Draft Initial Study
for the
Pepper Clinic Development Project

Colton, California

Lead Agency:

City of Colton
650 North La Cadena Drive
Colton, CA 92324

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August 2025

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LIST OF ACRONYMS AND ABBREVIATIONS

Term	Definition
AB	Assembly Bill
ADA	Americans with Disabilities Act
AF	acre-feet
AFY	acre-feet per year
AM	Morning Hours (Traffic Studies/Engineering)
AQMP	Air Quality Management Plan
ARMC	Arrowhead Regional Medical Center
AST	Above-ground Storage Tank
BMP	Best Management Practice
BRT	Bus Rapid Transit
BSA	Biological Study Area
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
California EPA	California Environmental Protection Agency
California ESA	California Endangered Species Act
Caltrans	California Department of Transportation
CAO	Cleanup and Abatement Order
CAP	Climate Action Plan
CARB	California Air Resources Board
CBR	Considered but rejected
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CDO	Cease and Desist Order

Term	Definition
CEQA	California Environmental Quality Act
CH4	methane
CHCCSP	Colton Hub City Centre Specific Plan
CHRIS	California Historical Resources Information System
City	City of Colton
CJUSD	Colton Joint Unified School District
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalence Levels
CNPS	California Native Plant Society
CO	carbon monoxide
CO2	carbon dioxide
CO2e	carbon dioxide equivalent
County	San Bernardino County
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CUP	Conditional Use Permit
CWD	City of Colton Water Department
dB	decibels
dBA	A-weighted decibels
DIF	Development Impact Fee
DOC	California Department of Conservation
DPM	Diesel Particulate Matter
DSF	Delhi Sands Flower-Loving Fly
DTSC	California Department of Toxic Substances Control
EB	Eastbound
ECORP	ECORP Consulting, Inc.
EIR	Environmental Impact Report
EMFAC	Emission Factor model
EPA	U.S. Environmental Protection Agency
EV	Electric Vehicle
FAR	Floor-to-Area Ratio

Term	Definition
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GATX	General American Transportation Corporation
GHG	greenhouse gas
GIS	Geographic Information Systems
GMZ	Groundwater Management Zone
GPD	Gallons per Day
GSP	Gross State Product
HCP	Habitat Conservation Plan
HQTA	High-Quality Transit Area
IPCC	Intergovernmental Panel On Climate Change
IRUWMP	Integrated Regional Urban Water Management Plan
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
LACM	Los Angeles County Museum
Ldn	Day-Night Average (Noise Level)
Leq	Equivalent Noise Level
LOS	Level of Service
LST	Localized Significance Thresholds
LT	Long Term
LUST	leaking underground storage tank
MBMI	Morongo Band of Mission Indians
MBTA	Migratory Bird Treaty Act
MGD	million gallons per day
MLD	Most Likely Descendant
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
msl	mean sea level
N2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards

Term	Definition
NAHC	Native American Heritage Commission
NFWF	National Fish and Wildlife Foundation
NHPA	National Historic Preservation Act
NIOSH	National Institute for Occupational Safety and Health
NOx	nitric oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O3	Ozone
OD	Origin/Destination (VMT)
OES	Office of Emergency Services
OMU	Office Mixed Use (City of Colton Zoning)
OS/H	Natural Habitat (City of Colton General Plan Designation)
Partner	Partner Engineering and Science, Inc.
PM	Evening
PM10	Particulate Matter Less than 10 Microns in Diameter
PM2.5	Particulate Matter Less than 2.5 Microns in Diameter
ppm	parts per million
PPV	Peak particle velocity
PRC	Public Resources Code
Project	Pepper Clinic Development Project
RCPG	Regional Comprehensive Plan and Guide
RHNA	Regional Housing Needs Assessment
Rincon Band	Rincon Band of Luiseño Indians
RIX	Rapid Infiltration Extraction
RLC	Rivers and Lands Conservancy
RMS	root mean square
ROG	Reactive Organic Gases
ROW	Right-of-Way
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RUSD	Rialto Unified School District

Term	Definition
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SBCTA	San Bernardino County Transportation Authority
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SEL	Sound Exposure Level
SIP	State Implementation Plan
SLF	Sacred Lands File
SO2	sulfur dioxide
SoCAB	South Coast Air Basin
SoCalGas	Southern California Gas Company
SR	State Route
SRA	State Responsibility Area
SSC	California Species of Special Concern
ST	Short Term
STC	sound transmission class
SVP	Society of Vertebrate Paleontology
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TAZ	Traffic Analysis Zone
TBA	tert-butyl alcohol
TCR	tribal cultural resource
TIA	Traffic Impact Analysis
TPH	Total Petroleum Hydrocarbons
USFWS	U.S. Fish and Wildlife Service
VHFHSZ	Very High Fire Hazard Severity Zones
VMT	Vehicle Miles Traveled
WB	Westbound
WEAP	Worker Environmental Awareness Program
WRF	Water Reclamation Facility
WUI	wildland-urban interface

Term	Definition
YSMN	Yuhaaviatam of San Manuel Nation

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1.0 BACKGROUND

1.1 Summary

Project Title:	Pepper Clinic Development Project
Lead Agency Name and Address:	City of Colton 650 North La Cadena Drive Colton, CA 92324
Contact Person and Phone Number:	David Alvarez, Senior Planner City of Colton (909) 370-5596
Project Location:	The Pepper Clinic Development Project is located on an approximately 9-acre (392,040 square feet) vacant parcel in the City of Colton, San Bernardino County, California. The Proposed Project Area is located on the western side of North Pepper Avenue and approximately 625 feet south of West San Bernardino Avenue (Figures 1-1 and 1-2). The Project Area comprises one parcel: Assessor's Parcel Number 0254-071-10. As depicted on the U.S. Geological Survey *San Bernardino South, California* 7.5-minute topographic quadrangle, the Proposed Project Area is located within Section 24, Township 1 South, Range 5 West, San Bernardino Principal Meridian.
General Plan Designation:	Colton Hub City Centre Specific Plan (CHCCSP) Office Mixed Use (OMU); Natural Habitat (OS/H)
Zoning Designation:	CHCCSP Office Mixed Use (OMU); Natural Habitat (OS/H)

1.2 Introduction

The City of Colton (City) is the Lead Agency for this Initial Study. The Initial Study has been prepared to identify and assess the anticipated environmental impacts of the Pepper Clinic Development Project (Proposed Project). This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Public Resource Code [PRC], Section 21000 et seq.) and State CEQA Guidelines (14 California Code of Regulations 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, Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]).

1.3 Surrounding Land Uses/Environmental Setting

The Pepper Clinic Development Project is located in the City of Colton, in San Bernardino County (County). The Project Area is located on the west side of North Pepper Avenue and approximately 625 feet south of West San Bernardino Avenue.

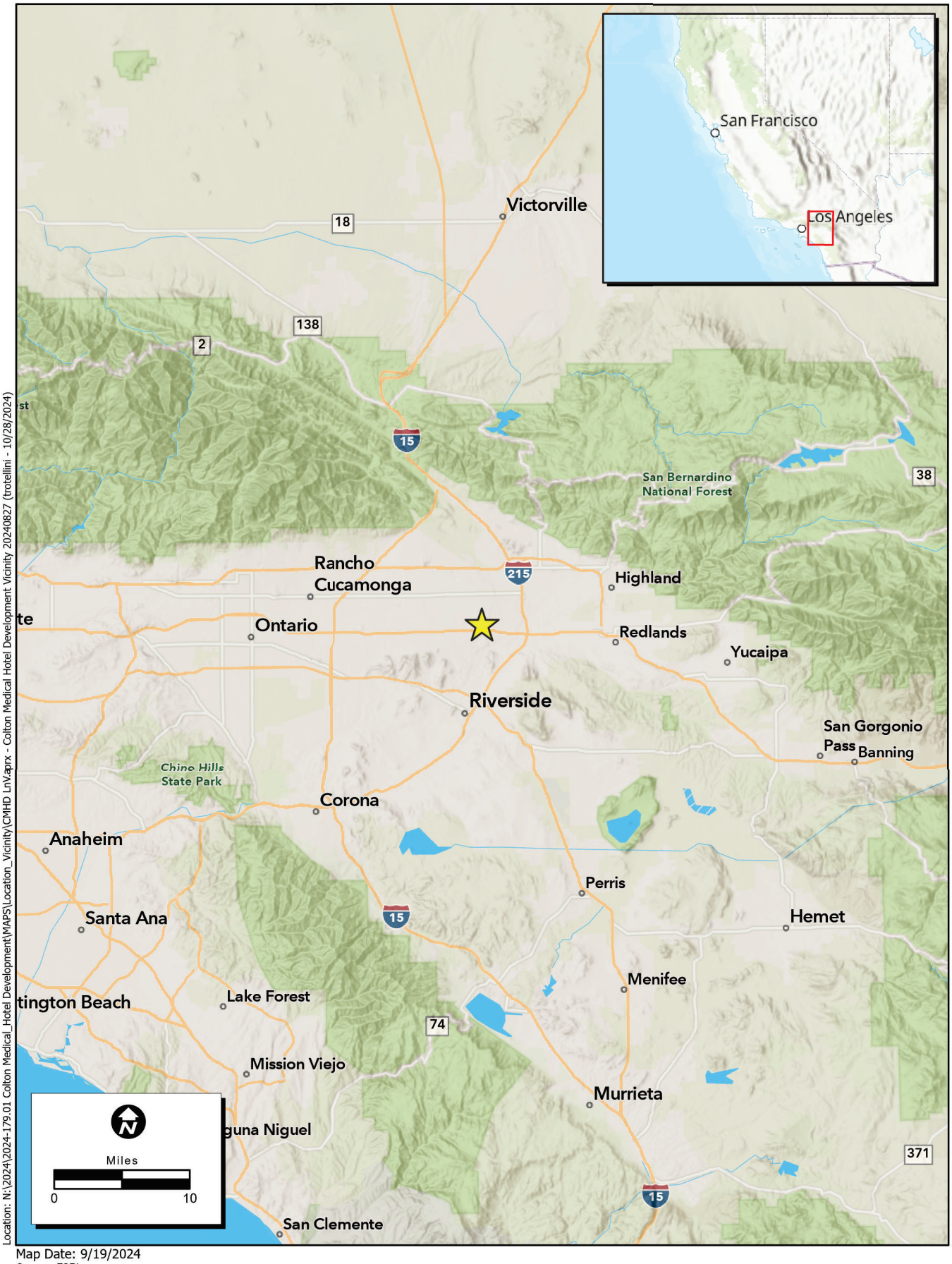
The Project Area is zoned and has a land use designation of Office Mixed Use (OMU) and Natural Habitat (OS/H) per the City's Colton Hub City Centre Specific Plan (CHCCSP). The Project would need a Conditional Use Permit (CUP) to allow for the development of a three-story parking structure, and a five-story, 112 room hotel within the CHCCSP OMU zone. Table 1-1 describes the land uses surrounding the Project Area (Figure 1-3).

Table 1-1. Surrounding Land Uses

Area	Land Use Designation	Zoning Designation	Existing Land Use
Project Area	*CHCCSP*: Office Mixed Use (OMU); Natural Habitat (OS/H)	*CHCCSP*: OMU; OS/H	Vacant Land
North	*CHCCSP*: OMU; OS/H	*CHCCSP*: OMU; OS/H	Vacant Land; Vocational School; Vacant building
East	*CHCCSP*: OMU *General Plan*: Public/ Institution	*CHCCSP*: OMU *Zoning Ordinance*: Public/Institutional Zone (P I)	University Building; Medical Offices
South	*CHCCSP*: Retail (R)	*CHCCSP*: R	Retail Buildings
West	*CHCCSP*: OS/H	*CHCCSP*: OS/H	Vacant Land

Source: City of Colton 2014a, 2019a, 2019b

Notes: CHCCSP = Colton Hub City Centre Specific Plan



Location: N:\2024\2024-179.01 Colton Medical_Hotel Development\MAPS\Location_Vicinity\CMHD LnV.aprx - Colton Medical Hotel Development Vicinity 20240827 (trotellini - 10/28/2024)

Map Date: 9/19/2024

Sources: ESRI

Figure 1. Project Vicinity

ECORP Consulting, Inc.
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2024-179.01 Pepper Clinic LLC Development Project

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Location: N:\2024\2024-179.01 Colton Medical_Hotel Development\MAPS\Location_Vicinity\CMHD LnV.aprx - Colton Medical Hotel Development Location 20240827 (lgalvez - 9/5/2024)

Map Date: 9/5/2024

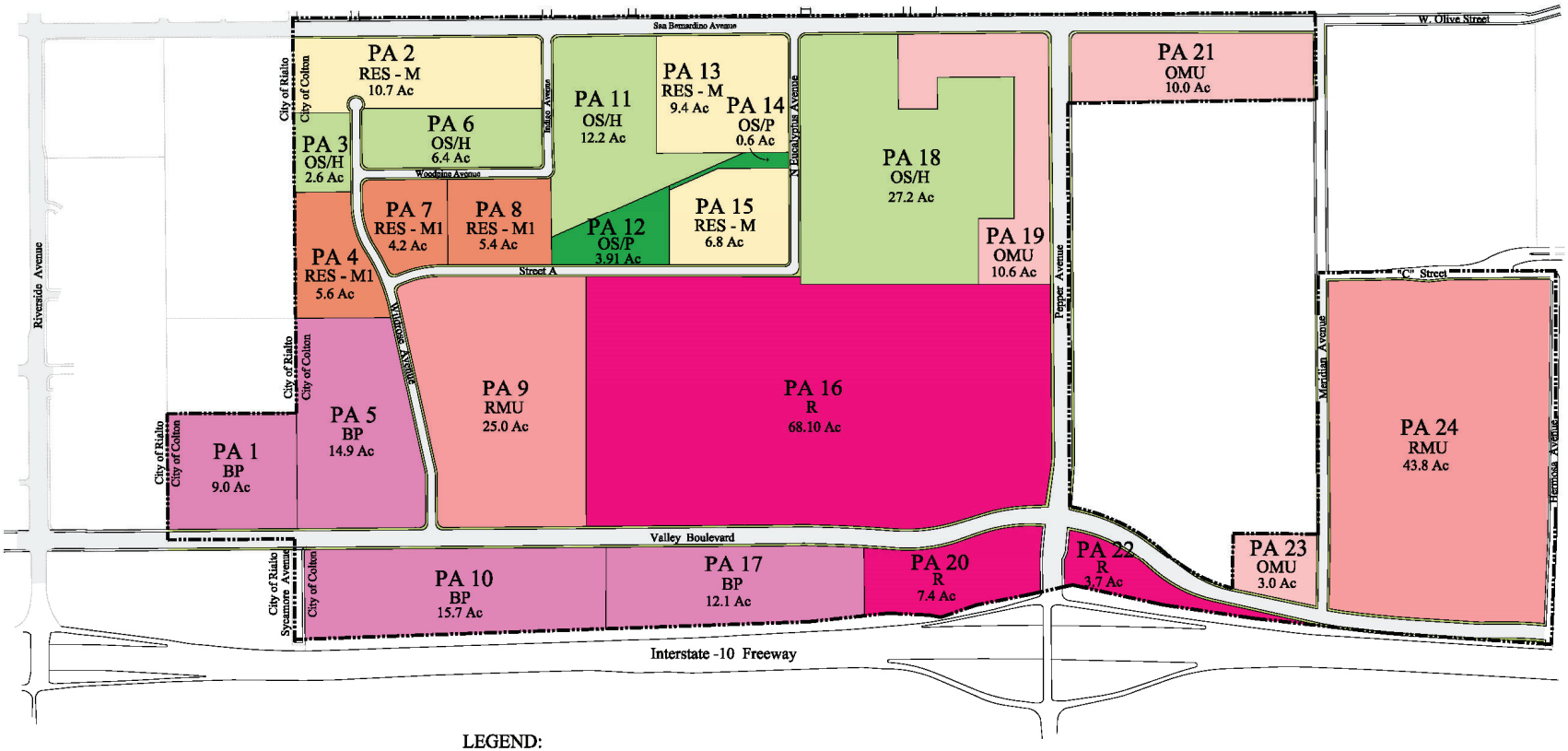
Sources: Esri World Imagery, County of San Bernardino (2023)

Figure 1-2. Project Location

ECORP Consulting, Inc.
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2024-179.01 Pepper Development Project

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Source: City of Colton 2014a

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Figure 1-3. Surrounding Land Uses

2024-179.01 Pepper Development Project

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2.0 PROJECT DESCRIPTION

2.1 Project Background

The Project Area is located within the Colton Hub City Centre Specific Plan Area and is surrounded by vacant land and the Center for Employment Training adjacent to the north; an abandoned structure adjacent to the northwest; vacant undeveloped land adjacent to the west and south; a church family service center to the south; and Arrowhead Regional Medical Center (ARMC) across North Pepper Avenue to the east. Residential uses exist beyond West San Bernardino Avenue to the north and a commercial retail center exists to the northwest. The Colton Golf Course is located west of the Project Area beyond the vacant and undeveloped parcels adjacent to the Project Area. Additional commercial uses are located approximately 0.3-mile to the south along the Interstate 10 corridor. The site is currently undeveloped and an electrical transmission line with steel towers currently runs through the site. A review of historical aerial photography reveals that the site has remained vacant and undeveloped since the early 1930s.

2.2 Project Characteristics

The Project Applicant proposes to construct a three-story 60,000-square-foot medical office clinic, a five-story 71,000-square-foot commercial hotel, a three-story parking structure, surface parking areas, and associated site improvements such as curb and gutter, utilities, and landscaping on an approximately 9-acre (392,040 square feet) vacant parcel in the City of Colton. The remaining 5.1 acres in the western portion of the Project parcel will be a dedicated conservation area for the Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) in accordance with the West Valley Habitat Conservation Plan (Figure 2-1).

The proposed three-story medical clinic would be a "build to suit" for the nearby ARMC located across North Pepper Avenue to the east. The proposed clinic would include seven different medical departments (Primary Care, Lab and Radiology, Non-Stress Test, Pediatrics, Women's Health, Specialty Medical Clinics, Employee Health and Wellness) and an employee conference center. The proposed five-story hotel would be branded as a Home 2 Suites by Hilton and would provide 112 guest rooms and guest amenities such as a pool, fitness center, and bar. The proposed structures would be supported by a conventional slab-on-grade foundation system with perimeter-spread footings and isolated interior footings. Other improvements include concrete and asphalt pavement, hardscape, and landscaping.

The proposed parking structure and surface parking areas would provide approximately 341 parking stalls to service both the medical clinic and the hotel. Approximately 205 parking stalls would be provided in the structure and 136 stalls would be provided in the surface parking areas, including Americans with Disability Act (ADA)-compliant and Electric Vehicle (EV)-capable stalls. This exceeds the 300-parking stall requirement for a medical office of the proposed size. Short and long-term bicycle parking will also be provided.

The Project Area is located in the CHCCSP zone within Planning Area 19, which is designated for OMU uses (City of Colton 2014a). The CHCCSP describes the OMU designation as intended to provide opportunities for corporate, executive, professional offices, banking, savings and loan institutions, medical

facilities, laboratories, pharmacies, durable medical equipment sales and leasing. The OMU designation provides for uses complementary to ARMC. Under the OMU designation, retail (includes hotels) and parking structures are conditionally permitted uses upon the issuance of a CUP (City of Colton 2014a). A CUP is also required to allow for the issuance of a Type 21 (Off-Sale General Liquor) Alcohol Beverage Control License which the Project is seeking to obtain.

In addition to the CUP, the Project requires variances for front setback of parking from 15 feet to 10 feet, rear setback from 15 feet to 0 feet, and reduction of parking requirements from 414 stalls to 321 stalls. A minor variance is required for the increase of the hotel structure's allowable height from 60 feet to 65 feet. Approval of these entitlements would render the Proposed Project in full compliance with City regulations.

2.2.1 Operating Hours and Personnel

The hours of operation for the proposed medical clinic are typical office hours Monday through Friday for outpatients. There are currently no plans for overnight stays at the clinic.

The proposed hotel will be operational 24 hours per day, 7 days per week. Approximately 10 employees per shift is expected. It is anticipated that occupancy would be 75 percent per day with guests expected to stay 3 to 5 nights at a time.

2.2.2 Vehicular/Pedestrian Traffic and Access

Ingress and egress to and from the Project Area will be through two proposed driveways on North Pepper Avenue that lead directly to the Project's surface parking lot. Due to the existing median on North Pepper Avenue, access to and from both driveways will be limited to a right-in/right-out configuration. Pedestrian and emergency vehicle access to the site would also be available via North Pepper Avenue.

2.2.3 Utilities

The City of Colton would be the Project's water and sewer service provider and this infrastructure already exists in the vicinity of the Project Area. New utility connections would be required to serve the Project. The City sits on one of the largest potable aquifers in the state of California and all of the City's water comes from deep water wells. The West Valley Water District, also provides water service to the area west of Pepper Avenue. The City owns, operates, and maintains a wastewater collection, pumping, and treatment system for itself, the City of Grand Terrace, and unincorporated County areas. Colton's Electric Utility provides electricity within the City and would provide electricity for the Proposed Project. Natural gas service in the City is provided by Southern California Gas Company (SoCalGas), which owns the one major natural gas pipeline that runs through northern Colton along Mill Street.

2.3 Project Timing

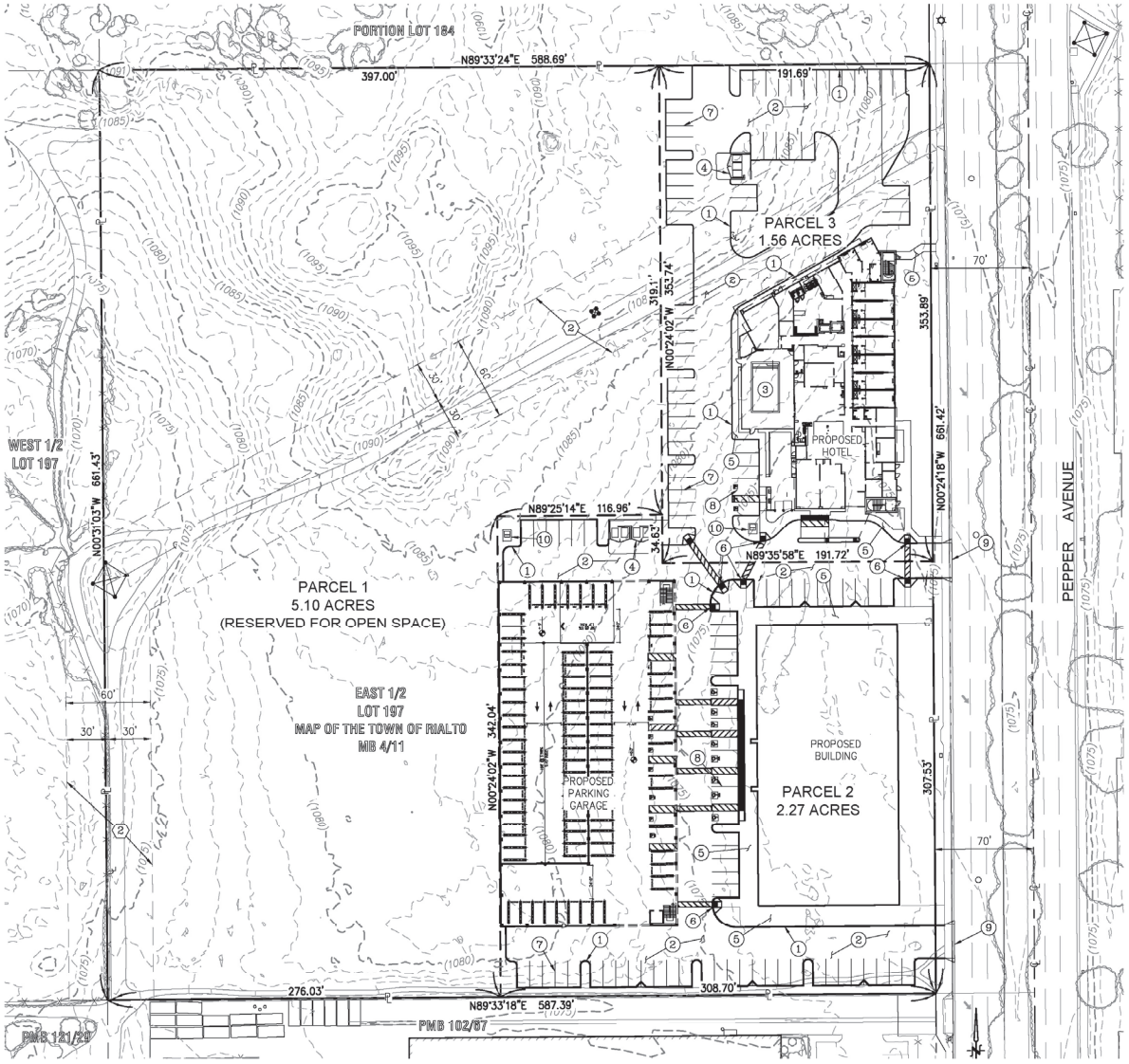
Project completion is estimated to be 2 years after Project approval.

2.4 Regulatory Requirements, Permits, and Approvals

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

- Tentative Parcel Map: Subdivision of parcel into three parcels located on a vacant lot along Pepper Avenue
- Conditional Use Permit: A CUP to allow for the development of a hotel and a parking structure within the CHCCSP OMU zone, and a Type 21 (Off-Sale General Liquor) Alcohol Beverage Control License.
- Architectural and Site Plan Review and Approval: An Architectural and Site Plan Review and Approval to allow for the construction of a new three-story medical office clinic totaling approximately 60,000 sq. ft. and five-story hotel building totaling approximately 71,000 sq. ft. on an undeveloped site.
- Variances: Variances for front setback of parking from 15 feet to 10 feet, rear setback from 15 feet to 0 feet; and reduction of parking requirements from 414 stalls to 341 stalls.
- Minor Variance: Minor variance for increase of allowed height of hotel structure from 60 feet to 65 feet.

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CONSTRUCTION NOTES

1. PROPOSED 6" CURB
2. PROPOSED AC PAVING
3. PROPOSED POOL
4. PROPOSED TRASH ENCLOSURE & NEW CONCRETE PAVING
5. PROPOSED CONCRETE WALK
6. PROPOSED ADA RAMP/DOME
7. PROPOSED STRIPING
8. PROPOSED ACCESSIBLE SYMBOL/STRIPING
9. PROPOSED DRIVEWAY
10. PROPOSED TRANSFORMER

Source: ATC Design Group 2024

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Figure 2-1. Site Plan

2024-179.01 Pepper Development Project

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

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 Alvarez Senior Planner Date

3.2 Evaluation of Environmental Impacts

3.2.1 Evaluation Process

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

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

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

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

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

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared

or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

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

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

    a. The significance criteria or threshold, if any, used to evaluate each question.

    b. The mitigation measure identified, if any, to reduce the impact to less than significant.

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4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

4.1 Aesthetics

4.1.1 Environmental Setting

The City of Colton is defined by its proximity to the Santa Ana River, Jurupa Hills, La Loma Hills, and Reche Canyon as well as its Colton Sand Dune system, one of the largest sand dune formations in Southern California (City of Colton 2013a). The CHCCSP is located in the western part of the City, east of the City of Rialto boundary and north of Interstate 10 (I-10). Mountain ranges surrounding the City include the San Gabriel Mountains to the north and northwest, San Bernardino Mountains to the east, Box Spring Mountains and Slover Mountain to the southeast, and Jurupa Hills to the southwest.

Light sources in the CHCCSP area include headlights of vehicles traveling on roadways, residential lighting, streetlights, recreational, advertising, security lighting, lighting associated with the ARMC and Colton Golf Course. There are also sections of undeveloped land with no light sources (City of Colton 2014b).

4.1.1.1 Regional Setting

State Scenic Highways

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. According to the California Department of Transportation (Caltrans), there are no state-designated scenic highways in the City of Colton (Caltrans 2024).

4.1.1.2 Visual Character of the Project Area

The Project Area consists of vacant land with low-growing vegetation. Surrounding properties include vacant land and a vocational school to the north, medical offices to the east, retail businesses to the south, and vacant land to the west.

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 Impact.

The City of Colton General Plan Open Space and Conservation Element (City of Colton 1987a) identifies principles to preserve and protect scenic vistas and visual features, however, no specific scenic vistas are

identified. Scenic views in the City include the San Gabriel Mountains to the north and northwest, San Bernardino Mountains to the east, Box Spring Mountains to the south, and Jurupa Mountains to the southwest.

Views of the mountains from local roads adjacent to the Project Area are mostly obstructed by existing intervening mature trees and structures. There are distant views of the San Gabriel Mountains from North Pepper Avenue; however, this view will not be obstructed by the Proposed Project due to the flatness of the area and the orientation of the roadway network. The preservation of scenic vistas would occur through view corridors established by the roadway network. The planned medical clinic and hotel will not cause any substantial changes from the views around the Project Area and therefore will not cause a substantial adverse effect on existing scenic vista. The Proposed Project would have a less than significant impact and no mitigation is required.

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.

According to Caltrans, there are no officially designated state scenic highways in the City (Caltrans 2024). State Route (SR) 38 in the City of Redlands and the San Bernardino Mountains is an eligible state scenic highway; however, it is located approximately 9.8 miles east of the Project Area at its closest point. The Project Area does not contain any trees, rock outcroppings, or historic buildings. Therefore, no damage to scenic resources would occur. There would be no impact, and no mitigation is required.

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 Impact.

The Project is located in an urbanized area surrounded by existing commercial businesses, medical offices, a medical center, and some areas of vacant land. The Project Area is currently vacant and contains low-growing vegetation. An electrical transmission line with steel towers currently runs through the site. The proposed construction will result in the development of a three-story medical office clinic, a five-story

commercial hotel, a three-story parking structure, surface parking areas, and associated site improvements. Landscaping would also be installed per City code. A CUP would be required to allow for the development of a three-story parking structure and a five-story hotel within the CHCCSP zone. The Project also includes variances for front setback of the parking area from 15 feet to 10 feet, rear setback from 15 feet to 0 feet, and a reduction of parking requirements from 414 stalls to 321 stalls. A minor variance is required for the increase of the hotel structure's allowable height from 60 feet to 65 feet. With the CUP and variances, the Project would not conflict with CHCCSP zoning. Additionally, the Project would be constructed in accordance with applicable City design regulations and would be subject to City review prior to approval and construction.

Development of the site would convert an area that is currently mostly vacant into an urbanized setting with multi-story structures, asphalt pavement, and landscaping. Therefore, the change in the character of the site would be recognizable and would constitute a permanent alteration of the existing visual character of the Project Area. Although the visual characteristic of the Project Area would change, the Proposed Project would replace the existing vacant parcel with an attractive, well-designed development through the use of architectural elements, landscaping, and design. In addition, the Proposed Project would be designed and constructed per applicable City Municipal Code and General Plan standards. Furthermore, the Project Area is zoned OMU per the CHCCSP indicating that the Project Area is envisioned for development with the type, scale, and intensity of uses that complement and are compatible with existing developed uses in the vicinity such as ARMC. Therefore, because no demonstrable negative aesthetic effect to the existing visual character or quality of the Project Area or surroundings is anticipated to result from the Proposed Project, no significant impact related to this issue would occur. Impacts would be less than significant, and no mitigation is required.

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 Impact.

The Project Area is located within an urban environment with pre-existing light pollution from adjacent development (e.g., ARMC, paved roadways, and commercial and residential development). The Project includes the exterior building lighting and parking lot pole fixtures. The type, density, and intensity of light proposed onsite are typical of office mixed use, business parks, and retail mixed use buildings in the CHCCSP area. The Proposed Project does not include the use of reflective façades that would result in substantial glare and would not introduce a substantial new source of light or glare to an area where none previously existed. New onsite lighting will be designed, installed, and maintained to satisfy applicable CHCCSP requirements and would ensure nighttime lighting would not spillover into adjacent areas. Therefore, impacts would be less than significant and no mitigation is required.

4.1.3 Mitigation Measures

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

4.2 Agriculture and Forestry Resources

4.2.1 Environmental Setting

"Forest land" as defined by PRC 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 PRC 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."

The California Department of Conservation (DOC), Farmland Mapping and Monitoring Program, compiles important farmland maps pursuant to the provisions of Section 65570 of the California Government Code. These maps utilize data from the United States Department of Agriculture, Natural Resource Conservation Service (NRCS) soil survey and current land use information using eight mapping categories, and they represent an inventory of agricultural resources within San Bernardino County. The City of Colton is almost completely developed and does not have any designated Prime or Unique Agricultural Land (DOC 2024). Additionally, according to the City's General Plan, the City does not include any land designated for agricultural use (City of Colton 2013a).

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.

According to the California Important Farmland Finder, the Project Area is located on land classified as Other Land and is surrounded by land classified as Urban and Built-Up Land (DOC 2024). As the Proposed Project is not located on land classified as prime farmland, unique farmland, or farmland of statewide importance, it would not convert these agricultural lands to non-agricultural use. 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
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

No Impact.

According to the most current General Plan and CHCCSP land use and zoning maps, the City does not contain any agricultural land use or zoning designations, and the Project Area supports no agricultural activities (City of Colton 2014a, 2019a, 2019b). The Project Area is also not under a Williamson Act contract (DOC 2023). The Proposed Project would not conflict with zoning for agricultural use or a Williamson Act Contract. 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
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 Area is not located on land designated for forest land, timberland, or timberland zoned timberland production (City of Colton 2014a, 2019a, 2019b). 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
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

No Impact.

The Project Area is not zoned for forest land, timberland, or timberland production (City of Colton 2014a, 2019a, 2019b). Therefore, the Proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. 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
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 Area and surrounding properties are not currently designated for agriculture. The Project Area is located on land designated as Other Land and the surrounding areas are designated as Urban and Built-Up Land (DOC 2024). Development in the Project Area would not result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur, and no mitigation is required.

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 Area, pursuant to the regulatory authority of the South Coast Air Quality Management District (SCAQMD).

ECORP Consulting, Inc. (ECORP) prepared an Air Quality and Greenhouse Gas (GHG) Emissions Assessment for the Proposed Project to estimate project-generated criteria air pollutants, health risk, and GHG emissions attributable to the Project and to determine the level of impact the Project would have on the environment (ECORP 2024a; Appendix A).

The City of Colton is located within San Bernardino County. The California Air Resource Board (CARB) has divided California into regional air basins according to topographic features. The City of Colton portion of San Bernardino County is located in a region identified as SoCAB. SoCAB occupies 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. The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the

SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions.

The U.S. Environmental Protection Agency (EPA) and CARB designate air basins or portions of air basins and counties as being in "attainment" or "nonattainment" for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) (other than Ozone [O_3], Particulate Matter Less than 10 Microns in Diameter [PM_{10}], Particulate Matter Less than 2.5 Microns in Diameter [$PM_{2.5}$], and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O_3, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air Quality Standards (CAAQS) are not to be exceeded during a three-year period. The attainment status for the San Bernardino County portion of the SoCAB, which encompasses the Project Area, is included in Table 4.3-1.

Table 4.3-1. Attainment Status of Criteria Pollutants in the San Bernardino County Portion of the SoCAB

Pollutant	State Designation	Federal Designation
Ozone (O_3)	Nonattainment	Nonattainment
Particulate Matter Less than 10 Microns in Diameter (PM_{10})	Nonattainment	Attainment
Particulate Matter Less than 2.5 Microns in Diameter ($PM_{2.5}$)	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen Dioxide (NO_2)	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO_2)	Unclassified/Attainment	Unclassified/Attainment

Source: CARB 2022a

The determination of whether an area meets the state and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant-specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. The region is designated as a nonattainment area for the federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, $PM_{2.5}$ and PM_{10} (CARB 2022a).

4.3.1.1 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 SCAQMD defines sensitive receptors as any residence including private homes, condominiums, apartments, and living quarters, schools, preschools, daycare centers, and health facilities such as hospitals or retirement and nursing homes, long term care hospitals, hospices, prisons, and dormitories or similar live-in housing.

The Project is proposing the construction and operation of a 3-story medical facility, a 5-story hotel that would include 112 units and amenities such as a pool, and associated parking (both enclosed in a parking structure and unenclosed surface parking). The nearest sensitive receptors would be the residences located on West San Bernardino Avenue to the north and the ARMC on the eastern side of North Pepper Avenue. The residences on West San Bernardino Avenue are located approximately 730 feet north of the Project's north boundary and the ARMC drop-off area is located approximately 400 feet distant from the Proposed Project's eastern boundary.

South Coast Air Quality Management District

The SCAQMD is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties, including the Project Area. The agency's primary responsibility is ensuring that the NAAQS and CAAQS are attained and maintained in the SoCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction. The following is a list of noteworthy SCAQMD rules that are required of construction activities associated with the Proposed Project:

- Rule 212 (Standards for Approving Permits and Issuing Public Notice)- This rule requires the applicant to show that the equipment used of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, is so designed, controlled, or equipped with such air pollution control equipment that it may be expected to operate without emitting air contaminates in violation of Section 41700, 4170 or 44300 of the Health and Safety Code or of these rules.
- Rule 402 (Nuisance) – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- Rule 403 (Fugitive Dust) – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. This rule is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM_{10} suppression techniques are summarized below.
    - Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
    - All onsite roads will be paved as soon as feasible or watered periodically or chemically stabilized.
    - All material transported offsite will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
    - The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
    - Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.
- Rule 1113 (Architectural Coatings) – This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce Reactive Organic Gas (ROG) emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.
- Rule 1401 (New Source Review of Toxic Air Contaminants) – This rule requires new source review of any new, relocated, or modified permit units that emit Toxic Air Contaminants (TACs). The rule establishes allowable risks for permit units requiring permits pursuant to Rules 201 and 203 discussed above.

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

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 Impact.

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (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 California Clean Air Act 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.

The SCAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted and adopted the 2022 Air Quality Management Plan (AQMP). The 2022 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state and federal air quality standards. The 2022 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, Southern California Association of Governments (SCAG), and the EPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's latest Regional Transportation Plan/Sustainable Communities Strategy (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 4.3-2, 4.6-3, and 4.3-4 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 Table 4.3-2 and 4.3-4 below, the Proposed Project would be below the SCAQMD regional thresholds for construction and operations. Because 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, in part, 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 2022 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 2022 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. SCAG's Growth Management Chapter of the Regional Comprehensive Plan and Guide (RCPG) provides regional population forecasts for the region and SCAG's RTP/SCS provides socioeconomic forecast projections of regional population growth. The City of Colton's General Plan is referenced by SCAG in order to assist forecasting future growth in the city.

The City's General Plan Land Use Plan Map designates the Proposed Project Area as part of the Colton's Hub City Centre Specific Plan (City of Colton 2016). The CHCCSP currently designates the Proposed Project Area as OMU (Office/Mixed Use.) The intent of the CHCCSP OMU designation is to provide for uses complementary to the ARMC, e.g., opportunities for medical related offices, research and development, and services such as pharmacies, medical and equipment supplies. To promote other compatible uses, the land use designation includes flexibility to incorporate Business Parks and Retail. The Proposed Project is consistent with this designation and is not proposing to amend the City General Plan or CHCCSP. Therefore, the Proposed Project would adhere to the land uses envisioned in the General Plan and CHCCSP, and is therefore consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the RTP/SCS and RCPG. As a result, the Project would not conflict with the land use assumptions or exceed the population or job growth projections used by SCAQMD to develop the 2022 AQMP. The City's population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City; and these are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into their air quality planning efforts, it can be concluded that the Proposed Project would be consistent with the projections (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans). Therefore, the Proposed Project would be considered consistent with the population, housing, and employment growth projections utilized in the preparation of SCAQMD's air quality plans.

Additionally, the Proposed Project would support smart growth principles by maximizing the use of existing infrastructure and expanding medical services to the residents nearby. The Proposed Project would provide new employment opportunities and is in walking distance to residences and local transit

stops which could lessen vehicle trips, a source of criteria air pollutants. Additionally, placing a hotel across the street from the ARMC would enable family members and individuals visiting patients a place to stay which could reduce vehicle trips. The reduction of vehicle trips and associated reduction of criteria air pollutants is a key goal of SCAQMD air quality planning efforts.

The Project would not exceed the population or job growth projections used by SCAQMD to develop the 2022 AQMP. Therefore, the Project would not conflict with the AQMP pollutant inventory forecast, which is based on the City of Colton General Plan, and thus would not conflict with SCAQMD air quality planning efforts.

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 such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. SCAQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. SCAQMD 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. As previously mentioned, the Proposed Project Area 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 2022 AQMP.

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 Impact.

Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. The basic sources of short-term emissions that will be generated through construction of the Proposed Project would be from ground-disturbing activities and from the operation of the construction vehicles (i.e., trenchers, dump trucks). Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive particulate matter 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

Regional Construction Significance Analysis

Predicted maximum daily construction-generated emissions for the Proposed Project are summarized in Table 4.3-2. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but are considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Table 4.3-2. Construction-Related Emissions (Regional Significance Analysis)

Construction Year	Pollutant (pounds per day)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction Calendar Year 1	8.04	33.9	33.1	0.06	9.75	5.40
Construction Calendar Year 2	7.87	18.7	30.1	0.05	2.55	1.08
SCAQMD Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: California Emissions Estimator Model (CalEEMod) version 2022.1. Refer to Appendix A for Model Data Outputs.

Table 4.3-2. Construction-Related Emissions (Regional Significance Analysis)						
Construction Year	**Pollutant (pounds per day)**					
	ROG	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**

Notes: ROG = Reactive Organic Gases; NO_x = nitric oxides; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = Particulate Matter Less than 10 Microns in Diameter; $PM_{2.5}$ = Particulate Matter Less than 2.5 Microns in Diameter;

Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in California Emissions Estimator Model (CalEEMod) include the following: sweeping/cleaning adjacent roadway access areas daily; water exposed surfaces three times daily; and limit speeds on unpaved roads. Building construction, paving, and painting are assumed to occur simultaneously.

As shown in Table 4.3-2, 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

The nearest sensitive land use that would be impacted by onsite construction activities consist of the ARMC bordering the Project Area approximately 400 feet to the east. In order to identify localized, air toxic-related impacts to sensitive receptors, the SCAQMD recommends addressing Localized Significance Thresholds (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 2008]) for guidance (SCAQMD 2003). The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific level proposed projects.

For this Project, the appropriate State Responsibility Area (SRA) for the localized significance thresholds is the Central San Bernardino Valley, SRA 34. 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 1, 2, and 5 acres. The Project proposes to construct on approximately 3.83 acres of the Project Area which spans just under 9 acres. The remaining 5.1 acres in the western portion of the Project parcel is proposed to be a dedicated conservation area for the Delhi Sands flower-loving fly. Thus, the LST threshold values for a 2-acre site were used. Applying the 2-acre LST thresholds to Project construction, which could disturb a greater amount of acreage daily (up to 3.83 acres), is conservative. For instance, the 2-acre LST thresholds were developed, in part, based on the dispersion of pollutants over a 2-acre construction area before exposing sensitive receptors. Thus, applying the 2-acre LST thresholds to a project that could disturb up to 3.83 acres daily does not consider the pollutant-dispersing effect of the dispersion of pollutants over a 3.83-acre site before exposing receptors, and is therefore a lower threshold (more stringent) than one calculated specific to 3.83 acres.

LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. The ARMC drop-off and pick-up area is located approximately 400 feet, or 122 meters, from the Project Area's

eastern boundary. Therefore, this analysis used LSTs for receptors located at 100 meters. 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 California Emissions Estimator Model (CalEEMod) *onsite* emissions outputs were considered. Table 4.3-3 presents the results of localized emissions. The LSTs reflect a maximum disturbance of the entire Project Area daily at 100 meters from sensitive receptors.

Table 4.3-3. Maximum Construction-Related Emissions (Localized Significance Analysis)

Activity	Onsite Pollutant (pounds per day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Site Preparation	31.6	30.2	9.04	5.20
Grading	16.3	17.9	3.48	2.00
Building Construction, Paving & Architectural Coating	17.8	22.98	0.75	0.69
SCAQMD Localized Significance Threshold (2 acre of disturbance at 100 meters)	*263*	*2,738*	*42*	*12*
Exceed SCAQMD Localized Threshold?	**No**	**No**	**No**	**No**

Source: California Emissions Estimator Model (CalEEMod) version 2022.1. Refer to Appendix A for Model Data Outputs.

Notes: NO_x = nitric oxides; CO = carbon monoxide; PM_{10} = Particulate Matter Less than 10 Microns in Diameter; $PM_{2.5}$ = Particulate Matter Less than 2.5 Microns in Diameter

Emissions taken from the year and season, summer, or winter, with the highest outputs. Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in California Emissions Estimator Model (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 25 miles per hour.

Table 4.3-3 shows that the emissions of these pollutants during 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. Therefore, impacts would be less than significant.

Operations

Regional Operational Significance Analysis

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM_{10}, $PM_{2.5}$, CO, and Sulfur Dioxide (SO_2) as well as O_3 precursors such as ROGs and NO_x. Project-generated increases in emissions would be predominantly associated with motor vehicle use from employees and visitors to the park. Operational air pollutant emissions were based on the number of hotel units and building square footage provided by the Project Site Plan, and traffic information provided

by KOA Corporation (KOA) (KOA 2025). Long-term operational emissions attributable to the Project are identified in Table 4.3-4 and compared to the operational significance thresholds promulgated by the SCAQMD.

Table 4.3-4. Operational-Related Emissions (Regional Significance Analysis)

Emission Source	Pollutant (pounds per day)					
	ROG	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Summer Emissions						
Mobile	9.64	9.00	87.7	0.22	20.2	5.22
Area	4.67	0.08	9.23	0.00	0.02	0.01
Energy	0.06	1.01	0.85	0.01	0.08	0.08
Total	**14.37**	**10.09**	**97.78**	**0.23**	**20.30**	**5.31**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Winter Emissions						
Mobile	9.00	9.66	73.20	0.21	20.20	5.22
Area	3.16	0.00	0.00	0.00	0.00	0.00
Energy	0.06	1.01	0.85	0.01	0.08	0.08
Total	**12.22**	**10.67**	**74.05**	**0.22**	**20.28**	**5.63**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: California Emissions Estimator Model (CalEEMod) version 2022.1. Refer to Appendix A for Model Data Outputs.

Notes: ROG = Reactive Organic Gases; NO_x = nitric oxides; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = Particulate Matter Less than 10 Microns in Diameter; $PM_{2.5}$ = Particulate Matter Less than 2.5 Microns in Diameter;

Emission projections predominately based on CalEEMod model defaults for San Bernardino County and amount of units and square footage identified in the Project Site Plan coupled with daily trips provided by KOA Corporation (2025) to inform the modeling calculations of operational mobile source emissions. Operational area source emissions account for emissions associated with pesticides used for maintenance of lawn areas, parking degreasers, parking lot paint, and landscaping equipment emissions. Energy source emissions account for emissions associated with onsite natural gas combustion at the Project Area. CalEEMod Measures T-2 "Increase Job Density" for the Proposed Medical Facility and T-3 "Provide Transit-Oriented Development" were applied to the CalEEMod scenario to be consistent with the Proposed Project operational characteristics.

As shown in Table 4.3-4, the Project's emissions would not exceed any SCAQMD thresholds for any criteria air pollutants during operation.

As identified in Table 4.3-1, the San Bernardino County portion of the SoCAB is listed as a nonattainment area for federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, $PM_{2.5}$ and PM_{10} (CARB 2022a). 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. Particulate matter can adversely affect the human respiratory system. As shown in Table 2-7, 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 2022 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 (BMPs), 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 operational phase of a proposed project only if the project includes stationary sources (e.g., smokestacks) or attracts heavy-duty trucks that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Project does not include such uses. As previously described, the Project would involve the construction and operation of a medical facility, hotel, and associated enclosed and unenclosed parking with no associated stationary sources. Therefore, in the case of the Proposed Project, the operational phase LST protocol does not need to be applied.

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 Impact.

The nearest sensitive receptors would be the residences located on West San Bernardino Avenue to the north and the ARMC on the eastern side of North Pepper Avenue. The residences on West San Bernardino Avenue are located approximately 730 feet north of the Project's north boundary and the ARMC drop-off and pick-up area is located approximately 400 feet distant from the Proposed Project eastern boundary.

Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of Diesel Particulate Matter (DPM), ROG, NO_x, 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 $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, $PM_{2.5}$ and PM_{10} (CARB 2022a). Thus, existing O_3, PM_{10}, and $PM_{2.5}$ levels in the SoCAB are at unhealthy levels during certain periods. However, as shown in Table 4.3-2 and Table 4.3-3, the Project would not exceed the SCAQMD regional or localized significance thresholds for construction emissions.

The health effects associated with O_3 are generally associated with reduced lung function. O_3 is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of ROG and NO_x in the presence of sunlight. The reactivity of O_3 causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O_3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O_3 for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion. Because the Project would not involve construction activities that would result in O_3 precursor emissions (i.e., ROG or NO_x) in excess of the SCAQMD thresholds, which are set to be protective of human health and account for cumulative emissions in the SoCAB, 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, which are set to be protective of human health and account for cumulative emissions in the SoCAB. 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 TAC of concern. PM_{10} exhaust is considered a surrogate for DPM as all diesel exhaust is considered to be DPM and it contains $PM_{2.5}$ exhaust as a subset. As with O_3 and NO_x, the Project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed the SCAQMD's thresholds. The increases of these pollutants generated by the Proposed Project would not on their own generate an increase in the number of days exceeding the NAAQS or CAAQS standards. Therefore, PM_{10} and $PM_{2.5}$ emissions, when combined with the existing PM emitted regionally, would have minimal health effect on people located in the immediate vicinity of the Project Area. Additionally, the Project would be required to comply with Rule 403 for fugitive dust control, as 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.

Onsite Project construction emissions would be generated at rates below the LSTs for NO_x, CO, PM_{10}, and $PM_{2.5}$ therefore the Project would not adversely impact vicinity sensitive receptors. Impacts would be less than significant.

Operational Air Contaminants

The health risk public-notification thresholds adopted by the SCAQMD is 10 excess cancer cases in a million for cancer risk and a hazard index of more than one (1.0) for non-cancer risk. Examples of projects that emit toxic pollutants over long-term operations include oil and gas processing, gasoline dispensing, dry cleaning, electronic and parts manufacturing, medical equipment sterilization, freeways, and rail yards. 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 would spend long periods queuing and idling at the site. The operational emissions are expected to come from vehicle emissions from patients and visitors to the medical office clinic and commercial hotel. However, according to Table 4.3-3, onsite Project emissions would not result in emissions of criteria pollutants over the SCAQMD's thresholds, which are set to be protective of human health and account for cumulative emissions in the SoCAB. Therefore, there would not be significant concentrations of pollutants at nearby sensitive receptors. The Project would not be a source of TACs. The Project would not result in a high carcinogenic or non-carcinogenic risk during operation.

Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SoCAB is designated as in attainment. Detailed modeling of Project-specific CO "hot spots" is not necessary and thus this potential impact is addressed qualitatively.

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 (SCAQMD 1992). The SCAQMD is the air pollution control officer for much of southern California. 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). In order to establish a more accurate record of baseline CO concentrations affecting Los Angeles, a CO "hot spot" analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway. Thus, there was no violation of CO standards.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District, 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 Proposed Project is anticipated to result in 2,807 daily trips (KOA Corporation 2025). 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 Proposed 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 Impact.

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals can smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to

odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

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 Project Area. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. It is expected that the odors associated with the Project's construction would not be concentrated or stagnant near any of the sensitive receptors, specifically the residences to the north or the ARMC to east. Additionally, odors would be localized and generally confined to the construction area. Therefore, construction odors would not adversely affect a substantial number of people to odor emissions.

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.

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

The Project Area refers to the entire approximately 9-acre property for the Proposed Project. The Project Area is located within the West Valley Habitat Conservation Plan (HCP), which has delineated habitat within its planning area that can be developed and areas to be conserved as habitat for the Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*), both of which occur within the Project Area. The proposed development is planned to occur over 3.84 acres along North Pepper Avenue (referred to hereafter as Area to be Developed) in a developable area of the West Valley HCP. The remaining 5.1 acres

of the property is proposed to be reserved for habitat conservation purposes (referred to hereafter as Proposed Conservation Area) in accordance with the West Valley HCP.

A literature review and biological reconnaissance survey were conducted for the Project to determine its vegetation communities and wildlife habitats, potential to provide habitat for special-status plant and wildlife species, and potential to facilitate wildlife movement (ECORP 2024b; Appendix B).

The literature review included a review of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB; CDFW 2024a) and the California Native Plant Society (CNPS) Electronic Inventory.

A biological reconnaissance survey was conducted on September 9, 2024, to determine the vegetation communities and wildlife habitats in the Biological Study Area (BSA). The BSA includes the applicant-provided Project boundaries plus a 500-foot buffer. Additionally, the biologists documented features within the Project Area with the potential to be jurisdictional to the United States Army Corps of Engineers, Regional Water Quality Control Board (RWQCB), and/or CDFW; however, a formal aquatic resources delineation was not performed as part of the survey.

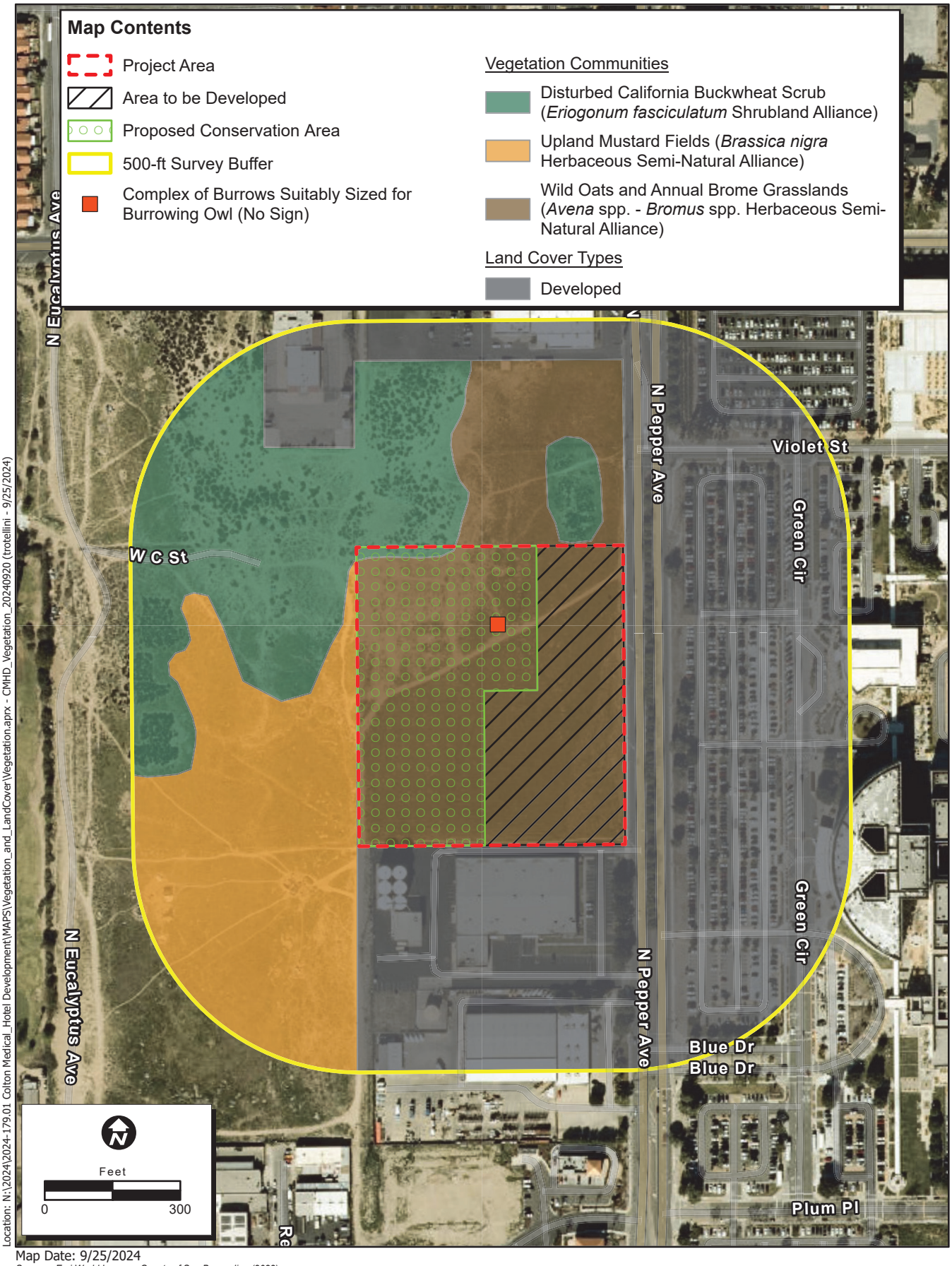
A habitat assessment for the Delhi Sands flower-loving fly was conducted by a qualified Delhi Sands flower-loving fly biologist. The biologist walked the Project Area by foot and documented the presence or absence of indicator plants for the species, other native plant species that occur in Delhi Sands flower-loving fly habitat and noted the vegetation cover in the Project Area.

4.4.1.1 Vegetation Communities

The Project Area is located in an undeveloped lot, that is generally subjected to repeated and ongoing disturbance from human activities such as mowed vegetation and homeless encampments. Vegetation communities present within the Project Area included Disturbed California Buckwheat Scrub (*Eriogonum fasciculatum* Shrubland Alliance) and Wild Oat and Annual Brome Grassland (*Avena* spp. - *Bromus* spp. Herbaceous Semi-Natural Alliance) (Figure 4.4-1). Vegetation communities and land cover types within the 500-foot survey buffer include the previously mentioned vegetation communities, Upland Mustard Fields (*Brassica nigra* Herbaceous Semi-Natural Alliance), and developed (Figure 4.4-1).

4.4.1.2 Plants

Plant species observed in the Project Area are generally characteristic of disturbed areas. The dominant non-native plant species present in the Project Area included brome grasses, golden crownbeard, and spotted spurge. Despite the disturbed nature of the Project Area, native plant species are interspersed throughout the Project Area and include California croton, telegraph weed, turkey mullein, annual bursage, deerweed (*Acmispon glaber*), California buckwheat, and other buckwheat species (*Eriogonum* spp.)



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Map Date: 9/25/2024

Sources: Esri World Imagery, County of San Bernardino (2023)

Figure 4.4-1. Vegetation Communities, Land Cover Types, and Biological Survey Results

2024-179.01 Colton Medical/Hotel Development

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ENVIRONMENTAL CONSULTANTS

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4.4.1.3 Wildlife

Despite the disturbed nature of the Project Area, the biologists documented numerous wildlife species during the survey. Wildlife incidentally observed during the biological reconnaissance survey include species such as common side-blotched lizard (*Uta stansburiana*), house finch (*Haemorhous mexicanus*), Cassin's kingbird (*Tyrannus vociferans*), and California ground squirrel.

4.4.1.4 Soils

A soils analysis search was conducted using the Web Soil Survey data and one soil type was identified within the BSA: Delhi fine sand. Soil characteristics observed in the field were generally consistent with what has been identified for these soil units and their official series descriptions.

4.4.1.5 Potential Waters of the U.S.

Although a formal aquatic resources delineation was not performed, potentially jurisdictional features were not identified within the Project Area. However, one freshwater pond classified by the National Wetlands Inventory (NWI) as a palustrine, unconsolidated shore was mapped within the Project Area in the NWI Database (U.S. Fish and Wildlife Service [USFWS] 2024). The feature as mapped in the NWI Database is predominantly located in the 500-foot survey buffer and only marginally overlaps with the westernmost portion of the Project Area. This feature was searched during the biological survey, and no water or sign of water (e.g., cracked soils) was observed.

4.4.1.6 Special-Status Plants

There were 40 special-status plant species that appeared in the literature review and database searches for the Project Area. After review, 16 special-status plant species identified in the literature review have a potential to occur, while the remaining 24 are presumed absent due to the lack of suitable habitat (including elevation and soils), or because the Project Area is located outside of the known range for the species.

Descriptions of the California Rare Plant Rank (CRPR) designations are found in Table 4.4-1. A table outlining each species, their designations, and potential for occurrence on the Project Area can be found in Appendix B.

Table 4.4-1. California Rare Plant Rank Status Designations

List Designation	Meaning
1A	Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B	Plants Rare, Threatened, or Endangered in California and Elsewhere
2A	Plants Presumed Extirpated in California, But Common Elsewhere
2B	Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3	Plants about which more information is needed; a review list

Table 4.4-1. California Rare Plant Rank Status Designations	
List Designation	**Meaning**
4	Plants of limited distribution; a watch list
CBR	Considered but rejected
List .1, .2 and .3 extension meanings:	
.1	Seriously threatened in California (over 80 percent of occurrences threatened / high degree and immediacy of threat)
.2	Moderately threatened in California (20 to 80 percent occurrences threatened / moderate degree and immediacy of threat)
.3	Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

Note: According to the California Native Plant Society (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10, of the California Fish and Game Code (California Department of Fish and Game [CDFG] 1984). This interpretation is inconsistent with other definitions.

Plant Species with a Moderate Potential to Occur

Smooth Tarplant

Smooth tarplant (*Centromadia pungens* ssp. *laevis*) has a CRPR of 1B.1. This annual herb in the Asteraceae family blooms from April to September and occurs at elevations ranging from 0 to 2,100 feet above mean sea level (msl). Smooth tarplant is typically found in alkaline soils of chenopod scrub, meadows and seeps, playas, riparian woodlands, and valley and foothill grasslands. This subspecies is also known to occur in disturbed areas. Threats to this subspecies include foot traffic, agriculture, road maintenance, disking, urbanization, hydrological alterations, and flood control projects (CNPS 2024b).

The Project Area contains limited coastal scrub habitat in the disturbed California buckwheat scrub and suitable disturbed grassland habitat in the wild oats and annual brome grasslands. One recent CNDDB occurrence was documented in 2016 approximately 4.7 miles east of the Project Area, and additional historic CNDDB records were documented within 5 miles of the Project Area (CDFW 2024a). Due to the presence of suitable habitat and a recently documented occurrence of the subspecies within 5 miles of the Project Area, this subspecies has a moderate potential to occur.

Santa Ana River Woollystar

Santa Ana River woollystar (*Eriastrum densifolium* spp. *sanctorum*) is state and federally listed as endangered and has a CRPR of 1B.1. This perennial herb in the Polemoniaceae family blooms from March through September and occurs at elevations ranging from 300 to 2,000 feet above msl. This subspecies typically occurs in chaparral and alluvial fans of coastal scrub, sometimes in sandy or gravelly soils. Threats to this species include off-road vehicle use, development, altered hydrology and illegal dumping (CNPS 2024b).

The Project Area contains limited coastal scrub habitat with sandy soils in the disturbed California buckwheat scrub. Multiple recent and historic CNDDB occurrences were documented within the vicinity of the Project Area. The most recent record was documented in 2020 approximately 2.3 miles southeast of the Project Area, and the closest recent record was documented in 2013 approximately 1.7 miles south of the Project Area (CDFW 2024a). Due to the presence of limited suitable habitat and recently documented occurrences of the species within 5 miles of the Project Area, this species has a moderate potential to occur.

Plant Species with a Low Potential to Occur

Fourteen species have a low potential to occur within the Project Area due to limited habitat for the species within the Project Area and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search.

4.4.1.7 Special-Status Wildlife

The literature search identified 28 special-status wildlife species that had previously been documented on or in the vicinity of the Project Area. A list was generated from the results of the literature review and the Project was evaluated for suitable habitat that could support any of the special-status wildlife species on the list. The Project Area's disturbed nature, proximity to commercial development, and anthropogenic influences likely preclude many of these species from occurring. A brief natural history and discussion of the special-status wildlife species that are determined to have a high or moderate potential to occur within the Project Area is provided below. A table outlining each species, their designations, and potential for occurrence on the Project Area can be found in Appendix B.

Wildlife Species Present with a High Potential to Occur

Three species were found to have a high potential to occur in the Project Area. Although these species were not incidentally observed in the Project Area during the biological reconnaissance survey, habitat (including soils and elevation factors) for the species occurs within the Project Area and a known occurrence has recently been recorded (within the last 20 years) within 5 miles of the area.

Burrowing Owl

Burrowing owl was petitioned for listing under the California Endangered Species Act (California ESA) in August 2024 (CDFW 2024b) and advanced to candidacy in October 2024 which awarded the species the same protection as an endangered species. Burrowing owls historically occurred throughout much of California and the western U.S.; however, many former California populations have been extirpated. Burrowing owls typically inhabit open habitats, primarily grasslands and deserts. Burrowing owls require burrows for roosting and nesting cover. Although they often nest in abandoned California ground squirrel burrows, they will also use other small mammal burrows, pipes, culverts, and nest boxes, particularly where burrows are scarce (Zeiner et al. 1990).

Suitable habitat for the species is present within the wild oat and annual grassland habitat and disturbed California buckwheat scrub in the Project Area. Habitat characteristics such as low-growing vegetation, friable soils, and California ground squirrel burrows provide habitat for burrowing owl. Foraging habitat is also present throughout the Project Area with food sources such as small mammals and lizards. Although no burrowing owls or burrowing owl sign were incidentally observed during the biological survey, a complex of burrows suitably sized for burrowing owl use were observed. Due to the mobile nature of the species, it is possible for burrowing owls to move onto or offsite throughout the year.

The CNDDB documented six occurrences of this species within the 5 miles of the Project Area, one of which overlaps with the Project Area. All six of these occurrences were recently documented (in the last 20 years). The closest occurrence which overlaps with the Project Area describes one adult and one breeding pair in May of 2007. The most recent occurrence was recorded in 2007 approximately 4 miles northwest of the Project Area (CDFW 2024a). This species has a high potential to occur within the Project Area due to presence of suitable habitat and the previous occurrence which overlaps with the Project Area.

Delhi Sands Flower-Loving Fly

The Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) is a federally listed endangered species. As observed by the name, this species is associated with the Delhi series of sand. Within the life cycle of the fly, larval stages develop completely underground and may remain underground for several years before emerging as adults during summer (USFWS 2019). The Delhi Sands flower-loving fly prefers low density cover, often using habitat that has less than 50 percent cover (USFWS 1997). Indicator species include buckwheat, California croton, and telegraph weed. It is documented that oviposition occurs primarily near telegraph weed (USFWS 2008, 2019) and that California buckwheat is a primary feeding plant (USFWS 2019).

Suitable habitat for this species was found to occur throughout the Project Area. The Project Area is composed of Delhi Sand series, vegetation density was low, and indicator plant species for the fly were present. Despite the Project Area having disturbances from discing, three native plant species that are indicator species for the fly, were found throughout the Project Area. These plants were California buckwheat, telegraph weed, and California croton. California buckwheat was concentrated in the northwest corner of the Project Area within the disturbed California buckwheat scrub, telegraph weed was scattered throughout the Project Area, and California croton was concentrated in the northwest corner of the Project Area but scattered throughout. Additionally, an existing West Valley HCP conservation area which is managed by the Rivers and Lands Conservancy (RLC), the "Laing National Fish and Wildlife Foundation (NFWF) Delhi Sands flower-loving fly (DSF)" protected sand dune habitat, is present west of the Project Area within the 500-foot survey buffer (RBF Consulting 2014; RLC 2024). The previously described area is hereby referred to as "Existing Conservation Area." This habitat is preserved for the Delhi sands flower-loving fly and other species that co-occur (RLC 2024).

A total of 30 recent and historic occurrences were documented in CNDDB, all within 5 miles of the Project Area. Of the 16 recent occurrences, 10 had an overlap with the Project Area. Of the 14 historic occurrences, 10 had an overlap with the Project Area. The most recent occurrence was documented within the Project Area in 2013 (CDFW 2024a). This species has a high potential to occur within the Project Area

due to presence of indicator plant species, Delhi Sands series, and the numerous historic and recent occurrences which overlap with the Project Area.

Coastal Whiptail

The coastal whiptail (*Aspidoscelis tigris stejnegeri*) is a CDFW Species of Special Concern (SSC). Coastal whiptails are generally found in hot, dry open areas in chaparral, woodland, and riparian habitats (CDFW 2024c). This species commonly occurs in moist, warm, and loose soil with plant cover in sparsely vegetated areas. Typically occurs in habitats with beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks.

The Project Area has suitable habitat in the form of sandy loose soils and sparse vegetation throughout the disturbed California buckwheat scrub and wild oat and annual brome grassland. The wild oat and annual brome grassland within the Project Area appears to be regularly mowed and disced, keeping vegetation cover low. One recent occurrence and one historic occurrence were documented in CNDDB within 5 miles of the Project Area. The most recent occurrence was documented in 2016 approximately 4 miles southeast of the Project Area. The closest occurrence was documented in 1995 less than a half mile from the Project Area. This species has a high potential to occur due to the presence of suitable habitat and occurrences within 5 miles of the Project Area.

Wildlife Species with a Moderate Potential to Occur

Coast Horned Lizard

The coast horned lizard (*Phrynosoma blainvillii*) is currently designated as a CDFW SSC (CDFW 2024c). The coast horned lizard occurs from central California west of the Cascade-Sierran Highlands south to Baja California. Historically, the species occurred as far north as Kennett in Shasta County. This species can occur within a variety of environments including scrubland, annual grassland, valley-foothill woodlands, and coniferous forest from 0 to 8,000 feet above msl. However, they most commonly occur in and along lowland sandy washes with scattered low vegetation. This species requires bushes to provide cover, open areas for sunning, and loose soils for burial. The species primarily eats harvester ants, but also eats various other invertebrates.

Marginally suitable habitat is present in the Project Area within the disturbed California buckwheat scrub in the northwest corner of the Project Area and wild oat and annual brome grassland. Habitat characteristics such as loose soil for burial, open areas for sunning and food sources such as ants are present. However, shrub cover within the Project Area was low and there were limited ant hills for foraging within both the Project Area and survey buffer. Shrub cover was more prevalent within the 500-foot survey buffer.

Four historic occurrences and one occurrence without an observation date were recorded in CNDDB within 5 miles of the Project Area. The closest occurrence was recorded approximately 3 miles south of the Project Area without an observation date. This species has a moderate potential to occur due to occurrences within 5 miles of the Project Area and the presence of marginally suitable habitat within the Project Area and adjacent habitat.

Crotch Bumble Bee

The Crotch bumble bee (*Bombus crotchii*) was petitioned for listing under the California ESA in October 2018 (Hatfield et al. 2018), advanced to candidacy in June 2019, was challenged in courts and the candidacy was temporarily stayed beginning in February 2021, and candidacy was recently reinstated in September 2022 (CDFW 2023). This species is associated with open grassland and scrub habitats and occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California (Williams et al. 2014). Crotch bumble bees primarily nest underground, and may occupy cavities in a variety of substrates including: thatched grasses, abandoned rodent burrows or bird nests, brush piles, rock piles, and fallen logs and have also been found nesting in artificial structures such as walls, rubble or abandoned furniture. Bumble bee nests are annual and conclude with deaths of the queen, workers, and drones at the end of the season with only the mated gyne (future queen) surviving the winter (overwintering) in order to emerge the following spring to start the next year's colony. Similar to other bumble bee species, Crotch bumble bee is a generalist forager and reportedly visits a variety of flowering plants, including *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia,* and *Salvia*.

The Project Area contains marginally suitable habitat for this species within the wild oat and annual brome grassland and in the disturbed California buckwheat scrub. Flowering plants, which provide nectar sources and foraging opportunities, were present throughout the Project Area including California croton, deerweed, turkey mullein, and California buckwheat. Additionally, small mammal burrows are scattered throughout the Project Area and 500-foot survey buffer that could provide marginal nesting and overwintering habitat. However, the wild oat and annual brome grassland appears to be subjected to repeated ground disturbances, which likely precludes this species from nesting/overwintering within the wild oat and annual brome grassland. This species has the potential to forage within Project Area or nest along the edges of the disced areas within the disturbed California buckwheat scrub and the 500-foot survey buffer.

Three historic occurrences of the species were documented in CNDDB all within 5 miles of the Project Area. The most recent and nearest occurrence was documented in 1938 approximately 1.5 miles northwest of the Project Area. This species has a moderate potential to occur due to the presence of potential foraging, nesting, marginally suitable overwintering habitat, and CNDDB records within 5 miles of the Project Area.

Los Angeles Pocket Mouse

The Los Angles pocket mouse, a CDFW SSC, is a small heteromyid averaging between 8 to 12 grams. The Los Angeles pocket mouse is one of eight subspecies of the little pocket mouse, *Perognathus longimembris*. It inhabits areas containing fine sandy soils or sandy loams, which are excellent substrates for burrow excavation by this diminutive animal. Like many heteromyids, Los Angeles pocket mouse dig burrow systems near the base of shrubs or amidst other vegetation types and position themselves within the burrow as environmental conditions change. The species can occur in open grasslands entirely lacking shrubs; however, trapping studies suggest that Los Angeles pocket mouse primarily forage under the protection of some form of vegetative canopy and are rarely found in exposed open areas. Los Angeles pocket mouse most commonly occur in sage scrub and grassland habitats, but also in alluvial fan sage

scrub habitats. Plant species composition varies greatly among Los Angeles pocket mouse occupied habitat areas, but typically encompasses both native and nonnative plants commonly associated with sandy or granular soils, and often in lower elevational alluvial systems. The species range extends from the Los Angeles Basin, from approximately Burbank and San Fernando in the northwest, to San Bernardino on the northeast, and Cabazon, Hemet, and Aguanga on the east and southeast.

Habitat characteristics such as scrub, friable soils, and grassy areas are present in the Project Area within the wild oats and annual brome grassland and disturbed California buckwheat scrub. However, little shrub cover is present within the Project Area to provide protection for the species. Additionally, the scrub habitat is limited to the northwest portion of the Project Area and the grassy habitat appears to be regularly disced and mowed. Therefore, the habitat within the Project Area is marginally suitable for Los Angeles Pocket mouse.

One recent and five historic occurrences were documented in CNDDB within 5 miles of the Project Area. The most recent CNDDB occurrence was documented in 2017 approximately 4 miles north of the Project Area. The closest occurrence was documented in 2000 less than 1 mile south of the Project Area (CDFW 2024a). This species has a moderate potential to occur due to the presence of marginally suitable habitat and CNDDB records within 5 miles of the Project Area.

Wildlife Species with a Low Potential to Occur

Seven species have a low potential to occur within the Project Area due to limited or marginal habitat for the species occurs within the Project Area and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search.

4.4.1.8 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 varies, but corridors may include such areas as greenbelts, refuge systems, channels and flood control, underpasses, and biogeographic land bridges. In general, a corridor is described as a linear habitat embedded in a dissimilar matrix that 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. The nature of corridor usage and wildlife movement patterns vary greatly among species.

The Project Area was assessed for its ability to function as a wildlife corridor. Although the Project Area contains open areas, it is completely surrounded by urban development and is isolated from large, contiguous blocks of native habitat. The nearest natural wildlife corridor and area is the Santa Ana River

approximately 2 miles south of the of the Project Area. Less than a half mile south of the Project Area is I-10, approximately 3 miles to east is SR-215, and approximately 4 miles to the north is I- 210; all three are major highways that limit wildlife movement. Additionally, the lack of consistent vegetative cover within the Project Area, the urban nature of the site, and the high density of nonnative weedy vegetation across the Project Area likely deter wildlife from using the area for movement opportunities due to lack of suitable cover. Wildlife commonly found in urban areas (e.g., coyote [*Canis latrans*]) could use portions of the Project Area or areas immediately adjacent to the Project Area, such as the Rivers and Lands Conservancy "Laing NFWF DSF" protected sand dune habitat to the west, for local travel but the Project Area itself does not provide wildlife movement corridor or linkage opportunities.

The Project Area was also assessed for its ability to function as a native wildlife nursery site and for bat roosting habitat. Bat roosting habitat was not identified within the Project Area. Some palm tree species and buildings, which can be considered bat roosting habitat, were present within the 500-foot survey buffer. However, the palm trees skirts had been removed and the buildings did not have crevices, both of which are necessary to support roosting bats. Suitable nesting habitat for bird species was documented within the Project Area. However, due to the level of disturbance within and adjacent to the Project Area, nursery site habitat for bird species (e.g., heron rookery) is not anticipated to occur.

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.

Area to be Developed

The Area to be Developed consists of an undeveloped lot with the vegetation community, wild oat, and annual brome grassland. Disturbances were present throughout the Area to be Developed, including compacted gravelly soils along the eastern Project boundary, disced soils, mowed vegetation, abundant trash, and a powerline easement that bisects the area and includes metal power poles and a dirt road with vehicle tracks.

The literature review and database searches identified 40 special-status plant species and 28 special-status wildlife species that have previously been documented on or near the Project Area. Sixteen special-status plant species were determined to have a moderate or low potential to occur and the remaining 24 special-status plant species were determined to be absent due to the disturbed nature of the Project Area, the lack of suitable habitat (including elevation and soils), and/or because the Project is located outside of the known range for the species.

Special-Status Plant Species

Within the Area to be Developed, five special-status plant species have a moderate or low potential to occur due to the presence of suitable habitat within the wild oat and annual brome grassland. Smooth tarplant (CRPR 1B.1) has a moderate potential to occur within the Area to Be Developed while Catalina mariposa lily (*Calochortus catalinae*) (CRPR 4.2), Plummer's mariposa lily (*Calochortus plummerae*) (CRPR 4.2), Parry's spineflower (*Chorizanthe parryi* var. *parryi*) (CRPR 1B.1), and paniculate tarplant (*Deinandra paniculata*) (CRPR 4.2) all have a low potential to occur. Should these species occur within the Area to be Developed, impacts to the species may occur in the form of ground disturbance, vegetation removal, mortality, dust, and habitat loss. If present, impacts to species with a CRPR rank of 4, including Catalina mariposa lily, Plummer's mariposa lily, and paniculate tarplant, would not be considered significant under CEQA. Impacts to smooth tarplant and Parry's spineflower would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-2.

Special-Status Wildlife Species

Of the 28 special-status wildlife species identified in the literature review, 3 species have a high potential to occur, 3 species have a moderate potential to occur, and 7 have a low potential to occur. The remaining 15 species are presumed absent due to a lack of suitable habitat or because the Project Area being outside the known range for the species.

Burrowing Owl

Burrowing owl has a high potential to occur within the Area to be Developed. This species is protected by the Migratory Bird Treaty Act (MBTA), California Fish and Game Code, and is a Candidate for state listing which affords the species the same protections as though it were listed under the California ESA. Within the Area to be Developed, suitable habitat was present in wild oat and annual brome grassland in the form of friable soils, suitable foraging habitat, and California ground squirrel burrows. The literature review and database search identified numerous recent occurrences within five miles of the Project Area in CNDDB, one of which was documented in 2007 in the Area to be Developed. Although no live owls or their sign were incidentally observed during the biological survey, suitable burrowing and foraging habitat is present in the Area to Be Developed. Due to the mobile nature of the species, burrowing owls may be present within the Project Area prior to the start of Project activities. Direct impacts in the form of ground disturbance, vegetation removal, habitat loss, and mortality and indirect impacts from construction noise and vibrations may occur to this species. Impacts to burrowing owl would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-3.

Delhi Sands Flower-Loving Fly

Delhi Sands flower-loving fly (federally listed Endangered) has a high potential to occur within the Area to be Developed. Within the Area to be Developed, Delhi Sands soil series is present; this soil is necessary for the ecology of the Delhi Sands flower-loving fly. Additionally, foraging and oviposition resources are present within and adjacent to the Area to be Developed including three of four indicator plant species, California buckwheat, annual bursage, and telegraph weed. If present, direct impacts to Delhi Sands flower-loving fly could occur in the form of injury or mortality due to vehicle or equipment strikes and loss of habitat. If present, indirect impacts to this species may occur in the form of increased human activity,

noise, dust, and ground vibrations. However, Project activities would be covered under the West Valley HCP incidental take permit, which would require the Project to implement species-specific and construction-related avoidance and minimization measures. Impacts to Delhi Sands flower-loving fly, if present, would be reduced to less than significant with the implementation of Mitigation Measures BIO-1 and BIO-4.

Crotch Bumble Bee

Crotch bumble bee has a moderate potential to occur within the Area to Be Developed and is a Candidate for state listing and is therefore afforded all the protections as though it were listed under the California ESA. This species has a moderate potential to occur within the wild oat and annual brome grassland which included suitable friable soils, suitable burrow habitat, suitable burrows (i.e., small mammal burrows), and nectar sources. Due to the disced soils and mowed vegetation within the Area to be Developed, it is unlikely that the species would use the Area to be Developed to nest. However, it is possible that the species could use the Area to Be Developed to forage. Three historic occurrences were documented in the CNDDB within five miles of the Project Area. If Crotch bumble bee is found to be using or nesting adjacent to the Area to Be Developed prior to the start of construction, impacts to Crotch bumble bee may occur in the form of direct mortality of individuals, direct mortality to an active nesting colony, direct mortality to an overwintering individual, conversion of foraging habitat, or permanent loss of foraging resources. Due to the location of the Project in an already mowed and disced area, the suitable foraging, nesting, and overwintering habitat is already subject to repeated disturbance. Because this species is a generalist forager that chooses nest and overwintering locations on an annual basis, temporary and permanent loss of habitat resulting from the Project would not be expected to contribute substantially to the overall decline of this species unless direct impacts were to occur to an active nest or overwintering gyne (future queen). Impacts to Crotch bumble bee would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-5.

Coastal California Gnatcatcher

Coastal California gnatcatcher (federally listed Threatened and CDFW SSC) has a low potential to occur in the disturbed California buckwheat scrub in the northwest portion of the Proposed Conservation Area. The disturbed California buckwheat scrub is present immediately north and west of the Area to be Developed. Therefore, it is unlikely that the species will use the Area to be Developed to nest but could travel through the Area to be Developed to access suitable habitat in adjacent areas. If present, direct impacts to this species could occur in the form of injury or mortality due to vehicle or equipment strikes or nest failure. If present, indirect impacts to this species may occur in the form of increased human activity, noise, dust, light pollution, and ground vibrations. Impacts to coastal California gnatcatcher would be considered less than significant with the implementation of Mitigation Measures BIO-1 and BIO-6.

Western Spadefoot

Western spadefoot (federally proposed for listing, threatened, and CDFW SSC) is not expected to occur within the Area to be Developed. The species was determined to have a low potential due to the presence of an NWI pond feature that overlaps with the Proposed Conservation Area, disturbed California buckwheat scrub, and the presence of sandy soils. However, the habitat characteristics previously

described were not present within the Area to Be Developed. Additionally, no sign of aquatic resources, such as the presence of cracked soils, were identified at the time of the biological survey. There is only one CNDDB occurrence of the species, which is 12 years old and was recorded approximately 5 miles away from the Project Area. As a result, direct impacts to western spadefoot are not expected to occur within the Area to Be Developed. If present, indirect impacts to this species may occur in the form of increased human activity, noise, dust, light pollution, and ground vibrations. Impacts to western spadefoot would be considered less than significant with the implementation of Mitigation Measure BIO-1.

Other Wildlife Species

Six additional CDFW SSC species have a low potential to occur within the Project Area: southern California legless lizard, California glossy snake, San Diego desert woodrat, southern grasshopper mouse, Los Angeles pocket mouse, and American badger. If present, direct impacts to these species could occur in the form of injury or mortality due to vehicle or equipment strike or entombment inside of burrows that are graded over during construction, and loss of habitat. If present, indirect impacts to these species could occur in the form of increased human activity, noise, dust, nighttime lighting, and ground vibrations. These species have a low probability of occurring in the Area to Be Developed, and if present, these species are not expected to occur at high densities due to limited or marginal habitat being present, the lack of contiguous habitat surrounding the Project Area, and the disturbed nature of the Area to be Developed. The potential loss of individuals in the Area to be Developed would not be expected to contribute to the decline in regional populations and would therefore not be considered a significant impact under CEQA. The remaining 15 special-status wildlife species are presumed absent from the Project Area or areas adjacent to the Project Area due to the lack of suitable habitat and ongoing disturbances within and adjacent to the Project Area. No impacts to the 15 presumed absent special-status wildlife species are anticipated to result from the development of this Project.

Nesting Birds and Raptors

Metal power poles, shrub species, and grasses are present within and immediately adjacent to the Area to be Developed. These resources can provide nesting habitat for nesting songbirds and raptors protected by the MBTA and California Fish and Game Code. Furthermore, the Area to be Developed can provide nesting habitat for ground-nesting bird species such as mourning dove (*Zenaida macroura*). Ground-disturbing construction activities could directly affect birds protected by the MBTA and their nests through the removal of occupied habitat (e.g., destruction of nests, mortality of flightless juveniles) in the Area to be Developed, and indirectly through increased noise, vibrations, increased lighting/glare, and increased human activity. These impacts to nesting songbirds and raptors would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-6.

Proposed Conservation Area

The Proposed Conservation Area consists of an open graded lot, sandy hills in the northwest corner, and a powerline easement that bisects the area and includes metal power poles and a dirt road. Vegetation communities present within the Proposed Conservation Area include wild oat and annual brome grassland and a small patch of disturbed California buckwheat scrub in the northwest. Disturbances were present throughout the Proposed Conservation Area including disced soils, mowed vegetation, abundant

trash, homeless encampments, fire pit scars and vehicle tracks. No Project related impacts are expected to occur within the portion of the powerline easement which runs through the Proposed Conservation Area.

The Proposed Conservation Area will be subject to mitigation and restoration activities as part of the West Valley HCP requirements in order to restore the habitat for the Delhi Sands flower-loving fly. Activities may include "fencing, assessments, surveys, and biological monitoring of the habitat and/or species, weed abatement and monitoring, thinning of native vegetation to maintain prescribed ratios of vegetation to open ground/dune areas, habitat restoration and enhancement of disturbed areas and excess sand which accumulates at the downwind side of conservation areas will be collected within the plan area and distributed at the upwind side of conservation areas" (RBF Consulting 2014). Aside from maintenance and restoration activities required by the West Valley HCP, Project-related activities are not planned to occur in the Proposed Conservation Area; therefore, Project-related impacts are expected to be minimal to non-existent or as indirect impacts only. These impacts are discussed in more detail below.

Special-Status Plant Species

Sixteen special-status plant species have a moderate or low potential to occur in the disturbed California buckwheat scrub and/or wild oat and annual grassland present in the Proposed Conservation Area. Twenty-four special-status plant species are presumed absent due to the disturbed nature of the Project Area, the lack of suitable habitat (including elevation and soils, and/or because the Project is located outside of the known range of the species. No Project-related impacts will occur to these species.

Two special status species have moderate potential to occur within the Proposed Conservation Area including smooth tarplant (CRPR 1B.1) and Santa Ana River woollystar (state- and federally listed endangered and CRPR 1B.1). Smooth tarplant has potential to occur within the wild oat and annual brome grassland or the disturbed California buckwheat scrub while Santa Ana river woollystar has potential to occur only within the disturbed California buckwheat scrub. Four plant species have a low potential to occur within the disturbed California buckwheat scrub and wild oat and annual brome grassland in the Proposed Conservation Area: catalina mariposa lily (CRPR 4.2), Plummer's mariposa lily (CRPR 4.2), Parry's spineflower (CRPR 1B.1), and paniculate tarplant (CRPR 4.2). Project-related construction activities will not occur within the Proposed Conservation Area; therefore, no permanent loss of individuals or habitat will occur in the Proposed Conservation Area as a result of the Project. However, some minor beneficial impacts could occur during the restoration activities required by the West Valley HCP, such as non-native weed abatement, trash removal, and fencing to keep public foot traffic and vehicles out of the Proposed Conservation Area. During the restoration activities, impacts may occur in the form of ground disturbance, vegetation removal, mortality, or increased dust. However, these impacts would be beneficial overall to any special-status plant species occurring in the Proposed Conservation Area because the restoration activities would improve habitat quality and also prevent or drastically minimize the anthropogenic impacts currently present in the Proposed Conservation Area (e.g., trash, homeless encampments, off-road vehicle use). If present, impacts to species with a CRPR rank of 4 (Catalina mariposa lily, Plummer's mariposa lily, paniculate tarplant, southern California black walnut, Robinson's pepper-grass, and California muhly) would not be considered significant under CEQA and therefore do not require mitigation. Impacts to the remaining special-status plant species with potential to occur would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-2.

Special-Status Wildlife Species

Three special-status wildlife species have a high potential to occur, three species have a moderate potential to occur, and seven have a low potential to occur. A total of 15 species are presumed absent due to a lack of suitable habitat or the Project Area being outside the known range for the species and Project-related impacts are not expected to occur to these species.

Burrowing Owl

Burrowing owl has a high potential to occur throughout the Proposed Conservation Area in the wild oat and annual brome grassland and disturbed California buckwheat scrub. This species is protected by the MBTA, California Fish and Game Code, and is a Candidate for state listing which affords the species the same protections as though it were listed under the California ESA. Suitable habitat was present throughout the Proposed Conservation Area in the form of friable soils, suitable foraging habitat, and California ground squirrel burrows, including a complex of burrows suitably sized for burrowing owl use. The literature review and database search identified numerous recent occurrences within five miles of the Project Area in CNDDB, one of which was documented in 2007 and describes a breeding pair in the Area to Be Developed. Although no live owls or their sign were incidentally observed during the biological survey, suitable burrowing and foraging habitat were present within the Proposed Conservation Area. Due to the mobile nature of the species, burrowing owls may be present within the Proposed Conservation Area prior to the start of Project activities. Direct impacts may occur to the species in the form of nest failure and indirectly in the form of construction noise, ground vibrations, dust, and light pollution. Additionally, some minor beneficial impacts could occur during the mitigation and restoration activities required by the West Valley HCP, such as non-native weed abatement, trash removal, and fencing to keep public foot traffic and vehicles out of the Proposed Conservation Area. During the mitigation and restoration activities, impacts may occur in the form of ground disturbance and temporary increased human activity. However, these impacts would be beneficial overall for the species occurring in the Proposed Conservation Area because the mitigation and restoration activities would improve habitat quality and prevent or drastically minimize the anthropogenic impacts currently present in the Proposed Conservation Area (e.g., trash, homeless encampments, off-road vehicle use). Impacts to burrowing owl would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-3.

Delhi Sand Flower-Loving Fly

Delhi Sands flower-loving fly (federally listed Endangered) has a high potential to occur throughout the Proposed Conservation Area in the wild oat and annual brome grassland and disturbed California buckwheat scrub. Within the Proposed Conservation Area, Delhi Sand soil series is present; this soil is necessary for the ecology of the Delhi Sands flower-loving fly. Additionally, foraging and oviposition resources are present within and adjacent to the Proposed Conservation Area, including all three indicator plant species: California buckwheat, California croton, and telegraph weed. If present, indirect impacts to this species may occur in the form of increased noise, dust, ground vibrations, and temporary increased human activity during Project related construction or mitigation and restoration activities. However, mitigation and restoration activities in the Proposed Conservation Area were designed specifically to protect the Delhi sands flower-loving fly and are expected to overall benefit the species. Impacts to this species, if present, in the Proposed Conservation Area would be covered under the West Valley HCP

incidental take permit and would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-4.

Crotch Bumble Bee

Crotch bumble bee has a moderate potential to occur throughout the Proposed Conservation Area in the wild oat and annual brome grassland or disturbed California buckwheat scrub. This species is a Candidate for state listing and is therefore afforded all the protections as though it were listed under the California ESA. Habitat characteristics were present throughout the Proposed Conservation Area such as suitable friable soils, suitable burrow habitat, and nectar sources. If Crotch bumble bee is found to be using or nesting in the Proposed Conservation Area prior to the start of construction related Project activities, impacts to this species may occur in the form of noise, dust, and ground vibrations. Additionally, some minor beneficial impacts could occur during the mitigation and restoration activities required by the West Valley HCP, such as non-native weed abatement, trash removal, and fencing to keep public foot traffic and vehicles out of the Proposed Conservation Area. During the restoration activities impacts may occur in the form of ground disturbance and temporary increased human activity. However, these impacts would be beneficial overall for the species occurring in the Proposed Conservation Area because the restoration activities would improve habitat quality and also prevent or drastically minimize the anthropogenic impacts currently present in the Proposed Conservation Area (e.g., trash, homeless encampments, off-road vehicle use). Temporary or permanent loss of habitat resulting from the Project is not expected to occur within the Proposed Conservation Area. Impacts to Crotch bumble bee would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-5.

Coastal California Gnatcatcher

Coastal California gnatcatcher (federally listed Threatened and CDFW SSC) has a low potential to occur in the disturbed California buckwheat scrub in the northwest portion of the Proposed Conservation Area. Direct impacts may occur in the form of ground disturbance and habitat loss or nest failure during vegetation removal associated with restoration activities required by the West Valley HCP. Indirect impacts to this species may occur in the form of increased human activity, noise, dust, light pollution, and ground vibrations. However, these impacts would be beneficial overall for the species occurring in the Proposed Conservation Area because the restoration activities would improve habitat quality and also prevent or drastically minimize the anthropogenic impacts currently present in the Proposed Conservation Area (e.g., trash, homeless encampments, off-road vehicle use). Temporary or permanent loss of habitat resulting from the Project is not expected to occur within the Proposed Conservation Area. Impacts to coastal California gnatcatcher would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-6.

Western Spadefoot

Western spadefoot (federally proposed for listing, threatened, and CDFW SSC) has low potential to occur in the Proposed Conservation Area, in the NWI freshwater pond and disturbed California buckwheat scrub. During the biological survey, no signs of aquatic resources were observed in association with the NWI freshwater pond feature; however, it is possible that the NWI freshwater pond feature seasonally holds water that could provide habitat for the species after rain events. There is only one CNDDB

occurrence of the species, which is 12 years old and was recorded approximately 5 miles away from the Project Area. Impacts may occur in the form of ground disturbance, habitat loss, or direct mortality during mitigation and restoration activities. Indirect impacts to western spadefoot may occur in the form of noise, dust, light pollution, and ground vibrations during construction related Project activities. Impacts to western spadefoot would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-7.

Other Wildlife Species

Six additional CDFW SSC species have a low potential to occur within the Project Area: southern California legless lizard, California glossy snake, San Diego desert woodrat, southern grasshopper mouse, Los Angeles pocket mouse, and American badger. If present, indirect impacts to these species could occur in the form of increased human activity, noise, dust, nighttime lighting, and ground vibrations. During restoration activities, direct impacts may occur in the form of ground disturbance or loss of habitat during vegetation removal. However, these impacts would be beneficial overall for the species occurring in the Proposed Conservation Area because the restoration activities would improve habitat quality and also prevent or drastically minimize the anthropogenic impacts currently present in the Proposed Conservation Area (e.g., trash, homeless encampments, off-road vehicle use). Temporary or permanent loss of habitat resulting from the Project is not expected to occur within the Proposed Conservation Area. These species have a low probability of occurring in the Project Area, and if present, these species are not expected to occur at high densities due to the Project Area being surrounded by development without contiguous habitat nearby, the disturbed nature of the Project Area, and the presence of limited or only marginally suitable habitat. Any potential loss of individuals in the Project Area would not be expected to contribute to the decline in regional populations and would therefore not be a significant impact under CEQA.

Nesting Birds and Raptors

Metal power poles, shrubs, and grasses are present within and immediately adjacent to the Proposed Conservation Area. These resources can provide nesting habitat for nesting songbirds and raptors protected by the MBTA and California Fish and Game Code. Furthermore, the Proposed Conservation Area can provide nesting habitat for ground-nesting bird species such as mourning dove. Ground-disturbing restoration activities required by the West Valley HCP could directly affect birds protected by the MBTA and their nests through the removal of occupied habitat (e.g., destruction of nests, mortality of flightless juveniles). However, these impacts would be beneficial overall for the species occurring in the Proposed Conservation Area because the restoration activities would improve habitat quality and also prevent or drastically minimize the anthropogenic impacts currently present in the Proposed Conservation Area (e.g., trash, homeless encampments, off-road vehicle use). Temporary or permanent loss of habitat resulting from the Project is not expected to occur within the Proposed Conservation Area. Additionally, indirect impacts to nesting birds could occur through increased noise, vibrations, increased lighting/glare, and increased human activity. Impacts to nesting songbirds and raptors would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-6.

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.

Area to be Developed

No riparian habitat or sensitive natural communities were identified within the Area to be Developed. Only one vegetation community is present within the Area to be Developed, wild oats and annual brome grassland. No impacts to sensitive natural communities within the Area to be Developed are anticipated as a result of the Project.

Proposed Conservation Area

No riparian habitat or sensitive natural communities were identified within the Proposed Conservation Area. Two vegetation communities are present within the Proposed Conservation Area, including disturbed California buckwheat scrub and wild oats and annual brome grassland. No impacts to sensitive natural communities within Proposed Conservation Area are anticipated as a result of the 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?	☐	☐	☒	☐

Less than Significant Impact.

Area to be Developed

Although a formal aquatic resources delineation was not performed, potentially jurisdictional features were not identified within the Area to be Developed. Impacts to aquatic resources within the Area to be Developed are not expected as a result of the Project.

Proposed Conservation Area

Although a formal aquatic resources delineation was not performed, potentially jurisdictional features were not identified within the Proposed Conservation Area during the biological survey. One NWI aquatic feature, a palustrine, unconsolidated shore freshwater pond, overlaps with the Proposed Conservation Area. However, the majority of the freshwater pond lies west of the Proposed Conservation Area within

the 500-foot survey buffer. Project-related construction activities will not occur in the Proposed Conservation Area and impacts to this feature are not expected as a result of the Project. No significant impacts to state and federally protected wetlands and waters of the U.S. will occur as a result of the Project.

If the Project design changes or offsite improvements are found to be necessary within the NWI freshwater pond feature as a result of the Project, then a formal aquatic resources delineation should be conducted to determine jurisdiction and extent of the feature. If it is found to be jurisdictional then mitigation and regulatory permitting under the California Fish and Game Code (Section 1600) and the federal Clean Water Act (Section 401) would be necessary prior to the start of construction.

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.

Area to be Developed

The Area to be Developed is located within and adjacent to areas containing existing disturbances (e.g., roadways, major highways, residential and commercial development). Despite these disturbances, the Area to be Developed contains open land and resources that could provide limited movement opportunities in the immediate vicinity. Additionally, to the west of the Area to be Developed is the Proposed Conservation Area, which will remain undeveloped per the West Valley HCP (RBF Consulting 2014). This adjacent habitat connects the Area to be Developed to other open spaces such as the Existing Conservation Area which supports native wildlife, such as the Delhi sands flower-loving fly, and may provide limited movement opportunities for wildlife. Despite these characteristics, the Area to be Developed is adjacent to urban development and anthropogenic disturbances and provides no connection between large, contiguous blocks of native habitat in the region. Due to being surrounded by development and low vegetative cover, impacts to wildlife corridors or linkages are not expected to occur within the Area to Be Developed as a result of the Project.

The Area to Be Developed was also assessed for its ability to function as a native wildlife nursery site and for bat roosting habitat. Bat roosting habitat was not identified within the Area to Be Developed. Some palm tree species and buildings, which can provide bat roosting habitat under the right conditions, are present within the 500-foot survey buffer. However, the palm trees skirts had been removed and the buildings did not have crevices, both of which are necessary to support roosting bats. Suitable nesting habitat for bird species was documented within the Project Area. However, due to the level of disturbance within and adjacent to the Project Area, nursery site habitat for bird species (e.g., heron rookery) is not

anticipated to occur. As a result, impact nursery sites are not expected to occur within the Area to Be Developed as a result of the Project.

Proposed Conservation Area

The Proposed Conservation Area is located within and adjacent to areas containing existing disturbances (e.g., roadways, major highways, residential and commercial development). Despite these disturbances, the Proposed Conservation Area contains open land and resources that could provide limited movement opportunities in the immediate vicinity. Additionally, immediately west of the Proposed Conservation Area is the Existing Conservation Area which supports native wildlife, such as the Delhi Sands flower-loving fly, and may provide limited movement opportunities for wildlife. Despite these characteristics, the Proposed Conservation Area is adjacent to urban development and anthropogenic disturbances and provides no connection between large, contiguous blocks of native habitat in the region. Due to being surrounded by development and low vegetative cover, impacts to wildlife corridors or linkages are not expected to occur within the Proposed Conservation Area as a result of the Project.

The Proposed Conservation Area was also assessed for its ability to function as a native wildlife nursery site and for bat roosting habitat. Bat roosting habitat was not identified within the Proposed Conservation Area. Some palm tree species and buildings, which can provide bat roosting habitat under the right conditions, were present within the 500-foot survey buffer. However, the palm trees skirts had been removed and the buildings did not have crevices, both of which are necessary to support roosting bats. Suitable nesting habitat for bird species was documented within the Proposed Conservation Area. However, due to the level of disturbance within and adjacent to the Proposed Conservation Area, nursery site habitat for bird species (e.g., heron rookery) is not anticipated to occur. As a result, impacts to nursery sites are not expected to occur within the Proposed Conservation Area as a result of the Project.

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.

No mature trees, according to the definitions provided in City of Colton Municipal Code, Chapter 12.20, were observed within the Area to be Developed nor within the Proposed Conservation Area. No impacts to these resources are expected to occur as a result of the Project.

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?	☐	☐	☒	☐

Less than Significant Impact.

Area to be Developed

The West Valley HCP was developed to preserve populations of Delhi Sands flower-loving fly that occur north of the I-10 freeway (RBF Consulting 2014) within the city of Colton in San Bernardino County, California. The Area to be Developed lies within high quality habitat for the Delhi sands flower-loving fly, and within a developable area as defined by the West Valley HCP. Under the West Valley HCP, the current Project would be a "Covered Activity" due its status as "construction, operation, and maintenance of public or public use facilities/structures within 'Developed and Developable Lands' including… other public facilities and projects identified in the City's General Plan and/or Capital Improvements Plans" (RBF Consulting 2014). The Project would therefore be consistent with and also considered a Covered Activity under the West Valley HCP. As a Covered Activity, the Project will be required to implement avoidance and minimization measures during construction as well as species-specific measures to avoid/minimize impacts, such as non-native weed abatement, trash removal, and fencing to keep public foot traffic and vehicles out.

Proposed Conservation Area

The West Valley HCP was developed to preserve populations of Delhi Sands flower-loving fly that occur north of the I-10 freeway (RBF Consulting 2014) within the city of Colton in San Bernardino County, California. The Area to be Reserved for Open Space lies within high quality habitat for the Delhi sands flower-loving fly, and within a proposed "Conservation Area" as defined by the West Valley HCP. Under the West Valley HCP, the current Project activities within the Proposed Conservation Area would be a "Covered Activity" due to its status of "Construction, operation and maintenance within the Conservation Areas including … management of designated Conservation Areas, natural open spaces, or sensitive habitats" (RBF Consulting 2014). The Project would therefore be covered under the West Valley HCP incidental take permit and conservation easement which will implement biological surveys, monitoring, and restoration within the Proposed Conservation Area.

4.4.3 Mitigation Measures

BIO-1: **Worker Environmental Awareness Program and Biological Monitor:** Prior to the start of ground disturbing activities, a Worker Environmental Awareness Program (WEAP) shall be developed by the City or the City's consultant. A qualified biologist with experience with the sensitive biological resources in the region shall present the WEAP to all personnel working in the Project Area (either temporarily or permanently) prior to the start of Project activities.

The WEAP may be videotaped and used to train newly hired workers or those not present for the initial WEAP. The WEAP shall include, but will not be limited to, discussions of the sensitive biological resources associated with the Project, Project-specific measures to avoid or eliminate impacts to these resources, consequences for not complying with Project permits and agreements, and contact information for the lead biologist. Logs of personnel who have taken the training shall be kept on the site at the construction or Project office.

In addition to a WEAP, a qualified biologist (biological monitor) with experience monitoring for and identifying sensitive biological resources known to occur in the area shall be present during initial ground-disturbing activities related to the Project (including fence installation and vegetation removal activities). Biological monitoring duties shall include, but are not limited to, conducting worker education training, verifying compliance with Project permits, and helping to ensure Project activities stay within designated work areas.

The biological monitor shall have the right to halt all activities in an affected area if a special-status species is identified in a work area and is in danger of injury or mortality. If work is halted by the biological monitor, work shall proceed only after the hazards to the individual are removed and there is no longer a risk to the individual, or the individual has been moved from harm's way in accordance with the Project's permits and/or management/translocation plans. The biological monitor shall take representative photographs of the daily activities and will also maintain a daily log that documents general Project activities and compliance with the Project's permit conditions. Non-compliances shall also be documented in the daily log, including any measures that were implemented to rectify the issue.

BIO-2: **Rare Plant Survey:** A rare plant survey for smooth tarplant and Santa Ana River woollystar shall be conducted within suitable habitat within the Area to be Developed and Proposed Conservation Area during the appropriate blooming period. The survey shall be conducted by a botanist or qualified biologist in accordance with the USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants; the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities; and the CNPS Botanical Survey Guidelines of the CNPS. One survey shall be conducted during a time of the year that overlaps with all blooming periods (April through September).

If the aforementioned special-status plant species are observed during the rare plant survey, individual plants or populations shall be marked using a GPS unit with submeter accuracy. If any of these special-status plant species are detected in the Project Area and impacts to these species are unavoidable and impacts would result in deleterious effects to the regional population of the species as determined by the qualified Project botanist or biologist, then the Project shall consult with CDFW to develop a mitigation plan or additional avoidance and minimization measures to ensure impacts to these plant species are minimized to the maximum extent practicable. Examples of measures that may be implemented after consultation with CDFW include establishing non-disturbance buffers around special-status plant locations or additional monitoring requirements during Project construction.

BIO-3: **Burrowing Owl Surveys:** If the burrowing owl is no longer a Candidate or formally listed species under the California ESA at the time ground-disturbing activities occur, then no additional protection measures are proposed for the species.

If the Crotch bumble bee is legally protected under the California ESA as a Candidate or Listed species at the time ground-disturbing activities are scheduled to begin, pre-construction surveys for burrowing owl shall be conducted prior to the start of ground-disturbing activities (including vegetation removal and fence installation activities), in the Area to be Developed, Proposed Conservation Area and adjacent areas. The surveys shall follow the methods described in the California Department of Fish and Game (CDFG) *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) on take avoidance. Two surveys shall be conducted by a qualified biologist with experience surveying for and identifying burrowing owls and their sign. The first survey shall be conducted between 14 and 30 days prior to the start of ground-disturbing activities and the second survey shall be conducted no more than 24 hours prior to the start of ground-disturbing activities. If burrowing owls and/or suitable burrowing owl burrows with sign (e.g., whitewash, pellets, feathers, prey remains) are identified on the Project site during the survey and impacts to the species or occupied burrows are unavoidable, additional mitigation measures consistent with those outlined in the Staff Report (CDFG 2012) may need to be implemented, such as implementing a non-disturbance buffer around occupied burrows, seasonal work restrictions, or passive relocation. Additionally, CDFW shall be notified within 24 hours as further coordination may be required to avoid or mitigate certain impacts and an incidental take permit may be required. If the pre-construction surveys result in no detections of live burrowing owls and no sign of owl use of the two potential burrows, then Project activities may commence.

BIO-4: **Delhi Sands Flower-Loving Fly:**

Prior to the initiation of any ground disturbing activities, a qualified biologist shall conduct a focused survey for the Delhi Sands Flower-loving Fly in accordance with USFWS Survey Guidelines (1996) and all subsequent revisions to the guidelines to determine the presence or absence of the species within the Area to be Developed.

At minimum, the following shall be required per the West Valley HCP. Construction monitoring will be conducted by qualified biologists. Prior to the start of monitoring, submittal of the name(s), permit numbers, and resumes of all prospective biological monitors to the City of Colton at least 30 days prior to initiating Project activities. The biologists shall be experienced surveying for, monitoring, and identifying Delhi Sands flower-loving fly. Prior to the start of Project activities, the biological monitor shall mark the Proposed Conservation Area and temporary fencing shall be installed. At least 1 week prior the commencement of Project activities, the biological monitor shall submit written and photographic documentation of the limits of construction to ensure the Project does not encroach upon the Proposed Conservation Area. The City approved biologist will visit the site at least twice a week during Project construction. The biological monitor will provide a worker environmental awareness program (WEAP) to ensure those onsite are aware of the

conserved area and the biology of the Delhi Sands flower-loving fly. The biological monitor will also submit a report to the City's Development Services Department at the end of each month documenting Project grading and implementation of minimization measures. If construction activities encroach into the Proposed Conservation Area, the City shall report the incident to the USFWS within 24 hours of receiving the monthly report and any impacted areas shall be restored in accordance with section 5.4.1. of the West Valley HCP (RBF Consulting 2014). During construction, the Project personnel shall properly dispose of toxic substances, implement fire prevention such as providing fire extinguishing equipment and prohibiting smoking, keep storage and staging a minimum of 50 feet from the Proposed Conservation Area, keep the work site and staging area free of trash and waste, implement dust control by watering work areas, and shield any permanent lightning (RBF Consulting 2014).

The Proposed Conservation area shall be fenced with educational signage installed, permanent lighting in developed areas shall be shielded, Project personnel shall be provided a map displaying the Proposed Conservation Area in proximity to the Area to Be Developed, Project boundaries shall be clearly defined, all damage to the Proposed Conservation area shall be reported within 24 hours for their evaluation and recommendations (RBF Consulting 2014).

BIO-5: Preconstruction Surveys for Crotch Bumble Bee: If the Crotch bumble bee is no longer a Candidate or formally listed species under the California ESA at the time ground-disturbing activities occur, then no additional protection measures are proposed for the species.

If the Crotch bumble bee is legally protected under the California ESA as a Candidate or Listed species at the time ground-disturbing activities are scheduled to begin, preconstruction surveys shall be conducted in accordance with CDFW's Survey Considerations for the California ESA Candidate Bumble Bee Species (CDFW 2023) the season immediately prior to Project-related ground disturbing activities (including but not limited to vegetation clearing, fence installation, and grading). A minimum of three Crotch bumble bee preconstruction surveys shall be conducted by a qualified biologist during the colony active period (April through August) and blooming period of flowering resources when Crotch bumble bees are most likely to be detected. If Crotch bumble bees are detected, CDFW shall be notified within 24 hours as further coordination may be required to avoid or mitigate certain impacts and an incidental take permit may be required. If no Crotch bumble bees are detected, then the Project activities may commence.

BIO-6: Preconstruction Survey for Coastal California Gnatcatcher and Nesting Birds: A preconstruction survey for coastal California gnatcatcher and nesting birds shall be conducted by a qualified avian biologist prior to ground-disturbing Project activities (e.g., grubbing, vegetation removal, grading, fence installation) regardless of the time of year Project-related activities are scheduled to begin. The preconstruction survey shall be performed to minimize impacts to coastal California gnatcatcher and ensure

that active bird nests will not be disturbed or destroyed as a result of the Project. The survey shall be completed no more than three days prior to initial ground disturbance. The survey shall include the Project Area and adjacent areas where Project activities have the potential to affect active nests, either directly or indirectly, due to construction activity, noise, human activity, or ground disturbance.

If an active nest is identified, a qualified avian biologist shall establish an appropriately sized non-disturbance buffer around the nest using flagging or staking. Construction activities shall not occur within any non-disturbance buffer zones until the nest is deemed inactive by the qualified avian biologist through regular nest status monitoring conducted by the avian biologist.

If coastal California gnatcatcher, or any other special-status avian species is identified during the preconstruction survey, and Project-related impacts are unavoidable, consultation with the appropriate agency (e.g., USFWS, CDFW) may need to occur to develop additional avoidance and minimization measures.

BIO-7: **Preconstruction Survey for Western Spadefoot:** Prior to ground disturbing activities in the Proposed Conservation Area, a qualified biologist shall conduct at least one preconstruction daytime and nighttime survey for all life stages of western spadefoot. The survey shall be conducted when surface water is ponded in aquatic features, if feasible, between October through May (when suitable environmental conditions are met). Surveys will be conducted during or following rain events and in nonfreezing temperatures to the maximum extent feasible. Daytime surveys of aquatic features shall be conducted with the aid of binoculars and polarized sunglasses for all life stages of western spadefoot as well as adjacent upland habitat for burrowing adults and juveniles. Nighttime audio detection and eye-shine surveys shall be conducted with the aid of binoculars and flashlight for calling males in and near aquatic features. A preconstruction survey report shall be prepared and submitted to the USFWS and CDFW, as appropriate, that includes the methods, results, and recommendations based on the survey. If the preconstruction survey(s) are conducted according to the above methods and no detections of western spadefoot occur within the Project Area or surroundings, then no further measures need to be taken. If the preconstruction survey(s) are conducted according to the above methods and there are detections of western spadefoot within the Project Area or surroundings, consultation with the appropriate regulatory agencies may be required based on the current status of the western spadefoot at the time of detection.

4.5 Cultural Resources

4.5.1 Environmental Setting

The Project Area is located on the margins of San Bernardino Valley and Cucamonga Valley, to the south of the San Gabriel Mountains and north of the Jurupa Mountains, and has elevations that range from 1,040 to 1,080 feet above mean sea level. It is located approximately 1.75 miles northwest of the Santa Ana River and 0.80 mile northeast of Slover Mountain, which was originally quarried for marble as early as

1861 and has been a cement factory since 1892 (Landis 2010). It is also located approximately 2.80 miles west of the confluence of Lytle Creek and Warm Creek and the confluence of Warm Creek and the Santa Ana River.

4.5.1.1 Cultural Resources Inventory and Evaluation

An Archaeological and Built Environment Resources Inventory and Evaluation Report was prepared for the Proposed Project (ECORP 2024c; Appendix C) The inventory included a records search, literature review, and field survey.

Records Search

A records search for the property was requested from the South Central Coastal Information Center of the California Historical Resources Information System (CHRIS) at California State University, Fullerton on August 28, 2024. The purpose of the records search was to determine the extent of previous surveys within a 1-mile (1,600-meter) radius of the Project Area, and whether previously documented pre-contact or historic archaeological sites, architectural resources, or traditional cultural properties exist within this area. The records search results indicate that 33 previous cultural resources investigations have been conducted within 1 mile of the Project Area. These studies revealed the presence of pre-contact sites, including lithic scatters, ceramic scatters, and isolates (such as projectile points); the studies also revealed the presence of historical sites, including quarries, railroad infrastructure, and farms. Two of the 33 studies within the 1-mile radius included the Project Area. The records search also identified 17 previously recorded cultural resources within 1 mile of the Project Area. Of these, 6 resources are believed to be associated with Native American occupation of the vicinity, and 11 resources are historic-era sites associated with early European-American agriculture, ranching, logistics, and mining activities. A portion of one resource is located within the Project Area: P-36-13627 (Southern Sierras Powerline).

Sacred Lands File

The Native American Heritage Commission (NAHC) was contacted on August 30, 2024 to request a search of the Sacred Lands File (SLF) for the Project Area. This search determines whether California Native American tribes have recorded Sacred Lands within the Project Area. This is because the SLF is populated by members of the Native American community with knowledge about the locations of tribal resources. In requesting a search of the SLF, information from the Native American community regarding tribal cultural resources (TCRs) was solicited, but the responsibility to formally consult with the Native American community lies exclusively with the federal and local agencies under applicable state and federal law. ECORP was not delegated authority by the lead agencies to conduct tribal consultation.

Literature Review

Additional sources were reviewed for the cultural resources inventory and evaluation. The Project Area does not contain any resources listed on the Office of Historic Preservation's Built Environment Resource Directory for San Bernardino County. The National Register Information System did not list any eligible or listed properties within the Project Area. No California Historical Landmarks were identified within the Project Area. A search of historic General Land Office land patent records from the Bureau of Land Management's patent information database revealed that Section 24 was patented to William Pierce on

May 10, 1870 as a sale-cash entry. The Caltrans State Bridges Inventory (Caltrans 2018) lists the Slover Mountain Underpass (Bridge 54 0835) located approximately 0.7 mile southeast of the Project Area. Caltrans classifies the bridge as Category 5, which indicates that it is ineligible for the National Register of Historic Places (NRHP). The Caltrans Local Bridges Inventory (Caltrans 2019) does not list any bridges within 1 mile of the Project Area. A review of the City of Colton local historical registry indicates that Hermosa Gardens Cemetery, which is located 0.27 mile east of the Project Area, is the City of Colton's Historical Landmark No. 31. The Cemetery was established in 1887 and is the location where lawman Morgan Earp was reinterred in 1892. His grave was dedicated as a Historical Landmark by the Historical Preservation Commission in 1993 (City of Colton n.d.).

ECORP also reviewed historical aerial photographs and maps of the Project Area to obtain information about past land-use practices and the potential for buried archaeological sites. The review indicates that no development has taken place within the Project Area, except for the transmission line and associated access road. The review also indicates nearby rural activities related to agriculture and Morrow Field.

Field Survey

On September 13, 2024, a pedestrian survey for archaeological resources was conducted for the Project Area. At that time, developed and exposed ground surfaces were examined for indications of surface or subsurface cultural resources. Within the Project Area, the ground visibility to the south of the powerline that crosses the Project Area was approximately 60 percent due to recent mowing and minimal overgrowth; the ground visibility on the associated access road was 100 percent. To the north of the powerline, recent digging activities associated with a homeless camp resulted in the removal of vegetation and increased ground visibility; however, modern debris and trash on the ground reduced the visibility to between 80 and 90 percent. No new cultural resources were identified within the Project Area. The previously recorded transmission line was revisited, and the California Department of Parks and Recreation site record was updated.

Impacts to a Historical Resource, as defined by CEQA (listed in an official historic inventory or survey or eligible for the California Register of Historical Resources [CRHR]), are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired (14 California Code of Regulations Section 15064.5(b)). Demolition or alteration of eligible buildings, structures, and features that they would no longer be eligible would result in a significant impact. The whole or partial destruction of eligible archaeological sites would result in a significant impact. In addition to impacts from construction resulting in destruction or physical alteration of an eligible resource, impacts to the integrity of setting (sometimes termed *visual impacts*) of physical features in the Project Area could also result in significant impacts.

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?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

As a result of previous investigations, one historic-period transmission line was previously recorded within the Project Area: P-36-13627 (Southern Sierras Powerline). No new resources were identified during the Project's field survey. Resource P-36-13627, also known as CA-SBR-12613H, is a historic-period powerline that travels through Orange, Riverside, and San Bernardino counties. ECORP archaeologists identified two towers, and one roadway associated with this resource within the Project Area.

Resource P-36-13627 (Southern Sierras Powerline) was originally recorded and evaluated by Michael Dice (Dice 2007). The evaluation by Dice (2007) included the recording of the entirety of the powerline. Dice found the Southern Sierras Powerline not eligible for the CRHR under all criteria due to lack of historical associations and significance. Another segment of the powerline was updated and found ineligible for the NRHP (Stropes 2019). Both Dice (2007) and Stropes (2019) found the powerline not eligible for the CRHR and NRHP, respectively, under all criteria. Further, Gillean and Sanka (2012) found that the original towers were replaced by the existing lattice-style towers between 1953 and 1954, thereby reducing the resource's physical integrity.

Archival research and field studies performed by ECORP as part of the current study did not yield any new information that would warrant a reconsideration of the previous findings of ineligibility. Therefore, based on a review of previously conducted investigations, ECORP concurs with Dice (2007) and Stropes (2019) that P-36-13627 (Southern Sierra Powerline) is recommended not eligible for listing on the CRHR and NRHP. ECORP's field analysis of the segment within the Project Area indicates that, due to the current condition of the transmission line, it should remain not eligible based on the lack of historical significance and loss of integrity. Although the previous evaluations included segments that were not located within the Project Area, ECORP concurs with the findings and analysis of the Southern Sierra Powerline as a whole and concludes that the resource remains not eligible for the NRHP and CRHR under all criteria. Therefore, P-36-13627 is not considered a Historical Resource under CEQA or a Historic Property under National Historic Preservation Act (NHPA) Section 106.

The survey of the Project Area did not identify any pre-contact resources on the surface; however, considerable homeless encampment refuse and disturbance was present in the Project Area. It is possible that any historic resources present on the surface have been removed. ECORP assumes that the subsurface areas within the Project Area still have a high potential for buried pre-contact resources. Impacts would be less than significant with incorporation of Mitigation Measures CUL-1 and CUL-2.

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.

The eastern half of the Project Area comprises Holocene Alluvium (likely deriving from Lytle Creek, Warm Creek, or the Santa Ana River) and the western half comprises Holocene Aeolian Sands (Dibblee and Minch 2004). Such sedimentation provides a high probability that archaeological deposits might be buried, if present, and also are indicative of a higher likelihood of human occupation.

The Project Area contains one soil type: Delhi fine sand. This soil type is a somewhat excessively drained, sandy alluvium derived from granite (NRCS 2024).

The Project Area has a high potential for buried pre-contact archaeological sites due to the presence of alluvial and aeolian deposits, in addition to the likelihood for pre-contact archaeological sites to be located near perennial waterways. The survey of the Project Area did not identify any pre-contact resources on the surface; however, considerable homeless encampment refuse and disturbance was present in the Project Area. ECORP assumes that the subsurface areas within the Project Area still have a high potential for buried pre-contact archaeological resources. Impacts would be less than significant with incorporation of Mitigation Measures CUL-1, CUL-2, and CUL-3.

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 dedicated cemeteries are located in or near the Project Area. Most Native American human remains are found in prehistoric archaeological sites. No impacts to human remains are anticipated; however, if any are encountered during Project-related ground-disturbing construction activities, existing regulations (Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California PRC, and Assembly Bill [AB] 2641) are in place that detail the actions that must be taken if such discoveries are made. Implementation of Mitigation Measure CUL-3 would reduce impacts to a less than significant level.

4.5.3 Mitigation Measures

CUL-1: **Monitoring and Treatment Plan.** A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist and submitted to the Lead Agency for dissemination to the Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN;

also known as San Manuel Band of Mission Indians). The Plan shall address the details, timing, and responsibility of archaeological and cultural activities that will occur on the project. Details in the Monitoring and Treatment Plan shall include Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling, safety requirements, duties, scope of work, contractor awareness training, archaeological and Native American Tribal Monitors' authority to stop and redirect grading activities, and the protocols and stipulations that the Lead Agency, YSMN, and the project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation. Once all parties review and approve the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

CUL-2: **Contractor Awareness Training.** The lead agency shall ensure that a Contractor Awareness Training Program is delivered to train equipment operators about cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the lead agency of any occurrences; project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program.

The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure, video, or in-person tailgate meeting, as determined appropriate by the archaeologist. The training shall be provided to all construction supervisors, forepersons, and operators of ground-disturbing equipment. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The Construction Manager shall provide a copy of the signed training roster to the lead agency as proof of compliance.

CUL-3: **Archaeological Monitoring.** Prior to the start of construction, the project proponent shall retain a qualified professional archaeologist to monitor all ground-disturbing activities associated with project construction. Monitoring is not required for placement of equipment or fill inside excavations that were monitored, above-ground construction activities, or redistribution of soils that were previously monitored (such as the return of stockpiles to use in backfilling).

The Monitoring Archaeologist shall meet or work under the direct supervision of someone meeting the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology. The Monitoring Archaeologist shall have the authority to temporarily halt ground-disturbing or construction-related work within 100 feet of any discovery of potential historical or archaeological resources in order to address unanticipated discoveries. In addition, if the find includes human remains, or remains that are potentially human, the procedures in Mitigation Measure CUL-4, shall be followed.

CUL-4: **Post-Review Discovery Procedures.** If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. The Monitoring Archaeologist shall evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.
- If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the lead agencies. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures if the find is determined to be a Historical Resource under CEQA, as defined by CEQA or a historic property under Section 106 of the NHPA, if applicable. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA or Section 106; or 2) that the treatment measures have been completed to their satisfaction.
- If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the San Bernardino County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California PRC, and AB 2641 will be implemented. If the coroner determines the remains are Native American and not the result of a crime scene, the Medical Examiner will notify the NAHC, which then will designate a Native American Most Likely Descendent (MLD) for the Project (Section 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC may mediate (Section 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

4.6 Energy

4.6.1 Environmental Setting

ECORP prepared an Energy Consumption Assessment for the Proposed Project to analyze the potential direct and indirect environmental impacts associated with Project energy consumption, including the depletion of nonrenewable resources (e.g., oil, natural gas, coal) during the construction and operational phases (ECORP 2024d; Appendix D). 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.

Energy relates directly to environmental quality. Energy use can adversely affect air quality and other natural resources. The vast majority of California's air pollution is caused by burning fossil fuels. Consumption of fossil fuels is linked to changes in global climate and depletion of stratospheric ozone. Transportation energy use is related to the fuel efficiency of cars, trucks, and public transportation; choice of different travel modes (auto, carpool, and public transit); vehicle speeds; and miles traveled by these modes. Construction and routine operation and maintenance of transportation infrastructure also consume energy. In addition, residential, commercial, and industrial land uses consume energy, typically through the usage of natural gas and electricity. 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., gallons of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh. As previously stated, this impact analysis focuses on the four sources of energy that are relevant to the Proposed Project: electricity usage, natural gas usage, the equipment-fuel necessary for Project construction, and the automotive fuel necessary for Project operations.

The electricity consumption associated with all non-residential uses in San Bernardino County from 2018 to 2022 is shown in Table 4.6-1. As indicated, electricity consumption has increased since 2018.

Table 4.6-1. Non-Residential Electricity Consumption in San Bernardino County 2018 – 2022

Year	Electricity Consumption (kWh)
2022	10,327,755,820
2021	10,137,255,897
2020	9,797,575,011
2019	9,926,183,260
2018	10,158,958,013

Source: California Energy Commission 2023

The natural gas consumption associated with all non-residential uses in San Bernardino County from 2018 to 2022 is shown in Table 4.6-2. As indicated, natural gas consumption has decreased since 2018.

Table 4.6-2. Non-Residential Natural Gas Consumption in San Bernardino County 2018 – 2022	
Year	**Natural Gas Consumption (therms)**
2022	294,792,317
2021	304,591,046
2020	259,859,817
2019	272,237,239
2018	268,588,772

Source: California Energy Commission 2023

On-road gasoline fuel consumption in San Bernardino County from 2019 to 2023 is shown in Table 4.6-3. On-road gasoline consumption has decreased in the County since 2019.

Table 4.6-3. On-Road Gasoline Consumption in San Bernardino County 2019 – 2023	
Year	**On-road Gasoline Consumption (gallons)**
2023	859,496,393
2022	867,249,836
2021	869,262,610
2020	763,765,304
2019	894,821,914

Source: CARB 2022b, 2021

On-road and offroad diesel fuel consumption in San Bernardino County from 2019 to 2023 is shown in Table 4.6-4. Offroad diesel consumption has decreased in the County since 2019, and on-road diesel consumption has increased in the County since 2019.

Table 4.6-4. Diesel Consumption in San Bernardino County 2019 – 2023			
Year	**On-Road (gallons)**	**Off-Road (gallons)**	**Total (gallons)**
2023	279,150,963	17,957,859	297,108,822
2022	276,240,473	17,958,286	297,198,759
2021	272,787,528	17,961,981	290,749,509
2020	265,477,739	17,970,801	283,448,540
2019	261,139,639	20,984,704	282,124,343

Sources: CARB 2022b, 2021

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 Impact.

The Project is proposing the construction and operation of a 3-story medical office clinic, a 5-story hotel, a 3-story parking structure, additional unenclosed parking, and associated site improvements. The Project would generate 2,807 daily trips on weekdays and 895 trips on weekends. In total, the Project would therefore generate 763,910 annual trips.

The levels of construction and operational related energy consumption estimated to be consumed by the Project include the number of kWh of electricity, therms of natural gas, gallons of gasoline and gallons of diesel. The amount of total on-road construction-related fuel use was estimated using average county fuel economy found in CARB's Emission FACtor (EMFAC) 2021 (CARB 2022b). EMFAC 2021 is a mathematical model that was developed to calculate emission rates and rates of gasoline and diesel consumption from motor vehicles that operate on highways, freeways, and local roads in California. The fuel consumption of Project construction off-road equipment was also modeled using a combination of CalEEMod and CARB's OFFROAD2021 version 1.0.7 (CARB 2021). OFFROAD2021 is a mathematical model that was developed to calculate emission rates and rates of gasoline and diesel consumption from off-road vehicles that operate in California. Project operational electricity and natural gas consumption estimates were calculated using CalEEMod, version 2022.1. CalEEMod is a statewide land use computer model designed to quantify resources associated with both construction and operations from a variety of land use projects.

For 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 nonresidential land uses in San Bernardino County. The amount of fuel necessary for Project construction is calculated and compared to that consumed in San Bernardino County. Similarly, the amount of fuel necessary for Project operations is calculated and compared to that consumed in San Bernardino County. Energy consumption associated with the Proposed Project is summarized in Table 4.6-5.

Table 4.6-5. Proposed Project Energy and Fuel Consumption

Energy Type	Annual Energy Consumption	Percentage Increase Countywide
Building Energy Consumption		
Electricity Consumption[1]	2,551,459 kWh	0.0247%
Natural Gas[1]	37,672 therms	0.0128%

Table 4.6-5. Proposed Project Energy and Fuel Consumption		
Energy Type	**Annual Energy Consumption**	**Percentage Increase Countywide**
Construction Fuel Consumption		
Construction Off-Road & On-Road Equipment (Diesel)[2,3]	92,760 gallons	0.0312%
Construction On-Road (Gasoline)[3]	21,228 gallons	0.0025%
Operations Fuel Consumption		
Operations On-Road (Diesel) [3]	81,403 gallons	0.0292%
Operations On-Road (Gasoline) [3]	315,499 gallons	0.0367%

Source: [1] California Emissions Estimator Model (CalEEMod); [2]OFFROAD2021; [3] Emission Factor model (EMFAC) 2021

Notes: The Project increases in electricity and natural gas consumption are compared with all nonresidential uses in San Bernardino County in 2022, the latest data available. The Project increases in on-road and off-road fuel consumption are compared with the anticipated countywide fuel consumption in 2023, the most recent full year of data.

Fuel necessary for Project construction would be required for the operation and maintenance of construction equipment and the transportation of materials to the Project Area. The fuel expenditure necessary to construct the hotel, medical office and associated parking would be temporary, lasting only as long as Project construction. As indicated in Table 4.6-5, the Project's on-road gasoline fuel consumption during the one-time construction period is estimated to be 21,228 gallons, which would increase the annual countywide gasoline fuel use by 0.0025 percent. Additionally, the Project is estimated to consume 92,760 gallons of diesel fuel, which would be 0.0312 percent of the county's annual diesel fuel consumption. 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.

Operations of the Proposed Project would include electricity and natural gas usage. As shown in Table 4.6-5, the annual electricity consumption due to operations would be 2,551,459 kilowatt-hours resulting in a small increase (0.0247 percent) in the typical annual electricity consumption attributable to all nonresidential uses in San Bernardino County. However, this is potentially a conservative estimate. The City of Colton General Plan Land Use Element provides goals and policies meant to reduce energy consumption by all new projects. Policy LU 4.3 of the General Plan aims to promote sustainable building practices that go beyond the requirement of Title 24 of the California Administrative Code and encourage energy-efficient design elements. Natural gas consumption due to operations would be 37,672 therms

resulting in a nominal increase (0.0128 percent) in the typical annual natural gas consumption attributable to all nonresidential uses in San Bernardino County. For these reasons, it is expected that energy consumption associated with Project buildings would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature.

The Project is estimated to generate approximately 2,807 daily trips on weekdays and 895 trips on weekends. No Project-specific fleet mix data was provided; therefore, CalEEMod defaults were used for a conservative analysis. As indicated in Table 4.6-5, this would equate to a consumption of approximately 315,499 gallons of automotive gasoline per year, which would lead to a minimal (0.0367 percent) increase in the annual countywide automotive gasoline consumption. The Project is estimated to consume approximately 81,403 gallons of automotive diesel fuel per year, which would lead to a minimal (0.0292 percent) increase in the annual countywide automotive diesel consumption. Therefore, fuel consumption associated with the vehicle trips generated by the Project during ongoing maintenance activities would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. 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 or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

No Impact.

The Project would be designed in a manner that is consistent with relevant energy conservation plans 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 2019 Title 24 updates went into effect on January 1, 2020. The 2022 standards went into effect became effective January 1, 2023. The 2022 Energy Standards improve upon the 2019 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2022 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, encouraging better energy efficiency, strengthening ventilation standards, and more. The 2022 Energy Standards are a major step toward meeting Zero Net Energy. Buildings permitted on or after January 1, 2023, must comply with the 2022 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 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. Policy LU-4.3 of the City of Colton General Plan aims to promote sustainable building practices that go beyond the requirement of Title 24 of the California Administrative Code and encourage energy-efficient design elements. Additionally, Policy

LU-5.1 requires the incorporation of energy conservation features into the design of all new construction and site development, as required by State law and local regulations.

The Proposed Project would not conflict or obstruct a state or local plan for renewable energy or energy efficiency. No impact would occur.

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 Phase I Environmental Site Assessment Report was prepared for the Proposed Project to provide an assessment of existing environmental conditions in the Project Area (Partner Engineering and Science, Inc. [Partner] 2018; Appendix E). Additionally, a Geotechnical Engineering Investigation was prepared for the Proposed Project to evaluate the geotechnical conditions of the Project Area and provided recommendations for development (NorCal Engineering 2022; Appendix F).

A Paleontological Resources Assessment was prepared by ECORP to evaluate the potential for paleontological resources to be affected by the development of the Proposed Project (ECORP 2025; Appendix G). A paleontological resource assessment conducted less than 1 mile east of the Project Area indicated that the Project Area is directly underlain by Quaternary alluvium and eolian drift sand deposits of Holocene age (Applied Earthworks 2015). Bortugno and Spittler (1986) have also described the soils as being Holocene in age. The eolian sediment are described as yellowish-brown sand dune deposits composed of poorly to moderately consolidated, well-to poorly sorted, fine- to medium-grained sand, silty sand, and fine gravelly sand. The alluvial deposits contain coarse material and are poorly to moderately sorted (Applied Earthworks 2015).

4.7.1.1 Geomorphic Setting

The City of Colton lies on a flat alluvial fan surface south of the Transverse Ranges, a geomorphic province that includes the San Gabriel and the San Bernardino Mountains. Wind-blown dunes trend north to northwest along the northern boundary. These features overlie alluvial deposits and granitic basement rock (City of Colton 2014b). The City is situated within the Peninsular Ranges Geomorphic Province. The Peninsular range is series of ranges separated by northwest trending valleys. The Peninsular ranges extend into lower California and are bound to the east by the Colorado Desert, and extend into the Los Angeles Basin and the island group surrounding the continental shelf (Partner 2018).

4.7.1.2 Regional Seismicity and Fault Zones

The Alquist-Priolo Earthquake Fault Zoning Act (California PRC, Chapter 7.5, Section 2621-2699.6) was intended to reduce the risks associated with surface faults and requires that the designated State Geologist identify and map "Earthquake Fault Zones" around known active faults. An "active fault," according to California DOC, 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."

The San Jacinto fault zone, Crafton Hills fault zone, and San Andreas fault zone run through the City (San Jacinto fault) and the surrounding San Bernardino region (Crafton Hills and San Andreas faults) (City of Colton 2018).

4.7.1.3 Soils

Soils in the City have been mapped by the NRCS as Delhi fine sand (Db) at the surface with other soils in the surrounding area including Tujunga Loamy Sand (Tb), exposures of Ramona Sandy Loam (RmC), and a belt of Tujunga Gravelly Loamy Sand (TvC). The dominant soil is Delhi fine sand, which form approximately 15 to 25-foot-high dunes along the northern boundary (City of Colton 2014b).

According to the U.S. Department of Agriculture's NRCS Web Soil Survey, the Project Area is composed of the soil type Db Delhi fine sand (NRCS 2024). The Delhi series consists of very deep, somewhat excessively drained soils. They formed in wind modified material weathered from granitic rock sources. Delhi soils are on floodplains, alluvial fans, and terraces. Slopes are 0 to 15 percent (Partner 2018).

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 Impact.

i) The San Jacinto fault zone, Crafton Hills fault zone, and San Andreas fault zone run through the City (San Jacinto fault) and the surrounding San Bernardino region (Crafton Hills and San Andreas faults). The San Jacinto fault passes along Colton's eastern border with the cities of Loma Linda

and San Bernardino. There are no records of surface rupture in Colton, but surface ruptures outside of Colton have ranged from five inches to approximately three feet. The closest fault to the Project Area is the Rialto-Colton fault, which runs diagonally through the City from northwest to southeast (City of Colton 2018). It is located approximately 0.20 mile to the northeast. Relatively little is known about the Rialto-Colton fault, which has no known records of fault rupture. There is some evidence that the fault has been active in recent geologic times and it may be capable of causing surface rupture. Because no known active fault line traverses the Project Area, fault rupture impacts at the Project Area would be less than significant. No mitigation is required.

Less than Significant Impact.

ii) Unlike surface rupture, the consequences of seismic shaking are not restricted to the area immediately surrounding the fault. Energy resonating through the ground has the potential to travel hundreds of miles and cause damage in many locations simultaneously. The City is located within a seismically active region and earthquakes have the potential to cause ground shaking of significant magnitude (City of Colton 2018). There is potential for strong ground motion due to proximity to the San Jacinto fault zone, Crafton Hills fault zone, and San Andreas fault zone which run through the City (San Jacinto fault) and the surrounding San Bernardino region (Crafton Hills and San Andreas faults). According to the Geotechnical Engineering Investigation prepared for the Proposed Project, The San Jacinto (San Bernardino) Fault is located 2 kilometers from the Project Area and is capable of producing a magnitude 6.7 earthquake. Ground shaking originating from earthquakes along other active faults in the region is expected to induce lower horizontal accelerations due to smaller anticipated earthquakes and/or greater distances to other faults. (NorCal Engineering 2022).

The strong ground shaking hazard may be managed by structural design per the governing edition of the California Building Code. Structures should be designed in general accordance with the seismic provisions of the California Building Code Seismic Design Category D to reduce the risk of loss, injury, or death resulting from strong ground-shaking to less than significant.

Less than Significant Impact.

iii) Liquefaction is a phenomenon where 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. In the City, the areas prone to liquefaction are along the north and south banks of the Santa Ana River as well as in the Reche Canyon areas (City of Colton 2018). The Project Area is not located within a liquefaction hazard zone. Thus, the design of the proposed construction in conformance with the latest Building Code provisions for earthquake design is expected to provide mitigation of ground shaking hazards that are typical to Southern California, including liquefaction (NorCal Engineering 2022). Impacts would be less than significant.

Less than Significant Impact.

iv) A landslide is the movement of earth materials down slopes and areas of steep topography. Landslides present some risk to the City, specifically in Reche Canyon, La Loma Hills, and areas around the base of Slover Mountain. The Project Area is located near a landslide hazard zone with low-medium landslide risk (City of Colton 2018). According to the Project's Phase I Environmental Site Assessment, the Project Area is located at approximately 1,100 feet above msl. The contour lines on the map indicate the area is sloping gently toward the south (Partner 2018). The Project Area does not contain steep topography and is not located in a hillside area with unstable slopes. 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 substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Less than Significant Impact.

Erosion can occur by varying processes and may occur in the Project Area where bare soil is exposed to wind or moving water (both rainfall and surface runoff). The processes of erosion are generally a function of material type, terrain steepness, rainfall or irrigation levels, surface drainage conditions, and general land uses. Implementation of the Proposed Project would require ground-disturbing activities that could potentially result in soil erosion or loss of topsoil. Construction of the Proposed Project would be required to comply with the Construction General Permit, through preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

BMPs are included as part of the SWPPP prepared for the Proposed Project and would be implemented to manage erosion and the loss of topsoil during construction-related activities (see Hydrology and Water Quality [IX.] Environmental Checklist and Discussion). With implementation of BMPs identified in the Project-specific SWPPP, soil erosion impacts would be reduced to a less than significant impact, and no mitigation is required.

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 Impact.

The Project Area is located near an area of low-medium landslide potential but does not contain steep topography and is not near any hillsides. Strong ground shaking can also cause settlement, lateral

spreading, or subsidence by allowing sediment particles to become more tightly packed, thereby reducing pore space. Most subsidence in California is generally a more drawn-out process that takes place over a longer period. Colton's location in the Upper Santa Ana Valley groundwater basin makes it susceptible to subsidence. Between 1933 and 1960, North Colton experienced approximately 2.5 inches of subsidence while South Colton experienced approximately one inch over the same period. Although recent reports indicate that subsidence has slowed substantially, it still poses a risk to the City (City of Colton 2018); however, the Project Area is not located within a liquefaction hazard zone. Impacts would be less than significant, and no mitigation is required.

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 Impact.

Expansive soils are fine-grained silts and clays which are subject to swelling and contracting. The amount of this swelling and contracting is subject to the amount of fine-grained clay materials present in the soils and the amount of moisture either introduced or extracted from the soils. The Geotechnical Engineering Investigation prepared for the Project divided expansive soils into five categories ranging from very low to very high based on their expansion index. Table 4.7-1 shows the classifications of expansive soils.

Table 4.7-1. Classification of Expansive Soil

Expansion Index	Potential Expansion
0 to 20	Very Low
21 to 50	Low
51 to 90	Medium
91 to 130	High
Above 130	Very High

Source: NorCal Engineering 2022

If the expansion index of the soils onsite is 21 or higher, the soils are considered expansive. The laboratory tests conducted on the Project soil found the soil to have an expansion index of 0. Therefore, the Project is not located on expansive soil that would create substantial direct or indirect risks to life or property. Impacts would be less than significant, and no mitigation is required.

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.

No septic tanks or alternative wastewater disposals systems are proposed. The Proposed Project would connect to the City's sewer system, which is available for the disposal of wastewater. 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) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

ECORP attempted to conduct a paleontological record search through the Western Science Center in Hemet, California, but did not receive any response; therefore, the results discussed here are based on findings conducted through literature searches for other projects within the City of Colton. The Society of Vertebrate Paleontology (SVP) guidelines are used to assess the paleontological resource potential of the underlying geologic units. The potential of the geologic unit(s) can be assigned to one of four categories defined by the SVP: *high*, *undetermined*, *low*, and *no potential* (SVP 2010).

Applied Earthworks (2015) conducted a record search through the Los Angeles County Museum (LACM). Although no previously recorded vertebrate fossil localities were found in the Project Area from within Quaternary alluvial and eolian deposits, the LACM did identify two vertebrate localities of deer and whipsnake (LACM 1207 and LACM 7811, respectively) nearby from within older Pleistocene-age sedimentary deposits (Applied Earthworks 2015).

First Carbon Solutions (2019) conducted a cultural resources assessment on the Ashley Way Logistics Center Project in the City of Colton south of Interstate 10 (I-10). A record search through LACM also produced the whipsnake (LACM 7811) as well as a specimen of fossil horse (LACM 4540).

The Project Area is underlain at the surface by Quaternary alluvium and eolian drift sand deposits of Holocene age. Holocene-age eolian and alluvial deposits are typically too young to contain fossils; however, older Quaternary alluvium may be encountered at depth and are considered to have a high paleontological sensitivity. Older Quaternary alluvium deposits are not expected to be encountered as Project related excavation would not exceed 5.7 feet in depth from the existing grade.

While there is a low paleontological sensitivity of the geologic units underlying the Project Area, there is a documented presence of nearby recorded fossil collection localities. Therefore, construction of the Proposed Project has the potential to result in impacts to paleontological resources. With implementation of Mitigation Measure GEO-1, impacts would be reduced to less than significant.

4.7.3 Mitigation Measures

GEO-1: **Unanticipated Discovery – Paleontological Resource.** Although full-time monitoring is not warranted based on the low sensitivity to produce paleontological resources (i.e., fossil remains), a Worker's Environmental Awareness Program shall be given to all personnel associated with the Project prior to ground disturbance in case any unanticipated paleontological resources are discovered during excavation activities. If an unanticipated discovery is made, the contractor shall notify the City and cease excavation within 50 feet of the find until a qualified paleontological professional can provide an evaluation of the site. The qualified paleontological professional shall 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.

4.8 Greenhouse Gas Emissions

ECORP prepared an Air Quality and Greenhouse Gas Emissions Assessment for the Proposed Project to estimate project-generated criteria air pollutants, health risk, and GHG emissions attributable to the Project and to determine the level of impact the Project would have on the environment (ECORP 2024a; Appendix A).

4.8.1 Environmental Setting

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead trapped, resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient

concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. More specifically, experts agree that human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with global surface temperature reaching 1.1 degrees Celsius above 1850 to 1900 degrees Celsius in 2011 to 2020 (Intergovernmental Panel on Climate Change [IPCC] 2023).

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 more than 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 CO_2 equivalents (CO_2e), which weight each gas by its global warming potential. Expressing GHG emissions in CO_2e 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.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms. Despite the sequestration of CO_2, human-caused climate change is already causing damaging effects, including weather and climate extremes in every region across the globe (IPCC 2023).

Table 4.8-1 describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the greenhouse effect.

Table 4.8-1. Summary of Greenhouse Gases

Greenhouse Gas	Description
carbon dioxide (CO_2)	Carbon dioxide is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere.[1]
methane (CH_4)	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH_4 to the atmosphere. Natural sources of CH_4 include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH_4 is about 12 years.[2]

Table 4.8-1. Summary of Greenhouse Gases	
Greenhouse Gas	**Description**
nitrous oxide (N_2O)	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years.[3]

Sources: [1] EPA 2023a; [2] EPA 2023b; [3] EPA 2023c

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; it is sufficient to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

In 2024, CARB released the 2024 edition of the *California GHG Emissions from 2000 to 2022: trends of Emissions and Other Indicators* report. In 2022, California emitted 371.1 million metric tons of CO_2e. This inventory is 2.4 percent lower than in 2021. The 2022 emissions data shows that the State of California is continuing its established long-term trend of GHG emission declines, despite the anomalous emissions trends from 2019 through 2021, due in large part to the impacts of the COVID-19 pandemic. Overall trends in the Inventory continue to demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of Gross State Product [GSP]) is declining. California's GSP increased by 0.7 percent in 2022, and emissions per GSP declined by 3.1 percent from 2021 to 2022. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2022, accounting for approximately 37.7 percent of total GHG emissions in the state. Transportation emissions have decreased 3.6 percent from 2021 levels due to reductions from on-road, rail and, to a lesser extent, intrastate aviation transportation. Emissions from the electricity sector account for 16.1 percent of the Inventory, which is a decrease of 4.1 percent since 2021, despite the growth of in-state solar, wind, and hydropower energy generation. California's industrial sector accounts for the second largest source of the state's GHG emissions in 2022, accounting for 19.6 percent, which saw a decrease of 2 percent since 2021 (CARB 2024b).

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to GHG emissions if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

The Appendix G thresholds for GHG emissions do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the

appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA.

The significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) and the SCAQMD Tier 2 GHG threshold by considering whether the Project complies with applicable plans, policies, regulations, and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Specifically, the Project is evaluated for consistency with CARB's 2022 Scoping Plan, the City of Colton's Climate Action Plan (CAP), and with SCAG's 2024 RTP/SCS.

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 Impact with Mitigation Incorporated.

4.8.2.1 Construction-Related Emissions

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project Area, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 4.8-2 illustrates the specific construction generated GHG emissions that would result from construction of the Project. Once construction is complete, the generation of these GHG emissions would cease.

Table 4.8-2. Construction-Related Greenhouse Gas Emissions

Emissions Source	CO_2e Emissions (metric tons/year)
Construction Calendar Year 1	584
Construction Calendar Year 2	141
Total	**725**

Sources: California Emissions Estimator Model (CalEEMod) version 2022.1. Refer to Appendix A for Model Data Outputs

Notes: CO2e = carbon dioxide equivalent

Project construction generated GHG emissions were calculated using CalEEMod model defaults for San Bernardino County and information from the Proposed Project Site Plan.

As shown in Table 4.8-2, Project construction would result in the generation of approximately 725 metric tons of CO_2e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. Consistent with SCAQMD recommendations, Project construction GHG emissions

have been amortized of the expected life of the Project, which is considered to be 30 years per the SCAQMD and added to the annual average operational emissions (see Table 4.8-3).

4.8.2.2 Operational Emissions

Operation of the Project would result in an increase in GHG emissions primarily associated with mobile sources. Long-term operational GHG emissions attributed to the Project are identified in Table 4.8-3.

Table 4.8-3. Operational-Related Greenhouse Gas Emissions

Emissions Source	CO_2e Emissions (metric tons/year)
Construction Emissions (Amortized)	24
Mobile	2,970
Area	4
Energy	727
Water	29
Waste	224
Refrigeration	19
Total	**3,997**

Sources: California Emissions Estimator Model (CalEEMod) version 2022.1. Refer to Appendix A for Model Data Outputs

Notes: CO2e = carbon dioxide equivalent

Emission projections predominately based on CalEEMod model defaults for San Bernardino County and amount of units identified in the Project Site Plan coupled with daily trips provided by KOA Corporation (2024) to inform the modeling calculations of operational mobile source emissions. CalEEMod Measures T-2 "Increase Job Density" for the Proposed Medical Facility and T-3 "Provide Transit-Oriented Development" were applied to the CalEEMod scenario to be consistent with the Proposed Project operational characteristics.

As shown in Table 4.8-3, the Project would generate 3,997 metric tons of CO_2e annually. CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies, and/or other regulatory strategies to reduce GHG emissions.

The significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) and the SCAQMD Tier 2 GHG threshold by considering whether the Project complies with applicable plans, policies, regulations, and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Specifically, the Project is evaluated for consistency with CARB's 2022 Scoping Plan, the City of Colton's CAP, and with SCAG's 2024 RTP/SCS. As described below, the Proposed Project would be subject to implementation of measures consistent with the CAP GHG emissions reductions strategies. Implementing mitigations consistent with the City's CAP strategies for land use development will greatly reduce the regional GHG emissions and facilitate progress towards statewide emission reduction targets. All of the applicable and feasible provisions of the City's

GHG-reduction program as promulgated by its CAP will be incorporated into the Proposed Project as a requirement of Mitigation Measure GHG-1. With the implementation of Mitigation Measure GHG-1, the Proposed Project 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?	☐	☒	☐	☐

Less Than Significant With Mitigation Incorporated.

4.8.2.3 2022 CARB Scoping Plan

CARB's 2022 Scoping Plan sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. The 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high global warming potential; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., CAP) consistent with CEQA Guidelines Section 15183.5.

GHG reductions are also achieved as a result of State of California energy and water efficiency requirements for new residential developments. These efficiency improvements correspond to reductions in secondary GHG emissions. The 2022 Scoping Plan Appendix D provides local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. The 2022 Scoping Plan Appendix D focuses on Residential and Mixed-Use Projects.

The Project would include a number of the 2022 Scoping Plan and 2022 Scoping Plan Appendix D standard conditions and mitigation measures for construction and operation. For example, the 2022 Scoping Plan's construction actions include enforcing idling time restrictions on construction vehicles and requiring construction vehicles to operate highest tier engines commercially available. Some of the recommended operational design features in Appendix D would include providing bicycle parking, creating on- and off-site safety improvements for bike, pedestrian, and transit connections, requiring solar panels, drought-tolerant landscaping, and energy conserving appliances.

As shown in Table 4.8-3, approximately 92 percent of the Project's emissions are from energy and mobile sources, which would be further reduced by the 2022 Scoping Plan actions described above. The City has no control over vehicle emissions (approximately 74 percent of the Project's total emissions). However, these emissions would decline in the future due to statewide measures, as well as cleaner technology and fleet turnover.

The Project would not impede the state's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. As such, impacts related to consistency with the 2022 Scoping Plan would be less than significant.

City of Colton Climate Action Plan

The City of Colton adopted a CAP on November 3, 2015. The 2015 CAP contained guidance on the City of Colton's GHG Inventory reduction goals, policies, guidelines, and implementation programs. The City's GHG emissions reduction target was 15 percent below the 2008 emission level by 2020, which aligned with California's statewide reduction target. The 2015 CAP included mitigation measures such as increasing solar installation, tree planting programs, sustainable transportation efforts, and waste and wastewater emission reduction measure. In December of 2023, the City Council rescinded the 2015 CAP and adopted the City of Colton 2023 CAP Update, which includes GHG Emissions Screening Tables, and consists of a relevant GHG inventory for the City of Colton, implementation actions for Colton, and Colton GHG reduction measures (City of Colton 2023a). The 2023 CAP Update is informed by the technical information presented in the San Bernardino County's Regional GHG Reduction Plan Update which was adopted in June of 2023. The 2023 CAP Update includes detailed descriptions of all reduction strategies discussed in the County's Regional GHG Reduction Plan Update. Strategies are organized into state and local categories. The GHG emissions reduction strategies that are pertinent to the Proposed Project including the following state and local measures:

State Measures:

- *State-2. Title 24 Standards for Non-Residential and Residential Buildings (Energy Efficiency Standards and CALGreen):* Requires that building shells and building components be designed to conserve energy and water. Note that in some instances, implementation of the CALGreen voluntary measures has been identified by local jurisdictions as part of their selected local measures.
- *State-3. Senate Bill (SB) 350 Clean Energy and Pollution Reduction Act:* SB 350 requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030.
- *State-4. AB 1470 (Huffman), AB797 Solar Water Heating:* AB 1470 created a 10-year incentive program funded at 25 million dollars per year to encourage the installation of 200,000 solar water heating systems that offset natural gas use in homes and businesses throughout the state.

Local Measures:

- *Energy-1. Energy Efficiency Incentives and programs to promote Energy Efficiency for Existing Buildings:* Promote energy efficiency in nonresidential buildings. Promote individualized energy management services for large energy users. Remove funding barriers to energy-efficiency improvements. Participate in programs (national, state, or regional) that provide innovative, low-interest financing for energy-efficiency and alternative energy projects. Promote incentives to encourage the use of energy-efficient equipment and lighting.

- *Energy-3. Building Electrification:* Adopt building electrification targets and incentives, for both new commercial and residential buildings and retrofits. Establish a goal that a percentage of new and existing buildings use electric heating, ventilation, and air conditioning and water heating systems.
- *Energy-4. Solar Installations for New Commercial/Industrial Development:* Establish a goal for solar installations on new commercial and industrial development to be achieved before 2030.
- *Land Use-2. Urban Tree Planting:* Establish a jurisdiction-wide tree planting goal or tree preservation goal. This measure will reduce energy consumption and associated GHG emissions in the building energy sector by reducing the heat island effect.
- *On-Road-2. Encourage Use of Mass Transit, Carpooling, Ridesharing, and Telecommuting*: Commute Trip Reduction programs aim to reduce commute trips and Vehicle Miles Traveled (VMT) through various strategies. The strategies include encouraging the use of mass transit, carpooling, ridesharing, and telecommuting.
- *On-Road-5. Community Fleet Electrification:* Hybrid electric vehicles, plug-in hybrid vehicles, and all EVs produce lower emissions than conventional vehicles. All EV types emit at least 40 percent less GHG emissions than conventional vehicles. However, more than 95 percent of people still drive conventional gasoline or diesel vehicles, so programs to encourage the use of EV or hybrid vehicle ownership are greatly needed.
- *Off-Road Equipment-2. Idling Ordinance:* Adopt an ordinance that limits idling time for heavy-duty diesel trucks beyond CARB or local air district regulations and if not already required as part of CEQA mitigation. As part of permitting requirements or city contracts, encourage contractors to submit a construction vehicle management plan that includes such things as idling time requirements; requiring hour meters on equipment; and documenting the serial number, horsepower, age, and fuel of all onsite equipment. State law currently requires all off-road equipment fleets to limit idling to no more than 5 minutes.
- *Waste-1. Increased Waste Diversion:* Exceed the waste diversion goal (75 percent) required by AB 341 by adopting citywide waste goals to divert more than 75 percent of waste. In instances where cities operate their own waste services programs, they will have responsibility to expand or establish composting, recycling, and yard waste programs to residences and businesses.
- *Water-1. Require Adoption of the Voluntary CALGreen Water Efficiency Measures for New Construction:* Require adoption of the voluntary CALGreen water efficiency measures (at least Tier 1) for new construction. CALGreen voluntary measures recommended use of certain water-efficient appliances, plumbing and irrigation systems, as well as more aggressive water-savings targets.
- *Water-3. Encourage Water-Efficient Landscaping Practices:* Encourage water-efficient landscaping practices. Adopt a landscaping water conservation ordinance that exceeds the requirements in the Model Landscape Ordinance (AN 1881).

As such, the Proposed Project would be subject to implementation of measures consistent with the CAP GHG emissions reductions strategies. Implementing mitigations consistent with the City's CAP strategies for land use development will greatly reduce the regional GHG emissions and facilitate progress towards statewide emission reduction targets. The City ensures all applicable provisions of the CAP are incorporated into projects and their permits through development review and applications of conditions of approval as applicable. Furthermore, all of the applicable and feasible provisions of the City's GHG-reduction program as promulgated by its CAP will be incorporated into the Proposed Project as a requirement of Mitigation Measure GHG-1.

Regional Transportation Plan/Sustainable Communities Strategy

Additionally, the objective of the Proposed Project also aligns with various aspects of the SCAG's RTP/SCS to accommodate balancing job opportunities in local areas to reduce long commutes from home to work.

The SCAG Regional Council adopted the 2024-2050 RTP/SCS, which charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably. The 2024 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions.

The proposed Project Area is currently vacant and mixed-use development is proposed to accommodate a medical facility and hotel in close proximity (approximately 0.3 roadway miles) to a commercial area consisting of one grocery store, several restaurants, and residences. Located in an urbanized area of Colton, the Project Area is surrounded by predominantly residential, commercial, retail, medical and restaurant land uses. This strategic positioning highlights the Project's "location efficiency." Location efficiency refers to how well a project is integrated within its urban context, such as an "urban area," "compact infill," or "suburban center." The Project Area qualifies as an urban/compact infill site, surrounded by existing residential, office and commercial developments in an active urban center. The Proposed Project would provide future visitors with a variety of nearby commercial uses as well as potential work opportunities within walking distance to nearby existing residences. Additionally, the Project's location along the OmniTrans Route 1 bus route would enhance connectivity. With a bus stop at the ARMC, Route 1 meanders through Colton on Meridian Avenue, East Valley Boulevard and Mt. Vernon Avenue before entering the City of San Bernardino and continuing to traverse West 2nd Street, with access offered to the Downtown San Bernardino Metrolink Station. After connecting with this Metrolink station, Route 1 continues through the City of San Bernardino. OmniTrans Route 1 makes it a viable alternative transportation option for future Project visitors, especially considering its connection to the Downtown San Bernardino Metrolink Station. This improved accessibility supports community integration by linking the Project Area with a broader network of commercial and residential areas. The increased use of public transit is anticipated to result in fewer vehicle trips and a reduction in VMT. Consequently, this shift can lead to a significant decrease in transportation related GHG emissions. As such, the Project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

4.8.3 Mitigation Measures

GHG-1: Prior to the certificate of construction-related permits for the Pepper Clinic Development Project, the Project Applicant shall demonstrate to the satisfaction of the City of Colton Planning Division that the following measures are implemented.

- Consistent with CAP Measures Energy-1, Energy-3, and Energy-4, all Project buildings shall adhere to Title 24 standards and implement Tier 1 and Tier 2 Green Building Ratings, such as LEED, Build It Green, or Energy Star certifications, to the satisfaction of the City of Colton Planning Division.
- Consistent with CAP Measure Land Use-2, the Proposed Project landscaping should include tree planting to provide shade which will reduce energy consumption and associated GHG emissions in the building energy sector by reducing the heat island effect.
- Consistent with CAP Measure On-Road-2, the medical facility and hotel staff should be knowledgeable about rideshare and public transit options for transport of visitors. Additionally, the enclosed parking garage should designate a certain percentage of desirable parking spaces for ridesharing vehicles and/or charge for parking.
- Consistent with CAP Measure On-Road-5, the Proposed Project should include EV charging stations and EV parking stalls to promote use of electric vehicles.
- Consistent with CAP Measure Off-Road Equipment-2, all construction equipment must follow the City's idling ordinances.
- Consistent with CAP Measure Waste-1, the medical facility and hotel operators shall contact the City of Colton's Recycling Coordinator, as required by AB 341, to coordinate the availability of assessable recycling bins on site in the case that the Proposed Project generates more than four cubic yards of waste per week. Additionally, the medical facility and hotel operators shall coordinate with the City of Colton's Recycling Coordinator to implement organic waste recycling onsite in the case that more than eight cubic yards of organic waste per week are generated (City of Colton 2023a.
- Consistent with CAP Measures Water-1 and Water-3, all Proposed Project landscaping shall be low irrigation and water use-efficient and water-efficient appliances should be prioritized and utilized where possible.

Timing/Implementation: Prior to the issuance of occupancy permits

Monitoring/Enforcement: The City of Colton Planning Division

4.9 Hazards and Hazardous Materials

4.9.1 Environmental Setting

A hazardous material is defined as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment (Health and Safety Code Section 25501(n)(1)). The term "hazardous materials" refers to both hazardous substances and hazardous wastes. Any material may be considered hazardous if it is specifically listed by a statute or if it has one or more of the following characteristics:

- Toxicity (causes adverse human health effects);
- Ignitability (has the ability to burn);
- Corrosivity (causes severe burns or damage to materials); or
- Reactivity (causes explosions or generates toxic gases).

Depending on the type and concentrations of contamination, potential exposure can threaten public health if released from the soil, groundwater, or into the air. The primary exposure pathways through which an individual can be exposed to a hazardous material or waste are inhalation, ingestion, and direct contact. The manufacture, storage, transport, and use of hazardous materials can also result in the accidental release of hazardous materials into the environment.

In the City of Colton, mechanical dealerships, repair shops, gasoline and diesel fuel stations, and dry cleaners are some examples of businesses that regularly use and store chemicals or other hazardous materials. An existing jet fuel pipeline transects the City, which could pose a risk if failure occurs. These operations also tend to involve the transportation of raw materials and their byproducts either by pipeline, rail, or truck. The central location of two major interstate freeways and the Union Pacific rail line increases the risk of transportation hazardous material exposure because of the high volume of goods moving along these routes (City of Colton 2018).

The Hazardous Materials of the San Bernardino County Fire Protection District is designated by the State Secretary for Environmental Protection as the Certified Unified Program Agency for the County of San Bernardino (City of Colton Fire Department 2024a).

4.9.2 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 Impact.

Construction Impacts

Some hazardous materials, including diesel and gasoline fuels, oils, solvents, hydraulic fluids, and paints, would be used in the Project Area during construction. To limit the exposure of construction workers to hazardous materials (e.g., construction related fuels and paints), construction activities will comply with applicable worker protection laws and regulations. This includes the Occupational Safety and Health Act, Title 8 and 9 of the Code of Federal Regulations. The contractor will be required to identify a controlled staging area within the project limits for storing materials and equipment. These materials would be stored and handled in a manner to prevent accidental release and consistent with the hazardous materials handling BMPs and other measures contained within the required SWPPP. With these protections in place, impacts would be less than significant.

Operational Impacts

The Proposed Project involves the construction of a three-story medical office clinic, a five-story commercial hotel, a three-story parking structure, surface parking areas, and associated site improvements. The types of hazardous materials that would be used and stored onsite in connection with the proposed hotel include cleaning agents, building maintenance products, paints and solvents, and similar items. The proposed hotel pool would also require the use of chlorine. These potentially hazardous materials would not be present in significant quantities to pose a significant hazard to public health and safety or the environment. Operation of the proposed medical office is expected to result in biohazardous materials and medical wastes. The use, handling, storage, and disposal of biomedical waste would be required to comply with California's Medical Waste Management Act of 2017. Additionally, only medical waste transporters registered with the California Department of Public are allowed to transport medical waste, including biohazardous waste. All transporters of biomedical waste also must hold a Hazardous Waste Transporter Registration through the California Department of Toxic Substances Control (DTSC).

With mandatory regulatory compliance, the Project would not pose a significant hazard to the public or the environment through the routine transport, use, storage, emission, or disposal of biomedical wastes or hazardous materials, nor would the Project increase the potential for accident conditions which could result in the release of hazardous materials into the environment. Impacts would be less than significant, and no mitigation is required.

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 Impact.

Construction Impacts

As stated above, some hazardous materials would be used during construction. 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 release of any construction-related spills would be prevented through the implementation of BMPs listed in the SWPPP.

Operational Impacts

Operation of the proposed hotel would include the use of cleaning agents, building maintenance products, paints and solvents, and similar items. These potentially hazardous materials would not be present in significant quantities to pose a significant hazard to public health and safety or the environment. Operation of the proposed medical office is expected to result in biohazardous materials and medical wastes. The use, handling, storage, and disposal of biomedical waste would be required to comply with California's Medical Waste Management Act of 2017. With mandatory regulatory compliance, the Project would not pose a significant hazard to the public or the environment through the release of hazardous materials into the environment. Impacts would be less than significant, and no mitigation is required.

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 Proposed Project is located approximately 0.5 mile south of Jehue Middle School. The school is located more than 0.25 mile from an existing or proposed school. 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
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.

According to the Project's Phase I Environmental Site Assessment, no evidence of current or former Aboveground Storage Tanks (AST) or underground storage tanks were observed during the site

reconnaissance and there were no spills, stains, or other indications that a surficial release has occurred onsite (Partner 2018).

The adjacent property reconnaissance consisted of observing the adjacent properties from the Project premises. Four large ASTs were observed on the southern-adjacent property. No information pertaining to the contents of the ASTs was identified. No evidence of spills, leaks, or staining were observed in the vicinity of the ASTs at the time of the site reconnaissance. Additionally, the southern-adjacent property was not identified on any databases that report releases of hazardous substances (Partner 2018). As such, this site is not expected to represent a significant environmental concern.

The provisions in Government Code Section 65962.5 are commonly referred to as the Hazardous Waste and Substances Site List (Cortese List). The Cortese List includes five data resources that DTSC shall compile and update at least annually (California Environmental Protection Agency [California EPA] 2024a). The list includes:

- List of Hazardous Waste and Substances sites from DTSC's EnviroStor database (DTSC 2024)
- List of Leaking Underground Storage Tank (LUST) Sites from the State Water Resources Control Board (SWRCB) GeoTracker database (SWRCB 2024)
- List of solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit (California EPA 2024b)
- List of active Cease and Desist Orders (CDOs) and Cleanup and Abatement Orders (CAOs) from SWRCB (California EPA 2024a)
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC (California EPA 2024c)

The search of DTSC's EnvioStor database revealed two cleanup sites and one permitted site within 1 mile of the Project Area (DTSC 2024), including:

<u>Cleanup Sites</u>

- Las Terrazaz [0.70 mi]
  - Location: West Valley Boulevard and North Cypress Avenue, Colton, CA 92324
  - Site Type: Voluntary Cleanup
  - Past Use that Caused Contamination: None specified
  - Potential Contaminants of Concern: chlordane, dieldrin, polychlorinated biphenyls
  - Potential Media Affected: None specified
  - Status: Certified as of 01/25/2017
- General American Transportation Corporation (GATX) Rail [0.75 mi]
  - Location: South Pepper Avenue and Slover Street, Colton, CA 92324

- Site Type: Corrective Action
- Past Use that Caused Contamination: ASTs, oil/water separators, paint/de-paint facility, railroad maintenance shop
- Potential Contaminants of Concern: acetone, nickel, Total Petroleum Hydrocarbons (TPH)-motor oil
- Potential Media Affected: soil
- Status: Certified Operations and Management – Land Use Restrictions Only as of 08/11/2023

- GATX Rail [0.75 mi]
  - Location: South Pepper Avenue and Slover Street, Colton, CA 92324
  - Site Type: Corrective Action
  - Past Use that Caused Contamination: ASTs, oil/water separators, paint/de-paint facility, railroad maintenance shop
  - Potential Contaminants of Concern: Acetone, nickel, TPH-motor oil
  - Potential Media Affected: Soil
  - Status: Certified Operations and Management – Land Use Restrictions Only as of 08/11/2023

Permitted Sites

- GATX Rail [0.75 mi]
  - Program Type: Hazardous Waste Facility
  - Status: Closed as of 04/10/2006

Additionally, searches of SWRCB GeoTracker revealed 10 LUST Cleanup Sites and 1 Cleanup Program Site within 1 mile of the Project Area (SWRCB 2024), including:

- Shell Service Station [0.28 mi]
  - Location: 1600 Valley Boulevard West, Colton, CA 92373
  - Site Type: LUST Cleanup Site
  - Potential Contaminants of Concern: Gasoline, methyl-tert-butyl/tert-butyl alcohol (TBA)/Other fuel oxygenates, TBA
  - Potential Media Affected: Soil
  - Status: Completed – Case Closed as of 07/27/2005
- Telco Foods [0.64 mi]
  - Location: 2111 Valley Boulevard West, Colton, CA 92324

- Site Type: LUST Cleanup Site
- Potential Contaminants of Concern: Gasoline
- Potential Media Affected: Soil
- Status: Completed – Case Closed as of 07/30/2007

- CalNev [0.75 mi]
  - Location: 2051 East Slover Avenue, Bloomington, CA 92316
  - Site Type: Cleanup Program Site
  - Potential Contaminants of Concern: Diesel, gasoline
  - Potential Media Affected: Aquifer used for drinking water supply
  - Status: Open – Remediation as of 12/01/2011
- I-10 Truck Stop [0.81 mi]
  - Location: 195 East Valley Boulevard, Rialto, CA 92376
  - Site Type: LUST Cleanup Site
  - Potential Contaminants of Concern: Diesel, gasoline
  - Potential Media Affected: Soil
  - Status: Completed – Case Closed as of 06/01/2007
- I-10 Truck Stop [0.81 mi]
  - Location: 195 East Valley Boulevard, Rialto, CA 92376
  - Site Type: LUST Cleanup Site
  - Potential Contaminants of Concern: None specified
  - Potential Media Affected: None specified
  - Status: Completed – Case Closed as of 06/23/2016
- Chevron #9-6969 [0.88 mi]
  - Location: 101 East Valley Boulevard, Rialto, CA 92376
  - Site Type: LUST Cleanup Site
  - Potential Contaminants of Concern: Gasoline
  - Potential Media Affected: Well used for drinking water supply
  - Status: Completed – Case Closed as of 04/28/2000

- Texaco City of Rialto [0.89 mi]
  - Location: 102 East Valley Boulevard, Rialto, CA 92376
  - Site Type: LUST Cleanup Site
  - Potential Contaminants of Concern: Gasoline
  - Potential Media Affected: Soil
  - Status: Completed – Case Closed as of 08/25/1992
- Southern Pacific Railyard [0.91 mi]
  - Location: 200 Marion Way, Bloomington, CA 92316
  - Site Type: LUST Cleanup Site
  - Potential Contaminants of Concern: Diesel
  - Potential Media Affected: Soil
  - Status: Completed – Case Closed as of 03/28/1991
- Texaco Service Station [0.93 mi]
  - Location: 120 West Valley Boulevard, Rialto, CA 92376
  - Site Type: LUST Cleanup Site
  - Potential Contaminants of Concern: Waste oil/motor/hydraulic/lubricating
  - Potential Media Affected: Soil
  - Status: Completed – Case Closed as of 03/05/1997
- Thrifty Oil #323/ARCO #9695 [0.94 mi]
  - Location: 111 West Valley Boulevard, Rialto, CA 92376
  - Site Type: LUST Cleanup Site
  - Potential Contaminants of Concern: Gasoline, methyl-tert-butyl/TBA/Other fuel oxygenates
  - Potential Media Affected: Soil
  - Status: Completed – Case Closed as of 09/17/2008
- Clem Trans Inc [0.97 mi]
  - Location: 213 West Valley Boulevard, Rialto, CA 92376
  - Site Type: LUST Cleanup Site
  - Potential Contaminants of Concern: Diesel

- Potential Media Affected: Soil
- Status: Completed – Case Closed as of 08/26/2004

All of the previously described cleanup sites are not located within or adjacent to the Project Area and have been completed and closed under the direction and oversight of San Bernardino County or the Santa Ana RWQCB (Region 8). The only open clean-up program site is CalNev, located approximately 0.75 mile away from the Project Area. Remediation is being conducted on this site and monthly project status reports have been submitted since 2011.

There are no solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit within proximity of the Project Area (California EPA 2024b). The Project Area does not have any active CDOs or CAOs and there are no sites with active CDOs or CAOs within 1 mile of the Project Area (California EPA 2024a). Additionally, the Project Area is not on the List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code (California EPA 2024c).

Therefore, the Project Area is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as such would not create a significant hazard to the public or the environment. No impact would occur.

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

No Impact.

The City of Colton is located near San Bernardino International Airport and Ontario International Airport. The Project Area is located approximately 6.3 miles southwest of the San Bernardino International Airport and 13 miles east of the Ontario International Airport. The Proposed Project is not located within an airport land use plan or within two miles of a public airport or public use airport. As such, the Proposed Project would not result in a safety hazard for people residing or working in the Project Area. 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) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

The City's Emergency Operations Plan is primarily responsible for informing the emergency management strategies for the City and is organized into four categories: mitigation, preparedness, response, and recovery. Emergency response activities are conducted in tandem with the Colton Police and Fire Departments. The Project Area parcel runs along North Pepper Avenue which is designated as an evacuation route in the City of Colton's General Plan Safety Element (City of Colton 2018).

Implementation of the Proposed Project would require construction to occur within the public right-of-way (ROW) of North Pepper Avenue. Construction activities, which may temporarily restrict vehicular traffic, would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road/lane closures. The Proposed Project design would be submitted to and approved by the City's Fire and Police Departments prior to any construction activities. Furthermore, a Traffic Control Plan shall be prepared to ensure proper access to residences and businesses in the area by emergency vehicles during construction, ensure residences and businesses in the area have proper access to evacuation routes during construction, and to maintain traffic flow. Impacts to an adopted emergency response plan or emergency evacuation route would be less than significant with the incorporation of Mitigation Measure HAZ-1.

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.

Development along the southern border of the City exists in a wildland-urban interface (WUI) area and is at risk of being affected by wildfires. A fire protection plan approved by the fire code official, is required for all new development within the WUI area (City of Colton 2018). The Proposed Project is located in the northern part of the City that is more urban and developed. The Project Area is not located within the wildfire perimeter for historic wildfires and is also not within a wildfire hazard zone. The nearest wildfire hazard zone is a portion of West Valley Boulevard, located approximately 500 meters (0.31 mile) south of the Project Area, which is determined to be a moderate wildfire hazard zone.

The Proposed Project would not directly or indirectly expose people or structures to significant risk involving wildland fires. No impact would occur and no mitigation is required.

4.9.3 Mitigation Measures

HAZ-1: **Traffic Control Plan.** Prior to construction, the City of Colton (or its contractor) shall prepare a Traffic Control Plan to ensure proper access to residences and businesses in the area by emergency vehicles during construction, to maintain traffic flow, and to maintain access to evacuation routes. The Traffic Control Plan shall be approved by the City of Colton prior to any road or lane closures.

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

4.10.1.1 Regional Hydrology

The City of Colton is located in the Santa Ana River Basin watershed, also known as a hydrologic basin. The river bisects the City along the east and south. The river is ephemeral and only contains water flows during winter and spring months when rain and snowmelt draining from the San Bernardino and San Gabriel mountains enter the river through storm channels. The City is also affected by Lytle Creek, a large channelized creek that traverses the northeasterly portion of the City. Stormwater flows around the City are controlled by a series of storm drains and channels that ultimately drain into the Santa Ana River (City of Colton 2014b).

4.10.1.2 Regional Groundwater

The City is located approximately 1.5 miles north of the Santa Ana River channel within the Upper Santa Ana Valley Groundwater Basin, which is divided into the following subbasins: the Bunker Hill Subbasin, the Riverside-Arlington Subbasin, the Rialto-Colton Subbasin, and the San Timoteo Subbasin. The City is located in the Rialto-Colton Subbasin. This subbasin is further divided into the Lytle, Rialto, and Colton Groundwater Management Zones (GMZs), with the Lytle Creek and Rialto GMZs underlying the City. Primary recharge areas include Lytle Creek in the northwest, Reche Canyon in the southeast, and the Santa Ana River in the east and south (City of Colton 2014b).

A public water system operated by the City of Colton Water Department (CWD) serves the Project vicinity. The sources of public water for the CWD are groundwater from 13 public supply wells, which draw water from three underlying groundwater basins (Colton/Rialto Basin, Bunker Hill Basin, and Riverside-Arlington Basin [Riverside North Basin portion]). Another source, if needed, is the City of San Bernardino's water supply, which is treated groundwater from the Bunker Hill Basin.

4.10.1.3 Site Hydrology and Onsite Drainage

The Project Area is generally flat. Based on topographic map interpretation, the direction of groundwater in the vicinity of the Project Area is inferred to flow towards the south. The depth of groundwater in the Project vicinity is between 175 to 200 feet below ground surface. No paved surfaces are present on the parcel. Stormwater directly infiltrates onsite soils (Partner 2018).

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 Impact.

Potential water quality impacts associated with the Proposed Project include short-term, construction-related erosion/sedimentation from ground-disturbing activities and construction-related hazardous material discharge.

As the Project Area exceeds 1 acre, the applicant is required to obtain coverage under a National Pollutant Discharge Elimination System (NPDES) Construction Permit, which includes the submittal of a Notice of Intent application to the SWRCB, the receipt of a Waste Discharge Identification Number from the SWRCB, and the preparation of a SWPPP for construction discharges. An SWPPP is a written document that describes the construction operator's activities to comply with the requirements in the NPDES permit. The focus of a construction SWPPP is to manage soil disturbance, non-storm water discharges, construction materials, and construction wastes during the construction phase of a Project. The SWPPP also selects and implements BMPs designed to prevent or control discharge of pollutants in storm water runoff. During project demolition and construction, the construction contractor would use a series of BMPs to reduce erosion and sedimentation. These measures may include the use of gravel bags, silt fences, check dams, hydroseed, and soil binders. The construction contractor would be required to operate and maintain these controls throughout the duration of onsite activities.

Implementation of the NPDES permits ensures that the State's mandatory standards for the maintenance of clean water and the federal minimums are met. Through implementation of the BMPs detailed in a SWPPP and periodic inspections by RWQCB staff, water quality impacts during project construction 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 Impact.

The CHCCSP EIR estimates water consumption in the CHCCSP area using the following consumption rates listed in Table 4.10-1.

Table 4.10-1. Water Consumption Rates

Land Use	Water Consumption Rate
Residential	400 gallons per day (GPD) per unit
Retail	75 GPD per 1,000 square feet
Retail Mixed Use	75 GPD per 1,000 square feet
Office Mixed Use	75 GPD per 1,000 square feet

Table 4.10-1. Water Consumption Rates	
Land Use	**Water Consumption Rate**
Business Park	67.5 GPD per 1,000 square feet
Park	N/A

Source: City of Colton 2014b

The Project Area is zoned and has a land use designation of OMU and OS/H per the City's CHCCSP. The 3.9-acre portion of the Project Area under OMU would be developed with a 60,000-square-foot medical office clinic and a 71,000-square-foot commercial hotel. The remaining 5.1 acres in the western portion of the Project parcel will be a dedicated conservation area for the Delhi Sands flower-loving fly. Using the water consumption rates listed in Table 4.10-1, the Proposed Project's water consumption would be approximately 9,825 gallons per day (GPD), or 11.01 acre-feet (AF) per year (AFY).

CWD pumps groundwater from the Upper Santa Ana Valley Groundwater Basin, specifically the Colton/Rialto, Bunker Hill, and Riverside-Arlington (Riverside North portion) Basins. Table 4.10-2 shows each basin's actual volume in AF as of 2020 and projected water supply through 2045.

Table 4.10-2. Actual and Project Water Supplies							
Water Type	**Water Supply**	**Actual Water Supply (AF)**	**Projected Water Supply (AF)**				
		2020	**2025**	**2030**	**2035**	**2040**	**2045**
Groundwater	Bunker Hill	2,623	4,425	4,968	5,510	5,784	6,058
Groundwater	Rialto-Colton	2,899	2,800	2,800	2,800	2,801	2,802
Groundwater	Riverside North	3,722	3,800	3,800	3,800	3,800	3,800
Purchased Water	State Water Project	—	197	257	317	377	436
Total		**9,244**	**11,222**	**11,825**	**12,427**	**12,762**	**13,096**

Source: City of Colton 2021

Notes: AF = acre-feet

Water supplies available are sufficient to meet all existing customer demands and anticipated future customer demands, including the Project's demands through 2045. The Project's estimated demand is not expected to adversely affect the City's existing water facilities. Additionally, the City participates in several ongoing water conservation measures and contributes to regional recharge projects through the San Bernardino Basin Groundwater Council and Rialto Basin Groundwater Council to optimate and enhance the reliability of local groundwater resources (City of Colton 2021).

According to the City's Hub City Center Water Supply Assessment, Lytle Creek subbasin is a major recharge area for both the Bunker Hill and Rialto-Colton subbasins. Lytle Creek subbasin is adjoined to

the west by the Rialto-Colton subbasin and on the east and southeast by the Bunker Hill subbasin. It is highly porous and replenishes easily during heavy precipitation years. The North Riverside Basin provides recharge from the underflow from basins to the north, the Santa Ana River, and percolation from surface water runoff from the surrounding uplands (City of Colton 2021). The Project Area is not identified as a groundwater recharge area and would not affect recharge areas such as the Lytle Creek subbasin or the North Riverside Basin.

For these reasons, the Project would have a less than significant impact and no mitigation is required.

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 Impact.

i) Construction of the Proposed Project would require ground disturbing activities, including excavation, trenching, and paving. These activities have the potential to result in erosion or siltation on- or off-site. Construction impacts would be less than significant with the implementation of standard construction BMPs identified in the Project-specific SWPPP.

Less than Significant Impact.

ii) The Project Area is flat, with a gentle slope towards the south. The Project Area does not contain steep topography and no paved surfaces are present on the parcel. Stormwater directly infiltrates onsite soils (Partner 2018). 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 Proposed Project would construct a medical office clinic, hotel, surface parking lot, and multi-story parking structure on 3.9 acres of an approximately 9-acre parcel. This

portion of the parcel would contain impervious material. The remaining 5.1 acres would be a dedicated conservation area for the Delhi Sands flower-loving fly and would allow for direct infiltration of stormwater into the soil. The developed portion of the parcel would include stormwater conveyance and connection to the City's storm drain system to prevent on- and off-site flooding. As such, surface runoff from the Proposed Project would be less than significant.

Less than Significant Impact.

iii) The City has implemented the 2020 Upper Santa Ana River Watershed Integrated Regional Urban Water Management Plan (IRUWMP) which addresses surface water diversions, groundwater supply, water quality, stormwater management, and habitat preservation. The City is a co-permittee to Order No. R8-2010-0036 NPDES Permit No. CAS618036 and Waste Discharge Requirements by the RWQCB, Santa Ana Region, which regulates urban and stormwater runoff within the Santa Ana Regional Board's jurisdiction (RWQCB 2010). This Order requires permittees to investigate sources of pollutants in stormwater runoff where a permittee's activities may have a reasonable potential to exceed water quality standards.

There are currently no paved surfaces present onsite and stormwater directly infiltrates the onsite soils. There are also no surface impoundments, natural catch basins, or settling ponds for stormwater to drain to (Partner 2018). The Proposed Project would increase the quantity of runoff water in the part of the Project Area proposed for development, as it would increase impervious surfaces. The portion of the Project Area proposed as a conservation area would remain without paved surfaces; stormwater in this area would continue to directly infiltrate the soil. The Proposed Project would install connections to the City's storm drain system and would direct stormwater to flow southeast towards North Pepper Avenue which has storm drains and gutters. The City's stormwater system capacity is not publicly available, however it is designed to handle varying levels of stormwater runoff based on local rainfall patterns and drainage areas within the City (RWQCB 2010). Impacts would be less than significant.

No Impact.

iv) As previously mentioned, drainage in the area proposed for development would be directed towards storm drain facilities on North Pepper Avenue and water in the proposed conservation area would continue to directly infiltrate the onsite soils. According to the Project's Phase I Environmental Site Assessment, the Project Area is located at approximately 1,100 feet above msl. The contour lines on the map indicate the area is sloping gently toward the south (Partner 2018). The Project Area is not located within a flood hazard area, it is located in Zone X (area of minimal flood hazard) (Federal Emergency Management Agency [FEMA] 2024). Construction of the medical office clinic, hotel, parking structure, and associated improvements would not increase the rate or amount of surface runoff in a manner that would substantially increase the risk of flooding, locally impede flow, or transfer flood risk to downstream areas. 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
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒

No Impact.

The risk of flooding in the City is largely isolated to the areas immediately adjacent to the Santa Ana River and Reche Canyon (City of Colton 2018). The Project Area is not located near the Santa Ana River or Reche Canyon and as previously discussed, is located in Zone X which is an area of minimal flood hazard (FEMA 2024). Portions of the City are at risk of flooding due to dam failure of the Seven Oaks Dam and Reservoir, located approximately 12 miles east of the City on the Santa Ana River. Failure of the dam would cause substantial flooding on both sides of the Santa Ana River. The Project Area is not located within the dam inundation zone (City of Colton 2018). The Project Area is located approximately 44 miles northeast of the Pacific Ocean; thus it is not at risk of flooding due to a tsunami. Additionally, the Project Area is not located near any confined bodies of water which would pose a threat of seiche. 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
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

No Impact.

As previously discussed, the City along with other agencies in the Upper Santa Ana River watershed developed the Upper Santa Ana River Watershed IRUWMP for water quality management and control for the Region. The IRUWMP discusses the City's water use and quality targets as well as demand management measures to maintain the reliability of groundwater supplies. Pursuant to the requirements of the NPDES permit, all development projects are required to implement source control BMPs that will minimize the generation of pollutants.

Potential water quality impacts associated with the Proposed Project include short-term construction-related erosion/sedimentation from ground-disturbing activities. Impacts associated with construction-related water quality impacts would be avoided or reduced to a level below significance through implementation of standard construction BMPs identified in the Project-specific SWPPP. No conflict with a water quality control plan or sustainable groundwater management plan would occur. No mitigation is required.

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 City of Colton General Plan Land Use Element establishes policies for the use and development of properties in the City. Land distribution in 2012 included vacant land (36 percent), residential (27 percent), open space-resource (13 percent), industrial (12 percent), public/institution (5 percent), commercial (4 percent), railroad/utility (2 percent), and open space-recreation (1 percent) (City of Colton 2013a).

Land use in the vicinity of the Project Area is regulated by the CHCCSP. The CHCCSP area spans approximately 373 acres, with planned uses for retail, business park, retail mixed use, office mixed use, residential, open space habitat, and parks.

The Proposed Project is located in an urban developed area characterized by commercial and public/institution uses. According to the City's General Plan, the San Bernardino County ARMC is an important employment base to the City's west side and this area represents a key location to create a vibrate mixed-use business center (City of Colton 2013a). The Proposed Project is located on vacant land and proposes construction of a medical office clinic, a commercial hotel, a parking structure, surface parking areas, and associated site improvements such as curb and gutter, utilities, and landscaping.

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 Proposed Project consists of the construction of a medical office clinic and commercial hotel on currently vacant land. The Project Area is surrounded by vacant land, commercial uses, and public/institutional uses. Residential uses exist beyond West San Bernardino Avenue to the north and are separated from the site. The Project Area is zoned OMU per the CHCCSP indicating that the Project Area is envisioned for development with the type, scale, and intensity of uses that complement and are compatible with existing developed uses in the vicinity. Due to the nature of the Proposed Project and distance away from residential neighborhoods, development of the Proposed Project would not physically divide an 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 Impact.

The Proposed Project is located on vacant land and proposes construction of a medical office clinic, a commercial hotel, a parking structure, surface parking areas, and associated site improvements such as curb and gutter, utilities, and landscaping. The Project Area is zoned and has a land use designation of OMU and OS/H per the City's CHCCSP. Medical complexes including medical, dental, and health related services are permitted uses under the OMU designation. Under the OMU designation, retail (includes hotels) and parking structures are conditionally permitted uses (City of Colton 2014a). Therefore, a CUP is required for the Project.

The Project also includes variances for front setback of parking from 15 feet to 10 feet, rear setback from 15 feet to 0 feet, and reduction of parking requirements from 414 stalls to 321 stalls. A minor variance is required for the increase of the hotel structure's allowable height from 60 feet to 65 feet. Issuance of the CUP and variances would align the Proposed Project with the City's land use regulations and would not constitute a significant environmental impact. Impacts would be less than significant.

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

The State Mining and Geology Board establishes Mineral Resource Zone (MRZ) designations that quantify the mineral resource potential for specific locations across California. The MRZs are defined as follows:

- *MRZ-1:* Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- *MRZ-2:* Defined as areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists.
- *MRZ-3:* Defined as areas containing mineral deposits, the significance which cannot be evaluated from available data, but that may contain deposits that are marketable under present technologic and economic conditions or which can be estimated to exist in the foreseeable future.
- *MRZ-4:* Areas where available information is inadequate for assignment to any other MRZ zone.

According to the City of Colton General Plan Open Space Element, the main resource in the Colton area is the limestone deposits in and around Slover Mountain, however, mineral resources in the Colton area may not all be identified yet (City of Colton 1987a). The CHCCSP area occurs within an area that has been classified as MRZ-3 (City of Colton 2014b).

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.

The CHCCSP area, including the Project Area, is classified as MRZ-3, an area where the significance of mineral resources cannot be evaluated from available data. The main resource in the Colton area is the limestone deposits in and around Slover Mountain. Slover Mountain is located approximately 0.70 miles south of the Project Area. The Project Area does not contain any known mineral resource and therefore the Project would not result in the loss of availability of a known mineral resource of value to the region and residents of the state. 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 the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

No Impact.

The City has not been designated in the General Plan or any other land use plan as a mineral resource recovery site. Additionally, no mining operations currently occur on or close to the Project Area. The Project Area is not zoned or available for mining. Therefore, no impact to locally important mineral resource recovery sites would occur, and no mitigation is required.

4.12.3 Mitigation Measures

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

4.13 Noise

4.13.1 Environmental Setting

ECORP prepared a Noise Impact Assessment for the Proposed Project as a comparison of predicted Project noise levels to noise standards promulgated by the City of Colton General Plan Noise Element and Municipal Code. The purpose of this report is to estimate Project-generated noise and to determine the level of impact the Project would have on the environment (ECORP 2024e; Appendix H).

4.13.1.1 Noise Fundamentals

Addition of Decibels

The decibel (dB) scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. Two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted (dBA), an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70 dBA sound is half as loud as an 80-dBA sound and twice as loud as a 60-dBA sound. When two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than one source under the same conditions (Federal Transit Administration [FTA] 2018). For example, a 65-dB source of sound, such as a truck, when joined by another 65 dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB). Under the decibel scale, three sources of equal loudness together would produce an increase of 5 dB. Figure 4.13-1 shows typical noise levels associated with common noise sources.

Sound Propagation and Attenuation

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations. Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB (dBA) for each doubling of distance from a stationary or point source (Federal Highway Administration [FHWA] 2017). Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 dBA for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics (FHWA 2017). No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dBA per doubling of distance is normally assumed. For line sources, an overall attenuation rate of 3 dB per doubling of distance is assumed (FHWA 2011).

Noise levels may also be reduced by intervening structures; generally, a single row of detached buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm generally reduces noise levels by 10 to 20 dBA. However, noise barriers or enclosures specifically designed to reduce site-specific construction noise can provide a sound reduction 35 dBA or greater (Western Electro-Acoustic Laboratory, Inc. 2021). To achieve the most potent noise-reducing effect, a noise 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 general, barriers contribute to decreasing noise levels only when the structure breaks the "line of sight" between the source and the receiver.

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-

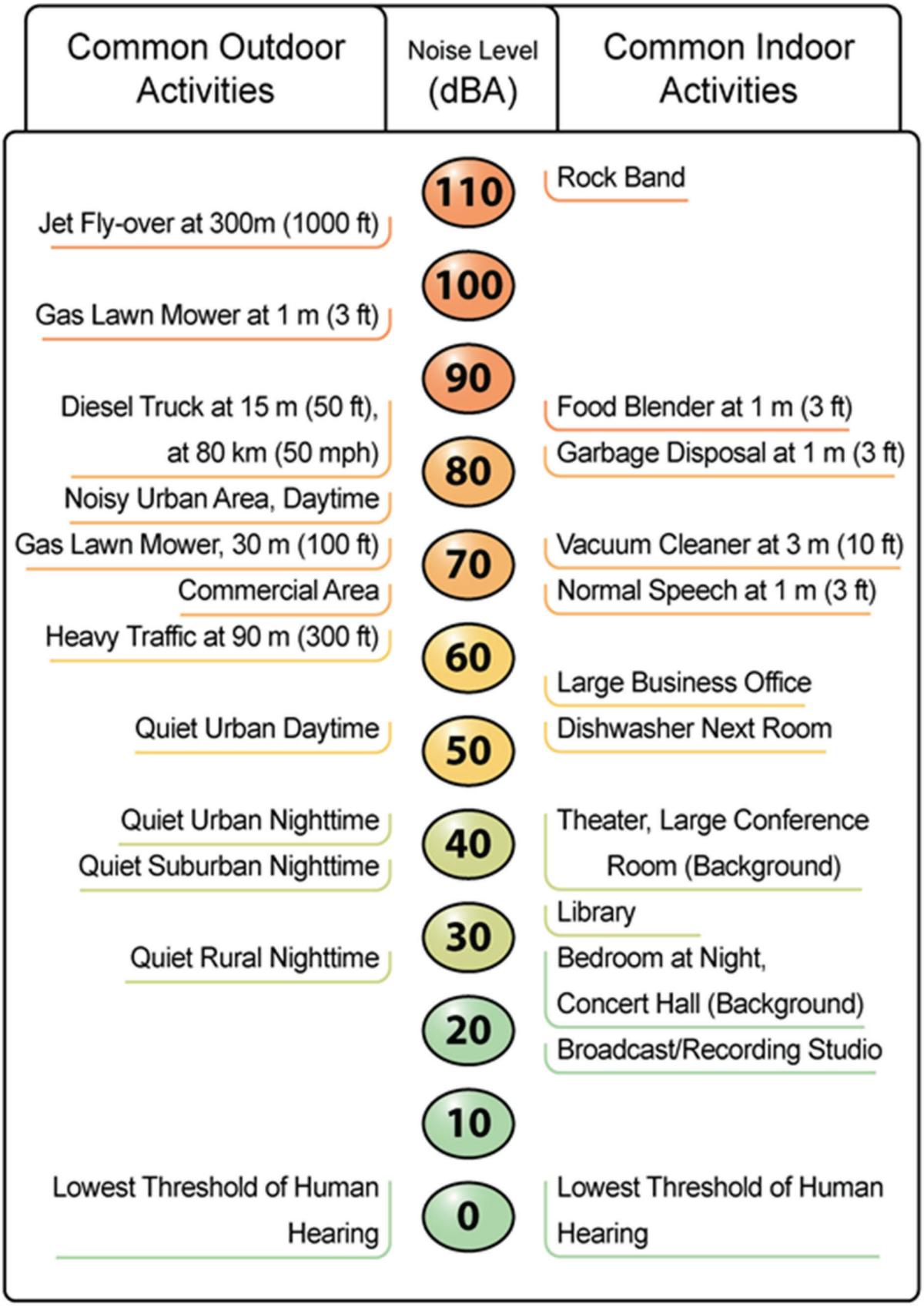
to-interior reduction of newer residential units is generally 30 dBA or more (Harris Miller, Miller & Hanson Inc. 2006). Generally, in exterior noise environments ranging from 60 dBA Community Noise Equivalent Level (CNEL) to 65 dBA CNEL, interior noise levels can typically be maintained below 45 dBA, a typical residential interior noise standard, with the incorporation of an adequate forced air mechanical ventilation system in each residential building, and standard thermal-pane residential windows/doors with a minimum rating of Sound Transmission Class (STC) 28. An STC is an integer rating of how well a building partition attenuates airborne sound. In the U.S., STCs are widely used to rate interior partitions, ceilings, floors, doors, windows, and exterior wall configurations. In exterior noise environments of 65 dBA CNEL or greater, a combination of forced-air mechanical ventilation and sound-rated construction methods is often required to meet the interior noise level limit. Attaining the necessary noise reduction from exterior to interior spaces is readily achievable in noise environments less than 75 dBA CNEL with proper wall construction techniques following California Building Code methods, the selections of proper windows and doors, and the incorporation of forced-air mechanical ventilation systems.

Noise Descriptors

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average hourly noise level (L_{eq}) and the average daily noise levels/community noise equivalent level (L_{dn}/CNEL). The L_{eq} is a measure of ambient noise, while the L_{dn} and CNEL are measures of community noise. Each is applicable to this analysis and defined as follows:

- Equivalent Noise Level (L_{eq}) 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.
- Day-Night Average (L_{dn}) is a 24-hour average L_{eq} with a 10-dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.
- Community Noise Equivalent Level (CNEL) is a 24-hour average L_{eq} with a 5-dBA weighting during the hours of 7:00 p.m. to 10:00 p.m. and a 10-dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

The A-weighted decibel sound level scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events.



Source: California Department of Transportation (Caltrans) 2020

Figure 4.13-1. Common Noise Levels

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The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within approximately 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends on the distance between the receptor and the noise source. Close to the noise source, the models are accurate to within approximately 1 to 2 dBA.

Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60- to 70-dBA range, and high, above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1.0 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3.0-dBA change is considered a just-perceivable difference.
- A change in level of at least 5.0 dBA is required before any noticeable change in community response would be expected. An increase of 5.0 dBA is typically considered substantial.
- A 10.0-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

Effects of Noise on People

Hearing Loss

While physical damage to the ear from an intense noise impulse is rare, a degradation of auditory acuity can occur even within a community noise environment. Hearing loss occurs mainly due to chronic exposure to excessive noise but may be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise.

The Occupational Safety and Health Administration has a noise exposure standard that is set at the noise threshold where hearing loss may occur from long-term exposures. The maximum allowable level is 90 dBA averaged over eight hours. If the noise is above 90 dBA, the allowable exposure time is correspondingly shorter.

Annoyance

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that causes of annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The L_{dn} as a measure of noise has been found to provide a valid correlation between noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources.

4.13.1.2 Vibration Fundamentals

Vibration Sources and Characteristics

Sources of earthborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or artificial causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions).

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the Peak Particle Velocity (PPV); another is the Root Mean Square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

PPV is generally accepted as the most appropriate descriptor for evaluating the potential for building damage. For human response, however, an average vibration amplitude is more appropriate because it takes time for the human body to respond to the excitation (the human body responds to an average vibration amplitude, not a peak amplitude). Because the average particle velocity over time is zero, the RMS amplitude is typically used to assess human response. The RMS value is the average of the amplitude squared over time, typically a 1 second period (FTA 2018).

Table 4.13-1 displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high-noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this

rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

Table 4.13-1. Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibration Levels

Peak Particle Velocity (inches/second)	Approximate Vibration Velocity Level (VdB)	Human Reaction	Effect on Buildings
0.006–0.019	64–74	Range of threshold of perception	Vibrations unlikely to cause damage of any type
0.08	87	Vibrations readily perceptible	Threshold at which there is a risk of architectural damage to extremely fragile historic buildings, ruins, ancient monuments
0.1	92	Level at which continuous vibrations may begin to annoy people, particularly those involved in vibration sensitive activities	Threshold at which there is a risk of architectural damage to fragile buildings. Virtually no risk of architectural damage to normal buildings
0.25	94	Vibrations may begin to annoy people in buildings	Threshold at which there is a risk of architectural damage to historic and some old buildings
0.3	96	Vibrations may begin to feel severe to people in buildings	Threshold at which there is a risk of architectural damage to older residential structures
0.5	103	Vibrations considered unpleasant by people subjected to continuous vibrations	Threshold at which there is a risk of architectural damage to new residential structures and Modern industrial/commercial buildings

Source: Caltrans 2020

Ground vibration can be a concern in instances where buildings shake, and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. For instance, heavy-duty trucks generally generate groundborne vibration velocity levels of 0.006 PPV at 50 feet under typical circumstances, which as identified in Table 4.13-1 is considered very unlikely to cause damage to buildings of any type. Common sources for groundborne vibration are planes, trains, and construction activities such as earthmoving which requires the use of heavy-duty earth moving equipment.

4.13.1.3 Existing Ambient Noise Environment

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. The City of Colton's Municipal Code states that sensitive receptors include, but are not limited to, hospitals, schools, daycare facilities, elderly housing, residential uses, and convalescent homes (City of Colton 2013c). Additional land uses such as historic sites, cemeteries, and certain recreation areas are often 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 sensitive receptors to the Project Area include the ARMC directly adjacent to the east, the California University of Science and Medicine campus located towards the northeast, the Colton Golf Course and West Valley Park located to the west, and the residences to the north of the Project Area.

Existing Ambient Noise Environment

The City of Colton 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/park activities) throughout the City that generate stationary source noise. The noise environment in Colton is composed of several major sources which are considered in the City's Noise Element of the General Plan and include: (1) primary arterials and major local streets, (2) passenger and freight on-line railroad operations, (3) highways and freeways, and (4) airport operations. Within the Proposed Project Area, the most common and significant noise sources are associated with traffic on W San Bernardino Avenue and N Pepper Avenue, highway noise from Interstate 10, and other typical residential noises like dogs barking, radios, and landscaping equipment. As shown in Table 4.13-2 below, the ambient recorded noise levels range 55.3 dBA to 72.4 dBA L_{eq} on and in the vicinity of the Project Area.

Existing Ambient Noise Measurements

In order to quantify existing ambient noise levels in the Project Area, ECORP conducted one 24-hour (long-term) noise measurement starting on October 3, 2024 and extending into October 4, 2024 (LT-1). This 24-hour noise measurement is representative of typical existing noise exposure on the Project Area during a typical 24-hour day. Additionally, ECORP conducted four approximately 15-minute (short-term) noise measurements on October 4, 2024 (ST-1 through ST-4). These short-term noise measurements are representative of typical existing noise exposure within and immediately adjacent to the Project Area during the daytime. The average noise levels at each location are listed in Table 4.13-2.

Table 4.13-2. Existing Ambient Noise Measurements

Location No.	Location	CNEL dBA	L_{eq} dBA	L_{min} dBA	L_{max} dBA	Time
ST-1	Southeast corner of W San Bernardino Avenue and N Iron Horse Drive	N/A	68.4	50.7	86.1	10:39 a.m. – 10:54 a.m.
ST-2	Corner of Violet Street and N Pepper Avenue	N/A	71.2	50.0	97.6	11:00 a.m. – 11:18 a.m.

Table 4.13-2. Existing Ambient Noise Measurements						
ST-3	On Parkway West of Green Circle Drive	N/A	55.3	50.5	82.6	11:21 a.m. – 11:36 a.m.
ST-4	Northeast corner of Eucalyptus Avenue and Valley Boulevard	N/A	72.4	56.3	98.1	11:44 a.m. – 12:00 p.m.
LT-1	75 feet south of the southwest corner of W San Bernardino Avenue and N Iron Horse Drive	60.0	56.9	45.8	98.9	10:26 a.m. – 10:26 a.m.

Source: Measurements were taken by ECORP with a Larson Davis Spartan 821 sound level meter, which satisfies the American National Standards Institute for general environmental noise measurement instrumentation. Prior to the measurements, the Spartan 821 sound level meter was calibrated according to manufacturer specifications with a Larson Davis CAL200 Class I Calibrator. See Appendix H for noise measurement outputs.

Notes: CNEL = Community Noise Equivalence Levels; dBA = A-weighted decibels; L_{eq} = Equivalent Noise Level; LT = Long-Term Measurement Location (24-hour); ST = Short-Term Measurement Location (15-minute)

L_{eq} 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. L_{min} is the minimum noise level during the measurement period and L_{max} is the maximum noise level during the measurement period. CNEL is a 24-hour average L_{eq} with a 5-dBA weighting during the hours of 7:00 pm to 10:00 pm and a 10-dBA weighting added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the evening and nighttime, respectively.

As shown in Table 4.13-2, the ambient recorded noise level during the span of the 24-hour noise measurement was 60.0 dBA CNEL. The ambient recorded noise levels range from 55.3 dBA to 72.4 dBA L_{eq} over the course of the four short-term noise measurements taken in the Project vicinity in October 2024. The most common noise in the Project vicinity is produced by automotive vehicles (e.g., cars, trucks, buses, motorcycles) on the local surrounding roadways such as West San Bernardino Avenue and North Pepper Avenue.

Existing Roadway Noise Levels

Existing roadway noise levels were taken from the CHCCSP's Draft EIR, which contains calculations of the existing noise levels along roadway segments in the Project vicinity (City of Colton 2014b). The average daily noise levels along roadway segments adjacent to the Project Area are presented in Table 4.13-3.

Table 4.13-3. Existing Roadway Noise Levels		
Roadway Segment	**Surrounding Uses**	**CNEL at 100 feet from Centerline of Roadway**
Pepper Avenue		
Between Violet Street and Hospital Entrance	Medical & Commercial	69.2
Between Hospital Entrance to Valley Boulevard	Medical & Commercial	69.6

Table 4.13-3. Existing Roadway Noise Levels		
Roadway Segment	**Surrounding Uses**	**CNEL at 100 feet from Centerline of Roadway**
San Bernardino Avenue		
Between N Eucalyptus Avenue to Pepper Avenue	Residential	62.6

Source: Traffic noise levels were provided in the Colton Hub City Centre Specific Plan's Draft EIR from May of 2014. The most relevant roadway segments were chosen to match the roadway segments included by KOA (2024) in the traffic assessment for the Proposed Project.

Notes: CNEL = Community Noise Equivalence Levels

The existing traffic-generated noise level on Project-vicinity roadways currently ranges from 62.6 to 69.6 dBA CNEL at a distance of 100 feet from the centerline. As previously described, CNEL is a 24-hour average L_{eq} with a 5-dBA weighting during the hours of 7:00 p.m. to 10:00 p.m. and a 10-dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively. It should be noted that the modeled noise levels depicted in Table 4.13-3 may differ from measured levels in Table 4.13-2 because the measurements represent noise levels at different locations around the Project Area and are reported in different noise metrics (e.g., noise measurements are the L_{eq} values and traffic noise levels from the CHCCSP's Draft EIR are reported in CNEL).

City of Colton General Plan Noise Element

The City of Colton General Plan Noise Element provides policy direction for minimizing noise impacts in the City. By identifying noise-sensitive land uses and establishing compatibility guidelines for land use and noise, noise considerations influence the general distribution, location, and intensity of future land use. The result is that effective land use planning and mitigation can alleviate the majority of noise problems. The City of Colton General Plan land use compatibility table identifies ambient noise levels of 65 dBA CNEL as acceptable for hotel (transient lodging) uses and ambient noise levels of 70 dBA CNEL as acceptable for office building uses (City of Colton 1987b).

Additionally, the City of Colton General Plan Noise Element lists several standards applicable to the Proposed Project. Per the Noise Element, exterior noise levels at sensitive receptors should not exceed 65 dBA during the day or 55 dBA at night. The City has not adopted interior noise/land use compatibility standards for commercial uses.

City of Colton Municipal Code

The City of Colton's regulation with respect to noise is included in Title 18 (Zoning) Chapter 18.42 of the Municipal Code. The Noise Regulation provides a noise standard within the City. Sections 18.42.040 and 18.42.050 outline regulations for noise and vibration. The Municipal Code Noise Regulation states that the maximum sound level radiated by any Use of Facility, when measured at the boundary line of the Property on which the sound is generated, shall not be obnoxious by reason of its intensity, pitch or dynamic characteristics as determined by the City and shall not exceed 65 dBA. Section 18.42.050 qualitatively regulates vibration within the City, stating that it is unlawful for equipment other than vehicles, trains, or

by temporary construction or demolition, to generate ground vibration that is perceptible without instruments by the average person at or beyond any lot line of the lot containing the activities.

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 Impact.

Onsite Construction Noise

Construction noise associated with the Proposed Project would be temporary and would vary depending on the specific 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, paving). Noise generated by construction equipment, including earth movers, pile drivers, 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.

The nearest sensitive receptors to the Project Area include the ARMC located to the east, the California University of Science and Medicine campus located towards the northeast, the Colton Golf Course and West Valley Park located to the west, and the residences to the north. The City does not promulgate a numeric threshold pertaining to the noise associated with construction. This is because construction noise is temporary, short term, intermittent in nature, and would cease upon Project completion. Additionally, construction would occur throughout the Project Area and would not be concentrated at one point.

Recent case law has held that the use of an absolute noise threshold for evaluating all ambient noise impacts violated CEQA because it did not provide a "complete picture" of the noise impacts that may result from implementation of the ordinance. As such, the Proposed Project's construction noise is estimated and then added to the average daily ambient noise level in the Project Area as determined by the baseline noise survey conducted by ECORP (see Table 4.13-2). As previously described, the dB scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. Doubling the source strength increases the sound pressure by 3 dB. Furthermore, when

combining two separate sources where one of the noise sources is 10 dB or greater than other noise sources, the noise contribution of the quieter source is completely obscured by the louder source.

To estimate the worst-case onsite construction noise levels that may occur at the nearest noise-sensitive receptor and in order to evaluate the potential health-related effects (physical damage to the ear) from construction noise, the construction equipment noise levels were calculated using the FHWA's Roadway Construction Noise Model (FHWA 2006) and compared against the construction-related noise level threshold established in the Criteria for a Recommended Standard: Occupational Noise Exposure prepared in 1998 by the National Institute for Occupational Safety and Health (NIOSH). NIOSH identifies a noise level threshold based on the duration of exposure to the source. The NIOSH construction-related noise level threshold starts at 85 dBA for more than 8 hours per day; for every 3-dBA increase, the exposure time is cut in half. This reduction results in noise level thresholds of 88 dBA for more than 4 hours per day, 92 dBA for more than 1 hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of this analysis, the lowest, more conservative threshold of 85 dBA L_{eq} is used as an acceptable threshold for construction noise at the nearby sensitive receptors.

It is acknowledged that the majority of construction equipment is not situated at any one location during construction activities but rather spread throughout the Project Area and at various distances from sensitive receptors. Therefore, this analysis employs FTA guidance for calculating construction noise, which recommends measuring construction noise produced by all construction equipment simultaneously from the center of the Project Area (FTA 2018), which in this case is approximately 600 feet from the pick-up/drop-off area for the ARMC to the east of the Proposed Project Area, along North Pepper Avenue. The anticipated short-term construction noise levels generated for the necessary equipment for each phase of construction are presented in Table 4.13-4.

Table 4.13-4. Construction Average (dBA) Noise Levels at Nearest Receptors

Construction Phase	Average Ambient Noise Level* (dBA L_{eq})	Exterior Construction Noise Level @ Closest Noise Sensitive Receptor (dBA L_{eq})	Existing Ambient Noise + Exterior Construction Noise Levels (dBA L_{eq})	Construction Noise Standard (dBA L_{eq})	Exceeds Standards?
Site Preparation	66.8	66.0	69.6	85	No
Grading		65.7	69.2	85	No
Building Construction, Paving, and Painting		68.3	71.8	85	No

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

Notes: dBA = A-weighted decibels; L_{eq} = Equivalent Noise Level

Table 4.13-4. Construction Average (dBA) Noise Levels at Nearest Receptors					
Construction Phase	**Average Ambient Noise Level* (dBA L_{eq})**	**Exterior Construction Noise Level @ Closest Noise Sensitive Receptor (dBA L_{eq})**	**Existing Ambient Noise + Exterior Construction Noise Levels (dBA L_{eq})**	**Construction Noise Standard (dBA L_{eq})**	**Exceeds Standards?**

*Average ambient noise levels of the Project Area were estimated using the average L_{eq} of the four short term noise measurement taken on October 4, 2024, and identified in Table 4.13-2.

Construction equipment used during construction derived from the California Emissions Estimator Model (CalEEMod). 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. Consistent with Federal Transit Administration (FTA) recommendations for calculating construction noise, construction noise was measured from the center of the Project Area (FTA 2018), which is 600 feet from the nearest sensitive receptor.

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 4.13-4, the Project's contribution of construction noise combined with the ambient noise environment would not exceed the 85 dBA NIOSH construction noise threshold during any phase of construction at the nearby noise-sensitive receptors. It is noted that construction noise was modeled on a worst-case basis and is considered in addition to ambient noise levels currently experienced in the Project Area. It is very unlikely that all pieces of construction equipment would be operating at the same time for the various phases of Project construction as well as at the point closest to residences. Therefore, onsite construction noise would be less than significant.

Offsite Construction Worker Trips

Project construction would result in additional traffic on adjacent roadways over the period that construction occurs. According to CalEEMod, which is used to predict the number of construction-related automotive trips, the maximum number of Project construction trips traveling to and from the Project Area during a single construction phase would not be expected to exceed 156 daily trips in total. The Proposed Project Area would be accessible from North Pepper Avenue. According to the City's General Plan Mobility Element, Pepper Avenue is classified as a major arterial roadway (City of Colton 2013c). Major arterial roadways are designed to move large traffic volumes of traffic, linking freeways with local streets and providing access between cities and subregions. They carry high traffic volumes and are designed for high speeds. According to Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol, a 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) (Caltrans 2013). The Proposed Project's construction trips would not result in a doubling of traffic on the local transportation network, and therefore its contribution to existing traffic noise would not be perceptible. Additionally, it is noted

that construction is temporary, and these trips would cease upon completion of the Project. Therefore, offsite construction noise would be less than significant.

Operational Onsite Noise

The Project is proposing construction of a medical office clinic, commercial hotel, parking structure, surface parking areas, and associated site improvements such as curb and gutter, utilities, and landscaping on approximately 3.83 acres of the site. Onsite noise associated with the Proposed Project has been calculated using the SoundPLAN 3D noise model using Project Site Plans provided by the Project Proponent. SoundPLAN 3D noise model generates computer simulations of noise situations based on the site's features. Further, SoundPLAN creates noise contour maps using reference noise levels, topography, point and area noise source, mobile noise sources, and intervening structures.

To estimate the noise generated by the proposed parking garage, the FTA's reference level of 92 Sound Exposure Level (SEL) is utilized. To estimate the noise generated by the proposed unenclosed parking areas, FTA's reference level of 101 SEL is utilized. The Proposed Project's medical facility land use would primarily operate during daytime hours (7:00 a.m. to 10:00 p.m.). As such, the modeling has accounted for parking lot activity noise during the hours of 7:00 a.m. to 10:00 p.m. at the parking garage and at the unenclosed parking lot surrounding the medical facility. The FTA reference levels are converted to an L_{eq} level using the conversion equation detailed in Appendix H. Appendix H also demonstrates how to calculate an L_{eq} at 50 feet from a parking garage and a parking lot, based on vehicle noise and traffic volume. The total number of parking stalls in the parking garage is inferred from the Proposed Project's Site Plan by subtracting the number of unenclosed parking spaces from the total number of 321 parking spaces. The unenclosed parking spaces are split into two separate area sources to account for the difference in operational time for the medical facility land use (which operates during normal business hours) and the hotel land use (which operates beyond normal business hours). In this assessment, a worst-case scenario is considered where every parking stall turns over at the same rate as the peak hour for volume traffic, as identified by the Traffic Impact Analysis (TIA) prepared for the Project (KOA 2025).

Table 4.13-5 shows the predicted Project noise levels at 25 noise-sensitive locations in the Project vicinity, including nearby residences to the north, the ARMC to the east, the California University of Science and Medicine campus located towards the northeast, and the Colton Golf Course and West Valley Park located to the west, as predicted by SoundPLAN. As shown in Table 4.13-5, noise levels would be up to 56.6 dBA L_{eq} during the day and up to 53.4 dBA L_{eq} during the night at the loudest, as experienced at the nearest sensitive receptors. This would not exceed the exterior daytime and nighttime noise standards of 65 and 55 dBA L_{eq}, respectively. Additionally, noise contour graphics (see Figures 4.13-2 and 4.13-3) have been prepared to provide a visual depiction of the predicted noise levels in the Project vicinity from Project operations.

Table 4.13-5. Modeled Operational Noise Levels

No.	Location	Daytime/ Nighttime Noise Attributed to the Project (dBA L_{eq})	Daytime/ Nighttime Exterior Noise Standards (dBA L_{eq})	Exceed Daytime or Nighttime Exterior Standard?
1	1000 Agua Caliente Avenue	55.3 / 52.1	65 / 55	No
2	1002 N Eucalyptus Avenue	53.0 / 48.5	65 / 55	No
3	1009 Whistle Stop Drive	55.4 / 52.5	65 / 55	No
4	1011 Whistle Stop Drive	55.7 / 52.9	65 / 55	No
5	1013 Whistle Stop Drive	55.9 / 53.1	65 / 55	No
6	1015 Whistle Stop Drive	55.9 / 53.1	65 / 55	No
7	1017 Whistle Stop Drive	55.8 / 53.2	65 / 55	No
8	1019 Whistle Stop Drive	55.7 / 53.1	65 / 55	No
9	1021 Whistle Stop Drive	55.7 / 53.2	65 / 55	No
10	1023 Whistle Stop Drive	55.7 / 53.1	65 / 55	No
11	1025 Whistle Stop Drive	55.5 / 53.0	65 / 55	No
12	1027 Whistle Stop Drive	55.2 / 52.8	65 / 55	No
13	1471 W San Bernardino Avenue	49.8 / 48.9	65 / 55	No
14	1838 W De Anza Drive	54.6 / 51.1	6 5/ 55	No
15	1868 W De Anza Drive	54.4 / 58.8	65 / 55	No
16	1920 N Martinez Lane	52.4 / 47.7	65 / 55	No
17	Arrowhead Regional Medical Center Facility 1	56.2 / 50.1	65 / 55	No
18	Arrowhead Regional Medical Center Facility 2	56.6 / 53.4	65 / 55	No
19	Arrowhead Regional Medical Center Facility 3	53.3 / 50.9	65 / 55	No
20	California University of Science and Medicine	53.6 / 52.6	65 / 55	No
21	Colton Golf Course 1	54.4 / 48.0	65 / 55	No
22	Colton Golf Course 2	56.4 / 50.0	65 / 55	No
23	Colton Golf Course 3	56.2 / 49.5	65 /55	No
24	West Valley Park 1	53.4 / 47.1	65 / 55	No
25	West Valley Park 2	50.6 / 45.1	65 / 55	No

Source: SoundPLAN v 9.0. Refer to Appendix H for Model Data Outputs.

Notes: dBA = A-weighted decibels; L_{eq} = Equivalent Noise Level

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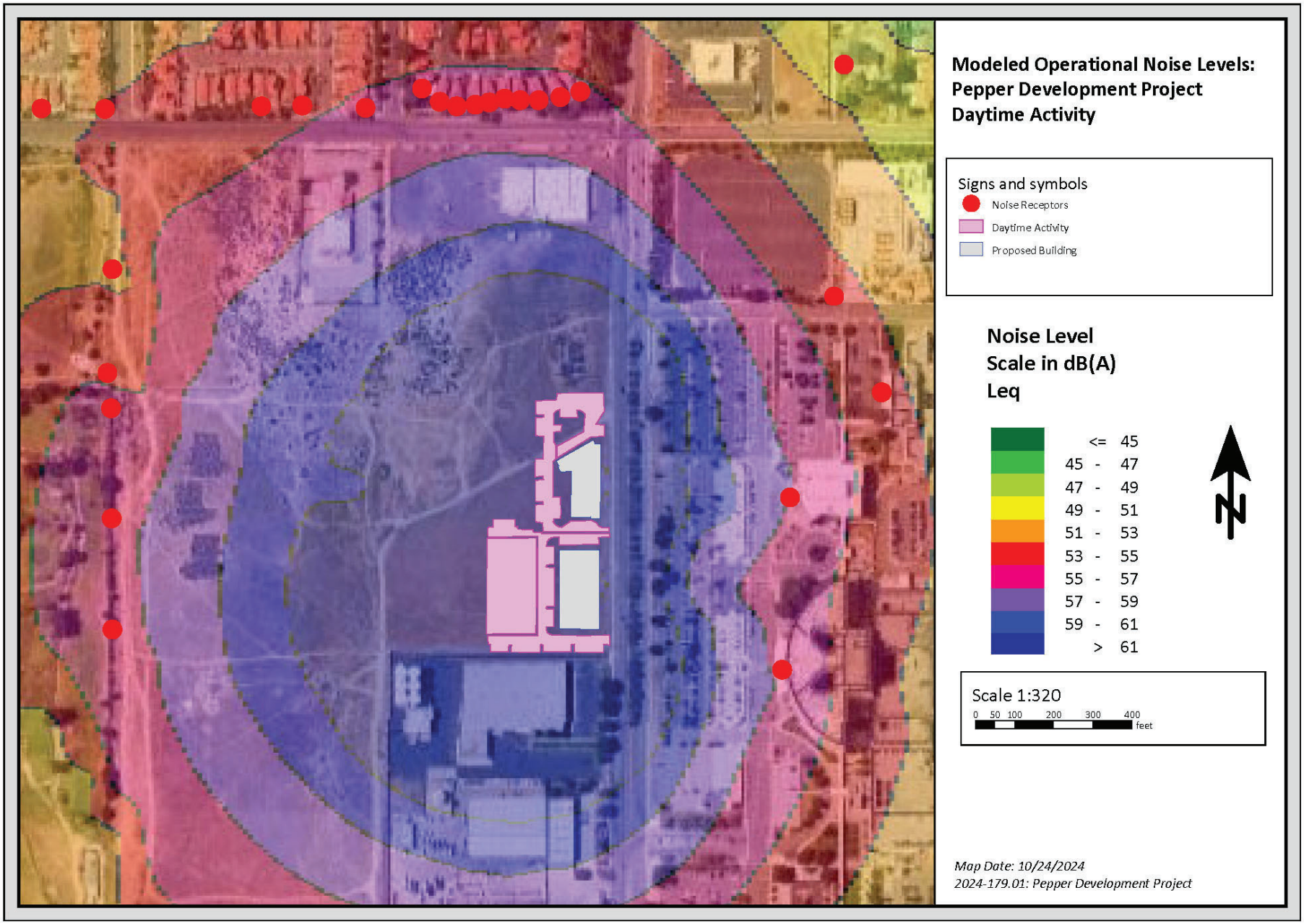


Figure 4.13-2. Daytime Operational Noise Levels

2024-179.01 Pepper Development Project

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

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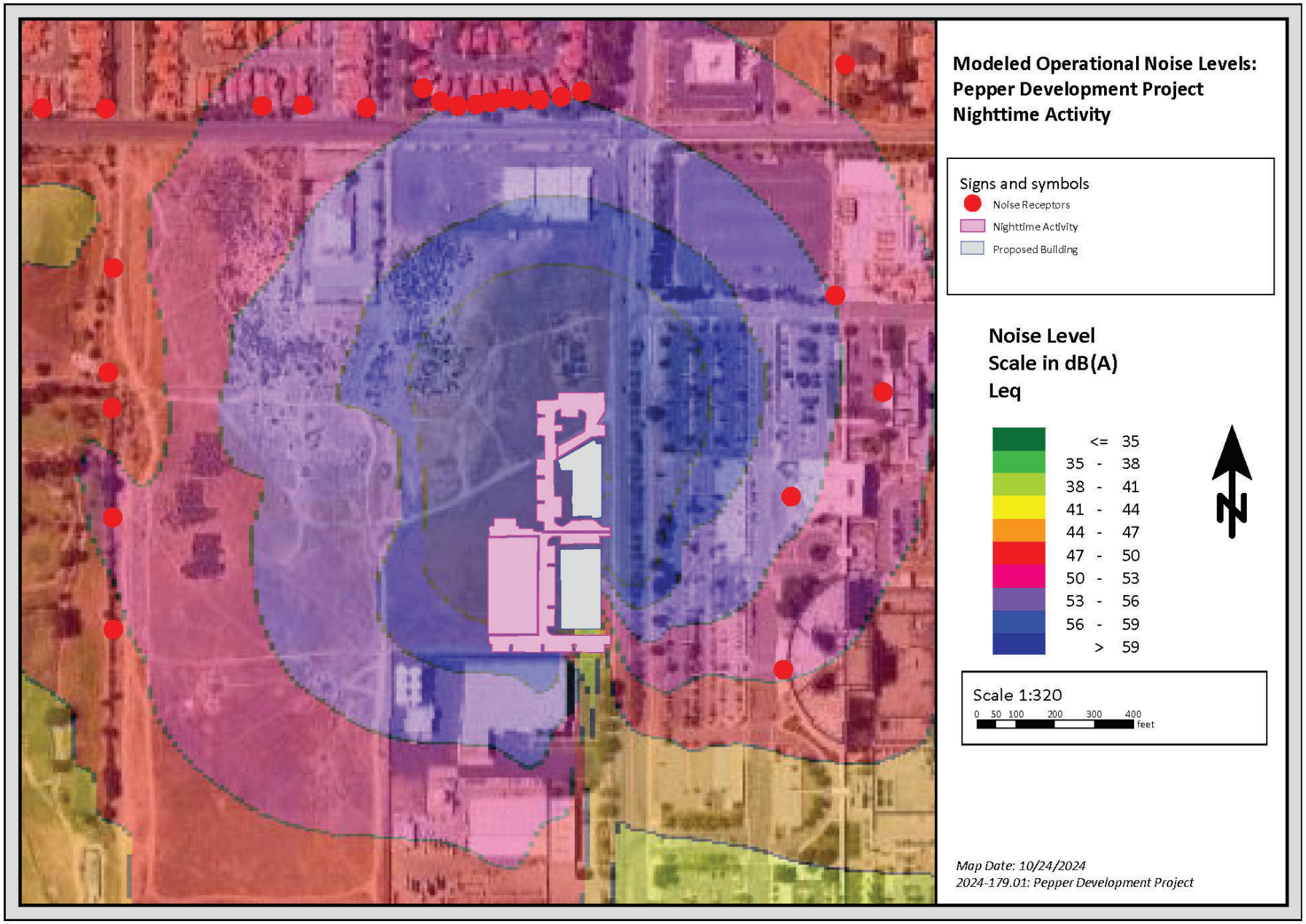


Figure 4.13-3. Nighttime Operational Noise Levels

2024-179.01 Pepper Development Project

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

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As shown in Table 4.13-5, Project operational noise would not exceed the City's exterior noise standards for daytime or nighttime at any location. It is important to note that the SoundPLAN scenario's results presented in Table 4.13-5 are presenting worst case scenario noise levels since the peak hour traffic volume was assumed to occur for every hour of the day at the hotel unenclosed parking lot and for every daytime hour at the unenclosed medical facility parking lot and parking garage structure.

As previously discussed, the average daily ambient noise of the area surrounding the Project Area is approximately 66.8 dBA. This noise level is based on the average of the short-term ambient noise measurements taken in the area by ECORP on October 4, 2024, and is generally representative of the existing noise environment. As shown above in Table 4.13-5, the Proposed Project would contribute noise levels of approximately 49.8 to 56.6 dBA L_{eq} to the existing ambient environment during the daytime. The existing ambient noise environment of 66.8 dBA is already over the city standard for commercial daytime noise limits of 65 dBA. The existing ambient noise level of 66.8 dBA would remain, and the Project onsite activities would not influence the ambient noise levels of the area. As previously described, the dB scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. For example, when combining two separate sources where one of the noise sources is 10 dB or greater than the other noise source, the noise contribution of the quieter source is completely obscured by the louder source. In this instance, the average daytime noise level collected by ECORP was 66.8 dBA and the maximum modeled noise contribution from the Proposed Project was 56.6 dBA. Since these values differ by a factor greater than 10 dB, the ambient noise environment would therefore be expected to remain 66.8 dBA. Therefore, operational onsite noise would be less than significant.

Operational Offsite Traffic Noise

Future traffic noise levels in the Project vicinity for the Proposed Project were modeled based on the traffic volumes identified by KOA (2024) to determine the noise levels along Project vicinity roadways. To compare the Proposed Project related traffic noise impact to the existing traffic noise environment, the CHCCSP Draft EIR was utilized (City of Colton 2014b). The City does not regulate noise from transportation sources for commercial projects and does not have noise standards for such sources. Table 4.13-6 compares the calculated offsite roadway noise levels to existing levels of traffic noise.

Table 4.13-6. Proposed Project Predicted Traffic Noise Levels Compared to Existing Traffic Noise Levels from CHCCSP Draft EIR

Roadway Segment from CHCCSP Draft EIR	Roadway Segment Modeled with FHWA and KOA Data	Surrounding Uses	dBA CNEL at 100 feet from Centerline of Roadway	
			Existing[1]	Project[2]
West San Bernardino Avenue				
Between Violet Street and the Hospital Entrance	N. Pepper Avenue South of Violet Street	Commercial	69.2	53.0
	N. Pepper Avenue North of Proposed Project Driveway			53.0
	N. Pepper Avenue South of Proposed Project Driveway			58.4
	Proposed Project Driveway West of N. Pepper Avenue			46.4
	Proposed Project Driveway East of N. Pepper Avenue			36.4
	N. Pepper Avenue North of Blue Drive			57.8
North Pepper Avenue				
Between the Hospital Entrance and Valley Boulevard	N. Pepper Avenue South of Blue Drive	Commercial	69.6	56.7
	Blue Drive West of N. Pepper Avenue			46.2
	Blue Drive East of N. Pepper Avenue			–
	N. Pepper Avenue North of W. Valley Blvd.			56.6
Between N. Eucalyptus Avenue and Pepper Avenue	W. San Bernardino Avenue West of N. Pepper Avenue	Residential	62.6	42.8

Source: Existing traffic noise levels were based on the Colton Hub City Centre Specific Plan Draft EIR (City of Colton 2014b). Project traffic volumes were provided by KOA (2024) to inform the modeling calculations of offsite operational traffic noise levels. Traffic noise levels were calculated by ECORP using the Federal Highway Administration (FHWA) Traffic Noise model. Refer to Appendix H for Model Data Outputs.

Notes: CHCCSP = Colton Hub City Centre Specific Plan; CNEL = Community Noise Equivalence Levels; dBA = A-weighted decibels; EIR = Environmental Impact Report; FHWA = Federal Highway Administration

[1] Existing traffic noise is referenced from the CHCCSP Draft EIR (City of Colton 2014b).

[2] The Proposed Project's contribution to traffic noise is calculated using the FHWA Traffic Noise model coupled with trip generation rates identified by KOA (2024).

As shown in Table 4.13-6, none of the Project vicinity roadway segments would experience an incremental increase of traffic noise in excess of the existing traffic noise levels. The Proposed Project's modeled traffic noise on each segment of roadway in the Project vicinity is lower than the existing traffic noise measurements collected for the purposes of the CHCCSP's Draft EIR. As previously described, the dB scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. When the standard logarithmic decibel is A-weighted, which is the case for both the existing

traffic noise measurements and the modeled traffic noise segments, an increase of 10 dBA is generally perceived as a doubling in loudness. Furthermore, when combining two separate sources where one of the noise sources is 10 dB or greater than the other noise source, the noise contribution of the quieter source is completely obscured by the louder source. As shown in Table 4.13-6, the Project's contribution of traffic noise is not within 10 dB of the existing traffic noise on any vicinity roadway segment and therefore the Project's contribution of traffic noise would not increase existing traffic noise levels. The Proposed Project's operational offsite traffic would not influence the ambient noise levels of the area and existing traffic noise levels ranging from 62.6 to 69.6 dBA would remain the same. Therefore, impacts would be less than significant.

Project Land Use Compatibility

As the Project is proposing the development of new noise-sensitive land uses within the existing noise environment a discussion of land use compatibility is needed in order to establish Project consistency with the City's General Plan. The predominant source of noise in the Project Area is traffic noise generated from vehicles traveling on West San Bernardino Avenue located north of the Project Area and North Pepper Avenue located east of the Project Area. The City's General Plan land use compatibility table identifies ambient noise levels of 65 dBA CNEL as acceptable for hotel (transient lodging) uses and ambient noise levels of 70 dBA CNEL as acceptable for office building uses (City of Colton 1987b).

ECORP conducted a 24-hour (long-term) noise measurement starting on October 3, 2024, and extending into October 4. This 24-hour noise measurement site is representative of typical existing noise exposure on the Project Area during a typical 24-hour day. The CNEL was calculated using the average noise levels from every hour of the long-term noise measurement. The calculated CNEL was 60.0 dBA. Thus, the Project Area can be classified as an acceptable location for noise-sensitive land uses such as hotels/transient lodging and office/commercial use which has noise level limits of 65 dBA CNEL and 70 dBA CNEL, respectively. Furthermore, the Project proposes to position commercial uses that double as sensitive noise receptors in the direct vicinity of other commercial uses that are sensitive to noise making the Project conducive within the existing noise environment. 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 generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

Less Than Significant Impact.

Project Construction

Excessive groundborne vibration impacts result from continuously occurring vibration levels. Increases in groundborne vibration levels attributable to the Project would be primarily associated with short-term, construction-related activities. Construction on the Project Area 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 noted that pile drivers would not be necessary during Project construction. Vibration decreases rapidly with distance and it is acknowledged that construction activities would occur throughout the Project Area and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with construction equipment at 25 feet distant are summarized in Table 4.13-7.

Table 4.13-7. Representative Vibration Source Levels for Construction Equipment

Equipment Type	Peak Particle Velocity at 25 Feet (inches per second)
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Hoe Ram	0.089
Jackhammer	0.035
Small Bulldozer/Tractor	0.003
Vibratory Roller	0.210

Source: Federal Transit Administration (FTA) 2018; Caltrans 2020

The City does not regulate vibrations associated with construction. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans recommended standard of 0.3 inches per second PPV with respect to the prevention of structural damage for older residential buildings is used as a threshold (Caltrans 2020). This is also the level at which vibrations may begin to annoy people in buildings. Consistent with FTA recommendations for calculating vibration generated from construction equipment, construction vibration was measured from the center of the Project Area (FTA 2018). The nearest structure of concern to the construction site is the ARMC, located approximately 600 feet east of the center of the Project Area.

Based on the representative vibration levels presented for various construction equipment types in Table 4.13-7 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 4.13-8 presents the expected Project related vibration levels at a distance of 600 feet.

Table 4.13-8. Construction Vibration Levels at 600 Feet							
Receiver PPV Levels (inches per second)[1]					Peak Vibration	Threshold	Exceed Threshold?
Large Bulldozer, Caisson Drilling & Hoe Ram	Loaded Trucks	Jackhammer	Small Bulldozer	Vibratory Roller			
0.0008	0.0006	0.0003	0.0014	0.0018	0.0018	0.3	No

Notes: PPV = Peak Particle Velocity

[1]Based on the Vibration Source Levels of Construction Equipment included on Table 4.13-7 (Federal Transit Administration [FTA] 2018). Distance to the nearest structure of concern is approximately 600 feet measured from Project Area center.

As shown in Table 4.13-8, vibration as a result of onsite construction activities on the Project Area would not exceed 0.3 PPV at the nearest structure. Thus, onsite Project construction would not exceed the recommended threshold. Impacts would be less than significant.

Project Operations

Project operations would not include the use of any stationary equipment that would result in excessive vibration levels. The Project would not attract large numbers of heavy-duty trucks or include heavy-duty stationary equipment. Therefore, the Project would result in negligible groundborne vibration impacts during operations. 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) 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 Area is located approximately 6.3 miles southwest of the San Bernardino International Airport. According to the City's General Plan Noise Element, the Project Area is located outside of the 65 dBA CNEL airport noise contours (City of Colton 1987b). While aircraft noise may be occasionally audible in the Project Area from aircraft flyovers, aircraft noise associated with nearby airport activity would not expose future hotel staff/guests or medical office staff/guests to excessive noise levels. Therefore, implementation of the Proposed Project would not expose people to noise levels from airport activity that would be in

excess of normally acceptable standards for the proposed land use development, and no impact would occur.

4.13.3 Mitigation Measures

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

4.14 Population and Housing

4.14.1 Environmental Setting

According to the City's General Plan, the City had a population of 52,154 residents in 2010. The most significant population growth occurred between 1980 and 1990 in which population increased from 21,310 to 40,213 residents (City of Colton 2013a). The 2020 U.S. Census shows the City's population grew to 53,909 residents (U.S. Census Bureau 2020).

The City's General Plan 2013 to 2021 Housing Element states that the 2010 Census recorded an estimated 16,350 housing units. There is a higher ratio of renters to owners in the City as compared to the rest of San Bernardino County. The City also has the highest percentage of multi-family units among the surrounding cities. The Housing Element is required to note adequate sites available in the City to accommodate the construction of new housing units consistent with the Regional Housing Needs Assessment (RHNA) developed for the City. For the 2013 to 2021 planning period, SCAG assigned Colton a RHNA of 1,923 housing units. SCAG projects that Colton's population will reach 71,700 by the year 2035, an average population increase of approximately 1.4 percent per year between 2000 and 2035 (City of Colton 2014c).

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 Impact.

The proposed medical office clinic would serve both the existing community and visitors to the City and the proposed hotel would serve visitors. Employees for the medical office clinic and hotel would likely reside in the City of Colton but could reside in nearby cities and commute into the City. The relocation of persons for employment at either facility is not anticipated. However, according to the CHCCSP EIR, future development in the CHCCSP has always been included in the City's planned growth (City of Colton 2014b). Overall, the nature of the Proposed Project would not substantially increase permanent population growth. 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 Proposed Project would construct a medical office clinic and a hotel on a currently vacant lot. The Project is located in an area with vacant land, commercial uses, and public/institutional uses and would not displace substantial numbers of people or existing housing. Therefore, there is no impact and no mitigation is required.

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

4.15.1.1 Fire Services

The City of Colton Fire Department is responsible for fire suppression, emergency medical services, light and heavy rescue, and hazardous materials mitigation for the City. The City maintains four fire stations, Station 211, Station 212, Station 213, and Station 214 which are equipped with three Type-1 paramedic engines, one paramedic truck, one Type-3 engine, one Office of Emergency Services (OES) water tender, one OES Type-6 engine, and one OES Type-1 engine (City of Colton Fire Department 2024b). The nearest fire station is Station 212, which is located at 1511 North Rancho Avenue, approximately 1.2 miles northeast of the Project Area.

4.15.1.2 Police Services

The Colton Police Department serves the City's approximately 16 square miles and is responsible for a variety of patrol shifts including traffic, investigations, SWAT, K-9, and field training. The Police Department employs 57 sworn officers and 40 non-sworn employees (Colton Police Department 2024). The police station is located at 650 North La Cadena Drive, approximately 1.7 mile east of the Project Area.

4.15.1.3 Schools

The City is located within the boundaries of two school districts, Colton Joint Unified School District (CJUSD) and Rialto Unified School District (RUSD). CJUSD covers 48 square miles and includes 1 preschool, 18 elementary schools, 4 middle schools, 3 high schools, 1 alternative high school, and 1 continuation

high school (CJUSD 2024). The Project Area is located within the RUSD boundary. Jehue Middle School, the nearest school to the Project Area, is located approximately 0.5 mile north of the Project Area.

4.15.1.4 Parks

The City maintains 12 parks totaling 49.56 acres (City of Colton 2024a). The nearest park, West Valley Park, is located approximately 900 feet northwest of the Project Area and is a City of Rialto park.

4.15.1.5 Other Public Facilities

Other public facilities and services provided within the City include library services. Library services are provided by two facilities, the Colton Public Library – Main Library, located at 656 North 9th Street, and the Luque Branch Library, located at 294 East O Street. The nearest library to the Project Area is the Main Library, located approximately 1.8 miles east of the Project Area.

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

Less than Significant Impact.

According to the CHCCSP EIR, future development in the CHCCSP has always been included in the City's planned growth, which would include the City's fire and police protection services (City of Colton 2014b). However, the nature of the Proposed Project would not substantially increase permanent population growth nor create substantial additional demand for fire services. Funding for new City services and facilities commensurate with the increased demand for services in the City of Colton would be provided

from capital improvement fees levied on new development. The City would collect fees to offset impacts associated with new development. These Development Impact Fees (DIFs) are one-time charges applied to new development and are imposed to raise revenue for the construction or expansion of capital facilities located out of the project boundaries of a new development that benefit the area. DIFs enable the City or agency to collect fair-share fees from new development projects to fund new infrastructure and services.

The Proposed Project would be designed and operated per applicable standards required by the City and Colton Police Department for new development in regards to public safety. The Proposed Project would be required to pay the City's DIF (Ordinance No. O-020-20), which includes a Traffic Facilities Fee; Public Facilities Fees for police, fire, the library, and the civic center; and a Park Development Fee (City of Colton 2020). Impacts would be less than significant.

Police Services

Less than Significant Impact.

According to the CHCCSP EIR, future development in the CHCCSP has always been included in the City's planned growth, which would include the City's fire and police protection services (City of Colton 2014b). However, the nature of the Proposed Project would not substantially increase permanent population growth nor create substantial additional demand for police services.

As noted above, the Proposed Project would be required to pay the City's DIF (Ordinance No. O-020-20) which includes a Traffic Facilities Fee; Public Facilities Fees for police, fire, the library, and the civic center; and a Park Development Fee (City of Colton 2020). Impacts would be less than significant.

Schools

Less than Significant Impact.

The proposed medical office clinic would serve the existing community and future residents. According to the CHCCSP EIR, future development in the CHCCSP has always been included in the City's planned growth (City of Colton 2014b). The proposed hotel would serve visitors to the City and would not cause an increase in permanent residents that would access the City's schools. Overall, the nature of the Proposed Project would not substantially increase permanent population growth or create substantial additional demand for school services.

Under Education Code Section 17620 and Government Code Section 65995, school districts are authorized to levy a fee, charge, or dedication against any new construction within its boundaries for the purpose of funding the construction or reconstruction of school facilities. As the Proposed Project is located within RUSD boundaries, it is required to pay RUSD's Level I Statutory School Fees. School fees applicable to the Proposed Project include for all categories of new commercial/industrial development and for hospitality (lodging) (RUSD Board of Education 2024). Impacts would be less than significant.

Parks

Less than Significant Impact.

The Project would not create a substantial increase in employees or new residents that would increase park use to the extent that modifications to existing parks or construction of new park facilities are required.

The Proposed Project would be required to pay the City's DIF (Ordinance No. O-020-20) which includes a Traffic Facilities Fee; Public Facilities Fees for police, fire, the library, and the civic center; and a Park Development Fee (City of Colton 2020). Impacts would be less than significant.

Other Public Facilities

Less than Significant Impact.

Overall, the nature of the Proposed Project would not substantially increase permanent population growth or create substantial additional demand for new or expanded public facilities, such as the local library. As a new development, the Proposed Project would be required to pay the City's Development Impact Fees (Ordinance No. O-020-20) which includes a Traffic Facilities Fee; Public Facilities Fees for police, fire, the library, and the civic center; and a Park Development Fee (City of Colton 2020). Impacts would be less than significant, and no mitigation is required.

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 Colton has 12 parks totaling 49.56 acres. Other City recreational facilities include the Gonzales Community Center, Hutton Community Center, Luque Community Center, and the Art Thompson Teen Center. Residents can also access the Santa Ana River Trail, which runs 6 miles through the City between the Riverside County line on the west and the City of San Bernardino on the east (City of Colton 2024a).

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?	☐	☐	☒	☐

Less than Significant Impact.

The nearest park, West Valley Park, is located approximately 900 feet northwest of the Project Area and is a City of Rialto park. The proposed medical office clinic would serve both the existing community and any future residents. The proposed hotel would provide temporary/short-term lodging for visitors to the City. According to the CHCCSP EIR, future development in the CHCCSP has always been included in the City's

planned growth (City of Colton 2014b). Therefore, permanent population growth in this area has been accounted for in relation to demand for parks and recreational facilities. Additionally as noted above, The Proposed Project would be required to pay the City's DIF (Ordinance No. O-020-20) which includes a Traffic Facilities Fee; Public Facilities Fees for police, fire, the library, and the civic center; and a Park Development Fee (City of Colton 2020). Given the nature of the Proposed Project, it would not create a substantial increase in new residents that would increase park use to the extent that substantial physical deterioration of the facility would occur or be accelerated. 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) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

No Impact.

The Proposed Project would construct a medical office clinic and a hotel, which would not affect recreational facilities. As such, the Proposed Project would not require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. No impact would occur, and no mitigation is required.

4.16.3 Mitigation Measures

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

4.17 Transportation

A Traffic Impact Analysis was prepared by KOA to evaluate the potential for transportation impacts associated with the development of the Proposed Project (KOA 2025; Appendix I).

4.17.1 Environmental Setting

4.17.1.1 Roadway Facilities

Roadways

The main highway facilities through the City are I-10 and I-215. I-10 runs east-west through the City with the California segment connecting Santa Monica through Los Angeles, San Bernardino, and Palm Springs until it crosses into Arizona. I-215 is a north-south auxiliary highway of I-15 that runs from Murrieta to the San Bernardino. The City has 11 major arterial roadways that link local streets to freeways and provide access between cities and subregions. Other roadway facilities include secondary arterials that connect districts and neighborhoods within the City, collector streets which provide a transition between local streets and higher-speed arterial roadways, and local streets which are neighborhood roadways that carry low volumes of traffic through the City (City of Colton 2013c).

The Project Area is located approximately 0.3 miles north of I-10 and 3.3 miles west of I-215. Major arterials in the vicinity of the Project Area include Pepper Avenue, San Bernardino Avenue, and Valley Boulevard. Pepper Avenue is adjacent to the Project Area and provides north-south access to I-10 between Randall Avenue and Slover Avenue. San Bernardino Avenue, located north of the Project Area, serves as a crosstown arterial route and provides a commuter tie to the ARMC and developments within the CHCCSP area. Valley Boulevard, located south of the Project Area, parallels I-10 and connects the City to the cities of Rialto, Fontana, and Ontario.

Truck Routes

The delivery of goods directly to and from Colton businesses is primarily provided by trucks on surface streets. Truck routes in the City are defined by ordinance via the Municipal Code and are subject to change based on vehicular traffic, changes to surrounding city truck routes, enforcement, and trucking demand through the City. Roadways that serve as truck routes include Valley Boulevard, Pepper Avenue, Mount Vernon Avenue, Colton Avenue, Fairway Drive, La Cadena Drive, Rancho Avenue (south of Valley Boulevard), and Washington Street (City of Colton 2013c). The nearest truck route is North Pepper Avenue, located adjacent to the Project Area.

Study Intersections

The TIA analyzed seven intersections adjacent or near the Project Area, including:

1) North Pepper Avenue and West San Bernardino Avenue
2) North Pepper Avenue and Violet Street
3) North Pepper Avenue and North Project Driveway (Future Intersection)
4) North Pepper Avenue and Blue Drive
5) North Pepper Avenue and West Valley Boulevard
6) North Pepper Avenue and I-10 Freeway Westbound On/Off Ramps
7) North Pepper Avenue and I-10 Freeway Eastbound On/Off Ramps

Vehicular access will be provided on North Pepper Avenue via two project driveways. Both driveways will be restricted to right-turn inbound and outbound only.

The City of Colton has established Level of Service (LOS) D as the acceptable LOS standard within the City. Therefore, LOS D was considered as the minimum LOS criterion for all study intersections.

As depicted in Table 4.17-1, none of the existing study area intersections are currently operating at an unacceptable LOS during weekday AM (morning), midday, and PM (evening) peak hours.

Table 4.17-1. Intersection Performance – Existing Conditions								
Study Intersection		Control Type	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
			Delay (secs)[1]	LOS	Delay (secs)[1]	LOS	Delay (secs)[1]	LOS
1	N. Pepper Avenue & San Bernardino Avenue	Signalized	30.7	C	22.1	C	21.0	C
2	N. Pepper Avenue & Violet Street	Signalized	6.2	A	7.5	A	8.6	A
3	N. Pepper Avenue & North Project Driveway[2]	Unsignalized	–	–	–	–	–	–
4	N. Pepper Avenue & Blue Drive	Signalized	10.1	B	7.2	A	14.5	B
5	N. Pepper Avenue & W. Valley Boulevard	Signalized	31.9	C	22.2	C	27.3	C
6	N. Pepper Avenue & I-10 Fwy WB On/Off Rams	Signalized	26.8	C	11.8	B	15.6	B
7	N. Pepper Avenue & I-10 Fwy EB On/Off Rams	Signalized	30.1	C	23.4	C	27.7	C

Source: KOA 2025

Note: AM = Morning; EB = Eastbound; LOS = Level of Service; PM = Evening; secs = seconds; WB = Westbound;

[1] Delay is the average delay in seconds for all vehicles at a signalized intersection.

[2] Intersection No. 3 is a future intersection with the development of the Project.

Trip Distribution

The Project trip distribution is based on the regional roadway network and the location of residential and commercial centers relative to the Project location. The TIA prepared for the Proposed Project uses the 11th Edition Institute of Transportation Engineers (ITE) Trip Generation Manual's trip rates for hotels and medical offices. Table 4.17-2 shows the Project trip rates for each ITE code.

Table 4.17-2. Project Trip Rates													
ITE Code	ITE Trip Rate		Daily (2-Way)	AM Peak Hour			Midday Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total	In	Out	Total
310	Hotel	Trips per Room	7.99	56%	44%	0.46	56%	44%	0.57	51%	49%	0.59
720	Medical Office	Trips per 1,000 square feet	31.86	81%	19%	2.68	51%	49%	3.56	25%	75%	2.84

Source: ITE Trip Generation, 11th Edition

Notes: AM = Morning; ITE = Institute of Transportation Engineers; PM = Evening

Using the ITE trip rates described above, KOA calculated the Project's trip generation as shown in Table 4.17-3.

Table 4.17-3. Project Trip Generation

Proposed Land Use	Size	Daily (2-Way)	AM Peak Hour			Midday Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total	In	Out	Total
Hotel (71,000 square feet)	112 Rooms	895	29	23	52	36	28	64	34	32	66
Medical Office	60,000 square feet	1,912	130	31	161	109	105	214	43	127	170
Total		**2,807**	**159**	**54**	**213**	**145**	**133**	**278**	**77**	**159**	**236**

Source: KOA 2025

Notes: AM = Morning; PM = Evening

The Proposed Project is estimated to generate approximately 2,807 daily two-way trips including 213 trips (159 inbound and 54 outbound) during the AM peak hour, 278 trips (145 inbound and 133 outbound) during the Midday peak hour, and 236 trips (77 inbound and 159 outbound) during the PM peak hour.

4.17.1.2 Public Transit Facilities

Bus

OmniTrans is the primary public bus transit provider in Colton and the San Bernardino region. OmniTrans operates a fixed-route bus service with several routes and a demand-responsive bus pickup service called OmniLink. OmniTrans also provides an ADA-compliant Dial-A-Ride program for senior and persons with physical or cognitive disabilities. A Bus Rapid Transit (BRT) system is planned for City to connect to the BRT lines in Rialto and San Bernardino. The San Bernardino Avenue BRT line is planned for San Bernardino Avenue, Pepper Avenue, Valley Boulevard, 10th Street, Colton Avenue, and Mount Vernon Avenue (City of Colton 2013c).

OmniTrans provides five bus routes through the City, including Routes 1, 15, 19, 22, 215, and 305 (OmniTrans 2024). The nearest routes to the Project Area are Routes 1, 19, and 22, which utilize North Pepper Avenue. Route 1 connects the City from the ARMC on North Pepper Avenue to Lynwood Drive/Victoria Avenue in San Bernardino. Route 19 serves Redlands and Fontana via Colton and Grand Terrace with popular destinates including the ARMC. Route 22 serves north and south Rialto and includes a stop at the ARMC.

Rail

Amtrak and Metrolink provide passenger rail services utilizing the City's existing rail lines to connect to Riverside and San Bernardino. The San Bernardino Metrolink and Amtrak stations are located at the Santa Fe Depot near the intersection of Mount Vernon Avenue and 3rd Street in San Bernardino, approximately three miles from Downtown Colton. The Riverside Station (Amtrak) and Riverside-Downtown Station

(Metrolink) are located in Downtown Riverside off of Vine Street, approximately eight miles from Downtown Colton (City of Colton 2013c). There are currently no rail stations in the City, however, a Metrolink station is planned for south Colton along La Cadena Drive.

4.17.1.3 Bicycle Facilities

Bicycle facilities in the City include Class I (Bicycle Path), Class II (Bicycle Lane), and Class III (Bike Route) facilities as well as the Santa Ana River Trail which parallels the Santa Ana River for 6 miles from the Riverside County line to the City of San Bernardino (City of Colton 2013c). Class I bikeways provide bicycle travel on a paved right-of-way completely separated from all streets and highways. Class II bikeways provide a striped and stenciled lane for one-way travel on a street or highway. Class III bikeways provide for shared use with motor vehicle traffic and are identified through signing.

The nearest bicycle facilities to the Project Area are a Class II Bicycle Lane along San Bernardino Avenue and a Class III Bike Route along Valley Boulevard (KOA 2025).

4.17.1.4 Pedestrian Facilities

The pedestrian network in Colton consists primarily of sidewalks provided along most roadways in commercial districts and residential neighborhoods. Paved sidewalks are present on both sides of Pepper Avenue, San Bernardino Avenue, and Valley Boulevard.

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 Impact.

Construction Impacts

The Proposed Project would generate short-term construction related vehicle trips. However, traffic generated during construction of the Proposed Project would be temporary and would not conflict with the City's Mobility Element. The Project would not impede the implementation of City programs supporting walking, bicycling, and use of public transportation. Impacts would be less than significant, and no mitigation is required.

Operational Impacts

Roadway Facilities

For study intersections under the City's jurisdiction, an operational deficiency is determined based on the impact criteria described in the San Bernardino County Transportation Authority (SBCTA) Congestion

Management Program (CMP) guidelines which state that a significant project impact occurs when the peak hour LOS falls below the City's LOS standard from LOS D to LOS E or F, or when the project contributes to an existing deficiency. While LOS can no longer be used as a significance threshold in CEQA for transportation impacts under SB 743, it can still be used for local transportation analysis and conditions of approval. Therefore, an LOS analysis is provided below.

LOS Analysis

Intersections

Potential impacts to traffic and circulation have been evaluated for each of the following conditions:

- Existing Conditions
- Project Opening Year 2027 with No Project Conditions
- Project Opening Year 2027 with Project Conditions
- General Plan Buildout Year with No Project Conditions
- General Plan Buildout Year with Project Conditions

Existing Conditions

For existing traffic conditions, none of the study area intersections are currently operating at an unacceptable LOS (LOS E or worse) during any peak hours (see Table 4.17-1).

Opening Year with No Project Conditions

This scenario provides an analysis of opening year traffic conditions in the study area with background traffic growth added but without the Proposed Project traffic. Results are shown on Table 4.17-4.

Table 4.17-4. Intersection Performance – Opening Year with No Project Conditions

Study Intersection		Control Type	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
			Delay (secs)[1]	LOS	Delay (secs)[1]	LOS	Delay (secs)[1]	LOS
1	N. Pepper Avenue & San Bernardino Avenue	Signalized	28.0	C	22.1	C	21.2	C
2	N. Pepper Avenue & Violet Street	Signalized	6.3	A	7.5	A	8.5	A
3	N. Pepper Avenue & North Project Driveway	Unsignalized	–	–	–	–	–	–
4	N. Pepper Avenue & Blue Drive	Signalized	10.3	B	7.2	A	13.7	B
5	N. Pepper Avenue & W. Valley Boulevard	Signalized	33.4	C	22.8	C	28.2	C

Table 4.17-4. Intersection Performance – Opening Year with No Project Conditions								
Study Intersection		Control Type	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
			Delay (secs)[1]	LOS	Delay (secs)[1]	LOS	Delay (secs)[1]	LOS
6	N. Pepper Avenue & I-10 Fwy WB On/Off Rams	Signalized	27.3	C	11.8	B	15.3	B
7	N. Pepper Avenue & I-10 Fwy EB On/Off Rams	Signalized	29.6	C	23.8	C	27.8	C

Source: KOA 2025

Note: AM = Morning Hours; EB = Eastbound; LOS = Level of Service; PM = Evening Hour; secs = seconds; WB = Westbound;

[1] Delay is the average delay in seconds for all vehicles at a signalized intersection.

The intersection analysis results indicate that the growth of background traffic is not anticipated to result in any LOS deficiencies.

Opening Year with Project Conditions

This scenario provides an analysis of opening year traffic conditions in the study area with the Proposed Project traffic. Results are shown on Table 4.17-5.

Table 4.17-5. Intersection Performance – Opening Year with Project Conditions								
Study Intersection		Control Type	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
			Delay (secs)[1]	LOS	Delay (secs)[1]	LOS	Delay (secs)[1]	LOS
1	N. Pepper Avenue & San Bernardino Avenue	Signalized	30.0	C	22.0	B	21.8	C
2	N. Pepper Avenue & Violet Street	Signalized	6.4	A	7.3	A	8.5	A
3	N. Pepper Avenue & North Project Driveway	One-Way Stop	20.1	C	15.3	C	16.0	C
4	N. Pepper Avenue & Blue Drive	Signalized	11.3	B	7.8	A	14.2	B
5	N. Pepper Avenue & W. Valley Boulevard	Signalized	33.1	C	23.2	C	29.4	C
6	N. Pepper Avenue & I-10 Fwy WB On/Off Rams	Signalized	28.7	C	12.2	B	18.4	B
7	N. Pepper Avenue & I-10 Fwy EB On/Off Rams	Signalized	30.8	C	24.7	C	28.8	C

Table 4.17-5. Intersection Performance – Opening Year with Project Conditions							
Study Intersection	Control Type	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
		Delay (secs)[1]	LOS	Delay (secs)[1]	LOS	Delay (secs)[1]	LOS

Source: KOA 2025

Note: AM = Morning; EB = Eastbound; LOS = Level of Service; PM = Evening; secs = seconds; WB = Westbound;

[1] Delay is the average delay in seconds for all vehicles at a signalized intersection and the average delay in seconds for the critical Stop-controlled turning movement for a one-way stop-controlled intersection.

The intersection analysis results indicate that the addition of Proposed Project traffic is not anticipated to result in any LOS deficiencies. All of the study intersections are projected to operate at LOS C or better during the weekday AM, Midday and PM peak hours.

General Plan Buildout Year with No Project Conditions

This section provides an analysis of the General Plan Buildout Year (2040) traffic conditions in the study area, without the Proposed Project. Results are shown in Table 4.17-6.

Table 4.17-6. Intersection Performance – General Plan Buildout Year with No Project Conditions								
Study Intersection		Control Type	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
			Delay (secs)[1]	LOS	Delay (secs)[1]	LOS	Delay (secs)[1]	LOS
1	N. Pepper Avenue & San Bernardino Avenue	Signalized	34.9	C	22.4	C	23.0	C
2	N. Pepper Avenue & Violet Street	Signalized	6.6	A	7.7	A	9.1	A
3	N. Pepper Avenue & North Project Driveway	Unsignalized	–	–	–	–	–	–
4	N. Pepper Avenue & Blue Drive	Signalized	11.3	B	7.6	A	15.7	B
5	N. Pepper Avenue & W. Valley Boulevard	Signalized	41.1	D	24.0	C	31.0	C
6	N. Pepper Avenue & I-10 Fwy WB On/Off Rams	Signalized	32.5	C	12.3	C	19.9	B
7	N. Pepper Avenue & I-10 Fwy EB On/Off Rams	Signalized	34.2	C	25.2	C	30.4	C

Source: KOA 2025

Note: AM = Morning; LOS = Level of Service; PM = Evening; secs = seconds

[1] Delay is the average delay in seconds for all vehicles at a signalized intersection.

The intersection analysis results indicate all the study intersections would operate at LOS D or better during the weekday AM, midday, and PM peak hours.

General Plan Buildout Year with Project Conditions

This section provides an analysis of the General Plan Buildout Year (2040) traffic conditions in the study area with Project intersection traffic volumes. Results are shown in Table 4.17-7.

Table 4.17-7. Intersection Performance – General Plan Buildout Year with Project Conditions

Study Intersection		Control Type	AM Peak Hour		Midday Peak Hour		PM Peak Hour	
			Delay (secs)[1]	LOS	Delay (secs)[1]	LOS	Delay (secs)[1]	LOS
1	N. Pepper Avenue & San Bernardino Avenue	Signalized	37.8	D	22.4	C	23.9	C
2	N. Pepper Avenue & Violet Street	Signalized	6.7	A	7.6	A	9.3	A
3	N. Pepper Avenue & North Project Driveway	One-Way Stop	22.8	C	16.2	C	17.3	C
4	N. Pepper Avenue & Blue Drive	Signalized	12.5	B	8.2	A	16.8	B
5	N. Pepper Avenue & W. Valley Boulevard	Signalized	41.0	D	24.6	C	31.4	C
6	N. Pepper Avenue & I-10 Fwy WB On/Off Rams	Signalized	38.0	D	12.7	B	24.0	C
7	N. Pepper Avenue & I-10 Fwy EB On/Off Rams	Signalized	35.9	D	26.3	C	32.0	C

Source: KOA 2025

Note: AM = Morning; LOS = Level of Service; PM = Evening; secs = seconds

[1] Delay is the average delay in seconds for all vehicles at a signalized intersection and the average delay in seconds for the critical Stop-controlled turning movement for a one-way stop-controlled intersection.

The intersection analysis results for the General Plan Buildout Year with Project conditions indicate all the study intersections would operate at LOS D or better during the weekday AM, midday, and PM peak hours.

All of the study intersections currently operate at an acceptable LOS (D or better) and are also anticipated to operate at an acceptable LOS (D or better) for the Opening Year and General Plan Buildout conditions.

San Bernardino County Transportation Authority (SBCTA) Congestion Management Plan

SBCTA, the transportation planning agency for San Bernardino County prepares and implements a CMP. Urbanized areas are required by State law to adopt a CMP to reduce traffic congestion and provide a mechanism for coordination land use development and transportation improvement decisions. Funding

for regional transportation system improvements identified in the CMP are supplemented by SBCTA's Development Mitigation Program).

Measure I 2010-2040

Measure I was approved by San Bernardino County voters in 1989 and authorizes the SBCTA to implement a half-cent sales tax dedicated to countywide transportation improvements. In 2004, voters approved an extension of the measure, referred to as Measure I 2010-2040, through 2040. Measure I 2010-2040 is organized into six subareas, including San Bernardino Valley, Victor Valley, Mountains, North Desert, Morongo Basin, and Colorado River. The Proposed Project is located in the San Bernardino Valley subarea (San Bernardino County 2024).

Funds collected through Measure I 2010-2040 provide for improvements such as street maintenance, bicycle lane improvements, road widening, paving, landscaping, and bridge replacement (City of Colton 2013c). Under Measure I Section VIII *Contributions from New Development*, no revenue generated from the sales tax shall be used to replace the fair share contributions required from new developments.

The Proposed Project would comply with all applicable transportation programs, plans, ordinances, and policies. Impacts to roadway facilities would be less than significant.

Transit Facilities

The nearest routes to the Project Area are Routes 1, 19, and 22, which utilize North Pepper Avenue. Route 1 connects the City from the ARMC on North Pepper Avenue to Lynwood Drive/Victoria Avenue in San Bernardino. Route 19 serves Redlands and Fontana via Colton and Grand Terrace with popular destinates including the ARMC. Route 22 serves north and south Rialto and includes a stop at the ARMC. The Proposed Project does not include any components that would impact existing transit facilities and routes. No impact would occur.

Bicycle Facilities

In the vicinity of the Project, the nearest bicycle facility is the Class II Bicycle Lane along San Bernardino Avenue, located approximately 0.14 miles north. The Proposed Project does not include any alterations to San Bernardino Avenue; therefore, there would be no impacts to existing bicycle facilities.

Pedestrian Facilities

There are existing sidewalks along the length of North Pepper Avenue, including along the Project frontage. The Proposed Project would construct two project driveways on the Project frontage, which may temporarily impede the use of the sidewalk during construction. However, the operation of the Proposed Project would not impact pedestrian 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)?	☐	☐	☒	☐

Less than Significant Impact.

CEQA Guidelines section 15064.3, subdivision (b) details the use of VMT to assess the significance of transportation impacts. As detailed in CEQA Guidelines section 15064.3, subdivision (c), a lead agency may elect to be governed by the provisions of this section immediately. As of July 1, 2020, the provisions of this section apply statewide.

The City's VMT Guidelines (2020) provide criteria for projects that would be considered to have a less-than-significant impact on VMT and therefore could be screened out for further analysis. If a project meets one of the following criteria, then the VMT impact of the project is considered less than significant and no further analysis of VMT would be required:

1) The project generates fewer than 110 daily vehicle trips.
2) The project is a local-serving land use.
3) The project is located within a High-Quality Transit Area (HQTA).
4) The project is in a low VMT area.

The applicability of each criterion to the Proposed Project is discussed in the VMT screening analysis below.

Screening Criteria 1 – Project Trip Generation Screening

The VMT Guidelines consider a project to have a less-than-significant VMT impact if the project generates fewer than 110 average daily trips. As indicated in Table 4.17-2, the Project would generate approximately 2,807 net daily trips. As a result, the Project does not screen out of VMT analysis through this criterion.

Screening Criteria 2 – Land Use Type Screening

The City of Colton VMT Guidelines provide a list of project types that can be considered to not have a significant impact upon transportation. The final determination is to be made by City staff. Project types falling under this screening criteria include the following:

- K-12 Schools
- Local-serving retail less than 50,000 square feet
- Local parks
- Day care centers
- Local serving gas stations

- Local serving banks
- Student housing projects
- Local serving community colleges

The Project does not meet any of the above criteria related to "Land Use Type screening."

Screening Criteria 3 – High Quality Transit Area (HQTA) Screening

Per the VMT Guidelines, projects located within a HQTA may be presumed to have a less than significant VMT impact based on their access to transit options. The City uses SCAG definitions for a HQTA. Projects which are located within 0.50 mile from an existing major transit stop or within 0.50 mile from an existing stop along a high-quality transit corridor. The criteria use the assumption that the project service population's primary mode of transportation will be the existing City transportation infrastructure and is therefore excluded from generating additional VMT for the Project. The Office of Planning and Research lists exceptions to this criterion as listed below where specific projects were found to generate significant amounts of VMT regardless of being located near an existing major transit stop/existing stop along a high-quality transit corridor:

- The project must have Floor-to-Area Ratio (FAR) of 0.75 or higher,
- Constructs a smaller number of moderate or high-income residential units than the existing number of affordable residential units.

Per the SBCTA VMT Screening Tool, the Proposed Project is located in a HQTA. A map depicting HQTA locations, based on SBCTA VMT Screening Tool data, is presented in Appendix I, Attachment 6. The FAR of the Project, based on the Site Plan, is approximately 0.79, which would meet the minimum FAR of 0.75 as stated in the VMT Guidelines. The Project is also consistent with the SCAG RTP/SCS and does not replace existing affordable housing. The Project therefore meets the HQTA screening criteria.

Screening Criteria 4 – Low VMT Area Screening

A similar region dependent threshold is used for the identification of low VMT areas, where the project's VMT generation, due to being located in an already low VMT area, is assumed to be negligible. The threshold for consideration of low VMT is determined to be 15 percent below the City's average from the 2016 Baseline of 23.30 VMT, however some Traffic Analysis Zones (TAZs) within the City are not under the jurisdiction of the City and will use a 15 percent threshold for the dictating City.

The VMT Guidelines define a Low-VMT Area as an individual TAZ where total daily Origin/Destination (OD) VMT per service population is 15 percent lower than the County-average total daily OD VMT per service population. The SBCTA VMT Screening Tool was used to determine if these conditions are met.

A map depicting low-VMT generating TAZs, based on SBCTA VMT Screening Tool data, is presented in Appendix I, Attachment 6 of the Project's Traffic Impact Analysis. The Project TAZ is expected to have a VMT per service population of 88.2 during the Opening Year. The County-wide VMT per service population is 29.6, leading to a threshold of 25.2 (15 percent below). The Project TAZ does not qualify as a

Low-VMT Area and therefore cannot be presumed to have a less-than-significant VMT impact based on the low-VMT area screening criteria.

Per the City's VMT Guidelines, additional VMT analysis is not required when a project meets one or more of the following screening criteria: Project Trip Generation Screening, Land Use Type Screening, High-Quality Transit Area Screening, or Low VMT Area Screening. Given that the project fulfills the High-Quality Transit Area Screening criteria, further VMT analysis of transportation impacts is not required. 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 increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒

No Impact.

Construction of the Proposed Project does not include any geometric design features such as sharp curves or dangerous intersections or incompatible uses such as farm equipment that would substantially increase hazards. 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 inadequate emergency access?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

Construction activities, which may temporarily restrict vehicular traffic, would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road/lane closures. The Proposed Project design would be submitted to and approved by the City's Fire and Police Departments prior to any construction activities. Furthermore, a Traffic Control Plan shall be prepared to ensure proper access to residences and businesses in the area by emergency vehicles during construction, ensure residences and businesses in the area have proper access to evacuation routes during construction, and to maintain traffic flow. As addressed in Section 4.9.3 of this report, impacts associated with inadequate emergency access would be less than significant with the implementation of Mitigation Measure HAZ-1.

4.17.3 Mitigation Measures

See HAZ-1 in Section 4.9.3 of this report.

4.18 Tribal Cultural Resources

4.18.1 Environmental Setting

4.18.1.1 Assembly Bill 52

Effective July 1, 2015, 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 tribal 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 PRC 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 I 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.

4.18.1.2 Summary of AB 52 Consultation

On September 10, 2024, the City sent Project notification letters to the following California Native American tribes during the Initial Study/Mitigated Negative Declaration (IS/MND) process pursuant to 21080.3.1(d) of the Public Resources Code:

- Agua Caliente Band of Cahuilla Indians
- Augustine Band of Cahuilla Indians
- Cabazon Band of Cahuilla Indians
- Cahuilla Band of Indians
- Chemehuevi Indian Tribe
- Colorado River Indian Tribes
- Fort Mojave Indian Tribe
- Gabrieleno Band of Mission Indians - Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino/Tongva Nation
- Gabrielino-Tongva Tribe
- Kern Valley Indian Community
- Los Coyotes Band of Cahuilla and Cupeño Indians
- Morongo Band of Mission Indians
- Pala Band of Mission Indians
- Pechanga Band of Indians
- Quechan Tribe of the Fort Yuma Reservation
- Ramona Band of Cahuilla
- Rincon Band of Luiseño Indians
- San Fernando Band of Mission Indians
- San Manuel Band of Mission Indians
- Santa Rosa Band of Cahuilla Indians
- Serrano Nation of Mission Indians
- Soboba Band of Luiseño Indians

- Torres-Martinez Desert Cahuilla Indians
- Twenty-Nine Palms Band of Mission Indians

Response letters were received from the following nine California Native American tribes:

- Agua Caliente Band of Cahuilla Indians
- Augustine Band of Cahuilla Indians
- Gabrieleño Band of Mission Indians - Kizh Nation
- Gabrielino Tongva Indians of California Tribal Council
- Morongo Band of Mission Indians
- Pala Band of Mission Indians
- Rincon Band of Luiseño Indians
- Twenty-Nine Palms Band of Mission Indians
- Yuhaaviatam of San Manuel Nation

Agua Caliente Band of Cahuilla Indians

The Agua Caliente Band of Cahuilla Indians responded to the Project notification letter on September 14, 2024. The Agua Caliente Band of Cahuilla Indians noted the Project is not located within the Tribe's Traditional Use Area and deferred to other tribes in the area. The Tribe stated the letter would conclude consultation efforts.

Augustine Band of Cahuilla Indians

The Augustine Band of Cahuilla Indians responded to the Project notification letter on September 18, 2024. The Augustine Band of Cahuilla Indians stated they are not aware of any specific cultural resources within the Project Area that would be affected by the proposed development. The Tribe declined formal consultation and stated to contact the California NAHC if any cultural resources are discovered as a result of the Proposed Project.

Gabrieleño Band of Mission Indians – Kizh Nation

The Gabrieleño Band of Mission Indians – Kizh Nation responded to the Project notification letter on September 19, 2024. The Tribe stated the Project location is within their Ancestral Tribal Territory and requests consultation with the lead agency.

On September 24, 2024, the Tribe emailed the City acknowledging consultation and requested Project documents. The City mailed the requested documents on October 31, 2024. No response was received and the City concluded consultation on March 12, 2025.

Gabrielino/Tongva Indians of California Tribal Council

The Gabrielino/Tongva Indians of California Tribal Council acknowledged receipt of the Project notification letter via email on September 26, 2024, and requested consultation. On September 30, 2024, the Tribe sent an email request for the cultural report, however the report was not complete at that time.

The Tribe sent a formal response letter on October 22, 2024 to make the same request for consultation. The letter also stated that the Project's undertaking would have a high potential to cause significant adverse effects to several historic/prehistoric tribal resources. On February 4, 2025, the City mailed the requested cultural report to the Tribe. The report was returned to sender on March 10, 2025, and the City remailed the cultural report the same day. No response was received and the City concluded consultation on March 12, 2025.

Morongo Band of Mission Indians

The Morongo Band of Mission Indians (MBMI) responded to the Project notification letter on September 30, 2024. The Tribe stated the Proposed Project is within the Tribe's ancestral territory and traditional use area of the Cahuilla and Serrano people of the MBMI. The MBMI requested consultation as well as the Project design and mass grading maps, CHRIS record search results, Tribal participation during pedestrian surveys and testing, Project Area limits shapefiles, and a Geotechnical Report.

On October 1, 2024, the MBMI sent a letter to the City requesting information. The City sent the requested information on October 30, 2024. No response was received and the City concluded consultation on March 12, 2025.

Pala Band of Mission Indians

The Pala Band of Mission Indians responded to the Project notification letter on October 22, 2024. The Tribe stated that the Project is not located within the boundaries of the recognized Pala Indian Reservation and is beyond the boundaries of the territory considered as the Tribe's Traditional Use Area. The Tribe requests to be kept in the information loop due to the Project's close proximity to the Reservation and potential to generate information that would be useful in understanding the regional culture and history. The Tribe defers to the wishes of the Tribes in closer proximity to the Project Area.

Rincon Band of Luiseño Indians

The Rincon Band of Luiseño Indians (Rincon Band) responded to the Project notification letter on September 19, 2024. Rincon Band stated the Project location is not within their specific Area of Historic Interest and declined consultation.

Twenty-Nine Palms Band of Mission Indians

The Twenty-Nine Palms Band of Mission Indians responded to the Project notification letter on January 10, 2025. The Tribe determined the Project is located within the Chemehuevi Traditional Use Area and the possibility of surface and/or buried archaeological materials exists. The Tribe requested consultation.

On February 4, 2025, the Tribe requested Project information, and the City sent the requested documents. No response was received and the City concluded consultation on March 12, 2025.

Yuhaaviatam of San Manuel Nation

The Yuhaaviatam of San Manuel Nation (YSMN) responded to the Project notification letter on September 16, 2024. The YSMN stated the proposed Project Area is located within Serrano ancestral territory and is of interest to the Tribe. The YSMN requests to review the Project's cultural report, geotechnical report (if required for the Project), Project plans showing depth of proposed disturbance, and shapefiles to assist the Tribe in determining how they will assume consulting party status under CEQA and participate in Project review. The letter notes that the Tribe automatically elects to be a consulting party under CEQA if the requested information cannot be provided within the Tribe's 30-day response window.

On September 16, 2024, the City sent the YSMN the documents requested in their response letter dated September 16, 2024. From December 2024 through June 2025, three additional requests for documents were made by YSMN and the City responded to each request with the requested documents.

YSMN provided their comments on the Proposed Project on August 14, 2025. The City provided a response, and consultation was concluded on August 14, 2025.

4.18.2 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	☐	☒	☐	☐

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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) No tribal cultural resources have been identified within the Project Area. However, subsurface construction disturbances (e.g., trenching, excavation, grading) associated with the Proposed Project would have the potential to impact unknown tribal cultural resources. To ensure proper protection of any unknown resources, should they be encountered during project-related ground disturbance activities, Mitigation Measures CUL-1, CUL-2, and TCR-1 would be required. Impacts would be less than significant with mitigation incorporated. Mitigation Measures

See Mitigation Measures CUL-1 through CUL-4 in Section 4.5.3

TCR-1: **Treatment of Cultural Resources During Project Implementation.** If a pre-contact cultural resource is discovered during project implementation, ground-disturbing activities shall be suspended 60 feet around the resource(s), and an Environmentally Sensitive Area physical demarcation/barrier constructed.

The professional archaeologist shall develop a research design that shall include a plan to evaluate the resource for significance under CEQA criteria. Representatives from YSMN, the professional archaeologist, and the Lead Agency shall confer regarding the research design, as well as any testing efforts needed to delineate the resource boundary. Following the completion of evaluation efforts, all parties shall confer regarding the resource's archaeological significance, its potential as a TCR, and avoidance (or other appropriate treatment) of the discovered resource. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the Tribe, unless otherwise decided by YSMN. All plans for analysis shall be reviewed and approved by the project proponent and YSMN prior to implementation, and all removed material shall be temporarily curated on-site.

It is the preference of YSMN that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by YSMN, the landowner, and the Lead Agency, and all finds

shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to Lead Agency, CHRIS, and YSMN. All reburials are subject to a reburial agreement that shall be developed between the landowner and YSMN outlining the determined reburial process/location and shall include measures and provisions to protect the reburial area from any future impacts.

Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with YSMN to identify an American Association of Museums-accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees.

All draft records/reports containing the significance and treatment findings and data recovery results shall be prepared by the professional archaeologist and submitted to the Lead Agency and YSMN for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Information Center, the Lead Agency, and YSMN.

4.19 Utilities and Service Systems

4.19.1 Environmental Setting

4.19.1.1 Water Service

The CWD provides potable and non-potable water to the City as well as an unincorporated area in the County. According to the 2020 Upper Santa Ana River Watershed IRUWMP, the CWD operates 7 wells, 4 main booster pumping plants, 6 water storage reservoirs, 2 pressure-reducing facilities, and over 120 miles of water transmission and distribution pipelines. The City's water supply is comprised entirely of groundwater extracted from the San Bernardino Basin Area (Bunker Hill Basin portion), the Rialto-Colton Basin, and the Riverside-Arlington Basin (Riverside North Basin portion) (San Bernardino Valley Municipal Water District 2021).

The Project Area is currently vacant and does not have water service. The Project would require connection to the City’s water system for the proposed medical office clinic and a hotel.

4.19.1.2 Wastewater

The City of Colton owns, operates, and maintains a wastewater collection, pumping, and treatment system. The City's wastewater treatment plant serves the City as well as Grand Terrace and unincorporated areas of the County. Treated effluent is conveyed to the Rapid Infiltration Extraction (RIX) facility which treats a combined secondary-treated effluent stream of approximately 5 million gallons per day (MGD) from the City's wastewater treatment plant and 20 MGD from the San Bernardino Water Reclamation Plant. All of the RIX-treated water is then discharged to the Santa Ana River (City of Colton 2021).

The Project Area is not currently serviced by a sanitary sewer system. The Project would require connection to the City's wastewater system for the proposed medical office clinic and a hotel.

4.19.1.3 Electricity

Colton Electric Utility provides electricity service within the City. Colton Electric Utility owns and operates a power plant, five substations, and transmission and distribution lines within the City boundaries. The utility serves a peak load of 93 megawatts (City of Colton 2023b).

High-voltage, tower-mounted electrical transmission lines were observed traversing the subject property generally from northeast to southwest.

4.19.1.4 Solid Waste

Solid waste disposal services are provided by CR&R Environmental Services, Inc., which collects solid waste in Colton under contract with the City. Solid waste in the City is disposed of at nearby active solid waste facilities, including the Mid-Valley Sanitary Landfill, San Timoteo Sanitary Landfill, and the Inland Regional Material Recovery Facility.

The Mid-Valley Sanitary Landfill has a remaining capacity of 54.2 million cubic yards with the maximum permitted throughput of 7,500 tons per day (CalRecycle 2024a). The San Timoteo Sanitary Landfill has a remaining capacity of 12.3 million cubic yards with a maximum permitted throughput of 2,000 tons per day (CalRecycle 2024b). The Inland Regional Material Recovery Facility has a maximum permit capacity of 24,667 cubic yards with a maximum permitted throughput of 1,950 tons per day (CalRecycle 2024c).

4.19.1.5 Natural Gas

Gas service for the City and the Project Area is provided by SoCalGas.

4.19.1.6 Telecommunications

Local landline telephone service is provided by AT&T.

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 Impact.

The Proposed Project would construct a medical office clinic and hotel on a vacant lot. The Proposed Project would connect to the City's existing water and sewer mains along North Pepper Avenue. Colton Electric Utility would provide electric power to the Project and telecommunication connections would be provided by AT&T. Natural gas service would be provided by SoCalGas, which owns the one major natural gas pipeline that runs through northern Colton along Mill Street.

According to the CHCCSP EIR, future development in the CHCCSP has always been included in the City's planned growth and thus is assumed in projections of water and wastewater treatment needs (City of Colton 2014b). As discussed below, there are sufficient water supplies and wastewater facilities to serve the Project and no new or expanded facilities are required. Impacts would be less than significant, and no mitigation is required.

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 Impact.

Project construction would require minimal water for compaction and dust control purposes. During operation, the proposed medical office clinic and hotel would result in an increase to water demand.

The Project Area is zoned and has a land use designation of OMU and OS/H per the City's CHCCSP. The 3.9-acre portion of the Project Area under OMU would be developed with a 60,000-square-foot medical office clinic and a 71,000-square-foot commercial hotel. The remaining 5.1 acres in the western portion of the Project parcel will be a dedicated conservation area for the Delhi Sands flower-loving fly. Using the water consumption rates listed in Table 4.10-1, the Proposed Project's water consumption would be approximately 9,825 GPD (11.01 AFY).

The City's water supply is comprised entirely of groundwater extracted from the San Bernardino Basin Area (Bunker Hill Basin portion), the Rialto-Colton Basin, and the Riverside-Arlington Basin (Riverside North Basin portion). Tables 4.19-1 and 4.19-2 show the City's surplus water availability through the year 2045 under normal year, single dry year, and multiple dry year scenarios.

Table 4.19-1. City of Colton Normal and Single Dry Year Water Supply and Demand in AFY

Totals	2025	2030	2035	2040	2045
Normal Year					
Supply Totals	11,222	11,825	12,427	12,762	13,096
Demand Totals	9,759	10,283	10,806	11,097	11,388
Difference	1,463	1,542	1,621	1,665	1,708
Single Dry Year					
Supply Totals	12,345	13,007	13,670	14,038	14,405
Demand Totals	10,734	11,311	11,887	12,207	12,526
Difference	1,610	1,697	1,783	1,831	1,879

Source: City of Colton 2021

Notes: AFY = acre-feet per year

Table 4.19-2. City of Colton Multiple Dry Year Water Supply and Demand in AFY

Year	Totals	2025	2030	2035	2040	2045
First Year	Supply Totals	12,345	13,007	13,670	14,038	14,405
	Demand Totals	10,734	11,311	11,887	12,207	12,526
	Difference	1,610	1,697	1,783	1,831	1,879
Second Year	Supply Totals	12,345	13,007	13,670	14,038	14,405
	Demand Totals	10,734	11,311	11,887	12,207	12,526
	Difference	1,610	1,697	1,783	1,831	1,879
Third Year	Supply Totals	12,345	13,007	13,670	14,038	14,405
	Demand Totals	10,734	11,311	11,887	12,207	12,526
	Difference	1,610	1,697	1,783	1,831	1,879

Source: City of Colton 2021

Notes: AFY = acre-feet per year

The local groundwater basins Colton produces water from have storage for use in dry years so the City can produce the volume of water needed to meet 100 percent of demands in multiple dry years. Water supplies available are sufficient to meet all existing customer demands and anticipated future customer demands, including the Project's demands under normal and single-dry years through 2045. The Project's

estimated demand is not expected to adversely affect the City's existing water facilities and would not require the construction of new or expanded facilities. For these reasons, the Project would have a less than significant impact on future water supplies and no mitigation is required.

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 Impact.

The City of Colton owns and operates a wastewater treatment plant located at 1201 South Rancho Avenue located approximately 2.03 miles south of the Project Area. The City of Colton Water Reclamation Facility (WRF) accepts domestic, commercial, and industrial wastewater generated within the Cities of Colton, Grand Terrace, and some unincorporated areas of San Bernardino County. Average daily flows are 5.6 MGD. The Wastewater Department is also responsible for operating and maintaining over 100 miles of sewer collection system pipelines and the lift stations that pump wastewater to the WRF for treatment (City of Colton 2024b).

The CHCCSP EIR estimates wastewater generation in the CHCCSP area using the generation rates listed in Table 4.19-3.

Table 4.19-3. Water Consumption and Wastewater Generation

Land Use	Wastewater Generation Rate
Residential	300 gallons per day (GPD) per unit
Retail	60 GPD per 1,000 square feet
Retail Mixed Use	60 GPD per 1,000 square feet
Office Mixed Use	60 GPD per 1,000 square feet
Business Park	60 GPD per 1,000 square feet
Park	N/A

Source: City of Colton 2014b

The Project Area under OMU zoning and designation would be developed with a 60,000-square-foot medical office clinic and a 71,000-square-foot commercial hotel. Therefore, using the wastewater generation rates listed in Table 4.19-3, the Proposed Project's wastewater generation would be approximately 7,860 GPD (8.81 AFY).

Tables 4.19-4a and 4.19-4b show the City's most recent wastewater collection, treatment, and discharge volumes.

Table 4.19-4a. Wastewater Collection Volumes in 2020		
Collection Agency	**Wastewater Volume (AF)**	**Wastewater Recipient**
City of Colton	4,092	Colton Water Reclamation Facility

Source: City of Colton 2021

Note: AF = acre-feet

The wastewater treatment plants treat wastewater generated outside the City's service area.

Table 4.19-4b. Wastewater Treatment and Discharge Volumes in 2020			
Treatment Plant	**Treated Wastewater Volume (AF)**	**Discharged Wastewater Volume (AF)**	**Discharge Location**
Colton Water Reclamation Facility	5,627	5,627	to RIX Plant for additional treatment
RIX Plant	29,816	29,816	Santa Ana River

Source: City of Colton 2021

Note: AF = acre-feet; RIX = Rapid Infiltration Extraction

The wastewater treatment plants treat wastewater generated outside the City's service area.

In 2020, the City's Colton WRF and RIX Plant treated and discharged 5,627 AF (5.02 MGD) and 29,816 AF (26.6 MGD), respectively, for a total of 35,443 AF (31.6 MGD) of wastewater (City of Colton 2021). The Colton WRF's facility design capacity is 10.4 MGD and the RIX Plant's facility design capacity is 40 MGD (City of Colton 2015; RWQCB 2006).

The City's wastewater treatment system has adequate capacity to process the Proposed Project's estimated 7,860 GPD, or 0.00786 MGD, in addition to its existing commitments. 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) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐

Less than Significant Impact.

Solid waste disposal services are provided by CR&R Environmental Services. The Mid-Valley Sanitary Landfill has a remaining capacity of 54.2 million cubic yards with the maximum permitted throughput of 7,500 tons per day (CalRecycle 2024a). The San Timoteo Sanitary Landfill has a remaining capacity of 12.3 million cubic yards with a maximum permitted throughput of 2,000 tons per day (CalRecycle 2024b). The

Inland Regional Material Recovery Facility has a maximum permit capacity of 24,667 cubic yards with a maximum permitted throughput of 1,950 tons per day (CalRecycle 2024c).

Minimal waste would be generated by the Proposed Project during construction.

Solid waste during operation would come from garbage receptacles in the proposed medical office clinic and the hotel. The CHCCSP EIR estimates solid waste generation in the CHCCSP area using the generation rates listed in Table 4.19-5. Note that the estimates in the table are considered conservative estimates and likely overstate actual operational solid waste generation.

Table 4.19-5. Solid Waste Generation

Land Use	Consumption/Generation Rates Per Day
Residential (Single-Family)	12 pounds per household
Retail	13 pounds per 1,000 square feet
Retail Mixed Use	5 pounds per 1,000 square feet
Office Mixed Use	6 pounds per 1,000 square feet
Business Park	5 pounds per 1,000 square feet
Neighborhood Park	5 pounds per 1,000 square feet

Source: City of Colton 2014b

The portion of the Project Area planned for development is zoned and has a land use designation of OMU. The proposed medical office clinic would be 60,000 square feet; therefore, total medical office waste generation would be 360 pounds per day. The proposed hotel would be 71,000 square feet; therefore, total hotel waste generation would be 426 pounds per day. Given the remaining capacities of the nearby landfills and the Proposed Project's total estimated waste generation of 786 pounds per day, the Proposed Project is not anticipated to generate solid waste in excess of the capacity of local infrastructure. Additionally, the Project would comply with the 50 percent diversion rate being achieved by most cities in compliance with AB 939. This diversion rate applies to all residential and non-residential uses. Impacts would be less than significant, and no mitigation is required.

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.

Assembly Bill 939 (the California Integrated Waste Management Act) requires local jurisdictions to divert at least 50 percent of its waste stream away from landfills either through waste reduction, recycling, or other means. The San Bernardino County Integrated Waste Management Plan addresses source reduction and recycling, household hazardous wastes, and non-disposal facilities such as transfer stations, material

recovery facilities, and composting facilities. The San Bernardino County Integrated Waste Management Plan also complies with the State's 50 percent reduction mandate. Waste generated by the Proposed Project would comply with all applicable federal, state, and local statutes and regulations related to solid waste. No impact would occur, and no mitigation is required.

4.19.3 Mitigation Measures

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

4.20 Wildfire

4.20.1 Environmental Setting

The California Department of Forestry and Fire Protection (CAL FIRE) evaluates and identifies Fire Hazard Severity Zones (FHSZs) within California's Local and State Responsibility Areas. The evaluation of lands is based on factors that influence fire likelihood and behavior over a 30- to 50-year period, such as fire history, existing and potential fuel (vegetation), predicted flame length, blowing embers, terrain, and typical fire weather for the area (CAL FIRE 2024a).

According to CAL FIRE's FHSZ Viewer, the Project Area is not located within any FHSZ in the Local or State Responsibility Areas (CAL FIRE 2024b).

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 City's Emergency Operations Plan is primarily responsible for informing the emergency management strategies for the City and is organized into four categories: mitigation, preparedness, response, and recovery. Emergency response activities are conducted in tandem with the Colton Police and Fire Departments. The Project Area parcel runs along North Pepper Avenue which is designated as an evacuation route in the City of Colton's General Plan Safety Element (City of Colton 2018).

Construction Impacts

As discussed in Section 4.9 of this Initial Study, implementation of the Proposed Project would require construction to occur within the North Pepper Avenue ROW. Construction activities, which may temporarily restrict vehicular traffic, would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road/lane closures. A Traffic Control Plan shall be prepared to ensure proper access to residences and businesses in the area by emergency vehicles during construction, ensure residences and businesses in the area have proper access to evacuation routes during construction, and to maintain traffic flow. Impacts to an adopted emergency

response plan or emergency evacuation route would be less than significant with the incorporation of Mitigation Measure HAZ-1.

Operational Impacts

Access to the proposed medical office clinic and hotel would be provided via two entrances along North Pepper Avenue. North Pepper Avenue is identified in the City's General Plan as an evacuation route.

As the Project Area is not located within or near a Very High Fire Hazard Severity Zone (VHFHSZ) in a State Responsibility Area, no impact to an adopted emergency response or evacuation plan would occur. No mitigation is required.

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.

Topography for the Project Area is generally flat, with a gentle slope toward the south (Partner 2018). 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 Project Area is not located in a VHFHSZ (CAL FIRE 2024b). No impact would occur, and no mitigation is required.

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 does not require the installation of infrastructure that would exacerbate fire risk or impacts to the environment, such as roads, fuel breaks, emergency water sources, or power lines. Furthermore, the Project Area is not located in a VHFHSZ (CAL FIRE 2024b). As such, no impact would occur, and no mitigation is required.

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 Area is generally flat and is not likely to cause downstream flooding or landslides. The Proposed Project would not substantially alter the drainage patterns of the Project Area, and thus would not expose people or structures to significant risks from runoff or post-fire instability. Furthermore, the Project Area is not located in a VHFHSZ (CAL FIRE 2024b). No impact would occur, and no mitigation is required.

4.20.3 Mitigation Measures

See HAZ-1 in Section 4.9.3 of this report.

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.

As discussed throughout this Initial Study, potentially significant impacts were identified for biological resources, cultural resources, paleontological resources, GHG emissions, hazards and hazardous materials, traffic and transportation, and tribal cultural resources. The Proposed Project's impacts would be less than significant through incorporation of Mitigation Measures BIO-1 through BIO-7, CUL-1 through CUL-3, GEO-1, GHG-1, and HAZ-1.

Impacts from the Proposed Project on all other environmental issue areas are discussed in corresponding sections of this Initial Study. As discussed in their respective sections of this Initial Study document, no significant impacts have been identified.

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 with Mitigation Incorporated.

Cumulative impacts are defined as two or more individual (and potentially less than significant) project effects that, when considered together or in concert with other projects combine to result in a significant impact within an identified geographic area. In order for a project to contribute to cumulative impacts, it must result in some level of impact on a project specific level.

As discussed in their respective sections of this document, potentially significant impacts were identified for biological resources, cultural resources, paleontological resources, GHG emissions, hazards and hazardous materials, traffic and transportation, and tribal cultural resources. The Proposed Project's contribution to cumulative impacts would not be considerable with the incorporation of Mitigation Measures BIO-1 through BIO-7, CUL-1 through CUL-3, GEO-1, GHG-1, and HAZ-1.

The analysis within this Initial Study demonstrates that the Project would not have any individually limited, but cumulatively considerable impacts. As presented in the analysis provided in this Initial Study, the Project has no impact, a less than significant impact, or a less than significant impact with implementation of mitigation with respect to all environmental issues. Due to the limited scope of direct physical impacts to the environment associated with this development project, the Project's impacts are Project-specific in nature. With implementation of the proposed mitigation measures found throughout this document, the Project will not result in significant, unavoidable, adverse environmental impacts. Impacts from the Proposed Project 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, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Population and Housing, Tribal Cultural Resources, 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 where 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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List of Appendices

Appendix A – Air Quality & Greenhouse Gas Emissions Assessment

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APPENDIX A

Air Quality & Greenhouse Gas Emissions Assessment

Air Quality & Greenhouse Gas Emissions Assessment
Pepper Development Project

Colton, California

Prepared For:

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October 2024

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LIST OF ACRONYMS AND ABBREVIATIONS

°F	Degrees Fahrenheit
µg/m^3	Micrograms per cubic meter; ppm = parts per million
1992 CO Plan	1992 Federal Attainment Plan for Carbon Monoxide
2022 Update	CARB's Final 2022 Climate Change Scoping Plan
AB	Assembly Bill
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ATCM	airborne toxics control measure
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CHCCSP	Colton's Hub City Centre Specific Plan
CH_4	Methane
City	Colton
CO	Carbon Monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
County	San Bernardino County

LIST OF ACRONYMS AND ABBREVIATIONS

DPM	Diesel particulate matter
EO	Executive Order
GHG	Greenhouse gas
GSP	Gross state product
HVAC	Heating, Ventilation, and Air Conditioning
IPCC	Intergovernmental Panel on Climate Change
LSTs	Localized significance threshold
N_2O	Nitrous oxide
NAAQS	National Ambient Air Quality Standards
NO_2	Nitrogen dioxide
NO_x	Nitric oxides
O_3	Ozone
PM	Particulate matter
PM_{10}	Coarse particulate matter
$PM_{2.5}$	Fine particulate matter
ppb	Parts per billion
ppm	Parts per million
Project	Pepper Development Project
ROGs	Reactive organic gases
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
sf	Square foot/feet
SIP	State Implementation Plan
SO_2	Sulfur dioxide
SO_x	Sulfur oxides
SRA	Source receptor area
SoCAB	South Coast Air Basin
TACs	Toxic air contaminants
USEPA	U.S. Environmental Protection Agency
VOC	Volatile organic compounds
ZEVs	Zero-emission vehicles

1.0 INTRODUCTION

This report documents the results of an Air Quality and Greenhouse Gas (GHG) Emissions Assessment completed for the Pepper Development Project (Project), which would include construction and operation of a three-story 60,000 square foot medical office clinic, a five-story 71,000 square foot hotel, a three-story parking structure, additional unenclosed parking, and associated site improvements in the City of Colton (City) in San Bernardino County (County). This assessment was prepared using methodologies and assumptions recommended in the rules and regulations of the South Coast Air Quality Management District (SCAQMD) and City of Colton, where applicable. Regional and local existing conditions are presented, along with pertinent emissions standards and regulations. The purpose of this assessment is to estimate Project-generated criteria air pollutants and GHG emissions attributable to the Project and to determine the level of impact the Project would have on the environment.

1.1 Location and Setting

The Proposed Project is located on an approximately 9-acre (389,336 square feet [sf]) vacant parcel in the City of Colton in San Bernardino County, California (Figure 1, Project Location). The Project is located on the west side of North Pepper Avenue and approximately 625 feet south of West San Bernardino Avenue. The Project Area is composed of one parcel (Assessor's Parcel Number [APN] 0254-071-10) designated as Office/Mixed Use per the City's Colton Hub City Centre Specific Plan (CHCCSP 2016). As depicted on the U.S. Geological Survey (USGS) 7.5-minute "San Bernardino South, California" topographic quadrangle, the Proposed Project is located within Section 24, Township 1 South, Range 5 West, San Bernardino Principal Meridian.

1.2 Project Description

The Project Applicant proposes to construct a three-story 60,000 sf medical office clinic, a five-story 71,000 sf commercial hotel, a three-story parking structure, surface parking areas, and associated site improvements such as curb and gutter, utilities, and landscaping on approximately 3.83 acres of the site. The remaining 5.1 acres in the western portion of the Project parcel is proposed to be a dedicated conservation area for the Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) consistent with the conservation strategy identified within the West Valley Habitat Conservation Plan (City of Colton 2014).

The proposed three-story medical clinic would be built-to-suit and complement the nearby Arrowhead Regional Medical Center located across North Pepper Avenue. The proposed five-story hotel would be branded as a Home2 Suites by Hilton and would provide 112 guest rooms and guest amenities such as a pool. The proposed structures would be supported by a conventional slab-on-grade foundation system with perimeter-spread footings and isolated interior footings. Other improvements include concrete and asphalt pavement, hardscape, and landscaping.

The proposed parking structure and surface parking areas would service both the medical clinic and the hotel. Approximately 321 parking stalls, including Americans with Disability Act (ADA)-compliant stalls,

would be provided. This exceeds the 300-parking stall requirement for a medical office of the proposed size.



Location: N:\2024\2024-179.01 Colton Medical_Hotel Development\MAPS\Location_Vicinity\CMHD LnV.aprx - Colton Medical Hotel Development Location 20240827 (lgalvez - 9/5/2024)

Map Date: 9/5/2024

Sources: Esri World Imagery, County of San Bernardino (2023)

Figure 1. Project Location

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2024-179.01 Colton Medical/Hotel Development

2.0 AIR QUALITY

2.1 Air Quality 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 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.

2.1.1 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).

2.1.1.1 Temperature and Precipitation

The air basin is part of a semi-permanent high-pressure zone in the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds. The annual average temperature varies little throughout the 6,645-square-mile SoCAB, ranging from the low 60s to the high 80s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas (SCAQMD 1993).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rains fall between November and April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains.

2.1.1.2 Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent, and low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (SCAQMD 1993).

2.1.1.3 Wind

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

Between periods of wind, air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (SCAQMD 1993).

2.1.1.4 Inversion

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two similarly distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions is a critical determinant leading to highly degraded air quality in the summer and generally good air quality in the winter in San Bernardino County (SCAQMD 1993).

2.1.2 Criteria Air Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O_3), coarse particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2) are considered to be local pollutants because they tend to accumulate in the air locally. Particulate matter (PM) is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in Table 2-1.

Table 2-1. Criteria Air Pollutants - Summary of Common Sources and Effects

Pollutant	Major Manmade Sources	Human Health & Welfare Effects
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO_2	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
O_3	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrogen oxides (NO_x) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
PM_{10} & $PM_{2.5}$	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
SO_2	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Source: California Air Pollution Control Officers Association (CAPCOA 2013)

2.1.2.1 Carbon Monoxide

CO in the urban environment is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can cause headaches, aggravate cardiovascular disease and impair central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations of CO are typically found near crowded intersections and along heavy roadways with slow moving traffic. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within relatively short distances of the source. Overall CO emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973. CO levels in the SoCAB are in compliance with the state and federal one- and eight-hour standards.

2.1.2.2 Nitrogen Oxides

Nitrogen gas comprises about 80 percent of the air and is naturally occurring. At high temperatures and under certain conditions, nitrogen can combine with oxygen to form several different gaseous compounds collectively called nitric oxides (NO_x). Motor vehicle emissions are the main source of NO_x in urban areas. NO_x is very toxic to animals and humans because of its ability to form nitric acid with water in the eyes, lungs, mucus membrane, and skin. In animals, long-term exposure to NO_x increases susceptibility to respiratory infections, and lowering resistance to such diseases as pneumonia and influenza. Laboratory studies show that susceptible humans, such as asthmatics, who are exposed to high concentrations can suffer from lung irritation or possible lung damage. Precursors of NO_x, such as NO and NO_2, attribute to the formation of O_3 and $PM_{2.5}$. Epidemiological studies have also shown associations between NO_2 concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions.

2.1.2.3 Ozone

O_3 is a secondary pollutant, meaning it is not directly emitted. It is formed when volatile organic compounds (VOCs) or reactive organic gasses (ROGs) and NO_x undergo photochemical reactions that occur only in the presence of sunlight. The primary source of ROG emissions is unburned hydrocarbons in motor vehicle and other internal combustion engine exhaust. NO_x forms as a result of the combustion process, most notably due to the operation of motor vehicles. Sunlight and hot weather cause ground-level O_3 to form. Ground-level O_3 is the primary constituent of smog. Because O_3 formation occurs over extended periods of time, both O_3 and its precursors are transported by wind and high O_3 concentrations can occur in areas well away from sources of its constituent pollutants.

People with lung disease, children, older adults, and people who are active can be affected when O_3 levels exceed ambient air quality standards. Numerous scientific studies have linked ground-level O_3 exposure to a variety of problems including lung irritation, difficult breathing, permanent lung damage to those with repeated exposure, and respiratory illnesses.

2.1.2.4 Particulate Matter

PM includes both aerosols and solid particulates of a wide range of sizes and composition. Of concern are those particles smaller than or equal to 10 microns in diameter size (PM_{10}) and small than or equal to 2.5 microns in diameter ($PM_{2.5}$). Smaller particulates are of greater concern because they can penetrate deeper into the lungs than larger particles. PM_{10} is generally emitted directly as a result of mechanical processes that crush or grind larger particles or form the resuspension of dust, typically through construction activities and vehicular travel. PM_{10} generally settles out of the atmosphere rapidly and is not readily transported over large distances. $PM_{2.5}$ is directly emitted in combustion exhaust and is formed in atmospheric reactions between various gaseous pollutants, including NO_x, sulfur oxides (SO_x) and VOCs. $PM_{2.5}$ can remain suspended in the atmosphere for days and/or weeks and can be transported long distances.

The principal health effects of airborne PM are on the respiratory system. Short-term exposure of high $PM_{2.5}$ and PM_{10} levels are associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure is associated with premature mortality and chronic respiratory disease.

According to the U.S. Environmental Protection Agency (USEPA), some people are much more sensitive than others to breathing PM_{10} and $PM_{2.5}$. People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worse illnesses; people with bronchitis can expect aggravated symptoms; and children may experience decline in lung function due to breathing in PM_{10} and $PM_{2.5}$. Other groups considered sensitive include smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths.

2.1.3 Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

CARB identified diesel particulate matter (DPM) as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine (USEPA 2002). Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs; due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

2.1.4 Ambient Air Quality

Ambient air quality at the Project Site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. CARB maintains more than 60 monitoring stations throughout California. O_3, PM_{10} and $PM_{2.5}$ are the pollutant species most potently affecting the Project region. As described in detail below, the region is classified as nonattainment regarding air quality standards for these pollutants. The San Bernardino – 4th Street air quality monitoring station (24302 E. 4th St, San Bernardino), located approximately 5.01 miles northeast of the Project Site, monitors ambient concentrations of O_3, PM_{10}

and $PM_{2.5}$. Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered "generally" representative of ambient concentrations in the Project Area.

Table 2-2 summarizes the published data concerning O_3. PM_{10} and $PM_{2.5}$ from the San Bernardino – 4th Street monitoring station.

Table 2-2. Summary of Ambient Air Quality Data

Pollutant Standards	2021	2022	2023
O_3 – San Bernardino 4th Street Monitoring Station			
Max 1-hour concentration (ppm)	0.142	0.128	0.143
Max 8-hour concentration (ppm) (state/federal)	0.113 / 0.112	0.105 / 0.105	0.118 / 0.118
Number of days above 1-hour standard (state)	66	60	58
Number of days above 8-hour standard (state/federal)	101 / 98	103 / 96	87 / 84
PM_{10} – San Bernardino 4th Street Monitoring Station			
Max 24-hour concentration (µg/m^3) (state/federal)	71.2 / 182.4	* / 177.8	* / *
Number of days above 24-hour standard (state/federal)	25.8 / 1.0	* / 1.0	* / *
$PM_{2.5}$ – San Bernardino 4th Street Monitoring Station			
Max 24-hour concentration (µg/m^3) (state/federal)	57.9 / 57.9	40.1 / 40.1	52.9 / 52.9
Number of days above federal 24-hour standard	3.0	6.4	3.1

Source: CARB 2024a
µg/m^3 = micrograms per cubic meter; ppm = parts per million
* = Insufficient data available

The USEPA and CARB designate air basins or portions of air basins and counties as being in "attainment" or "nonattainment" for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) (other than O_3, PM_{10} and $PM_{2.5}$ and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O_3, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air Quality Standards (CAAQS) are not to be exceeded during a three-year period. The attainment status for the San Bernardino County portion of the SoCAB, which encompasses the Project Site, is included in Table 2-3.

Table 2-3. Attainment Status of Criteria Pollutants in the San Bernardino County Portion of the SoCAB

Pollutant	State Designation	Federal Designation
O_3	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Unclassified/Attainment	Unclassified/Attainment

Source: CARB 2022

The determination of whether an area meets the state and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant-specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. The region is designated as a nonattainment area for the federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, $PM_{2.5}$ and PM_{10} (CARB 2022).

2.1.5 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 SCAQMD defines sensitive receptors as any residence including private homes, condominiums, apartments, and living quarters, schools, preschools, daycare centers, and health facilities such as hospitals or retirement and nursing homes, long term care hospitals, hospices, prisons, and dormitories or similar live-in housing.

The Project is proposing the construction and operation of a 3-story medical facility, a 5-story hotel that would include 112 units and amenities such as a pool, and associated parking (both enclosed in a parking structure and unenclosed surface parking). The nearest sensitive receptors would be the residences located on W San Bernardino Avenue to the north and the Arrowhead Regional Medical Center on the eastern side of N Pepper Avenue. The residences on W San Bernardino Avenue are located approximately 730 feet north of the Project's north boundary and the Arrowhead Regional Medical Center's drop-off area is located approximately 400 feet distant from the Proposed Project's eastern boundary.

2.2 Regulatory Framework

2.2.1 Federal

2.2.1.1 Clean Air Act

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the USEPA to establish the NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect public health and welfare. They are designed to protect those "sensitive receptors" most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The USEPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. Table 2-3 lists the federal attainment status of the SoCAB for the criteria pollutants.

2.2.2 State

2.2.2.1 California Clean Air Act

The California Clean Air Act (CCAA) allows the State to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

2.2.2.2 California State Implementation Plan

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to

attain the NAAQS by deadlines established by the CAA. The USEPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. The *2022 Air Quality Management Plan* (2022 AQMP) is the SIP for the SoCAB. The 2022 AQMP is a regional blueprint for achieving air quality standards and healthful air in the SoCAB and those portions of the Salton Sea Air Basin that are under SCAQMD's jurisdiction. The 2022 AQMP includes aggressive new regulations and the development of incentive programs to support early deployment of advanced technologies. The two key areas for incentive programs are (1) promoting widespread deployment of available zero emission and low NOx technologies and (2) developing new zero emission and ultra-low NOx technologies for use in cases where the technology is not currently available. The 2022 AQMP prioritizes distribution of incentive funding in "environmental justice" areas and seek opportunities to focus benefits on the most disadvantaged communities. The 2022 AQMP focuses on available, proven, and cost-effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in GHGs and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The AQMP relies on a regional and multi-level partnership of governmental agencies at the federal, state, regional, and local level. These agencies (USEPA, CARB, local governments, Southern California Association of Governments [SCAG] and the SCAQMD) are the primary agencies that implement the AQMP programs. The 2022 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's latest Regional Transportation Plan/Sustainable Communities Strategy, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. The 2022 AQMP includes integrated strategies and measures to meet the NAAQS. The current status of the SIPs for the SoCAB's nonattainment pollutants are shown below:

- On November 28, 2007, CARB submitted a SIP revision to the USEPA for O_3, $PM_{2.5}$ (1997 Standard), CO, and NO_2 in the SoCAB. This revision is identified as the "2007 South Coast SIP". The 2007 South Coast SIP demonstrates attainment of the federal $PM_{2.5}$ standard in the SoCAB by 2014 and attainment of the federal eight-hour O_3 standard by 2023. This SIP also includes a request to reclassify the O_3 attainment designation from "severe" to "extreme". The USEPA approved the redesignation effective June 4, 2010. The "extreme" designation requires the attainment of the eight-hour O_3 standard in the SoCAB by June 2024. CARB approved $PM_{2.5}$ SIP revisions in April 2011 and the O_3 SIP revisions in July 2011. The USEPA approved the $PM_{2.5}$ SIP in 2013 and has approved 46 of the 61, 1997 eight-hour O_3 SIP requirements. In 2014, the USEPA proposed a finding that the SoCAB has attained the 1997 $PM_{2.5}$ standards. In 2016, the USEPA determined that the SoCAB had attained the 1997 $PM_{2.5}$ standards; however, the SoCAB was not redesignated as an attainment area because the USEPA had not approved a maintenance plan and additional requirements under the CAA had not been met.
- In 2012, the SCAQMD adopted the 2012 AQMP, which was a regional and multiagency effort (the SCAQMD, CARB, SCAG, and the USEPA). The primary purposes of the 2012 AQMP were to demonstrate attainment of the federal 24-hour $PM_{2.5}$ standard by 2014 and to update the USEPA-

approved eight-hour Ozone Control Plan. In 2012, the 2012 AQMP was submitted to CARB and the USEPA for concurrent review and approval for inclusion in the SIP. The 2012 AQMP was approved by CARB on January 25, 2013.

- In 2017, the SCAQMD adopted the 2016 AQMP. The 2016 AQMP includes strategies and measures to meet the following NAAQS:
    - 2008 eight-hour O_3 (75 parts per billion [ppb]) by 2013
    - 2012 Annual $PM_{2.5}$ (12 µg/m^3) by 2025
    - 1997 eight-hour O_3 (80 ppb) by 2023
    - 1979 one-hour O_3 (120 ppb) by 2022
    - 2006 24-hour $PM_{2.5}$ (35 µg/m^3) by 2019
- In 2022, the SCAQMD adopted the 2022 AQMP. In response to the USEPA lowering the primary and secondary O_3 standard levels to 70 ppb, the 2022 AQMP was developed to address the requirements for meeting this standard. The 2022 AQMP explores new and innovative ways to accomplish these goals through incentive programs, efficiency improvements, recognition of co-benefits from other programs, regulatory measures, and other voluntary actions.

2.2.2.3 Tanner Air Toxics Act & Air Toxics "Hot Spots" Information and Assessment Act

CARB's statewide comprehensive air toxics program was established in 1983 with Assembly Bill (AB) 1807, the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

CARB also administers the State's mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA) and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, the "Hot Spots" Act was amended by Senate Bill (SB) 1731, which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

2.2.3 Local

2.2.3.1 Southern California Association of Governments

In April 2024, the SCAG Regional Council adopted the 2024-2050 Regional Transportation Plan/ Sustainable Communities Strategy (2024 RTP/SCS). The 2024 RTP/SCS charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2024 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions. Specifically, the region has been tasked by CARB to achieve a 19 percent per capita reduction by the end of 2035.

2.2.3.2 South Coast Air Quality Management District

The SCAQMD is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties, including the Project Site. The agency's primary responsibility is ensuring that the NAAQS and CAAQS are attained and maintained in the SoCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

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

- **Rule 212 (Standards for Approving Permits and Issuing Public Notice)**- This rule requires the applicant to show that the equipment used of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, is so designed, controlled, or equipped with such air pollution control equipment that it may be expected to operate without emitting air contaminates in violation of Section 41700, 4170 or 44300 of the Health and Safety Code or of these rules.
- **Rule 402 (Nuisance)** – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible PM are prohibited from crossing any property line. This rule is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM_{10} suppression techniques are summarized below.

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

- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

- **Rule 1401 (New Source Review of Toxic Air Contaminants)** – This rule requires new source review of any new, relocated, or modified permit units that emit TACs. The rule establishes allowable risks for permit units requiring permits pursuant to Rules 201 and 203 discussed above.

2.2.3.3 City of Colton General Plan

The City of Colton's General Plan Land Use Element lists goals and associated policies related to sustainable development and building practices. The goals and policy statements help guide the City council, Planning Commission, committees and boards, and City staff to review and decide whether a land use proposal is consistent with the City's goals for future growth and development. The goals and policies listed below are pertinent to the Proposed Project's impact on air quality (City of Colton 2013).

- **Goal LU 4:** Incorporate green building and other sustainable building practices into development projects.

    1. Policy LU 4.3: Promote sustainable building practices that go beyond the requirement of Title 24 of the California Administrative Code and encourage energy-efficient design elements.

    2. Policy LU 4.4: Support sustainable building practices that integrate building materials and methods that promote environmental quality, economic vitality, and social benefit through the design, construction, and operation of the built environment.

- **Goal LU 5:** Reduce use of energy resources citywide, with a key goal of reducing the City's carbon footprint.

    1. Policy LU 5.1: Require the incorporation of energy conservation features into the design of all new construction and site development, as required by State law and local regulations.

    2. Policy LU 5.2: Provide incentives, as funding opportunities become available, for the installation of energy conservation features in existing multi-family residential and commercial developments, including technical assistance and possible low interest loans.

    3. Policy LU 5.6: Require detailed air quality and climate change analyses for all applications that have the potential to adversely affect air quality and incorporate the analyses into applicable California Environmental Quality Act (CEQA) documents. Projects with the potential to generate significant levels of air pollutants and GHGs, such as manufacturing facilities and site development operations, shall be required to incorporate mitigation into their design and operation, and to utilize the most advanced technological methods feasible.

    4. Policy LU 5.7: Work with SCAQMD and SCAG to implement the AQMP and Regional Transportation Plan/Sustainable Communities Strategy, with the objective of meeting federal and state air quality standards for all pollutants. To ensure that new measures can be practically enforced in the region, participate in future amendments and updates of the AQMP.

2.2.3.4 City of Colton Municipal Code

The City of Colton's Municipal Code contains the following policies for air quality that would apply to the Proposed Project:

- **§ 18.42.060 (Smoke)**- No operation or activities is permitted to have operations which emit excessive smoke, fumes, or dust or which exceed the requirements, or levels, as specified by the SCAQMD.

- **§ 18.42.070 (Odors)**- All activities shall be operated so as not to emit matter causing unpleasant odors which are perceptible by the average person at or beyond any lot line of the lot containing the activities.

- **§ 18.42.080 (Air Quality)**- No operation or activity shall cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution which can cause damage to health, animals, vegetation, or other forms of property, or which can cause excessive soiling on any other lot. No emission shall be permitted which exceeds the requirements of the SCAQMD or the requirements of any air quality plan adopted by the City.

2.3 Air Quality Emissions Impact Assessment

2.3.1 Thresholds of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to air quality if it would do any of the following:

1) Conflict with or obstruct implementation of any applicable air quality plan.

2) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

3) Expose sensitive receptors to substantial pollutant concentrations.

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

2.3.1.1 South Coast Air Quality Management District Regional Thresholds

The significance criteria established by the applicable air quality management or air pollution control district (SCAQMD) may be relied upon to make the above 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 in Table 2-4.

Table 2-4. 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 cumulative considerable.

2.3.1.2 South Coast Air Quality Management District 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 project 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 Project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. The Project Site is located within SCAQMD SRA 34 (Central San Bernardino Valley). Table 2-5 shows the LSTs for a one-, two-, and five-acre project site in SRA 34 with sensitive receptors located within 100 meters of the Project Site.

Table 2-5. Local Significance Thresholds at 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	2,141 / 2,141	33 / 8	9 / 3
2 Acres	263 / 263	2,738 / 2,738	42 / 10	12 / 3
5 Acres	378 / 378	4,142 / 4,142	65 / 16	17 / 5

Source: SCAQMD 2009

2.3.2 Methodology

Air quality impacts were assessed in accordance with methodologies recommended by the SCAQMD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2022.1. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for San Bernardino County and project information provided by the Project Site Plan.

Total building footprint are calculated for the medical facility and the hotel by dividing the total building square footage by the number of floors. The unenclosed parking spaces have been summed, and the remainder number of parking spaces are allotted to the 3-story enclosed parking garage. The square footage of the hotel pool is estimated in proportion with other site plan dimensions. The remaining square footage is assigned a land use type of non-asphalt surfaces to account for landscaping. The building construction, paving, and architectural coating phases are assumed to occur simultaneously. Operational

emissions are calculated using CalEEMod model defaults for San Bernardino County and amount of units identified in the Project Site Plan coupled with daily trips provided by KOA Corporation (2024) to inform the modeling calculations of operational mobile source emissions. Operational area source emissions account for emissions associated with pesticides used for maintenance of lawn areas, parking degreasers, parking lot paint, and landscaping equipment emissions. Energy source emissions account for emissions associated with onsite natural gas combustion at the Project Site.

2.3.3 Impact Analysis

2.3.3.1 Project Construction-Generated Criteria Air Quality Emissions

Regional Construction Significance Analysis

Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. The basic sources of short-term emissions that will be generated through construction of the Proposed Project would be from ground-disturbing activities and from the operation of the construction vehicles (i.e., trenchers, dump trucks). Construction activities such as excavation and 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 are calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements.

Predicted maximum daily construction-generated emissions for the Proposed Project are summarized in Table 2-6. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but are considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Table 2-6. Construction-Related Emissions (Regional Significance Analysis)

Construction Year	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction Calendar Year One	8.04	33.9	33.1	0.06	9.75	5.40
Construction Calendar Year Two	7.87	18.7	30.1	0.05	2.55	1.08
SCAQMD Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2022.1. Refer to Attachment 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; water exposed surfaces three times daily; and limit speeds on unpaved roads. Building construction, paving and painting are assumed to occur simultaneously.

As shown in Table 2-6, 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 described, the Project is proposing construction and operation of a medical facility, a 112-unit hotel, and associated enclosed and unenclosed parking. The nearest sensitive land use that would be impacted by onsite construction activities consist of the Arrowhead Regional Medical Center bordering the Project Site to the east, approximately 400 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 2008]) 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 Central San Bernardino Valley, SRA 34. 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. While the Project Site spans just under nine acres, the Project only proposes to construct approximately 3.83 acres. The remaining 5.1 acres in the western portion of the Project parcel is proposed to be a dedicated conservation area for the Delhi Sands flower-loving fly. Thus, the LST threshold values for a two-acre site were used. Applying the two-acre LST thresholds to Project construction, which could disturb a greater amount of acreage daily (up to 3.83 acres), is conservative. For instance, the two-acre LST thresholds were developed, in part, based on the dispersion of pollutants over a two-acre construction area before exposing sensitive receptors. Thus, applying the two-acre LST thresholds to a project that could disturb up to 3.83 acres daily does not consider the pollutant-

dispersing effect of the dispersion of pollutants over a 3.83-acre site before exposing receptors, and is therefore a lower threshold (more stringent) than one calculated specific to 3.83 acres.

LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. The Arrowhead Regional Medical Center's drop-off and pick-up area is located approximately 400 feet, or 122 meters, from the Project Site's eastern boundary. Therefore, this analysis used LSTs for receptors located at 100 meters. 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 2-7 presents the results of localized emissions. The LSTs reflect a maximum disturbance of the entire Project Site daily at 100 meters from sensitive receptors.

Table 2-7. Maximum Construction-Related Emissions (Localized Significance Analysis)

Activity	Onsite Pollutant (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Site Preparation	31.6	30.2	9.04	5.20
Grading	16.3	17.9	3.48	2.00
Building Construction, Paving & Architectural Coating	17.8	22.98	0.75	0.69
SCAQMD Localized Significance Threshold (2 acre of disturbance at 100 meters)	*263*	*2,738*	*42*	*12*
Exceed SCAQMD Localized Threshold?	**No**	**No**	**No**	**No**

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.

Notes: Emissions taken from the year and season, summer or winter, with the highest outputs. 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 25 miles per hour.

Table 2-7 shows that the emissions of these pollutants during 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. Therefore, significant impacts would not occur concerning LSTs during construction activities.

2.3.3.2 Project Operations Criteria Air Quality Emissions

Regional Operational Significance Analysis

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 ROGs and NO_X. Project-generated increases in emissions would be predominantly associated with motor vehicle use from employees and visitors to the

park. Operational air pollutant emissions were based on the number of hotel units and building square footage provided by the Project Site Plan, and traffic information provided by KOA Corporation (2024). Long-term operational emissions attributable to the Project are identified in Table 2-8 and compared to the operational significance thresholds promulgated by the SCAQMD.

Table 2-8. Operational-Related Emissions (Regional Significance Analysis)

Emission Source	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer Emissions						
Mobile	9.64	9.00	87.7	0.22	20.2	5.22
Area	4.67	0.08	9.23	0.00	0.02	0.01
Energy	0.06	1.01	0.85	0.01	0.08	0.08
Total:	**14.37**	**10.09**	**97.78**	**0.23**	**20.30**	**5.31**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Winter Emissions						
Mobile	9.00	9.66	73.20	0.21	20.20	5.22
Area	3.16	0.00	0.00	0.00	0.00	0.00
Energy	0.06	1.01	0.85	0.01	0.08	0.08
Total:	**12.22**	**10.67**	**74.05**	**0.22**	**20.28**	**5.63**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.

Notes: Emission projections predominately based on CalEEMod model defaults for San Bernardino County and amount of units and square footage identified in the Project Site Plan coupled with daily trips provided by KOA Corporation (2024) to inform the modeling calculations of operational mobile source emissions. Operational area source emissions account for emissions associated with pesticides used for maintenance of lawn areas, parking degreasers, parking lot paint, and landscaping equipment emissions. Energy source emissions account for emissions associated with onsite natural gas combustion at the Project Site. CalEEMod Measures T-2 "Increase Job Density" for the Proposed Medical Facility and T-3 "Provide Transit-Oriented Development" were applied to the CalEEMod scenario to be consistent with the Proposed Project operational characteristics.

As shown in Table 2-8, the Project's emissions would not exceed any SCAQMD thresholds for any criteria air pollutants during operation.

As identified in Table 2-3, the San Bernardino County portion of the SoCAB is listed as a nonattainment area for federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, $PM_{2.5}$ and PM_{10} (CARB 2022). 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 2-7, the Proposed Project would result in increased emissions of the O_3 precursor pollutants ROG and NOx, 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 2022 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 operational phase of a proposed project only if the project includes stationary sources (e.g., smokestacks) or attracts heavy-duty trucks that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Project does not include such uses. As previously described, the Project would involve the construction and operation of a medical facility, hotel, and associated enclosed and unenclosed parking with no associated stationary sources. Therefore, in the case of the Proposed Project, the operational phase LST protocol does not need to be applied.

2.3.3.3 Conflict with the 2022 Air Quality Management Plan

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 and adopted the 2022 AQMP. The 2022 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state and federal air quality standards. The 2022 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 latest 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 2-6, 2-7, and 2-8 above, 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 Table 2-6 and 2-8 above, the Proposed Project would be below the SCAQMD regional thresholds for construction and operations. Because 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, in part, 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 2022 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 2022 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. SCAG's Growth Management Chapter of the Regional Comprehensive Plan and Guide (RCPG) provides regional population forecasts for the region and SCAG's RTP/SCS provides socioeconomic forecast projections of regional population growth. The City of Colton's General Plan is referenced by SCAG in order to assist forecasting future growth in the city.

The City's General Plan Land Use Plan Map designates the Proposed Project Site as part of the Colton's Hub City Centre Specific Plan (CHCCSP 2016). The Colton's Hub City Centre Specific Plan (CHCCSP) currently designates the Proposed Project Site as "OMU", Office/Mixed Use. The intent of the CHCCSP OMU designation is to provide for uses complementary to the Arrowhead Regional Medical Center, e.g., opportunities for medical related offices, research and development, and services such as pharmacies, medical and equipment supplies. To promote other compatible uses, the land use designation includes flexibility to incorporate Business Parks and Retail. The Proposed Project is consistent with this designation and is not proposing to amend the City General Plan or CHCCSP. Therefore, the Proposed Project would adhere to the land uses envisioned in the General Plan and CHCCSP, and is therefore consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the RTP/SCS and RCPG. As a result, the Project would not conflict with the land use assumptions or exceed the population or job growth projections used by SCAQMD to develop the 2022 AQMP. The City's population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City; and these are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into their air quality planning efforts, it can be concluded that the Proposed Project would be consistent with the projections (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans). Therefore, the Proposed Project would be considered consistent with the population, housing, and employment growth projections utilized in the preparation of SCAQMD's air quality plans.

Additionally, the Proposed Project would support smart growth principles by maximizing the use of existing infrastructure and expanding medical services to the residents nearby. The Proposed Project would provide new employment opportunities and is in walking distance to residences and local transit stops which could lessen vehicle trips, a source of criteria air pollutants. Additionally, placing a hotel across the street from the Arrowhead Regional Medical Center would enable family members and individuals visiting patients a place to stay which could reduce vehicle trips. The reduction of vehicle trips and associated reduction of criteria air pollutants is a key goal of SCAQMD air quality planning efforts.

The Project would not exceed the population or job growth projections used by SCAQMD to develop the 2022 AQMP. Therefore, the Project would not conflict with the AQMP pollutant inventory forecast, which is based on the City of Colton General Plan, and thus would not conflict with SCAQMD air quality planning efforts.

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 such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. SCAQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. SCAQMD 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. As previously mentioned, the Proposed Project Site 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 2022 AQMP.

2.3.3.4 Exposure of Sensitive Receptors to Toxic Air Contaminants

As previously described, 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 age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The SCAQMD defines sensitive receptors as any residence including private homes, condominiums, apartments, and living quarters, schools, preschools, daycare centers, and health facilities such as hospitals or retirement and nursing homes, long term care hospitals, hospices, prisons, and dormitories or similar live-in housing. The nearest sensitive receptors would be the residences located on W San Bernardino Avenue to the north and the Arrowhead Regional Medical Center on the eastern side of N Pepper Avenue. The residences on W San Bernardino Avenue are located approximately 730 feet north of the Project's north boundary and the Arrowhead Regional Medical Center's drop-off and pick-up area is located approximately 400 feet distant from the Proposed Project eastern boundary.

Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of 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 $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, $PM_{2.5}$ and PM_{10} (CARB 2022). Thus, existing O_3, PM_{10}, and $PM_{2.5}$ levels in the SoCAB are at unhealthy levels during certain periods. However, as shown in Table 2-6 and Table 2-7, the Project would not exceed the SCAQMD regional or localized significance thresholds for construction emissions.

The health effects associated with O_3 are generally associated with reduced lung function. O_3 is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of ROG and NOx in the presence of sunlight. The reactivity of O_3 causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O_3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O_3 for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Studies show associations between short-term O_3 exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to O_3 may increase the risk of respiratory-related deaths. The concentration of O_3 at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 parts per billion of O_3 and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggests that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum O_3 concentration reaches 80 parts per billion. Because the Project would not involve construction activities that would result in O_3 precursor emissions (i.e., ROG or NO_x) in excess of the SCAQMD thresholds, which are set to be protective of human health and account for cumulative emissions in the SoCAB, 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, which are set to be protective of human health and account for cumulative emissions in the SoCAB. 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 TAC of concern. PM_{10} exhaust is considered a surrogate for DPM as all diesel exhaust is considered to be DPM and it contains $PM_{2.5}$ exhaust as a subset. As with O_3 and NO_x, the Project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed the SCAQMD's thresholds. The increases of these pollutants generated by the Proposed Project would not on their own generate an increase in the number of days exceeding the NAAQS or CAAQS standards. Therefore, PM_{10} and $PM_{2.5}$ emissions, when combined with the existing PM emitted regionally, would have minimal health effect on people located in the immediate vicinity of the Project Site. Additionally, the Project would be required to comply with Rule 403 for fugitive dust control, as 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.

In summary, Project construction 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. 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 2-7, 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 vicinity sensitive receptors.

Operational Air Contaminants

The health risk public-notification thresholds adopted by the SCAQMD is 10 excess cancer cases in a million for cancer risk and a hazard index of more than one (1.0) for non-cancer risk. Examples of projects that emit toxic pollutants over long-term operations include oil and gas processing, gasoline dispensing, dry cleaning, electronic and parts manufacturing, medical equipment sterilization, freeways, and rail yards. 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 would spend long periods queuing and idling at the site. The operational emissions are expected to come from vehicle emissions from patients and visitors to the medical office clinic and commercial hotel. However, according to Table 2-7, onsite Project emissions would not result in emissions of criteria pollutants over the SCAQMD's thresholds, which are set to be protective of human health and account for cumulative emissions in the SoCAB. Therefore, there would not be significant concentrations of pollutants at nearby sensitive receptors. The Project would not be a source of TACs. The Project would not result in a high carcinogenic or non-carcinogenic risk during operation.

Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SoCAB is designated as in attainment. Detailed modeling of Project-specific CO "hot spots" is not necessary and thus this potential impact is addressed qualitatively.

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 is the air pollution control officer for much of southern California. 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). In order to establish a more accurate record of baseline CO concentrations affecting the Los Angeles, a CO "hot spot" analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway. Thus, there was no violation of CO standards.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District, 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 Proposed Project is anticipated to result in 2,807 daily trips (KOA Corporation 2024). 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 Proposed Project traffic exceeding CO values.

2.3.3.5 Odors

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

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. It is expected that the odors associated with the Project's construction would not be concentrated or stagnant near any of the sensitive receptors, specifically the residences to the north or the Arrowhead Regional Medical Center to east. Additionally, odors would be localized and generally confined to the construction area. Therefore, construction odors would not adversely affect a substantial number of people to odor emissions.

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.

3.0 GREENHOUSE GAS EMISSIONS

3.1 Greenhouse Gas Setting

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead trapped, resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. More specifically, experts agree that human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850–1900 in 2011–2020. (Intergovernmental Panel on Climate Change [IPCC] 2023).

Table 3-1 describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the greenhouse effect.

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), which weight each gas by its global warming potential. Expressing GHG emissions in CO_2e 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.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO_2 is emitted into the atmosphere than is sequestered

by ocean uptake, vegetation, or other forms. Despite the sequestration of CO_2, human-caused climate change is already causing damaging effects, including weather and climate extremes in every region across the globe (IPCC 2023).

Table 3-1. Summary of Greenhouse Gases

Greenhouse Gas	Description
CO_2	Carbon dioxide is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere.[1]
CH_4	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH_4 to the atmosphere. Natural sources of CH4 include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH_4 is about 12 years.[2]
N_2O	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years.[3]

Sources: (1) USEPA 2023a; (2) USEPA 2023b; (3) USEPA 2023c

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; it is sufficient to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

3.1.1 Sources of Greenhouse Gas Emissions

In 2024, CARB released the 2024 edition of the *California GHG Emissions from 2000 to 2022: trends of Emissions and Other Indicators* report. In 2022, California emitted 371.1 million metric tons of CO_2e. This inventory is 2.4 percent lower than in 2021. The 2022 emissions data shows that the State of California is continuing its established long-term trend of GHG emission declines, despite the anomalous emissions

trends from 2019 through 2021, due in large part to the impacts of the COVID-19 pandemic. Overall trends in the Inventory continue to demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross state product (GSP)) is declining. California's GSP increased by 0.7 percent in 2022, and emissions per GSP declined by 3.1 percent from 2021 to 2022. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2022, accounting for approximately 37.7 percent of total GHG emissions in the state. Transportation emissions have decreased 3.6 percent from 2021 levels due to reductions from on-road, rail and, to a lesser extent, intrastate aviation transportation. Emissions from the electricity sector account for 16.1 percent of the Inventory, which is a decrease of 4.1 percent since 2021, despite the growth of in-state solar, wind, and hydropower energy generation. California's industrial sector accounts for the second largest source of the state's GHG emissions in 2022, accounting for 19.6 percent, which saw a decrease of 2 percent since 2021 (CARB 2024b).

3.2 Regulatory Framework

3.2.1 State

3.2.1.1 Executive Order S-3-05

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

3.2.1.2 Assembly Bill 32 Climate Change Scoping Plan and Updates

In 2006, the California legislature passed Assembly Bill (AB) 32 (Health and Safety Code § 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 required CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which outlined measures to meet the 2020 GHG reduction goals. California exceeded the target of reducing GHG emissions to 1990 levels by the year 2017.

The Scoping Plan is required by AB 32 to be updated at least every five years. The latest update, the 2022 Scoping Plan Update, outlines strategies and actions to reduce GHG emissions in California. The plan focuses on achieving the state's goal of reaching carbon neutrality by 2045 and reducing GHG emissions to 40 percent below 1990 levels by 2030. The plan includes a range of strategies across various sectors, including transportation, industry, energy, and agriculture. Some of the key strategies include transitioning to zero-emission vehicles, expanding renewable energy sources, promoting sustainable land use practices, implementing a low-carbon fuel standard, and reducing emissions from buildings. Additionally, the plan addresses equity and environmental justice by prioritizing investments in communities most impacted by

pollution and climate change. The plan also aims to promote economic growth and job creation through the transition to a low-carbon economy.

3.2.1.3 Senate Bill 32 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030 (the other provisions of AB 32 remained unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provided a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies. The 2017 Scoping Plan also placed an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with Statewide per capita goals of no more than 6 metric tons of CO_2e by 2030 and 2 metric tons of CO_2e by 2050.

3.2.1.4 Assembly Bill 197 of 2016

AB 197 is a bill linked to SB 32 and was signed on September 8, 2016. AB 197 prioritizes efforts to cut GHG emissions in low-income or minority communities. AB 197 requires CARB to make available, and update at least annually, the emissions of GHGs, criteria pollutants, and toxic air contaminants for each facility that reports to CARB and air districts. In addition, AB 197 adds two Members of the Legislature to the CARB board as ex officio, non-voting members and creates the Joint Legislative Committee on Climate Change Policies to ascertain facts and make recommendations to the Legislature and the houses of the Legislature concerning the State's programs, policies, and investments related to climate change.

3.2.1.5 Assembly Bill 1279 of 2022

In September 2022, Governor Brown signed AB 1279, The California Climate Crisis Act, which requires California to achieve carbon neutrality as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. AB 1279 also requires that by 2045 statewide anthropogenic GHG emissions be reduced to at least 85 percent below 1990 levels and directs CARB to ensure that its scoping plan identifies and recommends measures to achieve these goals. AB 1279 also directs CARB to identify policies and strategies to enable carbon capture, utilization, and storage and CO_2 removal technologies to meet emission reduction goals. In addition, CARB is required to submit an annual report on progress in achieving the 2022 Scoping Plan's goals.

In response to the passage of AB 1279 and the identification of the 2045 GHG emissions reduction target, CARB published the Final 2022 Climate Change Scoping Plan in November 2022 (2022 Update). The 2022 Update builds upon the framework established by the 2008 Climate Change Scoping Plan and previous updates while identifying a new, technologically feasible, cost-effective, and equity-focused path to achieve California's climate target. The 2022 Update includes policies to achieve a significant reduction in fossil fuel combustion, further reductions in short-lived climate pollutants, support for sustainable development,

increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

The 2022 Update assesses the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan; addresses recent legislation and direction from Governor Newsom; extends and expands upon these earlier plans; and implements a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, as well as taking an additional step of adding carbon neutrality as a science-based guide for California's climate work. As stated in the 2022 Update, "the plan outlines how carbon neutrality can be achieved by taking bold steps to reduce GHGs to meet the anthropogenic emissions target and by expanding actions to capture and store carbon through the State's natural and working lands and using a variety of mechanical approaches." Specifically, the 2022 Update achieves the following:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of natural and working lands to the State's GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

In addition to reducing emissions from transportation, energy, and industrial sectors, the 2022 Update includes emissions and carbon sequestration in natural and working lands and explores how they contribute to long-term climate goals. Under the Scoping Plan Scenario, California's 2030 emissions are anticipated to be 48 percent below 1990 levels, representing an acceleration of the current SB 32 target. Cap-and-trade regulation continues to play a large factor in the reduction of near-term emissions for meeting the accelerated 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet these GHG emissions reduction goals and achieve carbon neutrality no later than 2045. The 2022 Update approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology.

3.2.1.6 Executive Order N-79-20

Governor Gavin Newsom signed an executive order on September 23, 2020, that would phase out sales of new gas-powered passenger cars by 2035 with an additional 10-year transition period for heavy vehicles. The State would not restrict used car sales, nor forbid residents from owning gas-powered vehicles, meaning that the overall reduction in GHG emissions would likely not substantially reduce GHG emissions from vehicles for many years after the ban goes into effect.

3.2.1.7 Senate Bill 100 of 2018

In 2018, SB 100 was signed codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

3.2.1.8 Senate Bill 1020 of 2022

SB 1020, the Clean Energy, Jobs, and Affordability Act of 2022, adds interim targets to the policy framework originally established in SB 100 to require renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent of all retail electricity sales by 2040. Additionally, the bill requires all state agencies to rely on 100 percent renewable energy and zero-carbon resources to serve their own facilities by 2035. This bill also requires that CARB's Scoping Plan workshops be held in non-attainment areas and requires the California Public Utilities Commission, the California Energy Commission, and CARB to create a joint report on electricity reliability.

3.2.1.9 Senate Bill 375 of 2008

SB 375 set forth a mechanism for coordinating land use and transportation on a regional level for the purpose of reducing GHG emissions. SB 375 was adopted with a goal of reducing fuel consumption and GHG emissions from cars and light trucks. Under SB 375, CARB was required to set GHG reduction targets for each metropolitan region for 2020 and 2035, and each of California's metropolitan planning organizations was responsible to prepare a sustainable communities strategy that demonstrates how the region will meet its GHG reduction target through integrated land use, housing, and transportation planning. The SCAG Regional Council adopted the 2024 RTP/SCS to remain compliant with SB 375.

3.2.1.10 2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings

The Building and Efficiency Standards (Energy Standards) were first adopted and put into effect in 1978 and have been updated periodically in the intervening years. These standards are a unique California asset that have placed the State on the forefront of energy efficiency, sustainability, energy independence and climate change issues. The 2022 California Building Codes include provisions related to energy efficiency to reduce energy consumption and GHG emissions from buildings. Some of the key energy efficiency components of the codes are:

1. Energy Performance Requirements: The codes specify minimum energy performance standards for the building envelope, lighting, heating and cooling systems, and other components.

2. Lighting Efficiency: The codes require that lighting systems meet minimum efficiency standards, such as the use of energy-efficient light bulbs and fixtures.
3. HVAC Systems: The codes establish requirements for heating, ventilation, and air conditioning (HVAC) systems, including the use of high-efficiency equipment, duct sealing, and controls.
4. Building Envelope: The codes include provisions for insulation, air sealing, glazing, and other building envelope components to reduce energy loss and improve indoor comfort.
5. Renewable Energy: The codes encourage the use of renewable energy systems, such as photovoltaic panels and wind turbines, to reduce dependence on non-renewable energy sources.
6. Commissioning: The codes require the commissioning of building energy systems to ensure that they are installed and operate correctly and efficiently.

Overall, the energy efficiency provisions of the 2022 California Building Codes aim to reduce the energy consumption of buildings, lower energy costs for building owners and occupants, and reduce the environmental impact of the built environment. The 2022 Building Energy Efficiency Standards improve upon the 2019 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The exact amount by which the 2022 Building Codes are more efficient compared to the 2019 Building Codes would depend on the specific provisions that have been updated and the specific building being considered. However, in general, the 2022 Building Codes have been updated to include increased requirements for energy efficiency, such as higher insulation and air sealing standards, which are intended to result in more efficient buildings. The 2022 standards are a major step toward meeting Zero Net Energy.

3.2.2 Local

3.2.2.1 South Coast Air Quality Management District

To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SCAQMD staff is convening an ongoing GHG CEQA Significance Threshold Working Group. Members of the working group include government agencies implementing CEQA and representatives from various stakeholder groups that provide input to SCAQMD staff on developing the significance thresholds. On October 8, 2008, the SCAQMD released the Draft AQMD Staff CEQA GHG Significance Thresholds. These thresholds have not been finalized and continue to be developed through the working group.

The Draft AQMD Staff CEQA GHG Significance Thresholds guidance document, which builds on the previous guidance prepared by the California Air Pollution Control Officers Association (CAPCOA), explored various approaches for establishing a significance threshold for GHG emissions and was described as a "work in progress" of efforts to date. However, the draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. In December 2008, the SCAQMD adopted a 10,000 metric tons of CO_2e per year threshold for stationary source/industrial projects for which the SCAQMD is the lead agency. From December 2008 to September 2010, SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. SCAQMD has continued to consider adoption of significance thresholds for

residential and general land use development projects. The most recent proposal, issued in September 2010, used the following tiered approach to evaluate potential GHG impacts from various uses:

- Tier 1 Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2 Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3 Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 metric tons of CO_2e per year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 metric tons of CO_2e per year), commercial projects (1,400 metric tons of CO_2e per year), and mixed-use projects (3,000 metric tons of CO_2e per year). Under option 2, a single numerical screening threshold of 3,000 metric tons of CO_2e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.
- Tier 4 Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions by 40 percent by 2035. The efficiency-based threshold of 3.0 metric tons of CO_2e per service population (defined as the people that work and/or congregate on the Project Site) per year in 2035. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.
- Tier 5 Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

The SCAQMD has not announced when staff are expecting to present a finalized version of its GHG thresholds to the governing board.

These thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. This working group was formed to assist 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 SoCAB, industry groups, and environmental and professional organizations. These thresholds were developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provides guidance to CEQA practitioners with regard to determining whether GHG emissions from a proposed land use project are significant.

3.2.2.2 Southern California Association of Governments

In April 2024, the SCAG Regional Council adopted the *2024-2050 Regional Transportation Plan/ Sustainable Communities Strategy* (2024 RTP/SCS). The 2024 RTP/SCS charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably. It was prepared through a

collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2024 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions. Specifically, the region has been tasked by CARB to achieve a 19 percent per capita reduction by the end of 2035.

3.2.2.3 City of Colton General Plan

The City of Colton's General Plan Land Use Element lists goals and associated policies related to sustainable building development and building practices. The goals and policy statements help guide the City council, Planning Commission, committees and boards, and City staff to review land use proposals and decide whether land use proposals are consistent with the City's goals for future growth and development. The goals and policies related to GHG emissions are listed below and are pertinent to the Proposed Project (City of Colton 2013).

- **Goal LU 4:** Incorporate green building and other sustainable building practices into development projects.
    1. Policy LU 4.2: Facilitate the use of green building standards and Leadership in Energy and Environmental Design or similar programs in both private and public projects.
    2. Policy LU 4.3: Promote sustainable building practices that go beyond the requirement of Title 24 of the California Administrative Code and encourage energy-efficient design elements.
    3. Policy LU 4.4: Support sustainable building practices that integrate building materials and methods that promote environmental quality, economic vitality, and social benefit through the design, construction, and operation of the built environment.
- **Goal LU 5:** Reduce use of energy resources citywide, with a key goal of reducing the City's carbon footprint.
    1. Policy LU 5.1: Require the incorporation of energy conservation features into the design of all new construction and site development, as required by State law and local regulations.
    2. Policy LU 5.2: Provide incentives, as funding opportunities become available, for the installation of energy conservation features in existing multi-family residential and commercial developments, including technical assistance and possible low interest loans.
    3. Policy LU 5.4: Support the ongoing efforts of the CARB to implement AB 32 and SB 375, and fully follow any new AB 32 and SB 375-related regulations.

4. Policy LU 5.5: Develop and implement GHG emissions reduction measures, including discrete, early action GHG reducing measures that are technologically feasible and cost effective.

5. Policy LU 5.6: Require detailed air quality and climate change analyses for all applications that have the potential to adversely affect air quality and incorporate the analyses into applicable California Environmental Quality Act (CEQA) documents. Projects with the potential to generate significant levels of air pollutants and GHGs, such as manufacturing facilities and site development operations, shall be required to incorporate mitigation into their design and operation, and to utilize the most advanced technological methods feasible.

6. Policy LU 5.7: Work with SCAQMD and SCAG to implement the AQMP and Regional Transportation Plan/Sustainable Communities Strategy, with the objective of meeting federal and state air quality standards for all pollutants. To ensure that new measures can be practically enforced in the region, participate in future amendments and updates of the AQMP.

3.2.2.4 City of Colton Climate Action Plan

The City of Colton adopted a Climate Action Plan (2015 CAP) on November 3, 2015. The 2015 CAP contained guidance on the City of Colton's GHG Inventory reduction goals, policies, guidelines, and implementation programs. The City's GHG emissions reduction target was 15 percent below the 2008 emission level by 2020, which aligned with California's statewide reduction target. The 2015 CAP included mitigation measures such as increasing solar installation, tree planting programs, sustainable transportation efforts, and waste and wastewater emission reduction measure. In December of 2023, the City Council rescinded the 2015 CAP and adopted the City of Colton 2023 CAP Update, which includes GHG Emissions Screening Tables, and consists of a relevant GHG inventory for the City of Colton, implementation actions for Colton, and Colton GHG reduction measures (City of Colton 2023). The 2023 CAP Update is informed by the technical information presented in the San Bernardino County's Regional GHG Reduction Plan Update which was adopted in June of 2023. The 2023 CAP Update includes detailed descriptions of all reduction strategies discussed in the County's Regional GHG Reduction Plan Update. Strategies are organized into state and local categories. The GHG emissions reduction strategies that are pertinent to the Proposed Project are as follows:

State Measures:

- **State-2. Title 24 Standards for Non-Residential and Residential Buildings (Energy Efficiency Standards and CALGreen):** Requires that building shells and building components be designed to conserve energy and water. Note that in some instances, implementation of the CALGreen voluntary measures has been identified by local jurisdictions as part of their selected local measures.
- **State-3. SB 350 Clean Energy and Pollution Reduction Act:** SB 350 requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030.

- **State-4. AB 1470 (Huffman), AB797 Solar Water Heating:** AB1470 created a 10-year incentive program funded at $25 million per year to encourage the installation of 200,000 solar water heating systems that offset natural gas use in homes and businesses throughout the state.

Local Measures:

- **Energy-1. Energy Efficiency Incentives and programs to promote Energy Efficiency for Existing Buildings:** Promote energy efficiency in nonresidential buildings. Promote individualized energy management services for large energy users. Remove funding barriers to energy-efficiency improvements. Participate in programs (national, state, or regional) that provide innovative, low-interest financing for energy-efficiency and alternative energy projects. Promote incentives to encourage the use of energy-efficient equipment and lighting.
- **Energy-3. Building Electrification:** Adopt building electrification targets and incentives, for both new commercial and residential buildings and retrofits. Establish a goal that a percentage of new and existing buildings use electric HVAC and water heating systems.
- **Energy-4. Solar Installations for New Commercial/Industrial Development:** Establish a goal for solar installations on new commercial and industrial development to be achieved before 2030.
- **Land Use-2. Urban Tree Planting:** Establish a jurisdiction-wide tree planting goal or tree preservation goal. This measure will reduce energy consumption and associated GHG emissions in the building energy sector by reducing the heat island effect.
- **On-Road-2. Encourage Use of Mass Transit, Carpooling, Ridesharing, and Telecommuting**: Commute Trip Reduction programs aim to reduce commute trips and VMT [vehicle miles traveled] through various strategies. The strategies include encouraging the use of mass transit, carpooling, ridesharing, and telecommuting.
- **On-Road-5. Community Fleet Electrification:** Hybrid electric vehicles, plug-in hybrid vehicles, and all-electric vehicles (EVs) produce lower emissions than conventional vehicles. All EV types emit at least 40% less GHG emissions than conventional vehicles. However, more than 95% of people still drive conventional gasoline or diesel vehicles, so programs to encourage the use of EV or hybrid vehicle ownership are greatly needed.
- **Off-Road Equipment-2. Idling Ordinance:** Adopt an ordinance that limits idling time for heavy-duty diesel trucks beyond CARB or local air district regulations and if not already required as part of CEQA mitigation. As part of permitting requirements or city contracts, encourage contractors to submit a construction vehicle management plan that includes such things as idling time requirements; requiring hour meters on equipment; and documenting the serial number, horsepower, age, and fuel of all on-site equipment. State law currently requires all off-road equipment fleets to limit idling to no more than 5 minutes.
- **Waste-1. Increased Waster Diversion:** Exceed the waste diversion goal (75%) required by AB 341 by adopting citywide waste goals to divert more than 75% of waste. In instances where cities

operate their own waste services programs, they will have responsibility to expand or establish composting, recycling, and yard waste programs to residences and businesses.

- **Water-1. Require Adoption of the Voluntary CALGreen Water Efficiency Measures for New Construction:** Require adoption of the voluntary CALGreen water efficiency measures (at least Tier 1) for new construction. CALGreen voluntary measures recommended use of certain water-efficient appliances, plumbing and irrigation systems, as well as more aggressive water-savings targets.
- **Water-3. Encourage Water-Efficient Landscaping Practices:** Encourage water-efficient landscaping practices. Adopt a landscaping water conservation ordinance that exceeds the requirements in the Model Landscape Ordinance (AN 1881).

As such, the Proposed Project would be subject to implementation of measures consistent with the CAP GHG emissions reductions strategies.

3.3 Greenhouse Gas Emissions Impact Assessment

3.3.1 Thresholds of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to greenhouse gas emissions if it would:

1) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

2) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

The Appendix G thresholds for GHG emissions do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or other performance-based standards." (14 CCR 15064.4(b)). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change." (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see CEQA Guidelines Section 15130). As a note, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions." Put another way, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) and the SCAQMD Tier 2 GHG threshold by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Specifically, the Project is evaluated for consistency with CARB's 2022 Scoping Plan, the City of Colton's CAP, and with SCAG's 2024 RTP/SCS.

3.3.2 Methodology

Where GHG emission quantification was required, emissions were modeled using CalEEMod, version 2022.1. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Project construction-generated GHG emissions were calculated using CalEEMod model defaults for San Bernardino County and Project information provided by the Site Plan. Total building square footage footprint was calculated for the hotel and medical facility by dividing the total building square footage by the number of floors. The square footage of the enclosed, 3-story parking garage was calculated by subtracting the CalEEMod default

area for the total number of unenclosed spots by the 321 parking spots in the Proposed Project Site Plan. The area of the hotel pool is calculated, and for the purposes of this analysis, the remaining area was attributed to landscaping to account for water use. The building construction, paving, and architectural coating phases are assumed to occur simultaneously. Operational GHG emissions were calculated using CalEEMod model defaults for San Bernardino County and amount of units identified in the Project Site Plan coupled with daily trips provided by KOA Corporation (2024) to inform the modeling calculations of operational mobile source emissions. Per the traffic impact analysis report, the Proposed Project is expected to generate approximately 2,807 daily vehicle trips (KOA Corporation 2024).

3.3.3 Generation of GHG Emissions

Project Construction

Construction-related activities that would generate GHG emissions 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 3-2 illustrates the specific construction generated GHG emissions that would result from construction of the Project. Once construction is complete, the generation of these GHG emissions would cease.

Table 3-2. Construction-Related Greenhouse Gas Emissions

Emissions Source	CO_2e (Metric Tons/ Year)
Construction Calendar Year One	584
Construction Calendar Year Two	141
Total Construction Emissions	**725**

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.
Notes: Project construction generated GHG emissions were calculated using CalEEMod model defaults for San Bernardino County and information from the Proposed Project Site Plan.

As shown in Table 3-2, Project construction would result in the generation of approximately 725 metric tons of CO_2e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. Consistent with SCAQMD recommendations, Project construction GHG emissions have been amortized of the expected life of the Project, which is considered to be 30 years per the SCAQMD and added to the annual average operational emissions (see Table 3-3).

Project Operations

Operation of the Project would result in an increase in GHG emissions primarily associated with mobile sources. Long-term operational GHG emissions attributed to the Project are identified in Table 3-3.

Table 3-3. Operational-Related Greenhouse Gas Emissions	
Emissions Source	**CO_2e (Metric Tons/ Year)**
Construction Emissions (Amortized)	24
Mobile	2,970
Area	4
Energy	727
Water	29
Waste	224
Refrigeration	19
Total	**3,997**

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.

Notes: Emission projections predominately based on CalEEMod model defaults for San Bernardino County and amount of units identified in the Project Site Plan coupled with daily trips provided by KOA Corporation (2024) to inform the modeling calculations of operational mobile source emissions. CalEEMod Measures T-2 "Increase Job Density" for the Proposed Medical Facility and T-3 "Provide Transit-Oriented Development" were applied to the CalEEMod scenario to be consistent with the Proposed Project operational characteristics.

As shown in Table 3-3, the Project would generate 3,997 metric tons of CO_2e annually.

3.3.4 Impact Analysis

3.3.4.1 Generation of Greenhouse Gas Emissions Resulting in Conflicts with any Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases

2022 California Air Resources Board Scoping Plan

CARB's 2022 Scoping Plan sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. The 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high global warming potential; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines Section 15183.5.

Statewide strategies to reduce GHG emissions in the latest 2022 Scoping Plan include implementing SB 100, which would achieve 100 percent clean electricity by 2045; achieving 100 percent zero emission vehicle sales in 2035 through Advanced Clean Cars II; and implementing the Advanced Clean Fleets regulation to deploy zero-emission vehicles (ZEVs) buses and trucks. Additional transportation policies include the Off-

Road Zero-Emission Targeted Manufacturer Rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, Clean Off-Road Fleet Recognition Program, and Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation. The 2022 Scoping Plan would continue to implement SB 375. GHGs would be further reduced through the Cap-and-Trade Program carbon pricing and SB 905. SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon dioxide removal projects and technology.

As indicated above, GHG reductions are also achieved as a result of State of California energy and water efficiency requirements for new residential developments. These efficiency improvements correspond to reductions in secondary GHG emissions. For example, in California, most of the electricity that powers homes are derived from natural gas combustion. Therefore, energy saving measures, such as Title 24, reduces GHG emissions from the power generation facilities by reducing load demand.

The 2022 Scoping Plan Appendix D provides local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. The 2022 Scoping Plan Appendix D focuses on Residential and Mixed-Use Projects.

The 2022 Scoping Plan Appendix D lists potential actions that support the state's climate goals. However, the 2022 Scoping Plan notes that the applicability and performance of the actions may vary across the regions. The document is organized into two categories (A) examples of plan-level GHG reduction actions that could be implemented by local governments and (B) examples of on-site project design features, mitigation measures, that could be required of individual projects under CEQA, if feasible, when the local jurisdiction is the lead agency.

The Project would include a number of the 2022 Scoping Plan standard conditions and mitigation measures for construction and operation. For example, the 2022 Scoping Plan's construction actions include enforcing idling time restrictions on construction vehicles and requiring construction vehicles to operate highest tier engines commercially available.

The Project would include a majority of the feasible operational mitigation measures listed in the 2022 Scoping Plan Appendix D as design features. Some of the recommended operational measures would include providing bicycle parking, creating on- and off-site safety improvements for bike, pedestrian, and transit connections, requiring solar panels, drought-tolerant landscaping, and energy conserving appliances.

As identified in Table 3-4 below, the Project would be consistent with all applicable plan goals and applicable regulatory programs designed to reduce GHG emissions generated by land use projects. The Project would be subject to compliance with all building codes in effect at the time of construction, which include energy conservation measures mandated by California Building Standards Code Title 24 – Energy Efficiency Standards. Because Title 24 standards require energy conservation features in new construction (e.g., high- efficiency lighting, high-efficiency heating, ventilating, and HVAC systems, thermal insulation, double-glazed windows, water conserving plumbing fixtures), they indirectly regulate and reduce GHG emissions. California's Building Energy Efficiency Standards are updated on an approximately three-year cycle.

As shown in Table 3-3, approximately 92 percent of the Project's emissions are from energy and mobile sources, which would be further reduced by the 2022 Scoping Plan actions described above. The City has no control over vehicle emissions (approximately 74 percent of the Project's total emissions). However, these emissions would decline in the future due to statewide measures, as well as cleaner technology and fleet turnover. Several of the state's plans and policies would contribute to a reduction in the Project's mobile source emissions, including the following:

- CARB's Advanced Clean Truck Regulation: Adopted in June 2020, CARB's Advanced Clean Truck Regulation requires truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8.

- Executive Order N-79-20: This Executive Order establishes the goal for all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, to be zero-emission by 2035 and all medium and heavy-duty vehicles to be zero-emission by 2045. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium- and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new ZEVs "towards the target of 100 percent."

- CARB's Mobile Source Strategy: CARB's Mobile Source Strategy takes an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve all of California's targets by increasing the adoption of ZEV buses and trucks.

- CARB's Sustainable Freight Action Plan: The Sustainable Freight Action Plan which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks. This Plan applies to all trucks accessing the Project Site and may include existing trucks or new trucks that are part of the Statewide goods movement sector.

- CARB's Emissions Reduction Plan for Ports and Goods Movement: CARB's Emissions Reduction Plan for Ports and Goods Movement identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories.

While these measures are not directly applicable to the Project, any activity associated with goods movement would be required to comply with these measures as adopted. The Project would not obstruct or interfere with efforts to increase ZEVs or state efforts to improve system efficiency. Compliance with applicable state standards (e.g., continuation of the Cap-and-Trade regulation; CARB's Mobile Source Strategy, Sustainable Freight Action Plan, and Advanced Clean Truck Regulation; Executive Order N-79-20; SB 1020/renewable electricity portfolio improvements that require renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent of all retail electricity sales by 2040, etc.) would ensure consistency with state and regional GHG reduction planning efforts, including the 2022 Scoping Plan. It is also noted that the Project would not convert any Natural and Working

Lands (NWL) and/or decrease the state's urban forest carbon stock, which are areas of emphasis in the 2022 Scoping Plan.

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that Project operations would benefit from applicable measures enacted to meet state GHG reduction goals. The Project would not impede the state's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. As such, impacts related to consistency with the 2022 Scoping Plan, as further shown in Table 3-4, would be less than significant, and no mitigation is required.

Table 3-4. Project Consistency with the Applicable Scoping Plan Measures

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
Transportation	California Cap-and Trade Program Linked to Western Climate Initiative	Regulation for the California Cap on GHG Emissions and Market-Based Compliance Mechanism October 20, 2015 (CCR 95800)	**Consistent.** The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers. However, the regulation indirectly affects people who use the products and services produced by these industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. The Proposed Project would not conflict with implementation of the Cap-and-Trade Program and would indirectly be consistent with regard to the use of electricity and fuel.
	California Light-Duty Vehicle GHG Standards	Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles Pavley I 2005 Regulations to Control GHG	**Consistent**. This measure applies to all new vehicles starting with model year 2012. The Project would not conflict with its implementation as it would apply to all new passenger vehicles purchased in California. Passenger vehicles, model year 2012 and later, associated with Project construction

		Emissions from Motor Vehicles	and operation would be required to comply with the Pavley emissions standards.
		2012 LEV III California GHG and Criteria Pollutant Exhaust and Evaporative Emission Standards	**Consistent**. The LEV III amendments provide reductions from new vehicles sold in California between 2017 and 2025. Passenger vehicles associated with Project construction and operations would be required to comply with LEV III standards.
	Low Carbon Fuel Standard	2009 readopted in 2015. Regulations to Achieve GHG Emission Reductions Subarticle 7. Low Carbon Fuel Standard CCR 95480	**Consistent.** This measure applies to transportation fuels utilized by vehicles in California. The Project would not conflict with implementation of this measure. It is assumed that any motor vehicles associated with Project construction and operations would be consistent with the measure and utilize low carbon transportation fuels.
	Regional Transportation-Related GHG Targets	SB 375. Cal. Public Resources Code §§ 21155, 21155.1, 21155.2, 21159.28	**Consistent**. The Project would provide development in the region that is consistent with the growth projections in the 2024 RTP/SCS. The Project proposes a medical facility, hotel, parking accommodations, and other site improvements in an already developed area of the city and will increase employment opportunities and access to healthcare for local residents. The Proposed Project is consistent with the City's General Plan land use designation of mixed-use, office space. The Project is therefore consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the 2024 RTP/SCS and RCPG.
	Goods Movement	Goods Movement Action Plan January 2007	**Not Applicable.** The Project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.
	Medium/Heavy-Duty Vehicle	2010 Amendments to the Truck and Bus Regulation, the Drayage Truck Regulation and the Tractor-Trailer GHG Regulation	**Consistent**. This measure applies to medium- and heavy-duty vehicles that operate in the state. The Project would not conflict with implementation of this measure. Medium- and heavy-duty vehicles associated with Project construction would be required to comply with this regulation
	High Speed Rail	Funded under SB 862	**Not Applicable.** This is a Statewide measure that cannot be implemented by a project applicant or Lead Agency
Electricity and Natural Gas	Energy Efficiency	Title 20 Appliance Efficiency Regulation	**Consistent.** The Project would not conflict with implementation of this measure, as it

		Title 24 Part 6 Energy Efficiency Standards for Residential and Non-Residential Building	would be subject to compliance with the latest energy efficiency standards.
		Title 24 Part 11 California Green Building Code Standards	
	Renewable Portfolio Standard/Renewable Electricity Standard	2010 Regulation to Implement the Renewable Electricity Standard (33% 2020)	**Consistent.** The Project would obtain electricity from the electric utility, Southern California Edison (SCE). SCE obtained 30.9 percent of its power supply from renewable sources in 2020 and includes 50 percent and 100 percent renewable Green Rate options. Therefore, the utility would provide power to the Project that would be is comprised of a greater percentage of renewable sources.
	Million Solar Roofs Program	SB 350 Clean Energy and Pollution Reduction Act of 2015 (50% 2030)	
	Million Solar Roofs Program	Tax Incentive Program	**Consistent.** This measure is to increase solar use throughout California, which is being done by various electricity providers and existing solar programs. The program provides incentives that are in place at the time of construction.
Water	Water	Title 24 Part 11 California Green Building Code Standards	**Consistent.** The Project would comply with the CALGreen Code, which require a 20 percent reduction in indoor water use.
		SBX 7-7—The Water Conservation Act of 2009	
		Model Water Efficient Landscape Ordinance	
Green Buildings	Green Building Strategy	Title 24 Part 11 California Green Building Code Standards	**Consistent.** The state is required to increase use of green building practices. The Project would implement required green building strategies through existing regulations that require the Project to comply with various CALGreen Code standards.
Industry	Industrial Emissions	2010 CARB Mandatory Reporting Regulation	**Not Applicable.** The Mandatory Reporting Regulation requires facilities and entities with more than 10,000 metric tons of CO_2e of combustion and process emissions, all facilities belonging to certain industries, and all electric power entities to submit an annual GHG emissions data report directly to CARB. The Proposed Project would not exceed the 10,000 metric ton of CO_2e

			threshold, and the majority of the Proposed Project GHG emissions are from mobile sources. Therefore, this regulation would not apply.
Recycling and Waste Management	Recycling and Waste	Title 24 Part 11 California Green Building Code Standards	**Consistent.** The Project would not conflict with implementation of these measures. The Project is required to achieve the recycling mandates via compliance with the CALGreen Code.
		AB 341 Statewide 75 Percent Diversion Goal	
Forests	Sustainable Forests	Cap-and-Trade Offset Projects	**Not Applicable.** The Project is in an area designated for urban uses. No forested lands exist on the site.
High Global Warming Potential	High Global Warming Potential Gases	CARB Refrigerant Management Program CCR 95380	**Consistent.** The regulations are applicable to refrigerants used by large air conditioning systems and large commercial and industrial refrigerators and cold storage systems. The Project would not conflict with the refrigerant management regulations adopted by CARB.
Agriculture	Agriculture	Cap-and-Trade Offset Projects for Livestock and Rice Cultivation	**Not Applicable**. No grazing, feedlot, or other agricultural activities that generate manure occur currently on site or are proposed by the Project.

In conclusion, the Project does not conflict with the applicable plans and regulatory programs that are discussed above, and therefore with respect to this particular threshold, the Project does not have a significant impact.

City of Colton Climate Action Plan

The City of Colton adopted a CAP (2015 CAP) on November 3, 2015. The 2015 CAP contained guidance on the City of Colton's GHG Inventory reduction goals, policies, guidelines, and implementation programs. The City's GHG emissions reduction target was 15 percent below the 2008 emission level by 2020, which aligned with California's statewide reduction target. The 2015 CAP included mitigation measures such as increasing solar installation, tree planting programs, sustainable transportation efforts, and waste and wastewater emission reduction measure. In December of 2023, the City Council rescinded the 2015 CAP and adopted the City of Colton 2023 CAP Update, which includes GHG Emissions Screening Tables, and consists of a relevant GHG inventory for the City of Colton, implementation actions for Colton, and Colton GHG reduction measures (Colton City Council 2023). The 2023 CAP Update is informed by the technical information presented in the San Bernardino County's Regional GHG Reduction Plan Update which was adopted in June of 2023. The 2023 CAP Update includes detailed descriptions of all reduction strategies discussed in the County's Regional GHG Reduction Plan Update. Strategies are organized into state and local categories. The GHG emissions reduction strategies that are pertinent to the Proposed Project are as follows:

State Measures:

- **State-2. Title 24 Standards for Non-Residential and Residential Buildings (Energy Efficiency Standards and CALGreen):** Requires that building shells and building components be designed to conserve energy and water. Note that in some instances, implementation of the CALGreen voluntary measures has been identified by local jurisdictions as part of their selected local measures.
- **State-3. SB 350 Clean Energy and Pollution Reduction Act:** SB 350 requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030.
- **State-4. AB 1470 (Huffman), AB797 Solar Water Heating:** AB1470 created a 10-year incentive program funded at $25 million per year to encourage the installation of 200,000 solar water heating systems that offset natural gas use in homes and businesses throughout the state.

Local Measures:

- **Energy-1. Energy Efficiency Incentives and programs to promote Energy Efficiency for Existing Buildings:** Promote energy efficiency in nonresidential buildings. Promote individualized energy management services for large energy users. Remove funding barriers to energy-efficiency improvements. Participate in programs (national, state, or regional) that provide innovative, low-interest financing for energy-efficiency and alternative energy projects. Promote incentives to encourage the use of energy-efficient equipment and lighting.
- **Energy-3. Building Electrification:** Adopt building electrification targets and incentives, for both new commercial and residential buildings and retrofits. Establish a goal that a percentage of new and existing buildings use electric HVAC and water heating systems.
- **Energy-4. Solar Installations for New Commercial/Industrial Development:** Establish a goal for solar installations on new commercial and industrial development to be achieved before 2030.
- **Land Use-2. Urban Tree Planting:** Establish a jurisdiction-wide tree planting goal or tree preservation goal. This measure will reduce energy consumption and associated GHG emissions in the building energy sector by reducing the heat island effect.
- **On-Road-2. Encourage Use of Mass Transit, Carpooling, Ridesharing, and Telecommuting**: Commute Trip Reduction programs aim to reduce commute trips and VMT through various strategies. The strategies include encouraging the use of mass transit, carpooling, ridesharing, and telecommuting.
- **On-Road-5. Community Fleet Electrification:** Hybrid electric vehicles, plug-in hybrid vehicles, and all-electric vehicles (EVs) produce lower emissions than conventional vehicles. All EV types emit at least 40% less GHG emissions than conventional vehicles. However, more than 95% of people still drive conventional gasoline or diesel vehicles, so programs to encourage the use of EV or hybrid vehicle ownership are greatly needed.

- **Off-Road Equipment-2. Idling Ordinance:** Adopt an ordinance that limits idling time for heavy-duty diesel trucks beyond CARB or local air district regulations and if not already required as part of CEQA mitigation. As part of permitting requirements or city contracts, encourage contractors to submit a construction vehicle management plan that includes such things as idling time requirements; requiring hour meters on equipment; and documenting the serial number, horsepower, age, and fuel of all on-site equipment. State law currently requires all off-road equipment fleets to limit idling to no more than 5 minutes.
- **Waste-1. Increased Waste Diversion:** Exceed the waste diversion goal (75%) required by AB 341 by adopting citywide waste goals to divert more than 75% of waste. In instances where cities operate their own waste services programs, they will have responsibility to expand or establish composting, recycling, and yard waste programs to residences and businesses.
- **Water-1. Require Adoption of the Voluntary CALGreen Water Efficiency Measures for New Construction:** Require adoption of the voluntary CALGreen water efficiency measures (at least Tier 1) for new construction. CALGreen voluntary measures recommended use of certain water-efficient appliances, plumbing and irrigation systems, as well as more aggressive water-savings targets.
- **Water-3. Encourage Water-Efficient Landscaping Practices:** Encourage water-efficient landscaping practices. Adopt a landscaping water conservation ordinance that exceeds the requirements in the Model Landscape Ordinance (AN 1881).

As such, the Proposed Project would be subject to implementation of measures consistent with the CAP GHG emissions reductions strategies. Implementing mitigations consistent with the City's CAP strategies for land use development will greatly reduce the regional GHG emissions and facilitate progress towards statewide emission reduction targets. The City ensures all applicable provisions of the CAP are incorporated into projects and their permits through development review and applications of conditions of approval as applicable. Furthermore, all of the applicable and feasible provisions of the City's GHG-reduction program as promulgated by its CAP will be incorporated into the Proposed Project as a requirement of mitigation measure GHG-1.

Mitigation Measure

GHG-1: Prior to the certificate of construction-related permits for the Pepper Development Project, the Project Applicant shall demonstrate to the satisfaction of the City of Colton Planning Division that the following measures are implemented.

- Consistent with CAP Measures Energy-1, Energy-3, and Energy-4, all Project buildings shall adhere to Title 24 standards and implement Tier 1 and Tier 2 Green Building Ratings, such as LEED, Build It Green, or Energy Star certifications, to the satisfaction of the City of Colton Planning Division.
- Consistent with CAP Measure Land Use-2, the Proposed Project landscaping should include tree planting to provide shade which will reduce energy consumption and associated GHG emissions in the building energy sector by reducing the heat island effect.

- Consistent with CAP Measure On-Road-2, the medical facility and hotel staff should be knowledgeable about rideshare and public transit options for transport of visitors. Additionally, the enclosed parking garage should designate a certain percentage of desirable parking spaces for ridesharing vehicles and/or charge for parking.
- Consistent with CAP Measure On-Road-5, the Proposed Project should include electric vehicle (EV) charging stations and EV parking stalls to promote use of electric vehicles.
- Consistent with CAP Measure Off-Road Equipment-2, all construction equipment must follow the City's idling ordinances.
- Consistent with CAP Measure Waste-1, the medical facility and hotel operators shall contact the City of Colton's Recycling Coordinator, as required by AB 341, to coordinate the availability of assessable recycling bins on site in the case that the Proposed Project generates more than four cubic yards of waste per week. Additionally, the medical facility and hotel operators shall coordinate with the City of Colton's Recycling Coordinator to implement organic waste recycling on site in the case that more than eight cubic yards of organic waste per week are generated (City of Colton 2024).
- Consistent with CAP Measures Water-1 and Water-3, all Proposed Project landscaping shall be low irrigation and water use-efficient and water efficient appliances should be prioritized and utilized where possible.

Timing/Implementation: *Prior to the issuance of occupancy permits*

Monitoring/Enforcement: *The City of Colton Planning Division*

Regional Transportation Plan/Sustainable Communities Strategy

Additionally, the objective of the Proposed Project also aligns with various aspects of the SCAG's RTP/SCS to accommodate balancing job opportunities in local areas to reduce long commutes from home to work.

In April 2024, the SCAG Regional Council adopted the 2024-2050 RTP/SCS, which charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2024 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions.

The Proposed Project Site is currently vacant and mixed-use development is proposed to accommodate a medical facility and hotel in close proximity (approximately 0.3 roadway miles) to a commercial area consisting of one grocery store, several restaurants, and residences. Located in an urbanized area of Colton, the site is surrounded by predominantly residential, commercial, retail, medical and restaurant land uses. This strategic positioning highlights the Project's "location efficiency." Location efficiency refers to how well a project is integrated within its urban context, such as an "urban area," "compact infill," or "suburban center." The Project Area qualifies as an urban/compact infill site, surrounded by existing residential, office and commercial developments in an active urban center. The Proposed Project would provide future visitors with a variety of nearby commercial uses as well as potential work opportunities within walking distance to nearby existing residences. Additionally, the Project's location along the OmniTrans Route 1 bus route would enhance connectivity. With a bus stop at the Arrowhead Regional Medical Center, Route 1 meanders through Colton on Meridian Avenue, E Valley Boulevard and Mt. Vernon Avenue before entering the City of San Bernardino and continuing to traverse W 2nd Street, with access offered to the Downtown San Bernardino Metrolink Station. After connecting with this Metrolink station, Route 1 continues through the City of San Bernardino. OmniTrans Route 1 makes it a viable alternative transportation option for future Project visitors, especially considering its connection to the Downtown San Bernardino Metrolink Station. This improved accessibility supports community integration by linking the Project Site with a broader network of commercial and residential areas. The increased use of public transit is anticipated to result in fewer vehicle trips and a reduction in VMT. Consequently, this shift can lead to a significant decrease in transportation related GHG emissions.

As such, the Project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

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LIST OF ATTACHMENTS

Attachment A – CalEEMod Output File for Air Quality Emissions and Greenhouse Gas Emissions

ATTACHMENT A

CalEEMod Output File for Air Quality Emissions and Greenhouse Gas Emissions

Pepper Development Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pepper Development
Construction Start Date	3/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	14.2
Location	1501 Violet St, Colton, CA 92324, USA
County	San Bernardino-South Coast
City	Colton
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5335
EDFZ	10
Electric Utility	Colton Electric Utility Department
Gas Utility	Southern California Gas
App Version	2022.1.1.28

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Medical Office Building	60.0	1000sqft	0.46	60,000	0.69	—	—	—

Hotel	112	Room	0.33	71,000	0.69	—	—	—
Enclosed Parking with Elevator	203	Space	0.62	81,200	0.00	—	—	—
Parking Lot	118	Space	1.06	0.00	0.00	—	—	—
Recreational Swimming Pool	1.50	1000sqft	0.03	1,500	0.00	—	—	—
Other Non-Asphalt Surfaces	1.39	Acre	1.39	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-2	Increase Job Density
Transportation	T-3	Provide Transit-Oriented Development

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.04	33.8	33.1	0.06	1.39	8.36	9.75	1.28	4.12	5.40	—	7,271	7,271	0.41	0.33	9.34	7,385
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.01	33.9	32.4	0.06	1.39	8.36	9.75	1.28	4.12	5.40	—	7,251	7,251	0.41	0.33	0.24	7,361
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.11	10.8	16.5	0.02	0.42	1.12	1.54	0.39	0.31	0.70	—	3,482	3,482	0.17	0.14	2.09	3,529

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.75	1.97	3.02	< 0.005	0.08	0.20	0.28	0.07	0.06	0.13	—	576	576	0.03	0.02	0.35	584

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.04	33.8	33.1	0.06	1.39	8.36	9.75	1.28	4.12	5.40	—	7,271	7,271	0.41	0.33	9.34	7,385
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.01	33.9	32.4	0.06	1.39	8.36	9.75	1.28	4.12	5.40	—	7,251	7,251	0.41	0.33	0.24	7,361
2026	7.87	18.7	30.1	0.05	0.68	1.87	2.55	0.62	0.45	1.08	—	6,469	6,469	0.26	0.25	0.22	6,552
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.11	10.8	16.5	0.02	0.42	1.12	1.54	0.39	0.31	0.70	—	3,482	3,482	0.17	0.14	2.09	3,529
2026	1.02	2.42	3.93	0.01	0.09	0.24	0.33	0.08	0.06	0.14	—	838	838	0.03	0.03	0.47	849
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.75	1.97	3.02	< 0.005	0.08	0.20	0.28	0.07	0.06	0.13	—	576	576	0.03	0.02	0.35	584
2026	0.19	0.44	0.72	< 0.005	0.02	0.04	0.06	0.01	0.01	0.03	—	139	139	0.01	0.01	0.08	141

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.04	33.8	33.1	0.06	1.39	8.36	9.75	1.28	4.12	5.40	—	7,271	7,271	0.41	0.33	9.34	7,385

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.01	33.9	32.4	0.06	1.39	8.36	9.75	1.28	4.12	5.40	—	7,251	7,251	0.41	0.33	0.24	7,361
2026	7.87	18.7	30.1	0.05	0.68	1.87	2.55	0.62	0.45	1.08	—	6,469	6,469	0.26	0.25	0.22	6,552
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.11	10.8	16.5	0.02	0.42	1.12	1.54	0.39	0.31	0.70	—	3,482	3,482	0.17	0.14	2.09	3,529
2026	1.02	2.42	3.93	0.01	0.09	0.24	0.33	0.08	0.06	0.14	—	838	838	0.03	0.03	0.47	849
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.75	1.97	3.02	< 0.005	0.08	0.20	0.28	0.07	0.06	0.13	—	576	576	0.03	0.02	0.35	584
2026	0.19	0.44	0.72	< 0.005	0.02	0.04	0.06	0.01	0.01	0.03	—	139	139	0.01	0.01	0.08	141

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.1	10.8	105	0.25	0.25	21.6	21.9	0.24	5.49	5.73	407	29,465	29,872	42.2	1.19	190	31,471
Mit.	14.4	10.1	97.8	0.23	0.24	20.0	20.3	0.23	5.08	5.31	407	27,600	28,007	42.1	1.11	184	29,574
% Reduced	5%	7%	7%	7%	5%	7%	7%	5%	7%	7%	—	6%	6%	< 0.5%	7%	3%	6%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.9	11.5	79.9	0.23	0.24	21.6	21.9	0.23	5.49	5.72	407	27,871	28,278	42.2	1.23	115	29,813
Mit.	12.2	10.7	74.0	0.22	0.22	20.0	20.2	0.22	5.08	5.30	407	26,123	26,530	42.1	1.14	114	28,037
% Reduced	6%	7%	7%	7%	5%	7%	7%	5%	7%	7%	—	6%	6%	< 0.5%	7%	< 0.5%	6%

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.0	9.61	73.2	0.19	0.22	17.3	17.5	0.21	4.38	4.59	407	23,536	23,943	42.0	1.01	139	25,434
Mit.	11.4	8.98	68.3	0.18	0.21	16.0	16.2	0.20	4.06	4.26	407	22,126	22,533	41.9	0.94	137	23,999
% Reduced	5%	7%	7%	7%	4%	7%	7%	4%	7%	7%	—	6%	6%	< 0.5%	7%	1%	6%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.19	1.75	13.4	0.03	0.04	3.15	3.19	0.04	0.80	0.84	67.4	3,897	3,964	6.95	0.17	23.1	4,211
Mit.	2.09	1.64	12.5	0.03	0.04	2.92	2.96	0.04	0.74	0.78	67.4	3,663	3,731	6.94	0.16	22.8	3,973
% Reduced	5%	7%	7%	7%	4%	7%	7%	4%	7%	7%	—	6%	6%	< 0.5%	7%	1%	6%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.4	9.72	94.7	0.24	0.16	21.6	21.8	0.15	5.49	5.64	—	24,963	24,963	1.09	1.11	77.4	25,399
Area	4.67	0.08	9.23	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.0	38.0	< 0.005	< 0.005	—	38.1
Energy	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	4,375	4,375	0.34	0.03	—	4,393
Water	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Waste	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Total	15.1	10.8	105	0.25	0.25	21.6	21.9	0.24	5.49	5.73	407	29,465	29,872	42.2	1.19	190	31,471
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.72	10.4	79.1	0.23	0.16	21.6	21.8	0.15	5.49	5.64	—	23,407	23,407	1.13	1.15	2.01	23,779

Area	3.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	4,375	4,375	0.34	0.03	—	4,393
Water	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Waste	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Total	12.9	11.5	79.9	0.23	0.24	21.6	21.9	0.23	5.49	5.72	407	27,871	28,278	42.2	1.23	115	29,813
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.77	8.55	66.1	0.19	0.13	17.3	17.4	0.12	4.38	4.51	—	19,047	19,047	0.91	0.93	26.9	19,374
Area	4.20	0.05	6.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.0	26.0	< 0.005	< 0.005	—	26.1
Energy	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	4,375	4,375	0.34	0.03	—	4,393
Water	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Waste	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Total	12.0	9.61	73.2	0.19	0.22	17.3	17.5	0.21	4.38	4.59	407	23,536	23,943	42.0	1.01	139	25,434
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.42	1.56	12.1	0.03	0.02	3.15	3.17	0.02	0.80	0.82	—	3,153	3,153	0.15	0.15	4.46	3,208
Area	0.77	0.01	1.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.30	4.30	< 0.005	< 0.005	—	4.32
Energy	0.01	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	724	724	0.06	0.01	—	727
Water	—	—	—	—	—	—	—	—	—	—	3.32	14.6	18.0	0.34	0.01	—	28.9
Waste	—	—	—	—	—	—	—	—	—	—	64.1	0.00	64.1	6.40	0.00	—	224
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.6	18.6
Total	2.19	1.75	13.4	0.03	0.04	3.15	3.19	0.04	0.80	0.84	67.4	3,897	3,964	6.95	0.17	23.1	4,211

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.64	9.00	87.7	0.22	0.15	20.0	20.2	0.14	5.08	5.22	—	23,099	23,099	1.01	1.03	71.6	23,502
Area	4.67	0.08	9.23	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.0	38.0	< 0.005	< 0.005	—	38.1
Energy	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	4,375	4,375	0.34	0.03	—	4,393
Water	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Waste	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Total	14.4	10.1	97.8	0.23	0.24	20.0	20.3	0.23	5.08	5.31	407	27,600	28,007	42.1	1.11	184	29,574
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.00	9.66	73.2	0.21	0.15	20.0	20.2	0.14	5.08	5.22	—	21,659	21,659	1.04	1.06	1.86	22,003
Area	3.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	4,375	4,375	0.34	0.03	—	4,393
Water	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Waste	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Total	12.2	10.7	74.0	0.22	0.22	20.0	20.2	0.22	5.08	5.30	407	26,123	26,530	42.1	1.14	114	28,037
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.19	7.91	61.2	0.17	0.12	16.0	16.1	0.11	4.06	4.17	—	17,636	17,636	0.84	0.86	24.9	17,939
Area	4.20	0.05	6.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.0	26.0	< 0.005	< 0.005	—	26.1
Energy	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	4,375	4,375	0.34	0.03	—	4,393
Water	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Waste	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Total	11.4	8.98	68.3	0.18	0.21	16.0	16.2	0.20	4.06	4.26	407	22,126	22,533	41.9	0.94	137	23,999
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	1.31	1.44	11.2	0.03	0.02	2.92	2.94	0.02	0.74	0.76	—	2,920	2,920	0.14	0.14	4.13	2,970
Area	0.77	0.01	1.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.30	4.30	< 0.005	< 0.005	—	4.32
Energy	0.01	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	724	724	0.06	0.01	—	727
Water	—	—	—	—	—	—	—	—	—	—	3.32	14.6	18.0	0.34	0.01	—	28.9
Waste	—	—	—	—	—	—	—	—	—	—	64.1	0.00	64.1	6.40	0.00	—	224
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.6	18.6
Total	2.09	1.64	12.5	0.03	0.04	2.92	2.96	0.04	0.74	0.78	67.4	3,663	3,731	6.94	0.16	22.8	3,973

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314

Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.43	0.41	< 0.005	0.02	—	0.02	0.02	—	0.02	—	72.5	72.5	< 0.005	< 0.005	—	72.8
Dust From Material Movement	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.1
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	1.36	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	247	247	0.01	0.01	0.91	250
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	2.07	1.16	0.01	0.02	0.46	0.49	0.02	0.13	0.15	—	1,729	1,729	0.18	0.28	3.67	1,821
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.08	0.08	1.03	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	226	226	0.01	0.01	0.02	229
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	2.16	1.17	0.01	0.02	0.46	0.49	0.02	0.13	0.15	—	1,729	1,729	0.18	0.28	0.10	1,818
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.14	3.14	< 0.005	< 0.005	0.01	3.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.7	23.7	< 0.005	< 0.005	0.02	24.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.52	0.52	< 0.005	< 0.005	< 0.005	0.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.92	3.92	< 0.005	< 0.005	< 0.005	4.13

3.2. Site Preparation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.43	0.41	< 0.005	0.02	—	0.02	0.02	—	0.02	—	72.5	72.5	< 0.005	< 0.005	—	72.8
Dust From Material Movement	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.1
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	1.36	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	247	247	0.01	0.01	0.91	250
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	2.07	1.16	0.01	0.02	0.46	0.49	0.02	0.13	0.15	—	1,729	1,729	0.18	0.28	3.67	1,821

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	1.03	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	226	226	0.01	0.01	0.02	229
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	2.16	1.17	0.01	0.02	0.46	0.49	0.02	0.13	0.15	—	1,729	1,729	0.18	0.28	0.10	1,818
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.14	3.14	< 0.005	< 0.005	0.01	3.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.7	23.7	< 0.005	< 0.005	0.02	24.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.52	0.52	< 0.005	< 0.005	< 0.005	0.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.92	3.92	< 0.005	< 0.005	< 0.005	4.13

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.36	0.39	< 0.005	0.02	—	0.02	0.01	—	0.01	—	64.9	64.9	< 0.005	< 0.005	—	65.1
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.8
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	1.17	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	211	211	0.01	0.01	0.78	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.29	0.73	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,080	1,080	0.11	0.18	2.30	1,138
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.31	4.31	< 0.005	< 0.005	0.01	4.37

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.7	23.7	< 0.005	< 0.005	0.02	24.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.92	3.92	< 0.005	< 0.005	< 0.005	4.13

3.4. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.36	0.39	< 0.005	0.02	—	0.02	0.01	—	0.01	—	64.9	64.9	< 0.005	< 0.005	—	65.1
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.8
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	1.17	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	211	211	0.01	0.01	0.78	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.29	0.73	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,080	1,080	0.11	0.18	2.30	1,138
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.31	4.31	< 0.005	< 0.005	0.01	4.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.7	23.7	< 0.005	< 0.005	0.02	24.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.92	3.92	< 0.005	< 0.005	< 0.005	4.13

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	5.25	6.56	0.01	0.22	—	0.22	0.20	—	0.20	—	1,206	1,206	0.05	0.01	—	1,210
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.96	1.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	200	200	0.01	< 0.005	—	200
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.37	6.52	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	1,180	1,180	0.05	0.04	4.38	1,198
Vendor	0.03	1.20	0.65	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,081	1,081	0.08	0.16	3.04	1,134

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.41	4.92	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	1,082	1,082	0.05	0.04	0.11	1,096
Vendor	0.03	1.25	0.65	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,081	1,081	0.08	0.16	0.08	1,132
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.22	2.61	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	552	552	0.03	0.02	0.95	560
Vendor	0.01	0.63	0.32	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	0.04	0.08	0.66	570
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	91.4	91.4	< 0.005	< 0.005	0.16	92.7
Vendor	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	90.0	90.0	0.01	0.01	0.11	94.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	5.25	6.56	0.01	0.22	—	0.22	0.20	—	0.20	—	1,206	1,206	0.05	0.01	—	1,210
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.96	1.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	200	200	0.01	< 0.005	—	200
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.37	6.52	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	1,180	1,180	0.05	0.04	4.38	1,198
Vendor	0.03	1.20	0.65	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,081	1,081	0.08	0.16	3.04	1,134
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.41	4.92	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	1,082	1,082	0.05	0.04	0.11	1,096
Vendor	0.03	1.25	0.65	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,081	1,081	0.08	0.16	0.08	1,132
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.22	2.61	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	552	552	0.03	0.02	0.95	560
Vendor	0.01	0.63	0.32	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	0.04	0.08	0.66	570
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	91.4	91.4	< 0.005	< 0.005	0.16	92.7
Vendor	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	90.0	90.0	0.01	0.01	0.11	94.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.27	1.67	< 0.005	0.05	—	0.05	0.04	—	0.04	—	310	310	0.01	< 0.005	—	311
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.23	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.3	51.3	< 0.005	< 0.005	—	51.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.37	4.55	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	1,060	1,060	0.02	0.04	0.10	1,073
Vendor	0.02	1.19	0.63	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,063	1,063	0.08	0.16	0.07	1,114
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.62	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	139	139	< 0.005	0.01	0.22	141
Vendor	< 0.005	0.16	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	137	137	0.01	0.02	0.16	144
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.0	23.0	< 0.005	< 0.005	0.04	23.3
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.7	22.7	< 0.005	< 0.005	0.03	23.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.27	1.67	< 0.005	0.05	—	0.05	0.04	—	0.04	—	310	310	0.01	< 0.005	—	311
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.23	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.3	51.3	< 0.005	< 0.005	—	51.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.37	4.55	0.00	0.00	1.09	1.09	0.00	0.26	0.26	—	1,060	1,060	0.02	0.04	0.10	1,073
Vendor	0.02	1.19	0.63	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,063	1,063	0.08	0.16	0.07	1,114
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.62	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	139	139	< 0.005	0.01	0.22	141
Vendor	< 0.005	0.16	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	137	137	0.01	0.02	0.16	144
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.0	23.0	< 0.005	< 0.005	0.04	23.3
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.7	22.7	< 0.005	< 0.005	0.03	23.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	3.28	4.45	0.01	0.14	—	0.14	0.13	—	0.13	—	679	679	0.03	0.01	—	682
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.60	0.81	< 0.005	0.03	—	0.03	0.02	—	0.02	—	112	112	< 0.005	< 0.005	—	113
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	1.56	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	282	282	0.01	0.01	1.05	286
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.10	1.17	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	258	258	0.01	0.01	0.03	262
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.62	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	132	132	0.01	< 0.005	0.23	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.8	21.8	< 0.005	< 0.005	0.04	22.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	3.28	4.45	0.01	0.14	—	0.14	0.13	—	0.13	—	679	679	0.03	0.01	—	682
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.60	0.81	< 0.005	0.03	—	0.03	0.02	—	0.02	—	112	112	< 0.005	< 0.005	—	113
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	1.56	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	282	282	0.01	0.01	1.05	286
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.10	1.17	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	258	258	0.01	0.01	0.03	262
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.62	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	132	132	0.01	< 0.005	0.23	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.8	21.8	< 0.005	< 0.005	0.04	22.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	6.23	8.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,350	1,350	0.05	0.01	—	1,355
Paving	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.81	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	174	174	0.01	< 0.005	—	175
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.9	28.9	< 0.005	< 0.005	—	29.0
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.09	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.02	256
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.2	33.2	< 0.005	< 0.005	0.05	33.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.49	5.49	< 0.005	< 0.005	0.01	5.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Paving (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	6.23	8.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,350	1,350	0.05	0.01	—	1,355
Paving	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.81	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	174	174	0.01	< 0.005	—	175
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.9	28.9	< 0.005	< 0.005	—	29.0
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.09	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.02	256
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.2	33.2	< 0.005	< 0.005	0.05	33.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.49	5.49	< 0.005	< 0.005	0.01	5.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.44	0.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	67.2	67.2	< 0.005	< 0.005	—	67.4
Architectural Coatings	2.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.1	11.1	< 0.005	< 0.005	—	11.2
Architectural Coatings	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.30	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	236	236	0.01	0.01	0.88	240
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	0.98	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	216	216	0.01	0.01	0.02	219
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.52	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	110	110	0.01	< 0.005	0.19	112
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.3	18.3	< 0.005	< 0.005	0.03	18.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Architectural Coating (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.44	0.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	67.2	67.2	< 0.005	< 0.005	—	67.4
Architectural Coatings	2.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.1	11.1	< 0.005	< 0.005	—	11.2
Architectural Coatings	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.30	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	236	236	0.01	0.01	0.88	240
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	0.98	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	216	216	0.01	0.01	0.02	219
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.52	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	110	110	0.01	< 0.005	0.19	112
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.3	18.3	< 0.005	< 0.005	0.03	18.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.2	17.2	< 0.005	< 0.005	—	17.3
Architectural Coatings	0.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.85	2.85	< 0.005	< 0.005	—	2.86
Architectural Coatings	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.91	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	212	212	< 0.005	0.01	0.02	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.8	27.8	< 0.005	< 0.005	0.04	28.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.60	4.60	< 0.005	< 0.005	0.01	4.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.2	17.2	< 0.005	< 0.005	—	17.3
Architectural Coatings	0.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.85	2.85	< 0.005	< 0.005	—	2.86
Architectural Coatings	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.91	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	212	212	< 0.005	0.01	0.02	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.8	27.8	< 0.005	< 0.005	0.04	28.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.60	4.60	< 0.005	< 0.005	0.01	4.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	7.09	6.62	64.5	0.17	0.11	14.7	14.8	0.10	3.74	3.84	—	17,003	17,003	0.74	0.76	52.7	17,300
Hotel	3.32	3.10	30.2	0.08	0.05	6.90	6.95	0.05	1.75	1.80	—	7,960	7,960	0.35	0.35	24.7	8,099
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	10.4	9.72	94.7	0.24	0.16	21.6	21.8	0.15	5.49	5.64	—	24,963	24,963	1.09	1.11	77.4	25,399
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	6.62	7.11	53.9	0.16	0.11	14.7	14.8	0.10	3.74	3.84	—	15,943	15,943	0.77	0.78	1.37	16,197
Hotel	3.10	3.33	25.2	0.07	0.05	6.90	6.95	0.05	1.75	1.80	—	7,464	7,464	0.36	0.37	0.64	7,582
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	9.72	10.4	79.1	0.23	0.16	21.6	21.8	0.15	5.49	5.64	—	23,407	23,407	1.13	1.15	2.01	23,779
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.86	0.94	7.28	0.02	0.01	1.90	1.92	0.01	0.48	0.50	—	1,905	1,905	0.09	0.09	2.69	1,938
Hotel	0.56	0.62	4.77	0.01	0.01	1.25	1.26	0.01	0.32	0.33	—	1,248	1,248	0.06	0.06	1.76	1,270
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.42	1.56	12.1	0.03	0.02	3.15	3.17	0.02	0.80	0.82	—	3,153	3,153	0.15	0.15	4.46	3,208

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	6.54	6.11	59.6	0.15	0.10	13.6	13.7	0.09	3.45	3.55	—	15,690	15,690	0.68	0.70	48.7	15,964
Hotel	3.09	2.89	28.1	0.07	0.05	6.42	6.47	0.04	1.63	1.67	—	7,409	7,409	0.32	0.33	23.0	7,539
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	9.64	9.00	87.7	0.22	0.15	20.0	20.2	0.14	5.08	5.22	—	23,099	23,099	1.01	1.03	71.6	23,502
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	6.11	6.56	49.7	0.14	0.10	13.6	13.7	0.09	3.45	3.55	—	14,712	14,712	0.71	0.72	1.26	14,946
Hotel	2.89	3.10	23.5	0.07	0.05	6.42	6.47	0.04	1.63	1.67	—	6,947	6,947	0.33	0.34	0.60	7,058
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	9.00	9.66	73.2	0.21	0.15	20.0	20.2	0.14	5.08	5.22	—	21,659	21,659	1.04	1.06	1.86	22,003
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.79	0.87	6.72	0.02	0.01	1.76	1.77	0.01	0.45	0.46	—	1,758	1,758	0.08	0.09	2.48	1,788
Hotel	0.52	0.57	4.44	0.01	0.01	1.16	1.17	0.01	0.29	0.30	—	1,162	1,162	0.06	0.06	1.64	1,182
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.31	1.44	11.2	0.03	0.02	2.92	2.94	0.02	0.74	0.76	—	2,920	2,920	0.14	0.14	4.13	2,970

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	1,300	1,300	0.09	0.01	—	1,306
Hotel	—	—	—	—	—	—	—	—	—	—	—	1,407	1,407	0.10	0.01	—	1,413
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	372	372	0.03	< 0.005	—	374
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	50.3	50.3	< 0.005	< 0.005	—	50.5
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	38.6	38.6	< 0.005	< 0.005	—	38.8
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3,168	3,168	0.23	0.03	—	3,182
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	1,300	1,300	0.09	0.01	—	1,306
Hotel	—	—	—	—	—	—	—	—	—	—	—	1,407	1,407	0.10	0.01	—	1,413
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	372	372	0.03	< 0.005	—	374
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	50.3	50.3	< 0.005	< 0.005	—	50.5

Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	38.6	38.6	< 0.005	< 0.005	—	38.8
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3,168	3,168	0.23	0.03	—	3,182
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	215	215	0.02	< 0.005	—	216
Hotel	—	—	—	—	—	—	—	—	—	—	—	233	233	0.02	< 0.005	—	234
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	61.6	61.6	< 0.005	< 0.005	—	61.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	8.33	8.33	< 0.005	< 0.005	—	8.37
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	6.39	6.39	< 0.005	< 0.005	—	6.42
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	525	525	0.04	< 0.005	—	527

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	1,300	1,300	0.09	0.01	—	1,306
Hotel	—	—	—	—	—	—	—	—	—	—	—	1,407	1,407	0.10	0.01	—	1,413
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	372	372	0.03	< 0.005	—	374
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	50.3	50.3	< 0.005	< 0.005	—	50.5
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	38.6	38.6	< 0.005	< 0.005	—	38.8
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3,168	3,168	0.23	0.03	—	3,182
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	1,300	1,300	0.09	0.01	—	1,306
Hotel	—	—	—	—	—	—	—	—	—	—	—	1,407	1,407	0.10	0.01	—	1,413
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	372	372	0.03	< 0.005	—	374
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	50.3	50.3	< 0.005	< 0.005	—	50.5
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	38.6	38.6	< 0.005	< 0.005	—	38.8

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3,168	3,168	0.23	0.03	—	3,182
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	215	215	0.02	< 0.005	—	216
Hotel	—	—	—	—	—	—	—	—	—	—	—	233	233	0.02	< 0.005	—	234
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	61.6	61.6	< 0.005	< 0.005	—	61.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	8.33	8.33	< 0.005	< 0.005	—	8.37
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	6.39	6.39	< 0.005	< 0.005	—	6.42
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	525	525	0.04	< 0.005	—	527

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	528	528	0.05	< 0.005	—	529

Hotel	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	680	680	0.06	< 0.005	—	682
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	1,207	1,207	0.11	< 0.005	—	1,211
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	528	528	0.05	< 0.005	—	529
Hotel	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	680	680	0.06	< 0.005	—	682
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	1,207	1,207	0.11	< 0.005	—	1,211
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.4	87.4	0.01	< 0.005	—	87.6
Hotel	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	113	113	0.01	< 0.005	—	113
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	200	200	0.02	< 0.005	—	200

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	528	528	0.05	< 0.005	—	529
Hotel	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	680	680	0.06	< 0.005	—	682

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	1,207	1,207	0.11	< 0.005	—	1,211
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	528	528	0.05	< 0.005	—	529
Hotel	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	680	680	0.06	< 0.005	—	682
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	1,207	1,207	0.11	< 0.005	—	1,211

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.4	87.4	0.01	< 0.005	—	87.6
Hotel	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	113	113	0.01	< 0.005	—	113
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	200	200	0.02	< 0.005	—	200

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	1.52	0.08	9.23	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.0	38.0	< 0.005	< 0.005	—	38.1
Total	4.67	0.08	9.23	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.0	38.0	< 0.005	< 0.005	—	38.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	0.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipme nt	0.19	0.01	1.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.30	4.30	< 0.005	< 0.005	—	4.32
Total	0.77	0.01	1.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.30	4.30	< 0.005	< 0.005	—	4.32

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipme nt	1.52	0.08	9.23	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.0	38.0	< 0.005	< 0.005	—	38.1
Total	4.67	0.08	9.23	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.0	38.0	< 0.005	< 0.005	—	38.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	0.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipme nt	0.19	0.01	1.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.30	4.30	< 0.005	< 0.005	—	4.32
Total	0.77	0.01	1.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.30	4.30	< 0.005	< 0.005	—	4.32

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	14.4	63.6	78.1	1.48	0.04	—	126
Hotel	—	—	—	—	—	—	—	—	—	—	5.44	24.0	29.5	0.56	0.01	—	47.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.17	0.75	0.92	0.02	< 0.005	—	1.48
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	14.4	63.6	78.1	1.48	0.04	—	126
Hotel	—	—	—	—	—	—	—	—	—	—	5.44	24.0	29.5	0.56	0.01	—	47.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Recreati Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.17	0.75	0.92	0.02	< 0.005	—	1.48
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	2.39	10.5	12.9	0.25	0.01	—	20.8
Hotel	—	—	—	—	—	—	—	—	—	—	0.90	3.98	4.88	0.09	< 0.005	—	7.86
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.03	0.12	0.15	< 0.005	< 0.005	—	0.25
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	3.32	14.6	18.0	0.34	0.01	—	28.9

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	—	—	—	—	—	—	—	—	—	—	14.4	63.6	78.1	1.48	0.04	—	126
Hotel	—	—	—	—	—	—	—	—	—	—	5.44	24.0	29.5	0.56	0.01	—	47.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.17	0.75	0.92	0.02	< 0.005	—	1.48
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	14.4	63.6	78.1	1.48	0.04	—	126
Hotel	—	—	—	—	—	—	—	—	—	—	5.44	24.0	29.5	0.56	0.01	—	47.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.17	0.75	0.92	0.02	< 0.005	—	1.48

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	20.0	88.4	108	2.06	0.05	—	175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	2.39	10.5	12.9	0.25	0.01	—	20.8
Hotel	—	—	—	—	—	—	—	—	—	—	0.90	3.98	4.88	0.09	< 0.005	—	7.86
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.03	0.12	0.15	< 0.005	< 0.005	—	0.25
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	3.32	14.6	18.0	0.34	0.01	—	28.9

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	—	—	—	—	—	—	—	—	—	—	349	0.00	349	34.9	0.00	—	1,222
Hotel	—	—	—	—	—	—	—	—	—	—	33.0	0.00	33.0	3.30	0.00	—	116
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	4.61	0.00	4.61	0.46	0.00	—	16.1
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	349	0.00	349	34.9	0.00	—	1,222
Hotel	—	—	—	—	—	—	—	—	—	—	33.0	0.00	33.0	3.30	0.00	—	116
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	4.61	0.00	4.61	0.46	0.00	—	16.1

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	57.8	0.00	57.8	5.78	0.00	—	202
Hotel	—	—	—	—	—	—	—	—	—	—	5.47	0.00	5.47	0.55	0.00	—	19.1
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.76	0.00	0.76	0.08	0.00	—	2.67
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	64.1	0.00	64.1	6.40	0.00	—	224

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	349	0.00	349	34.9	0.00	—	1,222

Hotel	—	—	—	—	—	—	—	—	—	—	33.0	0.00	33.0	3.30	0.00	—	116
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	4.61	0.00	4.61	0.46	0.00	—	16.1
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	349	0.00	349	34.9	0.00	—	1,222
Hotel	—	—	—	—	—	—	—	—	—	—	33.0	0.00	33.0	3.30	0.00	—	116
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	4.61	0.00	4.61	0.46	0.00	—	16.1
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	387	0.00	387	38.7	0.00	—	1,354
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	57.8	0.00	57.8	5.78	0.00	—	202
Hotel	—	—	—	—	—	—	—	—	—	—	5.47	0.00	5.47	0.55	0.00	—	19.1
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	0.76	0.00	0.76	0.08	0.00	—	2.67
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	64.1	0.00	64.1	6.40	0.00	—	224

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.53	1.53
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	111	111

Recreati Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.53	1.53
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	111	111
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.4	18.4
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.6	18.6

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.53	1.53
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	111	111
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.53	1.53
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	111	111
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	113	113
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.4	18.4
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.6	18.6

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	3/30/2025	4/6/2025	5.00	5.00	—
Grading	Grading	4/7/2025	4/18/2025	5.00	8.00	—
Building Construction	Building Construction	4/19/2025	3/7/2026	5.00	230	—
Paving	Paving	4/19/2025	3/7/2026	5.00	230	—
Architectural Coating	Architectural Coating	4/19/2025	3/7/2026	5.00	230	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	25.0	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	15.6	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	83.8	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	35.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	16.8	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	25.0	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	15.6	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	83.8	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	35.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	16.8	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	197,718	65,635	8,025

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	1,000	7.50	0.00	—
Grading	1,000	—	8.00	0.00	—
Paving	0.00	0.00	0.00	0.00	3.07

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Medical Office Building	0.00	0%
Hotel	0.00	0%
Enclosed Parking with Elevator	0.62	100%
Parking Lot	1.06	100%
Recreational Swimming Pool	0.00	0%
Other Non-Asphalt Surfaces	1.39	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	453	0.03	< 0.005
2026	0.00	453	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Medical Office Building	1,912	0.00	0.00	498,381	20,770	0.00	0.00	5,415,120
Hotel	895	895	895	326,631	9,723	9,723	9,723	3,548,983
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Medical Office Building	1,764	0.00	0.00	459,874	19,165	0.00	0.00	4,996,719
Hotel	833	833	833	304,036	9,051	9,051	9,051	3,303,476
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	197,718	65,635	8,025

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Medical Office Building	1,047,113	453	0.0330	0.0040	1,646,401
Hotel	1,132,979	453	0.0330	0.0040	2,120,805

Enclosed Parking with Elevator	299,744	453	0.0330	0.0040	0.00
Parking Lot	40,524	453	0.0330	0.0040	0.00
Recreational Swimming Pool	31,099	453	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	453	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Medical Office Building	1,047,113	453	0.0330	0.0040	1,646,401
Hotel	1,132,979	453	0.0330	0.0040	2,120,805
Enclosed Parking with Elevator	299,744	453	0.0330	0.0040	0.00
Parking Lot	40,524	453	0.0330	0.0040	0.00
Recreational Swimming Pool	31,099	453	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	453	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Medical Office Building	7,528,832	11.1
Hotel	2,841,078	11.1
Enclosed Parking with Elevator	0.00	0.00
Parking Lot	0.00	0.00
Recreational Swimming Pool	88,715	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Medical Office Building	7,528,832	11.1
Hotel	2,841,078	11.1
Enclosed Parking with Elevator	0.00	0.00
Parking Lot	0.00	0.00
Recreational Swimming Pool	88,715	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Medical Office Building	648	—
Hotel	61.3	—
Enclosed Parking with Elevator	0.00	—
Parking Lot	0.00	—
Recreational Swimming Pool	8.55	—
Other Non-Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Medical Office Building	648	—
Hotel	61.3	—
Enclosed Parking with Elevator	0.00	—
Parking Lot	0.00	—
Recreational Swimming Pool	8.55	—

Other Non-Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Recreational Swimming Pool	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Recreational Swimming Pool	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.1	annual days of extreme heat
Extreme Precipitation	4.85	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	98.7
AQ-PM	80.6
AQ-DPM	82.9
Drinking Water	87.6
Lead Risk Housing	38.6
Pesticides	0.00
Toxic Releases	60.9
Traffic	89.5
Effect Indicators	—
CleanUp Sites	68.9
Groundwater	39.8
Haz Waste Facilities/Generators	70.1
Impaired Water Bodies	0.00
Solid Waste	54.8
Sensitive Population	—
Asthma	64.9
Cardio-vascular	70.7
Low Birth Weights	34.5
Socioeconomic Factor Indicators	—
Education	84.5
Housing	81.8
Linguistic	—
Poverty	85.7
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	13.96124727
Employed	11.51032978
Median HI	33.45309893
Education	—
Bachelor's or higher	17.04093417
High school enrollment	13.78159887
Preschool enrollment	11.18952906
Transportation	—
Auto Access	49.51879892
Active commuting	7.532400873
Social	—
2-parent households	22.55870653
Voting	14.97497754
Neighborhood	—
Alcohol availability	53.71487232
Park access	81.35506224
Retail density	42.73065572
Supermarket access	66.46990889
Tree canopy	11.03554472
Housing	—
Homeownership	64.54510458
Housing habitability	7.750545361
Low-inc homeowner severe housing cost burden	41.42178878
Low-inc renter severe housing cost burden	1.193378673
Uncrowded housing	13.49929424
Health Outcomes	—

Insured adults	20.30026947
Arthritis	14.1
Asthma ER Admissions	38.1
High Blood Pressure	23.8
Cancer (excluding skin)	36.4
Asthma	18.0
Coronary Heart Disease	7.5
Chronic Obstructive Pulmonary Disease	13.3
Diagnosed Diabetes	16.2
Life Expectancy at Birth	4.0
Cognitively Disabled	74.6
Physically Disabled	76.0
Heart Attack ER Admissions	32.5
Mental Health Not Good	24.7
Chronic Kidney Disease	10.6
Obesity	26.2
Pedestrian Injuries	19.6
Physical Health Not Good	19.0
Stroke	11.3
Health Risk Behaviors	—
Binge Drinking	63.5
Current Smoker	28.8
No Leisure Time for Physical Activity	23.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	37.8
Elderly	61.3

English Speaking	42.9
Foreign-born	53.1
Outdoor Workers	52.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	51.9
Traffic Density	80.2
Traffic Access	23.0
Other Indices	—
Hardship	88.6
Other Decision Support	—
2016 Voting	34.9

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	93.0
Healthy Places Index Score for Project Location (b)	9.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Lot acreage for medical office building was updated to match site plan. Lot acreage and building square footage for hotel were updated to match site plan. Lot acreage for the enclosed parking with elevator land use was updated to match site plan for the 3-story parking garage.
Construction: Construction Phases	Building construction, paving, and architectural coating assumed to occur simultaneously. Demolition was removed because the parcel is vacant.
Operations: Vehicle Data	Project trip generation from KOA Corporation.
Operations: Energy Use	Energy consumption for pool heating estimated based on average cost of heating outdoor pools with a heat pump in Southern California.

APPENDIX B

Biological Technical Report

Biological Technical Report
for the
Pepper Clinic LLC Development Project

San Bernardino County, California

Prepared For:

City of Colton Development Services Department
659 N. La Cadena Drive
Colton, California 92324

Prepared By:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS
215 North 5th Street
Redlands, California 92374

October 2024

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LIST OF ACRONYMS AND ABBREVIATIONS

Term	Definition
°F	degrees Fahrenheit
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CNPSEI	California Native Plan Society's Electronic Inventory
CRPR	California Rare Plant Rank
CWA	Clean Water Act
ECORP	ECORP Consulting, Inc.
ESA	Endangered Species Act
FR	Federal Register
GPS	Global Positioning System
HCP	Habitat Conservation Plan
MBTA	Migratory Bird Treaty Act
mph	miles per hour
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OHWM	Ordinary High-Water Mark
Procedures	Procedures for Discharges of Dredged or Fill Material to Waters of the State
Project	Pepper Clinic LLC Development Project
PUS	palustrine, unconsolidated shore
RLC	Rivers and Lands Conservancy
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSC	California Species of Special Concern
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WEAP	Worker Environmental Awareness Program
WOTUS	Waters of the United States

1.0 INTRODUCTION

ECORP Consulting, Inc. (ECORP) conducted a biological reconnaissance survey at an approximately 9-acre property Assessor's Parcel Number 025-071-10-0000 along N Pepper Avenue in the City of Colton, San Bernardino County, California. The survey was conducted to identify any potential biological resources that could be affected by the proposed Pepper Clinic LLC Development Project (Project) pursuant to the terms of the California Environmental Quality Act (CEQA), and for the purposes of identifying any biological constraints that would affect the proposed site plan for the Project. The Project will be subject to county, state, and federal regulations regarding compliance with the federal Endangered Species Act (ESA), California ESA, Migratory Bird Treaty Act (MBTA), Clean Water Act (CWA) regulations, California Fish and Game Code, and the West Valley Habitat Conservation Plan.

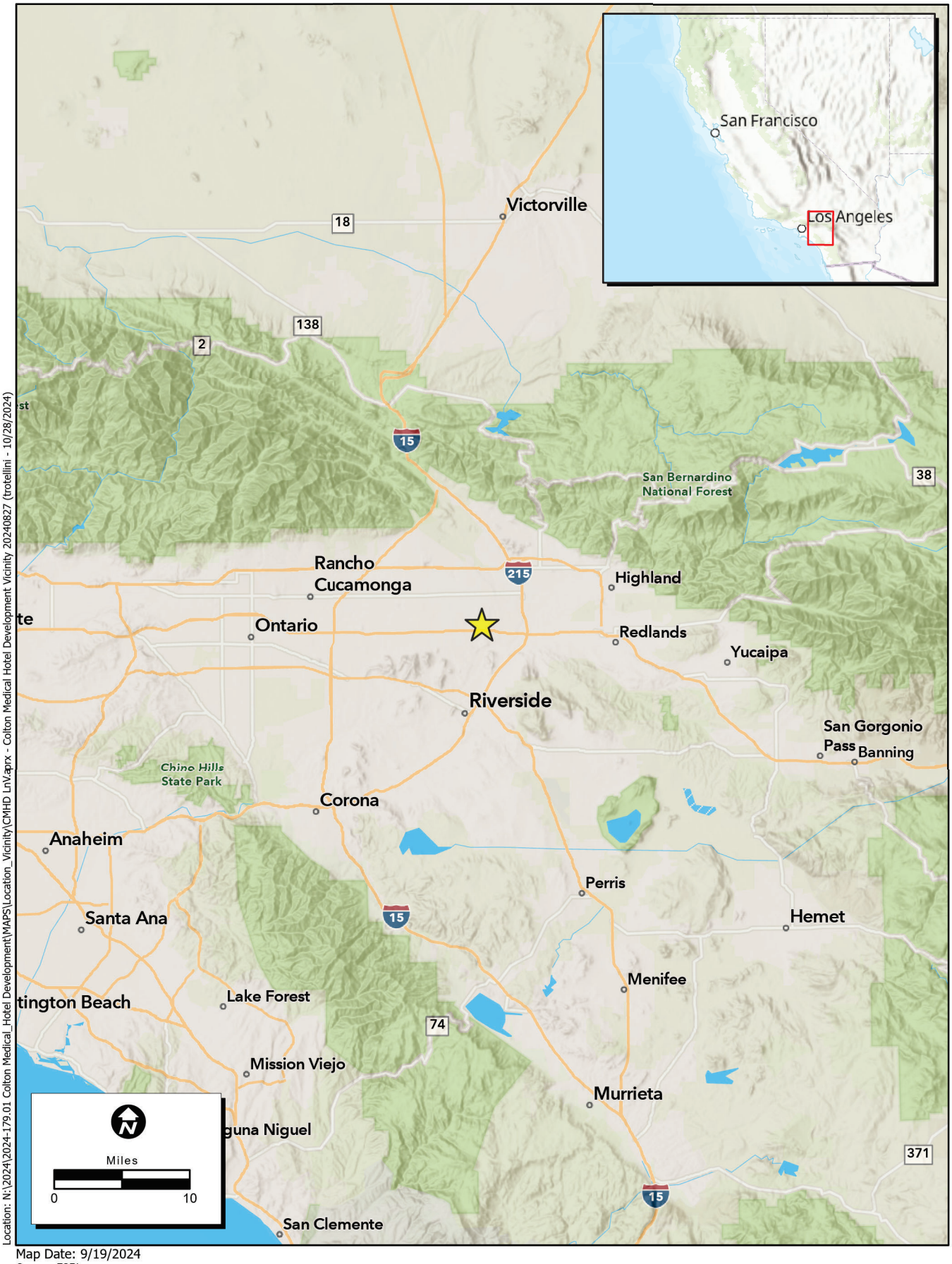
1.1 Project Description and Location

The Project proposes construction of a three-story 60,000-square-foot medical office clinic, a five-story 71,000-square-foot commercial hotel with 112 guestrooms, a three-story parking structure, and associated site improvements. For the purposes of this report, the Project Area refers to the entire approximately 9-acre property for the Pepper Clinic LLC Development. The Project Area is located within the West Valley Habitat Conservation Plan (HCP), which has delineated habitat within its planning area that can be developed and areas to be conserved as habitat for the Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*), both of which occur within the Project Area. The proposed development is planned to occur over 3.84 acres along North Pepper Avenue (referred to hereafter as Area to be Developed) in a developable area of the West Valley HCP. The remaining 5.1 acres of the property is proposed to be reserved for habitat conservation purposes (referred to hereafter as Proposed Conservation Area) in accordance with the West Valley HCP.

The Project Area is located in Section 24 Township 1 South, Range 5 West in the San Bernardino Baseline Meridian as depicted on the San Bernardino South, California, U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map. The Project Area is located north of Interstate (I-) 10, south I-210, west of I-215 and east of I-15 in the City of Colton, California (Figures 1 and 2). The elevation of the Project Area ranges from approximately 1,070 to 1,090 feet above Mean Sea Level (MSL).

2.0 FEDERAL, STATE, AND LOCAL REGULATIONS

This biological reconnaissance survey was conducted to identify potential biological resource constraints on the Project and ensure compliance with federal, state, and local regulations regarding listed, protected, and special-status species and resources. The regulations are detailed below.



Location: N:\2024\2024-179.01 Colton Medical_Hotel Development\MAPS\Location_Vicinity\CMHD LnVic.aprx - Colton Medical Hotel Development Vicinity 20240827 (trotellini - 10/28/2024)

Map Date: 9/19/2024

Sources: ESRI

Figure 1. Project Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2024-179.01 Pepper Clinic LLC Development Project



Location: N:\2024\2024-179.01 Colton Medical_Hotel Development\MAPS\Location_Vicinity\CMHD LnV.aprx - Colton Medical Hotel Development Location 20240827 (lgalvez - 9/5/2024)

Map Date: 9/5/2024

Sources: Esri World Imagery, County of San Bernardino (2023)

Figure 2. Project Location

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2.1 Federal Regulations

2.1.1 The Federal Endangered Species Act

The federal ESA protects plants and animals that are listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service. Section 9 of the ESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 U.S. Code 1538).

Under Section 7 of the ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of the ESA provides for issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan is developed.

2.1.2 Migratory Bird Treaty Act

The MBTA implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities including hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR Part 21 Migratory Bird Permits.

2.1.3 Federal Clean Water Act

Under Section 404 of the federal CWA, potential Waters of the United States (WOTUS)., including wetlands, may be regulated by the U.S. Army Corps of Engineers (USACE). The limit of USACE jurisdiction for non-tidal watercourses (without adjacent wetlands) is defined in 33 CFR 328.4(c)(1) as the *Ordinary High-Water Mark* (OHWM).

The OHWM is defined as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. The upstream limits of other waters are defined as the point where the OHWM is no longer perceptible.

Jurisdictional WOTUS are delineated in accordance with the "Revised Definition of 'Waters of the United States'" rule, published in the Federal Register (FR) in 2022 and which became final on January 18, 2023. This rule, set forth by the U.S. Environmental Protection Agency (USEPA) and USACE, was consistent with the pre-2015 regulatory definition as all waters that are currently used, or were used in the past, or may be susceptible to use in interstate commerce, including all waters subject to the ebb and flow of the tide. This definition also includes all interstate waters, including interstate wetlands, interstate lakes, rivers, streams (including all intermittent and ephemeral streams), mudflats, sand flats, sloughs, and prairie potholes, wet meadows, playa lakes, or natural ponds where the use, degradation, or destruction of which could affect interstate or foreign commerce. Under this rule, WOTUS do not include prior converted cropland.

The definition of WOTUS in accordance with this rule (40 CFR 230.3[s]), is summarized below.

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (iii) Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the U.S. under the definition;
5. Tributaries of waters identified in paragraphs (s)(1)-(4) of this section;
6. The territorial sea; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not WOTUS.

On May 25, 2023, the U.S. Supreme Court adopted a narrower definition of WOTUS in the case *Sackett v. Environmental Protection Agency*. Under the majority opinion, WOTUS refers to "geographical features that are described in ordinary parlance as 'streams, oceans, rivers, and lakes' and to adjacent wetlands that are 'indistinguishable' from those bodies of water due to a continuous surface connection." On August 29, 2023, the agencies issued a final rule to amend the final "Revised Definition of 'Waters of the United

States'" rule to conform the definition of "waters of the United States" to the U.S. Supreme Court's May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*.

Parts of the January 2023 Rule are invalid under the U.S. Supreme Court's interpretation of the CWA in the *Sackett* decision. Therefore, the agencies have amended key aspects of the regulatory text to conform to the Court's decision. Key changes under the amendment include:

- Definition of "adjacent" is now "having a continuous surface connection;"
- Only tributaries that are relatively permanent, standing or continuously flowing bodies of water (or tributaries with a continuous surface connection to those) are considered jurisdictional;
- Interstate wetlands are no longer jurisdictional just by virtue of being interstate; and
- Significant nexus test is eliminated.

Where areas jurisdictional to the USACE are present, and will be impacted by a project, the project proponent must usually apply for permitting with the agency, which generally consists of submittal of a Pre-Construction Notification under Section 404 of the CWA. As of the writing of this report, we do not know the details of how the individual USACE offices will implement the conforming rule for permitting purposes.

2.2 State and Local Regulations

2.2.1 California Endangered Species Act

The California ESA generally parallels the main provisions of the ESA but, unlike its federal counterpart, the California ESA applies the take prohibitions to species proposed for listing (called "candidates" by the state). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California ESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with the California Department of Fish and Wildlife (CDFW) to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

2.2.2 Fully Protected Species

The State of California first began to designate species as *fully protected* prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians, reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESA. Previously, the regulations that implement the Fully Protected Species Statute (California Fish and Game Code § 4700) provide that fully protected species may not be taken or possessed at any time. However, as of July 10, 2023 Senate Bill 147 (SB147) was signed into law,

authorizing the CDFW to issue take permits under the California ESA for fully protected species for qualifying projects through 2033. As stated in section 2081.15 of SB147, qualifying projects include:

- a maintenance, repair, or improvement project to the State Water Project, including existing infrastructure, undertaken by the Department of Water Resources;
- a maintenance, repair, or improvement project to critical regional or local water agency infrastructure;
- a transportation project, including any associated habitat connectivity and wildlife crossing project, undertaken by a state, regional, or local agency, that does not increase highway or street capacity for automobile or truck travel;
- a wind project and any appurtenant infrastructure improvement, and any associated electric transmission project carrying electric power from a facility that is located in the state to a point of junction with any California based balancing authority; and
- a solar photovoltaic project and any appurtenant infrastructure improvement, and any associated electric transmission project carrying electric power from a facility that is located in the state to a point of junction with any California-based balancing authority.

2.2.3 California Fish and Game Code

2.2.3.1 Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code §§ 1900-1913) was created with the intent to *preserve, protect and enhance rare and endangered plants in this State*. The NPPA is administered by the CDFW. The California Fish and Game Commission has the authority to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. The California ESA of 1984 (California Fish and Game Code § 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

2.2.3.2 Streambed Alteration Agreement

Pursuant to Section 1602 of the California Fish and Game Code, a Streambed Alteration Agreement (SAA) application must be submitted for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake" (CDFW 2021). In Title 14 of the California Code of Regulations (CCR), Section 1.72, the CDFW defines a *stream* (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation."

In Chapter 9, Section 2785 of the Fish and Game Code, *riparian habitat* is defined as "lands which contain habitat which grows close to, and which depends upon, soil moisture from a nearby freshwater source."

The CDFW's jurisdiction includes drainages with a definable bed, bank, or channel and areas associated with a drainage channel that support intermittent, perennial, or subsurface flows; supports fish or other

aquatic life; or supports riparian or hydrophytic vegetation. It also includes areas that have a hydrologic source.

The CDFW will determine if the proposed actions will result in diversion, obstruction, or change of the natural flow, bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. If warranted, the CDFW will issue an SAA that includes measures to protect affected fish and wildlife resources; this SAA is the final proposal agreed upon by the CDFW and the applicant.

2.2.3.3 Migratory Birds

The CDFW enforces the protection of nongame native birds in §§ 3503, 3503.5, and 3800 of the California Fish and Game Code. Section 3513 of the California Fish and Game Code prohibits the possession or take of birds listed under the MBTA. These sections mandate the protection of California nongame native birds' nests and also make it unlawful to take these birds. All raptor species are also protected from "take" pursuant to California Fish and Game Code § 3503.5 and are also protected at the federal level by the MBTA of 1918 (USFWS 1918).

2.2.3.4 Bats and Bat Roosts

Bats in California are currently protected directly and indirectly by the California Fish and Game Code, Sections 86, 1600, 2000, 2014, 3007, and 4150; California Public Resources Code, Division 14, Section 21000 et seq.; and CCR, Title 14 including, but not limited to Section 251.1, CEQA regulations (Section 15000 et seq.), and Section 15382 – Significant Effect on the Environment.

Regulations of particular relevance to the protection of bats and bat roosts include Title 14, Section 251.1 of the CCR, which prohibits harassment (defined in that section as an intentional act that disrupts an animal's normal behavior patterns, including breeding, feeding, or sheltering) of nongame mammals (e.g., bats), and California Fish and Game Code Section 4150, which prohibits *take* or possession of all nongame mammals or parts thereof. Any activities resulting in bat mortality (e.g., the destruction of an occupied bat roost that results in the death of bats), disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), or various modes of nonlethal pursuit or capture may be considered *take* as defined in Section 86 of the California Fish and Game Code. In addition, impacts to bat maternity colonies, which are considered native wildlife nursery sites, could be considered significant under CEQA.

2.2.4 Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act requires "any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the State to file a report of discharge" with the Regional Water Quality Control Board (RWQCB) through State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) (CCR, title 23, § 3855; State Water Resources Control Board 2021). *Waters of the State* is defined as any surface water or groundwater, including saline waters, within the boundaries of the State (California Water Code § 13050[e]). Pollution is defined as an alteration of the quality of the waters of the state by waste to a degree that unreasonably affects its beneficial uses (California Water Code § 13050) and includes filling in

waters of the State. Note that CCR, title 23, § 3855 applies only to individual water quality certifications, but the new Procedures extend the application of § 3855 to individual waste discharge requirements for discharges of dredged or fill material to Waters of the State and waivers thereof.

A permit for impacts to Waters of the State of California would likely be required under the CWA and/or Porter-Cologne Water Quality Control Act. To determine whether a project should be regulated pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB considers whether project activities could impact the quality of Waters of the State.

On September 27, 2023, the USEPA published its final 2023 CWA Section 401 Quarter Quality Certification Improvement Rule (88 FR 66558.) The final 2023 Rule revises and replaces the 2020 Rule's regulatory requirements for water quality certification that were adopted by the prior federal administration. The updates realign the scope of the Section 401 certification process with established practices, while also restoring the roles of states, territories, and authorized Tribes as certifying agencies.

2.2.5 San Bernardino County Biotic Resources Overlay

The San Bernardino County Biotic Resources Overlay was established by the Land Use Plan and Land Use Zoning Districts (§§ 82.01.020) and the Overlays (§§ 82.01.0230) of the County of San Bernardino. The purpose of the Biotic Resources Overlay is to implement General Plan policies regarding the "protection and conservation of beneficial rare and endangered plants and animal resources and their habitats" (County of San Bernardino 2024). Projects within the County of San Bernardino are required to address the biological resources that appear within the Biotic Resources Overlay and overlap with their project site. Further, project proponents must identify mitigation measures that will reduce or eliminate impacts to the identified resources.

2.2.6 California Environmental Quality Act Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the CEQA checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if a project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or the USFWS;
- 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;

- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCP.

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of an important resource on a population-wide or region-wide basis.

2.2.7 City of Colton

2.2.7.1 Tree Protection Guidelines

Per the City of Colton Municipal Code, Chapter 12.20 Trees and Shrubs, all mature and healthy trees will strongly be considered during the application process (Section 12.20.041; City of Colton 2019)

Per the Tree Protection Guidelines, the following will be ensured:

- Tree protection guidelines are the standards and specifications for the protection of trees under this chapter. The tree protection guidelines, and any revision thereto, shall be effective as of the date of their adoption by resolution of the City Council; or
- All departments, agencies and personnel of the City shall consult with the Public Works Director prior to engaging in any action which would require the removal of, or which would otherwise substantially affect or seriously jeopardize the health of any existing public tree; or
- It shall be the policy of the City to protect and maintain mature and healthy trees. Special consideration shall be afforded to mature, public, landmark, landmark-eligible, native and specimen trees as forth in this chapter; or
- The preservation of mature trees is strongly considered during an application for any permit or approval. A decision may be made through the design review process or other entitlement process to waive development standards or accept alternative solutions to assist in the preservation of these trees. The review authority or director, if there is no other review authority, may modify the development standards or accept alternative solutions to these standards.

2.2.7.2 West Valley Habitat Conservation Plan

A notice in the FR for the proposed West Valley HCP was posted in July 2014 and a 30-year incidental take permit was issued for the West Valley HCP effective February 2015. The focus of the West Valley HCP is on the preservation of populations for the Delhi Sands flower-loving fly that occur north of the I-10 freeway

(RBF 2014) within the city of Colton in San Bernardino County, California. At least four populations are known to occur within the West Valley HCP plan area and would be covered under the West Valley HCP. The West Valley HCP would encompass approximately 416.3 acres to the of north of the I-10 freeway and 5.8 acres of a portion of East Slover Avenue south of the I-10 freeway. Despite approximately 248.2 acres having been developed, the remaining 148.5 acres have been documented to possess potentially suitable Delhi Sands flower-loving fly habitat. The West Valley HCP designated land within their planning area as high, moderate, or low quality habitat for the Delhi sands flower-loving fly. Under the issued incidental take permit, authorized development could occur on 79.4 acres of low, moderate, and high-quality Delhi sands flower-loving fly habitat north of the 1-10 freeway. 50.3 acres of habitat for the Delhi sands flower-loving fly would be conserved as part of the West Valley HCP. Covered activities, as defined by the West Valley HCP would be required to implement mitigation and species-specific avoidance measures within developable lands and biological monitoring, surveys and habitat restoration within conservation areas (RBF 2014).

3.0 METHODS

3.1 Literature Review

Prior to conducting the biological reconnaissance survey, ECORP biologists performed a literature review using the CDFW's California Natural Diversity Database (CNDDB; CDFW 2024a) and the California Native Plant Society's (CNPS') Electronic Inventory (CNPSEI; CNPS 2024b) to determine the special-status plant and wildlife species that have been documented near the Project Area. ECORP searched CNDDB and CNPSEI records within the Project Area boundaries as depicted on USGS 7.5-minute San Bernardino South topographic quadrangle and the surrounding five miles, which included occurrences within the topographic quadrangles of San Bernardino North, Devore, and Fontana. The CNDDB and CNPSEI searches for special-status plant and wildlife species were limited to species that have been documented within five miles of the Project Area since it is surrounded by development, the Project Area's history of disturbance, and the lack of mobility for plant species. Additionally, the CNPSEI search was restricted to an elevation range of 500 feet to 1,600 feet in order to eliminate species associated with the high elevations within the San Bernardino Mountains from the literature search that would not be expected to occur in the Project Area. The CNDDB and CNPSEI contain records of reported occurrences of federally and/or state-listed endangered, threatened, proposed endangered or threatened species, California Species of Special Concern (SSC), or other special-status species or habitat that may occur within or near the Project. Additional information was gathered from the following sources and includes, but is not limited to:

- *State and Federally Listed Endangered and Threatened Animals of California* (CDFW 2024b);
- *Special Animals List* (CDFW 2024c);
- *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012);
- *The Manual of California Vegetation,* 2nd Edition (Sawyer et al. 2009);
- *West Valley Habitat Conservation Plan* (RBF 2014);

- Countywide – All Biotic Resources Overlay Map (County of San Bernardino 2012);
- National Wetlands Inventory (NWI; USFWS 2024a); and
- various online websites (e.g., Calflora 2024).

Using this information and observations in the field, a list of special-status plant and wildlife species that have the potential to occur on or near the Project Area was generated. For the purposes of this assessment, special-status species are defined as plants or animals that:

- have been designated as either rare, threatened, or endangered by the CDFW, the CNPS, or the USFWS, or are protected under either the federal ESA or California ESA;
- are candidate species being considered or proposed for listing under these same acts;
- are fully protected by the California Fish and Game Code, §§ 3511, 4700, 5050, or 5515; or
- are of expressed concern to resource and regulatory agencies or local jurisdictions.

Special-status species reported for the region in the literature review or for which suitable habitat occurs on the site were assessed for their potential to occur within the Project Area based on the following guidelines:

- Present: The species was observed onsite during a site visit or focused survey.
- High: Habitat (including soils and elevation factors) for the species occurs within the Project Area and a known occurrence has recently been recorded (within the last 20 years) within 5 miles of the area.
- Moderate: Habitat (including soils and elevation factors) for the species occurs within the Project Area and a documented observation occurs within the database search, but not within 5 miles of the area; or a recently documented observation occurs within 5 miles of the area and marginal or limited amounts of habitat occurs in the Project Area.
- Low: Limited or marginal habitat for the species occurs within the Project Area and a recently documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.
- Presumed Absent: Species was not observed during a site visit or focused surveys conducted in accordance with protocol guidelines at an appropriate time for identification; habitat (including soils and elevation factors) does not exist onsite; or the known geographic range of the species does not include the Project Area.

Note that location information on some special-status species may be of questionable accuracy or unavailable. Therefore, for survey purposes, the environmental factors associated with a species' occurrence requirements may be considered sufficient reasons to give a species a positive potential for occurrence. In addition, just because a record of a species does not exist in the databases does not mean

it does not occur. In many cases, records may not be present in the databases because an area has not been surveyed for that species.

A review of the Natural Resources Conservation Service (NRCS; NRCS 2024a) Web Soil Survey, NRCS Hydric Soils List (NRCS 2024b), NWI (USFWS 2024a), and the corresponding USGS topographic maps was also conducted to determine if there were any blue line streams or drainages present on the Project Area that potentially fall under the jurisdiction of either federal or state agencies.

3.2 Field Surveys

3.2.1 Biological Reconnaissance Survey

The biological reconnaissance survey was conducted by biologists who walked the entire Project Area and a 500-foot buffer, where accessible, to determine the vegetation communities and wildlife habitats present on the site. Areas that were not accessible by foot were scanned using binoculars for suitable habitat. The biologists documented the plant and wildlife species present on the Project Area, and the location and condition of the Project Area were assessed for the potential to provide habitat for special-status plant and wildlife species. Additionally, the biologists documented features within the Project Area with the potential to be jurisdictional to the USACE, RWQCB, and/or the CDFW; however, a formal aquatic resources delineation was not performed as part of the survey. Data were recorded in the field utilizing ArcGIS™ Field Maps on a device (smartphone or tablet) connected to a Global Positioning System (GPS) unit, field notebooks, or maps. Photographs were also taken during the survey to provide visual representation of the conditions within the Project Area. The Project Area was also examined to assess its potential to facilitate wildlife movement or function as a movement corridor for wildlife moving throughout the region. The biologists also documented the vegetation communities present on the Project Area. Vegetation communities were mapped in accordance with the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). Vegetation communities were classified to the alliance level and followed *A Manual of California Vegetation Online* (CNPS 2024a).

Plant and wildlife species, including any special-status species that were observed during the survey, were recorded. Plant nomenclature follows that of the *Jepson eFlora* (Jepson Flora Project [eds.] 2024) and *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012). Wildlife nomenclature follows Society for the Study of Amphibians and Reptiles (2017), *Check-list of North American Birds* (Chesser et al. 2023), and the *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014). In instances where a special-status species was observed, the date, species, location and habitat, and GPS coordinates were recorded.

3.2.2 Delhi Sands Flower-Loving Fly Habitat Assessment

A habitat assessment for the Delhi Sands flower-loving fly was conducted by a qualified permitted Delhi Sands flower-loving fly biologist. The biologist walked the Project Area by foot and documented the presence or absence of indicator plants for the species, other native plant species that occur in Delhi Sands flower-loving fly habitat, and additional habitat characteristics such as open unconsolidated soils in the Project Area.

4.0 RESULTS

Summarized below are the results of the literature review and field surveys, including site characteristics, vegetation communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors).

4.1 Literature Review

4.1.1 Special-Status Plants and Wildlife

The literature review and database searches identified 40 special-status plant species and 28 special-status wildlife species that have been previously documented within five miles of the Project Area. A list was generated from the results of the literature review and the Project Area was evaluated for suitable habitat that could support any of the special-status plant or wildlife species on the list. Additionally, the Project Area is located within the San Bernardino County Biotic Resources Overlay for Delhi Sands flower-loving fly and burrowing owl (*Athene cunicularia*) (County of San Bernardino 2012).

4.1.2 U.S. Fish and Wildlife Service Designated Critical Habitat

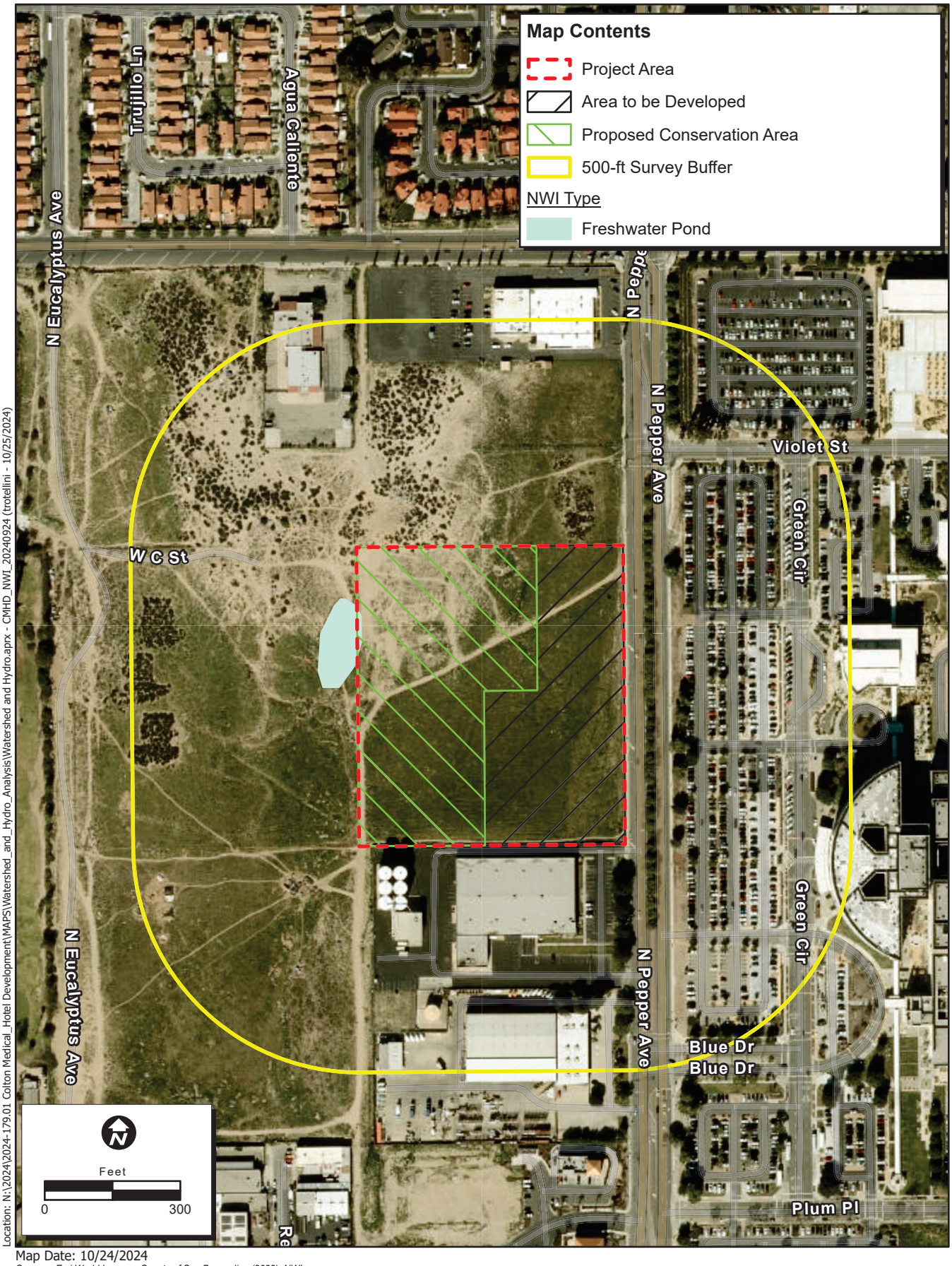
The Project Area is not located within or adjacent to any USFWS-designated Critical Habitat (USFWS 2024b). Designated Critical Habitat for the following species is present in the vicinity of the Project Area: Southwestern willow flycatcher (*Empidonax traillii extimus*) and Santa Ana sucker (*Catostomus santaanae*) is present approximately 1.5 miles south of the Project Area, Coastal California gnatcatcher (*Polioptila californica californica*) is present approximately 2 miles south of the Project Area, San Bernardino Merriam's Kangaroo rat (*Dipodomys merriami parvus*) is present approximately 2.5 miles northeast of the Project Area, and least Bell's vireo (*Vireo bellii pusillus*) is present approximately 8 miles southwest of the Project Area.

4.1.3 Aquatic Resources

The NWI (USFWS 2024a) mapped one aquatic resource, a freshwater pond, within the Project Area. The freshwater pond is predominantly located in the survey buffer and only marginally overlaps with the western portion of the Project Area (Figure 3). The freshwater pond is classified under the NWI as Palustrine, Unconsolidated Shore (PUS; USFWS 2024a). Additionally, the desktop review of the NRCS identified one hydric soil type on the site: Delhi fine sand (NRCS 2024a, 2024b; Figure 4). According to the NRCS, Delhi sands are only potentially hydric where depressional features occur.

4.2 Biological Reconnaissance Survey

The biological reconnaissance survey was conducted within the entire Project Area and a 500-foot survey buffer, where accessible, on September 9, 2024, by ECORP biologists Alexandra Dorough and Shelby Dunn. Summarized below are the results of the biological reconnaissance survey including site characteristics, plant communities present, wildlife observed, special-status species observed, and special-status habitats present (including any potential wildlife corridors). Weather conditions during the survey are summarized in Table 1.

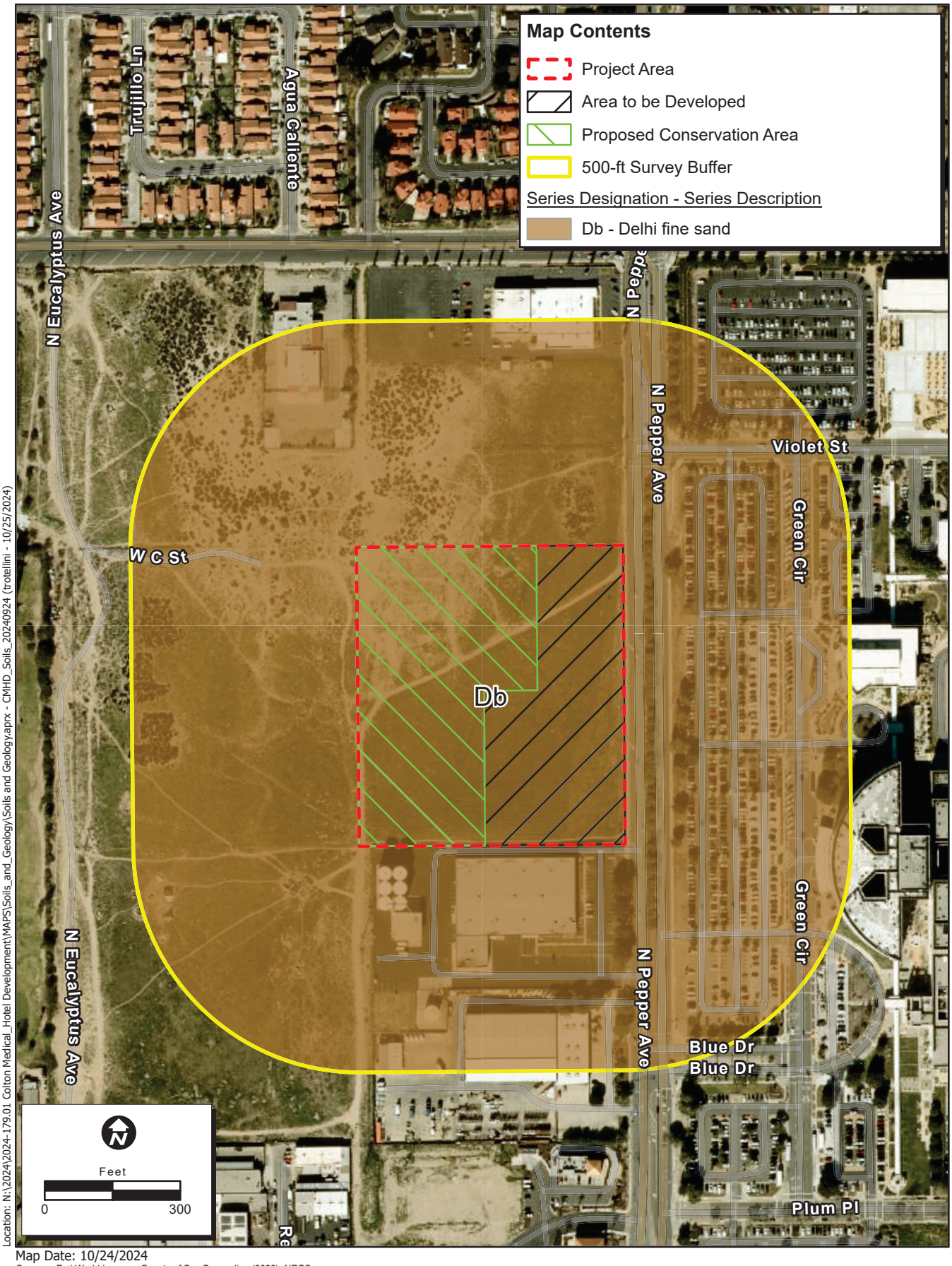


Location: N:\2024\2024-179.01 Colton Medical_Hotel Development\MAPS\Watershed_and_Hydro_Analysis\Watershed and Hydro.aprx - CMHD_NWI_20240924 (trotellini - 10/25/2024)

Map Date: 10/24/2024

Sources: Esri World Imagery, County of San Bernardino (2023), NWI

Figure 3. National Wetlands Inventory



Location: N:\2024\2024-179.01 Colton Medical_Hotel Development\MAPS\Soils_and_Geology\Soils and Geology.aprx - CMHD_Soils_20240924 (trotellini - 10/25/2024)

Map Date: 10/24/2024

Sources: Esri World Imagery, County of San Bernardino (2023), NRCS

Figure 4. Natural Resources Conservation Service Soil Types

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Table 1. Weather Conditions During the Biological Reconnaissance Survey								
Date	Time		Temperature (˚F)		Cloud Cover (%)		Wind Speed (mph)	
	Start	End	Min	Max	Min	Max	Min	Max
9/09/24	0730	1000	79	86	0*	0*	1-3	0-3

Notes: °F = degrees Fahrenheit; mph = miles per hour; *=smoke cover was present due to nearby wildfires

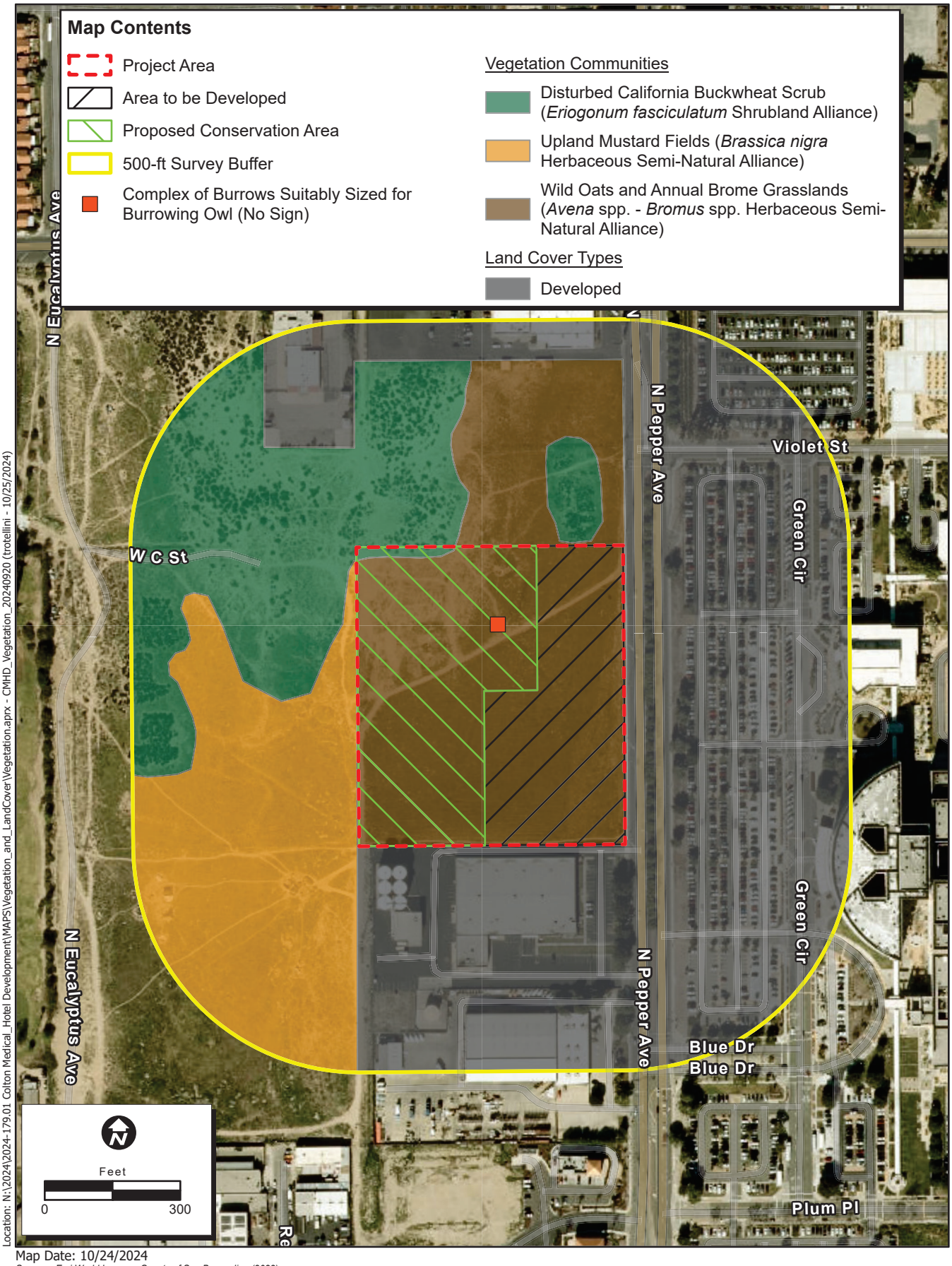
4.2.1 Property Characteristics

The Project Area consists of a sloped, undeveloped lot. Anthropogenic disturbances are abundant throughout the Project Area in the form of disturbed soils (e.g., signs of recent discing, previous sign of grading such as compacted gravelly soil, depressions and pits dug in the ground, fire pit scars), mowed vegetation, scattered trash, unauthorized dumping, homeless encampments, vehicle tracks, and domestic cats and dogs. Small mammal burrows, including California ground squirrel (*Otospermophilus beecheyi*) burrows, are present throughout the Project Area. The Area to be Developed is gently sloped with disced soils in the north, mowed vegetation, is relatively open with few scattered annual species and perennial shrubs, and has compacted gravelly soils along the eastern Project boundary. The Proposed Conservation Area includes the previously described anthropogenic disturbances and small mammal burrows but is also composed of sandy open hills in the northwest. An existing powerline easement bisects the Project Area and includes a dirt road that extends southwest from North Pepper Avenue through the Area to Be Developed and Proposed Conservation Area. Additionally, metal power poles are present in the powerline easement at the northern boundary and at the northwestern boundary of the Project Area.

The Project Area is immediately bound by undeveloped land to the north and west and commercial development to the south and east. General surrounding land uses around the Project Area consist of commercial and residential development to the north, Arrowhead Regional Medical Center to the east, commercial development to the south, and an existing West Valley HCP Conservation Area managed by the Rivers and Lands Conservancy (RLC), the Laing Conservation Site, to the west (RBF 2014; RLC 2024). The Laing Conservation Site is hereby referred to as Existing Conservation Area. Representative photographs of the Project Area are presented in Appendix A.

4.2.2 Vegetation Communities and Land Cover Types

The Project Area is located in an undeveloped lot that is generally subjected to repeated and ongoing disturbance from human activities such as mowed vegetation and homeless encampments. Vegetation communities present within the Project Area included Disturbed California Buckwheat Scrub (*Eriogonum fasciculatum* Shrubland Alliance) and Wild Oat and Annual Brome Grassland (*Avena* spp.
- *Bromus* spp. Herbaceous Semi-Natural Alliance) (Figure 5). Vegetation communities and land cover types within the 500-foot survey buffer include the previously mentioned vegetation communities, Upland Mustard Fields (*Brassica nigra* Herbaceous Semi-Natural Alliance), and Developed. These vegetation communities and land cover types are described below and the acreages of each, as they exist within the Project Area, are provided in Table 2.



Location: N:\2024\2024-179.01 Colton Medical_Hotel Development\MAPS\Vegetation_and_LandCover\Vegetation.aprx - CMHD_Vegetation_20240920 (trotellini - 10/25/2024)

Map Date: 10/24/2024

Sources: Esri World Imagery, County of San Bernardino (2023)

Figure 5. Vegetation Communities, Land Cover Types, and Biological Survey Results

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Table 2. Vegetation Community Acreages Within the Project Area			
Vegetation Communities	**Acreage Within the Area to be Developed**	**Acreage Within Proposed Conservation Area**	**Total Acreage Within the Project Area**
Disturbed California Buckwheat Scrub	0.00	0.11	0.11
Wild Oat and Annual Brome Grassland	3.84	5.00	8.84
Total	**3.84**	**5.11**	**8.95**

Disturbed California Buckwheat Scrub California buckwheat scrub (*Eriogonum fasciculatum* Shrubland Alliance) is dominated by California buckwheat (*Eriogonum fasciculatum*) in the shrub canopy and occurs with other species such as California sagebrush (*Artemisia californica*), sticky monkeyflower (*Diplacus aurantiacus*), brittlebush (*Encelia farinosa*), and white sage (*Salvia apiana*). This community typically occurs at elevations between 0 and 4,000 feet above MSL in coarse, well-drained soils with a continuous or intermittent canopy and a variable, sometimes grassy, herbaceous layer (CNPS 2024a). This community is classified as disturbed due to the heavy presence of anthropogenic disturbances such as trash, homeless encampments, and the presence of nonnative species. Disturbed California buckwheat scrub is present in the northwest portion of the Project Area, within the Proposed Conservation Area, and within the 500-foot survey buffer as depicted in Figure 5. Species observed in this vegetation community at the time of the survey include California buckwheat, California croton (*Croton californicus*), and hollyleaf cherry (*Prunus ilicifolia*).

4.2.2.1 Wild Oat and Annual Brome Grasslands

Wild oat and annual brome grassland (*Avena* spp. - *Bromus* spp. Herbaceous Semi-Natural Alliance) is dominated by one or more nonnative annual grass species with an open to continuous herb layer of herbage up to four feet in height (CNPS 2024a). The following nonnative grass species may be dominant or co-dominant on the landscape and occur with other nonnatives in the herb layer: slender oat (*Avena barbata*), wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), and foxtail barley (*Hordeum murinum*) (CNPS 2024a). This vegetation community accounts for the largest acreage of nonnative grassland vegetation in cismontane California, and occurs in all topographic settings including foothills, disturbed areas, rangelands, and openings in woodlands (CNPS 2024a). Wild oat and annual brome grassland is present throughout the majority of the Project Area, including the entirety of the Area to be Developed and most of the Proposed Conservation Area, as depicted in Figure 5. The dominant nonnative grass in the Project Area is a species of brome (*Bromus* spp.); however, due to recent discing and mowing on the Project Site, the plant was not identifiable to the species level due to a lack of characteristics. Species observed in this vegetation community at the time of the survey include California croton, turkey-mullein (*Croton setiger*), annual bursage (*Ambrosia acanthicarpa*), golden crownbeard (*Verbesina encelioides*), and flax-leaved horseweed (*Erigeron bonariensis*).

4.2.2.2 Upland Mustard Fields

Upland mustard fields (*Brassica nigra* Herbaceous Semi-Natural Alliance) is dominated by one or more nonnative, ruderal herb species with open to continuous cover of herbage up to approximately nine feet in height (CNPS 2024a). The following nonnative, ruderal herb species may be dominant or co-dominant on the landscape and occur with other nonnatives in the herb or shrub layer: black mustard (*Brassica nigra*), common mustard (*Brassica rapa*), italian thistle (*Carduus pycnocephalus*), maltese star thistle (*Centaurea melitensis*) and short podded mustard (*Hirschfeldia incana*) (CNPS 2024a). This community typically occurs in elevations ranging from 0 to 9,186 feet above MSL, in clay to sandy loam soils and disturbed habitats (CNPS 2024a). Upland mustard fields are present in the western portion of the 500-foot survey buffer as depicted in Figure 5. Species observed in this vegetation community during the time of the survey include mustard (*Brassica* sp.), telegraph weed (*Heterotheca grandiflora*), fiddleneck (*Amsinckia* sp.), and spotted spurge (*Euphorbia maculata*). Most annual species in this community were dead during the time of the survey and could only be identified to the genus level.

4.2.2.3 Developed

Developed areas are present to the south, north, and east of the Project Area within the 500-foot survey buffer and included roadways, commercial buildings and associated landscaping. Areas characterized as developed are depicted in Figure 5.

4.2.3 Plants

Plant species observed in the Project Area are generally characteristic of disturbed areas. The dominant non-native plant species present in the Project Area included brome grasses, golden crownbeard, and spotted spurge. Despite the disturbed nature of the Project Area, native plant species are interspersed throughout the Project Area and include California croton, telegraph weed, turkey mullein, annual bursage, deerweed (*Acmispon glaber*), California buckwheat, and other buckwheat species (*Eriogonum* spp.) A full list of plant species observed on and immediately adjacent to the Project Area is included in Appendix B.

4.2.4 Wildlife

Despite the disturbed nature of the Project Area, the biologists documented numerous wildlife species during the survey. Wildlife incidentally observed during the biological reconnaissance survey include species such as common side-blotched lizard (*Uta stansburiana*), house finch (*Haemorhous mexicanus*), Cassin's kingbird (*Tyrannus vociferans*), and California ground squirrel. A full list of wildlife species observed on and immediately adjacent to the Project Area is included in Appendix C.

4.2.5 Potential for Special-Status Plant and Wildlife Species to Occur in the Project Area

The literature review and database searches identified 40 special-status plant species and 28 special-status wildlife species that have previously been documented on or near the Project Area. Many of the species are presumed absent from the Project Area due to the level of human disturbance in the Project

Area and current lack of suitable habitat, including soils. However, 17 special-status plant species and 13 special-status wildlife species identified in the literature review are determined to have potential to occur in the Project Area. Details regarding these findings are described in more detail below.

4.2.5.1 Special-Status Plants

There were 40 special-status plant species that appeared in the literature review and database searches for the Project Area (CDFW 2024a; CNPS 2024b). A list was generated from the results of the literature review and the Project was evaluated for suitable habitat that could support any of the special-status plant species on the list. With various habitat types occurring within the nine-quadrangle search, including the San Bernardino Mountains, several species appeared in the literature review results that have no potential to occur on or near the Project Area due to elevational requirements.

After review, 17 special-status plant species identified in the literature review have a potential to occur, while the remaining 23 are presumed absent due to the lack of suitable habitat (including elevation and soils), or because the Project Area is located outside of the known range for the species.

Descriptions of the California Rare Plant Rank (CRPR) designations are found in Table 3. A table outlining each species, their designations, and potential for occurrence on the Project Area can be found in Appendix D.

Table 3. California Rare Plant Rank Status Designations

List Designation	Meaning
1A	Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B	Plants Rare, Threatened, or Endangered in California and Elsewhere
2A	Plants Presumed Extirpated in California, But Common Elsewhere
2B	Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3	Plants about which more information is needed; a review list
4	Plants of limited distribution; a watch list
CBR	Considered but rejected
List .1, .2 and .3 extension meanings:	
.1	Seriously threatened in California (over 80 percent of occurrences threatened / high degree and immediacy of threat)
.2	Moderately threatened in California (20 to 80 percent occurrences threatened / moderate degree and immediacy of threat)
.3	Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

Note: According to the California Native Plant Society (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10, of the California Fish and Game Code (California Department of Fish and Game 1984). This interpretation is inconsistent with other definitions.

4.2.5.2 Plant Species with a Moderate Potential to Occur

Two species have a moderate potential to occur in the Project Area. A brief natural history of this species is below.

Smooth tarplant

Smooth tarplant (*Centromadia pungens* ssp. *laevis*) has a CRPR of 1B.1. This annual herb in the Asteraceae family blooms from April to September and occurs at elevations ranging from 0 to 2,100 feet above MSL (CNPS 2024b). Smooth tarplant is typically found in alkaline soils of chenopod scrub, meadows and seeps, playas, riparian woodlands, and valley and foothill grasslands (CNPS 2024b). This subspecies is also known to occur in disturbed areas. Threats to this subspecies include foot traffic, agriculture, road maintenance, disking, urbanization, hydrological alterations, and flood control projects (CNPS 2024b).

The Project Area contains limited coastal scrub habitat in the disturbed California buckwheat scrub and suitable disturbed grassland habitat in the wild oats and annual brome grasslands (Figure 5). One recent CNDDB occurrence (Occ. #2) was documented in 2016 approximately 4.7 miles east of the Project Area, and additional historic CNDDB records were documented within 5 miles of the Project Area (CDFW 2024a). Due to the presence of suitable habitat and a recently documented occurrence of the subspecies within 5 miles of the Project Area, this subspecies has a moderate potential to occur.

Santa Ana River Woollystar

Santa Ana River woollystar (*Eriastrum densifolium* spp. *sanctorum*) is state and federally listed as endangered and has a CRPR of 1B.1. This perennial herb in the Polemoniaceae family blooms from March through September and occurs at elevations ranging from 300 to 2,000 feet above MSL (CNPS 2024b). This subspecies typically occurs in chaparral and alluvial fans of coastal scrub, sometimes in sandy or gravelly soils (CNPS 2024b). Threats to this species include off-road vehicle use, development, altered hydrology and illegal dumping (CNPS 2024b).

The Project Area contains limited coastal scrub habitat with sandy soils in the disturbed California buckwheat scrub (Figure 5). Multiple recent and historic CNDDB occurrences were documented within the vicinity of the Project Area. The most recent record (Occ. # 29) was documented in 2020 approximately 2.3 miles southeast of the Project Area, and the closest recent record (Occ. # 40) was documented in 2013 approximately 1.7 miles south of the Project Area (CDFW 2024a). Due to the presence of limited suitable habitat and recently documented occurrences of the species within 5 miles of the Project Area, this species has a moderate potential to occur.

4.2.5.3 Plant Species with a Low Potential to Occur

Fourteen species have a low potential to occur within the Project Area due to limited habitat for the species within the Project Area and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search.

- Nevin's Barberry (*Berberis nevinii*), state- and federally listed (Endangered), CRPR 1B.1;
- Catalina mariposa lily (*Calochortus catalinae*) CRPR 4.2;
- Plummer's mariposa lily (*Calochortus plummerae*) CRPR 4.2;
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*) CRPR 1B.1;
- Paniculate tarplant (*Deinandra paniculata*) CRPR 4.2;
- Slender-horned spineflower (*Dodecahema leptocera*) state- and federally listed (Endangered), CRPR 1B.1;
- Mesa horkelia (*Horkelia cuneata* var. *puberula*), CRPR 1B.1;
- California satintail (*Imperata brevifolia*), CRPR 2B.1;
- Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), CRPR 4.3;
- Parish's desert-thorn (*Lycium parishii*), CRPR 2B.3;
- California muhly (*Muhlenbergia californica*), CRPR 4.3;
- Chaparral ragwort (*Senecio aphanactis*) CRPR 2B.2;
- Salt spring checkerbloom (*Sidalcea Neomexicana*), CRPR 2B.2; and
- San Bernardino aster (*Symphyotrichum defoliatum*), CRPR 1B.2

4.2.5.4 Plant Species Presumed Absent

The following 24 species are presumed absent from the Project Area due to the disturbed nature of the Project Area and the lack of suitable habitat (including elevation and soils), or because the Project Area is located outside of the known range for the species:

- Singlewhorl burrobrush (*Ambrosia monogyra*), CRPR 2B.2;
- Marsh sandwort (*Arenaria paludicola*), federally- and state listed (Endangered), CRPR 1B.1
- Western spleenwort (*Asplenium vespertinum*), CRPR 4.2
- Horn's milk-vetch (*Astragalus hornii* var. *hornii*), CRPR 1B.1
- Thread-leaved brodiaea (*Brodiaea filifolia*), federally listed (Threatened), state listed (Endangered), CRPR 1B.1
- Bristly sedge (*Carex comosa*), CRPR 2B.1
- Salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*), state- and federally listed (Endangered), CRPR 1B.2
- Peninsular spineflower (*Chorizanthe leptotheca*), CRPR 4.2

- White-bracted spineflower (*Chorizanthe xanti var. leucotheca*), CRPR 1B.2
- Peruvian dodder (Cuscuta obtusiflora var. glandulosa), CRPR 2B.2
- Hot springs fimbristylis (*Fimbristylis thermalis*), CRPR 2B.2
- Alvin Meadow bedstraw (*Galium californicum ssp. primum*), CRPR 1B.2
- Los Angeles sunflower (*Helianthus nuttallii* ssp. *parishii*), CRPR 1A
- Southern California black walnut (*Juglans californica*), CRPR 4.2
- Ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*), CRPR 4.2
- Parish's bush-mallow (*Malacothamnus parishii*), CRPR 1A
- Pringle's monardella (*Monardella pringlei*), CRPR 1A
- Gambel's water cress (*Nasturtium gambelii*), federally listed (Endangered), state listed (Threatened), CRPR 1B.1
- Short-joint beavertail (*Opuntia basilaris* var. *brachyclada*), CRPR 1B.2
- San Gabriel oak (*Quercus durata* var. *gabrielensis*), CRPR 1A
- Parish's gooseberry (*Ribes divaricatum* var. *parishii*), CRPR 1A
- Black bog rush (*Schoenus nigricans*), CRPR 2B.2
- San Gabriel ragwort (*Senecio astephanus*), CRPR 4.3
- Prairie wedge grass (*Sphenopholis obtusata*), CRPR 2B.2

4.2.5.5 Special-Status Wildlife

The literature search identified 28 special-status wildlife species that had previously been documented on or in the vicinity of the Project Area. A list was generated from the results of the literature review and the Project was evaluated for suitable habitat that could support any of the special-status wildlife species on the list. The Project Area's disturbed nature, proximity to commercial development, and anthropogenic influences likely preclude many of these species from occurring. A brief natural history and discussion of the special-status wildlife species that are determined to have a high or moderate potential to occur within the Project Area is provided below. A table outlining each species, their designations, and potential for occurrence on the Project Area can be found in Appendix E.

4.2.5.6 Wildlife Species Present with a High Potential to Occur

Three species were found to have a high potential to occur in the Project Area. Although these species were not incidentally observed in the Project Area during the biological reconnaissance survey, habitat (including soils and elevation factors) for the species occurs within the Project Area and a known occurrence has recently been recorded (within the last 20 years) within 5 miles of the area.

Burrowing Owl

Burrowing owl was petitioned for listing under the California ESA in August 2024 (CDFW 2024d) and advanced to candidacy in October 2024, which awarded the species the same protection as an endangered species. Burrowing owls historically occurred throughout much of California and the western U.S.; however, many former California populations have been extirpated. Burrowing owls typically inhabit open habitats, primarily grasslands and deserts. Burrowing owls require burrows for roosting and nesting cover. Although they often nest in abandoned California ground squirrel burrows, they will also use other small mammal burrows, pipes, culverts, and nest boxes, particularly where burrows are scarce (Zeiner et al. 1990).

Suitable habitat for the species is present within the wild oat and annual grassland habitat and disturbed California buckwheat scrub in the Project Area (figure 5). Habitat characteristics such as low-growing vegetation, friable soils, and California ground squirrel burrows provide habitat for burrowing owl. Additionally, foraging habitat is present throughout the Project Area with food sources such as small mammals and lizards. Although no burrowing owls or burrowing owl sign were incidentally observed during the biological survey, a complex of burrows suitably sized for burrowing owl use were observed (Figure 5). Due to the mobile nature of the species, it is possible for burrowing owls to move onto or off of the site throughout the year.

The CNDDB documented six occurrences of this species within the five miles of the Project Area (CDFW 2024a), one of which overlaps with the Project Area (CDFW 2024a). All six of these occurrences were recently documented (in the last 20 years). The closest occurrence which overlaps with the Project Area describes one adult and one breeding pair in May of 2007 (Occ. # 1785; CDFW 2024a). The most recent occurrence was recorded in 2007 approximately 4 miles northwest of the Project Area (Occ. # 7933; CDFW 2024a). This species has a high potential to occur within the Project Area due to presence of suitable habitat and the previous occurrence which overlaps with the Project Area.

Delhi Sands Flower-Loving Fly

The Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) is a federally listed endangered species. As observed by the name, this species is associated with the Delhi series of sand. Within the life cycle of the fly, larval stages develop completely underground and may remain underground for several years before emerging as adults during summer (USFWS 2019). The Delhi Sands flower-loving fly prefers low density cover, often using habitat that has less than 50 percent cover (USFWS 1997). Indicator species include buckwheat, California croton, annual bursage, and telegraph weed. It is documented that oviposition occurs primarily near telegraph weed (USFWS 2008, 2019) and that California buckwheat is a primary feeding plant (USFWS 2019).

Suitable habitat for this species was found to occur throughout the Project Area (see Section 4.3 for more details). The Project Area is composed of Delhi Sand series, vegetation density was low, and indicator plant species for the fly were present. Despite the Project site having disturbances from mowing and discing, four native plant species that are indicator species for the fly, were found throughout the Project Area. These plants were California buckwheat, annual bursage, telegraph weed, and California croton. California buckwheat was concentrated in the northwest corner of the Project Area within the disturbed

California buckwheat scrub, telegraph weed was scattered throughout the Project Area, and California croton was concentrated in the northwest corner of the Project Area but scattered throughout. Additionally, the Existing Conservation Area is present west of the Project Area within the 500-foot survey buffer (RBF 2014; RLC 2024). This habitat is preserved for the Delhi sands flower-loving fly and other species that co-occur (RLC 2024).

A total of 30 recent and historic occurrences were documented in CNDDB, all within 5 miles of the Project Area. Of the 16 recent occurrences, 10 had an overlap with the Project Area. Of the 14 historic occurrences, 10 had an overlap with the Project Area. The most recent occurrence was Occ. 34 which was documented within the Project Area in 2013 (CDFW 2024a). This species has a high potential to occur within the Project Area due to presence of indicator plant species, Delhi Sands series, and the numerous historic and recent occurrences which overlap with the Project Area.

Coastal Whiptail

The coastal whiptail (*Aspidoscelis tigris stejnegeri*) is a CDFW SSC. Coastal whiptails are generally found in hot, dry open areas in chaparral, woodland and riparian habitats (CDFW 2024b and Navis 2019). This species commonly occurs in moist, warm, and loose soil with plant cover in sparsely vegetated areas. Typically occurs in habitats with beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks.

The Project Area has suitable habitat in the form of sandy loose soils and sparse vegetation throughout the disturbed California buckwheat scrub and wild oat and annual brome grassland (Figure 5). The wild oat and annual brome grassland within the Project Area appears to be regularly mowed and disced, keeping vegetation cover low. One recent occurrence and one historic occurrence were documented in CNDDB within five miles of the Project Area. The most recent occurrence was documented in 2016 approximately 4 miles southeast of the Project Area (Occ. # 133). The closest occurrence was documented in 1995 less than a half mile from the Project Area (Occ. # 83). This species has a high potential to occur due to the presence of suitable habitat and occurrences within 5 miles of the Project Area.

4.2.5.7 Wildlife Species with a Moderate Potential to Occur

Three species have a moderate potential to occur in the Project Area. Although these species were not incidentally observed in the Project Area during the biological reconnaissance survey, habitat for the species occurs onsite, and a known occurrence has been reported in the database, but not within 5 miles of the site; or a recently documented observation occurs within 5 miles of the site and marginal or limited amounts of habitat occurs onsite.

Coast Horned Lizard

The coast horned lizard (*Phrynosoma blainvillii*) is currently designated as a CDFW SSC (CDFW 2024b). The coast horned lizard occurs from central California west of the Cascade-Sierran Highlands south to Baja California (Stebbins 2003). Historically, the species occurred as far north as Kennett in Shasta County. This species can occur within a variety of environments including scrubland, annual grassland, valley-foothill woodlands, and coniferous forest from 0 to 8,000 feet above mean sea level. However, they most

commonly occur in and along lowland sandy washes with scattered low vegetation (Zeiner et al. 1988; Stebbins 2003). This species requires bushes to provide cover, open areas for sunning, and loose soils for burial. The species primarily eats harvester ants, but also eats various other invertebrates.

Marginally suitable habitat is present in the Project Area within the disturbed California buckwheat scrub in the northwest corner of the Project Area and wild oat and annual brome grassland (Figure 5). Habitat characteristics such as loose soil for burial, open areas for sunning and food sources such as ants are present. However, shrub cover within the Project Area was low and there were limited ant hills for foraging within both the Project Area and survey buffer. Shrub cover was more prevalent within the 500-foot survey buffer.

Four historic occurrences and one occurrence without an observation date were recorded in CNDDB within five miles of the Project Area. The closest occurrence was recorded approximately 3 miles south of the Project Area without an observation date (Occ. # 5). This species has a moderate potential to occur due to occurrences within five miles of the Project Area and the presence of marginally suitable habitat within the Project Area and adjacent habitat.

Crotch Bumble Bee

The Crotch bumble bee (*Bombus crotchii*) was petitioned for listing under the California ESA in October 2018 (Hatfield et al. 2018), advanced to candidacy in June 2019, was challenged in courts and the candidacy was temporarily stayed beginning in February 2021, and candidacy was recently reinstated in September 2022 (CDFW 2023). This species is associated with open grassland and scrub habitats and occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California (Williams et al. 2014). Crotch bumble bees primarily nest underground, and may occupy cavities in a variety of substrates including: thatched grasses, abandoned rodent burrows or bird nests, brush piles, rock piles, and fallen logs (Alford 1975; Free and Colin Gasking Alford 1959; Fussell and Corbet 1992; Lye et al. 2012; Sladen 1912; Williams et al. 2014) and have also been found nesting in manmade structures such as walls, rubble or abandoned furniture (Fussell and Corbet 1992; Williams et al. 2014). Bumble bee nests are annual and conclude with deaths of the queen, workers, and drones at the end of the season with only the mated gyne (future queen) surviving the winter (overwintering) in order to emerge the following spring to start the next year's colony. Similar to other bumble bee species, Crotch bumble bee is a generalist forager and reportedly visits a variety of flowering plants, including *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia,* and *Salvia*.

The Project Area contains marginally suitable habitat for this species within the wild oat and annual brome grassland and in the disturbed California buckwheat scrub. Flowering plants, which provide nectar sources and foraging opportunities, were present throughout the Project Area including California croton, deerweed, turkey mullein, and California buckwheat. Additionally, small mammal burrows are scattered throughout the Project Area and 500-foot survey buffer that could provide marginal nesting and overwintering habitat. However, the wild oat and annual brome grassland appears to be subjected to repeated ground disturbances, which likely precludes this species from nesting/overwintering within the wild oat and annual brome grassland. This species has the potential to forage within Project Area or nest

along the edges of the disced areas within the disturbed California buckwheat scrub and the 500-foot survey buffer (Figure 5).

Three historic occurrences of the species were documented in CNDDB all within 5 miles of the Project Area. The most recent and nearest occurrence was documented in 1938 approximately 1.5 miles northwest of the Project Area (Occ. # 184; CDFW 2024b). This species has a moderate potential to occur due to the presence of potential foraging, nesting, marginally suitable overwintering habitat, and CNDDB records within 5 miles of the Project Area.

Los Angeles Pocket Mouse

The Los Angles pocket mouse, a CDFW SSC, is a small heteromyid averaging between 8 to 12 grams. The Los Angeles pocket mouse is one of eight subspecies of the little pocket mouse, *Perognathus longimembris* (Brylski et al. 1998). It inhabits areas containing fine sandy soils or sandy loams, which are excellent substrates for burrow excavation by this diminutive animal. Like many heteromyids, Los Angeles pocket mouse dig burrow systems near the base of shrubs or amidst other vegetation types and position themselves within the burrow as environmental conditions change. The species can occur in open grasslands entirely lacking shrubs (Montgomery 2014); however, trapping studies suggest that Los Angeles pocket mouse primarily forage under the protection of some form of vegetative canopy and are rarely found in exposed open areas. Los Angeles pocket mouse most commonly occur in sage scrub and grassland habitats, but also in alluvial fan sage scrub habitats. Plant species composition varies greatly among Los Angeles pocket mouse occupied habitat areas, but typically encompasses both native and nonnative plants commonly associated with sandy or granular soils, and often in lower elevational alluvial systems. The species range extends from the Los Angeles Basin, from approximately Burbank and San Fernando in the northwest, to San Bernardino on the northeast, and Cabazon, Hemet, and Aguanga on the east and southeast.

Habitat characteristics such as scrub, friable soils, and grassy areas are present in the Project Area within the wild oats and annual brome grassland and disturbed California buckwheat scrub (Figure 5). However, little shrub cover is present within the Project Area to provide protection for the species. Additionally, the scrub habitat is limited to the northwest portion of the Project Area and the grassy habitat appears to be regularly disced and mowed. Therefore, the habitat within the Project Area is marginally suitable for Los Angeles Pocket mouse.

One recent and five historic occurrences were documented in CNDDB within 5 miles of the Project Area. CNDDB occurrence 76 was documented in 2017 approximately 4 miles north of the Project Area (CDFW 2024a). The closest occurrence was documented in 2000 less than one mile south of the Project Area (Occ. 20; CDFW 2024a). This species has a moderate potential to occur due to the presence of marginally suitable habitat and CNDDB records within 5 miles of the Project Area.

4.2.5.8 Wildlife Species with a Low Potential to Occur

Seven species have a low potential to occur within the Project Area due to limited or marginal habitat for the species occurs within the Project Area and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20

years old) was recorded within 5 miles of the Project Area; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search.

- Western spadefoot (*Spea hammondii*), federally proposed for listing (Threatened) and CDFW SSC;
- Southern California legless lizard (*Anniella stebbinsi*), CDFW SSC;
- California glossy snake (*Arizona elegans occidentalis*), CDFW SSC;
- Coastal California gnatcatcher (*Polioptila californica californica*), federally listed (Threatened) and CDFW SSC;
- San Diego desert woodrat (*Neotoma lepida intermedia*), CDFW SSC;
- Southern grasshopper mouse (*Onychomys torridus ramona*), CDFW SSC;
- American badger (*Taxidea taxus*), CDFW SSC

4.2.5.9 Wildlife Species Presumed Absent

A total of 15 species are presumed absent. The habitat present in the Project Area was not suitable or the Project Area is located outside the known range of these species. For some species, there were historic or recent sightings near the site; however, due to the lack of suitable habitat within the Project Area, these species are presumed absent.

- Quino checkerspot butterfly (*Euphydryas editha quino*), federally listed (Endangered);
- Santa Ana sucker (*Catostomus santaanae*), federally listed (Threatened);
- arroyo chub (*Gila orcutti*), CDFW SSC;
- Steelhead - southern California distinct population segment (*Oncorhynchus mykiss irideus* pop. 10), federally listed (Endangered) and state listed Candidate;
- Southern rubber boa (*Charina umbratica*) state listed (Threatened)
- San Diego banded gecko (*Coleonyx variegatus abbotti*), CDFW SSC;
- Tricolored blackbird (*Agelaius tricolor*) state listed (Threatened) and CDFW SSC;
- Swainson's hawk (*Buteo swainsoni*), state listed (Threatened);
- Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), state listed (Endangered), federally listed (Threatened);
- California black rail (*Laterallus jamaicensis coturniculus*), state listed (Threatened), CDFW Fully Protected;
- Least Bell's vireo (*Vireo bellii pusillus*), state- and federally listed (Endangered);
- San Bernardino kangaroo rat (*Dipodomys merriami parvus*), state listed (Candidate), federally listed (Endangered), CDFW SSC;

- Western mastiff bat (*Eumops perotis californicus*) CDFW SSC;
- Western yellow bat (*Lasiurus xanthinus*) CDFW SSC;
- Pocket free-tailed bat (*Nyctinomops femorosaccus*) CDFW SSC;

4.2.6 Raptors and Migratory Birds

Potential nesting habitat for migratory birds and raptors protected by the MBTA and California Fish and Game Code was present throughout the Project Area in the form of shrubs and metal telephone lines. Suitable nesting habitat for ground-nesting bird species, such as mourning doves, was also present in the Project Area. Due to the presence of suitable nesting habitat, nesting native and migratory birds could use the Project Area during the nesting bird season (typically February 1 through August 31).

4.2.7 Aquatic Resources

Although a formal aquatic resources delineation was not performed, potentially jurisdictional features were not identified within the Project Area. However, one freshwater pond classified by NWI as a PUS was mapped within the Project Area in the NWI Database (USFWS 2024a). The feature as mapped in the NWI Database is predominantly located in the 500-foot survey buffer and only marginally overlaps with the westernmost portion of the Project Area (Figure 3). This feature was searched during the biological survey, and no water or sign of water (e.g., cracked soils) was observed.

4.2.8 Wildlife Movement Corridors, Linkages, and Native Wildlife Nursery Sites

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 varies, but corridors may include such areas as greenbelts, refuge systems, channels and flood control, underpasses, and biogeographic land bridges. In general, a corridor is described as a linear habitat embedded in a dissimilar matrix that 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. The nature of corridor usage and wildlife movement patterns vary greatly among species.

The Project Area was assessed for its ability to function as a wildlife corridor. Although the Project Area contains open areas, it is completely surrounded by urban development and is isolated from large, contiguous blocks of native habitat. The nearest natural wildlife corridor and area is the Santa Ana River approximately 2 miles south of the of the Project Area. Less than a half mile south of the Project Area is I-10, approximately 3 miles to east is State Route 215, and approximately 4 miles to the north is I- 210; all three are major highways that limit wildlife movement. Additionally, the lack of consistent vegetative cover within the Project Area, the urban nature of the site, and the high density of nonnative weedy vegetation across the Project Area likely deter wildlife from using the area for movement opportunities

due to lack of suitable cover. Wildlife commonly found in urban areas (e.g., coyote [*Canis latrans*]) could use portions of the Project Area or areas immediately adjacent to the Project Area, such as the Existing Conservation Area to the west, for local travel but the Project Area itself does not provide wildlife movement corridor or linkage opportunities.

The Project Area was also assessed for its ability to function as a native wildlife nursery site and for bat roosting habitat. Bat roosting habitat was not identified within the Project Area. Some palm tree species and buildings, which can be considered bat roosting habitat, were present within the 500-foot survey buffer. However, the palm trees skirts had been removed and the buildings did not have crevices, both of which are necessary to support roosting bats. Suitable nesting habitat for bird species was documented within the Project Area. However, due to the level of disturbance within and adjacent to the Project Area, nursery site habitat for bird species (e.g., heron rookery) is not anticipated to occur.

4.3 Delhi Sands Flower-Loving Fly Habitat Assessment

The Delhi Sands Flower-loving fly habitat assessment was conducted by a qualified and permitted biologist, Dale Powell (TE-006559-8), on September 22, 2024. Summarized below are the results of the survey. Weather conditions are summarized in Table 4.

Table 4. Weather Conditions During the Delhi Sands Flower-Loving Fly Habitat Assessment

Date	Time		Temperature (˚F)		Cloud Cover (%)		Wind Speed (mph)	
	Start	End	Min	Max	Min	Max	Min	Max
9/22/24	0330	0445	92	92	0	0	3	7

Notes: ˚F = degrees Fahrenheit; mph = miles per hour

The biologist documented three of the four indicator plant species for Delhi Sands flower loving fly in the Project Area including California buckwheat, annual bursage, and telegraph weed. Additionally, the biologist documented one native plant, deerweed (*Lotus scoparius*), known to occur in Delhi Sands loving fly habitat and large areas of open unconsolidated soil in the Project Area. A complete Delhi Sands Flower-loving fly habitat assessment report summarizing the survey methods, results, and recommendations is included as Appendix F.

5.0 IMPACT ANALYSIS

Two separate impacts analyses are presented in this section due to the difference in proposed uses of the Project Area. Impacts associated with the Area to be Developed are not expected to be the same as impacts associated with the Proposed Conservation Area. Impacts for each portion of the Project Area are described below.

5.1 Area to be Developed

5.1.1 Special Status Species

The Area to be Developed consists of an undeveloped lot with the vegetation community, wild oat and annual brome grassland. Disturbances were present throughout the Area to be Developed, including compacted gravelly soils along the eastern Project boundary, disced soils, mowed vegetation, abundant trash, and a powerline easement that bisects the area and includes metal power poles and a dirt road with vehicle tracks.

The literature review and database searches identified 40 special-status plant species and 28 special-status wildlife species that have previously been documented on or near the Project Area. 16 special-status plant species were determined to have a moderate or low potential to occur and the remaining 24 special-status plant species were determined to be absent due to the disturbed nature of the Project Area, the lack of suitable habitat (including elevation and soils), and/or because the Project is located outside of the known range for the species.

Within the Area to be Developed, five special-status plant species have a moderate or low potential to occur due to the presence of suitable habitat within the wild oat and annual brome grassland (Figure 5). Smooth tarplant (CRPR 1B.1) has a moderate potential to occur within the Area to Be Developed while Catalina mariposa lily (CRPR 4.2), Plummer's mariposa lily (CRPR 4.2), Parry's spineflower (CRPR 1B.1), and paniculate tarplant (CRPR 4.2) all have a low potential to occur. Should these species occur within the Area to be Developed, impacts to the species may occur in the form of ground disturbance, vegetation removal, mortality, dust, and habitat loss. If present, impacts to species with a CRPR rank of 4, including Catalina mariposa lily, Plummer's mariposa lily, and paniculate tarplant, would not be considered significant under CEQA. Impacts to smooth tarplant and Parry's spineflower would be less than significant with the implementation of Mitigation Measures BIO-1 and -2. The Mitigation Measures for the Proposed Project are discussed in Section 6.0.

Of the 28 special-status wildlife species identified in the literature review, 3 species have a high potential to occur, 3 species have a moderate potential to occur, and 7 have a low potential to occur. The remaining 15 species are presumed absent due to a lack of suitable habitat or because the Project Area being outside the known range for the species.

Burrowing owl has a high potential to occur within the Area to be Developed. This species is protected by the MBTA, California Fish and Game Code, and is a Candidate for state listing which affords the species the same protections as though it were listed under the California ESA. Within the Area to be Developed, suitable habitat was present in wild oat and annual brome grassland in the form of friable soils, suitable foraging habitat, and California ground squirrel burrows. The literature review and database search identified numerous recent occurrences within five miles of the Project Area in CNDDB, one of which was documented in 2007 in the Area to be Developed (CDFW 2024a). Although no live owls or their sign were incidentally observed during the biological survey, suitable burrowing and foraging habitat is present in the Area to Be Developed. Due to the mobile nature of the species, burrowing owls may be present within the Project Area prior to the start of Project activities. Direct impacts in the form of ground disturbance,

vegetation removal, habitat loss, and mortality and indirect impacts from construction noise and vibrations may occur to this species. Impacts to burrowing owl would be less than significant with the implementation of Mitigation Measures BIO-1 and -3.

Delhi Sands flower-loving fly (federally listed Endangered) has a high potential to occur within the Area to Be Developed. Within the Area to be Developed, Delhi Sands soil series is present; this soil is necessary for the ecology of the Delhi Sands flower-loving fly. Additionally, foraging and oviposition resources are present within and adjacent to the Area to be Developed including all four indicator plant species, California buckwheat, California croton, annual bursage and telegraph weed. If present, direct impacts to Delhi Sands flower-loving fly could occur in the form of injury or mortality due to vehicle or equipment strikes and loss of habitat. If present, indirect impacts to this species may occur in the form of increased human activity, noise, dust, and ground vibrations. However, Project activities would be covered under the West Valley HCP incidental take permit, which would require the Project to implement the species-specific and construction-related avoidance and minimization measures in Sections 5.3 and 5.4 of the West Valley HCP. Impacts to Delhi Sands flower-loving fly would be less than significant because the existing West Valley HCP requires construction- and species-specific protection measures to reduce or eliminate impacts to the Delhi Sands flower-loving fly and these measures would be implemented prior to and during Project activities..

Crotch bumble bee has a moderate potential to occur within the Area to Be Developed and is a Candidate for state listing and is therefore afforded all the protections as though it were listed under the California ESA. This species has a moderate potential to occur within the wild oat and annual brome grassland which included suitable friable soils, suitable burrow habitat, suitable burrows (i.e., small mammal burrows), and nectar sources. Due to the disced soils and mowed vegetation within the Area to be Developed, it is unlikely that the species would use the Area to be Developed to nest. However, it is possible that the species could use the Area to Be Developed to forage. Three historic occurrences were documented in the CNDDB within five miles of the Project Area (CDFW 2024a). If Crotch bumble bee is found to be using or nesting adjacent to the Area to Be Developed prior to the start of construction, impacts to Crotch bumble bee may occur in the form of direct mortality of individuals, direct mortality to an active nesting colony, direct mortality to an overwintering individual, conversion of foraging habitat, or permanent loss of foraging resources. Due to the location of the Project in an already mowed and disced area, the suitable foraging, nesting, and overwintering habitat is already subject to repeated disturbance. Because this species is a generalist forager that chooses nest and overwintering locations on an annual basis, temporary and permanent loss of habitat resulting from the Project would not be expected to contribute substantially to the overall decline of this species unless direct impacts were to occur to an active nest or overwintering gyne (future queen). Impacts to Crotch bumble bee would be less than significant with the implementation of Mitigation Measures BIO-1 and -4.

Coastal California gnatcatcher (federally listed Threatened and CDFW SSC) has a low potential to occur in the disturbed California buckwheat scrub in the northwest portion of the Proposed Conservation Area. The disturbed California buckwheat scrub is present immediately north and west of the Area to be Developed (Figure 5). Therefore, it is unlikely that the species will use the Area to be Developed to nest but could travel through the Area to be Developed to access suitable habitat in adjacent areas. If present,

direct impacts to this species could occur in the form of injury or mortality due to vehicle or equipment strikes or nest failure. If present, indirect impacts to this species may occur in the form of increased human activity, noise, dust, light pollution and ground vibrations. Impacts to coastal California gnatcatcher would be considered less than significant with the implementation of Mitigation Measures BIO-1 and -5.

Western spadefoot (federally proposed for listing, threatened, and CDFW SSC) is not expected to occur within the Area to be Developed. The species was determined to have a low potential due to the presence of an NWI pond feature that overlaps with the Proposed Conservation Area, disturbed California buckwheat scrub, and the presence of sandy soils. However, the habitat characteristics previously described were not present within the Area to Be Developed. Additionally, no sign of aquatic resources, such as the presence of cracked soils, were identified at the time of the biological survey. There is only one CNDDB occurrence of the species, which is 12 years old and was recorded approximately 5 miles away from the Project Area (Occ. # 1016; CDFW 2024a). As a result, direct impacts to western spadefoot are not expected to occur within the Area to Be Developed. If present, indirect impacts to this species may occur in the form of increased human activity, noise, dust, light pollution and ground vibrations. Impacts to western spadefoot would be considered less than significant with the implementation of Mitigation Measure BIO-1.

Six additional CDFW SSC species have a low potential to occur within the Project Area: southern California legless lizard, California glossy snake, San Diego desert woodrat, southern grasshopper mouse, Los Angeles pocket mouse, and American badger. If present, direct impacts to these species could occur in the form of injury or mortality due to vehicle or equipment strike or entombment inside of burrows that are graded over during construction, and loss of habitat. If present, indirect impacts to these species could occur in the form of increased human activity, noise, dust, nighttime lighting, and ground vibrations. These species have a low probability of occurring in the Area to Be Developed, and if present, these species are not expected to occur at high densities due to limited or marginal habitat being present, the lack of contiguous habitat surrounding the Project Area, and the disturbed nature of the Area to be Developed. The potential loss of individuals in the Area to be Developed would not be expected to contribute to the decline in regional populations and would therefore not be considered a significant impact under CEQA. The remaining 15 special-status wildlife species are presumed absent from the Project Area or areas adjacent to the Project Area due to the lack of suitable habitat and ongoing disturbances within and adjacent to the Project Area. No impacts to the 15 presumed absent special-status wildlife species are anticipated to result from the development of this Project.

Metal power poles, shrub species, and grasses are present within and immediately adjacent to the Area to be Developed. These resources can provide nesting habitat for nesting songbirds and raptors protected by the MBTA and California Fish and Game Code. Furthermore, the Area to be Developed can provide nesting habitat for ground-nesting bird species such as mourning dove (*Zenaida macroura*). Ground-disturbing construction activities could directly affect birds protected by the MBTA and their nests through the removal of occupied habitat (e.g., destruction of nests, mortality of flightless juveniles) in the Area to be Developed, and indirectly through increased noise, vibrations, increased lighting/glare, and increased human activity. These impacts to nesting songbirds and raptors would be less than significant with the implementation of Mitigation Measures BIO-1 and -5.

5.1.2 Sensitive Natural Communities

No sensitive natural communities, according to classifications described in the *Manual of California Vegetation Online* and by CDFW, were identified within the Area to be Developed. Only one vegetation community is present within the Area to be Developed, wild oats and annual brome grassland. No impacts to sensitive natural communities within the Area to be Developed are anticipated as a result of the Project.

5.1.3 State and Federally Protected Wetlands and Waters of the United States

Although a formal aquatic resources delineation was not performed, potentially jurisdictional features were not identified within the Area to be Developed. Impacts to aquatic resources within the Area to be Developed are not expected as a result of the Project.

5.1.4 Wildlife Corridors and Nursery Sites

The Area to be Developed is located within and adjacent to areas containing existing disturbances (e.g., roadways, major highways, residential and commercial development). Despite these disturbances, the Area to be Developed contains open land and resources that could provide limited movement opportunities in the immediate vicinity. Additionally, to the west of the Area to be Developed is the Proposed Conservation Area, which will remain undeveloped per the West Valley HCP (RBF 2014). This adjacent habitat connects the Area to be Developed to other open spaces such as the Existing Conservation Area which supports native wildlife, such as the Delhi sands flower-loving fly, and may provide limited movement opportunities for wildlife. Despite these characteristics, the Area to be Developed is adjacent to urban development and anthropogenic disturbances and provides no connection between large, contiguous blocks of native habitat in the region. Due to being surrounded by development and low vegetative cover, impacts to wildlife corridors or linkages are not expected to occur within the Area to Be Developed as a result of the Project.

The Area to Be Developed was also assessed for its ability to function as a native wildlife nursery site and for bat roosting habitat. Bat roosting habitat was not identified within the Area to Be Developed. Some palm tree species and buildings, which can provide bat roosting habitat under the right conditions, are present within the 500-foot survey buffer. However, the palm trees and buildings lacked the correct features to support roosting bats (e.g., palm tree skirts and crevices). Suitable nesting habitat for bird species was documented within the Project Area. However, due to the level of disturbance within and adjacent to the Project Area, nursery site habitat for bird species (e.g., heron rookery) is not anticipated to occur. As a result, impacts to nursery sites are not expected to occur within the Area to Be Developed as a result of the Project.

5.1.5 Local Policies, Plans, Ordinances and Habitat Conservation Plans

5.1.5.1 City of Colton— Tree Protection Guidelines

No mature trees, according to the definitions provided in City of Colton Municipal Code, Chapter 12.20, were observed within the Area to be Developed. No impacts to these resources are expected to occur as a result of the Project.

5.1.5.2 West Valley Habitat Conservation Plan

The West Valley HCP was developed to preserve populations of Delhi Sands flower-loving fly that occur north of the I-10 freeway (RBF 2014) within the city of Colton in San Bernardino County, California. The Area to be Developed lies within high quality habitat for the Delhi sands flower-loving fly, and within a developable area as defined by the West Valley HCP. Under the West Valley HCP, the current Project would be a "Covered Activity" due its status as "construction, operation, and maintenance of public or public use facilities/structures within 'Developed and Developable Lands' including… other public facilities and projects identified in the City's General Plan and/or Capital Improvements Plans" (RBF 2014). The Project would therefore be consistent with the West Valley HCP. As a Covered Activity, the Project is required to implement the species-specific avoidance and minimization measures identified in Sections 5.3 and 5.4 of the West Valley HCP (RBF 2014). Therefore, the Project would not conflict with a local management and impacts would not be significant.

5.2 Proposed Conservation Area

5.2.1 Special-Status Species

The Proposed Conservation Area consists of an open graded lot, sandy hills in the northwest corner, and a powerline easement that bisects the area and includes metal power poles and a dirt road. Vegetation communities present within the Proposed Conservation Area include wild oat and annual brome grassland and a small patch of disturbed California buckwheat scrub in the northwest (Figure 5). Disturbances were present throughout the Proposed Conservation Area including disced soils, mowed vegetation, abundant trash, homeless encampments, fire pit scars and vehicle tracks. No Project related impacts are expected to occur within the portion of the powerline easement which runs through the Proposed Conservation Area.

The Proposed Conservation Area will be subject to mitigation and restoration activities as part of the West Valley HCP requirements in order restore the habitat for the Delhi Sands flower-loving fly (RBF 2014). Activities may include "fencing, … assessments, surveys, and biological monitoring of the habitat and/or species, … weed abatement and monitoring, … thinning of native vegetation to maintain prescribed ratios of vegetation to open ground/dune areas, … habitat restoration and enhancement of disturbed areas … and … excess sand which accumulates at the downwind side of conservation areas will be collected within the plan area and distributed at the upwind side of conservation areas…" (RBF 2014). Aside from maintenance and restoration activities required by the West Valley HCP, Project-related activities are not

planned to occur in the Proposed Conservation Area; therefore, Project-related impacts are expected to be minimal to non-existent as indirect impacts only. These impacts are discussed in more detail below.

Sixteen special-status plant species have a moderate or low potential to occur in the disturbed California buckwheat scrub and/or wild oat and annual grassland present in the Proposed Conservation Area. Twenty-four special-status plant species are presumed absent due to the disturbed nature of the Project Area, the lack of suitable habitat (including elevation and soils, and/or because the Project is located outside of the known range of the species. No Project-related impacts will occur to the species that are presumed absent.

Two special status species have moderate potential to occur within the Proposed Conservation Area including smooth tarplant (CRPR 1B.1) and Santa Ana River woollystar (state- and federally listed endangered and CRPR 1B.1). Smooth tarplant has potential to occur within the wild oat and annual brome grassland or the disturbed California buckwheat scrub while Santa Ana River woollystar has potential to occur only within the disturbed California buckwheat scrub (Figure 5). The following 4 plant species have a low potential to occur within the disturbed California buckwheat scrub and wild oat and annual brome grassland in the Proposed Conservation Area: catalina mariposa lily (CRPR 4.2), Plummer's mariposa lily (CRPR 4.2), Parry's spineflower (CRPR 1B.1), and paniculate tarplant (CRPR 4.2) (Figure 5). The following 10 plant species have a low potential to occur within the disturbed California buckwheat scrub in the northwest corner of the Proposed Conservation Area: Nevin's Barberry (state- and federally listed endangered and CRPR 1B.1), slender-horned spineflower (state- and federally listed endangered and CRPR 1B.1), mesa horkelia (CRPR 1B.1), California satintail (CRPR 2B.1), Robinson's pepper-grass (CRPR 4.3), Parish’s desert-thorn (CRPR 2B.3), California muhly (CRPR 4.3), chaparral ragwort (CRPR 2B.2), salt spring checkerbloom (CRPR 2B.2), and San Bernardino aster (CRPR 1B.2). Project-related construction activities will not occur within the Proposed Conservation Area; therefore, no permanent loss of individuals or habitat will occur in the Proposed Conservation Area as a result of the Project. However, some minor beneficial impacts could occur during the restoration activities required by the West Valley HCP, such as non-native weed abatement, trash removal, and fencing to keep public foot traffic and vehicles out of the Proposed Conservation Area. During the restoration activities, impacts may occur in the form of ground disturbance, vegetation removal, mortality, or increased dust. However, these impacts would be beneficial overall to any special-status plant species occurring in the Proposed Conservation Area because the restoration activities would improve habitat quality and also prevent or drastically minimize the anthropogenic impacts currently present in the Proposed Conservation Area (e.g., trash, homeless encampments, off-road vehicle use). If present, impacts to species with a CRPR rank of 4 (Catalina mariposa lily, Plummer’s mariposa lily, paniculate tarplant, southern California black walnut, Robinson's pepper-grass, and California muhly) would not be considered significant under CEQA and therefore do not require mitigation. Impacts to the remaining special-status plant species with potential to occur would be less than significant with the implementation of Mitigation Measures BIO-1 and -2.

Three special-status wildlife species have a high potential to occur, 3 species have a moderate potential to occur, and 7 have a low potential to occur. A total of 15 species are presumed absent due to a lack of suitable habitat or the Project Area being outside the known range for the species and Project-related impacts are not expected to occur to these species.

Burrowing owl has a high potential to occur throughout the Proposed Conservation Area in the wild oat and annual brome grassland and disturbed California buckwheat scrub (Figure 5). This species is protected by the MBTA, California Fish and Game Code, and is a Candidate for state listing which affords the species the same protections as though it were listed under the California ESA. Suitable habitat was present throughout the Proposed Conservation Area in the form of friable soils, suitable foraging habitat, and California ground squirrel burrows, including a complex of burrows suitably sized for burrowing owl use (Figure 5). The literature review and database search identified numerous recent occurrences within five miles of the Project Area in CNDDB, one of which was documented in 2007 and describes a breeding pair in the Area to Be Developed (Occ. # 1785, CDFW 2024a). Although no live owls or their sign were incidentally observed during the biological survey, suitable burrowing and foraging habitat, were present within the Proposed Conservation Area. Due to the mobile nature of the species, burrowing owls may be present within the Proposed Conservation Area prior to the start of Project activities. Direct impacts may occur to the species in the form of nest failure and indirectly in the form of construction noise, ground vibrations, dust, and light pollution. Additionally, some minor beneficial impacts could occur during the mitigation and restoration activities required by the West Valley HCP, such as non-native weed abatement, trash removal, and fencing to keep public foot traffic and vehicles out of the Proposed Conservation Area. During the mitigation and restoration activities, impacts may occur in the form of ground disturbance and temporary increased human activity. However, these impacts would be beneficial overall for the species occurring in the Proposed Conservation Area because the mitigation and restoration activities would improve habitat quality and prevent or drastically minimize the anthropogenic impacts currently present in the Proposed Conservation Area (e.g., trash, homeless encampments, off-road vehicle use). Impacts to burrowing owl would be less than significant with the implementation of Mitigation Measures BIO-1 and 3.

Delhi Sands flower-loving fly (federally listed Endangered) has a high potential to occur throughout the Proposed Conservation Area in the wild oat and annual brome grassland and disturbed California buckwheat scrub (Figure 5). Within the Proposed Conservation Area, Delhi Sand soil series is present; this soil is necessary for the ecology of the Delhi Sands flower-loving fly. Additionally, foraging and oviposition resources are present within and adjacent to the Proposed Conservation Area, including all three indicator plant species: California buckwheat, California croton, and telegraph weed. If present, indirect impacts to this species may occur in the form of increased noise, dust, ground vibrations, and temporary increased human activity during Project related construction or mitigation and restoration activities. However, mitigation and restoration activities in the Proposed Conservation Area were designed specifically to protect the Delhi sands flower-loving fly and are expected to overall benefit the species. Impacts to Delhi Sands flower-loving fly in the Proposed Conservation Area would be less than significant because the existing West Valley HCP requires species-specific protection measures to reduce or eliminate impacts to the Delhi Sands flower-loving fly and these measures would be implemented prior to and during any activities undertaken at the Proposed Conservation Area.

Crotch bumble bee has a moderate potential to occur throughout the Proposed Conservation Area in the wild oat and annual brome grassland or disturbed California buckwheat scrub (Figure 5). This species is a Candidate for state listing and is therefore afforded all the protections as though it were listed under the California ESA. Habitat characteristics were present throughout the Proposed Conservation Area such as

suitable friable soils, suitable burrow habitat (i.e., small mammal burrows), and nectar sources. If Crotch bumble bee is found to be using or nesting in the Proposed Conservation Area prior to the start of construction related Project activities, impacts to this species may occur in the form of noise, dust, and ground vibrations. Additionally, some minor beneficial impacts could occur during the mitigation and restoration activities required by the West Valley HCP, such as non-native weed abatement, trash removal, and fencing to keep public foot traffic and vehicles out of the Proposed Conservation Area. During the restoration activities impacts may occur in the form of ground disturbance and temporary increased human activity. However, these impacts would be beneficial overall for the species occurring in the Proposed Conservation Area because the restoration activities would improve habitat quality and also prevent or drastically minimize the anthropogenic impacts currently present in the Proposed Conservation Area (e.g., trash, homeless encampments, off-road vehicle use). Temporary or permanent loss of habitat resulting from the Project is not expected to occur within the Proposed Conservation Area. Impacts to Crotch bumble bee would be less than significant with the implementation of Mitigation Measures BIO-1 and -4.

Coastal California gnatcatcher (federally listed Threatened and CDFW SSC) has a low potential to occur in the disturbed California buckwheat scrub in the northwest portion of the Proposed Conservation Area. Direct impacts may occur in the form of ground disturbance and habitat loss or nest failure during vegetation removal associated with restoration activities required by the West Valley HCP. Indirect impacts to this species may occur in the form of increased human activity, noise, dust, light pollution and ground vibrations. However, these impacts would be beneficial overall for the species occurring in the Proposed Conservation Area because the restoration activities would improve habitat quality and also prevent or drastically minimize the anthropogenic impacts currently present in the Proposed Conservation Area (e.g., trash, homeless encampments, off-road vehicle use). Temporary or permanent loss of habitat resulting from the Project is not expected to occur within the Proposed Conservation Area. Impacts to coastal California gnatcatcher would be considered less than significant with the implementation of Mitigation Measures BIO-1 and -5.

Western spadefoot (federally proposed for listing, threatened, and CDFW SSC) has low potential to occur in the Proposed Conservation Area, in the NWI freshwater pond and disturbed California buckwheat scrub. During the biological survey, no signs of aquatic resources were observed in association with the NWI freshwater pond feature; however, it is possible that the NWI freshwater pond feature seasonally holds water that could provide habitat for the species after rain events. There is only one CNDDB occurrence of the species, which is 12 years old and was recorded approximately 5 miles away from the Project Area (Occ. # 1016; CDFW 2024a). Impacts may occur in the form of ground disturbance, habitat loss, or direct mortality during mitigation and restoration activities. Indirect impacts to western spadefoot may occur in the form of noise, dust, light pollution and ground vibrations during construction related Project activities. Impacts to western spadefoot would be considered less than significant with the implementation of Mitigation Measures BIO-1 and -6.

Six additional CDFW SSC species have a low potential to occur within the Project Area: southern California legless lizard, California glossy snake, San Diego desert woodrat, southern grasshopper mouse, Los Angeles pocket mouse, and American badger. If present, indirect impacts to these species could occur in

the form of increased human activity, noise, dust, nighttime lighting, and ground vibrations. During restoration activities, direct impacts may occur in the form of ground disturbance or loss of habitat during vegetation removal. However, these impacts would be beneficial overall for the species occurring in the Proposed Conservation Area because the restoration activities would improve habitat quality and also prevent or drastically minimize the anthropogenic impacts currently present in the Proposed Conservation Area (e.g., trash, homeless encampments, off-road vehicle use). Temporary or permanent loss of habitat resulting from the Project is not expected to occur within the Proposed Conservation Area. These species have a low probability of occurring in the Project Area, and if present, these species are not expected to occur at high densities due to the Project Area being surrounded by development without contiguous habitat nearby, the disturbed nature of the Project Area, and the presence of limited or only marginally suitable habitat. Any potential loss of individuals in the Project Area would not be expected to contribute to the decline in regional populations and would therefore not be considered a significant impact under CEQA.

Metal power poles, shrubs, and grasses are present within and immediately adjacent to the Proposed Conservation Area. These resources can provide nesting habitat for nesting songbirds and raptors protected by the MBTA and California Fish and Game Code. Furthermore, the Proposed Conservation Area can provide nesting habitat for ground-nesting bird species such as mourning dove (*Zenaida macroura*). Ground-disturbing restoration activities required by the West Valley HCP could directly affect birds protected by the MBTA and their nests through the removal of occupied habitat (e.g., destruction of nests, mortality of flightless juveniles). However, these impacts would be beneficial overall for the species occurring in the Proposed Conservation Area because the restoration activities would improve habitat quality and also prevent or drastically minimize the anthropogenic impacts currently present in the Proposed Conservation Area (e.g., trash, homeless encampments, off-road vehicle use). Temporary or permanent loss of habitat resulting from the Project is not expected to occur within the Proposed Conservation Area. Additionally, indirect impacts to nesting birds could occur through increased noise, vibrations, increased lighting/glare, and increased human activity. Impacts to nesting songbirds and raptors would be less than significant with the implementation of Mitigation Measures BIO-1 and -6.

5.2.2 Sensitive Natural Communities

No sensitive natural communities, according to classifications described in the *Manual of California Vegetation Online* and by CDFW, were identified within the Proposed Conservation Area. Two vegetation communities are present within the Proposed Conservation Area, including disturbed California buckwheat scrub and wild oats and annual brome grassland (Figure 5). No impacts to sensitive natural communities within Proposed Conservation Area are anticipated as a result of the Project.

5.2.3 State and Federally Protected Wetlands and Waters of the United States

Although a formal aquatic resources delineation was not performed, potentially jurisdictional features were not identified within the Proposed Conservation Area during the biological survey. One NWI aquatic feature, a PUS freshwater pond, overlaps with the Proposed Conservation Area. However, the majority of the freshwater pond lies west of the Proposed Conservation Area within the 500-foot survey buffer. Project-related construction activities will not occur in the Proposed Conservation Area and impacts to

this feature are not expected as a result of the Project. No significant impacts to state and federally protected wetlands and waters of the U.S. will occur as a result of the Project.

If the Project design changes or offsite improvements are found to be necessary within the NWI freshwater pond feature as a result of the Project, then a formal aquatic resources delineation should be conducted to determine jurisdiction and extent of the feature. If it is found to be jurisdictional then mitigation and regulatory permitting under the California Fish and Game Code (Section 1600) and the federal CWA (Section 401) would be necessary prior to the start of construction.

5.2.4 Wildlife Corridors and Nursery Sites

The Proposed Conservation Area is located within and adjacent to areas containing existing disturbances (e.g., roadways, major highways, residential and commercial development). Despite these disturbances, the Proposed Conservation Area contains open land and resources that could provide limited movement opportunities in the immediate vicinity. Additionally, immediately west of the Proposed Conservation Area is the Existing Conservation Area which supports native wildlife, such as the Delhi Sands flower-loving fly, and may provide limited movement opportunities for wildlife. Despite these characteristics, the Proposed Conservation Area is adjacent to urban development and anthropogenic disturbances and provides no connection between large, contiguous blocks of native habitat in the region. Due to being surrounded by development and low vegetative cover, impacts to wildlife corridors or linkages are not expected to occur within the Proposed Conservation Area as a result of the Project.

The Proposed Conservation Area was also assessed for its ability to function as a native wildlife nursery site and for bat roosting habitat. Bat roosting habitat was not identified within the Proposed Conservation Area. Some palm tree species and buildings, which can provide bat roosting habitat under the right conditions, were present within the 500-foot survey buffer. However, the palm trees and buildings lacked the correct features to support roosting bats (e.g., palm tree skirts and crevices). Suitable nesting habitat for bird species was documented within the Proposed Conservation Area. However, due to the level of disturbance within and adjacent to the Proposed Conservation Area, nursery site habitat for bird species (e.g., heron rookery) is not anticipated to occur. As a result, impacts to nursery sites are not expected to occur within the Proposed Conservation Area as a result of the Project.

5.2.5 Local Policies, Plans, Ordinances and Habitat Conservation Plans

5.2.5.1 City of Colton— Tree Protection Guidelines

No mature trees, according to the definitions provided in City of Colton Municipal Code, Chapter 12.20, were observed within the Proposed Conservation Area. No impacts to these resources are expected to occur as a result of the Project.

5.2.5.2 West Valley Habitat Conservation Plan

The West Valley HCP was developed to preserve populations of Delhi Sands flower-loving fly that occur north of the I-10 freeway within the city of Colton in San Bernardino County, California (RBF 2014). The Proposed Conservation Area lies within high quality habitat for the Delhi sands flower-loving fly, and

within a proposed "Conservation Area" as defined by the West Valley HCP. Under the West Valley HCP, the current Project activities within the Proposed Conservation Area would be a "Covered Activity" due to its status of "Construction, operation and maintenance within the Conservation Areas including … management of designated Conservation Areas, natural open spaces, or sensitive habitats" (RBF 2014). As a Covered Activity, the Project is required to implement the species-specific avoidance and minimization measures identified in Sections 5.3 and 5.4 of the West Valley HCP (RBF 2014). Additionally, the Project is required to implement measures listed in Section 5.5.3 of the West Valley HCP required for conservation areas within the planning area. Therefore, the Project would not conflict with a local management and impacts would not be significant.

6.0 MITIGATION MEASURES AND RECOMMENDATIONS

The following mitigation measures are recommended prior to Project implementation:

BIO-1 **Worker Environmental Awareness Program and Biological Monitor:** Prior to the start of ground disturbing activities, a Worker Environmental Awareness Program (WEAP) will be developed by the City or the City's consultant. A qualified biologist with experience with the sensitive biological resources in the region will present the WEAP to all personnel working in the Project Area (either temporarily or permanently) prior to the start of Project activities. The WEAP may be videotaped and used to train newly hired workers or those not present for the initial WEAP. The WEAP could include but will not be limited to discussions of the sensitive biological resources associated with the Project, Project-specific measures to avoid or eliminate impacts to these resources, consequences for not complying with Project permits and agreements, and contact information for the lead biologist. Logs of personnel who have taken the training will be kept on the site at the construction or Project office.

In addition to a WEAP, a qualified biologist (biological monitor) with experience monitoring for and identifying sensitive biological resources known to occur in the area will be present during initial ground-disturbing activities related to the Project (including fence installation and vegetation removal activities). Biological monitoring duties will include, but are not limited to, conducting worker education training, verifying compliance with Project permits, and helping to ensure Project activities stay within designated work areas.

The biological monitor will have the right to halt all activities in an affected area if a special-status species is identified in a work area and is in danger of injury or mortality. If work is halted by the biological monitor, work will proceed only after the hazards to the individual are removed and there is no longer a risk to the individual, or the individual has been moved from harm's way in accordance with the Project's permits and/or management/translocation plans. The biological monitor will take representative photographs of the daily activities and will also maintain a daily log that documents general Project activities and compliance with the Project's permit conditions. Non-compliances will also be documented in the daily log, including any measures that were implemented to rectify the issue.

BIO-2 **Rare Plant Survey:** A rare plant survey for smooth tarplant and Santa Ana River woollystar shall be conducted within suitable habitat within the Area to be Developed and Proposed Conservation Area during the appropriate blooming period. The survey shall be conducted by a botanist or qualified biologist in accordance with the *USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants*; the *CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*; and the *CNPS Botanical Survey Guidelines*. One survey will be conducted during a time of the year that overlaps with all blooming periods (April through September).

If the aforementioned special-status plant species are observed during the rare plant survey, individual plants or populations will be marked using a GPS unit with submeter accuracy. If any of these special-status plant species are detected in the Project Area and impacts to these species are unavoidable and impacts would result in deleterious effects to the regional population of the species as determined by the qualified Project botanist or biologist, then the Project will need to consult with CDFW to develop a mitigation plan or additional avoidance and minimization measures to ensure impacts to these plant species are minimized to the maximum extent practicable. Examples of measures that may be implemented after consultation with CDFW include establishing non-disturbance buffers around special-status plant locations or additional monitoring requirements during Project construction.

BIO-3 **Burrowing Owl Surveys:** Pre-construction surveys for burrowing owl shall be conducted prior to the start of ground-disturbing activities (including vegetation removal and fence installation activities), in the Area to be Devleoped, Proposed Conservation Area, and adjacent areas. The surveys shall follow the methods described in the California Department of Fish and Game (CDFG) *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) on take avoidance. Two surveys shall be conducted by a qualified biologist with experience surveying for and identifying burrowing owls and their sign. The first survey shall be conducted between 14 and 30 days prior to the start of ground-disturbing activities and the second survey shall be conducted no more than 24 hours prior to the start of ground-disturbing activities. If burrowing owls and/or suitable burrowing owl burrows with sign (e.g., whitewash, pellets, feathers, prey remains) are identified on the Project site during the survey and impacts to the species or occupied burrows are unavoidable, additional mitigation measures consistent with those outlined in the Staff Report (CDFG 2012) may need to be implemented, such as implementing a non-disturbance buffer around occupied burrows, seasonal work restrictions, or passive relocation. The Project biologist shall coordinate with CDFW as appropriate prior to implementing additional mitigation measures consistent with those outlined in the Staff Report (CDFG 2012). If the pre-construction surveys result in no detections of live burrowing owls and no sign of owl use of the two potential burrows, then Project activities may commence.

If the burrowing owl is legally protected under the California ESA as a Candidate or Listed species at the time ground-disturbing activities are scheduled to begin and burrowing owl or sign of recent burrowing owl use is identified during the pre-construction surveys, then the Project biologist shall notify CDFW of the survey results. Further coordination may be required to avoid or mitigate certain impacts to burrowing owl and an incidental take permit may be required prior to the start of Project activities. If the burrowing owl is no longer a Candidate or a formally listed species under the California ESA at the time ground-disturbing activities occur and pre-construction surveys are positive for burrowing owl, then the Project biologist shall implement additional mitigation measures as appropriate to avoid or eliminate impacts to burrowing owls consistent with the Staff Report (CDFG 2012).

BIO-4 **Preconstruction Surveys for Crotch Bumble Bee:** If the Crotch bumble bee is no longer a Candidate or formally listed species under the California ESA at the time ground-disturbing activities occur, then no additional protection measures are proposed for the species.

If the Crotch bumble bee is legally protected under the California ESA as a Candidate or Listed species at the time ground-disturbing activities are scheduled to begin, preconstruction surveys shall be conducted in accordance with CDFW's Survey Considerations for California ESA Candidate Bumble Bee Species (CDFW 2023) the season immediately prior to Project-related ground disturbing activities (including but not limited to vegetation clearing, fence installation, and grading). A minimum of three Crotch bumble bee preconstruction surveys shall be conducted by a qualified biologist during the colony active period (April through August) and blooming period of flowering resources when Crotch bumble bees are most likely to be detected. If Crotch bumble bees are detected, CDFW shall be notified within 24 hours as further coordination may be required to avoid or mitigate certain impacts and an incidental take permit may be required. If no Crotch bumble bees are detected, then the Project activities may commence.

BIO-5 **Preconstruction Survey for Coastal California Gnatcatcher and Nesting Birds:** A preconstruction survey for coastal California gnatcatcher and nesting birds shall be conducted by a qualified avian biologist prior to ground-disturbing Project activities (e.g., grubbing, vegetation removal, grading, fence installation) regardless of the time of year Project-related activities are scheduled to begin. The preconstruction survey shall be performed to minimize impacts to coastal California gnatcatcher and ensure that active bird nests will not be disturbed or destroyed as a result of the Project. The survey shall be completed no more than three days prior to initial ground disturbance. The survey shall include the Project Area and adjacent areas where Project activities have the potential to affect active nests, either directly or indirectly, due to construction activity, noise, human activity, or ground disturbance.

If an active nest is identified, a qualified avian biologist shall establish an appropriately sized non-disturbance buffer around the nest using flagging or staking. Construction activities shall not occur within any non-disturbance buffer zones until the nest is deemed inactive by

the qualified avian biologist through regular nest status monitoring conducted by the avian biologist.

If coastal California gnatcatcher, or any other special-status avian species is identified during the preconstruction survey, and Project-related impacts are unavoidable, consultation with the appropriate agency (e.g., the USFWS and the CDFW) may need to occur to develop additional avoidance and minimization measures.

BIO-6 **Preconstruction Survey for Western Spadefoot:** Prior to the start of ground disturbing activities in the Proposed Conservation Area, a qualified biologist shall conduct at least one preconstruction daytime and nighttime survey for all life stages of western spadefoot. The survey shall be conducted when surface water is ponded in aquatic features, if feasible, between October through May (when suitable environmental conditions are met). Surveys will be conducted during or following rain events and in nonfreezing temperatures to the maximum extent feasible. Daytime surveys of aquatic features shall be conducted with the aid of binoculars and polarized sunglasses for all life stages of western spadefoot as well as adjacent upland habitat for burrowing adults and juveniles. Nighttime audio detection and eye-shine surveys shall be conducted with the aid of binoculars and flashlight for calling males in and near aquatic features. A preconstruction survey report shall be prepared and submitted to the USFWS and the CDFW, as appropriate, that includes the methods, results, and recommendations based on the survey. If the preconstruction survey(s) are conducted according to the above methods and no detections of western spadefoot occur within the Project Area or surroundings, then no further measures need to be taken. If the preconstruction survey(s) are conducted according to the above methods and there are detections of western spadefoot within the Project Area or surroundings, consultation with the appropriate regulatory agencies may be required based on the current status of the western spadefoot at the time of detection.

6.1 Additional Recommendations

6.1.1 Lighting/Glare

The Project is located within an urban environment with pre-existing light pollution from adjacent development (e.g., Arrowhead Medical Center, paved roadways, residential development). However, the Project will result in an increase in lighting/glare due to stadium lighting. Although light pollution is not a novel addition to the Project's vicinity due to existing development, it is recommended that to reduce the potential indirect impacts of increased lighting/glare from the Project to sensitive biological resources such as nesting birds, the following guidance be implemented:

- Eliminate all non-essential lighting;
- Avoid or limit use of lighting during dawn and dusk hours;
- Install shields on lights to reduce overpour into adjacent areas;
- Direct light downward;

- Incorporate light with warmer color temperatures; and
- Reduce light intensity where feasible.

6.1.2 Recommended Practices

The following recommended practices are not mitigation measures pursuant to CEQA but are recommended to further reduce impacts to species that have potential to occur on the property:

- Confine all work activities to a predetermined work area.
- To prevent inadvertent entrapment of wildlife during the construction phase of the Project, all excavated, steep-walled holes or trenches more than two feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.
- Wildlife are often attracted to burrow- or den-like structures such as pipes and may enter stored pipes and become trapped or injured. To prevent wildlife use of these structures, all construction pipes, culverts, or similar structures with a diameter of four inches or greater should be capped while stored onsite.
- All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from the construction or Project Area.
- Use of rodenticides and herbicides on the Project Area should be implemented in a manner that reduces the potential for primary or secondary poisoning of non-target species. This is necessary to prevent poisoning of non-target species, including special-status species, and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the USEPA, California Department of Food and Agriculture, and other state and federal legislation. If rodent control must be conducted, zinc phosphide should be used because it has a proven lower risk to predatory wildlife.

7.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the Project applicant or the applicant's representative and that I have no financial interest in the Project.

SIGNED: DATE:



October 24, 2024

Shelby Dunn
Associate Biologist
ECORP Consulting, Inc.

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LIST OF APPENDICES

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Appendix B – Plant Species Observed

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Appendix D – Special-Status Plant Species Potential for Occurrence

Appendix E – Special-Status Wildlife Species Potential for Occurrence

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