Initial Study/Mitigated Negative Declaration

2752 Coloma Street – Housing Opportunity Overlay
City of Placerville, California

May 2024

LEAD AGENCY:

City of Placerville
Development Services Department
3101 Center Street
Placerville, CA 95667

Initial Study/Mitigated Negative Declaration

2752 Coloma Street – Housing Opportunity Overlay
City of Placerville, California

May 2024

LEAD AGENCY:

City of Placerville
Development Services Department
3101 Center Street
Placerville, CA 95667

PREPARED BY:

Acorn Environmental
5170 Golden Foothill Pkwy.
El Dorado Hills, CA 95762
www.acorn-env.com

Table of Contents

Section 1 | Introduction 1
1.1 Regulatory Information 1
1.2 Document Format 1
Section 2 | Project Description 2
2.1 Project Background 2
2.1.1 Project Title 2
2.1.2 Lead Agency Name and Address 2
2.1.3 Contact Person and Number 2
2.1.4 Project Location 2
2.1.5 General Plan Designation 2
2.1.6 Zoning 2
2.1.7 Description of the Project 2
2.1.8 Surrounding Land Use and Setting 5
2.1.9 Other Public Agencies Whose Approval is Required 5
2.1.10 Consultation with California Native American Tribes (Public Resources Code Section 21080.3.1) 5
2.2 Project Commitments 6
Section 3 | Determination 8
3.1 Environmental Factors Potentially Affected 8
3.2 Determination 9
Section 4 | Evaluation of Environmental Impacts 10
4.1 Aesthetics 10
4.1.1 Environmental Setting 10
4.1.2 Impact Assessment 11
4.2 Agriculture and Forestry 13
4.2.1 Environmental Setting 13
4.2.2 Impact Assessment 14
4.3 Air Quality 16
4.3.1 Environmental Setting 16
4.3.2 Impact Assessment 17
4.4 Biological Resources 21
4.4.1 Environmental Setting 21
4.4.2 Impact Assessment 22
4.5 Cultural Resources 30
4.5.1 Environmental Setting 30
4.5.2 Impact Assessment 30
4.6 Energy 35
4.6.1 Environmental Setting 35
4.6.2 Impact Assessment 35
4.7 Geology and Soils 37
4.7.1 Environmental Setting 37
4.7.2 Impact Assessment 39

4.8 Greenhouse Gas Emissions 42
4.8.1 Environmental Setting 42
4.8.2 Impact Assessment 43
4.9 Hazard and Hazardous Materials 45
4.9.1 Environmental Setting 45
4.9.2 Impact Assessment 46
4.10 Hydrology and Water Quality 49
4.10.1 Environmental Setting 49
4.10.2 Impact Assessment 50
4.11 Land Use and Planning 53
4.11.1 Environmental Setting 53
4.11.2 Impact Assessment 53
4.12 Mineral Resources 55
4.12.1 Environmental Setting 55
4.12.2 Impact Assessment 55
4.13 Noise 56
4.13.1 Environmental Setting 56
4.13.2 Impact Assessment 59
4.14 Population and Housing 62
4.14.1 Environmental Setting 62
4.14.2 Impact Assessment 63
4.15 Public Services 64
4.15.1 Environmental Setting 64
4.15.2 Impact Assessment 65
4.16 Recreation 67
4.16.1 Environmental Setting 67
4.16.2 Impact Assessment 67
4.17 Transportation 68
4.17.1 Environmental Setting 68
4.17.2 Impact Assessment 71
4.18 Tribal Cultural Resources 73
4.18.1 Environmental Setting 73
4.18.2 Impact Assessment 74
4.19 Utilities and Service Systems 75
4.19.1 Environmental Setting 75
4.19.2 Impact Assessment 77
4.20 Wildfire 81
4.20.1 Environmental Setting 81
4.20.2 Impact Assessment 81
4.21 CEQA Mandatory Findings of Significance 83
4.21.1 Impact Assessment 83
Section 5 | References 86
Section 6 | Report Preparers 90

List of Figures

Figure 1: Regional Location 3
Figure 2: Aerial Map 4
Figure 3: NWI Map 23
Figure 4: CNDDB Map 24
Figure 5: Vegetation Communities Map 25
Figure 6: Surface Waters Map 26

List of Tables

Table 1: Air Quality Attainment Status - Federal and State 17
Table 2: Estimated Construction and Operational Air Pollutant Emissions 18
Table 3: Estimated Construction and Operational GHG Emissions 43
Table 4: Effects of Vibration on People and Buildings 57
Table 5: Summary of Existing Background Noise Measurement Data 58
Table 6: FICON Significance of Changes in Noise Exposure 60

List of Appendices

Appendix A Air Quality and Greenhouse Gas Supporting Information
Appendix B Biological Resources Supporting Information
Appendix C Cultural Resources Investigation
Appendix D Environmental Noise Assessment

List of Abbreviations and Acronyms

AADT .....Annual Average Daily Traffic
AB .....Assembly Bill
afy.....acre-feet per year
AQAP .....Air Quality Attainment Plan
AQMD.....Air Quality Management District
BMP .....Best management practice
CAA.....Clean Air Act
CAAQS .....California Ambient Air Quality Standards
CalEEMod .....California Emissions Estimator Model
CAL FIRE .....California Department of Forestry and Fire Protection
Caltrans .....California Department of Transportation
CARB.....California Air Resources Board
CBC .....California Building Code
CCA.....Community Choice Aggregator
CCR .....Code of California Regulations
CDFW .....California Department of Fish and Wildlife
CEC .....California Energy Consumption
CEQA .....California Environmental Quality Act
CGS .....California Geological Survey
CH_4.....methane
City .....City of Placerville
CNDDB.....California Natural Diversity Database
CNPS.....California Native Plant Society
CO_2 .....carbon dioxide
CO_2e .....carbon dioxide equivalent
Cortese List.....The Hazardous Waste and Substance Site List
CRHR .....California Register of Historical Resources
dB .....decibels
dBA.....A-weighted sound levels
DNL or L_{dn} .....day/night average sound level
DOC .....California Department of Conservation
du .....dwelling units
EDCOE .....El Dorado County Office of Education
EID .....El Dorado Irrigation District
EIR .....Environmental Impact Report
FEMA .....Federal Emergency Management Agency
FICON .....Federal Interagency Committee on Noise
Fire District.....El Dorado County Fire Protection District
FMMP.....Farmland Mapping and Monitoring Program
GHG .....greenhouse gas
HCWRF .....Hangtown Creek Water Reclamation Facility
HO .....Housing Opportunity
IPCC .....Intergovernmental Panel on Climate Change
IS/MND.....Initial Study/Mitigated Negative Declaration

JPA.....Joint Powers Authority
L_{eg} .....average sound level
MCAB .....Mountain Counties Air Basin
MGD.....million gallons per day
MLD.....Most Likely Descendent
MRZ.....Mineral Resource Zone
N_2O .....nitrous oxide
NAAQS.....National Ambient Air Quality Standards
NAHC.....Native American Heritage Commission
NCIC.....North Central Information Center
NO_x .....nitrogen oxide
NPDES.....National Pollutant Discharge Elimination System
NRCS.....Natural Resource Conservation Service
NWI .....National Wetland Inventory
OPR.....Office of Planning and Research
PCE .....Pioneer Community Energy
PM.....particulate matter
Police Department .....City of Placerville Police Department
PRC.....Public Resources Code
ROG .....reactive organic compounds
RWQCB.....Regional Water Quality Control Board
SB .....Senate Bill
SFNA.....Sacramento Federal Nonattainment Area
SGMA .....Sustainable Groundwater Management Act
SIP.....State Implementation Plan
SLF .....Sacred Lands File
SMAQMD .....Sacramento Metropolitan Air Quality Management District
SWPPP.....Storm Water Pollution Prevention Plan
TAC.....Transportation Analysis Under CEQA
TAF .....Transportation Analysis Framework
UBC.....Uniform Building Code
UCMP .....University of California Museum of Paleontology
USACE.....U.S. Army Corps of Engineers
USDA .....U.S. Department of Agriculture
USEPA.....U.S. Environmental Protection Agency
USFWS.....U.S. Fish and Wildlife Service
VHFHSZ .....Very High Fire Hazard Severity Zone
VMT.....vehicle miles traveled
WWTP .....wastewater treatment plant

Section 1 | Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND) addresses the environmental effects of a proposed General Plan Amendment and Rezone, which would add the Housing Opportunity (HO) Overlay to 3.77 acres at 2752 Coloma Street in Placerville, California ("Proposed Project" or "Project"). It is assumed that up to 67 multi-family dwelling units could be developed, consistent with the HO Overlay. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code (PRC) Section 21000 et. seq. The City of Placerville is the CEQA lead agency for this Proposed Project. The Proposed Project and the Project Site are described in detail in **Section 2**.

1.1 REGULATORY INFORMATION

An IS is a document prepared by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Code of Regulations (CCR) Title 14, Chapter 3, Section 15000 et seq. (also known as the CEQA Guidelines), Section 15064(a)(1) states that an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the proposed project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant levels. A negative declaration (ND) may be prepared instead if the lead agency finds that there is no substantial evidence in light of the whole record that the project may have a significant effect on the environment. An ND is a written statement describing the reasons why a proposed project, not otherwise exempt from CEQA, would not have a significant effect on the environment and therefore does not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a ND or mitigated ND (MND) shall be prepared for a project subject to CEQA when either:

a. The IS shows there is no substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment, or
b. The IS identified potentially significant effects, but:
    1 Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed MND and IS released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur is prepared, and
    2 There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.

1.2 DOCUMENT FORMAT

This IS/MND contains four chapters plus appendices. **Section 1**, Introduction, provides a brief overview of the Proposed Project and CEQA requirements. **Section 2**, Project Description, provides a detailed description of Proposed Project components. **Section 3**, Determination, identifies the environmental factors potentially affected based on the analyses contained in this IS and includes the Lead Agency's determination based upon those analyses**. Section 4**, Evaluation of Environmental Impacts, presents the CEQA checklist and environmental analyses for all impact areas and the mandatory findings of significance. A brief discussion of the reasons why the impact is anticipated to be less than significant or why no impacts are expected is included.

Section 2 | Project Description

2.1 PROJECT BACKGROUND

2.1.1 Project Title

City of Placerville General Plan Land Use Designation and Zoning Map Amendment – Housing Opportunity (HO) Overlay - 2752 Coloma Street

2.1.2 Lead Agency Name and Address

City of Placerville
3101 Center Street
Placerville, CA 95667

2.1.3 Contact Person and Number

Carole Kendrick
Development Services Director
City of Placerville Development Services Department
(530) 642-5252

2.1.4 Project Location

The Project Site consists of one parcel (Assessor's Parcel Number 001-092-027) that totals 3.77 acres within the City of Placerville, California, as shown in **Figure 1** and **Figure 2**. The Project Site is located on Coloma Street (Highway 49) across from Holly Way.

2.1.5 General Plan Designation

The existing general plan designation is HDR, High Density Residential. The proposed general plan designation is HDR-HO, High Density Residential – Housing Opportunity Overlay.

2.1.6 Zoning

The existing zoning is R-2, Low Density Multi-Family Residential. The proposed zoning is R-2-HO, Low Density Multi-Family Residential–Housing Opportunity Overlay.

2.1.7 Description of the Project

The City of Placerville identified a housing need in the City's General Plan 2021-2029 Housing Element 6th cycle. Program A-3 is to complete implementation of high-density development land inventory and objective design standards. The program would increase the City's inventory of parcels for high-density residential development conducive and appropriate to accommodate housing affordable for low-income households at a minimum density of twenty units per acre and a maximum density of twenty-four units per acre in the HO Overlay Zone. The HO Overlay includes affordability provisions that ensure a minimum

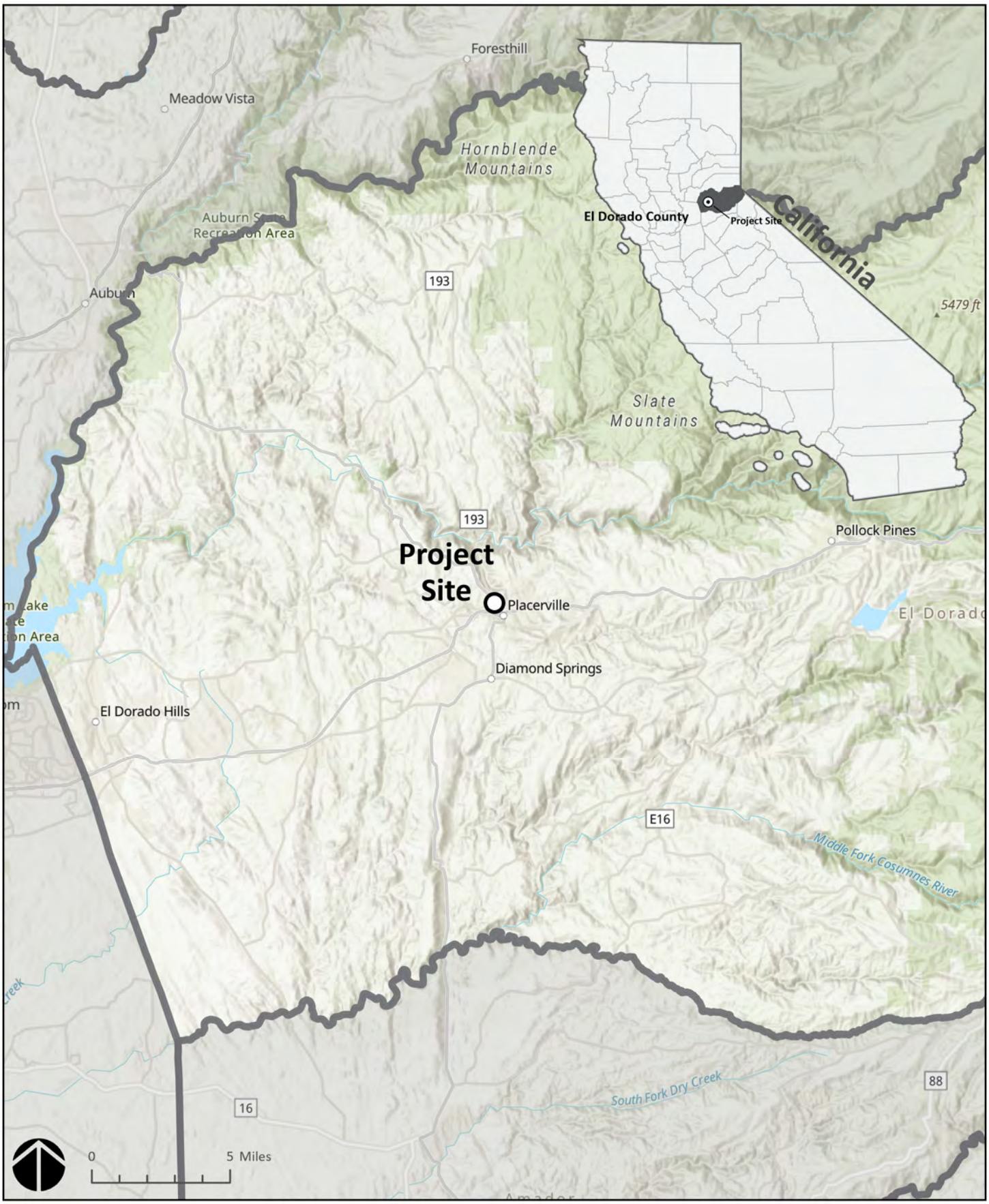


FIGURE 1

REGIONAL LOCATION

Source: El Dorado County Assessor; ESRI World Imagery

FIGURE 2

AERIAL MAP

of fifty percent (50%) of all housing on the site must be affordable to very low and low income households, with very low income households comprising a minimum of thirty percent (30%) of the total units and low income households comprising a minimum of twenty percent (20%) of the total units in the development.

The Proposed Project is to amend the General Plan and rezone the Project Site to add the HO overlay, which would allow for the proposed development of up to 67 multi-family units. As discussed in the Housing Element, the Project Site is not necessary to accommodate Regional Housing Needs Allocation for the 2021-2029 Planning Period but would provide additional inventory in the event that existing high density classified HO parcels are not developed with affordable housing.

The Project Site is currently undeveloped with the exception of a small outbuilding used for storage. It is assumed that the storage structure would be demolished.

2.1.8 Surrounding Land Use and Setting

The site is bordered by single-family residential to the north, east, and west, and multi-family residential to the south. The site is bounded on the east by Coloma Street (Highway 49).

2.1.9 Other Public Agencies Whose Approval is Required

The following approvals may be required from other public agencies:

- Final design would be reviewed for impacts to an on-site channel feature and associated riparian habitat parallel to Coloma Street. Alterations to the channel or riparian habitat would require approvals from the U.S. Army Corps of Engineers (USACE), Central Valley Regional Water Quality Control Board (RWQCB), and/or California Department of Fish and Wildlife (CDFW).
- Development of a driveway connected to Coloma Street would require an encroachment permit from Caltrans.
- The Project may be required to file a Notice of Timber Operations that are Exempt from Conversion and Timber Harvesting Plan Requirements (Less Than 3 Acre Conversion Exemption) with the California Department of Forestry and Fire Protection for the conversion of timberland (see **Section 4.2** for further discussion).

2.1.10 Consultation with California Native American Tribes (Public Resources Code Section 21080.3.1)

On May 12, 2023, the City sent a consultation invitation letter via email to the following five tribes:

- Shings Springs Band of Miwok Indians
- Tsi Akim Maidu of Taylorsville Rancheria
- United Auburn Indian Community of the Auburn Rancheria
- Washoe Tribe of Nevada California
- Colfax-Todds Valley Consolidated Tribe

No responses requesting formal consultation have been received as of July 2023.

2.2 PROJECT COMMITMENTS

The following measures are considered to be part of the Proposed Project as they are required by law or statute. These commitments would be undertaken by the Project Developer to reduce environmental impacts associated with the Proposed Project.

AES-1: The Proposed Project shall conform with Zoning Ordinance Section 10-5-24(D) and (E) which pertains to density, minimum parcel area, maximum building height, and specific regulations having to do with affordability provisions and accessibility amongst others. These measures include, but are not limited to:

- Maximum building height of 40 feet
- Minimum parcel frontage of 60 feet
- A minimum of fifty percent of all housing must be affordable to very low- and low-income households, i.e., 30 percent very low income, and 20 percent low income

AES-2: The Proposed Project shall conform with Zoning Ordinance Section 10-4-16 which pertains to exterior lighting regulations encompassing glare, light pollution, shielding, and types of illumination amongst others. These measures include, but are not limited to:

- Outdoor light fixtures for new multi-family development shall be fully shielded with the exception of porch lights.
- Automatic timing devices shall be required for all new outdoor light fixtures on multi-family residential development with off hours between 11 pm and 6 am with the exception of hours of operation of corresponding use, security purposes, or to illuminate walkways, roadways, and parking lots.

AQ-1: Construction of the Proposed Project shall comply with the Air Quality Management District's (AQMD's) Rule 223-1. The general contractor for development under the Proposed Project shall be required to submit a Fugitive Dust Plan prior to the start of construction. This plan would be subject to the approval of the AQMD.

BIO-1: The Proposed Project shall comply with the City of Placerville Municipal Code Chapter 13 Woodland and Forest Conservation, which protects trees that are at least 7.5 inches in diameter or 20 feet tall and ensures that residential subdivision and development adheres to canopy retention standards. A Woodland Alteration Permit is required to significantly alter forest or woodland. Creation of a Woodland Alteration Plan is required to establish conservation of existing woodland resources and to replace impacted woodland resources during construction or development. The Project shall prioritize retention of trees along the southern Project boundary, to the extent feasible, to meet canopy retention standards.

ENERGY-1: The Proposed Project shall comply with CCR, Title 24, Part 6, known as the Building Energy Efficiency Standards.

GEO-1: The Proposed Project shall conform with the City's Grading, Erosion and Sediment Control regulations (Chapter 7 Grading, Erosion and Sediment Control).

GHG-1: The Proposed Project shall implement the following measures consistent with the California Building Code and regional efforts to reduce greenhouse gas emissions:

- The current CALGreen Tier 2 standards shall be implemented, with the exception that all electric vehicle capable spaces shall instead be electric vehicle ready (provided with powered receptacle or charger).
- New development on the Project Site shall be designed and constructed without natural gas or propane infrastructure.
- Water consumption shall be reduced through low-flow appliances and drought resistant landscaping.
- Energy efficient lighting and appliances shall be installed to reduce greenhouse gas emissions.
- Recycling facilities shall be installed for glass, cans, and paper products.

HAZ-1: Site plans shall be submitted to the Placerville Development Services Department and El Dorado County Fire Protection District for review and approval prior to construction. These plans shall adhere to the applicable requirements of the California Building Standards Code (CCR, Title 24), as amended by the City Municipal Code.

HYDRO-1: A Notice of Intent to Comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit shall be filed with the Regional Water Quality Control Board, prior to construction. As part of the NPDES Permit, a Stormwater Pollution Prevention Plan shall be prepared, implemented, and maintained throughout the construction phase of the project, and shall include best management practices to minimize stormwater effects to water quality during construction.

HYDRO-2: The Proposed Project shall conform with the City's Stormwater Quality regulations (Chapter 15 Stormwater Quality) and the requirements of the City's MS4 Permit.

PUBSERV-1: All applicable development fees established by Resolution #7625 (July 8, 2008) shall be paid, including but not limited to development fees for fire protection services, schools, and parks.

TRAFFIC-1: The Proposed Project shall conform with applicable requirements of the City's Title 8 Public Ways and Property regulations, which includes but is not limited to, Chapter 9 (Street Improvement) requirements and Chapter 15 (Traffic Mitigation Fee).

TRAFFIC-2: The Proposed Project shall be designed to include space along Coloma Street for a planned sidewalk network, consistent with the City's Pedestrian Circulation Plan.

UTILITY-1: Should the Proposed Project include an aggregate landscape area equal to or greater than 500 square feet, it shall comply with the Water Efficient Landscape Regulations (Zoning Ordinance Section 10-6) that requires landscaping plans that promote the selection, planting, and maintenance of water efficient and water conserving landscaping.

Section 3 | Determination

3.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

As indicated by the discussions of existing and baseline conditions, and impact analyses that follow in this Section, environmental factors not checked below would have no impacts or less than significant impacts resulting from the Project. Environmental factors that are checked below would have potentially significant impacts resulting from the Project. Mitigation measures are recommended for each of the potentially significant impacts that would reduce the impact to less than significant.

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

The analyses of environmental impacts in **Section 4**, result in an impact statement, which shall have the following meanings.

Potentially Significant Impact: This category is applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce impacts to a less than significant level. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.

Less than Significant with Mitigation Incorporated: This category applies where the incorporation of mitigation measures would reduce an effect from a “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measure(s), and briefly explain how they would reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).

Less Than Significant Impact: This category is identified when the proposed project would result in impacts below the threshold of significance, and no mitigation measures are required.

No Impact: This category applies when a project would not create an impact in the specific environmental issue area. “No Impact” answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the

specific project (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 would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

3.2 DETERMINATION

On the basis of this initial evaluation (to be completed by the Lead Agency):

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

Signature	**Date**

Section 4 | Evaluation of Environmental Impacts

4.1 AESTHETICS

I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

4.1.1 Environmental Setting

The Project Site is visible from Coloma Street, which borders the Project Site to the east, and from residences surrounding the Project Site on Bennett Drive, Holly Way, and Acacia Way. The Project Site is located in an open space with trees surrounded by a residential neighborhood. The property topography slopes down towards the east, with an approximate 80-foot elevation drop. Views of the Project Site from the surrounding vicinity are typical of a rural residential setting, and consist of gently sloped, undeveloped property, surrounded by roadways, scattered residential developments, and undeveloped land (**Photograph 1**).

Light emitting sources in the vicinity of the Project Site include traffic along Coloma Street and other nearby roadways, stadium lighting from El Dorado High School football field, and security lighting associated with residential land uses.

Coloma Street in the vicinity of the Project Site is designated as an Eligible Scenic Highway under the State Scenic Highway Program (Caltrans, 2023); however, Coloma Street is not an Officially Designated Scenic Highway. Much of the Placerville area has views of the Sierra Nevadas to the east; however, residences and vegetation in the area block views of the Sierra Nevadas from the Project Site.

Photograph 1 - View of the Project Site facing west, from the intersection of Coloma Street and Holly Way

The City of Placerville's City Council established residential historical districts in 1981 upon the adoption of Ordinance 1280. These non-contiguous historic districts include four areas within the City including Spring Street/Coloma Street; Bedford Avenue/Clay Street; Cedar Ravine; and Sacramento Street/Chamberlain Street. The Project Site is not within the boundaries of any of the designated residential historic districts. Therefore, designated scenic highways, roadways, and resources do not occur within viewing range of the Project Site.

4.1.2 Impact Assessment

a) Would the project have a substantial adverse effect on a scenic vista?

No Impact. The Project Site is not located near a designated scenic vista. The Project Site does not have views of a scenic vista and is not visible from any scenic vista. Therefore, there would be *no impact*.

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

No Impact. The Project Site is not located along a State-designated Scenic Highway (CalTrans, 2023). The nearest officially designated scenic highway is US-50, which is located approximately 0.4 miles south of the Project Site and is not visible from the Project Site. Furthermore, there are no notable trees, rock

outcroppings, or historical buildings on the Project Site that would be affected. Therefore, the Proposed Project would have *no impact*.

c) 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 Proposed Project would maintain the residential character of the immediate vicinity, which includes single-family and multi-family residential. Implementation of **Project Commitment AES-1** includes consistency with City Zoning Ordinance Section 10-5-24(D) and (E) which pertains to density, minimum parcel area, and maximum building height. Therefore, the Proposed Project would have a *less-than-significant impact* on visual character.

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 Proposed Project would introduce new sources of nighttime lighting to the Project Site for safety and security purposes, such as porch lights and lighting of walkways and parking areas; however, lighting would be similar to the sources of light from other nearby residential and commercial developments. **Project Commitment AES-2** would ensure that the Proposed Project lighting would be consistent with City Zoning Ordinance 10-4-16, which regulates lighting to balance the safety and security needs for lighting with the City's desire to preserve the nighttime skyscape and to ensure that light trespass and glare have negligible impacts on surrounding properties. Therefore, the Proposed Project would have a *less-than-significant impact.*

4.2 AGRICULTURE AND FORESTRY

II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	**Potentially Significant Impact**	**Less than Significant Impact 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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
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))?	☐	☐	☒	☐
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐
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?	☐	☐	☐	☒

4.2.1 Environmental Setting

The Project Site is zoned R-2, Low Density Multi-Family Residential and thus the Project site is not zoned for agriculture, forest land, or timberland.

Agriculture

According to the *2017 Census of Agriculture*, a total of 91,006 acres in El Dorado County are used for farming purposes (U.S. Department of Agriculture [USDA], 2017). The Project Site is not identified as Farmland per the Farmland Mapping and Monitoring Program (FMMP) (DOC, 2022a). The FMMP identifies the Project Site as Urban and Built-Up land. Additionally, the Project Site and surrounding areas are within the Placerville--Diamond Springs, CA Urban Cluster a designated Urban Area by the Census Bureau (U.S. Census Bureau, 2015). The Project Site is zoned for development and there are no historic or current farming operations on the site.

Forestry

Forest land is defined by Public Resources Code Section 12220(g) as 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 is defined by Public Resources Code Section 4526 as 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.

The Project Site may or may not meet the definition of “forest land” and “timberland” as defined above. While the Project Site contains mixed oak-conifer forest habitat which includes timber tree species (habitat is discussed further in **Section 4.4**), the small size of the site and location within a residential neighborhood make it somewhat unsuitable for forest resource management or timberland production.

4.2.2 Impact Assessment

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

No Impact. The FMMP identifies the Project Site as Urban and Built-Up land. The Project Site and surrounding areas are zoned for development and there are no historic or current farming operations on the site. Therefore, there would be *no impact* to farmland.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The property is not enrolled in a Williamson contract and is not in an existing zone for agricultural use. Therefore, the Proposed Project would have *no impact*.

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

Less than Significant Impact. The Project Site is not zoned for forestry, timberland, or conservation uses. The Proposed Project would rezone land, through the addition of the HO Overlay, that may or may not meet the definitions of forest land and/or timberland; however, the site is already zoned R-2 for multi-family residential use. If applicable, the Project Developer would be required to file a Notice of Timber Operations that are Exempt from Conversion and Timber Harvesting Plan Requirements (Less Than 3 Acre Conversion Exemption). The Proposed Project would not change the underlying R-2 zoning and thus the impact of the rezoning is considered *less than significant*.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Less than Significant Impact. The Proposed Project would result in the removal of conifer trees. The removal of trees would be regulated by Chapter 13 (Woodland and Forest Conservation) of the City of Placerville Municipal Code and may also require filing of a Notice of Timber Operations that are Exempt from Conversion and Timber Harvesting Plan (Less Than 3 Acre Conversion Exemption). The 3.77-acre Project Site is considered an infill site in a residential neighborhood and is zoned for multi-family residential use. The removal of trees would represent a small loss of forest land in comparison to available forest land in the region and has already been anticipated by the existing R-2 zoning. For these reasons the loss of forest land would be *less-than-significant* impact.

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

No Impact. As described above, there is no farmland, agricultural uses, forest or timberland adjacent to the Project Site, therefore the Proposed Project would not involve other changes in the existing environment that could result in the conversion of farmland to non-agricultural use or the conversion of forest land to non-forest use. Therefore, there would be *no impact* to agricultural resources or forest land.

4.3 AIR QUALITY

III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

4.3.1 Environmental Setting

Air Basin

The Project Site is located within the jurisdiction of the El Dorado County Air Quality Management District (AQMD). It is also located within the approximately 11,000 square-mile Mountain Counties Air Basin (MCAB). This basin is located along the northern Sierra Nevada mountain range and is bordering or close to the State of Nevada border. The Counties of Plumas, Sierra, Nevada, Placer (except for the portion within the Lake Tahoe Air Basin), Amador, Calaveras, Tuolumne, Mariposa, and El Dorado (except for the portion within the Lake Tahoe Air Basin) constitute the MCAB. Local conditions tend to determine the effect of emissions in the MCAB due to topographical and meteorological conditions in the basin. The hills and mountains influence regional airflows. These influences direct surface air flows, cause shallow vertical mixing, and hinder dispersion. These factors create areas of high pollutant concentrations, and these pollutants are often trapped to the ground because inversion layers, where warm air overlays cooler air, frequently occur. During the increased daylight hours and temperatures of summer in addition to stagnant air, these conditions provide the circumstances and energy for the photochemical reaction between reactive organic compounds (ROG) and oxides of nitrogen (NOx) that results in the formation of ozone (El Dorado County Air Pollution Control District, 2002).

Regulatory Setting

The USEPA per the Clean Air Act (CAA) classifies air basins as “attainment” or “nonattainment” for each criteria air pollutant based on whether they meet the thresholds set forth in the National Ambient Air Quality Standards (NAAQS). “Unclassified” is defined by the federal CAA as any area that cannot be classified, on the basis of available information, as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant. Furthermore, an area may be designated attainment with a maintenance plan (also known as a maintenance area), which means that an area was

previously in nonattainment. The California Air Resources Board (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. In addition to administering the NAAQS standards, CARB is also responsible for overseeing the California Ambient Air Quality Standards (CAAQS).

The MCAB is currently classified as a nonattainment area for ozone and particulate matter less than 2.5 microns ($PM_{2.5}$) under the NAAQS (**Table 1**). The MCAB is also a nonattainment area for ozone and particulate matter less than 10 microns (PM_{10}) under the CAAQS. The MCAB is designated as attainment, maintenance or unclassified for all other pollutants under the NAAQS and CAAQS.

The MCAB portion of El Dorado County lies within the area designated by the USEPA as the Sacramento Federal Ozone Nonattainment Area (SFNA), comprised of Sacramento and Yolo counties, and parts of El Dorado, Solano, Placer, and Sutter counties. In 2017, the regional air districts developed the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan to address how the region would attain the 2008 8-hour ozone standard.

The Project Site also lies within the area designated by the USEPA as the Sacramento Federal $PM_{2.5}$ Nonattainment Area. In 2017, the USEPA found that the area had attained the 2006 24-hour $PM_{2.5}$ NAAQS. This determination of attainment did not constitute a redesignation to attainment. Rather, the State must meet additional criteria including approval of a State Implementation Plan (SIP) demonstrating maintenance of the air quality standard for 10 years after redesignation.

Table 1: Air Quality Attainment Status - Federal and State

Pollutant	NAAQS	CAAQS
Ozone	Nonattainment	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Unclassified
CO	Maintenance	Unclassified
SO_2	Attainment	Attainment
Pb	Attainment	Attainment

Source: CARB, 2022; USEPA, 2023

In 2002, the AQMD adopted a *Guide to Air Quality Assessment*. This guide evaluates project-specific impacts and helps determine if air quality mitigation measures are needed, or if potentially significant impacts could result. The Guide provides quantitative and qualitative significance criteria for both construction and operational emissions from a project.

4.3.2 Impact Assessment

Methodology

Impacts are evaluated based on CEQA Appendix G criteria and the AQMD's *Guide to Air Quality Assessment*. The California Emissions Estimator Model (CalEEMod), version 2020.4.0, was used to estimate emissions as a result of potential development for the Proposed Project. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The detailed output model files generated for this analysis are included in **Appendix A.**

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The MCAB is currently designated a nonattainment area for the federal 8-hour ozone standard. The applicable air quality plan is the 2017 Sacramento Regional Ozone Air Quality Attainment Plan (AQAP), which outlines how the SFNA, including western El Dorado County, will meet the 2008 ozone NAAQS.

The AQMD considers a proposed project consistent with the AQAP if the project satisfies the following criteria. A discussion of the Proposed Project's compliance is provided under each criterion.

1. *The project does not require a change in the existing land use designation (e.g., a general plan amendment or rezone), and projected emissions of ROG and NOx from the proposed project are equal to or less than the emissions anticipated for the site if developed under the existing land use designation.*

   The Proposed Project would add a Housing Opportunity Overlay to the Project Site, thereby increasing the allowed residential density. While this could increase emissions from the Project Site, increasing the residential density for needed housing would reduce per capita emissions, thereby furthering overall ROG and NOx emissions reductions consistent with the AQAP. AQMD's *Guide to Air Quality Assessment* provides a range of potential mitigation measures to reduce emissions. Included among the measures is increasing residential density above 7 dwelling units (du) per acre. Because the Proposed Project would increase residential density and thereby reduce per capita emissions, it is considered consistent with the intent of this criterion.

2. *The project does not exceed the "project alone" significance criteria.*

   As shown in **Table 2**, emissions of ROG and NOx would not exceed the AQMD's threshold of 82 lbs/day for construction and operational emissions.

Table 2: Estimated Construction and Operational Air Pollutant Emissions

Phase	Maximum Daily Emissions (lbs/day)			
	ROG	NOx	PM_{10}	$PM_{2.5}$
Construction	21.9	13.9	7.7	4.0
Operation	4.2	2.6	3.3	0.9
AQMD Threshold	82	82	—	—
Significant?	No	No	No	No

Source: El Dorado County APCD, 2002; **Appendix A**

3. *The lead agency for the project requires the project to implement any applicable emission reduction measures contained in and/or derived from the AQAP.*

   Appendix E of the AQMD's *Guide to Air Quality Assessment* identifies measures that can be incorporated into a project to ensure consistency with the AQAP. These measures include increasing residential density above 7 du per acre and providing electric vehicle charging facilities. By design and through required compliance with the California Building Code (CBC), the Proposed Project would

comply with these measures. The Proposed Project would have a residential density of 24 du per acre and would be required to provide electric vehicle charging facilities consistent with the CBC.

4. *The project complies with all applicable district rules and regulations*.

   Construction and operation of the Proposed Project would be required to comply with all applicable AQMD rules and regulations. The Proposed Project does not include any components that would conflict with AQMD rules and regulations.

The Proposed Project meets the AQMD's criteria for consistency with the AQAP and thus this impact is *less than significant*.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact. As discussed above, the MCAB is in nonattainment for ozone for both NAAQS and CAAQS, nonattainment for $PM_{2.5}$ for NAAQS, and nonattainment for PM_{10} for CAAQS. As shown in **Table 2**, the Proposed Project would not exceed the thresholds set forth by the AQMD for ROG and NOx. Likewise, the AQMD considers projects that do not exceed the ROG and NOx thresholds to also have less than significant CO, PM_{10}, $PM_{2.5}$ and SOx emissions. Therefore, the potential increased development under the Proposed Project compared to existing conditions would have a negligible impact and would not make a cumulatively considerable contribution to nonattainment criteria pollutants levels in the MCAB. As such, this impact is *less than significant*.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive receptors are generally defined as land uses that house or attract people who are susceptible to adverse effects from air pollution emissions and, as such, should be given special consideration when evaluating air quality impacts from projects. Sensitive receptors include facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent homes, parks and recreational facilities, and residential areas are examples of sensitive receptors. The residences surrounding the Project Site are considered sensitive receptors in addition to the Happy Kids Preschool and Childcare facility to the south and El Dorado High School to the west.

During construction, sensitive receptors could be adversely affected from both emissions of criteria pollutants and fugitive dust from heavy equipment. The AQMD has implemented Rule 223 and 223-1 to reduce fugitive dust through requiring control measures. Rule 223-1 specifically addresses ambient air impacts due to construction fugitive dust creation and includes general requirements. These general requirements include not exceeding 20% opacity from the point of origin, limiting vehicle speeds, and suspending dust generating activities during windy conditions. A Fugitive Dust Plan, required by AQMD Rule 223-1, shall be developed prior to the start of construction, which is included as **Project Commitment AQ-1**. This plan would be subject to the approval of the AQMD before commencing construction activities (El Dorado County Air Quality Management District, 2013). With implementation of **Project Commitment AQ-1**, the impacts from fugitive dust during construction would be less than significant. With regards to

other emissions, as discussed above, emissions from the potential development under the Proposed Project would not exceed AQMD significance criteria as shown in **Table 2**. Therefore, the Proposed Project would have a *less than significant* impact on sensitive receptors during construction.

During operation, the Proposed Project would not be a source of substantial pollutant concentrations because residences are typically not heavy emitters, as shown in **Table 2**. These estimated emissions were below the significance thresholds for operation set by AQMD. Furthermore, the residences would not generate noticeable amounts of fugitive dust. Therefore, the impact would be *less than significant*.

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

Less Than Significant Impact. Types of operations that can produce noticeable odors waste include processing and heavy industrial facilities such as wastewater treatment plants (WWTPs), landfills and composting facilities, chemical manufacturing, and confined animal facilities. For qualitatively assessing odor impacts, the AQMD's *Guide to Air Quality Assessment* considers the project significant if the project "results in excessive odors, as defined under the Health & Safety Code definition of an air quality nuisance." California Health and Safety Code Section 41700 states that no person can discharge air contaminants that cause injury, nuisance, or annoyance to any considerable number of persons or the public, or discharge air contaminants that endanger the comfort, health, or safety of such persons.

During construction, equipment exhaust and application of asphalt, structural coating, and other construction applications would emit odors. However, these construction-related odors would be temporary in nature and typical of construction-related activities. During operation, development would only consist of residences that are not considered significant sources of offensive odors. For these reasons, this impact is *less than significant*.

4.4 BIOLOGICAL RESOURCES

IV. BIOLOGICAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant Impact 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?	☐	☒	☐	☐
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?	☐	☒	☐	☐
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?	☐	☒	☐	☐
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?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
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?	☐	☐	☐	☒

4.4.1 Environmental Setting

Senior Biologist Dr. Geo Graening and Environmental Project Manager Jennifer Wade performed a biological resources survey of the Project Site on May 7, 2023 to map habitat types, potentially jurisdictional waters, and potentially occurring special-status species. The term 'special-status species' is defined to include:

- Designated rare, threatened, endangered, and candidate species for listing by CDFW
- Designated threatened or endangered and candidate species for listing by the U.S. Fish and Wildlife Service (USFWS)

- Species considered rare or endangered under conditions of Section 15380 of CEQA Guidelines, such as those identified on lists 1A, 1B, and 2 in the 2001 *Inventory of Rare and Endangered Plants of California* by the California Native Plant Society (CNPS)
- Other species considered sensitive due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those listed as California Species of Special Concern (CSSC). Species designated as CSSC have no legal protective status under CEQA but are of concern to CDFW

Database lists, a special-status species table, and a list of observed plant species are included in **Appendix B**. The following databases were queried:

- USFWS National Wetland Inventory (NWI) digital maps (**Figure 3**)
- USFWS List of List of Threatened and Endangered Species that may occur on the Project Site or be affected by the Proposed Project
- California Natural Diversity Database (CNDDB) search for the Placerville quadrangle (**Figure 4**)
- California Native Plant Society's (CNPS) database Inventory of Rare and Endangered Plants of California using the Placerville quadrangle boundary

The Project Site consists of an undeveloped residential lot situated on a forested slope within foothills of the Sierra Nevada mountains. Vegetation communities consist of mixed oak-conifer forest, riparian, and urbanized (**Figure 5**). The mixed oak-conifer forest is considered young-growth.

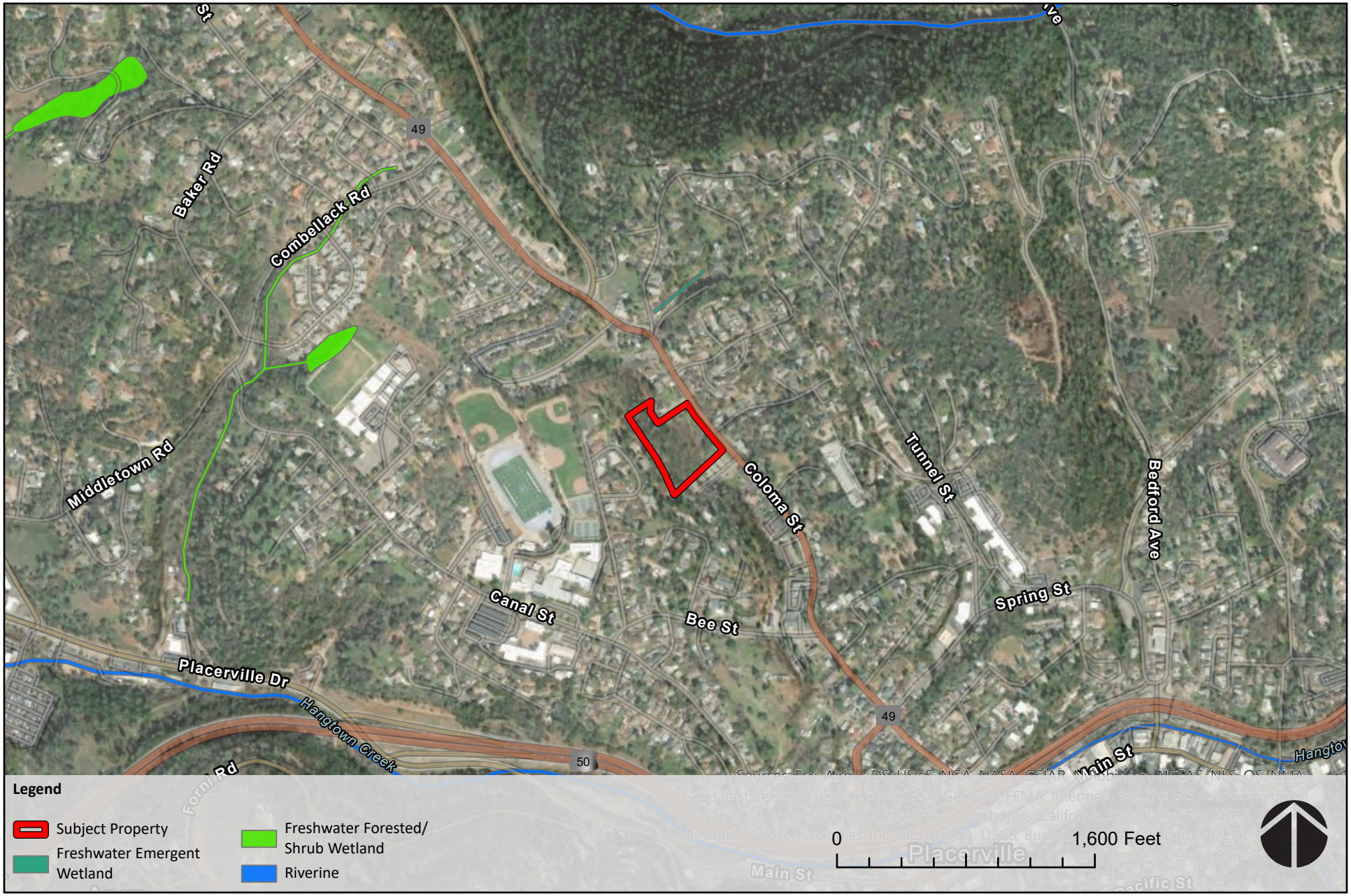
An intermittent channel flows through the Project Site and is fed by two ephemeral channels that discharge water from pipe culverts (**Figure 6**). These features tie into the City's stormwater system and have been channelized from their natural configurations. Potentially jurisdictional wetlands occur adjacent to the intermittent and ephemeral channels.

4.4.2 Impact Assessment

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation. No special-status species were observed during the survey and known occurrences of special-status species have not been recorded on the Project Site (**Appendix B**). An analysis of regionally occurring special-status species (**Appendix B**) determined that Project Site may contain suitable habitat (mixed oak-conifer forest) to support the following special-status plant species: oval-leaved viburnum (*Viburnum ellipticum*, California Rare Plant Rank 2B.3[1]. The survey was conducted during the blooming period of oval-leaved viburnum (May-June) and this species was not observed. The project site does not contain suitable habitat so support special-status animal species.

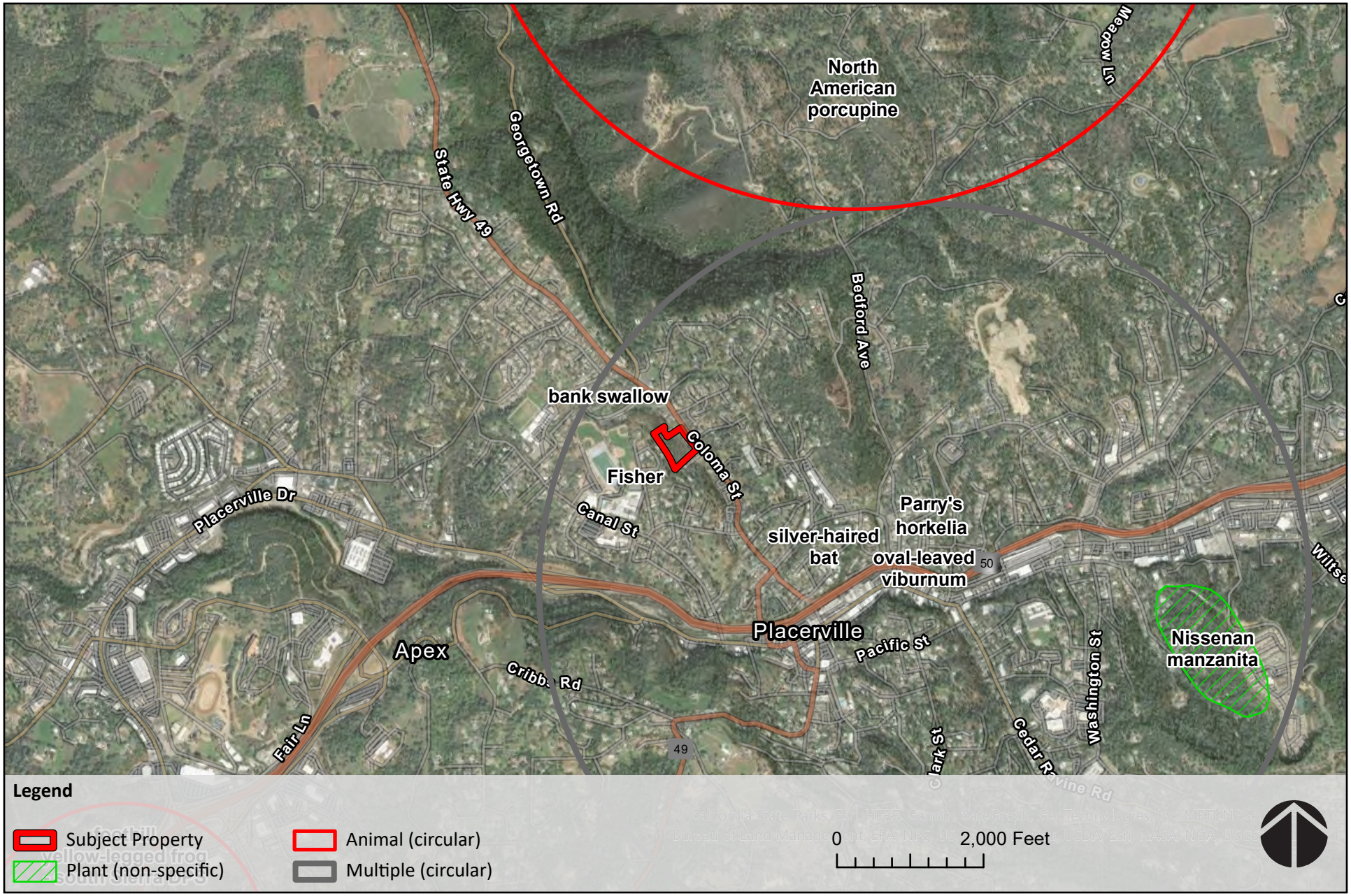
[1] 2B=Plants rare threatened or endangered in California, but more common elsewhere; 0.3 = not very threatened in California.



Source: El Dorado County Assessor; ESRI World Imagery

FIGURE 3

NWI MAP



Source: El Dorado County Assessor; ESRI World Imagery

FIGURE 4

CNDDB MAP

Source: El Dorado County Assessor; ESRI World Imagery

FIGURE 5

VEGETATION COMMUNITIES MAP

Source: El Dorado County Assessor; ESRI World Imagery

FIGURE 6

SURFACE WATERS MAP

The Project Site and adjacent trees and utility poles may contain suitable nesting habitat for migratory bird and raptor species; however, no active nests were observed during the survey. Migratory birds and raptors are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The direct injury or death of a migratory bird due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered "take" under federal law. Should construction activities begin during the nesting season (February 1 through August 31), potentially occurring nesting migratory birds and raptors could be directly impacted by tree removal or indirectly impacted by noise, vibration, and other construction-related disturbance. **Mitigation Measure BIO-1** consists of a pre-construction nesting bird survey and avoidance procedures if active nests are observed. Implementation of **Mitigation Measure BIO-1** would reduce potential impacts to nesting migratory birds and raptors to a less-than-significant level.

The Proposed Project would have a *less-than-significant impact with mitigation.*

> **Mitigation Measure BIO-1:** If construction activities commence during the general nesting season (February 1 to August 31), a preconstruction nest survey shall be conducted by a qualified biologist within 500 feet of proposed construction areas within 3 days of initiating ground disturbance.
>
> If active nests are identified, the qualified biologist shall determine a suitable avoidance buffer based on the needs of the species observed. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged. Avoidance buffers may vary in size depending on habitat characteristics, project-related activities, and disturbance levels.
>
> Should work activity cease for 14 days or greater during the nesting season, surveys shall be repeated to ensure birds/raptors have not established nests during inactivity.

b) Would the project 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?

Less Than Significant with Mitigation. Implementation of the Proposed Project would require tree removal within the mixed oak – conifer forest habitat and likely vegetation removal within the riparian habitat. Oak woodland, forested oak habitat, and mature trees in general are protected under the City of Placerville Municipal Code. Therefore, **Project Commitment BIO-1** ensures that the Proposed Project would comply with the City of Placerville Municipal Code Chapter 13 Woodland and Forest Conservation and obtain required permits prior to development of proposed housing units.

Impacts to potentially jurisdictional wetlands and waters of the U.S./State and associated riparian habitat would be avoided to the extent feasible (**Figure 6**). However, the Proposed Project may include a crossing or crossings to channelized features that may involve removal of riparian vegetation and/or minor impacts

to streambeds/banks. Implementation of **Mitigation Measure BIO-2** would reduce potential impacts to sensitive habitats and the required compliance with regulations.

The Proposed Project would have a *less-than-significant impact with mitigation.*

> **Mitigation Measure BIO-2:** Should impacts to waters of the State and associated riparian habitat occur, the Proposed Project shall apply for a Streambed Alteration Agreement. Avoidance and minimization measures contained within the approved permit shall be implemented accordingly.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant with Mitigation. Potential indirect impacts to aquatic resources could occur during construction through stormwater transport of sediment from disturbed soils or by accidental release of hazardous materials or petroleum products from sources such as heavy equipment servicing or refueling. As described further in **Project Commitment HYDRO-1,** a Notice of Intent to Comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit shall be filed with the Regional Water Quality Control Board prior to the initiation of construction (for projects that disturb at least one acre of ground). In conjunction the NPDES Permit, a Storm Water Pollution Prevention Plan (SWPPP), Erosion Control Plan, and a Hazardous Materials Management/Spill Response Plan would be implemented during construction to avoid or minimize the potential for erosion, sedimentation, and accidental release of hazardous materials. Implementation of these measures mandated by law would reduce potential construction-related impacts to water quality to a less-than-significant level.

Impacts to potentially jurisdictional wetlands and waters of the U.S./State would be avoided to the extent feasible (**Figure 6**). However, the Proposed Project may include a crossing or crossings to channelized features that may involve minor impacts to streambeds/banks. Additionally, the Proposed Project may require the filling of wetlands and the redirection or culvertization of channels. **Mitigation Measure BIO-2** and **BIO-3** would be implemented to address potential impacts to aquatic resources.

The Proposed Project would have a *less-than-significant impact with mitigation.*

> **Mitigation Measure BIO-3:** A delineation of jurisdictional waters shall be conducted prior to filling a potentially wetland or water of the U.S./State. If potentially jurisdictional wetlands/waters of the U.S. are delineated on the Project Site, verification of the delineation by the USACE is recommended. The delineation shall also include an assessment of potential waters of the State. If the USACE determines that features are subject to their jurisdiction, a Clean Water Act Section 404 permit shall be obtained and mitigation implemented prior to disturbance. The Proposed Project shall also obtain a permit from the Central Valley Regional Water Quality Control Board (Waste Discharge Requirements or Clean Water Act Section 401 Water Quality Certification). Avoidance and minimization measures required by the permits shall be implemented accordingly.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact. The Project Site does not contain rivers or streams that could support fish species or native wildlife nursery sites. The Project Site is located in a residential neighborhood and surrounded by residential development and roadways that impede wildlife movement. Thus, implementation of the Proposed Project would have a *less-than significant-impact* on fish and wildlife movement.

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

Less Than Significant Impact. Implementation of the Proposed Project may involve the removal of mature trees and forest protected under Chapter 13 (Woodland and Forest Conservation) of the City of Placerville Municipal Code. The Proposed Project would be required to comply with the provisions of the Code as noted in **Project Commitment BIO-1** and thus this impact would be *less than significant*.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Project Site is not within the coverage area of an adopted Habitat Conservation Plan or Natural Community Conservation Plan and thus the Proposed Project would have *no impact*.

4.5 CULTURAL RESOURCES

V. CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant Impact 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?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

4.5.1 Environmental Setting

Background research related to cultural resources included a records search conducted by the North Central Information Center (NCIC) at Sacramento State University, a Sacred Lands File (SLF) search conducted by the Native American Heritage Commission (NAHC), geoarchaeological sensitivity analyses, pedestrian survey of the 3.77 acre Project Site, and completion of a Cultural Resources Investigations report summarizing the findings, which is described throughout this analysis and attached as **Appendix C**.

As described in **Appendix C**, the NCIC records search for the Project Site did not identify any previous surveys or previously recorded cultural resources. The SLF search for the Proposed Project yielded negative results for the presence of sensitive Native American resources in the area. Geoarchaeological analysis determined that the sensitivity of the Project Site for the presence of buried deposits of cultural resources is very low. The pedestrian surface survey of the Project Site identified two new sites, NIC-2023-Coloma-01 and -02. These two sites are segments of historic earthen water conveyance ditches. The pedestrian survey did not identify any prehistoric cultural resources (e.g., prehistoric sites or isolated artifacts) or any indication of buried deposits of cultural resources. Sites NIC-2023-Coloma-01 and -02 do not meet any of the criteria for consideration as historical resources or unique archaeological resources and are not eligible for the California Register of Historical Resources (CRHR).

4.5.2 Impact Assessment

a-b) Would the project cause a substantial adverse change in the significance of a historical or archaeological resource pursuant to § 15064.5?

Less than Significant with Mitigation. No historical or archaeological resources have been identified on the Project Site through background research, and no resources were found during pedestrian surveys of the Project Site. The date of construction of the existing storage shed is unknown; however, the outbuilding is not listed on the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks or considered by the City to be a historic resource. The outbuilding is not known to be associated with significant events or persons at the local, State, or national

level and does not present distinctive characteristics or high artistic values. For these reasons, the outbuilding is not considered to be a historical resource pursuant to § 15064.5.

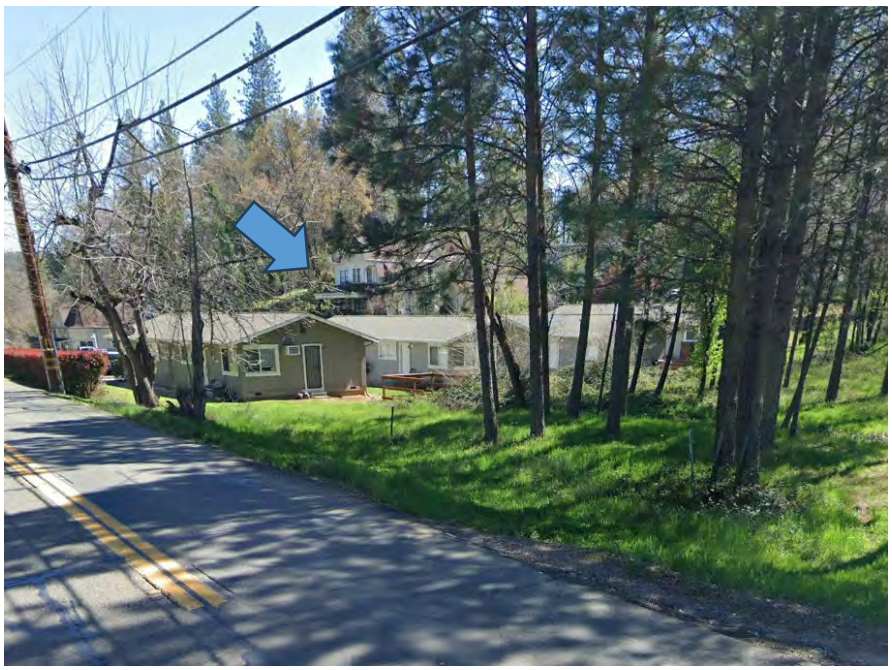
The Nick Fox House located at 2780 Coloma Street is approximately 150 feet southeast of the southern Project Site boundary. The Victorian-style home was constructed around 1895 and inhabited by Nick Fox and his wife Anna Fox. Nick Fox was well known locally and served a four-year term as the City Mayor. The house was painted by Thomas Kincade and distributed as a print entitled Victorian Christmas II (nickfoxhouse.com, 2023). The Nick Fox House is assumed to be of local significance and thus visual changes to views to and from the Nick Fox House were assessed.

As shown in **Photograph 2** views facing the Project Site from the side of the Nick Fox House include an existing multi-family residential development built in 1974 (El Dorado County, 2023), with Project Site trees visible above the development. Views from the main entrance to the Nick Fox House were not publicly accessible but are anticipated to be similar to **Photograph 2**. The Nick Fox House is visible from limited areas, including the adjacent property to the south (**Photograph 3**), briefly to motorists traveling northbound on Coloma Street (similar to **Photograph 3**), and briefly to motorists traveling southbound on Coloma Street (**Photograph 4**).

Views to and from the Nick Fox House include existing multi-family residential development of more modern construction. As these viewsheds already include more modern construction, the Proposed Project is not anticipated to substantially adversely affect the significance of the Nick Fox House. While this impact is considered *less than significant*, **Project Commitment BIO-1** states the Project shall prioritize retention of trees along the southern project boundary to meet canopy retention standards prescribed by Chapter 13 Woodland and Forest Conservation of the City of Placerville Municipal Code.

Photograph 2 - View facing northwest from the side entrance to the Nick Fox House. A residence which is part of an adjacent multi-family housing development is visible in the foreground and trees on the Project Site are visible in the background.

Photograph 3 - View facing northwest from a parking lot adjacent to the Nick Fox House property, near Coloma Street. The Nick Fox house and a multi-family housing development are visible in the background. Trees on the Project Site are visible above the multi-family residential development.



Photograph 4 - View facing southeast from Coloma Street. Project Site trees are visible in the foreground. A single-story multi-family residential development is visible in the background. The Nick Fox house is visible above the multi-family residential development (see blue arrow) but partially screened by Project Site trees.

It is possible that unknown buried historical materials or archaeological resources could be found during ground disturbing activities at the Project Site which is a potentially significant impact. **Mitigation Measure CUL-1** includes that if cultural resources are discovered, construction would halt until cultural resources are reported and assessed by an archaeologist. Potential impacts would be *less than significant with mitigation***.**

> **Mitigation Measure CUL-1:** If cultural resources (i.e., prehistoric sites, historic sites, and/or isolated artifacts) are discovered, all construction work within 100 feet shall halt and the City of Placerville shall be notified. An archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology (qualified archaeologist) shall inspect the findings within 24 hours of discovery. If it is determined that the Project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with Public Resources Code (PRC) § 21083.2 and CEQA Guidelines § 15126.4, with a preference for preservation in place.
>
> Consistent with CEQA Guidelines § 15126.4(b)(3), preservation in place may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan in consultation with the City.
>
> Treatment of unique archaeological resources shall follow the applicable requirements of PRC § 21083.2. Treatment for most resources would consist of (but would not be limited to) consultation with applicable tribes (for resources of Native American origin), sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant with Mitigation. The Proposed Project would not disturb any human remains, including those interred outside of formal cemeteries, because there are no known human remains located on or in the vicinity of the Project Site. However, it is possible that unknown remains could be found during ground disturbing activities at the Project Site. This is considered potentially significant. To address unanticipated and accidental discovery of human remains, **Mitigation Measure CUL-2** would require construction to halt until the discovered remains are properly assessed and a treatment plan is in place. With implementation of mitigation, this potential impact would be *less than significant with mitigation*.

> **Mitigation Measure CUL-2:** If human remains are discovered, all construction work within 100 feet of the find shall halt. The El Dorado County Coroner and City of Placerville shall be contacted to investigate and determine that no investigation of the cause of death is required. The Native American Heritage Commission (NAHC) shall be contacted within 24 hours if it is determined that the remains are Native American. The NAHC will then identify the person or persons it believes to

be the most likely descendant from the deceased Native American (PRC § 5097.98), who in turn would make recommendations to the City for the appropriate means of treating the human remains and any associated funerary objects [CEQA Guidelines § 15064.5(d)].

4.6 ENERGY

VI. ENERGY. Would the project	Potentially Significant Impact	Less than Significant Impact 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?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

4.6.1 Environmental Setting

Public Resources Code Section 21100(b)(3) and CEQA Guidelines Appendices F and G require a description of the wasteful, inefficient, and unnecessary consumption of energy caused by a project. The production of electricity requires the conversion of energy stored in natural resources such as water, wind, oil, gas, coal, solar radiation, certain minerals (for nuclear power), and geothermal energy. Energy consumed in the vicinity of the Project Site is currently attributed to vehicles traveling on local roadways, the use of electricity and natural gas in nearby residences, and electricity used for other land uses such as the nearby school and associated football stadium. Production of energy and energy use both result in pollution and depletion of these renewable and nonrenewable resources.

The City, including the Project Site, is served by PG&E for its natural gas and electrical energy demands. Pioneer Community Energy (PCE) is an alternative energy provider available in the City, which allows residents and businesses in the City to have a choice in electric service provider (PCE, 2023). PCE is a not-for-profit Community Choice Aggregator (CCA) which began providing services in the City in January 2022.

In El Dorado County, the California Energy Consumption (CEC) reported an annual electrical consumption of approximately 1,293.31 million kWh in 2021. Of the 1,293.31 million kWh consumed, approximately 842.03 million kWh was from residential use and approximately 451.28 million kWh was from non-residential use (CEC, 2023).

4.6.2 Impact Assessment

a) Would the project 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. Construction of the Proposed Project would result in energy consumption. Heavy equipment used to bring materials to and from the Project Site, workers commuting to the Project Site, and tools used during construction would consume petroleum products. The use of this energy is necessary for Project Site development and would be utilized only when needed for construction progress. Construction would be temporary in nature and of a limited scale. Compliance with federal, State, and

local regulations (e.g., limit engine idling times) would reduce short-term energy demand and prevent the wasteful or inefficient use of energy during construction to the extent feasible, ensuring there would be *less-than-significant* impacts due to energy use.

Once operational, the Proposed Project would comply with Title 24, Part 6 of the California Code of Regulations, known as the Building Energy Efficiency Standards per **Project Commitment ENERGY-1**. Additionally, the Project Site is located adjacent to Hwy 49 and in close proximity to US-50, so the Project Site would provide efficient vehicle access for residents. As a result, the Proposed Project would not result in wasteful or inefficient use of energy resources and would thus have a *less than significant impact*.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. As previously discussed, the construction and operation of the Proposed Project would be subject to compliance with applicable CARB Regulations, California Code of Regulations, and Title 24 standards, which include a broad set of energy conservation requirements. Thus, applicable State regulations and programs would be implemented to reduce energy waste. The Proposed Project would not conflict with any plans for renewable energy or energy efficiency and would therefore have *no impact*.

4.7 GEOLOGY AND SOILS

VII. GEOLOGY AND SOILS. Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial 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?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

4.7.1 Environmental Setting

Geological Setting

The City is located within the Sierra Nevada Geomorphic Province (CGS, 2002). The Sierra is a tilted fault block nearly 400 miles long. Its east face is a high, rugged multiple scarp, contrasting with the gentle

western slope (about 2°) that disappears under sediments of the Great Valley. Deep river canyons are cut into the western slope. Their upper courses, especially in massive granites of the higher Sierra, are modified by glacial sculpturing, forming such scenic features as Yosemite Valley. The high crest culminates in Mount Whitney with an elevation of 14,495 feet above sea level near the eastern scarp. The metamorphic bedrock contains gold-bearing veins in the northwest trending Mother Lode. The northern Sierra boundary is marked where bedrock disappears under the Cenozoic volcanic cover of the Cascade Range (CGS, 2002).

Seismic Conditions

The Project Site is not located within an Alquist-Priolo Earthquake Fault Zone as mapped by the California Department of Conservation (DOC, 2023). As described in the County's Local Hazard Mitigation Plan, which was adopted by the Federal Emergency Management Agency (FEMA) in 2019, El Dorado County lies between two seismically active regions in the western United States. Tectonic stresses associated with the North American-Pacific Plate boundary can generate damaging earthquakes along faults 30 to 100 miles west of El Dorado County (El Dorado County, 2018). El Dorado County itself is traversed by a series of northwest trending faults called the Foothill Fault Zone. Earthquakes on nearby fault segments in the Foothill Fault Zone could be the source of shaking in the City. The closest recently active fault in the western Sierra Nevada foothills is the Cleveland Hills fault, which is part of the Foothill Fault Zone and is situated approximately 50 miles northwest of the Project Site. There is an estimated 62 percent probability of at least one 6.7 or greater magnitude earthquake occurring that could cause widespread damage in the greater San Francisco Bay Area before 2032 (El Dorado County, 2018).

Soil Types and Characteristics

Soils mapped by Natural Resources Conservation Service (NRCS) with the highest percent acres within the Project Site include: (BkE) Boomer very rocky loam, 30 to 50 percent slopes; (MpB) Mixed alluvial land, 2 to 5 percent slopes; and (BhC) Boomer gravelly loam, 3 to 15 percent slopes (USDA, 2023).

Soil Hazards

The hydrologic soil group is a classification based on the runoff potential of the soils when thoroughly saturated by a long duration storm. Soils are grouped into four classes grading from A to D, with A being coarse-grained soils with high infiltration and low runoff potential, and D being mostly fine-grained clays with extremely slow infiltration and high runoff potential. The soils on the Project Site have hydrologic ratings of C, indicating that the majority of the soils have moderately high runoff potential when thoroughly wet (USDA, 2023).

Drainage class is a measure of the frequency and duration of wet periods under conditions similar to those in which the soil developed. The soils on the Project Site are a mixture of well-drained and somewhat poorly-drained soil types (USDA, 2023).

Saturated hydraulic conductivity is a quantitative measurement of the movement of water through saturated soil, or the ease with which pores in a saturated soil transmit water, abbreviated as "Ksat." Ksat is a factor in determining the hydrologic soil group and is often used in the design of water and wastewater disposal features such as percolation ponds and septic systems. Ksat measures transport only in a vertical direction under completely saturated conditions. It is considered an inherent property irrespective of a

soil's native surroundings and does not account for site-specific variations such as confining layers, degree of saturation, or topography. The soils on the Project Site transmit water at varying rates between 8.05 and 8.97 micrometers per second, which is considered a moderately high rate.

Corrosivity pertains to a soil-induced electrochemical or chemical action that corrodes concrete or steel. The soils on the Project Site have a moderate risk of corrosion of steel and a low risk of corrosion to concrete (USDA, 2023).

Expansive soils are largely comprised of clays, which may increase in volume when water is absorbed and shrink when dried; this property is measured using linear extensibility. Expansive soils are of concern because they can cause building foundations to rise during the rainy season and fall during the dry season, causing structural distortion. The soils within the Project Site have low to moderate linear extensibility ratings, and thus low-to-moderate shrink-swell potential (USDA, 2023).

Paleontological Resources

A search of the University of California Museum of Paleontology (UCMP) specimen records cited no listings for unique paleontological resources or geological features in the immediate project area. However, the database search listed 3,955 fossil specimens found in El Dorado County (UCMP, 2023).

4.7.2 Impact Assessment

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

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

Less Than Significant Impact. The Project Site is not within an Alquist-Priolo Earthquake Fault Zone (DOC, 2023). No known faults with evidence of historic activity are located on or within the vicinity of the Project Site, and the nearest active fault is approximately 50 miles from the Project Site. Due to the geology of the City and its distance from active faults, the potential for loss of life, property damage, ground settlement, or liquefaction to occur in the vicinity of the Project Site is considered minimal. The CBC establishes minimum standards for structures located in regions subject to ground shaking hazard areas. Structures constructed on-site would be required by State law and City ordinances to be constructed in accordance with the CBC (as amended by the City Municipal Code) and to adhere to all current earthquake construction requirements. Therefore, the Proposed Project would have a *less-than-significant impact*.

ii. Strong seismic ground shaking?

Less Than Significant Impact. The nearest active fault is approximately 50 miles from the Project Site. Ground shaking generally decreases with distance and increases with the depth of unconsolidated alluvial deposits. Considering the distance to the causative faults, the potential for ground motion in the vicinity of the Project Site is minimal. As described above, the Proposed Project would be constructed in accordance with the CBC which addresses seismic hazards and provide safeguards against typical ground shaking. Consistency with CBC design and construction standards would allow ground shaking-related

hazards to be managed from a geologic, geotechnical, and structural standpoint such that adverse impacts to the health or safety of workers or members of the public would be minimized. Therefore, the Proposed Project would result in a *less-than-significant impact*.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. As previously described, there are no geologic hazards or significantly unstable soil conditions known to exist on the Project Site. Additionally, there have been no recorded seismic-related liquefaction or ground failure events on or in the vicinity of the Project Site as mapped by the USGS (USGS, 2023). As described above, the Proposed Project would be constructed in accordance with the CBC which addresses seismic hazards. Further, development of the Project Site would require compliance with the City's development standards, including grading and drainage standards. Therefore, because of the Proposed Project's stability of soils, infrequency of seismic activity, and required compliance with building standards, the Proposed Project would have a *less-than-significant impact.*

iv. Landslides?

Less Than Significant Impact. There have been no recorded landslide events on or in the vicinity of the Project Site as mapped by the USGS (USGS, 2023). Additionally, there are no geologic hazards or significantly unstable soil conditions known to exist on the Project Site which could contribute toward landslides. However, for the preparation of Project Site development, activities such as grading may result in the potential for short-term soil disturbance or erosion impacts which could contribute toward unstable conditions. Consistency with CBC design and construction standards would ensure continued slope stability such that adverse impacts to the health or safety of workers or members of the public would be minimized. Therefore, the Proposed Project would result in a *less-than-significant impact*.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. Construction activities such as vegetation removal, earthmoving, and grading may result in the potential for short-term soil disturbance or erosion impacts. Construction would also involve the use of water, which may cause further soil disturbance. Additionally, the soils on the Project Site have moderate to high surface runoff rates. As described further in **Project Commitment HYDRO-1**, a Notice of Intent to Comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit shall be filed with the Regional Water Quality Control Board prior to the initiation of construction (for projects that disturb at least 1 one acre of ground). In conjunction with the NPDES Permit, a Storm Water Pollution Prevention Plan (SWPPP) and Erosion Control Plan, and a Hazardous Materials Management/Spill Response Plan would be created and implemented during construction to avoid or minimize the potential for erosion and sedimentation. **Project Commitment GEO-1** includes that the Project shall comply with the City's Grading, Erosion and Sediment Control regulations. With the required project commitments, the Proposed Project would have a *less-than-significant impact.*

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact. The Project Site contains relatively stable soils and no apparent unique or significant landforms. There have been no recorded landslide or liquefaction events on or in the vicinity

of the Project Site as mapped by the USGS (USGS, 2023). Considering the distance to the causative faults, the potential for ground motion in the vicinity of the Project Site is minimal. Therefore, any development on the native, relatively stable soils is unlikely to become unstable and result in geologic hazards. As a result, the Proposed Project would have a *less-than-significant impact.*

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

Less than Significant Impact. The soils within the Project Site have low to moderate linear extensibility ratings, and thus low-to-moderate shrink-swell potential (USDA, 2023). Therefore, the Proposed Project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code and would therefore not create substantial direct or indirect risks to life or property. Therefore, the Proposed Project would result in a *less-than-significant impact.*

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The Proposed Project would not require the construction or use of septic tanks or alternative wastewater disposal systems. The Proposed Project would be tied into the City's existing sewer system; therefore, there would be *no impact*.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation. There are no recorded listings for unique paleontological resources or geological features on the Project Site or in the immediate project area. However, it is possible that unknown buried paleontological materials could be found during ground disturbing activities at the Project Site. This is considered potentially significant. To address unanticipated and accidental archaeological discoveries, **Mitigation Measure GEO-1** would require construction to halt until paleontological resources are reported and assessed by an archaeologist. With implementation of mitigation, this potential impact would be *less than significant*.

> **Mitigation Measure GEO-1:** If, during the course of development of the Project Site, paleontological materials are discovered, all work shall be halted immediately on site, and the project proponent for any future residential development on the site shall notify the City of Placerville Development Services, Planning Division. The project proponent and the City shall work with a qualified archaeologist to decide the proper treatment of the paleontological materials.

4.8 GREENHOUSE GAS EMISSIONS

VIII. GREENHOUSE GAS EMISSIONS. Would the project:	Potentially Significant Impact	Less than Significant Impact 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?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

4.8.1 Environmental Setting

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. GHGs include all of the following compounds: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (Health & Safety Code § 38505[g]). In addition to natural sources, human activities are exerting a substantial and growing influence on climate by changing the composition of the atmosphere and the ocean, and by modifying the land surface through deforestation and urbanization that reduces carbon capture and decreases albedo (Intergovernmental Panel on Climate Change, 2014). GHGs are typically quantified in terms of "carbon dioxide equivalent" (CO_2e), a common measure used to compare the emissions of various greenhouse gases based on their global warming potential. This measure is usually presented in metric tons and is expressed as $MTCO_2e$. The primary source of GHG in the County is fossil fuel combustion, mainly from the transportation sector at approximately 70%. Other sources of GHG in the County are residential sources (approximately 20%), commercial/industrial sources (approximately 7%), waste/landfill (approximately 3%), and agricultural activities (<1%) (El Dorado County Air Quality Management District, n.d.).

The Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) is the overarching law that requires the State to set statewide GHG reduction targets. AB 32 required CARB to develop a Climate Change Scoping Plan that describes the approach California will take to reduce GHGs to achieve emission reduction goals, and to update the plan every five years. CARB approved the first Scoping Plan in 2008, and the most recent update was approved by CARB in 2022.

In 2016, the Legislature passed Senate Bill (SB) 32. This established a benchmark for California to reduce GHG emissions to 40 percent below 1990 levels by 2030. Under the 2022 Scoping Plan, seven key areas were identified: transportation sustainability, clean electricity grid, sustainable manufacturing and buildings, carbon dioxide removal and capture, short-lived climate pollutants (non-combustion gases), and natural and working lands.

At this time, the AQMD has not adopted any guidance or thresholds with regards to GHG emissions. However, the AQMD does have goals to reduce emissions from all sources to the extent practicable. Working with residents and businesses, the AQMD implements several grant and incentive programs that reduce criteria, toxic and GHG emissions to the extent practicable. Programs include wood stove

replacement, lawn mower replacement, electric vehicle incentive, electric vehicle supply equipment installation, shuttle programs, school bus replacement, agricultural equipment replacement and others (El Dorado County Air Quality Management District, 2023).

4.8.2 Impact Assessment

Methodology

Section 15064.4 of the CEQA Guidelines states that: "A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." In performing that analysis, the lead agency has discretion to determine whether to use a model or methodology to quantify greenhouse gas emissions, or to rely on a qualitative analysis or performance-based standards. In this analysis, a modeled approach was used and construction and operational GHG emissions were estimated using CalEEMod, version 2020.4.0. The input and output files from the CalEEMod have been attached to this IS as **Appendix A**. As discussed above, the AQMD has not adopted GHG guidance or thresholds for the district, and instead recommends the usage of neighboring air district CEQA GHG guidance and thresholds. To assess the GHG impacts, the GHG thresholds and guidance set forth in the Sacramento Metropolitan Air Quality Management District (SMAQMD) *Guide to Air Quality Assessment in Sacramento County* were utilized (SMAQMD, 2020). Per the recommendation of the AQMD, the SMAQMD is an adjacent air quality district and, in addition, has similar environmental conditions as the AQMD jurisdictional area. The *Guide to Air Quality Assessment in Sacramento County* provides methods to analyze air quality impacts from plans and projects, including screening criteria, thresholds of significance, calculation methods, and mitigation measures to assist lead agencies in complying with the CEQA.

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Construction of the Proposed Project would emit GHGs through the combustion of fossil fuels by heavy-duty construction equipment and through vehicle trips generated by construction workers traveling to and from the site. As shown in **Table 3**, potential annual construction GHG emissions would be approximately 348 $MTCO_2e$ for the Proposed Project if full development were to occur. This is below the SMAQMD GHG thresholds for annual construction emissions of 1,100 $MTCO_2e$.

Table 3: Estimated Construction and Operational GHG Emissions

Source	CO_2e Emissions (MT/Year)
Construction	
2024	348
2025	6
Operation	561
SMAQMD Threshold	1,100
Exceeds Threshold?	No

Source: **Appendix A**

Furthermore, construction would be required to incorporate modern construction and design features that reduce energy consumption to the extent feasible. These features are identified as **Project Commitment GHG-1** in **Section 2.2** of this document.

The proposed development would also result in operational GHG emissions. As shown in **Table 3**, potential annual operational GHG emissions would be approximately 561 $MTCO_2e$ for the Proposed Project if full development were to occur. According to SMAQMD's *Guide to Air Quality Assessment in Sacramento County*, if a project generates less than or equal to 1,100 metric tons of GHG per year and implements the SMAQMD's Tier 1 operational GHG BMPs, the project would result in a less than significant impact. The Tier 1 BMPs require that projects do not include natural gas infrastructure and meet CALGreen Tier 2 standards, except that all electric vehicle capable spaces be provided as electric vehicle ready (provided with powered receptacle or charger). These BMPs are identified as **Project Commitment GHG-1** in **Section 2.2** of this document. With the implementation of BMPs, the Proposed Project would follow SMAQMD guidance and this impact would be *less than significant*.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. As discussed above, the Proposed Project would have temporary emissions during construction and emissions during operation but would also include project features that would reduce GHG emissions. Therefore, the Proposed Project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHG emission because it includes no features that would be contradictory to or emit GHGs beyond acceptable standards. As explained above, the GHG emissions from the Proposed Project are estimated to be below SMAQMD's 1,100 $MTCO_2e$/year thresholds for construction and operation. Additionally, the project includes operational BMPs that would reduce GHG emissions, consistent with SMAQMD guidance. Therefore, this impact is *less than significant*.

4.9 HAZARD AND HAZARDOUS MATERIALS

IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:	Potentially Significant Impact	Less than Significant Impact 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

4.9.1 Environmental Setting

For the purposes of this section, the term “hazardous materials” as defined by the California Code of Regulations are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories based on their properties:

- Toxic: causes human health effect
- Ignitable: has the ability to burn
- Corrosive: causes severe burns or damage to materials

- Reactive: causes explosions or generates toxic gases

Hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that define a material as hazardous also define a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

The Hazardous Waste and Substances Sites (Cortese) List is a planning tool used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. The Cortese list is prepared in accordance with California Government Code Section 65962.5. The List of Hazardous Waste and Substances sites from DTSC EnviroStor and the SWRCB GeoTracker databases were reviewed to locate "Cortese List" sites. These databases did not indicate any sites located on or in the vicinity of the Project Site (SWRCB, 2023 and DTSC, 2023).

4.9.2 Impact Assessment

a-c) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant. Activities associated with the Proposed Project would utilize potentially hazardous materials associated with construction and operation of vehicles and construction equipment including diesel, gasoline, solvents, hydraulic fluid, grease, and oil. These materials are similar to those routinely used for other types of construction projects throughout the City and County. As discussed in **Project Commitment HAZ-1**, the design and construction of the Proposed Project would comply with the City's Construction Standards, which incorporates the CBC, as amended, and the California Fire Code, as amended. Other laws and regulations that govern the use and storage of hazardous materials include, but are not limited to, Chapter 6.95 of the California Health and Safety Code (inventory and emergency response), Title 8 of the Code of California Regulations (CCR) (workplace safety), and Titles 22 and 26 of the CCR (hazardous waste). Delivery of hazardous materials to the Project Site and along public roadways would be required to comply with CFR Title 49, as monitored and enforced by the California Highway Patrol and Caltrans. Storage of all flammable materials at construction sites would be subject to the regulations of Title 19 of the CCR and the Uniform Fire Code. Because federal, State, and City laws and regulations govern the transport, use, storage, handling and disposal of hazardous materials, use of hazardous materials associated with the Proposed Project would be minimized and/or avoided. With implementation of **Project Commitments HAZ-1** and **HYDRO-1**, and adherence to other laws and regulations that govern the use and storage of hazardous materials regulatory requirements, potential impacts associated with hazardous materials during construction activities would be less than significant.

Once operational, the Proposed Project would utilize substances typical of residential settings. These include household cleaning products, household goods, and other materials needed for maintenance of the property including commercial grade cleaning products or chemicals required for landscaping and gardening purposes. All operational activities would be required to adhere to local standards set forth by the City, as well as state and federal health and safety requirements that are intended to minimize risk to the public from hazardous materials, such as Cal/OSHA requirements, the Hazardous Waste Control Act, the California Accidental Release Prevention Program, and the California Health and Safety Code. Compliance with these regulations would reduce potential exposure of people or the environment to hazardous materials associated with the Proposed Project to a less-than-significant level.

El Dorado High School is located less than one-quarter mile from the Project Site. The Proposed Project would not involve hazardous emissions, or the handling of hazardous materials, substances, and wastes, with the exception of common household cleaning, maintenance, and landscaping products. Common products would be used in limited quantities and would not be expected to affect the nearby school. For these reasons, the Proposed Project would have a less-than-significant impact.

The Proposed Project would have a *less-than-significant impact*.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The List of Hazardous Waste and Substances sites from DTSC EnviroStor and the SWRCB GeoTracker databases were reviewed to locate "Cortese List" sites. These databases did not indicate any sites located on or in the vicinity of the Project Site. The Proposed Project is not located on a site included on a hazardous materials list and would not create a significant hazard to the public or the environment; therefore *no impact* would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The nearest public airport is the Placerville Airport, which is located over two miles from the Project Site. As there are no public airports within two miles of the Project Site, there would be *no impact*.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. Implementation of the Proposed Project would alter the Project Site's existing land use pattern and would add additional vehicle and truck traffic and residential uses requiring evacuation in case of an emergency. The Project Site is located within a Very High Fire Hazard Severity Zone (VHFHSZ) as defined by CAL FIRE (CAL FIRE, 2023). The Project Site a local responsibility area as defined by CAL FIRE and is served by the El Dorado County Fire Protection District. Station 25, the nearest fire station, is 0.6 mile south of the Project Site.

Traffic associated with future construction of street frontage improvements, driveway encroachment improvements, and site preparation activities for the Proposed Project may have a temporary effect on existing traffic circulation patterns and may also affect emergency access; therefore, construction contractors working on the Project Site shall use standard procedures to minimize the length of time that any roadway segments would be temporarily blocked during construction activities. Emergency vehicles shall be able to pass through the project area without obstruction. To ensure adequate emergency access to the Project Site, final site design is required to be approved by the El Dorado County Fire Protection District prior to construction permit approval and designed per City and Fire District requirements. The Proposed Project would not impair implementation of, or physically interfere with, the City of Placerville's Emergency Response Plan. As such, the Proposed Project would have a *less than significant impact*.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less than Significant Impact. The Project Site is located within a VHFHSZ as defined by CAL FIRE (CAL FIRE, 2023). However, the Project is located within the City limits in a residential neighborhood which lacks sufficient fuels to present a wildfire risk. The Proposed Project would involve the removal of trees on land already zoned for residential use, and thus would reduce wildland fire risks for the Project Site and vicinity. For these reasons, this impact would be *less than significant*.

4.10 HYDROLOGY AND WATER QUALITY

X. HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less than Significant Impact 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?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
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 which would:				
i. result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☒	☐	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☒	☐	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

4.10.1 Environmental Setting

The region is characterized by a Mediterranean climate with dry summers and moderate precipitation during the winter months, with the majority of the precipitation occurring between November and April. The Project Site is located in the Indian Creek-Weber Creek watershed within the larger Sacramento River hydrologic region. An intermittent channel flows through the Project Site parallel with Coloma Street (Hwy 49) and is fed by two on-site ephemeral channels that receive off-site stormwater discharged from pipe culverts (**Figure 6**). These features have been channelized from their natural configurations and they tie into the City's stormwater system. As shown on **Figure 6**, a non-jurisdictional ditch conveys water from the southeast corner of the property to the channelized swale. The City of Placerville is not located within

a medium- or high-priority groundwater basin pursuant to the Sustainable Groundwater Management Act (SGMA) (California Department of Water Resources, 2023).

4.10.2 Impact Assessment

a) Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant with Mitigation. Construction and grading activities associated with the Proposed Project have the potential to impact water quality through soil erosion and increased silt and debris discharge into runoff. Additionally, the use of construction materials such as fuels, solvents, and paints may present a risk to surface water quality. Temporary storage of construction material and equipment in work areas or staging areas could create the potential for a release of hazardous materials, trash, or sediment to the City's storm drain system. As described in **Project Commitment HYDRO-1**, the Proposed Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit, which requires the implementation of a SWPPP that incorporates best management practices (BMPs) to control sedimentation, erosion, and the potential for hazardous materials contamination of runoff during construction. In addition, the Proposed Project must comply with the City of Placerville Grading, Erosion and Sediment Control regulations (City Code Section 8-7-1 to 8-7-35) which is included as **Project Commitment GEO-1**. The purpose of the Grading, Erosion, and Sediment Control regulations as promulgated by Section 8-7-2 is to "safeguard life, limb, health, property and public welfare; to avoid pollution of watercourses with nutrients, sediments or other earthen materials generated on or caused by surface runoff on or across the permit area; and to ensure that the intended use of a graded site is consistent with the city's general plan, any specific plans adopted thereto, and applicable ordinances including the zoning ordinance and the California building code."

With implementation of **Project Commitments GEO-1** and **HYDRO-1** and adherence to regulatory requirements, potential impacts associated with water quality standards would be *less than significant*.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The Proposed Project would connect to the City's water supply which is provided by the El Dorado Irrigation District (EID). As further discussed in **Section 4.19**, the Project Site is located in EID's Eastern Region where potable water is provided from surface water sources. As such, the Proposed Project would not substantially impact groundwater resources from increased water demands. The Proposed Project through compliance with the California Green Building Code, Project Commitments, and Placerville Municipal Code, would include water efficiency and water conservation best practices.

The Proposed Project is not anticipated to interfere substantially with groundwater recharge such that sustainable groundwater management of the basin would be impeded as the Project Site is not located in a medium- or high-priority basin pursuant to the SGMA. The Proposed Project would maintain the underlying zoning which allows for multi-family residential development. For these reasons, impacts to groundwater recharge would be *less than significant*.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. As discussed in **Section 4.7.2(b)** and **4.10.2(a)**, **Project Commitments GEO-1** and **HYDRO-1** would reduce potential impacts from stormwater runoff, including erosion and siltation, to a *less-than-significant* level.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less Than Significant with Mitigation. Runoff from the Project Site currently sheet flows from the west downhill toward the channel that runs parallel to Coloma Street (Hwy 49) before entering the City's storm drain system. Future grading for housing development under the Proposed Project would alter the surface drainage patterns of the site and would increase the impervious surfaces compared to baseline conditions, which is a potentially significant impact. In order to ensure that surface runoff is adequately managed to prevent substantial increases in rate or amount of runoff, **Mitigation Measure HYDRO-1** includes preparation of a Drainage Report and review by the City. This impact is *less than significant with mitigation*.

> **Mitigation Measure HYDRO-1:** Prior to final design of Storm Drainage systems for the project, a project Drainage Report shall be prepared and submitted to the City Engineer for approval. The Drainage Report shall include all aspects of drainage as discussed herein. The approved Drainage Report shall serve as a design guide for the project's drainage system(s). The results of the Drainage Report shall be considered in final design and construction requirements of the storm drain system for the proposed development. Drainage and detention facilities shall be designed and constructed to keep post-development flows leaving the site at or below pre-development levels, including increased drainage from site access and/or public roadway construction. Drainage calculations shall be required to show that these conditions are being met. Changes to historical and existing drainage patterns shall not be allowed without specific City approval.

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?

Less Than Significant Impact with Mitigation. The Proposed Project would introduce additional impervious surfaces and would have the potential to increase the amount and velocity of stormwater runoff either on- or off-site. In order to ensure that the Proposed Project would not exceed the capacity of the City's existing stormwater drainage systems, **Project Commitment HYDRO-2** includes conformance with the City's Stormwater Quality regulations (Chapter 15 Stormwater Quality) and the requirements of the City's MS4 Permit. **Mitigation Measure HYDRO-1** includes preparation of a Drainage Report and review by the City. The Proposed Project would have a *less-than-significant impact with mitigation*.

iv. Impede or redirect flood flows?

Less Than Significant Impact. The Project Site is not located within a floodplain and thus is not anticipated to impede or redirect flood flows. Therefore, the Proposed Project would have a *less-than-significant impact*.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. The Project Site is located in an area of minimal flood hazard, Zone X, per FEMA Map 06017C0756E effective 9/26/2008 (FEMA, 2008). The site is not located close to an inland body of water or near the Pacific Ocean. For these reasons, there would be *no impact* related to release of pollutants from flood, seiche, or tsunami.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The City is not located within an SGMA medium- or high-priority groundwater basin and therefore there is no Groundwater Management Plan covering the Project Site. As described above, the Proposed Project would not substantially impact groundwater recharge and would comply with the requirements of a SWPPP. For these reasons, there would be a *less-than-significant impact*.

4.11 LAND USE AND PLANNING

XI. LAND USE AND PLANNING. Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☒	☐

4.11.1 Environmental Setting

The Project Site is currently undeveloped with the exception of a small outbuilding used for storage. The existing general plan designation is HDR, High Density Residential and the existing zoning is R-2, Low Density Multi-Family Residential. The Project Site is located within a residential neighborhood in the City limits. It is bordered by single-family residential to the north, east, and west, and multi-family residential to the south.

4.11.2 Impact Assessment

a) Would the project physically divide an established community?

No Impact. Projects that have the potential to physically divide an established community typically include new freeways and highways, major arterials streets, and railroad lines. Further, the Proposed Project would include the development of residences which is consistent with the surrounding established residential neighborhood. The Proposed Project would not physically divide an established community and thus *no impact* would occur.

b) Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant Impact. The existing R-2 zoning allows for a maximum of eight dwelling units per acre which would allow for the development of approximately 30 dwelling units on the 3.77 acre site. The Proposed Project proposes 67 new dwelling units on the site or an increase of 37 units above the underlying zoning. The City of Placerville General Plan Policy Document's Housing Element, amended most recently in 2022, contains a program to complete implementation of High-Density Development Land Inventory and Objective Design Standards, which describes planned future development on the Project Site. The City's updated General Plan Policy Housing Element encourages the identification of infill development locations (Policy A.3) and development of affordable housing (Policies B.3, C.3, C.4); the Proposed Project is consistent with and would increase opportunities for the City to meet its General Plan Housing Element goals and policies.

As described throughout this IS/MND, all environmental effects of the Proposed Project would be *less than significant* with project commitments and mitigation. As such, the Proposed Project zoning overlay would not result in a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

4.12 MINERAL RESOURCES

XII. MINERAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

4.12.1 Environmental Setting

The California Geological Survey (CGS) is responsible for the classification and designation of areas within California containing or potentially containing significant mineral resources. The CGS classifies lands into Aggregate and Mineral Resource Zones (MRZs) based on guidelines adopted by the California State Mining and Geologic Board, as mandated by the Surface Mining and Reclamation Act of 1975. These MRZs identify whether known or inferred significant mineral resources are presented in areas. Lead agencies are required to incorporate identified MRZs resource areas delineated by the State into their general plans resource. The CGS and the City's General Plan do not identify any State or locally designated mineral resources on the Project Site (DOC, 2022).

4.12.2 Impact Assessment

a) Would the project result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

No Impact. The Project Site is not identified as containing any mineral deposits according to the CGS and thus would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. As such, there would be *no impact*.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The City's General Plan does not identify any mineral resources of significant value in the City. Therefore, the Proposed Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. As such, there would be *no impact*.

4.13 NOISE

XIII. NOISE. Would the project result in:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
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?	☐	☐	☐	☒

4.13.1 Environmental Setting

Fundamentals of Sounds and Vibrations

Noise

Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected, or undesired, and perceptions of sound and noise are highly subjective from person to person. To measure sound, the decibel scale uses the hearing threshold as a point of reference, defined as 0 dB. The perceived loudness of sounds is dependent upon many factors, but there is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. Due to the logarithmic nature of the decibel, two sound levels 10-dB apart differ in acoustic energy by a factor of 10 and when the standard logarithmic decibel is A-weighted, 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. An important way of predicting a human reaction to a new noise environment is comparing it to the existing sound environment, or ambient noise level (the all-encompassing noise level associated with a given environment). In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regards to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference

- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected
- A 10-dBA change is subjectively heard as approximately a doubling in loudness and can cause an adverse response

For describing noise, a common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The day/night average level (DNL or L_{dn}) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Vibration

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating. Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measurements in terms of peak particle velocities in inches per second. **Table 4** shows Caltrans' estimated vibration levels that would normally be required to result in damage to structures.

Table 4: Effects of Vibration on People and Buildings

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/second	in/second		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion.	Vibrations unlikely to cause damage of any type.
2.0	0.08	Vibrations readily perceptible.	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected.
2.5	0.10	Level at which continuous vibrations begin to annoy people.	Virtually no risk of "architectural" damage to normal buildings.
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations).	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage.
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.	Vibrations at a greater level than normally expected from traffic but would cause "architectural" damage and possibly minor structural damage.

Source: **Appendix D**

Existing Ambient Noise Environment

Existing General Ambient Noise Levels

The existing noise environment for the vicinity of the Project Site is primarily defined by traffic on Coloma Street (Hwy-49). To quantify the existing ambient noise environment in the project vicinity, Saxelby Acoustics conducted continuous (24-hr.) noise level measurements at one location on the Project Site (noise measurement are shown on Figure 2 in **Appendix D**) and also recorded the following:

- L_{max}: the highest noise level measures.
- L_{50}: the sound level exceeded 50 percent of the time during the monitoring period.
- L_{eq}: the average of all the noise received by the sound level meter microphone during the monitoring period.

A summary of the noise level measurement survey results is provided in **Table 5**. For additional information on methodology used to measure the ambient noise environment or the complete results of the noise monitoring, see **Appendix D**.

Table 5: Summary of Existing Background Noise Measurement Data

Location	Date	L_{dn}	Daytime L_{eq}	Daytime L_{50}	Daytime L_{max}	Nighttime L_{eq}	Nighttime L_{50}	Nighttime L_{max}
LT-1: 75 ft. to CL of Hwy 49	6/23/23	59	58	52	75	50	32	71
	6/24/23	56	55	50	74	48	33	66
	6/25/23	55	55	49	73	46	32	66

Source: **Appendix D**

Sensitive Receptors

Some land uses are considered more sensitive to noise than others, with sensitivity being a function of both noise exposure and the types of activities involved. Land uses often associated with sensitive receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Sensitive noise receptors may also include threatened or endangered noise-sensitive biological species, although many jurisdictions have not adopted noise standards for wildlife areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise.

The Project Site is directly adjacent to residential developments on its western, northern, and southern borders. There is also residential development across Coloma Street on the eastern border.

Regulatory Setting

There are no federal regulations which apply to the Proposed Project, but there are state and local regulations. For information about the state and local regulatory setting, see **Appendix D**.

4.13.2 Impact Assessment

a) Would the project generate 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?

Construction Noise

Less than Significant with Mitigation. Noise generated from construction of the Proposed Project would increase the ambient noise environment in the area immediately surrounding the Project Site. Depending on the equipment and machinery used, construction activities could generate maximum noise levels ranging from 76 to 90 dBA L_{max} at a distance of 50 feet. In addition, increased traffic due to construction trucks carrying equipment and materials to and from the Project Site on area roadways would increase the ambient noise environment. Noise from localized point sources (such as construction sites) typically decreases by approximately 6 dBA with each doubling of distance from source to receptor. Given this noise attenuation rate and assuming no noise shielding from either natural or human-made features (e.g., trees, buildings, fences), outdoor receptors within approximately 1,600 feet of construction sites could experience maximum instantaneous noise levels of greater than 60 dBA when on-site construction-related noise levels exceed approximately 90 dBA at the boundary of the Project Site. This range would encompass several sensitive receptors in the vicinity of the Project Site. This would be a potentially significant impact, but only a temporary one due to the short-term nature of construction. To reduce this potentially significant impact, **Mitigation Measure NOISE-1** would be implemented which includes features to lessen the adverse noise effects including limiting construction hours, using proper mufflers and maintenance for combustion engines, utilizing quiet construction equipment, and others. These features and others in the mitigation measure would effectively reduce the noise impact caused from construction of the Proposed Project. This impact is *less than significant with mitigation*.

> **Mitigation Measure NOISE-1:** The City shall establish the following as conditions of approval for any permit that results in the use of construction equipment:
>
> - Construction shall be limited to between 7:00 a.m. to 7:00 p.m. Monday through Friday and between 8:00 a.m. and 5:00 p.m. on Saturday and shall be prohibited on Sunday and federal/state-recognized holidays unless approved in advance by the City if required to meet project schedule.
> - All construction equipment powered by internal combustion engines shall be properly muffled and maintained.
> - Quiet construction equipment, particularly air compressors, are to be selected whenever possible.
> - All stationary noise-generating construction equipment, such as generators and air compressors, are to be located as far as practical from existing residences. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the Project Site.
> - Unnecessary idling of internal combustion engines is prohibited.
> - The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the Project Site during all project construction.

Operational Noise

Less Than Significant Impact. The Proposed Project is predicted to expose nearby residences to noise levels up to 42 dBA L_{50} during both daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) hours. In addition, maximum noise levels generated by the future residential HVAC units and on-site vehicle circulation are predicted are predicted to be 20 dBA or less than the median (L_{50}) values. These predicted project noise levels would meet the City noise standard for non-transportation noise sources of 45 dBA L_{50}, and the City maximum (L_{max}) nighttime noise level standard of 65 dBA L_{max}. Therefore, where average noise levels are in compliance with the L_{50} standards, maximum noise levels would also meet the City's standards. Based upon the predicted average noise levels of 42 dBA, the maximum noise levels would be 62 dBA and comply with the City maximum standards. This is a *less-than-significant impact*.

Table 6 is based upon recommendations made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been accepted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics, such as the L_{dn}. If the Proposed Project were to exceed the levels set forth in **Table 6**, this would constitute a significant impact.

Table 6: FICON Significance of Changes in Noise Exposure

Ambient Noise Level Without Project, L_{dn}	Increase Required for Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: **Appendix D**

For noise increases due to increased traffic on the roadways in the vicinity of the Project Site, the maximum increase in traffic noise at the nearest sensitive receptor is predicted to be 0.3 dBA. In this case, where existing traffic noise levels are greater than 65 dB L_{dn}, a 1.5 dB L_{dn} or more increase in roadway noise levels would be considered significant by FICON guidelines. Since the increase in noise would only be 0.3 dBA on these roadways and would not exceed the 1.5 dB FICON threshold, the impact resulting from increased traffic noise would be *less than significant*.

b) Would the project generate excessive groundborne vibration or groundborne noise levels?

Less than Significant with Mitigation. Vibrations would be considered significant if they were to cause annoyance to people or structural damage. For this to occur, vibrations would need to exceed 0.2 in/second (see **Table 4**). With the exception of vibratory compactors, construction vibration levels anticipated for the Proposed Project are less than the 0.2 in/sec at distance of 20 feet threshold. The Proposed Project would include parking lot and building construction that could occur at distances of less than 26 feet from the adjacent residential uses. This could cause adjacent residential buildings to experience vibrations in excess of 0.2 in/sec, the threshold for annoyance and structural damage. This is a potentially significant impact. **Mitigation Measure NOISE-2** would reduce the potential impact through either using weight instead of vibrations to achieve soil compaction or conducting pre-construction crack documentation and monitoring during construction. This impact would be *less than significant with mitigation*.

Mitigation Measure NOISE-2: Any compaction required less than 26 feet from the adjacent residential structures shall be accomplished by using static drum rollers that use weight instead of vibrations to achieve soil compaction. As an alternative to this requirement, pre-construction crack documentation and construction vibration monitoring could be conducted to ensure that construction vibrations do not cause damage to any adjacent structures.

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?

The nearest airport to the Project Site is Placerville Airport, located over 2 miles to the east. In addition, the Project Site is located outside of the Placerville Airport Influence Area boundaries (El Dorado County GIS, 2013). As, the Proposed Project would not expose people to excessive noise due to being in close proximity to an airport or its influence area, there would be *no impact*.

4.14 POPULATION AND HOUSING

XIV. POPULATION AND HOUSING. Would the project:	Potentially Significant Impact	Less than Significant Impact 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)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

4.14.1 Environmental Setting

The City's General Plan Housing Element estimated the population of Placerville was 10,389 in 2010 (City of Placerville, 2021). Between 2010 and 2019, the City's population grew by 528 residents, or approximately five percent. The population growth rate in the City is anticipated to increase by a rate of 0.5 percent per year, resulting in a projected population of 11,765 in the year 2035 (City of Placerville, 2021).

The City's Housing Element estimated that the housing stock in 2010 was 4,541 dwelling units, and in 2019 there were 4,715 dwelling units in the City, which constitutes an increase by approximately 3.8 percent (City of Placerville, 2021). The average household size within the City is approximately 2.3 persons per household (City of Placerville, 2021).

Approximately 3,175 City housing units, or 73 percent of the total housing stock, are at least 30 years old or more, and have a greater risk of deterioration associated with deferred or improper maintenance and repair (City of Placerville, 2021). Additionally, approximately 2.9 percent of all the occupied housing in the City is considered overcrowded (City of Placerville, 2021).

The City's General Plan Housing Element indicates that between 2014 and 2018 approximately 43 percent of the City's households fell into the less than $49,999 income category, suggesting that housing affordability may be an issue for several of these income groups in the City.

4.14.2 Impact Assessment

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than Significant Impact. The City of Placerville identified a housing need in the City's General Plan 2021-2029 Housing Element 6th cycle, including a need for affordable multi-family residential development. The Project Site is currently designated and zoned for multi-family residential use and would satisfy a portion of the identified need in the Housing Element. The Project Site is currently adjacent to existing public service and roadway infrastructure in a developed residential neighborhood. For these reasons, the Proposed Project would not result in substantial unplanned population growth for the City, either directly or indirectly, and this impact would be *less than significant*.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No impact. The Proposed Project would not displace existing people or housing and thus there would be *no impact*.

4.15 PUBLIC SERVICES

XV. PUBLIC SERVICES. Would the project:	Potentially Significant Impact	Less than Significant Impact 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:				
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☒	☐
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☐	☒

4.15.1 Environmental Setting

Fire Protection and Emergency Medical Services

The Project Site is located within the El Dorado County Fire Protection District (Fire District). The Fire District serves approximately 281 square miles and 74,000 residents (Fire District, 2023a). The Fire District employs 72 uniformed personnel and 3 support staff, who operate from five staffed and seven unstaffed firehouses. Additionally, the Fire District oversees a CAL FIRE Amador contract to operate a fire station in the Camino area. The Fire District operates four of the eight Western Slope El Dorado County Emergency Services Authority (JPA) Advanced Life Support ambulances (Fire District, 2023a). The Fire District's Station 25 is located at 3034 Sacramento Street, approximately 0.6 miles south of the Project Site. Station 25 is staffed 24 hours a day, 7 days a week by an Engine Company, a Medic Unit, and the Duty Chief (Fire District, 2023b). Between February and December of 2022, the Fire District answered 2,114 calls for service, which consisted of approximately 60.9% medical calls and 39.1% fire calls (Fire District, 2022).

Law Enforcement Services

The City, including the Project Site, is served by the City of Placerville Police Department (Police Department). The Police Department is located at 730 Main Street, approximately one mile southeast of the Project Site. The Placerville Police Department is comprised of 20 Sworn Officers and 11 Professional Staff (City of Placerville Police Department, 2023). In December of 2022, the Police Department responded to 1,953 service calls, comprised of DUIs, traffic collisions, traffic citations, reports, traffic stops, and other calls for service (City of Placerville Police Department, 2022).

Schools

The Project Site is located within the jurisdiction of the El Dorado County Office of Education (EDCOE), which operates fifteen school districts (EDCOE, 2023). The Project Site is located within the El Dorado Union High School District and Placerville Union School District. Public schools that would serve children residing on the Project Site include El Dorado High School, Edwin Markham Middle School, Louisiana Schnell School, and Sierra Elementary School, all located within the City. The nearest school to the Project Site is El Dorado High School, located approximately 600 feet west of the Project Site.

Parks and Recreation

The City manages seven parks (City of Placerville, 2023). The nearest park, Benham Park, is located approximately 0.65 miles south of the Project Site. Additionally, there are various walking trails and other recreational opportunities in the vicinity of the Project Site.

4.15.2 Impact Assessment

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

i. Fire protection?

Less than Significant Impact. The Project Site is served by the Fire District. Station 25, the nearest fire station, is 0.6 miles south of the Project Site. Due to the proximity of the Project Site to an existing station, no additional fire facilities are anticipated to be needed. As discussed in Project Commitment HAZ-1, site plans shall adhere to the CBC, as amended by the City Municipal Code, and reviewed by the Placerville Building Division and El Dorado County Fire Protection District.

The Fire District developed, and the City has adopted a development impact fee for fire services and facilities payable at time of development permit issuance, as required in **Project Commitment PUBSERV-1**. The impact fee as of the date of this Initial Study is $1.49 per square foot for multi-family residential construction. Potential impacts to fire protection resources therefore are considered less than significant due to adopted building standards and the payment of impact fees in effect at the time of permit issuance. Therefore, the Proposed Project would have a *less than significant impact* on fire protection services.

ii. Police protection?

Less than Significant Impact. The Project Site is currently served by the Police Department and would continue to be served by the Police Department. The Police Department is located approximately one mile southeast of the Project Site. While the Proposed Project would allow for development at an increased density, it would not modify the existing underlying zoning for multi-family residential development. Accordingly, the Proposed Project is not anticipated to result in the need for new or altered police facilities. Therefore, the Proposed Project would have a *less than significant impact.*

iii. Schools?

Less than Significant Impact. EDCOE has determined that multi-family development within their school districts can have an impact on their schools and school districts. EDCOE has implemented school Developer Fees to accommodate impacts related to new development. Standard development procedure requires that concurrently with the issuance of a development permit, the project proponent pay EDCOE Mitigation Impact Fees to offset impacts to the local school districts, as required in **Project Commitment PUBSERV-1**. Payment of the development fees in effect at the time of development permit issuance is expected to reduce the potential impacts to schools to a *less than significant* level.

iv. Parks?

Less than Significant Impact. The Proposed Project includes the development of residences which could increase patronage at nearby recreational facilities. The City has established a Parks and Recreation Facilities Development Fee under Section 8-11-2 of City Code. The intent of the development fee program is for the planning, acquisition, improvement, and expansion of public parks, playgrounds, and recreation facilities to serve the increasing population of the City and the means of providing additional revenues with which to finance such public facilities. Payment of the development fees in effect at the time of development permit issuance would be implemented per **Project Commitment PUBSERV-1** to reduce the potential impacts to parks to a *less than significant* level.

v. Other public facilities?

No Impact. There would be *no impact* to other public service facilities. Impacts to public utilities are discussed in **Section 4.19**.

4.16 RECREATION

XVI. RECREATION. Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

4.16.1 Environmental Setting

As described in **Section 4.15**, the City manages seven parks (City of Placerville, 2023). The nearest park, Benham Park, is located approximately 0.65 miles south of the Project Site. Additionally, there are various walking trails and other recreational opportunities in the vicinity of the Project Site.

4.16.2 Impact Assessment

a-b) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? Or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less than Significant Impact. The Proposed Project includes the development of residences which could increase patronage at nearby recreational facilities. The City has established a Parks and Recreation Facilities Development Fee under Section 8-11-2 of City Code. The intent of the development fee program is for the planning, acquisition, improvement, and expansion of public parks, playgrounds, and recreation facilities to serve the increasing population of the City and the means of providing additional revenues with which to finance such public facilities. As of the date of this Initial Study, the required park and recreational facilities development fee is $600.00 per new residential unit. Payment of the development fees in effect at the time of development permit issuance per **Project Commitment PUBSERV-1** is expected to reduce the potential impacts to parks to a *less-than-significant* level.

4.17 TRANSPORTATION

XVII. TRANSPORTATION. Would the project:	Potentially Significant Impact	Less than Significant Impact 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?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

4.17.1 Environmental Setting

Circulation Network

Coloma Street (Hwy 49 or State Route 49) provides primary access to the Project Site and is a State highway facility operated by Caltrans. Coloma Street is classified as a minor arterial road by the City's General Plan, and in the vicinity of the Project Site is a two-lane road with minimal shoulders and no turning lanes. Its intersection with US Highway 50 is approximately 0.6 mile south of the Project Site.

Caltrans' Route Concept Report for Coloma Street/Hwy 49 was developed in 2000 and contains a 20-year improvement concept for State Route 49. The route concept recognizes the unique nature of the roadway in terms of historical and topographic constraints, which preclude the possibility of significantly improving the highway on its existing alignment. The concept LOS is F south of the community of El Dorado and through the City of Placerville, while all other segments have a concept service level of LOS E (El Dorado County, 2019). The existing volumes for Coloma Street between US Highway 50 and State Route 193 are approximately 7,000 vehicles per day with 840 peak trips (Caltrans, 2021). Based on the peak hour volume thresholds and levels of service table prepared for the State Route 49 Realignment Study, a 2-Lane Minor Highway would operate at Level of Service (LOS) D if peak hour volume is 681-1,410 vehicles (TYLin, 2010). Thus, it is assumed that the segment of Coloma Street adjacent to the Project Site operates at LOS D, which is acceptable based on the concept service level of LOS F through the City of Placerville.

El Dorado Transit operates the Placerville Route (Route 20) which runs along Coloma Street. There are several existing public transit facilities in the vicinity, the closest of which, the Coloma Court bus stop, is 0.3 mile from the Project Site. The nearest Park-and-Ride carpooling facility is located at Ray Lawyer Drive, approximately 2 miles southwest of the Project Site, off of US Hwy 50. There are no sidewalks or designated bike lanes along Coloma Street near the Project Site.

Regulatory Setting

State CEQA Guidelines

As part of the statewide implementation of Senate Bill (SB) 743, the Governor's Office of Planning and Research (OPR) settled upon automobile vehicle miles of travel (VMT) as the preferred metric for assessing passenger vehicle-related impacts under CEQA and issued revised CEQA Guidelines in December 2018, along with a Technical Advisory on Evaluating Transportation Impacts in CEQA to assist practitioners in implementing the CEQA Guidelines revisions (OPR, 2018).

The CEQA Guidelines and the OPR Technical Advisory note that CEQA provides screening criteria for various types of projects, including affordable residential development:

> Adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT. Further, "… low-wage workers in particular would be more likely to choose a residential location close to their workplace, if one is available." In areas where existing jobs-housing match is closer to optimal, low-income housing nevertheless generates less VMT than market-rate housing. Therefore, a project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less-than-significant impact on VMT.

Caltrans

Caltrans has issued its own guidance for implementation of SB 743 for projects that could impact Caltrans facilities. Caltrans issued its Transportation Analysis Framework (TAF) in September 2020, which details methodology for calculating induced demand for capacity increasing transportation projects on the State Highway System (Caltrans, 2020a). Caltrans also issued its Transportation Analysis Under CEQA (TAC) guidance in September 2020 which describes significance determinations for capacity increasing projects on the State Highway System.

Caltrans has also adopted procedures to oversee construction activities on and around its facilities. The Caltrans Construction Manual (Caltrans, 2020b) describes best practices for construction activities, including personnel and equipment safety requirements, temporary traffic control, signage, and other requirements aimed at reducing construction-related hazards and constructing projects safely and efficiently. Any work proposed on Caltrans facilities would be required to abide by these requirements.

City of Placerville

The City of Placerville's General Plan Transportation Element contains numerous goals and policies to promote the development of a circulation system for all modes of transportation, including vehicles, pedestrians, and bicycles, which facilitates easy access through and within the City. The following Goals and Policies pertain to the Proposed Project:

Goal A: To provide a circulation system that is correlated and adequate to support existing and proposed land uses, thereby providing for the efficient movement of goods and services within and through Placerville.

> **Policy A-1:** The City shall strive to attain the highest possible traffic levels of service consistent with the financial resources available and within the limits of technical feasibility.

Policy A-2: Streets shall be dedicated, widened, extended, and constructed according to the City's Master Street Plan and the street cross-sections shown in the Street Standards figures in Part I. Rights-of-way shall be reserved according to the specifications of the Master Street Plan. Deviations from the street cross-sections shown in Part I shall be allowed based upon a determination by the Public Works Director that safe and adequate public access and circulation are preserved by such deviations.
Policy A-3: Major circulation improvements should be completed as abutting lands develop or redevelop, with dedication of right-of-way and construction of improvements required as a condition of approval. Where the City may deem it appropriate, a property owner can be allowed to enter into a Street Frontage Improvement Agreement in lieu of construction of improvements if the majority of the neighborhood or area is presently unimproved. However, the City should require a minimum level of improvements to ensure adequate accessibility for vehicles and emergency equipment.

Goal B: To promote the development of a circulation system that preserves the historic nature and character of neighborhoods and districts, reinforces neighborhood identity and integrity, and minimizes adverse impacts on hillsides and vegetation.

Policy B-4: The City shall support the relocation of Highway 49 to an alternate route through Placerville.

Goal C: To minimize traffic accidents and hazards.

Policy C-1: The City shall discourage the creation or continuance of traffic hazards in new development and other proposals requiring the City to exercise its discretionary authority.
Policy C-2: In the development of new projects, the City shall give special attention to maintaining adequate corner-sight distances at city street intersections and at intersections of city streets and private access drives and roadways.

Goal E: To provide a safe and secure bicycle route system.

Policy E-2: Wherever possible, bicycle facilities should be separate from roadways and walkways.
Policy E-3: The City shall limit on-street bicycle routes to those streets where the available roadway width and traffic volumes permit safe coexistence of bicycle and motor vehicle traffic.

Goal F: To promote convenient and safe pedestrian circulation.

Policy F-2: In approving development projects, the City shall continue to require the construction of sidewalks connecting major pedestrian destinations, such as schools, hospitals, and government centers.
Policy F-6: The City shall require all multi-family developments to provide sidewalks on both sides of any street that is developed as part of the project and on one side of any street that is used as a perimeter street by that project.

In addition, the City Municipal Code Title 8 Public Ways and Property, contains specific provisions to ensure that developments improve streets, curbs, and gutters (8-9-3 and 8-9-5) as well as contribute to a Traffic Mitigation Fund that allows the City to provide an adequate level of traffic and circulation infrastructure (8-15).

4.17.2 Impact Assessment

a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact. The Project proposes the development of 67 dwelling units which could generate as many as 500 trips per day and 51 trips in the peak hour (**Appendix D**). Based on a current peak volume of 840 vehicles (Caltrans, 2021), the addition of 51 trips would result in a peak volume of 891 vehicles. Under both existing and proposed conditions, Coloma Street in the vicinity of the Proposed Project would operate at LOS D (peak hour volume of 681-1,410 vehicles; TYLin, 2010) which is considered acceptable based on the roadway's concept service level of LOS F through the City of Placerville (El Dorado County, 2019).

Project Commitment TRAFFIC-1 ensures that the Proposed Project would pay its fair-share contribution to the City's Traffic Mitigation Fund through compliance with Chapter 15 of the City Municipal Code. **Project Commitment TRAFFIC-2** includes that space shall be reserved along Coloma Street/Hwy 49 for a future planned sidewalk network.

The Proposed Project would not significantly affect traffic levels of service, would contribute to impact development fees, and would be consistent with the development of planned sidewalk facilities. For these reasons, this impact would be *less than significant*.

b) Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Less Than Significant Impact. The CEQA Guidelines and the OPR Technical Advisory (2018) note that CEQA provides screening criteria for various types of projects, including affordable residential development. CEQA Guidelines Section 15064.3 (b) states that for land use projects, "[v]ehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. The Technical Advisory notes that "[a]dding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT" (OPR, 2018). Pursuant to the Technical Advisory and CEQA Guidelines Section 15064.3, a Lead Agency has the discretion to presume VMT impacts would be less than significant if the project adds a high percentage of affordable housing.

The existing R-2 zoning allows for a maximum of eight dwelling units per acre which would allow for the development of approximately 30 dwelling units on the 3.77-acre site. The Project proposes 67 new dwelling units on the site or an increase of 37 units above that allowable under the existing R-2 zoning. The HO Overlay would require that half or approximately 34 of the proposed units are dedicated to affordable housing. Thus, approximately 92% of the units added by the HO-Overlay would be affordable housing, which is considered a high percentage. Additionally, the Project Site is approximately 0.5 miles north of Downtown Placerville and U.S. Highway 50, and thus in proximity to jobs and services, as well as a regional transportation corridor. As the Project constitutes infill development and a high percentage of new allowable units would be affordable housing, VMT impacts would be *less than significant*.

c-d) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Would the Project result in inadequate emergency access?

Less Than Significant. Traffic associated with future construction of street frontage improvements, driveway encroachment improvements, and site preparation activities for the Proposed Project may have a temporary effect on existing traffic circulation patterns. Any minor increases in traffic during the construction period would be temporary, and emergency vehicle access would be maintained throughout construction in the project vicinity. This section of Coloma Street along the Project Site boundary is relatively straight, with clear line of sight distances in both directions. The Project would require an encroachment permit from Caltrans for one or more driveways connecting to Coloma Street and site plan review by the City and El Dorado County Fire Protection District prior to construction. This review would ensure that applicable safety requirements and design standards are met. For example, proposed site plans would be reviewed to ensure that the width of driveways and internal roadways allow for the movement of emergency vehicles. For these reasons, this impact is *less than significant*.

4.18 TRIBAL CULTURAL RESOURCES

XVIII. TRIBAL CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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 § 5020.1(k), or	☐	☒	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

4.18.1 Environmental Setting

The Project Site is located in the ethnographic territory of the Nisenan tribe (also known as the Southern Maidu). Prior to European-American contact, Nisenan territory included the southern extent of the Sacramento Valley, east of the Sacramento River between the North Fork Yuba River and Cosumnes Rivers on the north and south, respectively, and extended east into the foothills of the Sierra Nevada Range. Neighboring groups included the Plains Miwok to the south, Southern Patwin to the west across the Sacramento River beyond the Yolo Basin, and Konkow and Maidu to the north.

Background research related to tribal cultural resources included a Sacred Lands File (SLF) search conducted by the Native American Heritage Commission (NAHC), and completion of a Cultural Resources Investigations report summarizing the findings, which is described throughout this analysis and attached as **Appendix C**. As described in **Appendix C**, the SLF search for the Project yielded negative results for the presence of sensitive Native American resources in the area.

Assembly Bill (AB) 52 provides for consultation between lead agencies and Native American tribal organizations during the CEQA process. On May 12, 2023, based on the list of tribes provided by the NAHC, the City sent a consultation invitation letter via email to the following five tribes:

- Shings Springs Band of Miwok Indians
- Tsi Akim Maidu of Taylorsville Rancheria
- United Auburn Indian Community of the Auburn Rancheria
- Washoe Tribe of Nevada California
- Colfax-Todds Valley Consolidated Tribe

No responses were received requesting formal consultation.

4.18.2 Impact Assessment

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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 § 5020.1(k), or

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1.

Less than Significant with Mitigation. Based on the Cultural Resources Investigation and tribal consultation for the Proposed Project, the Project Site does not contain any known tribal cultural resources that are eligible for listing in the California Register of Historical Sources, or in a local register of historical resources as defined in PRC Section 5020.1(k). The Project Site is not a tribal cultural resource as determined by the City pursuant to the criteria set forth in subdivision (c) of PRC Section 5024.1. Geoarchaeological analysis determined that the sensitivity for the presence of buried deposits of cultural resources on the Project Site is very low (**Appendix C**). While unlikely, it is possible that unknown buried archaeological materials could be found during ground disturbing activities at the Project Site, including unrecorded tribal cultural resources. This is considered potentially significant. To address unanticipated and accidental archaeological discoveries, **Mitigation Measure CUL-1** would require construction to halt until cultural resources are reported and assessed by an archaeologist. With implementation of mitigation, this potential impact would be *less than significant with mitigation*.

4.19 UTILITIES AND SERVICE SYSTEMS

XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less than Significant Impact 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?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the waste water 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

4.19.1 Environmental Setting

Water Supply

Potable water is provided to the City by the El Dorado Irrigation District (EID). The nearest water line to the Project Site is an 8-inch line located along Coloma Street. As described in EID's 2020 Urban Water Management Plan, the potable water systems extend over 1,200 miles of pipelines, 27 miles of ditches, five treatment plants, 34 storage facilities with a combined capacity of over 100 million gallons, and 38 pump stations (EID, 2021).

The Project Site is located within EID's Eastern Region, which for supply purposes is connected to the Western Region. The Western/Eastern region derives its supplies under rights and entitlements emanating from both the South Fork American River watershed and the Cosumnes River watershed via Sly Park Reservoir. Water derived from upstream American River watershed diversions and storage reservoirs generally use the Reservoir 1 Water Treatment Plant to serve the Western/Eastern area, while the Sly Park Reservoir water supply uses Reservoir A Water Treatment Plant to serve the same area.

Under normal water year conditions, EID maintains an average supply of 70,794 acre-feet per year (afy) of existing supplies and 7,500 afy of planned supplies. The District anticipates the total average future water supplies to equal 78,294 afy by 2045. In a single dry year, the water supplies available to EID total 63,379 afy, and for multiple dry year conditions (five years), EID's secured supplies total 55,328 afy. EID had a potable water demand of 26,240 afy in 2020 (EID, 2021).

EID estimates a 23% increase in multi-family units in the Western/Eastern Regions through the planning horizon of 2045. EID maintains ample water supplies to meet current and growing customer demand and has adopted a Drought Action Plan which complies with the California Water Code (EID, 2021).

Wastewater Conveyance and Treatment

The City of Placerville is the sole provider of wastewater service within the City limits. Wastewater facilities operated by the City include the Hangtown Creek Water Reclamation Facility (HCWRF) and the wastewater collection system, which has approximately 50 miles of pipelines and five pumping stations (City of Placerville, 2012). The HCWRF has a design capacity of 5 million gallons per day (MGD) (Johnson Controls, 2015). The HCWRF plant operates at a reasonably low hydraulic and biological capacity (Johnson Controls, 2015). During peak flows, it is only operating at 30% of its design capacity, and during minimum flow conditions, it operates at less than 10% of its design capacity. Treated effluent is discharged to Cool Water Creek via an existing NPDES permit (NPDES Permits #CA0078956 and #CAC439621). The Project Site is located adjacent to an existing 8-inch sewer line along Coloma Street which serves existing residential development in the vicinity.

Stormwater Drainage

An intermittent channel flows through the Project Site parallel with Coloma Street (Hwy 49) and is fed by two on-site ephemeral channels that receive off-site stormwater discharged from pipe culverts (**Figure 6**). These features have been channelized from their natural configurations and they tie into the City's stormwater system. As shown on **Figure 6**, a non-jurisdictional ditch conveys water from the southeast corner of the property to the channelized swale.

Solid Waste

The City of Placerville has a franchise agreement with Waste Connections Inc., doing business as El Dorado Disposal Services, to provide solid waste disposal within the City. Solid waste collected by Waste Connections is processed at the Western El Dorado Recovery Systems MRF and then transferred to the Lockwood Regional Landfill (Permit No. SW214R03) in Nevada for disposal. Lockwood Landfill is located in Storey County, Nevada approximately 12 miles east of Reno, and is a regional sanitary landfill that receives solid waste from several counties in Nevada and California. The permitted total capacity is approximately 302.5 million cubic yards and it receives an estimated 5,000 tons of solid waste daily (Nevada Division of Environmental Protection, 2023).

Natural Gas, Electricity, and Communication Services

Natural gas and electrical power in the City are supplied by PG&E and PCE. These electrical service providers provide electrical services to business and residents throughout the City via underground and above-ground service lines. PG&E owns and maintains electrical service lines, transmission lines, and

substations throughout City. PG&E also owns and maintains several natural gas transmission lines, distribution lines, and individual service lines. There are existing overhead electrical lines, and underground natural gas lines immediately adjacent to the Project Site along Coloma Street. Several providers provide telecommunication services to the City, including AT&T, Verizon, T-Mobile.

4.19.2 Impact Assessment

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact

Water and Wastewater Supply

Water and wastewater services would be provided to the Proposed Project by the City through existing 8-inch water and sewer lines along Coloma Street.

In 2020 EIS had a potable water demand of 26,240 afy and an existing supply of 70,794 afy for a remaining capacity of approximately 44,554 afy. EID's municipal customer water use factor for new multi-family residential development is 0.18 afy per connection (EID, 2021). With a total of 67 units, the Proposed Project would have a total estimated water demand of approximately 12 afy. The Proposed Project would utilize approximately 0.03% of remaining capacity and thus is not anticipated to result in the need for new or expanded water facilities. This number is conservative as EID has additional planned supplies and **Project Commitment UTILITY-1** would ensure that water efficient and water conserving landscaping are used if the aggregate landscaping area is equal to or greater than 500 square feet. Further, the Proposed Project would comply with the California Green Building Standards, and would incorporate low-flow fixtures, drought- tolerant landscaping and irrigation systems that conserve water.

Wastewater treatment would be supplied by the City's HCWRF which is currently operating at only 30% of its design capacity at peak flows, and during minimum flow conditions, it operates at less than 10% of its design capacity. based on the overwhelming amount of available capacity, the Proposed Project is not anticipated to result in the need for new or expanded wastewater treatment facilities. The City has established Capital Improvement Charges (CIC) for new sewer connection services to the City system. New development and the expansion of existing development within the city impose a burden on the City sewer system. As of the date of this Initial Study, the sewer CIC is $5,513.00 per new residential unit.

The Project would be required to coordinate with the City on water and sewer connections and pay associated development impact fees to offset the costs of any larger Capital Improvements. As discussed above, the Proposed Project is not anticipated to result in the need for new or expanded water or wastewater facilities and thus this impact is *less than significant*.

Stormwater

As described in **Section 4.10**, the Proposed Project would include stormwater drainage infrastructure. **Mitigation Measure HYDRO-1** requires that prior to the final design of storm drainage systems for the Proposed Project, a project Drainage Report shall be prepared and submitted to the City Engineer for approval. Drainage and detention facilities shall be designed and constructed to keep post-development flows leaving the site at or below pre-development levels, including increased drainage from site access and/or public roadway construction. Construction of stormwater collection and drainage facilities would occur concurrently with development of the Proposed Project and would take place entirely within the Project Site. The construction of these facilities could result in temporary environmental impacts which have been assessed throughout **Section 4** of this IS/MND. As described herein, all impacts of the Proposed Project would be less than significant or reduced to less than significant through the implementation of mitigation measures. Therefore, the Proposed Project would not result in the construction or relocation of stormwater utilities which could cause significant environmental effects. This is a *less than significant impact*.

Natural Gas, Electricity, and Communication Services

These services would be provided to the Project Site by PG&E or PCE and AT&T via new underground connections to existing infrastructure located immediately adjacent to the Project Site along Coloma Street. PG&E and AT&T incrementally expand and update their service system as needed to serve their users and update their service systems in response to usage and demand. Construction of electric, natural gas, and telecommunications facilities would occur concurrently with development of the Proposed Project and would take place entirely within the Project Site. These connections and any existing utilities would be identified, avoided, and permitted by the City as necessary during the site design and grading permit process pursuant to **Project Commitment GEO-1.** The construction of these facilities could result in temporary environmental impacts which have been assessed throughout **Section 4** of this IS/MND. As described herein, all impacts of the Proposed Project would be less than significant or reduced to less than significant through the implementation of mitigation measures. Therefore, the Proposed Project would not result in the construction or relocation of utilities which could cause significant environmental effects. This is a *less than significant 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. As discussed in **Section 4.19.2 a)**, the Proposed Project would have a total estimated demand of approximately 12 afy and EID has sufficient supplies to serve the Proposed Project in normal years. The water supplies estimated to be available during a single dry year are 63,379 afy and during multiple dry years (5 years) 55,328 afy. EID had a potable water demand of 26,240 afy in 2020 resulting in available capacity of approximately 37,139 during a single dry year and 29,088 during multiple dry years. The Proposed Project would utilize approximately 0.03% of remaining capacity during a single dry year and 0.04% during multiple dry years. As discussed in **Section 4.19.2 a)** these numbers are conservative as EID has additional planned supplies and the Proposed Project would include water saving measures through compliance with the California Green Building Standards. EID's Drought Action Plan would also initiate public education, voluntary conservation measures, and/or mandatory conservation measures during dry year conditions (EID, 2021).

As there would be sufficient capacity to serve the Proposed Project under normal, dry, and multiple dry year conditions, this impact is *less than significant*.

c) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. The Proposed Project would be served by the HCWRF. The HCWRF has a design capacity of 5 MGD. The HCWRF plant operates at a reasonably low hydraulic and biological capacity (Johnson Controls, 2015). During peak flows, it is only operating at 30% of its design capacity, and during minimum flow conditions, it operates at less than 10% of its design capacity. The proposed increase would be an incremental increase to the existing flow rate, and the WWTP has adequate capacity to serve the Proposed Project in addition to its existing commitments.

Therefore, the Proposed Project would not exceed wastewater treatment requirements such that a new facility would be required, nor would the existing wastewater treatment facility need to be expanded. As such, the Proposed Project would have a *less-than-significant impact*.

d) Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. The Proposed Project would generate solid waste during construction and operation. Construction of the Proposed Project would not include indirect generation of excessive solid waste through actions such as demolition of existing structures. The construction debris would be contained in designated bins and picked up by the City's contracted waste hauler.

Assuming a multi-family residential solid waste generation rate of 12.23 pounds per unit per day, the addition of the 67-unit residential building would result in approximately 819 pounds per day (0.04 tons per day) of operational solid waste (CalRecycle, 2019). The Lockfill Landfill currently receives 5,000 tons per day and the operational solid waste added by the Proposed Project would constitute a nominal amount of the allowed daily intake amount. Additionally, over a year of operation, the Proposed Project would produce approximately 299,085 pounds (149.5 tons) of solid waste, which is well within the landfill's permitted capacity of 302.5 million cubic yards.

The Proposed Project would be required to comply with the City Code of Placerville Section 7-1A: Solid Waste Regulations, which outlines requirements and specifications for solid waste collection. For construction recycling, the Proposed Project would be subject to compliance with AB 939 and CALGreen. In addition, the City's General Plan outlines goals and policies for source reduction and recycling including Policy F-1. Compliance with these measures and policies would serve to reduce impacts of solid waste by promoting regular collection and encouraging the recycling of materials. Additionally, the City often coordinates with the contracted waste hauler on the location of bins and pickup access, and ensures that screened trash enclosures are large enough for garbage, green waste, and recycling. For these reasons, the Proposed Project would have a *less-than-significant impact*.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. Proposed Project construction and operation would not generate substantial amounts of solid waste and thus, the Proposed Project would not conflict with any federal, State, and local management and reduction statutes and regulations related to solid waste. Further, the Proposed Project would be subject to compliance with existing statutes and regulations by the City, State, or federal law. Therefore, the Proposed Project would have a *less than significant impact.*

4.20 WILDFIRE

XX. WILDFIRE. 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 Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☒	☐	☐
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?	☐	☒	☐	☐

4.20.1 Environmental Setting

The Project Site is identified by the California Department of Forestry and Fire Protection (CAL FIRE) as being within a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE, 2023). The Project Site is located within the El Dorado County Fire Protection District (Fire District). The Fire District is described further in **Section 4.15.1**.

4.20.2 Impact Assessment

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. This issue is addressed in **Section 4.9.2(f)**. The Proposed Project would not impair implementation of, or physically interfere with, the City of Placerville's Emergency Response Plan. As such, the Proposed Project would have *less than significant impact*.

b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less than Significant Impact. This issue is addressed in **Section 4.9.2(g)**. The Proposed Project would be designed consistent with the CBC, as amended by the City Municipal Code, which includes measures related to fire and structural safety. These measures would reduce the risk of a large structure fire commencing on or spreading off the Project Site. The Proposed Project would involve the removal of trees on land already zoned for residential use, and thus would reduce wildland fire risks for the Project Site and vicinity. For these reasons, this impact would be *less than significant*.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less Than Significant with Mitigation. The Proposed Project may involve the installation or maintenance of power lines and construction activities with the potential to create sparks or fire that could ignite vegetation on the Project Site. **Mitigation Measure FIRE-1**, which includes the use of spark arresters on equipment with the potential to create sparks, would reduce the probability of igniting a fire during construction. Therefore, the potential for fire ignition during construction is *less than significant with mitigation*.

> **Mitigation Measure FIRE-1**: The following wildfire prevention measures shall be implemented during construction of the Proposed Project:
>
> - Construction equipment shall contain spark arrestors, as provided by the manufacturer.
> - Staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel.
> - The construction site shall be cleaned daily of trash and debris to the maximum extent practicable.

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?

Less than Significant Impact with Mitigation. As described in **Section 4.7,** the Proposed Project is not located on an unstable geologic unit or soil and does not have a high risk of landslides or liquefaction. The potential for the Proposed Project to alter existing drainage patterns such that off-site flooding would occur is addressed in in **Section 4.10.2 c) ii**. In order to ensure that surface runoff is adequately managed to prevent substantial increases in rate or amount of runoff, **Mitigation Measure HYDRO-1** includes preparation of a Drainage Report and review by the City. This impact is *less than significant with mitigation*.

4.21 CEQA MANDATORY FINDINGS OF SIGNIFICANCE

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

4.21.1 Impact Assessment

a, c) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant with Mitigation. The environmental effects of the Proposed Project are discussed in **Sections 4.1** through **4.20**. Based on biological and cultural resources surveys, the Project Site is not known to provide habitat for special-status species or contain historic or prehistoric cultural resources. Potentially significant impacts related to nesting bird species, riparian and aquatic habitat, subsurface cultural resources, drainage patterns, construction noise, and construction vibration are characteristic of

other construction projects and would be minimized or eliminated by Project Approvals (**Section 2.1.9**) Project Commitments (**Section 2.2**) and mitigation measures. Therefore, the Proposed Project would have a *less-than-significant impact with mitigation* on the quality of the environment and human beings.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less Than Significant with Mitigation. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of a project are cumulatively considerable. The Proposed Project consists of infill development where the surrounding area is predominantly developed. The City is concurrently proposing to add the HO overlay to two other parcels. These projects propose to develop 56 units at 201 New Morning Court and 60 units at 7460 and 7444 Green Valley Road (City of Placerville, 2021) and are located approximately 1.4 miles and 1.7 miles southwest from the Project Site, respectively. Collectively the Proposed Project, 201 New Morning Court and 7460/7444 Green Valley Road developments are referred to as the "HO Overlay Projects" in the following discussion.

Agriculture and Mineral Resources: The Proposed Project would have no impacts related to mineral resources and agricultural resources and thus would not contribute to any cumulative impacts for these resource areas.

Aesthetics, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology (Water Quality), Noise, and Wildfire: For these resource areas, the impacts of the Proposed Project are generally limited to the Project Site and immediate vicinity (generally within a few hundred feet). The immediate vicinity of the Project Site is developed and no nearby off-site projects are proposed that would create the potential for cumulative or combined impacts. Project commitments and mitigation have been identified to address the localized impacts of the Project and to prevent the Project's contributions to a larger, cumulative impact.

Land Use and Planning, and Population and Housing: The City of Placerville identified a housing need in the City's General Plan 2021-2029 Housing Element 6th cycle, including a need for affordable multi-family residential development. The HO Overlay Projects would provide housing for this identified need and thus are not anticipated to result in substantial, unplanned growth. Land use conflicts are generally minimal as the three sites are infill sites that are designated/zoned for either multi-family/high density residential or commercial development. The HO Overlay Projects are not anticipated to cause significant environmental impacts due to conflicts with land use plans, policies, or regulations, as all projects are undergoing CEQA environmental review and would be required to implement similar project commitments and mitigation to address environmental impacts.

Air Quality, Greenhouse Gas, Energy and Transportation: The HO Overlay Projects are infill projects and providing affordable housing for an identified housing need. The location of the sites within developed neighborhoods, in proximity to a regional transportation corridor (U.S. Highway 50), and in proximity to jobs and services would reduce regional per capita emissions and VMT. New development is required to comply with CCR Title 24 which includes Building Energy Efficiency Standards (Part 6), and Green Building

standards (CALGreen, Part 11). For these reasons, the HO Overlay Projects are not anticipated to contribute significantly to cumulative impacts.

Biological and Forestry Resources: The HO Overlay Projects consist of infill on relatively small sites designated and zoned for development. The HO Overlay Project sites are surrounded by existing development (existing residences, commercial development, roadways, and infrastructure), which reduces the potential for wildlife on the sites. Senior Biologist Dr. Geo Graening and Environmental Project Manager Jennifer Wade performed a biological resources survey of all three sites on May 7, 2023. No special-status species were observed on the sites and the sites provide marginal or unsuitable habitat for most special-status species. The HO Overlay Projects are required to comply with federal, State, and local regulations protecting biological and forestry resources, including Chapter 13 (Woodland and Forest Conservation) of the City of Placerville Municipal Code, the Clean Water Act, federal Endangered Species Act, the California Fish and Game Code, among other regulations. The HO Overlay Projects are undergoing CEQA environmental review and would be required to implement similar project commitments and mitigation. For these reasons, the HO Overlay Projects are not anticipated to contribute significantly to cumulative impacts.

Hydrology (Drainage), Public Services, Recreation, Utilities and Service Systems: The HO Overlay Projects would alter drainage patterns and increase demands on public services and utilities. New development is required to pay impact development fees and property taxes, which would reduce the overall burden on public services and utilities. With these contributions, no new public facilities are anticipated to be needed. As discussed in **Section 4.19**, the water supply and wastewater treatment systems which serve the City have substantial capacity. The HO Overlay Projects are undergoing CEQA environmental review and would be required to implement similar project commitments and mitigation, including coordination with the City for connection to the water and sewer system and review of drainage plans (see **Mitigation Measure HYDRO-1**). For these reasons, the HO Overlay Projects are not anticipated to contribute significantly to cumulative impacts.

In summary, cumulative impacts would be *less than significant with mitigation*.

Section 5 | References

California Air Resources Board (CARB), 2022. State Area Designations Maps. Last Updated November 2022. Available online at: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed July 2023.

CAL FIRE, 2023. Fire Hazard Severity Zones Viewer. Available online at: https://egis.fire.ca.gov/FHSZ/. Accessed July 2023.

Caltrans, 2020a. Transportation Analysis Framework, First Edition: Evaluating Transportation Impacts of State Highway System Projects. September 2020. Available online at: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1st-edition-taf-fnl-a11y.pdf&sa=U&ved=2ahUKEwjAs5uB152AAxVaOkQIHSzbBL0QFnoECAUQAQ&usg=AOvVaw17Z_8sJgrRF3mfTla6WhDR. Accessed July 20, 2023.

Caltrans, 2020b. Transportation Analysis Under CEQA, First Edition: Evaluating Transportation Impacts of State Highway System Projects. September 2020. Available online at: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1st-edition-tac-fnl-a11y.pdf. Accessed July 20, 2023.

Caltrans, 2021. Traffic Census Program: 2021 AADT Traffic Counts. Available online at: https://dot.ca.gov/programs/traffic-operations/census. Accessed July 19, 2023.

Caltrans, 2023. California State Scenic Highway System Map. Available online at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed July 2023.

California Department of Conservation, 2022. California Important Farmland Finder. Available online at: https://maps.conservation.ca.gov/dlrp/ciff/. Accessed July 2023.

California Department of Conservation, 2022. Mineral Land Classification. Available online at: https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc. Accessed July 2023.

California Department of Conservation, 2023. Earthquake Zones of Required Investigation. Available online at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed July 2023.

California Department of Water Resources, 2023. SGMA Basin Prioritization Dashboard. Available online at: https://gis.water.ca.gov/app/bp-dashboard/final. Accessed July 13, 2023.

California Energy Commission (CEC). 2023. Electricity Consumption by County. El Dorado County. Available: https://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed July 17, 2023.

California Geological Survey, 2002. California Geomorphic Provinces. Available online at: https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-36.pdf. Accessed July 2023.

California State Resource Control Board (SWRCB), 2023. Map of "Cortese List" Sites. Available online at: https://geotracker.waterboards.ca.gov/. Accessed July 2023.

CalRecycle, 2019. Estimated Solid Waste Generation Rates. Available online at: https://www2.calrecycle.ca.gov/wastecharacterization/general/rates. Accessed July 2023.

City of Placerville, 2012. Sewer System Master Plan. Prepared by Holmes International, June 6, 2012.

City of Placerville, 2021. 2021-2029 Housing Element. PDF. Accessed June 2023.

City of Placerville, 2023. Placerville Parks. Available online at: https://www.cityofplacerville.org/maps/layer/Parks. Accessed June 2023.

City of Placerville Police Department, 2022. Police Reports and Service Demands, December 2022. Available online at: https://www.cityofplacerville.org/media/Police%20Stats/2022/12%202022%20%20Department%20Productivity.pdf. Accessed July 2023.

City of Placerville Police Department, 2023. Placerville Police Department Information. Available online at: https://www.cityofplacerville.org/police. Accessed June 2023.

Department of Toxic Substance Control, 2023. EnviroStor Cleanup Sites. Available online at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=2752+Coloma+Road%2C+Placerville%2C+CA%2C+USA. Accessed July 2023.

El Dorado County, 2015. El Dorado County Property Assessed Clean Energy Program. Available online at: https://www.edcgov.us/County%20Press%20Releases/Pages/el_dorado_county_property_assessed_clean_energy_program.aspx. Accessed June 2023.

El Dorado County, 2018. El Dorado County Local Hazard Mitigation Plan. Available online at: https://www.edcgov.us/Government/sheriff/Documents/ElDoradoCounty_LHMP.pdf. Accessed July 2023.

El Dorado County, 2019. El Dorado County General Plan Transportation and Circulation Element. Available online at: https://www.edcgov.us/government/planning/adoptedgeneralplan/documents/3_circulation.pdf. Amended August 2019

El Dorado County, 2023. UGOTNET, Parcel and Land Management Viewer. Available online at: https://eldoradocounty.maps.arcgis.com/home/index.html. Accessed August 2023.

El Dorado County Air Pollution Control District, 2002. Guide to Air Quality Assessment, Determining Significance of Air Quality Impacts Under the California Environmental Quality Act. First Edition. February 2002. Available online at:

https://www.edcgov.us/Government/AirQualityManagement/Pages/guide_to_air_quality_assessment.aspx. Accessed July 2023.

El Dorado County Air Quality Management District, 2013. Rule 223-1 Fugitive Dust-Construction Activities Information Sheet. March 6, 2013. Available online at: https://www.edcgov.us/Government/AirQualityManagement/Pages/construction_dust_rules.aspx. Accessed July 2023.

El Dorado County Air Quality Management District, 2023. Incentives and Grants. Available online at: https://www.edcgov.us/Government/AirQualityManagement/Pages/grants_and_incentive_refunds.aspx. Accessed July 2023.

El Dorado County Air Quality Management District, n.d. Air Quality Management District, Climate Change. Available online at: https://www.edcgov.us/Government/AirQualityManagement/Pages/climate_change.aspx. Accessed July 2023.

El Dorado County Fire Protection District, 2022. Monthly Run Statistics and Call Break Down. Available online at: https://eldoradocountyfire.specialdistrict.org/files/1e4ee155d/December+2022+ECF+Totals+w+City+Report.pdf. Accessed June 2023

El Dorado County Fire Protection District, 2023a. El Dorado County Fire Protection District Information. Available online at: https://eldoradocountyfire.specialdistrict.org/about-us. Accessed June 2023.

El Dorado County Fire Protection District, 2023b. Community Stations. Available online at: https://www.eldoradocountyfire.com/community-stations. Accessed July 2023.

El Dorado County GIS, 2013. A), Airport Overlay Zone. Available online at: https://evogov.s3.amazonaws.com/media/17/media/5788.pdf. Accessed July 2023.

El Dorado County Office of Education, 2023. El Dorado County School District Boundaries. Available online at: https://edcoe.org/districts-and-schools/school-district-boundaries. Accessed June 2023.

El Dorado Irrigation District (EID), 2018. Facility Improvement Letter No. DS0618-113. Appendix I of Dorado Oaks Tentative Subdivision Map Project Draft EIR. Available online at: https://www.edcgov.us/Government/planning/Documents/Dorado%20Oaks%20DEIR%20Appendices%20A-I_08-18-21_Z19-0005_TM18-1538_PD19-0005_DA20-0002.pdf. Accessed July 2023.

EID, 2021. 2020 Urban Water Management Plan. Available online at: https://www.eid.org/home/showpublisheddocument/5666/637619651261230000. Accessed July 2023.

El Dorado Transit, 2023. Route 20 Placerville Schedule. Last Updated June 26, 2023. Available online at: https://eldoradotransit.com/routes/placerville/. Accessed July 20, 2023.

Federal Emergency Management Agency (FEMA), 2008. National Flood Hazard Layer FIRMette. Map 06017C0756E effective 9/26/2008.

Intergovernmental Panel on Climate Change, 2014. Climate change 2014 Synthesis Report Summary for Policymakers. Available online at: https://www.ipcc.ch/site/assets/uploads/2018/02/AR5_SYR_FINAL_SPM.pdf. Accessed July 2023.

Johnson Controls, 2015. Preliminary Report. Available online at: https://evogov.s3.amazonaws.com/media/17/media/9247.pdf. Accessed July 2023.

Nevada Division of Environmental Protection, 2023. Lockwood Regional Sanitary Landfill – Class I & III. Available online at: https://ndep.nv.gov/uploads/land-waste-solid-fac-docs/lockwood-landfill.pdf. Accessed July 2023.

Office of Planning and Research (OPR), 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018.

Pioneer Community Energy (PCE), 2023. Who We Serve. Available online at: https://pioneercommunityenergy.org/who-we-serve/. Accessed July 2023.

Sacramento Metropolitan Air Quality Management District (SMAQMD), 2020. Guide to Air Quality Assessment in Sacramento County. Available online at: https://www.airquality.org/Residents/CEQA-Land-Use-Planning/CEQA-Guidance-Tools. Accessed July 2023.

TYLin, 2010. State Route 49 Realignment Study. Available online at: https://www.edctc.org/files/df0ac7bfb/Final+SR49-Complete.pdf. Viewed August 2023.

United States Department of Agriculture, 2017. Census of Agriculture. County Profile. El Dorado County, California. Available online at: https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/California/cp06017.pdf. Accessed July 2023.

U.S. Census Bureau, 2015. Rural America. Available online at: https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=49cd4bc9c8eb444ab51218c1d5001ef6. Accessed July 2023.

USDA, 2023. Custom Soil Resource Report for El Dorado Area, California. Available online at: https://websoilsurvey.nrcs.usda.gov/. Accessed July 2023.

USEPA, 2023. California Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants. Last updated June 30, 2023. Available online at: https://www3.epa.gov/airquality/greenbook/anayo_ca.html. Accessed July 2023.

U.S. Geological Survey, 2023. Earthquake-triggered Ground-failure Inventories. Available online at: https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=2b6f1e57135f41028ea42ebc6813d967. Accessed July 2023.

UCMP, 2023. Specimen Search. Available online at: https://ucmpdb.berkeley.edu/. Accessed July 2023.

Section 6 | Report Preparers

LEAD AGENCY

City of Placerville
3101 Center Street
Placerville, CA 95667

ACORN ENVIRONMENTAL

Prime Consultant

5170 Golden Foothill Pkwy, El Dorado Hills, CA 95762

- Jennifer Wade, Project Manager
- Annalee Sanborn, Environmental Analyst
- Kristen Miner, Environmental Analyst
- Darienne Highsmith, Environmental Analyst
- Kimberly Fuchs, Environmental Analyst

NATURAL INVESTIGATIONS COMPANY

Subconsultant: Cultural Resources Services

3104 O Street, No. 221, Sacramento, CA 95816

SAXELBY ACOUSTICS

Subconsultant: CEQA Noise/Vibration Analysis

915 Highland Pointe Drive, Suite 250, Roseville, CA 95678

Appendix A

Air Quality and Greenhouse Gas Supporting Information

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Coloma - Proposed Housing

El Dorado-Mountain County County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	0.90	Acre	0.90	39,204.00	0
Condo/Townhouse	67.00	Dwelling Unit	1.15	67,000.00	192

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project specific assumptions.

Construction Phase - Project specific assumption.

Architectural Coating - Compliance with AQMD Rule 215

Woodstoves - Project specific assumptions.

Area Coating - Compliance with AQMD Rule 215.

Area Mitigation - Project specific assumptions.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstructionPhase	NumDays	10.00	40.00
tblFireplaces	NumberGas	36.85	0.00
tblFireplaces	NumberNoFireplace	6.70	0.00
tblFireplaces	NumberWood	23.45	0.00
tblLandUse	LotAcreage	4.19	1.15
tblWoodstoves	NumberCatalytic	3.35	0.00
tblWoodstoves	NumberNoncatalytic	3.35	0.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.2609	1.7648	2.0005	4.0300e-003	0.0921	0.0709	0.1629	0.0290	0.0675	0.0965	0.0000	344.8564	344.8564	0.0548	6.2700e-003	348.0959
2025	0.4043	0.0217	0.0392	7.0000e-005	1.8900e-003	9.6000e-004	2.8600e-003	5.0000e-004	9.6000e-004	1.4700e-003	0.0000	6.1610	6.1610	3.0000e-004	4.0000e-005	6.1812
Maximum	**0.4043**	**1.7648**	**2.0005**	**4.0300e-003**	**0.0921**	**0.0709**	**0.1629**	**0.0290**	**0.0675**	**0.0965**	**0.0000**	**344.8564**	**344.8564**	**0.0548**	**6.2700e-003**	**348.0959**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.2609	1.7648	2.0005	4.0300e-003	0.0921	0.0709	0.1629	0.0290	0.0675	0.0965	0.0000	344.8560	344.8560	0.0548	6.2700e-003	348.0956
2025	0.4043	0.0217	0.0392	7.0000e-005	1.8900e-003	9.6000e-004	2.8600e-003	5.0000e-004	9.6000e-004	1.4700e-003	0.0000	6.1610	6.1610	3.0000e-004	4.0000e-005	6.1812
Maximum	**0.4043**	**1.7648**	**2.0005**	**4.0300e-003**	**0.0921**	**0.0709**	**0.1629**	**0.0290**	**0.0675**	**0.0965**	**0.0000**	**344.8560**	**344.8560**	**0.0548**	**6.2700e-003**	**348.0956**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2024**	**3-31-2024**	0.5038	0.5038
2	**4-1-2024**	**6-30-2024**	0.5085	0.5085
3	**7-1-2024**	**9-30-2024**	0.5141	0.5141
4	**10-1-2024**	**12-31-2024**	0.4972	0.4972
5	**1-1-2025**	**3-31-2025**	0.4195	0.4195
		Highest	0.5141	0.5141

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3224	5.7300e-003	0.4970	3.0000e-005		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	0.8127	0.8127	7.8000e-004	0.0000	0.8321
Energy	1.7900e-003	0.0153	6.5000e-003	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	49.9650	49.9650	5.5600e-003	9.6000e-004	50.3893
Mobile	0.3346	0.4677	2.9302	5.1800e-003	0.5160	5.3700e-003	0.5214	0.1383	5.0500e-003	0.1433	0.0000	477.6839	477.6839	0.0356	0.0255	486.1634
Waste						0.0000	0.0000		0.0000	0.0000	6.2562	0.0000	6.2562	0.3697	0.0000	15.4994
Water						0.0000	0.0000		0.0000	0.0000	1.3849	3.0767	4.4616	0.1427	3.4200e-003	9.0490
Total	**0.6588**	**0.4887**	**3.4337**	**5.3100e-003**	**0.5160**	**9.3700e-003**	**0.5254**	**0.1383**	**9.0500e-003**	**0.1473**	**7.6411**	**531.5383**	**539.1794**	**0.5544**	**0.0299**	**561.9332**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3224	5.7300e-003	0.4970	3.0000e-005		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	0.8127	0.8127	7.8000e-004	0.0000	0.8321
Energy	1.7900e-003	0.0153	6.5000e-003	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	49.9650	49.9650	5.5600e-003	9.6000e-004	50.3893
Mobile	0.3346	0.4677	2.9302	5.1800e-003	0.5160	5.3700e-003	0.5214	0.1383	5.0500e-003	0.1433	0.0000	477.6839	477.6839	0.0356	0.0255	486.1634
Waste						0.0000	0.0000		0.0000	0.0000	6.2562	0.0000	6.2562	0.3697	0.0000	15.4994
Water						0.0000	0.0000		0.0000	0.0000	1.3849	3.0767	4.4616	0.1427	3.4200e-003	9.0490
Total	**0.6588**	**0.4887**	**3.4337**	**5.3100e-003**	**0.5160**	**9.3700e-003**	**0.5254**	**0.1383**	**9.0500e-003**	**0.1473**	**7.6411**	**531.5383**	**539.1794**	**0.5544**	**0.0299**	**561.9332**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2024	1/26/2024	5	20	
2	Site Preparation	Site Preparation	1/27/2024	1/31/2024	5	3	
3	Grading	Grading	2/1/2024	2/8/2024	5	6	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Building Construction	Building Construction	2/9/2024	12/12/2024	5	220	
5	Paving	Paving	12/13/2024	12/26/2024	5	10	
6	Architectural Coating	Architectural Coating	12/27/2024	2/20/2025	5	40	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 6

Acres of Paving: 0.9

Residential Indoor: 135,675; Residential Outdoor: 45,225; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,352 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	65.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0144	0.1389	0.1349	2.4000e-004		6.3100e-003	6.3100e-003		5.8900e-003	5.8900e-003	0.0000	21.0916	21.0916	5.3400e-003	0.0000	21.2250
Total	**0.0144**	**0.1389**	**0.1349**	**2.4000e-004**		**6.3100e-003**	**6.3100e-003**		**5.8900e-003**	**5.8900e-003**	**0.0000**	**21.0916**	**21.0916**	**5.3400e-003**	**0.0000**	**21.2250**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.7000e-004	3.3500e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8030	0.8030	3.0000e-005	2.0000e-005	0.8110
Total	**4.4000e-004**	**2.7000e-004**	**3.3500e-003**	**1.0000e-005**	**1.0200e-003**	**1.0000e-005**	**1.0300e-003**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.8030**	**0.8030**	**3.0000e-005**	**2.0000e-005**	**0.8110**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0144	0.1389	0.1349	2.4000e-004		6.3100e-003	6.3100e-003		5.8900e-003	5.8900e-003	0.0000	21.0915	21.0915	5.3400e-003	0.0000	21.2250
Total	**0.0144**	**0.1389**	**0.1349**	**2.4000e-004**		**6.3100e-003**	**6.3100e-003**		**5.8900e-003**	**5.8900e-003**	**0.0000**	**21.0915**	**21.0915**	**5.3400e-003**	**0.0000**	**21.2250**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.7000e-004	3.3500e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8030	0.8030	3.0000e-005	2.0000e-005	0.8110
Total	**4.4000e-004**	**2.7000e-004**	**3.3500e-003**	**1.0000e-005**	**1.0200e-003**	**1.0000e-005**	**1.0300e-003**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.8030**	**0.8030**	**3.0000e-005**	**2.0000e-005**	**0.8110**

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8600e-003	0.0197	0.0144	4.0000e-005		7.5000e-004	7.5000e-004		6.9000e-004	6.9000e-004	0.0000	3.2300	3.2300	1.0400e-003	0.0000	3.2561
Total	**1.8600e-003**	**0.0197**	**0.0144**	**4.0000e-005**	**2.3900e-003**	**7.5000e-004**	**3.1400e-003**	**2.6000e-004**	**6.9000e-004**	**9.5000e-004**	**0.0000**	**3.2300**	**3.2300**	**1.0400e-003**	**0.0000**	**3.2561**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.1000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0741	0.0741	0.0000	0.0000	0.0749
Total	**4.0000e-005**	**3.0000e-005**	**3.1000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0741**	**0.0741**	**0.0000**	**0.0000**	**0.0749**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8600e-003	0.0197	0.0144	4.0000e-005		7.5000e-004	7.5000e-004		6.9000e-004	6.9000e-004	0.0000	3.2300	3.2300	1.0400e-003	0.0000	3.2561
Total	**1.8600e-003**	**0.0197**	**0.0144**	**4.0000e-005**	**2.3900e-003**	**7.5000e-004**	**3.1400e-003**	**2.6000e-004**	**6.9000e-004**	**9.5000e-004**	**0.0000**	**3.2300**	**3.2300**	**1.0400e-003**	**0.0000**	**3.2561**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.1000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0741	0.0741	0.0000	0.0000	0.0749
Total	**4.0000e-005**	**3.0000e-005**	**3.1000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0741**	**0.0741**	**0.0000**	**0.0000**	**0.0749**

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0213	0.0000	0.0213	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9000e-003	0.0415	0.0261	6.0000e-005		1.7200e-003	1.7200e-003		1.5800e-003	1.5800e-003	0.0000	5.4311	5.4311	1.7600e-003	0.0000	5.4750
Total	**3.9000e-003**	**0.0415**	**0.0261**	**6.0000e-005**	**0.0213**	**1.7200e-003**	**0.0230**	**0.0103**	**1.5800e-003**	**0.0119**	**0.0000**	**5.4311**	**5.4311**	**1.7600e-003**	**0.0000**	**5.4750**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	6.0000e-005	7.7000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1853	0.1853	1.0000e-005	1.0000e-005	0.1871
Total	**1.0000e-004**	**6.0000e-005**	**7.7000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1853**	**0.1853**	**1.0000e-005**	**1.0000e-005**	**0.1871**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0213	0.0000	0.0213	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9000e-003	0.0415	0.0261	6.0000e-005		1.7200e-003	1.7200e-003		1.5800e-003	1.5800e-003	0.0000	5.4311	5.4311	1.7600e-003	0.0000	5.4750
Total	**3.9000e-003**	**0.0415**	**0.0261**	**6.0000e-005**	**0.0213**	**1.7200e-003**	**0.0230**	**0.0103**	**1.5800e-003**	**0.0119**	**0.0000**	**5.4311**	**5.4311**	**1.7600e-003**	**0.0000**	**5.4750**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	6.0000e-005	7.7000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1853	0.1853	1.0000e-005	1.0000e-005	0.1871
Total	**1.0000e-004**	**6.0000e-005**	**7.7000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1853**	**0.1853**	**1.0000e-005**	**1.0000e-005**	**0.1871**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1757	1.4106	1.5510	2.7500e-003		0.0592	0.0592		0.0567	0.0567	0.0000	228.4853	228.4853	0.0426	0.0000	229.5492
Total	**0.1757**	**1.4106**	**1.5510**	**2.7500e-003**		**0.0592**	**0.0592**		**0.0567**	**0.0567**	**0.0000**	**228.4853**	**228.4853**	**0.0426**	**0.0000**	**229.5492**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1200e-003	0.0962	0.0217	3.4000e-004	0.0100	5.1000e-004	0.0106	2.9000e-003	4.9000e-004	3.3900e-003	0.0000	32.6678	32.6678	1.0000e-004	4.8700e-003	34.1230
Worker	0.0239	0.0151	0.1843	4.8000e-004	0.0563	3.1000e-004	0.0566	0.0150	2.9000e-004	0.0153	0.0000	44.1641	44.1641	1.5000e-003	1.3500e-003	44.6028
Total	**0.0261**	**0.1113**	**0.2060**	**8.2000e-004**	**0.0663**	**8.2000e-004**	**0.0672**	**0.0179**	**7.8000e-004**	**0.0187**	**0.0000**	**76.8319**	**76.8319**	**1.6000e-003**	**6.2200e-003**	**78.7258**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1757	1.4106	1.5510	2.7500e-003		0.0592	0.0592		0.0567	0.0567	0.0000	228.4851	228.4851	0.0426	0.0000	229.5489
Total	**0.1757**	**1.4106**	**1.5510**	**2.7500e-003**		**0.0592**	**0.0592**		**0.0567**	**0.0567**	**0.0000**	**228.4851**	**228.4851**	**0.0426**	**0.0000**	**229.5489**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1200e-003	0.0962	0.0217	3.4000e-004	0.0100	5.1000e-004	0.0106	2.9000e-003	4.9000e-004	3.3900e-003	0.0000	32.6678	32.6678	1.0000e-004	4.8700e-003	34.1230
Worker	0.0239	0.0151	0.1843	4.8000e-004	0.0563	3.1000e-004	0.0566	0.0150	2.9000e-004	0.0153	0.0000	44.1641	44.1641	1.5000e-003	1.3500e-003	44.6028
Total	**0.0261**	**0.1113**	**0.2060**	**8.2000e-004**	**0.0663**	**8.2000e-004**	**0.0672**	**0.0179**	**7.8000e-004**	**0.0187**	**0.0000**	**76.8319**	**76.8319**	**1.6000e-003**	**6.2200e-003**	**78.7258**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2100e-003	0.0405	0.0585	9.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	7.7574	7.7574	2.4600e-003	0.0000	7.8188
Paving	1.1800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.3900e-003**	**0.0405**	**0.0585**	**9.0000e-005**		**1.9800e-003**	**1.9800e-003**		**1.8300e-003**	**1.8300e-003**	**0.0000**	**7.7574**	**7.7574**	**2.4600e-003**	**0.0000**	**7.8188**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.6000e-004	1.9300e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4633	0.4633	2.0000e-005	1.0000e-005	0.4679
Total	**2.5000e-004**	**1.6000e-004**	**1.9300e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4633**	**0.4633**	**2.0000e-005**	**1.0000e-005**	**0.4679**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2100e-003	0.0405	0.0585	9.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	7.7573	7.7573	2.4600e-003	0.0000	7.8188
Paving	1.1800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.3900e-003**	**0.0405**	**0.0585**	**9.0000e-005**		**1.9800e-003**	**1.9800e-003**		**1.8300e-003**	**1.8300e-003**	**0.0000**	**7.7573**	**7.7573**	**2.4600e-003**	**0.0000**	**7.8188**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.6000e-004	1.9300e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4633	0.4633	2.0000e-005	1.0000e-005	0.4679
Total	**2.5000e-004**	**1.6000e-004**	**1.9300e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**5.9000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4633**	**0.4633**	**2.0000e-005**	**1.0000e-005**	**0.4679**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0325					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	1.8300e-003	2.7200e-003	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.3830	0.3830	2.0000e-005	0.0000	0.3835
Total	**0.0327**	**1.8300e-003**	**2.7200e-003**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.3830**	**0.3830**	**2.0000e-005**	**0.0000**	**0.3835**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	4.0000e-005	5.0000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1205	0.1205	0.0000	0.0000	0.1216
Total	**7.0000e-005**	**4.0000e-005**	**5.0000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1205**	**0.1205**	**0.0000**	**0.0000**	**0.1216**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0325					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	1.8300e-003	2.7200e-003	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.3830	0.3830	2.0000e-005	0.0000	0.3835
Total	**0.0327**	**1.8300e-003**	**2.7200e-003**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.3830**	**0.3830**	**2.0000e-005**	**0.0000**	**0.3835**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	4.0000e-005	5.0000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1205	0.1205	0.0000	0.0000	0.1216
Total	**7.0000e-005**	**4.0000e-005**	**5.0000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1205**	**0.1205**	**0.0000**	**0.0000**	**0.1216**

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0212	0.0335	5.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	4.7235	4.7235	2.6000e-004	0.0000	4.7300
Total	**0.4036**	**0.0212**	**0.0335**	**5.0000e-005**		**9.5000e-004**	**9.5000e-004**		**9.5000e-004**	**9.5000e-004**	**0.0000**	**4.7235**	**4.7235**	**2.6000e-004**	**0.0000**	**4.7300**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	4.6000e-004	5.7700e-003	2.0000e-005	1.8900e-003	1.0000e-005	1.9000e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.4375	1.4375	5.0000e-005	4.0000e-005	1.4512
Total	**7.6000e-004**	**4.6000e-004**	**5.7700e-003**	**2.0000e-005**	**1.8900e-003**	**1.0000e-005**	**1.9000e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.4375**	**1.4375**	**5.0000e-005**	**4.0000e-005**	**1.4512**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0212	0.0335	5.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	4.7235	4.7235	2.6000e-004	0.0000	4.7300
Total	**0.4036**	**0.0212**	**0.0335**	**5.0000e-005**		**9.5000e-004**	**9.5000e-004**		**9.5000e-004**	**9.5000e-004**	**0.0000**	**4.7235**	**4.7235**	**2.6000e-004**	**0.0000**	**4.7300**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	4.6000e-004	5.7700e-003	2.0000e-005	1.8900e-003	1.0000e-005	1.9000e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.4375	1.4375	5.0000e-005	4.0000e-005	1.4512
Total	**7.6000e-004**	**4.6000e-004**	**5.7700e-003**	**2.0000e-005**	**1.8900e-003**	**1.0000e-005**	**1.9000e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.4375**	**1.4375**	**5.0000e-005**	**4.0000e-005**	**1.4512**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3346	0.4677	2.9302	5.1800e-003	0.5160	5.3700e-003	0.5214	0.1383	5.0500e-003	0.1433	0.0000	477.6839	477.6839	0.0356	0.0255	486.1634
Unmitigated	0.3346	0.4677	2.9302	5.1800e-003	0.5160	5.3700e-003	0.5214	0.1383	5.0500e-003	0.1433	0.0000	477.6839	477.6839	0.0356	0.0255	486.1634

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	490.44	545.38	420.76	1,398,854	1,398,854
Parking Lot	0.00	0.00	0.00		
Total	490.44	545.38	420.76	1,398,854	1,398,854

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.438995	0.062839	0.224823	0.155974	0.045145	0.009085	0.011459	0.004323	0.000682	0.000481	0.037420	0.001294	0.007479
Parking Lot	0.438995	0.062839	0.224823	0.155974	0.045145	0.009085	0.011459	0.004323	0.000682	0.000481	0.037420	0.001294	0.007479

5.0 Energy Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	32.2663	32.2663	5.2200e-003	6.3000e-004	32.5854
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	32.2663	32.2663	5.2200e-003	6.3000e-004	32.5854
NaturalGas Mitigated	1.7900e-003	0.0153	6.5000e-003	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	17.6987	17.6987	3.4000e-004	3.2000e-004	17.8039
NaturalGas Unmitigated	1.7900e-003	0.0153	6.5000e-003	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	17.6987	17.6987	3.4000e-004	3.2000e-004	17.8039

Coloma - Proposed Housing - El Dorado-Mountain County County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	331661	1.7900e-003	0.0153	6.5000e-003	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	17.6987	17.6987	3.4000e-004	3.2000e-004	17.8039
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**1.7900e-003**	**0.0153**	**6.5000e-003**	**1.0000e-004**		**1.2400e-003**	**1.2400e-003**		**1.2400e-003**	**1.2400e-003**	**0.0000**	**17.6987**	**17.6987**	**3.4000e-004**	**3.2000e-004**	**17.8039**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	331661	1.7900e-003	0.0153	6.5000e-003	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	17.6987	17.6987	3.4000e-004	3.2000e-004	17.8039
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**1.7900e-003**	**0.0153**	**6.5000e-003**	**1.0000e-004**		**1.2400e-003**	**1.2400e-003**		**1.2400e-003**	**1.2400e-003**	**0.0000**	**17.6987**	**17.6987**	**3.4000e-004**	**3.2000e-004**	**17.8039**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	335014	30.9968	5.0100e-003	6.1000e-004	31.3033
Parking Lot	13721.4	1.2696	2.1000e-004	2.0000e-005	1.2821
Total		**32.2663**	**5.2200e-003**	**6.3000e-004**	**32.5854**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	335014	30.9968	5.0100e-003	6.1000e-004	31.3033
Parking Lot	13721.4	1.2696	2.1000e-004	2.0000e-005	1.2821
Total		**32.2663**	**5.2200e-003**	**6.3000e-004**	**32.5854**

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3224	5.7300e-003	0.4970	3.0000e-005		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	0.8127	0.8127	7.8000e-004	0.0000	0.8321
Unmitigated	0.3224	5.7300e-003	0.4970	3.0000e-005		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	0.8127	0.8127	7.8000e-004	0.0000	0.8321

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0433					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2642					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0149	5.7300e-003	0.4970	3.0000e-005		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	0.8127	0.8127	7.8000e-004	0.0000	0.8321
Total	**0.3224**	**5.7300e-003**	**0.4970**	**3.0000e-005**		**2.7600e-003**	**2.7600e-003**		**2.7600e-003**	**2.7600e-003**	**0.0000**	**0.8127**	**0.8127**	**7.8000e-004**	**0.0000**	**0.8321**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0433					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2642					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0149	5.7300e-003	0.4970	3.0000e-005		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003	0.0000	0.8127	0.8127	7.8000e-004	0.0000	0.8321
Total	**0.3224**	**5.7300e-003**	**0.4970**	**3.0000e-005**		**2.7600e-003**	**2.7600e-003**		**2.7600e-003**	**2.7600e-003**	**0.0000**	**0.8127**	**0.8127**	**7.8000e-004**	**0.0000**	**0.8321**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.4616	0.1427	3.4200e-003	9.0490
Unmitigated	4.4616	0.1427	3.4200e-003	9.0490

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	4.36532 / 2.75205	4.4616	0.1427	3.4200e-003	9.0490
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**4.4616**	**0.1427**	**3.4200e-003**	**9.0490**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	4.36532 / 2.75205	4.4616	0.1427	3.4200e-003	9.0490
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**4.4616**	**0.1427**	**3.4200e-003**	**9.0490**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.2562	0.3697	0.0000	15.4994
Unmitigated	6.2562	0.3697	0.0000	15.4994

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	30.82	6.2562	0.3697	0.0000	15.4994
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**6.2562**	**0.3697**	**0.0000**	**15.4994**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	30.82	6.2562	0.3697	0.0000	15.4994
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**6.2562**	**0.3697**	**0.0000**	**15.4994**

9.0 Operational Offroad

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Coloma - Proposed Housing

El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	0.90	Acre	0.90	39,204.00	0
Condo/Townhouse	67.00	Dwelling Unit	1.15	67,000.00	192

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project specific assumptions.

Construction Phase - Project specific assumption.

Architectural Coating - Compliance with AQMD Rule 215

Woodstoves - Project specific assumptions.

Area Coating - Compliance with AQMD Rule 215.

Area Mitigation - Project specific assumptions.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstructionPhase	NumDays	10.00	40.00
tblFireplaces	NumberGas	36.85	0.00
tblFireplaces	NumberNoFireplace	6.70	0.00
tblFireplaces	NumberWood	23.45	0.00
tblLandUse	LotAcreage	4.19	1.15
tblWoodstoves	NumberCatalytic	3.35	0.00
tblWoodstoves	NumberNoncatalytic	3.35	0.00

2.0 Emissions Summary

Coloma - Proposed Housing - El Dorado-Mountain County County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	21.8725	13.9108	16.1172	0.0328	7.1647	0.6317	7.7374	3.4465	0.5900	3.9734	0.0000	3,092.5650	3,092.5650	0.7694	0.0612	3,121.8299
2025	21.8597	1.1672	2.1479	3.8800e-003	0.1068	0.0520	0.1588	0.0283	0.0520	0.0803	0.0000	373.4823	373.4823	0.0179	2.3100e-003	374.6178
Maximum	**21.8725**	**13.9108**	**16.1172**	**0.0328**	**7.1647**	**0.6317**	**7.7374**	**3.4465**	**0.5900**	**3.9734**	**0.0000**	**3,092.5650**	**3,092.5650**	**0.7694**	**0.0612**	**3,121.8299**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	21.8725	13.9108	16.1172	0.0328	7.1647	0.6317	7.7374	3.4465	0.5900	3.9734	0.0000	3,092.5650	3,092.5650	0.7694	0.0612	3,121.8299
2025	21.8597	1.1672	2.1479	3.8800e-003	0.1068	0.0520	0.1588	0.0283	0.0520	0.0803	0.0000	373.4823	373.4823	0.0179	2.3100e-003	374.6178
Maximum	**21.8725**	**13.9108**	**16.1172**	**0.0328**	**7.1647**	**0.6317**	**7.7374**	**3.4465**	**0.5900**	**3.9734**	**0.0000**	**3,092.5650**	**3,092.5650**	**0.7694**	**0.0612**	**3,121.8299**

Coloma - Proposed Housing - El Dorado-Mountain County County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Coloma - Proposed Housing - El Dorado-Mountain County County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8507	0.0636	5.5224	2.9000e-004		0.0306	0.0306		0.0306	0.0306	0.0000	9.9532	9.9532	9.5300e-003	0.0000	10.1915
Energy	9.8000e-003	0.0837	0.0356	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003		106.9013	106.9013	2.0500e-003	1.9600e-003	107.5366
Mobile	2.3658	2.6331	18.0254	0.0335	3.3023	0.0330	3.3353	0.8819	0.0310	0.9129		3,403.4382	3,403.4382	0.2232	0.1630	3,457.6034
Total	**4.2263**	**2.7805**	**23.5834**	**0.0343**	**3.3023**	**0.0704**	**3.3727**	**0.8819**	**0.0684**	**0.9503**	**0.0000**	**3,520.2927**	**3,520.2927**	**0.2348**	**0.1650**	**3,575.3315**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8507	0.0636	5.5224	2.9000e-004		0.0306	0.0306		0.0306	0.0306	0.0000	9.9532	9.9532	9.5300e-003	0.0000	10.1915
Energy	9.8000e-003	0.0837	0.0356	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003		106.9013	106.9013	2.0500e-003	1.9600e-003	107.5366
Mobile	2.3658	2.6331	18.0254	0.0335	3.3023	0.0330	3.3353	0.8819	0.0310	0.9129		3,403.4382	3,403.4382	0.2232	0.1630	3,457.6034
Total	**4.2263**	**2.7805**	**23.5834**	**0.0343**	**3.3023**	**0.0704**	**3.3727**	**0.8819**	**0.0684**	**0.9503**	**0.0000**	**3,520.2927**	**3,520.2927**	**0.2348**	**0.1650**	**3,575.3315**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2024	1/26/2024	5	20	
2	Site Preparation	Site Preparation	1/27/2024	1/31/2024	5	3	
3	Grading	Grading	2/1/2024	2/8/2024	5	6	
4	Building Construction	Building Construction	2/9/2024	12/12/2024	5	220	
5	Paving	Paving	12/13/2024	12/26/2024	5	10	
6	Architectural Coating	Architectural Coating	12/27/2024	2/20/2025	5	40	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 6

Acres of Paving: 0.9

Residential Indoor: 135,675; Residential Outdoor: 45,225; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,352 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	65.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Coloma - Proposed Housing - El Dorado-Mountain County County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4397	13.8867	13.4879	0.0241		0.6311	0.6311		0.5895	0.5895		2,324.9459	2,324.9459	0.5884		2,339.6562
Total	**1.4397**	**13.8867**	**13.4879**	**0.0241**		**0.6311**	**0.6311**		**0.5895**	**0.5895**		**2,324.9459**	**2,324.9459**	**0.5884**		**2,339.6562**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0486	0.0242	0.3647	9.4000e-004	0.1068	5.6000e-004	0.1074	0.0283	5.2000e-004	0.0289		95.1277	95.1277	2.7600e-003	2.4800e-003	95.9350
Total	**0.0486**	**0.0242**	**0.3647**	**9.4000e-004**	**0.1068**	**5.6000e-004**	**0.1074**	**0.0283**	**5.2000e-004**	**0.0289**		**95.1277**	**95.1277**	**2.7600e-003**	**2.4800e-003**	**95.9350**

Coloma - Proposed Housing - El Dorado-Mountain County County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4397	13.8867	13.4879	0.0241		0.6311	0.6311		0.5895	0.5895	0.0000	2,324.9459	2,324.9459	0.5884		2,339.6562
Total	**1.4397**	**13.8867**	**13.4879**	**0.0241**		**0.6311**	**0.6311**		**0.5895**	**0.5895**	**0.0000**	**2,324.9459**	**2,324.9459**	**0.5884**		**2,339.6562**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0486	0.0242	0.3647	9.4000e-004	0.1068	5.6000e-004	0.1074	0.0283	5.2000e-004	0.0289		95.1277	95.1277	2.7600e-003	2.4800e-003	95.9350
Total	**0.0486**	**0.0242**	**0.3647**	**9.4000e-004**	**0.1068**	**5.6000e-004**	**0.1074**	**0.0283**	**5.2000e-004**	**0.0289**		**95.1277**	**95.1277**	**2.7600e-003**	**2.4800e-003**	**95.9350**

Coloma - Proposed Housing - El Dorado-Mountain County County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.2406	13.1186	9.5796	0.0245		0.4971	0.4971		0.4573	0.4573		2,373.6514	2,373.6514	0.7677		2,392.8435
Total	**1.2406**	**13.1186**	**9.5796**	**0.0245**	**1.5908**	**0.4971**	**2.0878**	**0.1718**	**0.4573**	**0.6291**		**2,373.6514**	**2,373.6514**	**0.7677**		**2,392.8435**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0299	0.0149	0.2244	5.8000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.2000e-004	0.0178		58.5401	58.5401	1.7000e-003	1.5200e-003	59.0369
Total	**0.0299**	**0.0149**	**0.2244**	**5.8000e-004**	**0.0657**	**3.5000e-004**	**0.0661**	**0.0174**	**3.2000e-004**	**0.0178**		**58.5401**	**58.5401**	**1.7000e-003**	**1.5200e-003**	**59.0369**

Coloma - Proposed Housing - El Dorado-Mountain County County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.2406	13.1186	9.5796	0.0245		0.4971	0.4971		0.4573	0.4573	0.0000	2,373.6514	2,373.6514	0.7677		2,392.8435
Total	**1.2406**	**13.1186**	**9.5796**	**0.0245**	**1.5908**	**0.4971**	**2.0878**	**0.1718**	**0.4573**	**0.6291**	**0.0000**	**2,373.6514**	**2,373.6514**	**0.7677**		**2,392.8435**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0299	0.0149	0.2244	5.8000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.2000e-004	0.0178		58.5401	58.5401	1.7000e-003	1.5200e-003	59.0369
Total	**0.0299**	**0.0149**	**0.2244**	**5.8000e-004**	**0.0657**	**3.5000e-004**	**0.0661**	**0.0174**	**3.2000e-004**	**0.0178**		**58.5401**	**58.5401**	**1.7000e-003**	**1.5200e-003**	**59.0369**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3015	13.8178	8.6998	0.0206		0.5722	0.5722		0.5265	0.5265		1,995.5803	1,995.5803	0.6454		2,011.7155
Total	**1.3015**	**13.8178**	**8.6998**	**0.0206**	**7.0826**	**0.5722**	**7.6548**	**3.4247**	**0.5265**	**3.9512**		**1,995.5803**	**1,995.5803**	**0.6454**		**2,011.7155**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0374	0.0186	0.2806	7.2000e-004	0.0822	4.3000e-004	0.0826	0.0218	4.0000e-004	0.0222		73.1752	73.1752	2.1200e-003	1.9100e-003	73.7962
Total	**0.0374**	**0.0186**	**0.2806**	**7.2000e-004**	**0.0822**	**4.3000e-004**	**0.0826**	**0.0218**	**4.0000e-004**	**0.0222**		**73.1752**	**73.1752**	**2.1200e-003**	**1.9100e-003**	**73.7962**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3015	13.8178	8.6998	0.0206		0.5722	0.5722		0.5265	0.5265	0.0000	1,995.5803	1,995.5803	0.6454		2,011.7155
Total	**1.3015**	**13.8178**	**8.6998**	**0.0206**	**7.0826**	**0.5722**	**7.6548**	**3.4247**	**0.5265**	**3.9512**	**0.0000**	**1,995.5803**	**1,995.5803**	**0.6454**		**2,011.7155**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0374	0.0186	0.2806	7.2000e-004	0.0822	4.3000e-004	0.0826	0.0218	4.0000e-004	0.0222		73.1752	73.1752	2.1200e-003	1.9100e-003	73.7962
Total	**0.0374**	**0.0186**	**0.2806**	**7.2000e-004**	**0.0822**	**4.3000e-004**	**0.0826**	**0.0218**	**4.0000e-004**	**0.0222**		**73.1752**	**73.1752**	**2.1200e-003**	**1.9100e-003**	**73.7962**

Coloma - Proposed Housing - El Dorado-Mountain County County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5971	12.8235	14.1002	0.0250		0.5381	0.5381		0.5153	0.5153		2,289.6541	2,289.6541	0.4265		2,300.3154
Total	**1.5971**	**12.8235**	**14.1002**	**0.0250**		**0.5381**	**0.5381**		**0.5153**	**0.5153**		**2,289.6541**	**2,289.6541**	**0.4265**		**2,300.3154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0196	0.8422	0.1935	3.1000e-003	0.0945	4.6400e-003	0.0991	0.0272	4.4400e-003	0.0316		327.2723	327.2723	1.0400e-003	0.0488	341.8395
Worker	0.2430	0.1207	1.8236	4.7100e-003	0.5340	2.8200e-003	0.5368	0.1416	2.6000e-003	0.1442		475.6386	475.6386	0.0138	0.0124	479.6750
Total	**0.2626**	**0.9629**	**2.0171**	**7.8100e-003**	**0.6284**	**7.4600e-003**	**0.6359**	**0.1688**	**7.0400e-003**	**0.1758**		**802.9109**	**802.9109**	**0.0148**	**0.0612**	**821.5146**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5971	12.8235	14.1002	0.0250		0.5381	0.5381		0.5153	0.5153	0.0000	2,289.6541	2,289.6541	0.4265		2,300.3154
Total	**1.5971**	**12.8235**	**14.1002**	**0.0250**		**0.5381**	**0.5381**		**0.5153**	**0.5153**	**0.0000**	**2,289.6541**	**2,289.6541**	**0.4265**		**2,300.3154**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0196	0.8422	0.1935	3.1000e-003	0.0945	4.6400e-003	0.0991	0.0272	4.4400e-003	0.0316		327.2723	327.2723	1.0400e-003	0.0488	341.8395
Worker	0.2430	0.1207	1.8236	4.7100e-003	0.5340	2.8200e-003	0.5368	0.1416	2.6000e-003	0.1442		475.6386	475.6386	0.0138	0.0124	479.6750
Total	**0.2626**	**0.9629**	**2.0171**	**7.8100e-003**	**0.6284**	**7.4600e-003**	**0.6359**	**0.1688**	**7.0400e-003**	**0.1758**		**802.9109**	**802.9109**	**0.0148**	**0.0612**	**821.5146**

Coloma - Proposed Housing - El Dorado-Mountain County County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8425	8.1030	11.7069	0.0179		0.3957	0.3957		0.3652	0.3652		1,710.2024	1,710.2024	0.5420		1,723.7529
Paving	0.2358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0783**	**8.1030**	**11.7069**	**0.0179**		**0.3957**	**0.3957**		**0.3652**	**0.3652**		**1,710.2024**	**1,710.2024**	**0.5420**		**1,723.7529**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0561	0.0279	0.4208	1.0900e-003	0.1232	6.5000e-004	0.1239	0.0327	6.0000e-004	0.0333		109.7628	109.7628	3.1800e-003	2.8600e-003	110.6942
Total	**0.0561**	**0.0279**	**0.4208**	**1.0900e-003**	**0.1232**	**6.5000e-004**	**0.1239**	**0.0327**	**6.0000e-004**	**0.0333**		**109.7628**	**109.7628**	**3.1800e-003**	**2.8600e-003**	**110.6942**

Coloma - Proposed Housing - El Dorado-Mountain County County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8425	8.1030	11.7069	0.0179		0.3957	0.3957		0.3652	0.3652	0.0000	1,710.2024	1,710.2024	0.5420		1,723.7529
Paving	0.2358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0783**	**8.1030**	**11.7069**	**0.0179**		**0.3957**	**0.3957**		**0.3652**	**0.3652**	**0.0000**	**1,710.2024**	**1,710.2024**	**0.5420**		**1,723.7529**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0561	0.0279	0.4208	1.0900e-003	0.1232	6.5000e-004	0.1239	0.0327	6.0000e-004	0.0333		109.7628	109.7628	3.1800e-003	2.8600e-003	110.6942
Total	**0.0561**	**0.0279**	**0.4208**	**1.0900e-003**	**0.1232**	**6.5000e-004**	**0.1239**	**0.0327**	**6.0000e-004**	**0.0333**		**109.7628**	**109.7628**	**3.1800e-003**	**2.8600e-003**	**110.6942**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.6431					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**21.8239**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0486	0.0242	0.3647	9.4000e-004	0.1068	5.6000e-004	0.1074	0.0283	5.2000e-004	0.0289		95.1277	95.1277	2.7600e-003	2.4800e-003	95.9350
Total	**0.0486**	**0.0242**	**0.3647**	**9.4000e-004**	**0.1068**	**5.6000e-004**	**0.1074**	**0.0283**	**5.2000e-004**	**0.0289**		**95.1277**	**95.1277**	**2.7600e-003**	**2.4800e-003**	**95.9350**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.6431					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**21.8239**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0486	0.0242	0.3647	9.4000e-004	0.1068	5.6000e-004	0.1074	0.0283	5.2000e-004	0.0289		95.1277	95.1277	2.7600e-003	2.4800e-003	95.9350
Total	**0.0486**	**0.0242**	**0.3647**	**9.4000e-004**	**0.1068**	**5.6000e-004**	**0.1074**	**0.0283**	**5.2000e-004**	**0.0289**		**95.1277**	**95.1277**	**2.7600e-003**	**2.4800e-003**	**95.9350**

Coloma - Proposed Housing - El Dorado-Mountain County County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.6431					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**21.8140**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0457	0.0217	0.3388	9.1000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		92.0343	92.0343	2.5000e-003	2.3100e-003	92.7859
Total	**0.0457**	**0.0217**	**0.3388**	**9.1000e-004**	**0.1068**	**5.3000e-004**	**0.1073**	**0.0283**	**4.9000e-004**	**0.0288**		**92.0343**	**92.0343**	**2.5000e-003**	**2.3100e-003**	**92.7859**

Coloma - Proposed Housing - El Dorado-Mountain County County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.6431					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**21.8140**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0457	0.0217	0.3388	9.1000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		92.0343	92.0343	2.5000e-003	2.3100e-003	92.7859
Total	**0.0457**	**0.0217**	**0.3388**	**9.1000e-004**	**0.1068**	**5.3000e-004**	**0.1073**	**0.0283**	**4.9000e-004**	**0.0288**		**92.0343**	**92.0343**	**2.5000e-003**	**2.3100e-003**	**92.7859**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3658	2.6331	18.0254	0.0335	3.3023	0.0330	3.3353	0.8819	0.0310	0.9129		3,403.4382	3,403.4382	0.2232	0.1630	3,457.6034
Unmitigated	2.3658	2.6331	18.0254	0.0335	3.3023	0.0330	3.3353	0.8819	0.0310	0.9129		3,403.4382	3,403.4382	0.2232	0.1630	3,457.6034

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	490.44	545.38	420.76	1,398,854	1,398,854
Parking Lot	0.00	0.00	0.00		
Total	490.44	545.38	420.76	1,398,854	1,398,854

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.438995	0.062839	0.224823	0.155974	0.045145	0.009085	0.011459	0.004323	0.000682	0.000481	0.037420	0.001294	0.007479
Parking Lot	0.438995	0.062839	0.224823	0.155974	0.045145	0.009085	0.011459	0.004323	0.000682	0.000481	0.037420	0.001294	0.007479

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	9.8000e-003	0.0837	0.0356	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003		106.9013	106.9013	2.0500e-003	1.9600e-003	107.5366
NaturalGas Unmitigated	9.8000e-003	0.0837	0.0356	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003		106.9013	106.9013	2.0500e-003	1.9600e-003	107.5366

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	908.661	9.8000e-003	0.0837	0.0356	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003		106.9013	106.9013	2.0500e-003	1.9600e-003	107.5366
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**9.8000e-003**	**0.0837**	**0.0356**	**5.3000e-004**		**6.7700e-003**	**6.7700e-003**		**6.7700e-003**	**6.7700e-003**		**106.9013**	**106.9013**	**2.0500e-003**	**1.9600e-003**	**107.5366**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	0.908661	9.8000e-003	0.0837	0.0356	5.3000e-004		6.7700e-003	6.7700e-003		6.7700e-003	6.7700e-003		106.9013	106.9013	2.0500e-003	1.9600e-003	107.5366
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**9.8000e-003**	**0.0837**	**0.0356**	**5.3000e-004**		**6.7700e-003**	**6.7700e-003**		**6.7700e-003**	**6.7700e-003**		**106.9013**	**106.9013**	**2.0500e-003**	**1.9600e-003**	**107.5366**

6.0 Area Detail

Coloma - Proposed Housing - El Dorado-Mountain County County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8507	0.0636	5.5224	2.9000e-004		0.0306	0.0306		0.0306	0.0306	0.0000	9.9532	9.9532	9.5300e-003	0.0000	10.1915
Unmitigated	1.8507	0.0636	5.5224	2.9000e-004		0.0306	0.0306		0.0306	0.0306	0.0000	9.9532	9.9532	9.5300e-003	0.0000	10.1915

Coloma - Proposed Housing - El Dorado-Mountain County County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2372					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1658	0.0636	5.5224	2.9000e-004		0.0306	0.0306		0.0306	0.0306		9.9532	9.9532	9.5300e-003		10.1915
Total	**1.8507**	**0.0636**	**5.5224**	**2.9000e-004**		**0.0306**	**0.0306**		**0.0306**	**0.0306**	**0.0000**	**9.9532**	**9.9532**	**9.5300e-003**	**0.0000**	**10.1915**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2372					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1658	0.0636	5.5224	2.9000e-004		0.0306	0.0306		0.0306	0.0306		9.9532	9.9532	9.5300e-003		10.1915
Total	**1.8507**	**0.0636**	**5.5224**	**2.9000e-004**		**0.0306**	**0.0306**		**0.0306**	**0.0306**	**0.0000**	**9.9532**	**9.9532**	**9.5300e-003**	**0.0000**	**10.1915**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B

Biological Resources Supporting Information

Special-status Species Potential to Occur in the Project Site Vicinity

Scientific Name	Common Name	Status*	General Habitat**	Microhabitat**	Potential to Occur in Project Area***
Arctostaphylos nissenana	Nissenan manzanita	CRPR 1B.2	CLOSED-CONE CONIFEROUS FOREST, CHAPARRAL.	USUALLY ON METAMORPHICS, ASSOCIATED W/ OTHER CHAPARRAL SPECIES. 450-1100M.	Absent: No habitat onsite.
Emys marmorata	western pond turtle	CSSC	A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BE	NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYIN	Low potential to occur: Marginal habitat is present.
Horkelia parryi	Parry's horkelia	CRPR 1B.2	CHAPARRAL, CISMONTANE WOODLAND.	OPENINGS IN CHAPARRAL OR WOODLAND; ESPECIALLY KNOWN FROM THE IONE FORMATION IN AMADOR COUNTY. 80-1035M.	Low potential to occur: Marginal habitat is present.
Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	FT	SACRAMENTO AND SAN JOAQUIN RIVERS AND THEIR TRIBUTARIES		Absent: No habitat onsite.
Packera layneae	Layne's ragwort	FT	CHAPARRAL, CISMONTANE WOODLAND.	ULTRAMAFIC SOIL; OCCASIONALLY ALONG STREAMS. 200-1000 M.	Absent: Requisite soils not found onsite.
Pekania pennanti	Fisher	CSSC	MATURE OR OLD GROWTH FOREST		Absent: No habitat onsite.
Phrynosoma blainvillii	coast horned lizard	CSSC	FREQUENTS A WIDE VARIETY OF HABITATS, MOST COMMON IN LOWLANDS ALONG SANDY WASHES WITH SCATTERED LOW BUSHES.	OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, & ABUNDANT SUPPLY OF ANTS & OTHER INSECTS.	Absent: No habitat onsite.
Rana boylii	foothill yellow-legged frog	CE	PARTLY-SHADED, SHALLOW STREAMS & RIFFLES WITH A ROCKY SUBSTRATE IN A VARIETY OF HABITATS.	NEED AT LEAST SOME COBBLE-SIZED SUBSTRATE FOR EGG-LAYING. NEED AT LEAST 15 WEEKS TO ATTAIN METAMORPHOSIS.	Low potential to occur: Marginal habitat is present.
Riparia riparia	bank swallow	CT	COLONIAL NESTER; NESTS PRIMARILY IN RIPARIAN AND OTHER LOWLAND HABITATS WEST OF THE DESERT.	REQUIRES VERTICAL BANKS/CLIFFS WITH FINE-TEXTURED/SANDY SOILS NEAR STREAMS, RIVERS, LAKES, OCEAN TO DIG NESTING HOLE.	Absent: No habitat onsite.
Viburnum ellipticum	oval-leaved viburnum	CRPR 2B.3	CHAPARRAL, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	215-1400M.	Potential to occur: Suitable habitat present. None observed during blooming period survey May 2023.

*Definitions of Status Codes: FE = Federally listed as endangered; FT = Federally listed as threatened; FPE = Federally proposed for listing as endangered; FPT = Federally proposed for listing as threatened; FC = Candidate for Federal listing; MB = Migratory Bird Act; CE = California State listed as endangered; CT = California State listed as threatened; CSSC = California species of special concern; CR = California rare species; CFP = California fully protected species; CRPR (California Rare Plant Rank) List 1A = Plants presumed extinct in California by; CRPR List 1B = Plants designated rare, threatened or endangered in California and elsewhere; CRPR List 2A = Plants presumed extirpated in California but common elsewhere; CRPR 2B = Plants rare threatened or endangered in California, but more common elsewhere; CRPR 3 Review List: Plants about which more information is needed and CRPR 4 = Watch List: Plants of limited distribution. CRPR Threat Ranks: 0.1 = seriously threatened in California; S2 = moderately threatened in California; S3 = not very threatened in California .

**Copied verbatim from CNDDB, unless otherwise noted.

***Definitions of Occurrence Probability Rankings:

- Present: Species was observed during site visit. Or
- Present: Species has been previously documented to occur within the Study Area.
- Potential to occur: Suitable habitat present.
- Low potential to occur: Marginal habitat is present.
- Absent: No habitat onsite.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: May 23, 2023
Project Code: 2023-0085190
Project Name: 2752 Coloma Street

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2023-0085190
Project Name: 2752 Coloma Street
Project Type: Distribution Line - New Construction - Above Ground
Project Description: Housing overlay, CEQA IS
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.735165699999996,-120.80939141390775,14z

Counties: El Dorado County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

AMPHIBIANS

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
Foothill Yellow-legged Frog *Rana boylii* Population: South Sierra Distinct Population Segment (South Sierra DPS) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5133	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Layne's Butterweed *Senecio layneae* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4062	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Placerville city
Name: Kimberly Fuchs
Address: 5170 Golden Foothill Parkway
City: El Dorado Hills
State: CA
Zip: 95762
Email kfuchs@acorn-env.com
Phone: 3022229102

Type	Scientific Name	Common Name	Federal Status	State Status	CDFW Status	CRPR Status	Quad	Data Status
Animals - Amphibians	Rana boylii pop. 5	foothill yellow-legged frog - south Sierra DPS	Proposed Endangered	Endangered	-	-	PLACERVILLE	Mapped
Animals - Birds	Riparia riparia	bank swallow	None	Threatened	-	-	PLACERVILLE	Mapped
Animals - Fish	Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	Threatened	None	-	-	PLACERVILLE	Unprocessed
Animals - Mammals	Pekania pennanti	Fisher	None	None	SSC	-	PLACERVILLE	Mapped
Animals - Reptiles	Emys marmorata	western pond turtle	None	None	SSC	-	PLACERVILLE	Mapped and Unprocessed
Animals - Reptiles	Phrynosoma blainvillii	coast horned lizard	None	None	SSC	-	PLACERVILLE	Unprocessed
Plants - Vascular	Packera layneae	Laynes ragwort	Threatened	Rare	-	1B.2	PLACERVILLE	Mapped
Plants - Vascular	Viburnum ellipticum	oval-leaved viburnum	None	None	-	2B.3	PLACERVILLE	Mapped
Plants - Vascular	Arctostaphylos nissenana	Nissenan manzanita	None	None	-	1B.2	PLACERVILLE	Mapped and Unprocessed
Plants - Vascular	Horkelia parryi	Parrys horkelia	None	None	-	1B.2	PLACERVILLE	Mapped

Plants Observed at 2752 Coloma Street on June 7, 2023

Common Name	**Scientific Name**
Maple	*Acer sp.*
Tree of heaven	*Ailanthus altissima*
White alder	*Alnus rhombifolia*
Whiteleaf manzanita	*Arctostaphylos viscida ssp. viscida*
California mugwort	*Artemisia douglasiana*
Slender wild oat	*Avena barbata*
Mustard	*Brassica sp.*
Rescue brome	*Bromus catharticus*
Ripgut brome	*Bromus diandrus*
Incense cedar	*Calocedrus decurrens*
sedge	*Carex sp.*
Wedge leaf ceanothus	*Ceanothus cuneatus*
Bull thistle	*Cirsium vulgare*
Field bindweed	*Convolvulus*
Bermuda grass	*Cynodon dactylon*
Dogtail grass	*Cynosurus echinatus*
Nut grass	*Cyperus sp.*
Broom	*Cytisus scoparius*
Queen Anne's lace	*Daucus carota*
Blue wildrye	*Elymus glaucus*
Edible fig	*Ficus carica*
Bedstraw	*Galium aparine*
Velvetgrass	*Holcus lanatus*
barley	*Hordeum sp.*
Northern California black walnut	*Juglans hindsii*
Rush	*Juncus sp.*
henbit	*Lamium amplexicaule*
Sweet pea	*Lathyrus latifolius*
Pink honeysuckle	*Lonicera hispidula*
Pineapple weed	*Matricaria discoidea*
Ponderosa pine	*Pinus ponderosa*
Gray pine	*Pinus sabiniana*
English plantain	*Plantago lanceolata*
Western sycamore	*Platanus racemosa*
Bluegrass	*Poa sp.*
cherry	*Prunus sp.*
Pear	*Pyrus sp.*
California black oak	*Quercus kelloggii*
Valley oak	*Quercus lobata*
Interior live oak	*Quercus wislizeni var. wislizeni*
Locust tree	*Robinia pseudoacacia*
Himalayan blackberry	*Rubus armeniacus*

Common Name	**Scientific Name**
California blackberry	*Rubus ursinus*
Curly dock	*Rumex crispus*
Broad leaf arrowhead	*Sagittaria latifolia*
Willow	*Salix sp.*
Old man of spring	*Senecio vulgare*
Sow thistle	*Sonchus oleraceus*
Dandelion	*Taraxacum officinale*
Tall sock-destroyer	*Torilis arvensis*
Hedge parsley	*Torilis nodosa*
Poison-oak	*Toxicodendron diversilobum*
Salsify	*Tragopogon*
Clover	*Trifolium sp.*
Cattails	*Typha sp.*
Winter vetch	*Vicia villosa*

Appendix C

Cultural Resources Investigation (Provided Under Separate Cover)

Appendix D

Environmental Noise Assessment

Environmental Noise Assessment

2752 Coloma Street Housing

City of Placerville, California

July 13, 2023

Project #230605

Prepared for:

Acorn Environmental
5170 Golden Foothill Parkway
El Dorado Hills, CA 95762

Prepared by:

Saxelby Acoustics LLC

Luke Saxelby, INCE Bd. Cert.
Principal Consultant
Board Certified, Institute of Noise Control Engineering (INCE)

(916) 760-8821
www.SaxNoise.com | Luke@SaxNoise.com
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678

Table of Contents

INTRODUCTION **1**

ENVIRONMENTAL SETTING **1**

BACKGROUND INFORMATION ON NOISE *1*

EXISTING NOISE AND VIBRATION ENVIRONMENTS **6**

EXISTING NOISE RECEPTORS *6*

EXISTING GENERAL AMBIENT NOISE LEVELS *6*

FUTURE TRAFFIC NOISE ENVIRONMENT AT OFF-SITE RECEPTORS **7**

OFF-SITE TRAFFIC NOISE IMPACT ASSESSMENT METHODOLOGY *7*

EVALUATION OF FUTURE TRANSPORTATION NOISE ON PROJECT SITE **7**

EVALUATION OF PROJECT OPERATIONAL NOISE ON EXISTING SENSITIVE RECEPTORS **9**

CONSTRUCTION NOISE ENVIRONMENT **11**

CONSTRUCTION VIBRATION ENVIRONMENT **11**

REGULATORY CONTEXT **12**

FEDERAL *12*

STATE *12*

LOCAL *12*

CRITERIA FOR ACCEPTABLE VIBRATION *16*

IMPACTS AND MITIGATION MEASURES **18**

THRESHOLDS OF SIGNIFICANCE *18*

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES *19*

REFERENCES **23**

List of Figures

Figure 1: Site Plan 2

Figure 2: Noise Measurement Sites and Receptor Locations 3

Figure 3: Future Transportation Noise Levels on Project Site 8

Figure 4: Project Operational Noise Contours, L_{eq} 10

List of Tables

Table 1: Typical Noise Levels 4
Table 2: Summary of Existing Background Noise Measurement Data 6
Table 3: Construction Equipment Noise 11
Table 4: Vibration Levels for Various Construction Equipment 11
Table 5: Noise Level Performance Standards for New Projects and Developments 14
Table 6: City of Placerville Land Use Compatibility Table 15
Table 7: Effects of Vibration on People and Buildings 17
Table 8: Significance of Changes in Noise Exposure 19

Appendices

Appendix A: Acoustical Terminology
Appendix B: Field Noise Measurement Data

INTRODUCTION

The 2752 Coloma Street Housing project is located in the City of Placerville, California. The project is currently a vacant residential site zoned for R-2 multi-family residential. This analysis considers the potential rezoning of the site to R-5 residential which could result in the maximum development of 90 residential units.

Figure 1 shows the project site plan. **Figure 2** shows an aerial photo of the project site.

ENVIRONMENTAL SETTING

BACKGROUND INFORMATION ON NOISE

Fundamentals of Acoustics

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

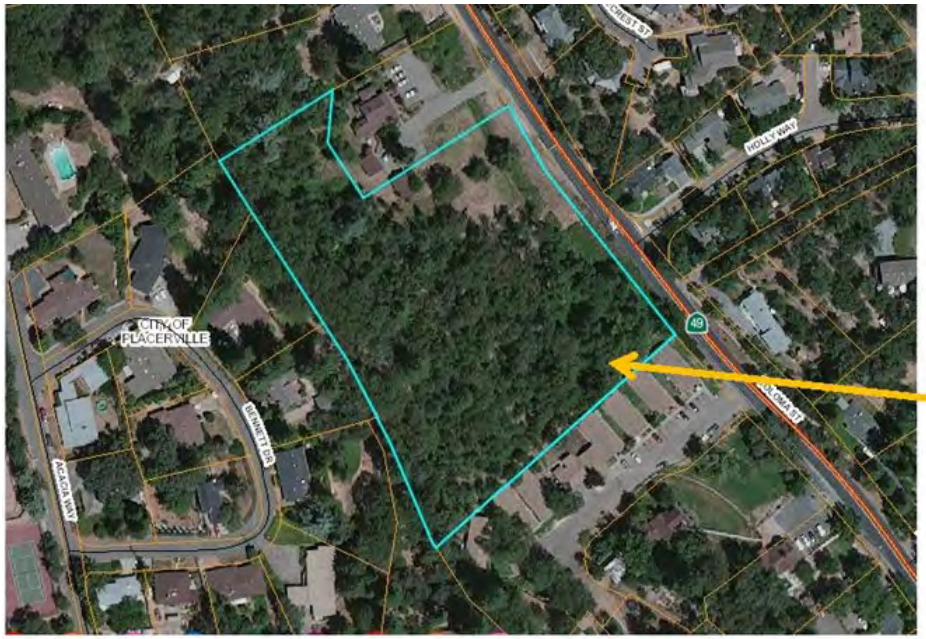
The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment.

2752 Coloma Street Housing

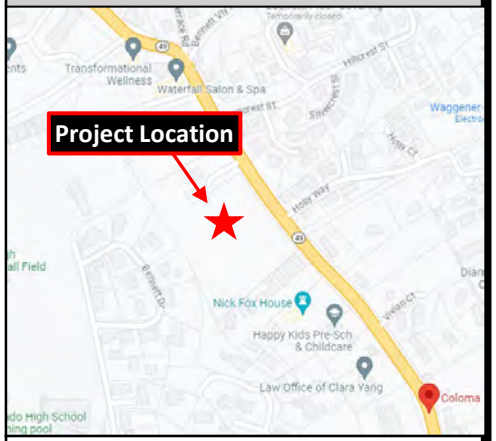
City of Placerville, California

Figure 1

Project Site Plan



APN 001-092-027
2752 COLOMA STREET
3.77 AC



SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

2752 Coloma Street

City of Placerville, California

Figure 2

Noise Measurement Sites

Legend

- Project Site
- Noise Measurement - Long Term

0 m 20 m 40 m 60 m

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 07/07/2023

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, 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.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (DNL or L_{dn}) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Table 1 lists several examples of the noise levels associated with common situations. **Appendix A** provides a summary of acoustical terms used in this report.

TABLE 1: TYPICAL NOISE LEVELS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft.)	--100--	
Gas Lawn Mower at 1 m (3 ft.)	--90--	
Diesel Truck at 15 m (50 ft.), at 80 km/hr. (50 mph)	--80--	Food Blender at 1 m (3 ft.) Garbage Disposal at 1 m (3 ft.)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft.)	--70--	Vacuum Cleaner at 3 m (10 ft.)
Commercial Area Heavy Traffic at 90 m (300 ft.)	--60--	Normal Speech at 1 m (3 ft.)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. September, 2013.

Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regards to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING NOISE AND VIBRATION ENVIRONMENTS

EXISTING NOISE RECEPTORS

Some land uses are considered more sensitive to noise than others. Land uses often associated with sensitive receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Sensitive noise receptors may also include threatened or endangered noise-sensitive biological species, although many jurisdictions have not adopted noise standards for wildlife areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise.

Sensitivity is a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. In the vicinity of the project site, sensitive land uses include existing single-family residential uses surrounding the project site.

EXISTING GENERAL AMBIENT NOISE LEVELS

The existing noise environment in the project area is primarily defined by traffic on SR 49. To quantify the existing ambient noise environment in the project vicinity, Saxelby Acoustics conducted continuous (24-hr.) noise level measurements at one location on the project site. The noise measurement location is shown on **Figure 2**. A summary of the noise level measurement survey results is provided in **Table 2**. **Appendix B** contains the complete results of the noise monitoring.

The sound level meter was programmed to record the maximum, median, and average noise levels during the survey. The maximum value, denoted L_{max}, represents the highest noise level measured. The average value, denoted L_{eq}, represents the energy average of all the noise received by the sound level meter microphone during the monitoring period. The median value, denoted L_{50}, represents the sound level exceeded 50 percent of the time during the monitoring period.

A Larson Davis Laboratories (LDL) model 820 precision integrating sound level meter was used for the ambient noise level measurement survey. The meter was calibrated before and after use with a CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

TABLE 2: SUMMARY OF EXISTING BACKGROUND NOISE MEASUREMENT DATA

Location	Date	L_{dn}	Daytime L_{eq}	Daytime L_{50}	Daytime L_{max}	Nighttime L_{eq}	Nighttime L_{50}	Nighttime L_{max}
LT-1: 75 ft. to CL of SR 49	6/23/23	59	58	52	75	50	32	71
	6/24/23	56	55	50	74	48	33	66
	6/25/23	55	55	49	73	46	32	66

- *All values shown in dBA*
- *Daytime hours: 7:00 a.m. to 10:00 p.m.*
- *Nighttime Hours: 10:00 p.m. to 7:00 a.m.*
- *Source: Saxelby Acoustics, 2023.*

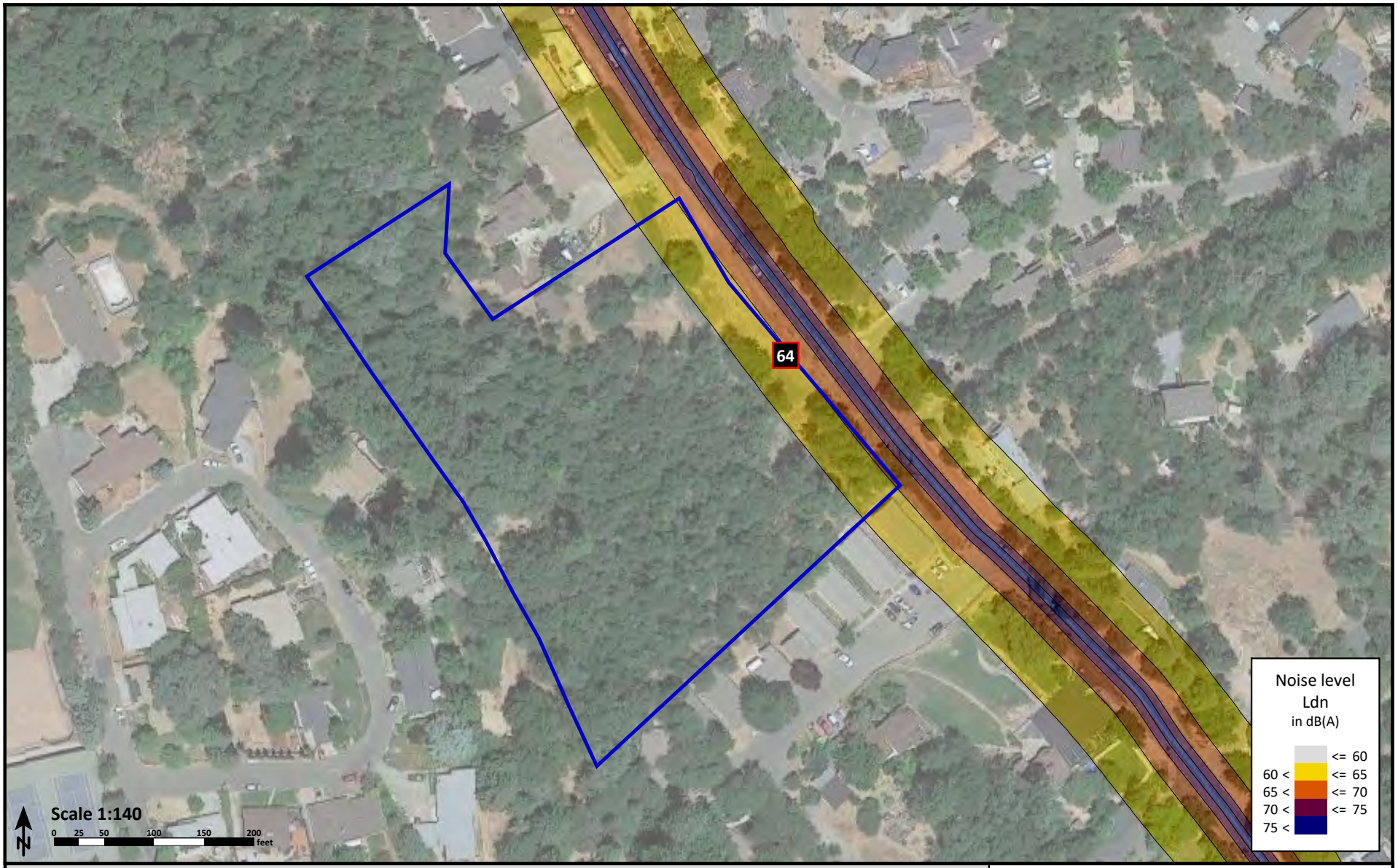
FUTURE TRAFFIC NOISE ENVIRONMENT AT OFF-SITE RECEPTORS

OFF-SITE TRAFFIC NOISE IMPACT ASSESSMENT METHODOLOGY

To assess noise impacts due to project-related traffic increases on the local roadway network, Saxelby Acoustics obtained existing roadway volumes for SR 49 from publicly available Caltrans traffic census data. The existing volumes as of 2021 are reported to be approximately 7,000 vehicles per day. Saxelby Acoustics estimates that the proposed project would generate a maximum of 500 new trips per day. This would result in a noise level increase of 0.3 dBA at the sensitive receptors along SR 49.

EVALUATION OF FUTURE TRANSPORTATION NOISE ON PROJECT SITE

Saxelby Acoustics used the SoundPLAN noise model to calculate traffic noise levels at the proposed residential uses due to traffic on SR 49. Inputs to the SoundPLAN noise model include topography, existing structures, roadway elevations, and the proposed building pad elevations. It was estimated that existing noise levels would increase by +1 dBA based upon an assumed 1% per year increase in traffic volumes on SR 49. The results of this analysis are shown graphically on **Figure 3**.



2752 Coloma Street Housing

City of Placerville, California

Figure 3
Future Transportation Noise Points (dB(A) Ldn)

Legend

- Project Site
- Noise Level Point

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

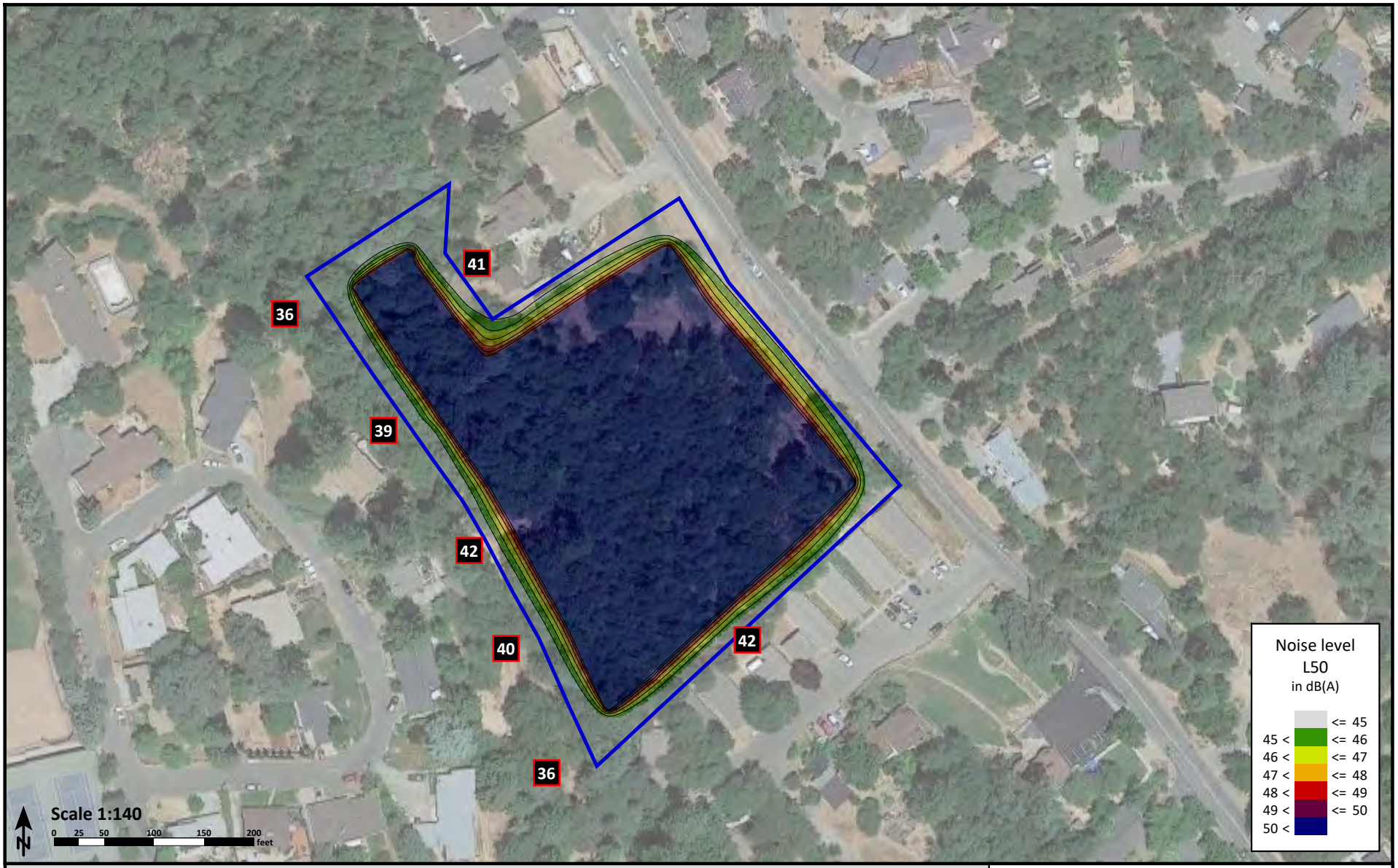
EVALUATION OF PROJECT OPERATIONAL NOISE ON EXISTING SENSITIVE RECEPTORS

Project site traffic circulation and residential HVAC noise are considered to be the primary noise sources for this project. The following is a list of assumptions used for the noise modeling. The data used is based upon a combination of manufacturer's provided data and Saxelby Acoustics data from similar operations.

On-Site Circulation: Saxelby Acoustics estimated that the project could generate 51 trips in the peak hour. Saxelby Acoustics assumed that 1-2 of these trips could be heavy trucks to account for trash collection or deliveries. Parking lot movements are predicted to generate a sound exposure level (SEL) of 71 dBA SEL at 50 feet for cars and 85 dBA SEL at 50 feet for trucks. Saxelby Acoustics data.

HVAC: Assumes a single three-ton HVAC unit for each residential unit (90 total units). The units were assumed to have a sound level rating of 70 dBA (manufacturer's data). Steady state HVAC noise does not fluctuate greatly, so exceedances of the City's maximum noise level standard are not predicted to occur.

Saxelby Acoustics used the SoundPLAN noise prediction model. Inputs to the model included sound power levels for the proposed amenities, existing and proposed buildings, terrain type, and locations of sensitive receptors. These predictions are made in accordance with International Organization for Standardization (ISO) standard 9613-2:1996 (Acoustics – Attenuation of sound during propagation outdoors). ISO 9613 is the most commonly used method for calculating exterior noise propagation. **Figure 4** shows the noise level contours resulting from operation of the project.



2752 Coloma Street Housing

City of Placerville, California

Figure 4
Day & Night Operational Noise Levels (dB(A) L50)

Legend

Project Site

Noise Level Point

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

CONSTRUCTION NOISE ENVIRONMENT

During the construction of the proposed project, noise from construction activities would temporarily add to the noise environment in the project vicinity. As shown in **Table 3**, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dB at a distance of 50 feet.

TABLE 3: CONSTRUCTION EQUIPMENT NOISE

Type of Equipment	Maximum Level, dBA at 50 feet
Auger Drill Rig	84
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

Source: Roadway Construction Noise Model User's Guide. Federal Highway Administration. FHWA-HEP-05-054. January 2006.

CONSTRUCTION VIBRATION ENVIRONMENT

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and parking lot construction occur. **Table 4** shows the typical vibration levels produced by construction equipment.

TABLE 4: VIBRATION LEVELS FOR VARIOUS CONSTRUCTION EQUIPMENT

Type of Equipment	Peak Particle Velocity at 25 feet (inches/second)	Peak Particle Velocity at 50 feet (inches/second)	Peak Particle Velocity at 100 feet (inches/second)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026

Source: Transit Noise and Vibration Impact Assessment Guidelines. Federal Transit Administration. May 2006.

REGULATORY CONTEXT

FEDERAL

There are no federal regulations which apply to the proposed project.

STATE

California Environmental Quality Act

The California Environmental Quality Act (CEQA) Guidelines, Appendix G, indicate that a significant noise impact may occur if a project exposes persons to noise or vibration levels in excess of local general plans or noise ordinance standards, or cause a substantial permanent or temporary increase in ambient noise levels. CEQA standards are discussed more below under the Thresholds of Significance section.

State Building Code, Title 24, Part 2 of the State of California Code of Regulations

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations, establishes uniform minimum noise insulation performance standards to protect persons within new buildings which house people, including hotels, motels, dormitories, apartment houses, and dwellings other than single-family dwellings. Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB L_{dn} or CNEL in any habitable room. Title 24 also mandates that for structures containing noise-sensitive uses to be located where the L_{dn} or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

LOCAL

City of Placerville General Plan

The City of Placerville General Plan outlines goals and policies to protect residents from excessive noise exposure. The relevant criteria are reproduced below:

Goal I: To protect the residents of Placerville from the harmful effects of exposure to excessive noise.

1. The City shall attempt, insofar as possible, to protect areas within the city where the present noise environment is considered acceptable.

2. Areas within Placerville exposed to existing or projected exterior noise levels exceeding 60dB L_{dn} shall be designated as noise-impacted areas.

3. Areas within Placerville shall be designated as noise-impacted if exposed to existing or projected exterior noise levels exceeding the performance standards in Table II-1.

4. New development of residential or other noise-sensitive land uses will not be permitted in noise impacted areas unless effective mitigation measures are incorporated into the project design to reduce noise levels to:

    a. 60 dB Ldn or less in outdoor activity areas, and interior noise levels to 45 dB Ldn or less, where the noise source is preempted from local control (i.e. traffic on public roadways, railroads and

airports). In areas where it is not possible to reduce exterior noise levels to 60 dB Ldn or less using a practical application of the best available noise-reduction technology, an exterior noise level of up to 65 dB Ldn will be allowed. Under no circumstances will interior noise levels be permitted to exceed 45 dB Ldn with the windows and doors closed.

b. Achieve compliance with the standards in Subsection 4.a. and with the performance standards set out in Table II-1, where the noise source is subject to local control (i.e., nontraffic related).

5. When industrial, commercial, or other land uses, including locally-regulated noise sources, are proposed for areas containing noise-sensitive land uses, noise levels generated by the proposed use shall not exceed the standards in Subsection 4.a. or the performance standards set out in Table II-1.

6. Where the development of residential or other noise-sensitive land use is proposed for a noise impacted area, an acoustical analysis shall be prepared at the applicant's expense. The acoustical analysis shall:

a. Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics.

b. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.

c. Include estimated noise levels in terms of Ldn and/or the standards in Table II-1 for existing and projected future noise levels, with a comparison made to the adopted policies of this subsection.

d. Include recommendations for appropriate mitigation to achieve compliance with the adopted policies of this subsection. Where the noise source in question consists of intermittent single events, the report must address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance.

e. Include estimates of noise exposure after the prescribed mitigation measures have been implemented. If compliance with the policies of this subsection will not be achieved, a rationale for acceptance of the project must be provided.

7. Noise level criteria applied to land uses other than residential or other noise-sensitive uses shall be consistent with recommendations of the California Office of Noise Control (see Table II-2).

8. The City shall enforce the Noise Insulation Standards of Title 24 of the California Administrative Code and Chapter 35 of the Uniform Building Code concerning the construction of new multiple occupancy dwellings such as hotels, apartments, and condominiums.

Noise created by non-preempted noise sources* associated with new projects or developments shall be controlled so as not to exceed the noise level standards set forth below as measured at any affected residential land use situated in either the incorporated or unincorporated areas. New residential development shall not be allowed where the ambient noise level due to non-preempted noise sources will exceed the noise level standards set forth below.

TABLE 5: NOISE LEVEL PERFORMANCE STANDARDS FOR NEW PROJECTS AND DEVELOPMENTS

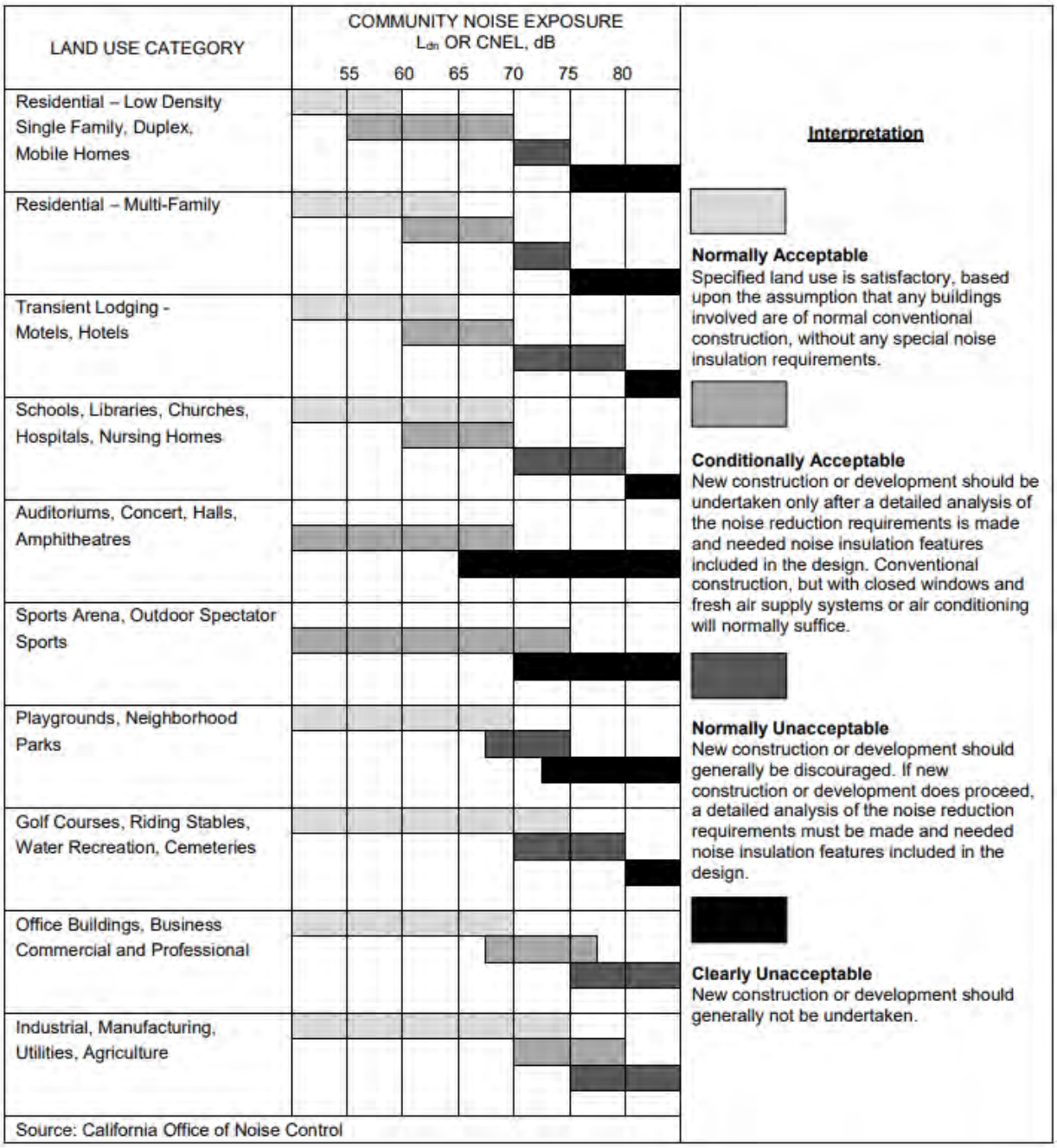
		Exterior Noise Level Standards dBA	
Category	**Cumulative Number of minutes in any one-hour time period**	**Daytime (7:00 a.m. to 10:00 p.m.)**	**Nighttime (10:00 p.m. to 7:00 a.m.)**
1	30	50	45
2	15	55	50
3	5	60	55
4	1	65	60
5	0	70	65

Source: Table II-2 of the City of Placerville General Plan Noise Element

**A preempted noise source is one that is regulated by the State or Federal Government at the source such as automobiles, railroads, and airports.*

Each of the noise level standards specified above shall be reduced by five dBA for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises.

TABLE 6: CITY OF PLACERVILLE LAND USE COMPATIBILITY TABLE



Source: Table II-2 of the City of Placerville General Plan Noise Element

CRITERIA FOR ACCEPTABLE VIBRATION

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. **Table 7**, which was developed by Caltrans, shows the vibration levels which would normally be required to result in damage to structures. The vibration levels are presented in terms of peak particle velocity in inches per second.

Table 7 indicates that the threshold for architectural damage to structures is 0.20 in/sec p.p.v. A threshold of 0.20 in/sec p.p.v. is considered to be a reasonable threshold for short-term construction projects.

TABLE 7: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/second	in/second		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: Transportation Related Earthborne Vibrations. Caltrans. TAV-02-01-R9601. February 20, 2002.

IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Appendix G of the CEQA Guidelines states that a project would normally be considered to result in significant noise impacts if noise levels conflict with adopted environmental standards or plans or if noise generated by the project would substantially increase existing noise levels at sensitive receivers on a permanent or temporary basis. Significance criteria for noise impacts are drawn from CEQA Guidelines Appendix G (Items XI [a-c]).

Would the project:

a. Generate 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?

b. Generate excessive groundborne vibration or groundborne noise levels?

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?

The proposed project is not located within two miles of a public or private airport, therefore item "c" is not discussed any further in this study.

Noise Level Increase Criteria for Long-Term Project-Related Noise Level Increases

The California Environmental Quality Act (CEQA) guidelines define a significant impact of a project if it "increases substantially the ambient noise levels for adjoining areas." Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in traffic noise from the project is a factor in determining significance. Research into the human perception of changes in sound level indicates the following:

- A 3-dB change is barely perceptible,
- A 5-dB change is clearly perceptible, and
- A 10-dB change is perceived as being twice or half as loud.

A limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project noise conditions. **Table 8** is based upon recommendations made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been accepted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the L_{dn}.

TABLE 8: SIGNIFICANCE OF CHANGES IN NOISE EXPOSURE

Ambient Noise Level Without Project, L_{dn}	Increase Required for Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON).

Based on the **Table 8** data, an increase in the traffic noise level of 5 dB or more would be significant where the pre-project noise levels are less than 60 dB L_{dn}, or 3 dB or more where existing noise levels are between 60 to 65 dB L_{dn}. Extending this concept to higher noise levels, an increase in the traffic noise level of 1.5 dB or more may be significant where the pre-project traffic noise level exceeds 65 dB L_{dn}. The rationale for the **Table 8** criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause annoyance.

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

Impact 1: ***Would the project generate 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?***

Traffic Noise Increases at Off-Site Receptors

The FICON guidelines specify criteria to determine the significance of traffic noise impacts. Where existing traffic noise levels are greater than 65 dB L_{dn}, a +1.5 dB L_{dn} increase in roadway noise levels will be considered significant. The maximum increase in traffic noise at the nearest sensitive receptor is predicted to be 0.3 dBA. Therefore, impacts resulting from increased traffic noise would be considered ***less-than-significant***, and no mitigation is required.

Operational Noise at Existing Sensitive Receptors

As shown on **Figure 4**, the project is predicted to expose nearby residences to noise levels up to 42 dBA, L_{50} during both daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) hours. The predicted project noise levels would meet the City of Placerville noise standard for non-transportation noise sources of 45 dBA, $L_{50.}$

It should be noted that maximum noise levels generated by the residential HVAC units and on-site vehicle circulation are predicted to be 20 dBA, or less, than the median (L_{50}) values. City of Placerville maximum (L_{max}) nighttime noise level standard is 65 dBA L_{max}, which is 20 dBA higher than the L_{50} standard. Therefore, where average noise levels are in compliance with the L_{50} standards, maximum noise levels will also meet the County's standards. Based upon the predicted average noise levels of 42 dBA, the maximum noise levels will be 62 dBA and comply with the City maximum standards.

This is a ***less-than-significant*** impact, and no mitigation is required.

Construction Noise

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. As indicated in **Table 3**, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max} at a distance of 50 feet. Construction activities would also be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from the construction site. This noise increase would be of short duration and would occur during daytime hours.

Noise from localized point sources (such as construction sites) typically decreases by approximately 6 dBA with each doubling of distance from source to receptor. Given this noise attenuation rate and assuming no noise shielding from either natural or human-made features (e.g., trees, buildings, fences), outdoor receptors within approximately 1,600 feet of construction sites could experience maximum instantaneous noise levels of greater than 60 dBA when on-site construction-related noise levels exceed approximately 90 dBA at the boundary of the construction site. As previously discussed, nearby noise-sensitive receptors consist predominantly of residential dwellings surrounding the project site.

During development of the proposed project, construction activities occurring during the more noise-sensitive late evening and nighttime hours (i.e., 7:00 p.m. to 7:00 a.m.), weekends, and holidays could result in increased levels of annoyance and potential sleep disruption for occupants of nearby existing noise sensitive land uses. Additionally, there are several residential uses directly adjacent to the project site which may be subject to construction noise. As a result, noise-generating construction activities would be considered to have a ***potentially significant*** short-term impact.

Transportation Noise on Project Site (Non-CEQA Issue)

Compliance with City's standards on new noise-sensitive receptors is not a CEQA consideration. However, this information is provided here so that a determination can be made regarding the ability of the proposed project to meet the requirements of the City of Placerville for exterior and interior noise levels at new sensitive uses proposed under the project.

As shown on **Figure 3**, the project site predicted to be exposed to exterior transportation noise levels up to approximately 65 dBA L_{dn}. This would fall into the "Conditionally Acceptable" land use category in the City of Placerville General Plan.

The City of Placerville municipal code establishes an exterior noise level standard of 60 dBA L_{dn} for outdoor activity areas. Outdoor activity areas should be located outside of the 60 dBA L_{dn} noise level contour shown on **Figure 3** to achieve compliance with this criterion. The City also establishes an interior noise level standard of 45 dBA L_{dn}. Modern building construction methods typically yield an exterior-to-interior noise level reduction of 25 dBA[1]. Therefore, where exterior noise levels are 70 dBA L_{dn}, or less, no additional interior noise control measures are typically required. For this project, exterior noise levels are predicted to be up to 65 dBA L_{dn},

[1] Assuming standard construction with a minimum STC rating of 29 for exterior window assemblies

resulting in an interior noise level of 40 dBA L_{dn}. Therefore, standard construction is predicted to be sufficient to meet the interior 45 dBA L_{dn} noise level standard.

Mitigation Measures

1(a) The City shall establish the following as conditions of approval for any permit that results in the use of construction equipment:

- Construction shall be limited to between 7:00 a.m. to 7:00 p.m. Monday through Friday and between 8:00 a.m. and 5:00 p.m. on Saturday, and shall be prohibited on Sunday and federal/state-recognized holidays unless approved in advance by the City if required to meet project schedule.
- All construction equipment powered by internal combustion engines shall be properly muffled and maintained.
- A sign, legible at a distance of 50 feet, shall be posted at the project construction site providing a contact name and a telephone number where residents can inquire about the construction process and register complaints. This sign shall indicate the dates and duration of construction activities. In conjunction with this required posting, a noise disturbance coordinator will be identified to address construction noise concerns.
- Quiet construction equipment, particularly air compressors, are to be selected whenever possible.
- All stationary noise-generating construction equipment such as generators or air compressors are to be located as far as is practical from existing residences. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
- Unnecessary idling of internal combustion engines is prohibited.
- The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.

Timing/Implementation: Throughout all stages of construction
Enforcement/Monitoring: City of Placerville Development Services Department

Implementation of mitigation measures 1(a) would help to reduce construction-generated noise levels. With mitigation, this impact would be considered ***less-than-significant***.

Impact 2: Would the project generate excessive groundborne vibration or groundborne noise levels?

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural.

With the exception of vibratory compactors, the **Table 6** data indicate that construction vibration levels anticipated for the project are less than the 0.2 in/sec threshold at distance of 20 feet. However, given the uncertainty of the project design geometry, the proposed project could include parking lot and building construction which could occur at distances of less than 26 feet from the adjacent residential uses. Therefore,

use of vibratory compactors within 26 feet of the adjacent residential buildings could cause vibrations in excess of 0.2 in/sec. Therefore, this is a ***potentially significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a ***less-than-significant*** level.

2(a) Any compaction required less than 26 feet from the adjacent residential structures should be accomplished by using static drum rollers which use weight instead of vibrations to achieve soil compaction. As an alternative to this requirement, pre-construction crack documentation and construction vibration monitoring could be conducted to ensure that construction vibrations do not cause damage to any adjacent structures.

Impact 3: ***For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

There are no airports within two miles of the project vicinity. Therefore, this impact is not applicable to the proposed project.

REFERENCES

American National Standards Institute. (1998). *[Standard] ANSI S1.43-1997 (R2007): Specifications for integrating-averaging sound level meters*. New York: Acoustical Society of America.

American Standard Testing Methods, *Standard Guide for Measurement of Outdoor A-Weighted Sound Levels, American Standard Testing Methods (ASTM) E1014-08*, 2008.

ASTM E1014-12. *Standard Guide for Measurement of Outdoor A-Weighted Sound Levels*. ASTM International. West Conshohocken, PA. 2012.

ASTM E1780-12. *Standard Guide for Measuring Outdoor Sound Received from a Nearby Fixed Source.* ASTM International. West Conshohocken, PA. 2012.

Barry, T M. (1978). *FHWA highway traffic noise prediction model* (FHWA-RD-77-108). Washington, DC: U.S. Department of transportation, Federal highway administration, Office of research, Office of environmental policy.

California Department of Transportation (Caltrans), *Technical Noise Supplement, Traffic Noise Analysis Protocol*, September 2013.

California Department of Transportation (Caltrans), *Traffic Noise Analysis Protocol*, May 2011.

Egan, M. D. (1988). Architectural acoustics. United States of America: McGraw-Hill Book Company.

Federal Highway Administration. *FHWA Roadway Construction Noise Model User's Guide.* FHWA-HEP-05-054 DOT-VNTSC-FHWA-05-01. January 2006.

Hanson, Carl E. (Carl Elmer). (2006). *Transit noise and vibration impact assessment*. Washington, DC: U.S. Department of Transportation, Federal Transit Administration, Office of Planning and Environment.

International Electrotechnical Commission. Technical committee 29: Electroacoustics. International Organization of Legal Metrology. (2013). *Electroacoustics: Sound level meters*.

International Organization for Standardization. (1996). *Acoustic - ISO 9613-2: Attenuation of sound during propagation outdoors. Part 2: General methods of calculation*. Ginevra: I.S.O.

Miller, L. N., Bolt, Beranek, & and Newman, Inc. (1981). *Noise control for buildings and manufacturing plants*. Cambridge, MA: Bolt, Beranek and Newman, Inc.

SoundPLAN. SoundPLAN GmbH. Backnang, Germany. http://www.soundplan.eu/english/

Appendix A: Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
ASTC	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by +5 dBA and nighttime hours weighted by +10 dBA.
DNL	See definition of Ldn.
IIC	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50% of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
NIC	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
NNIC	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
RT60	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
SPC	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

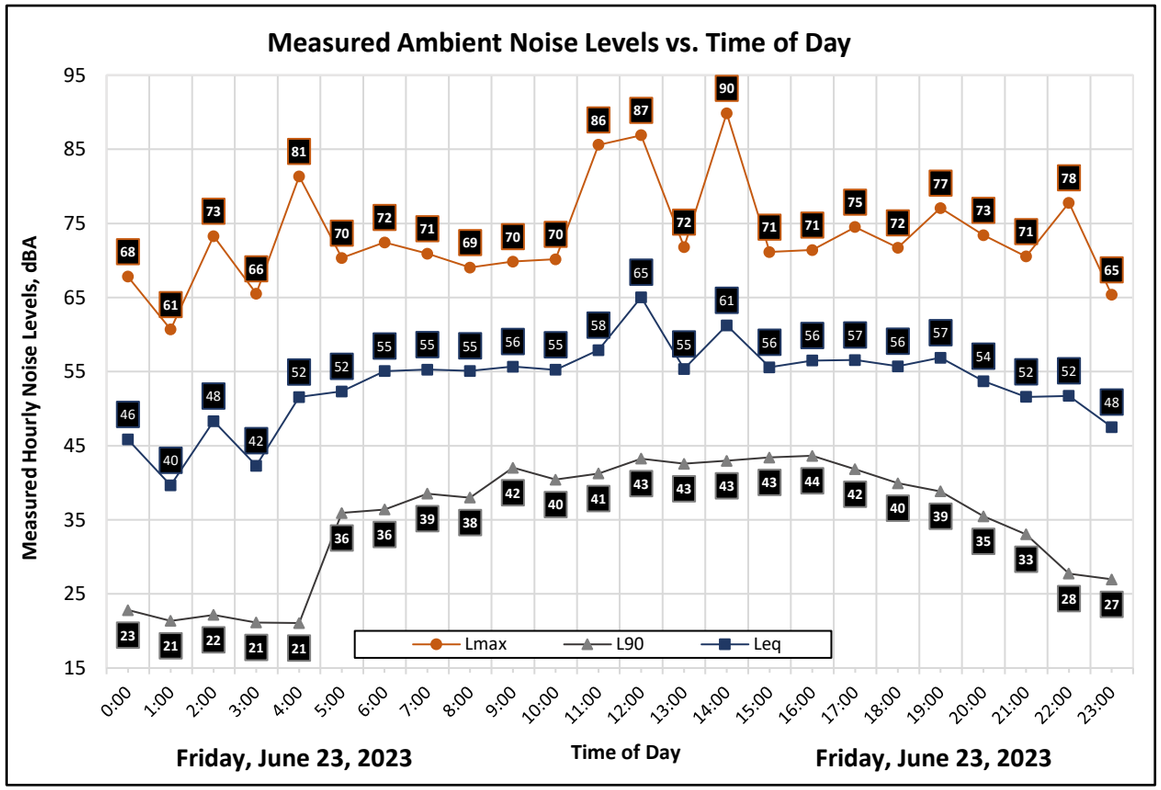
Appendix B: Continuous Ambient Noise Measurement Results

Appendix B1a: Continuous Noise Monitoring Results

Site: LT-1
Project: Coloma Street Housing
Location: Eastern Project Boundary
Coordinates: (38.7352414, -120.8089669)
Meter: LDL 820-1
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Friday, June 23, 2023	0:00	46	68	29	23
Friday, June 23, 2023	1:00	40	61	24	21
Friday, June 23, 2023	2:00	48	73	25	22
Friday, June 23, 2023	3:00	42	66	24	21
Friday, June 23, 2023	4:00	52	81	29	21
Friday, June 23, 2023	5:00	52	70	45	36
Friday, June 23, 2023	6:00	55	72	48	36
Friday, June 23, 2023	7:00	55	71	50	39
Friday, June 23, 2023	8:00	55	69	52	38
Friday, June 23, 2023	9:00	56	70	53	42
Friday, June 23, 2023	10:00	55	70	52	40
Friday, June 23, 2023	11:00	58	86	52	41
Friday, June 23, 2023	12:00	65	87	53	43
Friday, June 23, 2023	13:00	55	72	53	43
Friday, June 23, 2023	14:00	61	90	53	43
Friday, June 23, 2023	15:00	56	71	53	43
Friday, June 23, 2023	16:00	56	71	55	44
Friday, June 23, 2023	17:00	57	75	54	42
Friday, June 23, 2023	18:00	56	72	52	40
Friday, June 23, 2023	19:00	57	77	51	39
Friday, June 23, 2023	20:00	54	73	47	35
Friday, June 23, 2023	21:00	52	71	44	33
Friday, June 23, 2023	22:00	52	78	37	28
Friday, June 23, 2023	23:00	48	65	32	27

Statistics	Leq	Lmax	L50	L90
Day Average	58	75	52	40
Night Average	50	71	32	26
Day Low	52	69	44	33
Day High	65	90	55	44
Night Low	40	61	24	21
Night High	55	81	48	36
Ldn	59	Day %		92
CNEL	59	Night %		8

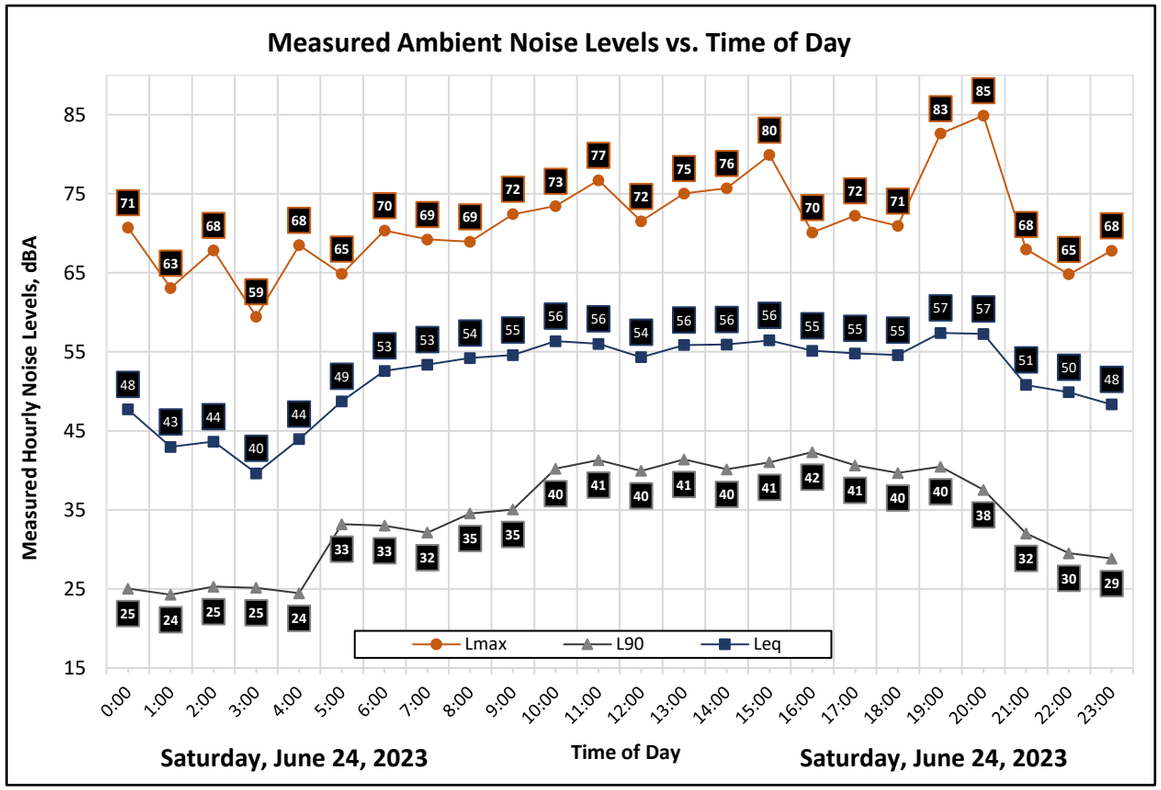


Appendix B1b: Continuous Noise Monitoring Results

Site: LT-1
Project: Coloma Street Housing
Location: Eastern Project Boundary
Coordinates: (38.7352414, -120.8089669)
Meter: LDL 820-1
Calibrator: CAL200

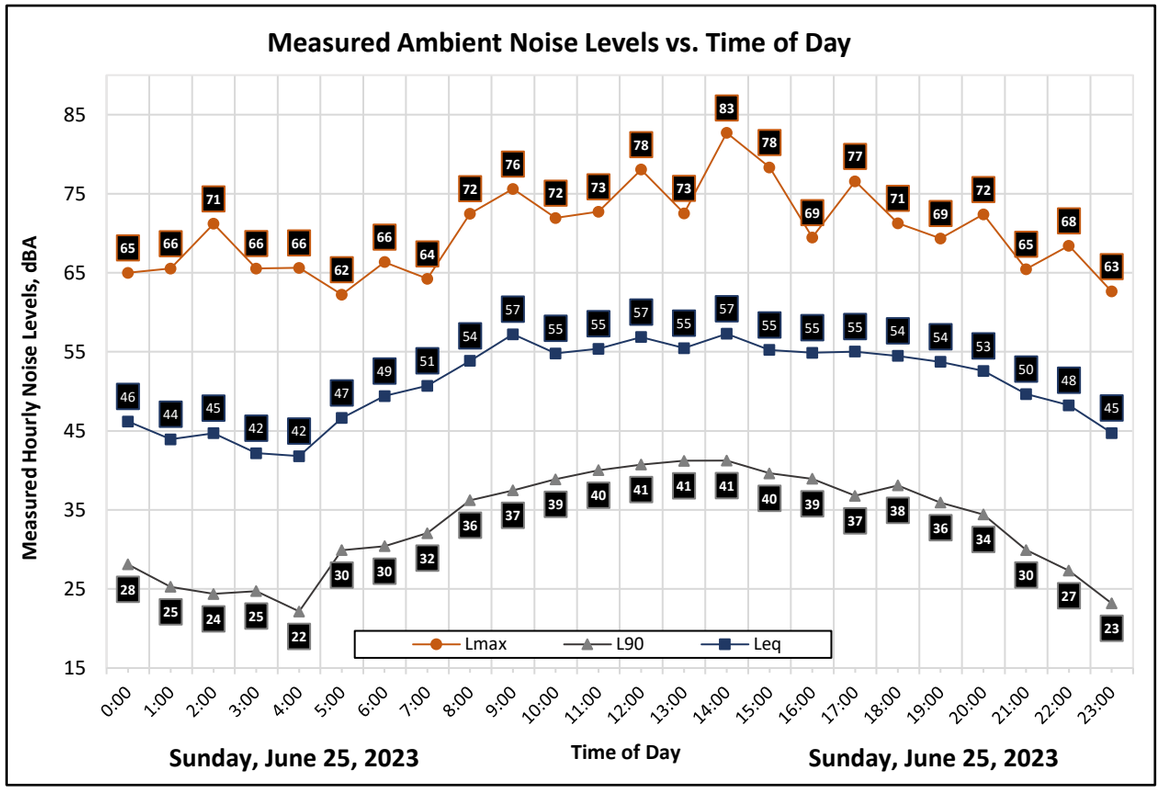
Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Saturday, June 24, 2023	0:00	48	71	31	25
Saturday, June 24, 2023	1:00	43	63	28	24
Saturday, June 24, 2023	2:00	44	68	28	25
Saturday, June 24, 2023	3:00	40	59	28	25
Saturday, June 24, 2023	4:00	44	68	29	24
Saturday, June 24, 2023	5:00	49	65	40	33
Saturday, June 24, 2023	6:00	53	70	39	33
Saturday, June 24, 2023	7:00	53	69	44	32
Saturday, June 24, 2023	8:00	54	69	49	35
Saturday, June 24, 2023	9:00	55	72	49	35
Saturday, June 24, 2023	10:00	56	73	53	40
Saturday, June 24, 2023	11:00	56	77	52	41
Saturday, June 24, 2023	12:00	54	72	52	40
Saturday, June 24, 2023	13:00	56	75	52	41
Saturday, June 24, 2023	14:00	56	76	52	40
Saturday, June 24, 2023	15:00	56	80	53	41
Saturday, June 24, 2023	16:00	55	70	52	42
Saturday, June 24, 2023	17:00	55	72	51	41
Saturday, June 24, 2023	18:00	55	71	50	40
Saturday, June 24, 2023	19:00	57	83	50	40
Saturday, June 24, 2023	20:00	57	85	48	38
Saturday, June 24, 2023	21:00	51	68	43	32
Saturday, June 24, 2023	22:00	50	65	42	30
Saturday, June 24, 2023	23:00	48	68	35	29

Statistics	Leq	Lmax	L50	L90
Day Average	55	74	50	39
Night Average	48	66	33	28
Day Low	51	68	43	32
Day High	57	85	53	42
Night Low	40	59	28	24
Night High	53	71	42	33
Ldn	56	Day %		92
CNEL	57	Night %		8



Appendix B1c: Continuous Noise Monitoring Results

Site: LT-1
Project: Coloma Street Housing
Location: Eastern Project Boundary
Coordinates: (38.7352414, -120.8089669)
Meter: LDL 820-1
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Sunday, June 25, 2023	0:00	46	65	32	28
Sunday, June 25, 2023	1:00	44	66	29	25
Sunday, June 25, 2023	2:00	45	71	28	24
Sunday, June 25, 2023	3:00	42	66	28	25
Sunday, June 25, 2023	4:00	42	66	25	22
Sunday, June 25, 2023	5:00	47	62	40	30
Sunday, June 25, 2023	6:00	49	66	40	30
Sunday, June 25, 2023	7:00	51	64	43	32
Sunday, June 25, 2023	8:00	54	72	48	36
Sunday, June 25, 2023	9:00	57	76	51	37
Sunday, June 25, 2023	10:00	55	72	51	39
Sunday, June 25, 2023	11:00	55	73	52	40
Sunday, June 25, 2023	12:00	57	78	53	41
Sunday, June 25, 2023	13:00	55	73	52	41
Sunday, June 25, 2023	14:00	57	83	52	41
Sunday, June 25, 2023	15:00	55	78	52	40
Sunday, June 25, 2023	16:00	55	69	52	39
Sunday, June 25, 2023	17:00	55	77	50	37
Sunday, June 25, 2023	18:00	54	71	49	38
Sunday, June 25, 2023	19:00	54	69	48	36
Sunday, June 25, 2023	20:00	53	72	45	34
Sunday, June 25, 2023	21:00	50	65	41	30
Sunday, June 25, 2023	22:00	48	68	35	27
Sunday, June 25, 2023	23:00	45	63	30	23

Statistics	Leq	Lmax	L50	L90
Day Average	55	73	49	37
Night Average	46	66	32	26
Day Low	50	64	41	30
Day High	57	83	53	41
Night Low	42	62	25	22
Night High	49	71	40	30
Ldn	55	Day %		94
CNEL	56	Night %		6