City of Nevada City Planning Department



Northern Queen Inn Expansion Project

Initial Study/Mitigated Negative Declaration

November 2021

Prepared by



TABLE OF CONTENTS

BACK	GROUND	.1			
SOUR	CES	.2			
ENVIR	ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED4				
DETE	DETERMINATION4				
BACKGROUND AND INTRODUCTION5					
PROJ	ECT DESCRIPTION	.5			
ENVIF	RONMENTAL CHECKLIST1	3			
Ι.	AESTHETICS	4			
<i>II.</i>	AGRICULTURE AND FOREST RESOURCES.	16			
<i>III.</i>	AIR QUALITY	8			
IV.	BIOLOGICAL RESOURCES	26			
V.	CULTURAL RESOURCES	34			
VI.	ENERGY.	36			
VII.	GEOLOGY AND SOILS.	39			
VIII.	GREENHOUSE GAS EMISSIONS.	13			
IX.	HAZARDS AND HAZARDOUS MATERIALS.	16			
Х.	HYDROLOGY AND WATER QUALITY	19			
XI.	LAND USE AND PLANNING.	53			
XII.	MINERAL RESOURCES	54			
XIII.					
XIV.	POPULATION AND HOUSING	59			
XV.	PUBLIC SERVICES	30			
XVI.	RECREATION.	51			
XVII.	TRANSPORTATION	52			
XVIII.	TRIBAL CULTURAL RESOURCES	6			
XIX.	UTILITIES AND SERVICE SYSTEMS	57			
XX.	WILDFIRE	70			
XXI.	MANDATORY FINDINGS OF SIGNIFICANCE.	71			
	SOUR ENVIE DETE BACK PROJ ENVIE I. II. IV. VI. VI. VI. VI. VI. VII. VI	DETERMINATION BACKGROUND AND INTRODUCTION PROJECT DESCRIPTION ENVIRONMENTAL CHECKLIST 1 AESTHETICS 11 AGRICULTURE AND FOREST RESOURCES 111 AIR QUALITY VI BIOLOGICAL RESOURCES VII. GEOLOGY AND SOILS SUIL GREENHOUSE GAS EMISSIONS VII. REARDS AND HAZARDOUS MATERIALS AX HYDROLOGY AND WATER QUALITY XI LAND USE AND PLANNING			

APPENDICES:

- Appendix A: Air Quality and Greenhouse Gas Modeling Results
- Appendix B: Biological Resources Inventory
- Appendix C: Preliminary Geotechnical Engineering Report
- Appendix D: Trip Generation and VMT Analysis

INITIAL STUDY

November 2021

A. BACKGROUND

4	Draiget Title:	Northern Ousen Inn Expension Project
1.	Project Title:	Northern Queen Inn Expansion Project
2.	Lead Agency Name and Addr	
		317 Broad Street
		Nevada City, CA 95959
3.	Contact Person and Phone N	umber: Amy Wolfson
		City Planner
		(530) 265-2496
4.	Project Location:	400 and 402 Railroad Avenue
	-	Nevada City, CA 95959
		APNs: 05-490-19, 37-050-02 & -03
5.	Project Sponsor's Name and	Address: Hamid Kazemi
		Heritage Hotel Group
		400 Railroad Avenue
		Nevada City, CA 95959
		(530) 265-5824
6.	General Plan Designation:	Employment Center (EC)
7.	Zoning Designation:	Employment Center (EC)
		Service Lodge (SL) with a Scenic Corridor Overlay (SL-SC)
o	Required Approvals from Oth	ar Dublia Aganaiaa:

8. Required Approvals from Other Public Agencies:

None

9. Surrounding Land Uses and Setting:

The project site is a portion of the 15.11-acre site that is currently developed with the 89unit Northern Queen Inn and associated facilities. The Northern Queen Inn currently consists of four motel buildings, nine individual chalets, and eight individual cabins, as well as a restaurant, pool, registration building, accessory buildings, and outdoor events and parking areas. Inactive train tracks are located throughout the site, and Gold Run Creek, a perennial stream, flows north to south throughout the project site.

Surrounding existing land uses include a tree care business and video manufacturing business to the east, an auto parts store to the northeast, a church to the south, and rural residences to the north, east, and south. State Route (SR) 20/49 extends along the western border of the project site.

10. Project Description Summary:

The proposed project would include expansion of the Northern Queen Inn to add a new two-story, 8,400-square foot (sf) building to accommodate 20 motel units, as well as 12 new 1,050-sf cabins. The proposed additions would displace 38 existing parking spaces; however, a new gravel parking area is proposed to replace 25 of the 38 displaced spaces, and a new 20-foot driveway would lead east from the new motel building and parking area to two of the proposed cabins along Gold Run Creek. The other ten proposed cabins would be accessed from an extension of the existing driveway that currently provides access to eight existing cabins. In addition, a hammerhead turn-around and overflow parking spaces are proposed on APN 37-050-03. The project would include the removal of 15 trees and the inactive train tracks. The proposed project would require City approval of the following entitlements:

- Variance for disturbance within the Gold Run Creek setback. A portion of the proposed hotel building, parking area, 10 of the 12 cabins, and a portion of the driveway are located within the 100-foot setback of Gold Run Creek;
- Architectural Review; and
- Tree Removal Permit.

In addition, a Zoning Consistency finding is required by the Planning Commission regarding the extension of the SL zoning to APN 37-050-02. The Planning Commission must also approve the proposed off-site parking.

11. Status of Native American Consultation Pursuant to Public Resources Code Section 21080.3.1:

In compliance with Assembly Bill (AB) 52 (Public Resources Code [PRC] Section 21080.3.1), a project notification letter was distributed to the Colfax-Todds Valley Consolidated Tribe, Nevada City Rancheria Tribal Council, T'si-Akim Maidu, United Auburn Indian Community of the Auburn Rancheria, and Washoe Tribe of Nevada and California on June 23, 2021. The Nevada City Rancheria Tribal Council has initiated consultation and requested a site visit. Currently, consultation is underway.

B. SOURCES

The following documents are referenced information sources used for the purpose of this Initial Study:

- 1. California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. January 20, 2017.
- 2. California Department of Conservation. *California Important Farmland Finder.* Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed June 2021.
- 3. California Department of Forestry and Fire Protection. *Nevada County, Very High Fire Hazard Severity Zones in LRA*. September 3, 2006.
- 4. California Energy Commission. *Title 24 2019 Building Energy Efficiency Standards FAQ*. November 2018.
- 5. California Geological Survey. *Earthquake Zones of Required Investigation, Altamont Quadrangle.* February 27, 2009.
- 6. California State Scenic Highway. *California State Scenic Highway System Map.* Available at:

https://www.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000d fcc19983. Accessed July 2021.

- 7. California Water Service. Nevada Irrigation District 2020 Urban Water Management Plan, Public Draft - June 14. June 2021.
- 8. California Department of Toxic Substances Control. *Envirostor Database*. Available at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=nevadacity%2C+ca. Accessed July 2021.
- 9. GEI Consulting Engineers and Scientists. Annual Report for the Martis Valley Groundwater Basin Sustainable Groundwater Management Act Alternative Submittal: Water Years 2016 and 2017. March 2018.
- 10. Greg Matuzak. Biological Resources Inventory and Management Plan for the Northern Queen Inn in Nevada City, CA (APNs: 05-470-35, 05-490-19, 37-050-02, & 15.11 Acres). March 2019.
- 11. LSC Transportation Consultants, Inc. Northern Queen Inn Trip Generation and Vehicle Miles Traveled (VMT) Analysis. September 28, 2021.
- 12. Nevada City Engineering, Inc. Northern Queen Inn Proposed Expansion: Engineering Report, Hydrologic, and Hydraulic Calculations for Analysis of Existing Sewer Capacity and Analysis of Potential Flooding. December 2020.
- 13. Nevada City. *Disaster Plan*. January 1, 2011.
- 14. Nevada City. Drought Action Plan: A Water Shortage Contingency Strategy for the City of Nevada City. March 2015.
- 15. Nevada City. General Plan 1980-2000, Nevada City, California. Amended January 2014.
- 16. Nevada County GIS Division. *Williamson Act Parcels Nevada County 2017.* August 22, 2018.
- 17. Nevada County Transportation Commission. *Nevada County Active Transportation Plan.* July 2019.
- 18. Nevada County. Initial Study/Mitigated Negative Declaration, McCourtney Road Transfer Station Renovation Project. December 10, 2020.
- 19. Nevada Division of Environmental Protection. *Lockwood Fact Sheet*. Available at: https://ndep.nv.gov/uploads/land-waste-solid-fac-docs/lockwood-fact-sheet.pdf. Accessed January 2021.
- 20. Nevada Local Agency Formation Commission. *City of Nevada City Sphere of Influence Plan: Public Review Draft* [pg 5]. July 2021.
- 21. NV5. Preliminary Geotechnical Engineering Report Northern Queen Inn-Expansion. November 11, 2009.
- 22. Personal communication between Patricia A. Holroyd, Ph.D., Senior Museum Scientist, Museum of Paleontology, University of California Berkeley, and Nick Pappani, Vice President, Raney Planning and Management, Inc., January 5, 2021.
- 23. Ready Nevada County. *Evacuation Zones*. Available at: https://www.mynevadacounty.com/3223/Evacuation-Zones. Accessed June 2021.
- 24. Sean Michael Jensen. Cultural Resources Inventory Survey: Northern Queen Inn Development Project circa 15.11-acres Nevada County, California. September 22, 2019.

C. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Less-Than-Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

Aesthetics

Noise

П

- Agriculture and Forest Resources
- × **Cultural Resources**
- × **Biological Resources** × **Geology and Soils**
- □ Greenhouse Gas Emissions

- □ Land Use and Planning
- Population and Housing
- Recreation Utilities and Service Systems

Hydrology and Water Quality

- Transportation
- □ Wildfire

- × Air Quality
- Energy
- Hazards and Hazardous Materials
- **Mineral Resources**
- Public Services
- × Tribal Cultural Resources
- Mandatory Findings of Significance

D. DETERMINATION

On the basis of this initial study:

- \square 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 applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the Proposed Project MAY have a significant effect on the environment, and an \square ENVIRONMENTAL IMPACT REPORT is required.
- \square I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" 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 pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Amy Wolfson, City Planner Printed Name

Nevada City For

E. BACKGROUND AND INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) identifies and analyzes the potential environmental impacts of the Northern Queen Inn Expansion Project (proposed project). The information and analysis presented in this document is organized in accordance with the order of the California Environmental Quality Act (CEQA) checklist in Appendix G of the CEQA Guidelines. Where the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures sufficient to reduce the impacts to less-than-significant levels are prescribed.

In 1984, the Nevada City Planning Commission approved a Master Plan for the construction of the Northern Queen hotel. The 1984 Master Plan included 36 units in two buildings, a conference room of 1,920 sf, a coffee shop of 2,800 sf, and a laundry room of 720 sf; however, ultimate development of the project site included four motel buildings, nine chalets, and eight cabins, as well as a 4,940-sf restaurant, pool, registration building, accessory buildings, and outdoor event and parking areas. The project site is located within the boundaries of the 1984 Master Plan.

In 1986, Nevada City adopted the City's General Plan¹ and certified an Environmental Impact Report (EIR) for the General Plan. The General Plan EIR is a program EIR, prepared pursuant to Section 15168 of the CEQA Guidelines (Title 14, California Code of Regulations [CCR], Sections 15000 *et seq.*). The General Plan EIR analyzed full implementation of the General Plan and identified measures to mitigate the significant adverse impacts associated with the General Plan.

F. PROJECT DESCRIPTION

The following provides a description of the project site's current location and setting, as well as the proposed project components and the discretionary actions required for the project.

Project Location and Setting

The project site consists of three parcels, identified by APNs 05-490-19, 37-050-02, and -03, located at 400 and 402 Railroad Avenue in Nevada City (see Figure 1 and Figure 2). The project site is located on the 15.11-acre site that is currently developed with the 89-unit Northern Queen Inn and associated facilities. The Northern Queen Inn consists of four motel buildings, nine individual chalets, and eight individual cabins, as well as a restaurant, pool, registration building, accessory buildings, and outdoor event and parking areas. The site is landscaped to include a garden area, manmade pond, and a pergola structure. Historical, inactive train tracks are located throughout the site and Gold Run Creek, a perennial stream, flows north to south throughout the project site. The northern portion of the project site is located within a floodplain associated with Gold Run Creek, and the southern portion of the project site includes a moderate slope.

Surrounding existing land uses include a tree care business and a video manufacturing business to the east, an auto parts store to the southeast, a church to the south, and rural residences to the north, east, and south. SR 20 extends along the western boundary of the project site. The Nevada City General Plan designates the project site as Employment Center (EC) and the site is zoned EC and Service Lodge with a Scenic Corridor Overlay (SL-SC).

¹ City of Nevada City. *General Plan 1980-2000, Nevada City, California.* Amended January 2014.

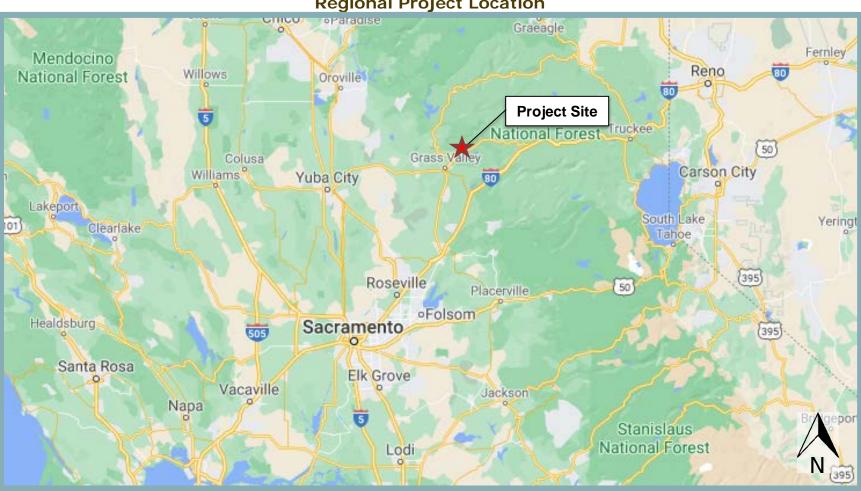


Figure 1 Regional Project Location

Figure 2 Project Site



Project Components

The proposed project would include an expansion of the existing Northern Queen Inn to add on a new two-story 20-unit motel building, 12 new cabins, a gravel parking area, a 20-foot driveway, and an extension of a driveway (see Figure 3). The foregoing components are discussed in further detail below.

Motel Building

The proposed project would include a two story 8,400-sf building to accommodate 20 motel units (see Figure 4). All units would include one bedroom and one bathroom, although some units would provide two beds. Each floor would support ten units, and an elevator and staircase would be provided in the northwest corner of the building. A shared, covered outdoor patio is proposed on the second story, as well as an outdoor staircase to provide pedestrian access.

<u>Cabins</u>

The proposed project would include the development of 12 1,050-sf cabins (see Figure 5). All cabins would include two bedrooms, one bathroom, a living room, and open kitchen/dining area. In addition, every cabin would include a covered back porch.

Two of the proposed cabins would be accessible from a new driveway that extends southeast of the proposed motel. The other ten cabins would be sited along the proposed extension of the existing driveway that serves eight existing cabins.

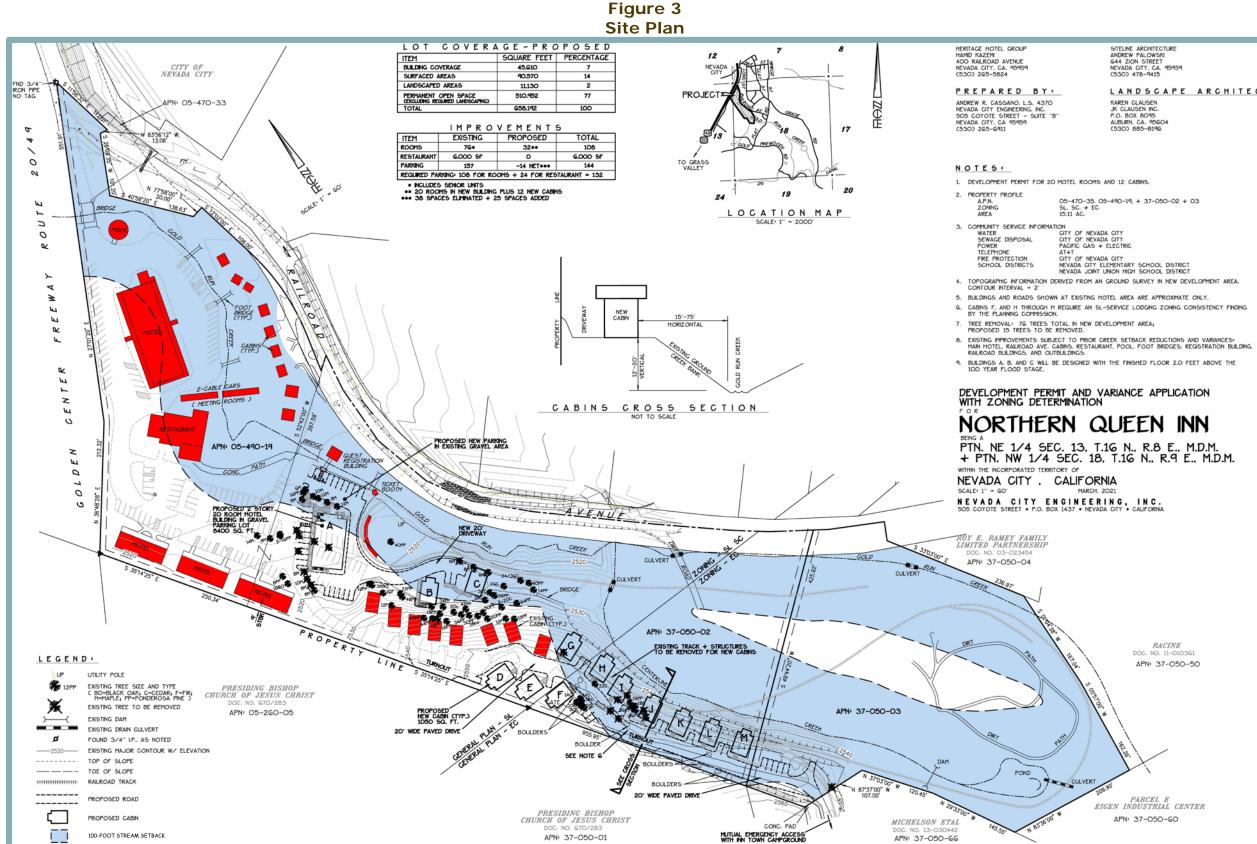
Parking and Site Access

The proposed motel building would be located within the existing parking lot, displacing 38 parking spaces. However, parking would be reconfigured around the new motel building to replace 25 of the 38 spaces. The overall amount of parking spaces following implementation of the proposed project would total 144 parking spaces (see Figure 3).

Primary access to the project site is provided from the north by Railroad Avenue. Parking spaces and a meandering internal circulation route is provided throughout the project site. A mutual emergency access road, shared with the Inn Town Campground, is provided at the southeast corner of the project site. As part of the project, two driveway extensions would be installed: a 20foot driveway that would lead from the motel building to two of the proposed cabins located generally in the center of the project site, and a 20-foot paved driveway with a hammerhead turnaround that would provide access to the remaining ten proposed cabins, located along the southern boundary of the project site.

Landscaping

The proposed project would require the removal of 15 trees, including eight maples, five ponderosa pines, and two cedar trees. The proposed tree removal would require City approval of a Tree Removal Permit. However, the proposed project would include a number of new landscape elements, including low water use plants, shade trees, small accent trees, small and medium accent shrubs, and low ground cover (see Figure 6). The proposed landscaping improvements would be consistent with Section 13.04.070, Water Waste Prohibitions, of the City's Municipal Code and is required to be consistent with the State Model Water Efficiency Landscape Ordinance.



Northern Queen Inn Expansion Project Initial Study

LANDSCAPE ARCHITECT .

Figure 4 Motel Elevation Plan

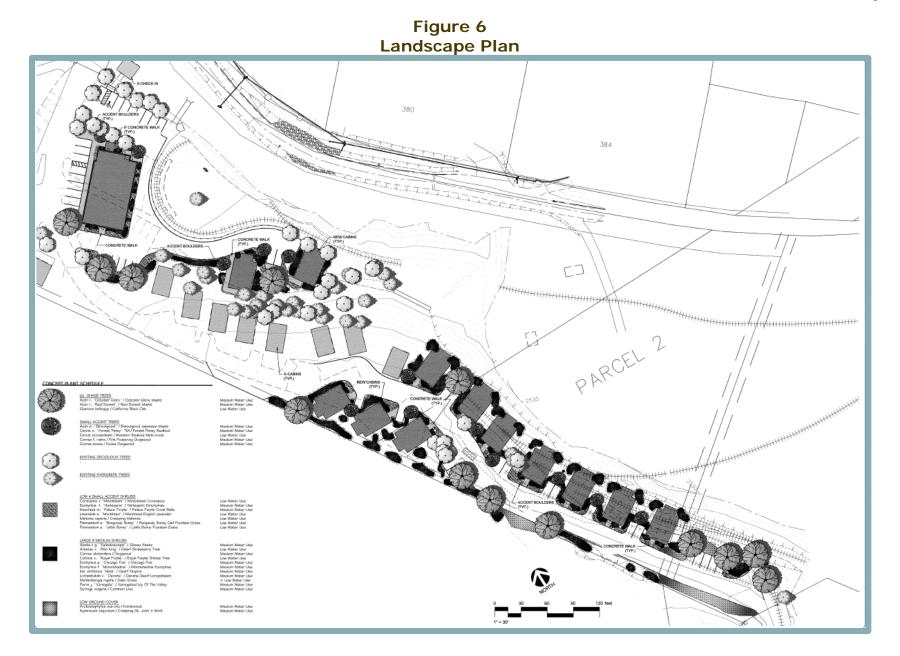


Page 10 November 2021

Figure 5 Cabin Floor Plan and Elevation Plan



Page 11 November 2021



<u>Utilities</u>

Sewer and water service would be provided to the project by Nevada City through connections to existing infrastructure within the project site. Natural gas and electricity service would be provided by Pacific Gas and Electric (PG&E).

Variance

A portion of the proposed motel building, parking area, nine of the proposed cabins, and a portion of the proposed driveway would be located within the 100-foot setback from Gold Run Creek. The closest proposed building would be approximately 15 feet from the creek's edge, and the closest area of disturbance would be approximately 10 feet from the creek's edge. As a result, approval of a variance is required to allow for construction of the proposed project within the 100-foot setback of Gold Run Creek.

Zoning Extension

Currently, APN 37-050-02 is split zoned as SL-SC in the northern portion and EC in the southern portion. The lower portion of the parcel reflects a former southern City boundary and tax line from when the parcel was annexed to the City in 1972 (Annexation No 14, City Resolution 525). The proposed project would include the extension of the SL zoning district with the -SC overlay to encompass the 1.99-acre southern portion of APN 37-050-02, consistent with Section 17.92.010 of the City Municipal Code.

Project Approvals

The proposed project would require the following approvals from the City of Nevada City:

- Adoption of the IS/MND;
- Adoption of a Mitigation Monitoring and Reporting Program;
- Variance for disturbance within the Gold Run Creek setback;
- Zoning Extension to apply the SL-SC zoning designation to the entirety of APN 37-050-02;
- Architectural Review;
- Site Plan; and
- Tree Removal Permit.

G. ENVIRONMENTAL CHECKLIST

The following checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less Than Significant with Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

I. AESTHETICS. Would the project:		Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Have a substantial adverse effect on a scenic vista?			*	
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?			*	
C.	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			*	
d.	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			*	

Discussion

a,b. Examples of typical scenic vistas include mountain ranges, ridgelines, or bodies of water as viewed from a highway, public space, or other area designated for the express purpose of viewing and sightseeing. In general, a project's impact to a scenic vista would occur if development of the project would substantially change or remove a scenic vista.

The project site is not located in the vicinity of any officially designated scenic highways. However, according to the California Scenic Highway Mapping System, the nearest eligible scenic highway to the project site is SR 20, which is located immediately west the project site.² The General Plan identifies Deer Creek, Little Deer Creek, and the "seven hills" as scenic resources in Nevada City. However, implementation of the proposed project would not interfere or obstruct views of such resources. Therefore, implementation of the proposed project would not affect any scenic resources within an officiallydesignated State scenic highway.

Additionally, the proposed project is an expansion of the existing use, and would not substantially alter the aesthetic quality of the project site. Furthermore, the proposed project would be consistent with the project site's General Plan land use designation and, therefore, impacts related to scenic resources have already been evaluated in the General Plan EIR.

Based on the above, the proposed project would not have a substantial adverse effect on a scenic vista nor substantially damage scenic resources within a State scenic highway, and a *less-than-significant* impact would occur.

c. The project site is located in an urbanized area of the City, and the proposed project would involve the expansion of the existing use. The proposed project would be consistent with the existing uses, as well as the General Plan land use and zoning designations for the site.

² California State Scenic Highway. California State Scenic Highway System Map. Available at: https://www.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983. Accessed September 2021.

The northern portion of the project site is within a Scenic Corridor Overlay (-SC) district and, contingent upon approval of the zoning extension, the southern 1.99-acre portion of APN 37-050-02 would also be located within the -SC district. According to Section 17.68.210 of the Nevada City Municipal Code, projects within the "-SC" district are subject to review by the Planning Commission to ensure General Plan policies are followed. The Planning Commission may require revisions to the site plan or specific conditions of approval related to design features in order to ensure consistency with the -SC zoning designation. The General Plan notes that, in scenic corridor areas where existing buildings are located, such as the project site, the City encourages cooperation between property owners and California Department of Transportation (Caltrans) to develop appropriate aesthetic screening between roadways and scenic areas.³ Because the project site is within the -SC zoning district, the project would be subject to Planning Commission review under Municipal Code Section 17.68.210.

Based on the above, implementation of the project would not conflict with applicable zoning and other regulations governing scenic quality, and the proposed project would have a *less-than-significant* impact.

d. The proposed motel, cabins, parking spaces, and internal driveways would introduce additional sources of light and glare to the site, including, but not limited to, headlights on cars traveling to and from the site, exterior light fixtures, light reflecting off windows, and interior light spilling through windows. The project would be required to comply with Section 17.80.215 of Nevada City Municipal Code for outdoor lighting requirements, which include ensuring light sources are shielded and pointed downward, abiding by illumination levels, and complying with energy-efficiency standards. Compliance with the requirements of Section 17.80.215 would help to ensure that the light and glare created by the proposed project is consistent with the levels of light and glare currently emitted on the site and in the surrounding area. Therefore, the proposed project would not introduce new sources of substantial light or glare to the site which would adversely affect day or nighttime views in the area, and a *less-than-significant* impact would occur.

³ City of City of Nevada. *General Plan 1980-2000* [pg 34]. Amended January 2014.

Less-Than-

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II. AGRICULTURE AND FOREST RESOURCES.

Would the project:

- 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?

Discussion

- a,e. Per the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP), the entirety of the project site is characterized as "Urban and Built-Up Land".⁴ The project site does not contain, and is not located adjacent to, Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Given the designation of the site as Urban and Built-Up Land, and considering that the project site is already developed, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, or otherwise result in the loss of Farmland to non-agricultural use. Therefore, *no impact* would occur.
- b. The project site is not under a Williamson Act contract⁵ and is not zoned for agricultural uses. The site is currently zoned EC and SL-SC, and is currently developed with an existing motel. Therefore, buildout of the proposed project would not conflict with existing zoning for an agricultural use or a Williamson Act contract, and **no impact** would occur.
- c,d. The project site is located within a developed area surrounded by western ponderosa pine forests. However, the proposed project would not result in a change to the existing character of the project vicinity, and the proposed motel and cabins would be constructed within an area that is currently paved. Furthermore, the project site is zoned EC and SL-SC and, thus, is not zoned as forest land and/or timberland. Because the proposed project would expand the existing facilities, and the proposed project would be consistent with the General Plan land use designation for the site, impacts related to forestland have already been evaluated by the City. As such, implementation of the proposed project would result in *no impact* related to conflicting with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section

⁴ California Department of Conservation. California Important Farmland Finder. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed June 2021.

⁵ Nevada County GIS Division. *Williamson Act Parcels Nevada County 2017.* August 22, 2018.

51104[g]), or resulting in the loss of forest land or conversion of forest land to non-forest use.

l I Wa	I. AIR QUALITY. ould the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Conflict with or obstruct implementation of the applicable air quality plan?		×		
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?			×	

Discussion

a,b. Nevada City is located in the Mountain Counties Air Basin (MCAB), and is under the jurisdiction of the Northern Sierra Air Quality Management District (NSAQMD) who has jurisdiction over an area encompassing Nevada, Plumas, and Sierra counties. Topography and meteorological conditions vary widely in the areas under the NSAQMD's jurisdiction and air quality conditions can be heavily influenced by local factors. Consequently, air quality conditions within the MCAB vary, resulting in differing attainment status designations for State and federal ambient air quality standards (AAQS) within various portions of the MCAB. The attainment status for AAQS for ozone, respirable particulate matter 10 microns in diameter or less (PM₁₀), fine particulate matter 2.5 microns in diameter or less (PM_{2.5}), and carbon monoxide (CO), are presented in Table 1.

Ozone is a secondary pollutant generated from ozone precursor gases, primarily oxides of nitrogen (NO_x) and reactive organic gases (ROG), which react with sunlight to create ozone. Reductions in ozone are accomplished through reducing precursor emissions. Western Nevada County is designated as being in nonattainment for the federal 8-hour ozone standard and all of Nevada County is designated as being in nonattainment for the State 1-hour ozone standard. Ozone exceedances in Nevada County are primarily due to transport of emissions from the broader Sacramento area and San Francisco Bay Area. As a result, the NSAQMD has jurisdiction over a relatively small portion of the pollutants causing nonattainment within the MCAB. Nevertheless, because portions of the MCAB have been designated as nonattainment, NSAQMD is preparing a federally enforceable State Implementation Plan (SIP) for western Nevada County in accordance with the Clean Air Act. The only current attainment plan adopted by NSAQMD is for the City of Portola. The attainment plan demonstrates that the City of Portola PM_{2.5} nonattainment area will reach attainment by December of 2021. Given that the attainment plan only applies to the City of Portola and surrounding areas of Plumas County, the proposed project would not affect implementation of the attainment plan.

An SIP is an air quality attainment plan designed to reduce emissions of ozone precursors sufficient to attain the federal ozone AAQS by the earliest practicable date. The SIP under preparation will include various pollution control strategies. Overall emissions of ozone precursors must be reduced in western Nevada County (consistent with Reasonable Further Progress requirements specified in the Clean Air Act) until attainment is reached. Most of the reductions are expected to come from motor vehicles throughout the MCAB, Sacramento region, and San Francisco Bay Area becoming cleaner as a result of State regulations mandating further emissions reductions. Failure to submit and implement the SIP in a timely manner could result in federal sanctions, including the loss of federal

highway funds, greater emission offset ratios for new sources, and other requirements that the U.S. Environmental Protection Agency (USEPA) may deem necessary.

Table 1					
Attainment of AAQS within NSAQMD					
Pollutant	State Designation	Federal Designation			
		2008 Standard Western Nevada County: Serious Nonattainment			
Ozone (O₃)	Nevada County: Nonattainment (due to overwhelming transport)	Sierra, Plumas, and Eastern Nevada County: Unclassifiable			
	Sierra and Plumas County: Unclassified	2015 Standard Western Nevada County: Moderate Nonattainment			
		Sierra Plumas, Eastern Nevada County: Unclassifiable			
Counties: Nonattainment		Unclassified			
	Portola area in Plumas County:	2012 Annual Standard Portola area in Plumas County: Nonattainment			
PM _{2.5}	Nonattainment Nevada, Sierra, and remainder of Plumas County: Unclassified	Nevada, Sierra, and Remainder of Plumas County: Unclassifiable/Attainment			
		2012 24-hour Standard Unclassifiable/Attainment			
	Plumas County: Attainment				
CO	Nevada, Sierra County: Unclassified	Unclassifiable/Attainment			
Source: NSAQMD. Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects. August 15, 2019.					

The NSAQMD has established significance thresholds associated with development projects for emissions of the ozone precursors ROG and NO_x, as well as for PM₁₀. Adopted NSAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment. The thresholds, expressed in pounds per day (lbs/day), are listed in Table 2 and apply to both construction-related emissions and operational emissions.

As shown in the table, NSAQMD has developed a tiered approach to determine significance levels based on a range of emissions levels. All projects, Level A or greater, are required to implement the following basic measures recommended by NSAQMD:

• Alternatives to open burning of vegetative material will be used unless otherwise deemed infeasible by the NSAQMD. Among suitable alternatives are chipping, mulching, or conversion to biomass fuel; and

• Grid power shall be used (as opposed to diesel generators) for job site power needs where feasible during construction.

Table 2						
NSAQMD Thresholds (lbs/day)						
ROG NOx PM ₁₀						
Level A						
<24 <24 <79						
Level B						
24-136	24-136	79-136				
Level C						
>136	>136	>136				
Source: NSAQMD. Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use projects. August 15, 2019.						

Projects that fall within the Level B emissions level thresholds require implementation of additional measures recommended by NSAQMD for consideration in order to result in a less-than-significant impact. Projects that exceed Level C emission level thresholds are required to implement further additional measures sufficient to reduce emissions to a level below significant. If, even after implementation of all such mitigation measures, a project would result in emissions in excess of the Level C thresholds, impacts would be considered significant and unavoidable.

The proposed project's construction and operational emissions were quantified using the California Emissions Estimator Model (CalEEMod) software version 2020.4.0 – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including greenhouse gas (GHG) emissions, from land use projects. The model applies inherent default values for various land uses, including construction data, trip generation rates, vehicle mix, trip length, average speed, compliance with the California Building Standards Code (CBSC), etc. Where project-specific information is available, such information should be applied in the model. Accordingly, the proposed project's modeling assumes the following inherent site design features and project-specific information:

- Construction is anticipated to begin in May 2022;
- Construction would occur over an approximately nine-month period; and
- The vehicle trip rate was adjusted based on project-specific information provided by LSC Transportation Consultants, Inc.

The proposed project's estimated emissions associated with construction and operations are presented and discussed in further detail below. A discussion of the proposed project's contribution to cumulative air quality conditions is provided below as well. All emissions modeling results are included as Appendix A to this IS/MND.

Construction Emissions

According to the CalEEMod results, the proposed project would result in maximum unmitigated construction emissions as shown in Table 3.

Table 3Maximum Unmitigated Construction Emissions (Ibs/day)					
Pollutant Proposed Project Emissions Level					
ROG	14.75	Level A			
NOx	38.92	Level B			
PM ₁₀ 21.42 Level A					
Source: CalEEMod, August 2021 (see Appendix A).					

As presented above, all projects, including the proposed project, are required to comply with the basic measures recommended by NSAQMD, which would help to reduce the construction emissions from the levels presented in Table 3. In addition, all development projects under the jurisdiction of the NSAQMD are required to prepare a Dust Control Plan pursuant to Rule 226 (Dust Control). The proposed project's required implementation of the Dust Control Plan would help to further minimize construction-related emissions of fugitive dust, which is a component of PM₁₀, from the levels presented in Table 3.

As shown in the table, the proposed project's construction emissions would be within the Level A thresholds for ROG and PM_{10} , and would result in Level B emissions of NO_X . Due to the Level B emissions of NO_X , pursuant to the NSAQMD guidelines, the proposed project would be required to implement additional NSAQMD recommended mitigation measures in order to be considered to reduce the impact to a less-than-significant level.

Operational Emissions

According to the CalEEMod results, the proposed project would result in maximum unmitigated operational criteria air pollutant emissions as shown in Table 4.

Table 4						
Maximum Unmitigated Operational Emissions (lbs/day)						
	Applicable Threshold					
Pollutant	Proposed Project Emissions	Level				
ROG	2.76	Level A				
NOx	1.53	Level A				
PM 10	0.85	Level A				
Source: CalEEMod, August 2021 (see Appendix A).						

As shown in the table, the proposed project's operational emissions would be within threshold Level A. With implementation of the basic measures recommended by NSAQMD, as discussed above, the proposed project would be considered to result in a less-than-significant impact related to operational emissions.

Cumulative Emissions

Due to the dispersive nature and regional sourcing of air pollutants, air pollution is already largely a cumulative impact. The nonattainment status of regional pollutants, including ozone and PM, is a result of past and present development, and, thus, cumulative impacts related to these pollutants could be considered cumulatively significant.

To improve air quality and attain the health-based standards, reductions in emissions are necessary within nonattainment areas. Adopted NSAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued

attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. As future attainment of AAQS is a function of successful implementation of NSAQMD's planning efforts, by exceeding the NSAQMD's Level C thresholds for construction or operational emissions, a project could contribute to the region's nonattainment status for ozone and PM emissions and could be considered to conflict with or obstruct implementation of the NSAQMD's air quality planning efforts.

As demonstrated above, the proposed project emissions would be below Level C for both construction and operations. Thus, pursuant to NSAQMD guidance, the proposed project would not be considered to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment, and the project's incremental contribution to cumulative emissions would be considered less than significant.

Conclusion

Operation of the proposed project would result in Level A emissions of all criteria pollutants. However, because construction associated with the proposed project would result in Level B emissions of NO_X, pursuant to NSAQMD guidelines, the proposed project could be considered to result in emissions that would conflict with or obstruct implementation of the applicable regional air quality plans. Thus, a **potentially significant** impact could occur during construction of the proposed project.

Mitigation Measure(s)

Consistent with NSAQMD's Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects, implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

- *III-1.* The following language shall be included, via written notation, on project improvement plans, subject to review and approval by the Nevada City Planning Department:
 - a. Grid power shall be used (as opposed to diesel generators) for job site power needs during construction to the maximum extent feasible, as determined by the City's Planning Department;
 - b. Temporary traffic control shall be provided during all phases of the construction to improve traffic flow as deemed appropriate by local transportation agencies and/or Caltrans; and
 - c. Construction activities shall be scheduled to direct traffic flow to off-peak hours to the maximum extent feasible, as determined by the City's Planning Department.
- c. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Sensitive receptors are typically defined as facilities where sensitive receptor population groups (i.e., children, the elderly, the acutely ill, and the chronically ill) are likely to be located. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools,

playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics. Existing sensitive receptors in the project vicinity include the scattered single-family residences surrounding the project site. The nearest sensitive receptor is a single-family residence located approximately 275 feet north of the project site boundary.

The major pollutant concentrations of concern are localized CO emissions, toxic air contaminant (TAC) emissions, and criteria pollutant emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. Emissions of CO are of potential concern, as the pollutant is a toxic gas that results from the incomplete combustion of carbon-containing fuels such as gasoline or wood.

Although NSAQMD does not have an established threshold for CO emissions, the maximum unmitigated daily construction and operational emissions of CO associated with the proposed project are provided in Table 5 below for informational purposes.

Table 5				
Maximum Unmitigated Emissions of CO (lbs/day)				
Project Phase CO Emissions				
Construction 29.76				
Operations 7.09				
Source: CalEEMod, August 2021 (see Appendix A).				

Although NSAQMD does not have an established threshold for CO, the nearby air pollution control district, Placer County Air Pollution Control District (PCAPCD), who has authority over a portion of the MCAB, has a screening level for localized CO impacts. According to the PCAPCD screening levels, a project could result in a significant impact if the project would result in CO emissions from vehicle operations in excess of 550 lbs/day. As shown in Table 5, CO emissions associated with the proposed project would be well below the PCAPCD's 550 lbs/day screening level. Therefore, based on the nearby PCAPCD's screening levels for localized CO impacts, the proposed project would not be expected to expose sensitive receptors to substantial concentrations of localized CO.

TAC Emissions

Another category of environmental concern is TACs. The California Air Resources Board's (CARB's) Air Quality and Land Use Handbook: A Community Health Perspective (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk.

The proposed project does not include any operational activities that would be considered a substantial source of TACs. Accordingly, operations of the proposed project would not expose sensitive receptors to excess concentrations of TACs.

Short-term, construction-related activities could result in the generation of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. Health risks are typically associated with exposure to high concentrations of TACs over extended periods of time (e.g., 30 years or greater), whereas the construction period associated with the proposed project would likely be limited to approximately nine months. All construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation, which is intended to help reduce emissions associated with off-road diesel vehicles and equipment, including DPM. Because construction equipment on-site would not operate for long periods of time and would be used at varying locations within the site. associated emissions of DPM would not occur at the same location (or be evenly spread throughout the entire project site) for long periods of time. The nearest sensitive receptors are located over 275 feet north of the project site. As a result, DPM emissions associated with construction of the proposed project would be substantially dispersed prior to reaching the nearest receptors.

Due to the temporary nature of construction and the relatively short duration of potential exposure to associated emissions, the potential for any one sensitive receptor in the area to be exposed to high concentrations of pollutants for a substantially extended period of time would be low. Thus, construction of the proposed project would not be expected to expose any nearby sensitive receptors to substantial TAC emissions concentrations.

Criteria Pollutants

The NSAQMD thresholds of significance were established with consideration given to the health-based air quality standards established by the federal and State AAQS, and are designed to aid the district in achieving attainment of such AAQS.⁶ Although the NSAQMD's thresholds of significance are intended to aid achievement of the AAQS for which the MCAB is in nonattainment, the thresholds of significance do not represent a level above which individual project-level emissions would directly result in public health impacts. Nevertheless, a project's compliance with the NSAQMD's thresholds of significance provides an indication that criteria pollutants released as a result of project implementation would not inhibit attainment of the health-based AAQS. With the implementation of Mitigation Measure III-1, project-related emissions would not exceed the NSAQMD thresholds for criteria pollutant emissions. Thus, project emissions would not inhibit attainment of the federal and State AAQS, and the criteria pollutants emitted during project implementation would not be anticipated to result in measurable health impacts to sensitive receptors. Accordingly, the proposed project would not exceed sensitive receptors to excess concentrations of criteria pollutants.

Conclusion

Based on the above discussion, the proposed project would not expose any sensitive receptors to excess concentrations of localized CO, TACs, or criteria pollutants.

⁶ Northern Sierra Air Quality Management District. *Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects*. August 18, 2009.

Consequently, the proposed project would result in a *less-than-significant* impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

d. Emissions of principal concern include emissions leading to odors, emission that have the potential to cause dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in questions "a" through "c" above. Therefore, the following discussion focuses on emissions of odors and dust.

Emissions such as those leading to odor have the potential to adversely affect people. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative analysis to determine the presence of a significant odor impact is difficult. Typical odor-generating land uses include, but are not limited to, wastewater treatment plants, landfills, and composting facilities. The proposed project would not introduce any such land uses.

Construction activities often include diesel-fueled equipment and heavy-duty trucks, which could create odors associated with diesel fumes that may be considered objectionable. However, construction is temporary and construction equipment would operate intermittently throughout the course of a day, and would likely only occur over portions of the site at a time. In addition, all construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. Project construction would also be required to comply with all applicable NSAQMD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations would help to minimize air pollutant emissions, as well as any associated odors related to operation of construction equipment. Considering the short-term nature of construction equipment, the proposed project would not be expected to create objectionable odors affecting a substantial number of people.

With respect to dust, as noted previously, the proposed project would be required to comply with all applicable NSAQMD rules and regulations. Specifically, implementation of a Dust Control Plan, pursuant to NSAQMD Rule 906, would be sufficient to reduce potential emissions of dust during construction. Following project construction, the driveways within the project site would be paved, and most non-paved areas would be landscaped. Some parking stall would be gravel. However, the speed limit on-site, and the speed at which cars would park, would be substantially slow to ensure that the movement of vehicles do not result in dust emissions. Thus, project operations would not include sources of dust that could adversely affect a substantial number of people.

For the aforementioned reasons, construction and operation of the proposed project would not result in emissions (such as those leading to odors) adversely affecting a substantial number of people, and a *less-than-significant* impact would result.

Northern Queen Inn Expansion Project Initial Study

Less-Than-Significant Potentially Less-Than-IV. **BIOLOGICAL RESOURCES.** No Significant with Significant Impact Would the project: Impact Mitigation Impact Incorporated Have a substantial adverse effect, either directly or a. 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, and regulations or by the × California Department of Fish and Wildlife or US Fish and Wildlife Service? Have a substantial adverse effect on state or federally C. protected wetlands (including, but not limited to, marsh, × \square \square vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established × resident or migratory wildlife corridors, or impede the use of wildlife nursery sites? Conflict with any local policies or ordinances protecting e. biological resources, such as a tree preservation policy X or ordinance? Conflict with the provisions of an adopted Habitat f. Conservation Plan, Natural Conservation Community × Plan, or other approved local, regional, or state habitat

Discussion

conservation plan?

a. Currently, the site consists primarily of western ponderosa pine forests as well as developed and disturbed areas associated with the existing Northern Queen Inn. Existing trees and vegetation surround the current development.

A Biological Resources Inventory was conducted to evaluate the project area for the presence of any sensitive biological resources. The Biological Resources Inventory included a review of information from databases for the project region, including the California Natural Diversity Database (CNDDB), reporting for similar projects in Nevada City and Nevada County, as well as reconnaissance-level surveys to determine if any special-status plant or wildlife species have the potential to occur on the project site.⁷ The CNDDB is a database inventory of previously identified locations of rare and endangered plants, wildlife, and communities in California. It should be noted that the assessment was conducted for the entire project site, with an emphasis on the 100-foot non-disturbance buffer area of the Gold Run Creek stream and on sensitive biological resources on the project site. For the purpose of this analysis, special-status species include the following:

• Plant and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal and State Endangered Species Acts. Both acts afford protection to listed species;

⁷ Greg Matuzak. Biological Resources Inventory and Management Plan for the Northern Queen Inn in Nevada City, CA (APNs: 05-470-35, 05-490-19, 37-050-02, & 15.11 Acres). March 2019.

- California Department of Fish and Wildlife (CDFW) Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue;
- CDFW fully protected species; and
- Species on California Native Plant Society (CNPS) Lists 1 and 2.

Although CDFW Species of Special Concern generally do not have special legal status, they are given special consideration under CEQA. In addition to regulations for special-status species, most birds in the U.S., including non-status species, are protected by the Migratory Bird Treaty Act (MBTA) of 1918. Under the MBTA, destroying active nests, eggs, and young is illegal.

The results of the database search and site surveys are discussed below.

Special-Status Plants

Based on the results of the CNDDB search, a total of five special-status plant species have been documented to occur within the project region. The identified species are: brandegee's clarkia, dubious pea, finger rush, pine hill flannelbush and scadden flat checkerbloom. Four out of the five special-status plant species were eliminated from further consideration due to lack of suitable on-site habitat. However, the dubious pea has the potential to occur on-site based on habitat requirements.

The dubious pea has been identified within three miles west/southwest of the project site and is known to be associated with western ponderosa pine forest habitat, which is identified on the project site. The species was not found on-site during the reconnaissance-level survey that was conducted in March 2019 as part of the Biological Resources Inventory; however, the species blooming period is between April and May and, therefore, may be present but was not visible and/or blooming during the survey. Therefore, if construction were to occur during the blooming season for the dubious pea, a potentially significant impact could occur.

Special-Status Wildlife

Based on the results of the CNDDB search, the following six special-status wildlife species have been documented to occur within the project region: California black rail, coast horned lizard, foothill yellow-legged frog, western bumble bee, western pond turtle, and California red-legged frog. Migratory bird species and nesting raptors, including the Cooper's hawk, were identified in the project area as well. However, six identified species were dismissed from further analysis due to the lack of suitable habitat on-site. The wildlife species with the potential to occur on-site are discussed in further detail below.

Per the Biological Resources Inventory, a low to moderate potential exists for nesting birds, raptors, or other birds protected under the MBTA, to occur within the project site, given the presence of on-site trees and adjacent forested habitat. Based on the CNDDB search, Cooper's hawks, which are protected under the MBTA, have been documented nesting approximately 2.7 miles from the project site. The species is known to nest in Sierra mixed conifer forests and primarily in riparian growths of deciduous trees in canyon bottoms on river floodplains. The species was not identified on-site during the biological survey. The Biological Resources Inventory concluded that the potential for Cooper's hawk to occur on-site is very low due to the limited nesting habitat provided on-site.

Nonetheless, nesting birds and raptors protected by the MBTA, including Cooper's hawk, have the potential to inhabit the existing trees and forested areas within the project site prior to construction activities. The removal of trees and other vegetation during an active nesting season could result in adverse effects to such species and, therefore, the proposed project could have a significant impact on nesting bird and raptor species.

Conclusion

The proposed project could have an adverse effect, either directly or through habitat modifications, on species identified as special-status species in local or regional plans, policies, or regulations, or by the CDFW or the U.S. Fish and Wildlife Service, specifically dubious pea and nesting birds and raptors protected by the MBTA, including Cooper's hawk. Therefore, a *potentially significant* impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Special-Status Plants

IV-1.

Prior to the initiation of any ground-disturbing activities during the blooming period (April or May), a pre-construction botanical survey shall be conducted by a qualified biologist to assess the project site for the presence of special-status plant species. If special-status plant species, including dubious pea, are identified during the pre-construction survey, and impacts to the species cannot be avoided, a Special-Status Plant Species Protection Plan shall be developed by a qualified biologist that outlines the minimization and mitigation measures for the plants identified within the proposed disturbance areas. For example, the Special-Status Plant Species Protection Plan could require the transplantation of the species outside of the proposed disturbance areas with up to three years of monitoring to ensure the transplanted plants survive and are protected from adjacent indirect development impacts. Results of the botanical survey shall be submitted to the City's Planning Department for review and approval.

Nesting Birds and Raptors

IV-2. A pre-construction survey for nesting birds shall be conducted by a qualified biologist within a 250-foot buffer around the project site boundaries, if feasible, not more than 14 days prior to site disturbance during the breeding season (March 1st to August 30th). Survey results shall be submitted to the City's Planning Department. If site disturbance commences outside the breeding season, a pre-construction survey for nesting birds is not required.

If active nests are not detected within approximately 250 feet of the project site, further mitigation is not required.

If nesting raptors or other migratory birds are detected on or adjacent to the site during the survey, an appropriate construction-free buffer shall be established around all active nests. Actual size of the buffer would be determined by the project biologist, and would depend on species, topography, and type of activity that would occur in the vicinity of the nest. The project buffer would be monitored periodically by the project biologist to ensure compliance. After the nesting is completed, as determined by the biologist, the buffer would no longer be required. Buffers shall remain in place for the duration of the breeding season or until a qualified biologist has confirmed that all chicks have fledged and are independent of their parents.

b,c. Gold Run Creek enters the project site from the southeast and extends through the project site, a portion of which constitutes a medium-sized pond. From the pond, the creek flows northwest before connecting with the main stem of Gold Run Creek that extends along the northern boundary of the project site. A narrow riparian zone is located adjacent to Gold Run Creek and supports the following species: Himalayan blackberry, native California blackberry, small willow trees, dogwood, alder, and big leaf maple. Per the Biological Resources Inventory, developed wetlands cannot occur on the banks of the on-site stream due to a lack of required hydrologic features. Therefore, wetland vegetation is considered sparse and marginal. Thus, although the project site contains Gold Run Creek, which is an aquatic feature, the project site is not considered to contain wetlands.

Nonetheless, construction of the proposed project could result in potential impacts to the stream channels, water quality, and the sparse riparian vegetation adjacent to Gold Run Creek. Therefore, the proposed project could have a substantial adverse effect on riparian habitat and sensitive natural communities associated with Gold Run Creek, and a *potentially significant* impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

- *IV-3.* The following measures shall be implemented during construction activities and included via notation on all project improvement plans:
 - Limit construction to periods of extended dry weather and the dry summer;
 - Establish the area around the active stream channel as Environmentally Sensitive Area (ESA) where those areas shall not be impacted by construction or thereafter;
 - No fill or dredge material shall enter or be removed from the stream channels during construction and thereafter;
 - Use appropriate machinery and equipment to limit disturbance in the proposed project disturbance areas;
 - No dewatering of the streams shall occur during construction or thereafter; and
 - Implement the following Best Management Practices (BMPs) during and following construction:
 - Minimize the number and size of work area for equipment and spoil storage sites in the vicinity of the stream. Place

staging area outside of the 100-foot non-disturbance buffers and drip line of any landmark tree.

- The contractor shall exercise reasonable precaution to protect Gold Run Creek, adjacent non-disturbance buffers, and the landmark tree from pollution with fuels, oils, and other harmful materials. Construction byproducts and pollutants such as oil, cement, and wash water shall be prevented from discharging into or near resources and be collected for removal off site. All construction debris and litter shall be removed from the work site immediately upon completion.
- No equipment for vehicle maintenance or refueling shall occur within 100-foot non-disturbance buffers or within drip line of tree. The contractors shall immediately contain and clean any petroleum or other chemical spills with absorbent materials.
- For ground disturbing and construction related activities occurring within the 100-foot non-disturbance buffer zone, straw bales, straw wattles, or another accepted erosion control and sedimentation BMPs shall be located between the ground disturbance or construction area and the top of the bank of the stream channels within the project area. This is to minimize any potential runoff from erosion and sedimentation caused by the proposed project.

Proof of compliance with the aforementioned measures shall be submitted to the City's Planning Department for review and approval.

d. Movement corridors or landscape linkages are usually linear habitats that connect two or more habitat patches, providing assumed benefits to the species by reducing inbreeding depression and increasing the potential for recolonization of habitat patches. The project site is bounded by SR 20 to the west and is surrounded by other rural development on all sides; thus, the project site is not anticipated to be used to connect two or more habitat patches. Additionally, the site is already developed with the existing Northern Queen Inn. Due to the disturbed nature of the project site, the site does not offer prime habitat and, as such, the potential for use of the site as a wildlife corridor or native wildlife nursery site is limited. Furthermore, sufficient land in the greater vicinity of the site, specifically in the forested areas east and southeast of the site, exists for continued wildlife movement in the area.

The project site supports a portion of Gold Run Creek which could be used by migratory fish or as a wildlife corridor for other wildlife species. However, implementation of the proposed project would not interfere with the creek habitat, and migratory fish and other species would be able to continue their use of the creek as a migratory route throughout construction and operations of the project.

Therefore, development of the proposed project would not substantially interfere with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites, and a *less-thansignificant* impact would occur.

e. The City's Tree Preservation Ordinance provides for additional protection of trees with 14inch or greater trunk diameter, identified as a Felix Gillet tree, or planted as commemorative or marking a historic spot. No trees on the project site were identified as Felix Gillets or commemorative. Several trees to remain do exceed a 14-inch trunk diameter.

Vegetation on the project site is dominated by ponderosa pine (*Pinus ponderosa*) and includes incense cedar (*Calocedrus decurrens*) and interior live oak (*Quercus wislizeni*). In addition, several small to medium California black oak (*Quercus kelloggii*) trees, scattered Douglas fir (*Pseudotsuga menziesii*) trees, and Pacific madrone (*Arbutus menziesii*) trees exist on-site. Landmark groves were not identified on the project site. A single landmark California black oak tree was identified on-site, adjacent to the proposed 20-foot-wide driveway.

According to the landscaping plan, 15 trees, including eight maples, five ponderosa pines, and two cedar trees, would be removed to facilitate development of the proposed project. Tree removal would be conducted in accordance with Chapter 18.01, Tree Preservation, of the City's Municipal Code. As required therein, trees shall be preserved where feasible, and protected trees require a permit for removal. Subject to City discretion, approval of a Tree Removal Permit may require project applicants to contribute to a tree preservation fund or to carry out replacement plantings. Overall, the required compliance with Chapter 18.01 of the City's Municipal Code would ensure that any tree removal conducted in association with the proposed project would not conflict with local policies.

Because the project would involve construction in the vicinity of additionally protected trees, including a California Black Oak with a diameter of 36 inches, the potential exists for conflict with the Nevada City Tree Preservation Policy regarding "additionally protected trees." Therefore, the proposed project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and a *potentially significant* impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

- IV-4. The following Best Management Practices (BMPs) for oak resources shall be implemented during construction of the proposed project, specifically for work within the root zone and drip line of any tree to remain with a trunk diameter over 14-inches, including the identified California Black Oak. Prior to the initiation of construction, the following measures shall be included via notation on all project grading plans. Proof of compliance with the following measures shall be submitted to the City's Planning Department for review and approval.
 - **Plans and specifications** shall clearly state protection procedures for protected trees within the project area. The specifications shall also require contractors to stay within designated work areas.
 - Protective Fencing not less than four feet in height shall be placed at the limits of proposed disturbance where the protected trees are located. The fencing shall be placed as far away from the trunk of the tree as possible to protect as much of the root zone as feasible.

The protective fencing shall be inspected by the contractor prior to commencement of any grading activity within the project disturbance areas and shall remain in place until construction is completed within each area of ground disturbing activities.

- **Damage to Trees** during construction shall be immediately reported to a qualified biologist or a certified arborist to assess the potential level of impacts to oak resources and determine whether the damage will have a significant impact on protected trees. If it is determined by the qualified biologist or certified arborist that there is significant damage that could harm the long-term health of any protected tree, work shall be halted and Nevada City shall be contacted to discuss appropriate mitigation measures for such damages.
- **Equipment Damage** to limbs, trunks, and roots of all remaining trees within the subject parcels shall be avoided during project construction and development.
- **Grading Restrictions:** Care must be taken to limit grade changes near the drip line of protected trees. Grade changes can lead to plant stress from oxygen deprivation or oak root fungus at the root collar of oaks. Minor grade changes further from the trunk are not as critical but can negatively affect the health of the tree if not carefully monitored by a qualified biologist or certified arborist.
- The Root Protective Zones (Drip Lines): Grade shall not be lowered or raised around the trunks (i.e., within the drip line) of protected trees. A qualified biologist or certified arborist shall supervise all excavation or grading proposed within the protective zone (drip line) of the protected trees and/or the clearance of vegetation within the protective zone (drip line) of the landmark oak tree. Any major roots encountered shall be conserved to the greatest extent possible and treated as recommended by the qualified biologist or certified arborist.

Annual monitoring of the project area, including all features of the project constructed within or directly adjacent to the designated protected trees shall be implemented to identify any indirect impacts (deterioration of health or death of individual tress). A qualified biologist or certified arborist shall evaluate the single landmark California black oak tree adjacent to the proposed new 20-foot driveway (beginning approximately 12 months after site construction has been finalized) and assess the landmark oak tree where the drip line is within or directly adjacent to the project features constructed within or directly adjacent to the designated landmark oak tree. Annual monitoring shall occur for up to three years post construction completion and shall include photo documentation of the landmark oak tree. If the landmark oak tree appears to be deteriorating in health, the qualified biologist or certified arborist shall make recommendations for minimizing further impacts to the tree.

In the event that the landmark oak tree is documented to be dying and needs to be removed, further mitigation is required for the removal of that landmark oak tree. Mitigation to offset the impacts from the removal of the landmark oak tree could include one or a combination of the following as recommended by the qualified biologist or certified arborist conducting the annual monitoring at that time:

- Conservation Easement within the project site to permanently protect landmark oak trees from future development or use impacts. The amount of area and oak resources to be included in such a conservation easement would be made by the qualified biologist or certified arborist conducting the monitoring and would be a minimum of a 1:1 ratio of impact area (dbh and area of canopy cover protected under the easement would have to be at least the dbh and canopy over of the landmark oak tree to be removed) to conservation easement area with the final approval of the mitigation being approved by Nevada City. An offsite conservation easement at the same minimum 1:1 ratio would also be a viable option for using this type of mitigation for impacts to the landmark oak tree.
- Bear Yuba Land Trust (BYLT) In-lieu Fee: Payment of an in-lieu fee to a BYLT mitigation fund that shall specify that the fee paid will be used to purchase mitigation for landmark oak trees or groves within Nevada City or Nevada County. An administration fee equal to five percent of the mitigation fee may also be required to cover the Nevada City and/or BYLT costs associated with this option.
- **Planting Replacement** at a 2:1 ratio the number of inches of oak trees removed (at dbh). This is the recommendation for planting ratios previously approved by recent Nevada County Planning Department permitted projects requiring similar mitigation. The oak plantings would need to be maintained and monitored to ensure that the number of inches of oak trees removed survive after five years from the time that plantings are completed. The final approval of this mitigation type being approved would be with Nevada City.
- **Other Mitigation** can be developed between a qualified biologist or certified arborist, the project proponent, and Nevada City with the final approval of the mitigation being approved by Nevada City. However, at a minimum, any other mitigation recommended as part of this Biological Resources Inventory and Management Plan would be required to fully mitigate for the loss of the number of trees (dbh at a 2:1 ratio).
- f. Nevada City is not involved in an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or State conservation plan. Therefore, the proposed project would not conflict with the applicable provisions of such, and **no impact** would occur.

V. Wa	CULTURAL RESOURCES.	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?		×		
b.	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?		×		
C.	Disturb any human remains, including those interred outside of dedicated cemeteries.		×		

Discussion

a-c. Historical resources are features that are associated with the lives of historically-important persons and/or historically-significant events, that embody the distinctive characteristics of a type, period, region or method of construction, or that have yielded, or may be likely to yield, information important to the pre-history or history of the local area, California, or the nation. Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics.

A Cultural Resources Inventory Survey was prepared for the proposed project, and included a search of the California Historical Resources Information System by the North Central Information Center (NCIC), a search of the Native American Heritage Commission's (NAHC's) Sacred Lands File, and a pedestrian survey of the project site. The Cultural Resources Inventory Survey noted that the project site is located within an area that has been covered by a previous archeological investigation; however, prehistoric or historic sites have not been documented on the project site.⁸ In addition, the NAHC's Sacred Lands File returned negative results, indicating that known cultural resources do not exist on-site. Finally, it is noted that the project site is already developed, and has been subject to previous ground disturbance during initial construction of the existing Northern Queen Inn. Considering the project site has been previously disturbed, ground disturbance associated with the proposed project is not anticipated to reveal any previously unknown cultural resources.

Although known cultural resources do not exist on-site, the potential exists for previously unknown resources to be discovered during ground-disturbing activities. Without the implementation of mitigation, the proposed project could have a *potentially significant* impact related to historical resources and unique archeological resources, as well as the disturbance of human remains.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

V-1. If buried archaeological, paleontological, and/or cultural resources are encountered during site grading or other site work, all such work shall be halted immediately within 100 feet of the discovery and the developer shall immediately notify the Nevada City Planning Department of the discovery.

⁸ Sean Michael Jensen. *Cultural Resources Inventory Survey: Northern Queen Inn Development Project circa* 15.11acres Nevada County, California. September 22, 2019.

In such case, the developer shall be required, at their own expense, to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery, as appropriate. The archaeologist shall be required to submit to the Nevada City Planning Department for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the area of discovery would not be allowed until the preceding work has occurred.

V-2. Pursuant to State Health and Safety Code Section 7050.5 (c) State Public Resources Code Section 5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop within 100 feet of the find and the Nevada County Coroner and Nevada City Planning Department shall be contacted immediately. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission, who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. Additional work is not to take place within 100 feet of the find until the identified appropriate actions have been implemented.

VI Wa	. ENERGY. build the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			*	
b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			×	

Discussion

a,b. The main forms of available energy supply are electricity, natural gas, and oil. A description of the 2019 California Green Building Standards Code and the Building Energy Efficiency Standards, with which the proposed project would be required to comply, as well as discussions regarding the proposed project's potential effects related to energy demand during construction and operations are provided below.

California Green Building Standards Code

The 2019 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11), is a portion of the CBSC, which became effective with the rest of the CBSC on January 1, 2020. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the CALGreen Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of Electric Vehicle charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), or a local ordinance, whichever is more stringent, to reduce outdoor water use;
- Diversion of 65 percent of construction and demolition waste from landfills;
- Mandatory periodic inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 sf to ensure that all are working at their maximum capacity according to their design efficiencies; and
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board.

Building Energy Efficiency Standards

The 2019 Building Energy Efficiency Standards is a portion of the CBSC, which expands upon energy-efficiency measures from the 2016 Building Energy Efficiency Standards. Non-residential buildings built in compliance with the 2019 standards are anticipated to

use approximately 30 percent less energy compared to the 2016 standards, primarily due to lighting upgrades.⁹

Construction Energy Use

Construction of the proposed project would involve on-site energy demand and consumption related to the use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and material delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met via a hookup to the existing electricity grid. Project construction would not involve the use of natural gas appliances or equipment.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project site would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. In addition, all construction equipment and operation thereof would be regulated per the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. The In-Use Off-Road Diesel Vehicle Regulation would subsequently help to improve fuel efficiency and reduce GHG emissions. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to reduce demand on oil and emissions associated with construction.

The CARB prepared the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan),¹⁰ which builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. Appendix B of the 2017 Scoping Plan includes examples of local actions (municipal code changes, zoning changes, policy directions, and mitigation measures) that would support the State's climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The In-Use Off Road Regulation is consistent with the intention of the 2017 Scoping Plan and the recommended actions included in Appendix B of the 2017 Scoping Plan.

Based on the above, the temporary increase in energy use during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. The proposed project would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

⁹ California Energy Commission. *Title 24 2019 Building Energy Efficiency Standards FAQ*. November 2018.

¹⁰ California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. January 20, 2017.

Operational Energy Use

Following implementation of the proposed project, PG&E would provide electricity and natural gas to the project site. Energy use associated with operation of the proposed project would be typical of motel uses, requiring electricity for interior and exterior building lighting, operation of stoves, kitchen and cleaning appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by employee commutes, motel patrons, and the movement of goods.

The proposed project would be subject to all relevant provisions of the most recent update of the CBSC, including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code and Building Energy Efficiency Standards would ensure that the proposed structures would consume energy efficiently. Required compliance with the CBSC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary. In addition, electricity supplied to the project by PG&E would comply with the State's Renewable Portfolio Standard (RPS), which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 60 percent by 2030. Thus, a portion of the energy consumed during project operations would originate from renewable sources.

Based on the above, compliance with the State's latest Energy Efficiency Standards would ensure that the proposed project would implement all necessary energy efficiency regulations.

Conclusion

Based on the above, construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, a *lessthan-significant* impact would occur.

Northern Queen Inn Expansion Project Initial Study

VI Wa	I. GEOLOGY AND SOILS.	Potentially Significant Impact	Less-Than- Significant 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:				
	 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 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 18-1B 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 wastewater disposal systems where sewers are not available for the disposal of wastewater?				×
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		*		

Discussion

The following discussion is based primarily on a Preliminary Geotechnical Engineering Report prepared by NV5 for the project site.¹¹ The Preliminary Geotechnical Engineering Report provides a preliminary evaluation of site conditions, and identifies areas of concern that require further investigation. As part of the Preliminary Geotechnical Engineering Report, a limited surface investigation, review of published geologic literature, and experience with subsurface conditions in the area were used to determine the general conditions of the project site geology.

a.i-ii. The project site is not located within the boundaries of an Earthquake Fault Zone, as designated pursuant to the Alquist-Priolo Earthquake Fault Zoning Act.¹² The nearest known active fault with surface displacement within Holocene time is the Cleveland Hill Fault, located approximately 32 miles northwest of the site. The project site does not contain any known faults or trace lines.¹³ Thus, fault rupture hazard is not a significant geologic concern at the site.

Based on the proximity of the project site to local and regional faulting, as well as historical seismic activity, strong seismic ground shaking is not anticipated to occur. In addition, the buildings would be constructed pursuant to the CBSC, which provides minimum standards

¹¹ NV5. Preliminary Geotechnical Engineering Report Northern Queen Inn - Expansion. November 11, 2009.

¹² California Geological Survey. *Earthquake Zones of Required Investigation, Altamont Quadrangle.* February 27, 2009.

¹³ Ibid.

to ensure that structures are designed using sound engineering practices and appropriate engineering standards for the seismic area in which a project site is located. Projects designed in accordance with the CBSC should be able to: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage, but with some non-structural damage; and 3) resist major earthquakes without collapse, but with some structural, as well as non-structural, damage. Although conformance with the CBSC does not guarantee that substantial structural damage would not occur in the event of a maximum magnitude earthquake, conformance with the CBSC can reasonably be assumed to ensure that the proposed structures would be survivable, allowing occupants to safely evacuate in the event of a major earthquake.

Proper engineering of the proposed project consistent with the CBSC would ensure that seismic-related effects would not cause adverse impacts. Therefore, a *less-than-significant* impact would occur related to seismic rupture of a known earthquake fault or strong seismic ground shaking.

aiii,aiv, According to the Preliminary Geotechnical Engineering Report prepared for the project c,d. site, the on-site soils were identified to be Hoda sandy loam and Placer Diggins. In addition, a large amount of undocumented fill was identified on the project site. The Hoda soil type is characterized by well-drained surface soil underlain by weathered granodiorite rock at depths of five to eight feet below ground surface. The Placer Diggins soil type is derived from tertiary river deposits in hydraulically mined areas, placer-mined areas, and areas of natural deposits along stream channels. Typically, the Placer Diggins soil type is composed of stones, cobblestones, or gravel, and bedrock may be exposed along stream channels. The Hoda soil types comprise most of the eastern edge of the project site boundary and an area near the center of the project site, along the western property line. The Placer Diggins soil type comprises the remainder of the project site.

The proposed project's potential effects related to liquefaction, landslides, lateral spreading, subsidence/settlement, expansive soils, and other unstable soil conditions are discussed in detail below.

Liquefaction

Soil liquefaction results from loss of strength during cyclic loading, especially as a result of cyclic loadings induced by earthquakes or ground shaking. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded fine sands. Based on the Preliminary Geotechnical Engineering Report prepared for the proposed project, the probability of soil liquefaction within the project site is low due to the well-drained soils underlying the project site. However, the undocumented fill could be susceptible to liquefaction. Thus, further evaluation and site-specific soil testing is required to ensure that a less-than-significant impact would occur related to liquefaction.

Landslides

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. The Nevada City General Plan lists a main precaution to avoid geotechnical hazards is through careful management of steeply sloping areas, which are known to be conducive to the risk of landslide. The project site features an over-steepened cut slope located along the western boundary of the project site. Due to the presence of the over-steepened cut slope, further evaluation is required to ensure that impacts related to landslides are less than significant.

Lateral Spreading

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. The amount of movement depends on the soil strength, duration and intensity of seismic shaking, topography, and free face geometry. Because the project site contains undocumented fill which could be susceptible to liquefaction, and because the site includes over-steepened slopes, further evaluation is required to ensure that impacts related to lateral spreading are less than significant.

Subsidence, Expansive Soils, and Undocumented Fill

When subsurface earth materials move, the movement can cause the gradual settling or sudden sinking of ground. The phenomenon of settling or sinking ground is referred to as subsidence, or settlement. Expansive soils are soils which undergo significant volume change with changes in moisture content. Specifically, such soils shrink and harden when dried and expand and soften when wetted, potentially resulting in damage to building foundations.

As noted previously, undocumented fill from unknown origin is located on-site. Based on the lack of information regarding the undocumented fill, the on-site fill has the potential to be expansive or to be susceptible to subsidence. Thus, further site-specific evaluation is required to ensure that impacts related to subsidence or expansive soils associated with the undocumented fill would be less than significant.

Conclusion

It is noted that the project site is currently developed with the existing Northern Queen Inn, and areas where the proposed expansion would occur have been subject to previous disturbance. In addition, the Preliminary Geotechnical Engineering Report concludes that implementation of the proposed project is feasible on the project site. Nonetheless, based on the discussion above and in an abundance of caution, the proposed project could result in potential hazards or risks related to liquefaction, landslides, lateral spreading, or subsidence and expansive soils. Thus, a **potentially significant** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

- VII-1. Prior to issuance of grading permits, a design-level Geotechnical Engineering Investigation shall be prepared in order to evaluate the proposed project's potential effects related to geologic hazards, including, but not limited to, liquefaction, subsidence, landslides, lateral spreading, and expansive soils. The City Engineer shall verify that all geotechnical recommendations specified in the design-level Geotechnical Engineering Investigation prepared for the project are properly incorporated in the project design.
- b. Issues related to erosion are discussed in Section X, Hydrology and Water Quality, of this IS/MND. As noted therein, the proposed project would not result in substantial soil erosion or the loss of topsoil. Thus, a *less-than-significant* impact would occur.

- e. The proposed project would connect to existing City sewer services. Thus, the construction or operation of septic tanks or other alternative wastewater disposal systems is not included as part of the project. Therefore, **no impact** regarding the capability of soil to adequately support the use of septic tanks or alternative wastewater disposal systems would occur.
- f. The project site has been subject to previous disturbance associated with development of the existing Northern Queen Inn. Given that the proposed project is an expansion of the existing on-site motel and would involve improvements in currently developed areas of the site, the discovery of previously unknown paleontological or geological resources is not anticipated to occur during development of the proposed project. Nonetheless, although not anticipated, the potential exists for unknown unique geological or paleontological resources to be encountered during ground-disturbing activities. Therefore, the proposed project could result in the direct or indirect destruction of a unique paleontological resource should any be identified on the site during construction, and a **potentially significant** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

VII-2. The project applicant shall retain the services of a professional paleontologist to educate the construction crew that will be conducting grading and excavation at the project site. The education shall consist of an introduction to the geology of the project site and the kinds of fossils that may be encountered, as well as what to do in case of a discovery. Should any vertebrate fossils (e.g., teeth, bones), an unusually large or dense accumulation of intact invertebrates, or well-preserved plant material (e.g., leaves) be unearthed by the construction crew, the Nevada City Planning Department shall be immediately notified and ground-disturbing activity shall be diverted to another part of the project site. The paleontologist shall be called on-site to assess the find and, if significant, recover the find in a timely manner. Finds determined significant by the paleontologist shall then be conserved and deposited with a recognized repository, such as the University of California Museum of Paleontology. The alternative mitigation would be to leave the significant finds in place, determine the extent of significant deposit, and avoid further disturbance of the significant deposit. Proof of the construction crew awareness training shall be submitted to the City's Planning Department in the form of a copy of training materials and the completed training attendance roster.

Less Than Significant Potentially Less-Than-VIII. GREENHOUSE GAS EMISSIONS. No Significant with Significant Impact Would the project: Impact Mitigation Impact Incorporated a. Generate greenhouse gas emissions, either directly or \square × \square indirectly, that may have a significant impact on the environment? b. Conflict with an applicable plan, policy or regulation \square adopted for the purpose of reducing the emissions of × greenhouse gasses?

Discussion

a,b. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO₂) and, to a lesser extent, other GHG pollutants, such as methane (CH₄) and nitrous oxide (N₂O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO₂ equivalents (MTCO₂e/yr).

In September 2006, AB 32, the California Climate Solutions Act of 2006, was enacted. Among other requirements, AB 32 required the CARB to identify the statewide level of GHG emissions in 1990 to serve as the emissions limit to be achieved by 2020, and to develop and implement a Scoping Plan. On September 8, 2016, AB 197 and Senate Bill (SB) 32 were enacted with the goal of providing further control over GHG emissions in the State. SB 32 built on previous GHG reduction goals by requiring that the CARB ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by the year 2030.

The proposed project is located within the jurisdictional boundaries of the NSAQMD, which does not currently have any established thresholds for GHG emissions. Nonetheless, NSAQMD prefers that GHG emissions are quantified for decision-makers and the public to consider. In addition, Nevada City does not have adopted GHG emission thresholds. Although the NSAQMD or the City have not adopted GHG thresholds, the thresholds of the nearby air pollution control districts of PCAPCD and Sacramento Metropolitan Air Quality Management District (SMAQMD) were applied to the proposed project for the purposes of this analysis. The thresholds of significance were adopted by the respective air districts to aid in compliance with the statewide goals established by AB 32 and SB 32, and the City has determined that the thresholds are appropriate for the proposed project.

Accordingly, the applicable thresholds of significance for this analysis are presented in Table 6.

Table 6 GHG Thresholds of Significance (MTCO₂e/yr)					
Air District	Construction Threshold	Operational Threshold			
PCAPCD	10,000	1,100			
SMAQMD	SMAQMD 1,100 1,100				
	ook Thresholds of Significance Ju SMAQMD Thresholds of Significal				

GHG emissions resulting from construction and operations of the proposed project were modeled using the CalEEMod emissions model under the same assumptions as discussed in Section III, Air Quality, of this IS/MND. All modeling outputs are included in Appendix A to this IS/MND.

Construction

Construction of the proposed project would occur over the course of approximately nine months. It should be noted that construction GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change. As discussed above, neither NSAQMD nor Nevada City has adopted thresholds of significance for construction-related GHG emissions. Therefore, the total emissions have been compared to the thresholds of significance used by the nearby air districts, PCAPCD and SMAQMD. The maximum annual unmitigated GHG emissions from construction of the proposed project are presented in Table 7 below.

Table 7				
Unmitigated Const	ruction GHG Emissions			
Construction Emissions	Annual GHG Emissions (MTCO ₂ e/yr)			
Maximum Project Emissions	308.85			
PCAPCD Threshold	10,000.00			
SMAQMD Threshold	1,100.00			
Exceeds Thresholds? NO				
Source: CalEEMod, August 2021 (see Appendi	ix A).			

As shown above, construction of the proposed project would result in maximum annual GHG emissions far below the thresholds of significance used by the nearby air districts.

Operations

The estimated unmitigated operational GHG emissions at full buildout of the proposed project in the year 2023 are presented in Table 8. Because NSAQMD has not adopted operational GHG thresholds, the total emissions were compared to both PCAPCD and SMAQMD operational GHG thresholds of significance. As shown in the table, the proposed project's annual unmitigated operational GHG emissions fall well below both PCAPCD's and SMAQMD's 1,100 MTCO₂e/yr threshold. As such, implementation of the proposed project would not conflict with achievement of the Statewide GHG reduction goals established by AB 32 and SB 32.

Table 8 Unmitigated Operational GHG Emissions				
Annual GHG EmissionsOperational Emissions(MTCO2e/yr)				
Project Emissions	278.76			
PCAPCD Threshold	1,100.00			
SMAQMD Threshold	1,100.00			
Exceeds Thresholds? NO				
Source: CalEEMod, August 2021 (see Appendix).				

Conclusion

In the absence of adopted thresholds of significance by the NSAQMD and the City, thresholds from nearby air districts were used in this analysis. Based on the above, the proposed project's GHG emissions would be below the thresholds of significance used by the nearby air districts. Therefore, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and a *less-than-significant* impact would occur.

Northern Queen Inn Expansion Project Initial Study

IX. HAZARDS AND HAZARDOUS MATERIALS.

Would the project:

- 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 likely 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 Section 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 the risk of loss, injury or death involving wildland fires?

Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
		×	
		*	
		×	
			×
			×
		×	
		×	

Discussion

- a. Motel uses are not typically associated with the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. Maintenance and operation of the proposed motel may include the use of common household cleaning products, fertilizers, and herbicides on-site, any of which could contain potentially hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. Due to the regulations governing use of such products would not represent a substantial risk to public health or the environment. Therefore, the project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and a *less-than-significant* impact would occur.
- b. The following discussion provides an analysis of potential hazards and hazardous materials associated with upset or accident conditions related to the proposed construction activities and existing on-site conditions.

Construction activities associated with the proposed project would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. Small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used at the project site and transported to and from the site during construction. However, the project contractor would be required to comply with all California Health and Safety Codes and local City ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Thus, construction of the proposed project

would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.

Known on-site hazardous conditions do not exist. The project site has already been developed with the existing Northern Queen Inn, and the proposed project would involve the expansion of the existing use. Thus, operations of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.

Based on the above, construction and operation of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. Thus, a *less-than-significant* impact would occur.

- c. The nearest school relative to the project site is Forest Charter School, located approximately 0.20-mile northwest of the site. However, as noted under question 'a', operations of the project would not involve the use or transport of hazardous materials. Therefore, the proposed project would have a *less-than-significant* impact related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- d. The project site is not included in the California Department of Toxic Substances Control EnviroStor Database.¹⁴ The Envirostor Database includes information provided by the Department of Toxic Substances Control (DTSC) and included in the State's Hazardous Waste and Substances Sites (Cortese) List, which is compiled pursuant to Government Code Section 65962.5. Therefore, the project would result in *no impact* related to being located on a hazardous materials site.
- e. The nearest airport to the project site is the Nevada County Airport, located approximately 2.2 miles south of the site. The site is not covered by an airport land use plan. Therefore, *no impact* would occur related to the project being located within an airport land use plan or within two miles of a public airport or public use airport.
- f. Nevada City has adopted a Disaster Plan that establishes a framework through which the City may prevent or mitigate the impacts of, prepare for, respond to, and recover from, a wide variety of disasters that could adversely affect the health, safety or general welfare of the citizens and visitors of Nevada City.¹⁵ The Disaster Plan delineates responsibilities and outlines the response actions for Nevada City staff when disasters occur. Implementation of the proposed project would not result in any substantial modifications to the existing roadway system and, thus, would not physically interfere with the Disaster Plan, particularly with any emergency evacuation routes. Furthermore, the proposed project would be consistent with what has been planned for the site and would not include land uses or operations that could impair implementation of the Disaster Plan. Therefore, the proposed project would not interfere with an emergency evacuation or response plan, and a *less-than-significant* impact would occur.

¹⁴ California Department of Toxic Substances Control. *Envirostor Database*. Available at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=nevadacity%2C+ca. Accessed July 2021.

¹⁵ Nevada City. *Disaster Plan*. January 1, 2011.

g. Issues related to wildfire hazards are discussed in Section XX, Wildfire, of this IS/MND. As noted therein, the project site is located within a Very High Fire Hazard Severity Zone.¹⁶ However, evacuation routes are located near the project site, including a shared route southeast of the project site as well as the primary site access on Railroad Avenue, and would provide safe and efficient evacuation for future patrons. In addition, the proposed project would be built in accordance with all applicable fire safety regulations. Furthermore, development of the project would be consistent with the existing on-site use and the General Plan land use designation; therefore, implementation of the proposed project would not increase risks related to wildfire as compared to what already occurs on-site and what was planned for the site in the General Plan and evaluated in the General Plan EIR. Overall, the proposed project would not expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands, and a *less-thansignificant* impact would occur.

¹⁶ California Department of Forestry and Fire Protection. *Nevada County, Very High Fire Hazard Severity Zones in LRA*. September 3, 2006.

Northern Queen Inn Expansion Project Initial Study

V	HYDROLOGY AND WATER		Less-Than-		
Χ.	QUALITY.	Potentially Significant	Significant with	Less-Than- Significant	No
Wc	ould the project:	Impact	Mitigation Incorporated	Impact	Impact
a.	Violate any water quality standards or waste discharge				
	requirements or otherwise substantially degrade surface			*	
b.	or ground water quality? 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			×	
e.	pollutants due to project inundation? Conflict with or obstruct implementation of a water quality				
0.	control plan or sustainable groundwater management			×	
	plan?				

Discussion

a. The following discussion provides a summary of the proposed project's potential to violate water quality standards or waste discharge requirements or otherwise degrade water quality during construction and operation.

Construction

During the early stages of construction activities, topsoil would be exposed due to grading and excavation of the site. After grading and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff, which could adversely affect water quality downstream.

The State Water Resources Control Board (SWRCB) regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres. The NPDES permit system was established in the federal Clean Water Act (CWA) to regulate municipal and industrial discharges to surface waters of the U.S. Each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. The State's General Construction Permit requires a Storm Water Pollution Prevention Plan (SWPPP) to be prepared for the site. A SWPPP describes Best Management Practices (BMPs) to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of the development project. Because the

proposed project would disturb greater than one acre of land, the proposed project would be subject to the requirements of the State's General Construction Permit.

In addition, the project would be required to comply with Section 13.08.090 of the City's Municipal Code, which includes standards for managing and prohibiting discharges. Per Section 13.08.090, stormwater or any unpolluted water will be discharged to pipelines that are specifically designated as storm drains, or to a natural outlet approved by the City manager. Therefore, the proposed project would not discharge sediment or urban pollutants through soil erosion, violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality during construction.

Operation

As noted throughout this IS/MND, the project site is developed with the existing Northern Queen Inn, and the portion of the site where the motel is proposed is already paved. As such, stormwater drainage facilities already exist to divert runoff towards the appropriate treatment areas. The only additional impervious surface area associated with the proposed project would be from the proposed cabins and the driveway extensions. Following implementation of the proposed project, runoff from new impervious surfaces would be directed towards the existing stormwater drainage system. All runoff would be managed in accordance with regulations established by the Central Valley Regional Water Quality Control Board.

Furthermore, the City would require implementation of the following standard conditions of approval (COAs):

- Prior to improvement plan permit issuance, prepare and submit with the project Improvement Plans, a drainage report to the City Engineering Department for review and approval. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: A written text addressing existing conditions, the effects of the improvements, all appropriate calculations, a watershed map, increases in downstream flows, proposed on- and off-site improvements and drainage easements to accommodate flows from this project. The report shall identify water quality protection features and methods to be used both during construction and for long-term post-construction water quality protection. The drainage report shall identify measures to intercept offsite storm runoff on the upslope side of buildings and convey said runoff around or between buildings.
- Prior to improvement plan permit issuance, demonstrate that all run-off water from impervious areas such as roofs, patios, and driveways will be collected and routes through specifically designed water quality treatment facilities (BMPs) for removal of pollutants of concern (e.g., sediment, oil/grease, etc.) prior to discharge to an appropriate disposal area. The ends of the culverts and/or drain pipes should be fitted with an energy dissipater, such a rip-rap boulders or concrete baffles. CC&Rs shall include a statement that it is the responsibility of the homeowners or property owners' association for drainage system inspection, maintenance, and cleaning on a regular basis to ensure that they are functioning correctly.

Compliance with State regulations and the City's standard COAs, above, would ensure that impacts related to water quality standards or waste discharge requirements do not occur during project operations.

Conclusion

Based on the above, compliance with the City's COA, as well as the applicable State and City standards and regulations would ensure that a *less-than-significant* impact would occur related to violating any water quality standards or waste discharge requirements or otherwise substantially degrading surface or ground water quality.

b,e. Water supply for Nevada City is primarily surface water from Deer Creek. However, in times of low surface water flows, potable water is provided by the Nevada Irrigation District (NID), which sources groundwater from the Martis Valley Groundwater Basin (MVGB). The MVGB, Basin No.6-67, is a 57-square-mile basin east of the Sierra Nevada crest. Groundwater level monitoring as part of the California Statewide Groundwater Elevation Monitoring is used to assess the sustainability of the MVGB and shows groundwater level elevation trends overtime.¹⁷ According the Annual Report, groundwater levels have remained stable in the MVGB. NID has drafted a Regional Groundwater Sustainability Plan, but the plan has not been adopted to date.

Given that the proposed project would be consistent with the site's current General Plan land use and zoning designations, as well as the existing land use, the project would not result in increased use of groundwater supplies beyond what has been anticipated for the site by the City. In addition, the proposed project would include pervious surfaces, such as the gravel parking stalls and landscapes areas, where groundwater recharge would continue to occur.

Therefore, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the MVGB. Thus, a *less-than-significant* impact would occur.

c.i-iii. Development of the proposed project could result in an increase in impervious surfaces on the project site, which could alter the existing drainage pattern of the site. However, as discussed above, the proposed project would be required to implement a grading and drainage plan as a COA prior to construction. The site would be graded and maintained such that surface drainage is directed away from structures in accordance with the 2019 CBSC. Additionally, the proposed project would include multiple landscaped areas throughout the site, as well as the gravel parking stalls and other open areas, which would allow for natural percolation of stormwater runoff. Furthermore, the proposed project would include temporary and permanent stormwater BMPs that have been designed to meet all applicable criteria and would promote water quality, mitigate peak flow increase, and ensure safety of structures.

Based on the above, the proposed project would result in a *less-than-significant* impact with respect to substantially altering the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion, siltation, or flooding on- or off-site, creating or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or providing substantial additional sources of polluted runoff.

¹⁷ GEI Consulting Engineers and Scientists. *Annual Report for the Martis Valley Groundwater Basin Sustainable Groundwater Management Act Alternative Submittal: Water Years 2016 and 2017.* March 2018.

c.iv. A hydrology report was prepared for the project site and classified the site as located within a 100-year floodplain and, thus, located within a Special Flood Hazard Area. Per Nevada City's Municipal Code, Chapter 13.20, finished floors must be elevated to a minimum of 2.0 feet above the 100-year flood elevation. According to the hydrology report prepared for the project, in order to ensure that the 100-year storm even would not result in flooding at the proposed buildings, the proposed project would include elevating the finished floor of the 20-unit building to a minimum of 3.0 feet above the existing grade, Cottage B a minimum of 3.5 feet above the existing grade, and Cottage C a minimum of 3.25 feet above the existing grade.¹⁸ Elevating the building foundations would effectively lift the proposed buildings out of the floodplain. Thus, the proposed structures would not be constructed within the floodplain nor be subjected to increased risks related to flood flows.

The proposed motel would be sited upon an existing paved area, and the proposed cabins would be located on separated and elevated building pads. During storm events, flood flows would be able to travel around the proposed buildings and the proposed project would not block or create a barrier for flood flows.

Therefore, development of the proposed project would not impede or redirect flood flows and a *less-than-significant* impact would occur.

d. Impacts related to flooding are discussed under question 'c.iv' above. Tsunamis are defined as sea waves created by undersea fault movement, whereas a seiche is a long-wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir. Due to the project site's substantial distance from the coast, and because large closed bodies of water do not exist in the project vicinity, the proposed project would not be exposed to flooding risks associated with tsunamis and seiches. Therefore, the proposed project has limited risk related to the release of pollutants due to project inundation due to flooding, tsunami, or seiche, and a *less-than-significant* impact would occur.

¹⁸ Nevada City Engineering, Inc. Northern Queen Inn Proposed Expansion: Engineering Report, Hydrologic, and Hydraulic Calculations for Analysis of Existing Sewer Capacity and Analysis of Potential Flooding. December 2020.

XI. LAND USE AND PLANNING. Would the project:

Physically divide an established community?

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
to a			×	
ation			×	

conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Cause a significant environmental impact due

Discussion

a.

b.

- a. A project risks dividing an established community if the project would introduce infrastructure or alter land uses so as to change the land use conditions in the surrounding community, or isolate an existing land use. Currently, the project site is developed with the existing Northern Queen Inn, and the proposed project would expand upon the current use. Accordingly, the project would not introduce a new land use type nor isolate the existing use. As such, the proposed project would not physically divide an established community, and a *less-than-significant* impact would occur.
- b. The project site is currently designated EC per the City's General Plan and is zoned EC and SL-SC. APN 37-050-02 is currently split zoned as SL-SC in the northern portion, and EC in the southern portion. As part of the project, the SL-SC zoning designation would be extended to the southern portion of APN 37-050-02. However, APN 37-050-03, which constitutes the southernmost parcel of the project site, would retain the EC zoning designation. Per the General Plan, allowable uses for the EC designation include light commercial or industrial developments. Similarly, the EC zoning district allows research and development, manufacturing, artist studios/craft workshops, and the SL zoning district is intended for hotels, motels, and bed and breakfast inns. Thus, the project would be consistent with the land use and zoning designations of the site.

As discussed throughout this IS/MND, the proposed project would not result in any significant environmental effects that cannot be mitigated to a less-than-significant level by the mitigation measures provided herein. Similarly, this IS/MND illustrates that the proposed project would not conflict with City policies or regulations adopted for the purpose of avoiding or mitigating an environmental effect, including, but not limited to, the City's noise standards and applicable SWRCB regulations related to stormwater. Therefore, the proposed project would not cause a significant environmental impact in excess of what has already been analyzed and anticipated in the General Plan EIR, and would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact. Thus, a *less-than-significant* impact would occur.

	I. MINERAL RESOURCES.	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			×	
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?			×	

Discussion

a,b. Areas subject to Mineral Land Classification studies are divided by the State Geologist into various Mineral Resource Zone (MRZ) categories that reflect varying degrees of mineral potential. The project site is classified as zone MRZ-2b. MRZ-2b zones are areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered mineral deposits that are either inferred reserves, as determined by limited sample analysis, exposure, and past mining history, or are deposits that presently are sub-economic.

Nevada City recognizing mining as an important part of history; however, the General Plan and Zoning Ordinance do not specifically accommodate a mining land use designation. In addition, the project site is already developed with the existing Northern Queen Inn, and mining on or near the project site would not be compatible with the existing surrounding land uses.

Because the project site has already been planned for development and is not designated or zoned for mineral extraction, and because the proposed project would be an extension of the existing use, a *less-than-significant* impact related to mineral resources would occur.

Northern Queen Inn Expansion Project Initial Study

	UI. NOISE.	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			*	
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?				×

Discussion

a. Some land uses are considered more sensitive to noise than others, and, thus, are referred to as sensitive noise receptors. Land uses often associated with sensitive noise receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise. In the vicinity of the project site, the nearest existing noise sensitive land uses are single-family residences, with the closest located approximately 275 feet to the north.

City Noise Standards

Chapter 8.20, Noise Control, of the City's Municipal Code establishes daytime and nighttime exterior noise limits. For daytime (7:00 AM to 9:00 PM), the noise limit is 75 dB measured 25 feet from the source, and for nighttime (9:00 PM to 7:00 AM), the noise limit is 60 dB at the nearest residential receiver. According to Nevada City Municipal Code Section 8.20.070, construction work is limited to 90 dBA, measured 50 feet from the source. Noise from both construction and operations of the proposed project are discussed in comparison to the foregoing standards included in the City's Municipal Code.

Project Construction Noise

During the construction of the proposed project, heavy equipment would be used for grading, excavation, paving, and building construction, which would temporarily increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. In addition, noise exposure at any single point outside the project site would vary depending on the proximity of construction activities to that point. Standard construction equipment, such as graders, backhoes, loaders, and trucks, would be used on-site.

Table 9 shows maximum noise levels associated with typical construction equipment. Based on the table, activities involved in typical construction would generate maximum noise levels up to 85 dB at a distance of 50 feet.

Table 9				
Construction Equipment Noise				
Type of Equipment	Maximum Level, dB at 50 feet			
Backhoe	78			
Compactor	83			
Compressor (air)	78			
Dozer	82			
Dump Truck	76			
Excavator	81			
Generator	81			
Pneumatic Tools 85				
Source: Federal Highway Administration, Roadway Construction Noise Model User's Guide, January 2006.				

As one increases the distance between equipment, or increases separation of areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of combining separate noise sources. The noise levels from a source decrease at a rate of approximately 6 dB per every doubling of distance from the noise source. For the project site, the closest receptors for construction noise would be the single-family residence located approximately 275 feet to the north. Due to the distance between the proposed construction area and the nearest receptors, the closest receptors would be exposed to maximum noise levels of approximately 70 dB, which would fall below the allowable construction noise limit of 90 dBA set forth in Section 8.20.070 of the Municipal Code.

Project Operational Noise

Operations of a motel and cabins are not known to generate substantial noise during operations. Considering the project site is already developed with the existing Northern Queen Inn, the expansion of such uses would not result in new types or substantially more intense operational noise. In conclusion, a less-than-significant impact would occur related to operational noise.

Conclusion

Based on the above, noise generated by construction and operations of the proposed project would be considered less than significant, and would not exceed the noise level standards established in Chapter 8.20 of the Nevada City Municipal Code. Thus, the project would not result in a temporary or permanent increase in noise in excess of the standards established in the local general plan or noise ordinance, or applicable standards of other agencies, and the impact would be **less than significant**.

b. Similar to noise, vibration involves a source, a transmission path, and a receiver. However, 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 depends 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 is measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of peak particle velocities (PPV) in inches per second (in/sec). Standards pertaining to perception, as well as damage to structures, have been developed for vibration levels defined in terms of PPV.

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 10, which was developed by Caltrans, shows the vibration levels that would normally be required to result in damage to structures.

Table 10						
	Effects of Vibration on People and Buildings					
PP	V					
mm/sec	in/sec	Human Reaction	Effect on Buildings			
0.15 to 0.30	0.006 to 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 to 15	0.4 to 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: Caltrans. Transportation Related Earthborne Vibrations. TAV-02-01-R9601. February 20, 2002.					

As shown in the table, the threshold for architectural damage to structures is 0.20 in/sec PPV and continuous vibrations of 0.10 in/sec PPV, or greater, would likely cause annoyance to sensitive receptors.

The proposed project would only cause elevated vibration levels during construction, as the proposed project would not involve any uses or operations that would generate substantial ground-borne vibration. Table 11 shows the typical vibration levels produced by construction equipment at various distances. The nearest existing structure relative to the project site is a single-family residence, located approximately 275 feet away. Thus, per the vibration levels shown in Table 11, groundborne vibrations at the nearest structure would be less than 0.070 in/sec PPV, which would be below the 0.20 in/sec PPV threshold established by Caltrans for building damage as well as the 0.10 in/sec PPV threshold for annoyance. Therefore, the nearest structure would not be subjected to excessive ground-borne vibration associated with project construction.

Based on the above, development of the proposed project would not expose people to or generate excessive ground-borne vibration or ground-borne noise levels, and a *less-than-significant* impact would occur.

Table 11					
Vibration Levels	s for Various Construc	ction Equipment			
Type of Equipment	PPV at 25 feet (in/sec)	PPV at 50 feet (in/sec)			
Large Bulldozer	0.089	0.029			
Loaded Trucks	0.076	0.025			
Small Bulldozer	0.003	0.000			
Auger/drill Rigs	0.089	0.029			
Jackhammer	0.035	0.011			
Vibratory Hammer	0.070	0.023			
Vibratory Compactor/roller	0.210	0.070			
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006.					

c. The nearest airport to the project site is the Nevada County Airport, located approximately 2.2 miles south of the site. The site is not covered by an airport land use plan. Given that the project site is not located within two miles of a public airport or public use airport, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with such. Thus, **no impact** would occur.

XIV. POPULATION AND HOUSING. Would the project:

replacement housing elsewhere?

V. POPULATION AND HOUSING. build the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?			×	
Displace substantial numbers of existing people or housing, necessitating the construction of				×

Discussion

a.

b.

a. The proposed project would not include any residential development and/or permanent lodging. Thus, the project would not directly induce population growth. While the proposed project could include the creation of new jobs, which could potentially result in an increase in the housing demand in the area, such an increase would be minimal due to the relatively small scale of the proposed project. In addition, given that the project is consistent with the site's land use designation, impacts related to population growth associated with development of the site have already been evaluated in the General Plan EIR. Thus, the proposed project would not induce substantial unplanned population growth in an area, either directly or indirectly, and a less-than-significant impact would occur.

b. The project site does not include permanent housing. As such, the proposed project would not displace existing housing or people and would not necessitate the construction of replacement housing elsewhere. Therefore, no impact would occur.

XV. PUBLIC SERVICES.

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:

an of new or potentially Significant Impact Impa

a.	Fire protection?		×	
b.	Police protection?		×	
C.	Schools?		×	
d.	Parks?		×	
e.	Other Public Facilities?		×	

Discussion

a,b. Fire protection services are currently provided to the site by the Nevada City Fire Department. The nearest fire station to the project site is located at 201 Providence Mine Road, approximately 2,000 feet from the project site. The Nevada City Fire Department maintains one fire station and is staffed by approximately six fire suppression staff.

The Nevada City Police Department provides police protection services at the project site. The City's Police Department headquarters is located at 317 Broad Street, approximately 2,000 feet from the project site.

Based on the proximity of the closest fire and police station, the relatively small scale of the proposed project, and the fact that the existing on-site Northern Queen Inn is already serviced by such facilities, new or expanded facilities would not be required as a result of the proposed project. Furthermore, the project would comply with all applicable State and local requirements related to fire safety and security. Compliance with such standards would minimize fire and police protection demands associated with the project.

Additionally, because the proposed project is consistent with the project site's current General Plan land use and zoning designations for the site, potential increases in demand for fire and police protection services associated with buildout of the site have been anticipated by the City and analyzed in the General Plan EIR.

Based on the above, the proposed project would result in a *less-than-significant* impact related to the need for new or physically altered fire or police protection facilities, the construction of which could cause significant environmental impacts.

c-e. The proposed project would not include any residential development and, thus, would not result in population growth such that demand for schools, parks, or other public facilities would increase substantially. The existing on-site amenities associated with the motel, such as outdoor recreation areas, would be available for future patrons' use. In addition, the project would be subject to a development impact fee in accordance with Section 3.36.010 of the Nevada City Municipal Code. The fee is assessed by the City Council and is intended to fund public facilities including recreational facilities. Therefore, the proposed project would have a *less-than-significant* impact related to the need for new or physically altered schools, parks, or other public facilities, the construction of which could cause significant environmental impacts.

	/I. RECREATION. build the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			*	
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?			×	

Discussion

a,b. The proposed project would include an expansion of the existing motel uses on a site designated for hotels and motels. The proposed project would not result in population growth that could result in increased demand on existing recreational facilities or cause the construction or expansion of recreational facilities. In addition, the project would be subject to a development impact fee in accordance with Section 3.36.010 of the Nevada City Municipal Code, which is intended to fund public facilities including recreational facilities. Thus, a *less-than-significant* impact related to recreational facilities would occur.

	/II. TRANSPORTATION. build the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a.	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			*	
b.	Conflict or be inconsistent with CEQA Guidelines section 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?			×	

Discussion

a. The proposed project would include the expansion of the current on-site development with 20 motel rooms, 12 cabins, and associated improvements. A Trip Generation and Vehicle Miles Traveled (VMT) Analysis was prepared for the proposed project. As noted therein, project vehicle trip generation rates were obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition). Based on the ITE rates, the proposed project is estimated to generate 214 new daily one-way vehicle trips, including 16 trips during the PM peak hour (see Table 12).¹⁹

Table 12 Project Vehicle Trip Analysis							
Land Daily PM Peak Hour Use Vehicle Trips Vehicle Trips							
Description	Code	Quantity	Rate	Trips	In	Out	Total
Motel	Hotel (310)	20 Rooms	8.36	134	5	5	10
Cabins	Hotel (310)	12 Rooms	8.36	80	3	3	6
Project Total: 214 8 8 16							
Source: LSC Transportation Consultants, Inc.							

The Traffic Impact Analysis Guidelines for the County of Nevada (June 2020) states that a traffic memo or study is required if a project generates 100 or more new peak hour vehicle trips. As shown in Table 12, the proposed project would generate less than 100 PM peak hour trips and, therefore, additional analysis is not required.

The law has changed with respect to how transportation-related impacts may be addressed under CEQA. Traditionally, lead agencies used level of service (LOS) to assess the significance of such impacts, with greater levels of congestion considered to be more significant than lesser levels. Mitigation measures typically took the form of capacity-increasing improvements, which often had their own environmental impacts (e.g., to biological resources). Depending on circumstances, and an agency's tolerance for congestion (e.g., as reflected in its general plan), LOS D, E, or F often represented significant environmental effects. In 2013, however, the State Legislature passed legislation with the intention of ultimately doing away with LOS in most instances as a

¹⁹ LSC Transportation Consultants, Inc. *Northern Queen Inn - Trip Generation and Vehicle Miles Traveled (VMT) Analysis.* September 28, 2021.

basis for environmental analysis under CEQA. Enacted as part of SB 743 (2013), PRC Section 21099, subdivision (b)(1), directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed CEQA Guidelines addressing "criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the criteria, [OPR] shall recommend potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated. The office may also establish criteria for models used to analyze transportation impacts to ensure the models are accurate, reliable, and consistent with the intent of this section."

Subdivision (b)(2) of Section 21099 further provides that "[u]pon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion *shall not be considered a significant impact on the environment* pursuant to [CEQA], except in locations specifically identified in the guidelines, if any." (Italics added.)

Pursuant to SB 743, the Natural Resources Agency promulgated CEQA Guidelines Section 15064.3 in late 2018, and the bill became effective in early 2019. Subdivision (a) of that section provides that "[g]enerally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact."²⁰

Considering the above, the following discussion evaluates whether implementation of the proposed project would conflict with transit, bicycle, and pedestrian facilities.

Transit, Bicycle, and Pedestrian Facilities

Bus service in Nevada County is provided by Gold Country Stage, which operates local bus service with regional connections to destinations north and south of Nevada City. Bus stops near the project site are located along Zion Street and Sacramento Street. Specifically, the nearest northbound bus stop to the project site is located approximately 0.25-mile northwest on Sacramento Street and the nearest southbound bus stop to the project site is located approximately 0.44-mile south at Pinewoods Road. Because the proposed project would not increase the City's population, any additional demand associated with the proposed project could be accommodated by the existing transit

²⁰ Subdivision (b)(2) of Section 15064.3 ("transportation projects") provides that "[t]ransportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.

facilities. Therefore, the proposed project would not conflict with a program, plan, ordinance, or policy related to the City's transit facilities.

Currently, over 33 miles of sidewalks and less than one mile of bicycle trail facilities exist within in Nevada City.²¹ Bike lanes are not located in the vicinity of the project site, and the Nevada County Active Transportation Plan does not identify any planned bicycle facilities near the project site. Due to the nature of the proposed project, the project is not expected to generate a significant amount of bicycle trips. Additionally, because the proposed project would expand the existing use, implementation of the project area. Thus, the proposed project would not interfere with any planned bike facilities identified in the Nevada County Active Transportation Plan.²²

Sidewalks are not located immediately along the project site, but an existing sidewalk extends along Railroad Avenue in the vicinity of the project site. Per the Nevada County Active Transportation Plan, a sidewalk is planned for development along the remainder of Railroad Avenue. Considering the proposed project would involve an expansion to the existing motel, implementation of the proposed project would not affect future development of the planned sidewalk along Railroad Avenue. In fact, according to Section 12.04.030 of the Municipal Code, the City Council can require that development projects provide funding for sidewalks that adjoin any lot within the City. Therefore, the proposed would not interfere with any planned pedestrian facilities identified in the Nevada County Active Transportation Plan.

Conclusion

Based on the above, a *less-than-significant* impact would occur related to conflicting with a program, plan, ordinance, or policy addressing the circulation system, including transit, bicycle, and pedestrian facilities.

b. Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Per Section 15064.3, analysis of VMT attributable to a project is the most appropriate measure of transportation impacts. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in Section 15064.3 (b)(2) regarding roadway capacity, a project's effect on automobile delay does not constitute a significant environmental impact under CEQA.

In the Trip Generation and VMT Analysis prepared for the proposed project, VMT was analyzed based on the methodologies found in *Senate Bill 743 Vehicle Miles Traveled Implementation Prepared for Nevada County Transportation Commission*, as well as in Nevada City's Resolution No. 2021-11 (February 2021). The applicable VMT screening criteria, as presented in Nevada City's Resolution No. 2021-11, Exhibit B, states that a project can be screened out of further analysis if:

"The project is a work-related land use and the [Traffic Analysis Zone] TAZ homebased work VMT per employee is equal to or less than 14.3 percent below the Nevada City subarea mean. The project should also be consistent with the jurisdiction's general plan and the Regional Transportation Plan."

²¹ Nevada County Transportation Commission. *Nevada County Active Transportation Plan.* July 2019.

²² Ibid.

The VMT screening tool was used for two parcels on the project site located in TAZ 558. The threshold, as provided by the screening tool, was determined to be 18 VMT per worker, which is 14.3 percent below the 21 VMT per worker subarea mean. For the proposed project, the VMT per worker was determined to be 13.5, which is below the screening threshold of 18 VMT per worker. Therefore, the proposed project would meet the Nevada City's screening criteria, and a less-than-significant impact related to VMT would occur.²³

Based on the above, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and a *less-than-significant* impact would occur.

c,d. Primary access to the project site would be provided by the existing entrance off of Railroad Avenue. In addition, as part of the proposed project, two new driveway extensions would be installed, including a 20-foot driveway to lead from the motel building and parking to the new cabins, as well as a hammerhead turn-around with overflow parking spaces. The proposed internal parking lot and drive aisles would be designed to be consistent with all applicable City roadway engineering standards.

The project site has adequate emergency access through the main entrance and a mutual emergency access with the campgrounds southeast of site. In the case of an emergency, one or both entrances could be used to access the site. The proposed project would not involve any alterations to the roadway network and, thus, would not result in inadequate emergency access.

Based on the above, the project would not substantially increase hazards due to design features or incompatible uses, and emergency accesses to the site would be adequate. Therefore, the project would result in a *less-than-significant* impact.

²³ LSC Transportation Consultants, Inc. Northern Queen Inn - Trip Generation and Vehicle Miles Traveled (VMT) Analysis. September 28, 2021.

XVIII.TRIBAL CULTURAL RESOURCES.

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).
- b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
	×		
	*		

Discussion

a,b. In compliance with AB 52 (Public Resources Code Section 21080.3.1), project notification letters were distributed on June 23, 2021, to the Washoe Tribe of Nevada and California, United Auburn Indian Community of the Auburn Rancheria, T'si-Akim Maidu, Nevada City Rancheria Tribal Council, and Colfax-Todds Valley Consolidated Tribe. The Nevada City Rancheria Tribal Council has initiated consultation and requested a site visit. Currently, consultation is underway.

As noted in Section V, Cultural Resources, of this IS/MND, a search of the NAHC's Sacred Lands File returned negative results, indicating that known tribal cultural resources do not exist on-site. Additionally, the Cultural Resources Inventory Survey prepared for the project site found that the site had been within the area covered by a previous archeological investigation; however, tribal cultural resources have not been documented on the project site.²⁴

Based on lack of identified resources at the site and the extensive disturbance that has occurred within the project vicinity, known tribal cultural resources do not exist within the site. Nevertheless, the possibility exists that construction of the proposed project could result in a substantial adverse change in the significance of a tribal cultural resource if previously unknown tribal cultural resources are uncovered during grading or other ground-disturbing activities. Thus, a **potentially significant** impact related to tribal cultural resources could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

XVIII-1. Implement Mitigation Measures V-1 and V-2.

²⁴ Sean Michael Jensen. Cultural Resources Inventory Survey: Northern Queen Inn Development Project circa 15.11acres Nevada County, California. September 22, 2019.

Northern Queen Inn Expansion Project Initial Study

XIX. UTILITIES AND SERVICE SYSTEMS.

Would the project:

- 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 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?
- 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?

Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
		*	
		*	
		×	
		×	
		*	

Discussion

a. Given that the project site is already developed with the existing Northern Queen Inn, water service is provided to the project site by the City and NID, and sewer service is provided by the City. The City supplies treated water to 70 percent of the City, and the NID supplies 600 connections within the City. The City's wastewater and sewer services serve 1,380 sewer connections, with one-third serving commercial use.²⁵ Electricity, natural gas, and telecommunications utilities are provided to the site by way of connections to existing infrastructure located within the immediate project vicinity. Therefore, the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, or other utility infrastructure would not be required.

Furthermore, given that the proposed project is consistent with the site's General Plan land use and zoning designations, the demand associated with buildout of the project site have been anticipated by the City, and associated environmental effects have been analyzed in the General Plan EIR. The proposed project would not increase demand such that new or expanding facilities are required. Therefore, the project would result in a *lessthan-significant* impact related to 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.

²⁵ Nevada Local Agency Formation Commission. *City of Nevada City Sphere of Influence Plan: Public Review Draft.* [pg.5]. July 2021.

b. Water supplies in Nevada City, including the project site, are provided by both the City and NID.²⁶ Per the NID's *2020 Urban Water Management Plans* (UWMP), adequate water supplies will be available to accommodate buildout of the City under a normal year.²⁷ However, for single-year and five-year drought periods, the NID plans to identify six drought stages including actions for the NID to alleviate the demand. Furthermore, Nevada City has adopted a water shortage contingency plan to address the water supply and standards for future drought seasons.²⁸

The proposed project is an expansion of the existing motel. The project site is consistent with the site's General Plan land use and zoning designations. Given that the project is consistent with the City's General Plan, water demand associated with buildout of the project site with hotel/motel uses has been anticipated by the City and accounted for in regional planning efforts, including the 2020 UWMP. Therefore, NID would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years, and a *less-than-significant* impact would occur.

c. Within Nevada City, sewer service is provided by the City. According to the *City of Nevada City Sphere of Influence Plan*, the City's wastewater treatment plant (WWTP) was comprehensively upgraded and expanded in 2006, and has a permitted average dry weather capacity of 0.69 million gallons per day (MGD).²⁹ Current average dry weather flow ranges from 0.38 to 0.47 MGD, which constitutes approximately 68 percent of the available capacity. Per the Nevada County General Plan EIR, Nevada City residents generate an average of 354 gallons per day per dwelling unit.³⁰ Although the proposed project would include hotel/motel uses rather than residential uses, the wastewater generation rate is assumed to be similar for the purposes of this analysis. Considering the proposed project would introduce 32 new units, the wastewater generate rate associated with operations of the project would be approximately 0.0113 MGD (32 units X 354 gallons per day per unit = 11,328 gallons per day). Given that the WWTP has a remaining capacity of 0.22 MGD, and the proposed project is conservatively anticipated to produce 0.0113 MGD, the WWTP has sufficient capacity to treat wastewater generated by the project.

Furthermore, the proposed project is consistent with the site's current General Plan land use and zoning designations. Thus, increased demand for wastewater collection and treatment facilities associated with buildout of the site have been anticipated by the City and analyzed in the General Plan. Thus, the City would have adequate capacity to serve the wastewater demand projected for the proposed project in addition to the City's existing commitments, and a *less-than-significant* impact would occur.

d,e. Solid waste, recyclable materials, and compostable material collection within Nevada City is provided through Waste Management of Nevada County. Solid waste from the City is

²⁶ Nevada Local Agency Formation Commission. *City of Nevada City Sphere of Influence Plan: Public Review Draft.* [pg. 5]. July 2021.

²⁷ California Water Service. Nevada Irrigation District 2020 Urban Water Management Plan, Public Draft- June 14 [pg. 2]. June 2021.

²⁸ Nevada City. Drought Action Plan: A Water Shortage Contingency Strategy for the City of Nevada City. March 2015.

²⁹ Nevada Local Agency Formation Commission. *City of Nevada City Sphere of Influence Plan: Public Review Draft.* [pg. 5]. July 2021.

³⁰ County of Nevada. *Nevada County General Plan Final Environmental Impact Report Volume I* [Table 4.10-6]. March 1995.

disposed of at the McCourtney Road Transfer Station, located at 14741 Wolf Mountain Road. The Transfer Station is permitted to accept 350 tons per day of residential and commercial solid waste, with a vehicle limit of 1,090 per day.³¹ From the Transfer Station, with the exception of recoverable materials, the solid waste is transported to the Lockwood Landfill outside of Reno, Nevada. The Lockwood Landfill, located in Sparks, Nevada, is a Class I Municipal Solid Waste Site that accepts municipal solid waste. The capacity of the Landfill is 302.5 million cubic yards (CY) with a disposal area of 856.5 acres. The Lockwood Regional Landfill has a waste volume of approximately 32.8 million CY.³²

Because the proposed project is consistent with the project site's current General Plan land use and zoning designations, construction and operation of the proposed project would not result in increased solid waste generation beyond what has been previously anticipated for the site by the City and analyzed in the General Plan EIR.

In addition, the project would be required to comply with all applicable provisions of Chapter 17.122, Project Recycling Facilities, of the City's Municipal Code.

Therefore, the proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. Thus, a *less-than-significant* impact related to solid waste would occur as a result of the proposed project.

³¹ County of Nevada. *Initial Study/Mitigated Negative Declaration, McCourtney Road Transfer Station Renovation Project.* December 10, 2020.

³² Nevada Division of Environmental Protection. *Lockwood Fact Sheet*. Available at: https://ndep.nv.gov/uploads/land-waste-solid-fac-docs/lockwood-fact-sheet.pdf. Accessed January 22, 2021.

XX. WILDFIRE.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- 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?

Discussion

According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire a-d. and Resource Assessment Program, the project site is located within a Very High Fire Hazard Severity Zone.³³ However, the project site is surrounded by existing development and would expand upon the existing on-site development; thus, implementation of the proposed project would not exacerbate the risk of fire in the project area. Additionally, the project would not include the installation of any infrastructure which would exacerbate fire risk at the site. Available evacuation routes include a shared route southeast of the project site as well as the primary site access on Railroad Avenue, and would provide a safe and efficient evacuation plan for future patrons.³⁴ In addition, the proposed project would not alter nearby roadways and, thus, would not impair an emergency evacuation route. The project site includes over-steepened slopes on the western portion of the project area. However, steep-walled canyons or mountainous valleys do not surround site. If a wildfire were to occur. landslides and post-fire debris flow would not adversely affect the site. Finally, per Chapter 15.08 of the City's Municipal Code, the project would be required to comply with the California Fire Code, compliance with which would help to reduce potential adverse effects associated with wildfire.

Based on the above, the proposed project would not be expected to be subject to or result in substantial adverse effects related to wildfires, and a *less-than-significant* impact would occur.

Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
		×	
		×	
		*	
		×	

³³ California Department of Forestry and Fire Protection. *Nevada County, Very High Fire Hazard Severity Zones in LRA*. September 3, 2006.

³⁴ Ready Nevada County. *Evacuation Zones*. Available at: https://www.mynevadacounty.com/3223/Evacuation-Zones. Accessed June 2021.

Northern Queen Inn Expansion Project Initial Study

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.

- 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?

Discussion

a. As discussed in Section IV, Biological Resources, of this IS/MND, while the potential exists for both the dubious pea and nesting birds and raptors protected by the MBTA to occur on-site, Mitigation Measures IV-1 through IV-6 would ensure that impacts to special-status species would be less than significant. The project site is developed and does not contain any known historic or prehistoric resources. Thus, implementation of the proposed project is not anticipated to result in impacts related to historic or prehistoric resources. Nevertheless, Mitigation Measures V-1 and V-2 would ensure that in the event that historic or prehistoric resources are discovered within the project site during construction activities, such resources are protected in compliance with the requirements of CEQA.

Considering the above, the proposed project would not: 1) degrade the quality of the environment; 2) substantially reduce or impact the habitat of fish or wildlife species; 3) cause fish or wildlife populations to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or 6) eliminate important examples of the major periods of California history or prehistory. Therefore, a **less-than-significant** impact would occur.

b. The proposed project in conjunction with other development within Nevada City could incrementally contribute to cumulative impacts in the area. However, as demonstrated in this IS/MND, all potential environmental impacts that could occur as a result of project implementation would be reduced to a less-than-significant level through compliance with the mitigation measures included in this IS/MND, as well as applicable General Plan policies, Municipal Code standards, and other applicable local and State regulations. In addition, the project would be consistent with the site's existing land use and zoning designations. Accordingly, buildout of the site with hotel/motel use was generally considered in the cumulative analysis of buildout of the General Plan within the General Plan EIR.

Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
	*		
	*		
	×		

As noted in Section 21083.3 of the CEQA Guidelines, where a project is consistent with zoning and general plan designations for the site, and an EIR has been certified with respect to that general plan, the analysis of potential environmental impacts resulting from the individual project should focus on those effects that are peculiar to the proposed project. As demonstrated throughout this IS/MND, the proposed project would not result in any significant environmental impacts peculiar to the project, and, thus, the proposed project would not contribute any new or additional impacts not previously analyzed in the General Plan EIR. Therefore, when viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of the proposed project would not result in a cumulatively considerable contribution to cumulative impacts in Nevada City and the project's incremental contribution to cumulative impacts would be *less than significant*.

c. As described in this IS/MND, the proposed project would comply with all applicable General Plan policies, Municipal Code standards, other applicable local and State regulations, and mitigation measures included herein. In addition, as discussed in the Air Quality, Geology and Soils, GHG, Hazards and Hazardous Materials, and Noise sections of this IS/MND, the proposed project would not cause substantial effects to human beings, which cannot be mitigated to less-than-significant levels, including effects related to exposure to air pollutants, geologic hazards, GHG emissions, hazardous materials, and excessive noise. Therefore, the proposed project's impact would be **less than significant**.

APPENDIX A

AIR QUALITY AND GREENHOUSE GAS MODELING RESULTS

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Northern Queen Inn Expansion Project

Northern Sierra AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Motel	32.00	Room	13.70	62,726.40	0
Parking Lot	157.00	Space	1.41	62,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	72
Climate Zone	1			Operational Year	2023
Utility Company	Pacific Gas and Electric C	ompany			
CO2 Intensity (Ib/MWhr)	203.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjusted per site plan.

Construction Phase - Construction phase timing based on applicant-provided aq questionnaire.

Grading -

Vehicle Trips - Trip rates adjusted per project-specific traffic report.

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	120.00
tblConstructionPhase	NumDays	300.00	120.00
tblConstructionPhase	NumDays	20.00	14.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	10.00	30.00
tblConstructionPhase	PhaseEndDate	11/24/2023	2/23/2023
tblConstructionPhase	PhaseEndDate	9/29/2023	2/9/2023
tblConstructionPhase	PhaseEndDate	10/27/2023	8/25/2022
tblConstructionPhase	PhaseStartDate	10/28/2023	9/9/2022
tblConstructionPhase	PhaseStartDate	8/6/2022	8/26/2022
tblConstructionPhase	PhaseStartDate	9/30/2023	8/6/2022
tblConstructionPhase	PhaseStartDate	6/11/2022	5/15/2022
tblLandUse	LotAcreage	1.44	13.70
tblVehicleTrips	ST_TR	3.35	6.69
tblVehicleTrips	SU_TR	3.35	6.69
tblVehicleTrips	WD_TR	3.35	6.69

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					ton	s/yr							МТ	'/yr		
2022	0.7209	1.9979	1.7921	3.4800e- 003	0.4669	0.0936	0.5605	0.2155	0.0872	0.3027	0.0000	305.8408	305.8408	0.0744	3.8700e- 003	308.8540
2023	0.2744	0.2536	0.3074	5.8000e- 004	9.7200e- 003	0.0117	0.0214	2.6300e- 003	0.0111	0.0137	0.0000	51.3155	51.3155	8.6000e- 003	1.1400e- 003	51.8712
Maximum	0.7209	1.9979	1.7921	3.4800e- 003	0.4669	0.0936	0.5605	0.2155	0.0872	0.3027	0.0000	305.8408	305.8408	0.0744	3.8700e- 003	308.8540

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					ton	s/yr							MT	'/yr		
2022	0.7209	1.9979	1.7921	3.4800e- 003	0.4669	0.0936	0.5605	0.2155	0.0872	0.3027	0.0000	305.8405	305.8405	0.0744	3.8700e- 003	308.8537
2023	0.2744	0.2536	0.3074	5.8000e- 004	9.7200e- 003	0.0117	0.0214	2.6300e- 003	0.0111	0.0137	0.0000	51.3155	51.3155	8.6000e- 003	1.1400e- 003	51.8711
Maximum	0.7209	1.9979	1.7921	3.4800e- 003	0.4669	0.0936	0.5605	0.2155	0.0872	0.3027	0.0000	305.8405	305.8405	0.0744	3.8700e- 003	308.8537

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

		ROG	NOx	со	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
ſ	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	5-15-2022	8-14-2022	1.2127	1.2127
2	8-15-2022	11-14-2022	0.9428	0.9428
3	11-15-2022	2-14-2023	1.0374	1.0374
4	2-15-2023	5-14-2023	0.0452	0.0452
		Highest	1.2127	1.2127

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					ton			МТ	/yr							
Area	0.3241	2.0000e- 005	1.7400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.3800e- 003	3.3800e- 003	1.0000e- 005	0.0000	3.6000e- 003
Energy	6.9500e- 003	0.0632	0.0531	3.8000e- 004		4.8000e- 003	4.8000e- 003		4.8000e- 003	4.8000e- 003	0.0000	112.9313	112.9313	8.4600e- 003	2.1300e- 003	113.7764
Mobile	0.1545	0.2145	1.2048	1.7200e- 003	0.1497	2.1200e- 003	0.1518	0.0401	1.9900e- 003	0.0421	0.0000	160.3174	160.3174	0.0158	0.0108	163.9153
Waste	Y) 		,			0.0000	0.0000		0.0000	0.0000	3.5564	0.0000	3.5564	0.2102	0.0000	8.8108
Water	F) 	,	,			0.0000	0.0000		0.0000	0.0000	0.2575	0.4356	0.6931	0.0265	6.3000e- 004	1.5448
Total	0.4855	0.2777	1.2597	2.1000e- 003	0.1497	6.9300e- 003	0.1566	0.0401	6.8000e- 003	0.0469	3.8139	273.6876	277.5016	0.2610	0.0135	288.0510

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					ton			МТ	/yr							
Area	0.3241	2.0000e- 005	1.7400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.3800e- 003	3.3800e- 003	1.0000e- 005	0.0000	3.6000e- 003
Energy	6.9500e- 003	0.0632	0.0531	3.8000e- 004		4.8000e- 003	4.8000e- 003		4.8000e- 003	4.8000e- 003	0.0000	112.9313	112.9313	8.4600e- 003	2.1300e- 003	113.7764
Mobile	0.1507	0.2042	1.1508	1.6200e- 003	0.1408	2.0000e- 003	0.1428	0.0377	1.8900e- 003	0.0396	0.0000	151.1763	151.1763	0.0153	0.0103	154.6195
Waste	r:					0.0000	0.0000		0.0000	0.0000	3.5564	0.0000	3.5564	0.2102	0.0000	8.8108
Water	Fi					0.0000	0.0000		0.0000	0.0000	0.2575	0.4356	0.6931	0.0265	6.3000e- 004	1.5448
Total	0.4817	0.2675	1.2057	2.0000e- 003	0.1408	6.8100e- 003	0.1476	0.0377	6.7000e- 003	0.0444	3.8139	264.5465	268.3605	0.2604	0.0130	278.7551

	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	0.79	3.68	4.29	4.76	5.95	1.73	5.76	5.94	1.47	5.33	0.00	3.34	3.29	0.20	3.55	3.23

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/15/2022	6/24/2022	5	30	
2	Grading	Grading	6/25/2022	8/5/2022	5	30	
3	Building Construction	Building Construction	8/26/2022	2/9/2023	5	120	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Paving	Paving	8/25/2022	5	14	
5	Architectural Coating	•	2/23/2023	5	120	

Acres of Grading (Site Preparation Phase): 45

Acres of Grading (Grading Phase): 90

Acres of Paving: 1.41

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 94,090; Non-Residential Outdoor: 31,363; Striped Parking Area: 3,768 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Grading	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	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	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

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					ton	s/yr							MT	/yr		
Fugitive Dust					0.2949	0.0000	0.2949	0.1515	0.0000	0.1515	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0476	0.4963	0.2955	5.7000e- 004		0.0242	0.0242		0.0223	0.0223	0.0000	50.1591	50.1591	0.0162	0.0000	50.5647
Total	0.0476	0.4963	0.2955	5.7000e- 004	0.2949	0.0242	0.3191	0.1515	0.0223	0.1738	0.0000	50.1591	50.1591	0.0162	0.0000	50.5647

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	со	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					ton	s/yr							МТ	/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	1.1900e- 003	9.2000e- 004	9.2900e- 003	2.0000e- 005	2.1200e- 003	1.0000e- 005	2.1400e- 003	5.6000e- 004	1.0000e- 005	5.8000e- 004	0.0000	1.8390	1.8390	8.0000e- 005	7.0000e- 005	1.8616
Total	1.1900e- 003	9.2000e- 004	9.2900e- 003	2.0000e- 005	2.1200e- 003	1.0000e- 005	2.1400e- 003	5.6000e- 004	1.0000e- 005	5.8000e- 004	0.0000	1.8390	1.8390	8.0000e- 005	7.0000e- 005	1.8616

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					ton	s/yr							MT	∵/yr		
Fugitive Dust					0.2949	0.0000	0.2949	0.1515	0.0000	0.1515	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0476	0.4963	0.2955	5.7000e- 004		0.0242	0.0242		0.0223	0.0223	0.0000	50.1590	50.1590	0.0162	0.0000	50.5646
Total	0.0476	0.4963	0.2955	5.7000e- 004	0.2949	0.0242	0.3191	0.1515	0.0223	0.1738	0.0000	50.1590	50.1590	0.0162	0.0000	50.5646

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	со	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					ton	s/yr							МТ	∵/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	1.1900e- 003	9.2000e- 004	9.2900e- 003	2.0000e- 005	2.1200e- 003	1.0000e- 005	2.1400e- 003	5.6000e- 004	1.0000e- 005	5.8000e- 004	0.0000	1.8390	1.8390	8.0000e- 005	7.0000e- 005	1.8616
Total	1.1900e- 003	9.2000e- 004	9.2900e- 003	2.0000e- 005	2.1200e- 003	1.0000e- 005	2.1400e- 003	5.6000e- 004	1.0000e- 005	5.8000e- 004	0.0000	1.8390	1.8390	8.0000e- 005	7.0000e- 005	1.8616

3.3 Grading - 2022

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					ton	s/yr							МТ	'/yr		
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e- 004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633
Total	0.0544	0.5827	0.4356	9.3000e- 004	0.1381	0.0245	0.1626	0.0548	0.0226	0.0774	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	со	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					ton	s/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	1.3200e- 003	1.0300e- 003	0.0103	2.0000e- 005	2.3600e- 003	2.0000e- 005	2.3700e- 003	6.3000e- 004	1.0000e- 005	6.4000e- 004	0.0000	2.0433	2.0433	9.0000e- 005	8.0000e- 005	2.0685
Total	1.3200e- 003	1.0300e- 003	0.0103	2.0000e- 005	2.3600e- 003	2.0000e- 005	2.3700e- 003	6.3000e- 004	1.0000e- 005	6.4000e- 004	0.0000	2.0433	2.0433	9.0000e- 005	8.0000e- 005	2.0685

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					ton	s/yr							МТ	/yr		
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e- 004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632
Total	0.0544	0.5827	0.4356	9.3000e- 004	0.1381	0.0245	0.1626	0.0548	0.0226	0.0774	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

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					ton	s/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	1.3200e- 003	1.0300e- 003	0.0103	2.0000e- 005	2.3600e- 003	2.0000e- 005	2.3700e- 003	6.3000e- 004	1.0000e- 005	6.4000e- 004	0.0000	2.0433	2.0433	9.0000e- 005	8.0000e- 005	2.0685
Total	1.3200e- 003	1.0300e- 003	0.0103	2.0000e- 005	2.3600e- 003	2.0000e- 005	2.3700e- 003	6.3000e- 004	1.0000e- 005	6.4000e- 004	0.0000	2.0433	2.0433	9.0000e- 005	8.0000e- 005	2.0685

3.4 Building Construction - 2022

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					ton	s/yr							МТ	/yr		
Off-Road	0.0776	0.7105	0.7445	1.2300e- 003		0.0368	0.0368		0.0346	0.0346	0.0000	105.4350	105.4350	0.0253	0.0000	106.0665
Total	0.0776	0.7105	0.7445	1.2300e- 003		0.0368	0.0368		0.0346	0.0346	0.0000	105.4350	105.4350	0.0253	0.0000	106.0665

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2022

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					ton	s/yr							МТ	/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	2.6000e- 003	0.0615	0.0195	2.1000e- 004	6.2500e- 003	6.0000e- 004	6.8500e- 003	1.8100e- 003	5.8000e- 004	2.3900e- 003	0.0000	20.0287	20.0287	1.7000e- 004	2.9600e- 003	20.9165
Worker	0.0106	8.2400e- 003	0.0830	1.8000e- 004	0.0190	1.3000e- 004	0.0191	5.0500e- 003	1.2000e- 004	5.1700e- 003	0.0000	16.4246	16.4246	7.3000e- 004	6.2000e- 004	16.6271
Total	0.0132	0.0698	0.1024	3.9000e- 004	0.0252	7.3000e- 004	0.0259	6.8600e- 003	7.0000e- 004	7.5600e- 003	0.0000	36.4533	36.4533	9.0000e- 004	3.5800e- 003	37.5436

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					ton	s/yr							МТ	/yr		
Off-Road	0.0776	0.7105	0.7445	1.2300e- 003		0.0368	0.0368		0.0346	0.0346	0.0000	105.4349	105.4349	0.0253	0.0000	106.0663
Total	0.0776	0.7105	0.7445	1.2300e- 003		0.0368	0.0368		0.0346	0.0346	0.0000	105.4349	105.4349	0.0253	0.0000	106.0663

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2022

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					ton	s/yr							МТ	'/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	2.6000e- 003	0.0615	0.0195	2.1000e- 004	6.2500e- 003	6.0000e- 004	6.8500e- 003	1.8100e- 003	5.8000e- 004	2.3900e- 003	0.0000	20.0287	20.0287	1.7000e- 004	2.9600e- 003	20.9165
Worker	0.0106	8.2400e- 003	0.0830	1.8000e- 004	0.0190	1.3000e- 004	0.0191	5.0500e- 003	1.2000e- 004	5.1700e- 003	0.0000	16.4246	16.4246	7.3000e- 004	6.2000e- 004	16.6271
Total	0.0132	0.0698	0.1024	3.9000e- 004	0.0252	7.3000e- 004	0.0259	6.8600e- 003	7.0000e- 004	7.5600e- 003	0.0000	36.4533	36.4533	9.0000e- 004	3.5800e- 003	37.5436

3.4 Building Construction - 2023

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					ton	s/yr							МТ	/yr		
Off-Road	0.0228	0.2086	0.2355	3.9000e- 004		0.0102	0.0102	- 	9.5500e- 003	9.5500e- 003	0.0000	33.6117	33.6117	8.0000e- 003	0.0000	33.8116
Total	0.0228	0.2086	0.2355	3.9000e- 004		0.0102	0.0102		9.5500e- 003	9.5500e- 003	0.0000	33.6117	33.6117	8.0000e- 003	0.0000	33.8116

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

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					ton	s/yr							МТ	/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	5.2000e- 004	0.0166	5.5500e- 003	6.0000e- 005	1.9900e- 003	1.0000e- 004	2.0900e- 003	5.8000e- 004	1.0000e- 004	6.8000e- 004	0.0000	6.1832	6.1832	4.0000e- 005	9.1000e- 004	6.4554
Worker	3.1600e- 003	2.3400e- 003	0.0242	6.0000e- 005	6.0400e- 003	4.0000e- 005	6.0800e- 003	1.6100e- 003	4.0000e- 005	1.6400e- 003	0.0000	5.1143	5.1143	2.1000e- 004	1.8000e- 004	5.1738
Total	3.6800e- 003	0.0189	0.0298	1.2000e- 004	8.0300e- 003	1.4000e- 004	8.1700e- 003	2.1900e- 003	1.4000e- 004	2.3200e- 003	0.0000	11.2975	11.2975	2.5000e- 004	1.0900e- 003	11.6292

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					ton	s/yr							МТ	/yr		
	0.0228	0.2086	0.2355	3.9000e- 004		0.0102	0.0102		9.5500e- 003	9.5500e- 003	0.0000	33.6117	33.6117	8.0000e- 003	0.0000	33.8115
Total	0.0228	0.2086	0.2355	3.9000e- 004		0.0102	0.0102		9.5500e- 003	9.5500e- 003	0.0000	33.6117	33.6117	8.0000e- 003	0.0000	33.8115

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

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					ton	s/yr							МТ	/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	5.2000e- 004	0.0166	5.5500e- 003	6.0000e- 005	1.9900e- 003	1.0000e- 004	2.0900e- 003	5.8000e- 004	1.0000e- 004	6.8000e- 004	0.0000	6.1832	6.1832	4.0000e- 005	9.1000e- 004	6.4554
Worker	3.1600e- 003	2.3400e- 003	0.0242	6.0000e- 005	6.0400e- 003	4.0000e- 005	6.0800e- 003	1.6100e- 003	4.0000e- 005	1.6400e- 003	0.0000	5.1143	5.1143	2.1000e- 004	1.8000e- 004	5.1738
Total	3.6800e- 003	0.0189	0.0298	1.2000e- 004	8.0300e- 003	1.4000e- 004	8.1700e- 003	2.1900e- 003	1.4000e- 004	2.3200e- 003	0.0000	11.2975	11.2975	2.5000e- 004	1.0900e- 003	11.6292

3.5 Paving - 2022

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					ton	s/yr							MT	/yr		
Off-Road	7.7200e- 003	0.0779	0.1021	1.6000e- 004		3.9800e- 003	3.9800e- 003		3.6600e- 003	3.6600e- 003	0.0000	14.0193	14.0193	4.5300e- 003	0.0000	14.1326
Paving	1.8500e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.5700e- 003	0.0779	0.1021	1.6000e- 004		3.9800e- 003	3.9800e- 003		3.6600e- 003	3.6600e- 003	0.0000	14.0193	14.0193	4.5300e- 003	0.0000	14.1326

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2022

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					ton	s/yr							МТ	/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	4.6000e- 004	3.6000e- 004	3.6100e- 003	1.0000e- 005	8.3000e- 004	1.0000e- 005	8.3000e- 004	2.2000e- 004	1.0000e- 005	2.2000e- 004	0.0000	0.7152	0.7152	3.0000e- 005	3.0000e- 005	0.7240
Total	4.6000e- 004	3.6000e- 004	3.6100e- 003	1.0000e- 005	8.3000e- 004	1.0000e- 005	8.3000e- 004	2.2000e- 004	1.0000e- 005	2.2000e- 004	0.0000	0.7152	0.7152	3.0000e- 005	3.0000e- 005	0.7240

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					ton	s/yr							МТ	/yr		
Off-Road	7.7200e- 003	0.0779	0.1021	1.6000e- 004		3.9800e- 003	3.9800e- 003		3.6600e- 003	3.6600e- 003	0.0000	14.0193	14.0193	4.5300e- 003	0.0000	14.1326
Paving	1.8500e- 003					0.0000	0.0000	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.5700e- 003	0.0779	0.1021	1.6000e- 004		3.9800e- 003	3.9800e- 003		3.6600e- 003	3.6600e- 003	0.0000	14.0193	14.0193	4.5300e- 003	0.0000	14.1326

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2022

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					ton	s/yr							МТ	/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	4.6000e- 004	3.6000e- 004	3.6100e- 003	1.0000e- 005	8.3000e- 004	1.0000e- 005	8.3000e- 004	2.2000e- 004	1.0000e- 005	2.2000e- 004	0.0000	0.7152	0.7152	3.0000e- 005	3.0000e- 005	0.7240
Total	4.6000e- 004	3.6000e- 004	3.6100e- 003	1.0000e- 005	8.3000e- 004	1.0000e- 005	8.3000e- 004	2.2000e- 004	1.0000e- 005	2.2000e- 004	0.0000	0.7152	0.7152	3.0000e- 005	3.0000e- 005	0.7240

3.6 Architectural Coating - 2022

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					ton	s/yr							МТ	/yr		
Archit. Coating	0.5054					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2800e- 003	0.0570	0.0735	1.2000e- 004		3.3100e- 003	3.3100e- 003		3.3100e- 003	3.3100e- 003	0.0000	10.3407	10.3407	6.7000e- 004	0.0000	10.3575
Total	0.5136	0.0570	0.0735	1.2000e- 004		3.3100e- 003	3.3100e- 003		3.3100e- 003	3.3100e- 003	0.0000	10.3407	10.3407	6.7000e- 004	0.0000	10.3575

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	1.9600e- 003	1.5200e- 003	0.0153	3.0000e- 005	3.5000e- 003	2.0000e- 005	3.5300e- 003	9.3000e- 004	2.0000e- 005	9.5000e- 004	0.0000	3.0343	3.0343	1.3000e- 004	1.1000e- 004	3.0717
Total	1.9600e- 003	1.5200e- 003	0.0153	3.0000e- 005	3.5000e- 003	2.0000e- 005	3.5300e- 003	9.3000e- 004	2.0000e- 005	9.5000e- 004	0.0000	3.0343	3.0343	1.3000e- 004	1.1000e- 004	3.0717

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					ton	s/yr							МТ	/yr		
Archit. Coating	0.5054					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2800e- 003	0.0570	0.0735	1.2000e- 004		3.3100e- 003	3.3100e- 003		3.3100e- 003	3.3100e- 003	0.0000	10.3407	10.3407	6.7000e- 004	0.0000	10.3575
Total	0.5136	0.0570	0.0735	1.2000e- 004		3.3100e- 003	3.3100e- 003		3.3100e- 003	3.3100e- 003	0.0000	10.3407	10.3407	6.7000e- 004	0.0000	10.3575

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2022

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					ton	s/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	1.9600e- 003	1.5200e- 003	0.0153	3.0000e- 005	3.5000e- 003	2.0000e- 005	3.5300e- 003	9.3000e- 004	2.0000e- 005	9.5000e- 004	0.0000	3.0343	3.0343	1.3000e- 004	1.1000e- 004	3.0717
Total	1.9600e- 003	1.5200e- 003	0.0153	3.0000e- 005	3.5000e- 003	2.0000e- 005	3.5300e- 003	9.3000e- 004	2.0000e- 005	9.5000e- 004	0.0000	3.0343	3.0343	1.3000e- 004	1.1000e- 004	3.0717

3.6 Architectural Coating - 2023

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					ton	s/yr							MT	'/yr		
Archit. Coating	0.2433					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7400e- 003	0.0254	0.0353	6.0000e- 005		1.3800e- 003	1.3800e- 003		1.3800e- 003	1.3800e- 003	0.0000	4.9788	4.9788	3.0000e- 004	0.0000	4.9863
Total	0.2471	0.0254	0.0353	6.0000e- 005		1.3800e- 003	1.3800e- 003		1.3800e- 003	1.3800e- 003	0.0000	4.9788	4.9788	3.0000e- 004	0.0000	4.9863

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	8.8000e- 004	6.5000e- 004	6.7600e- 003	2.0000e- 005	1.6900e- 003	1.0000e- 005	1.7000e- 003	4.5000e- 004	1.0000e- 005	4.6000e- 004	0.0000	1.4275	1.4275	6.0000e- 005	5.0000e- 005	1.4441
Total	8.8000e- 004	6.5000e- 004	6.7600e- 003	2.0000e- 005	1.6900e- 003	1.0000e- 005	1.7000e- 003	4.5000e- 004	1.0000e- 005	4.6000e- 004	0.0000	1.4275	1.4275	6.0000e- 005	5.0000e- 005	1.4441

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					ton	s/yr							MT	∵/yr		
Archit. Coating	0.2433					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7400e- 003	0.0254	0.0353	6.0000e- 005		1.3800e- 003	1.3800e- 003		1.3800e- 003	1.3800e- 003	0.0000	4.9788	4.9788	3.0000e- 004	0.0000	4.9863
Total	0.2471	0.0254	0.0353	6.0000e- 005		1.3800e- 003	1.3800e- 003		1.3800e- 003	1.3800e- 003	0.0000	4.9788	4.9788	3.0000e- 004	0.0000	4.9863

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	8.8000e- 004	6.5000e- 004	6.7600e- 003	2.0000e- 005	1.6900e- 003	1.0000e- 005	1.7000e- 003	4.5000e- 004	1.0000e- 005	4.6000e- 004	0.0000	1.4275	1.4275	6.0000e- 005	5.0000e- 005	1.4441
Total	8.8000e- 004	6.5000e- 004	6.7600e- 003	2.0000e- 005	1.6900e- 003	1.0000e- 005	1.7000e- 003	4.5000e- 004	1.0000e- 005	4.6000e- 004	0.0000	1.4275	1.4275	6.0000e- 005	5.0000e- 005	1.4441

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					ton	s/yr							MT	/yr		
Mitigated	0.1507	0.2042	1.1508	1.6200e- 003	0.1408	2.0000e- 003	0.1428	0.0377	1.8900e- 003	0.0396	0.0000	151.1763	151.1763	0.0153	0.0103	154.6195
Unmitigated	0.1545	0.2145	1.2048	1.7200e- 003	0.1497	2.1200e- 003	0.1518	0.0401	1.9900e- 003	0.0421	0.0000	160.3174	160.3174	0.0158	0.0108	163.9153

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Motel	214.08	214.08	214.08	406,274	382,101
Parking Lot	0.00	0.00	0.00		
Total	214.08	214.08	214.08	406,274	382,101

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
Motel	9.50	7.30	7.30	19.00	62.00	19.00	58	38	4
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
Motel	0.392441	0.066170	0.242659	0.163627	0.054061	0.010052	0.007796	0.013440	0.000833	0.000179	0.040629	0.000634	0.007480
Parking Lot	0.392441	0.066170	0.242659	0.163627	0.054061	0.010052	0.007796	0.013440	0.000833	0.000179	0.040629	0.000634	0.007480

5.0 Energy Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					ton	s/yr							MT	7/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	44.1104	44.1104	7.1400e- 003	8.6000e- 004	44.5466
Electricity Unmitigated	n					0.0000	0.0000		0.0000	0.0000	0.0000	44.1104	44.1104	7.1400e- 003	8.6000e- 004	44.5466
Mitigated	6.9500e- 003	0.0632	0.0531	3.8000e- 004		4.8000e- 003	4.8000e- 003		4.8000e- 003	4.8000e- 003	0.0000	68.8209	68.8209	1.3200e- 003	1.2600e- 003	69.2299
NaturalGas Unmitigated	6.9500e- 003	0.0632	0.0531	3.8000e- 004		4.8000e- 003	4.8000e- 003		4.8000e- 003	4.8000e- 003	0.0000	68.8209	68.8209	1.3200e- 003	1.2600e- 003	69.2299

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s 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					ton	s/yr							МТ	/yr		
Motel	1.28965e +006	6.9500e- 003	0.0632	0.0531	3.8000e- 004		4.8000e- 003	4.8000e- 003		4.8000e- 003	4.8000e- 003	0.0000	68.8209	68.8209	1.3200e- 003	1.2600e- 003	69.2299
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		6.9500e- 003	0.0632	0.0531	3.8000e- 004		4.8000e- 003	4.8000e- 003		4.8000e- 003	4.8000e- 003	0.0000	68.8209	68.8209	1.3200e- 003	1.2600e- 003	69.2299

Mitigated

	NaturalGa s 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					ton	s/yr							MT	/yr		
Motel	1.28965e +006	6.9500e- 003	0.0632	0.0531	3.8000e- 004		4.8000e- 003	4.8000e- 003		4.8000e- 003	4.8000e- 003	0.0000	68.8209	68.8209	1.3200e- 003	1.2600e- 003	69.2299
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		6.9500e- 003	0.0632	0.0531	3.8000e- 004		4.8000e- 003	4.8000e- 003		4.8000e- 003	4.8000e- 003	0.0000	68.8209	68.8209	1.3200e- 003	1.2600e- 003	69.2299

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
Motel	454766	42.0767	6.8100e- 003	8.3000e- 004	42.4928
Parking Lot	21980	2.0337	3.3000e- 004	4.0000e- 005	2.0538
Total		44.1104	7.1400e- 003	8.7000e- 004	44.5466

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
Motel	454766	42.0767	6.8100e- 003	8.3000e- 004	42.4928
Parking Lot	21980	2.0337	3.3000e- 004	4.0000e- 005	2.0538
Total		44.1104	7.1400e- 003	8.7000e- 004	44.5466

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					ton	s/yr							МТ	'/yr		
Mitigated	0.3241	2.0000e- 005	1.7400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.3800e- 003	3.3800e- 003	1.0000e- 005	0.0000	3.6000e- 003
Unmitigated	0.3241	2.0000e- 005	1.7400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.3800e- 003	3.3800e- 003	1.0000e- 005	0.0000	3.6000e- 003

6.2 Area by SubCategory

<u>Unmitigated</u>

	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					ton	s/yr							MT	/yr		
Architectural Coating	0.0749					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2490					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e- 004	2.0000e- 005	1.7400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.3800e- 003	3.3800e- 003	1.0000e- 005	0.0000	3.6000e- 003
Total	0.3241	2.0000e- 005	1.7400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.3800e- 003	3.3800e- 003	1.0000e- 005	0.0000	3.6000e- 003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					ton	s/yr							MT	∵/yr		
Architectural Coating	0.0749					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2490					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e- 004	2.0000e- 005	1.7400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.3800e- 003	3.3800e- 003	1.0000e- 005	0.0000	3.6000e- 003
Total	0.3241	2.0000e- 005	1.7400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.3800e- 003	3.3800e- 003	1.0000e- 005	0.0000	3.6000e- 003

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 Applied

	Total CO2	CH4	N2O	CO2e
Category		MT	/yr	
Mitigated		0.0265	6.3000e- 004	1.5448
Unmitigated		0.0265	6.3000e- 004	1.5448

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
	0.811737/ 0.090193		0.0265	6.3000e- 004	1.5448
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.6931	0.0265	6.3000e- 004	1.5448

Page 29 of 31

Northern Queen Inn Expansion Project - Northern Sierra AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
Motel	0.811737/ 0.090193		0.0265	6.3000e- 004	1.5448
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.6931	0.0265	6.3000e- 004	1.5448

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	/yr	
initigated	3.5564	0.2102	0.0000	8.8108
Ginnigatou	3.5564	0.2102	0.0000	8.8108

Page 30 of 31

Northern Queen Inn Expansion Project - Northern Sierra AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/yr	
Motel	17.52	3.5564	0.2102	0.0000	8.8108
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		3.5564	0.2102	0.0000	8.8108

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/yr	
Motel	17.52	3.5564	0.2102	0.0000	8.8108
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		3.5564	0.2102	0.0000	8.8108

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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
	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Northern Queen Inn Expansion Project

Northern Sierra AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Motel	32.00	Room	13.70	62,726.40	0
Parking Lot	157.00	Space	1.41	62,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	72
Climate Zone	1			Operational Year	2023
Utility Company	Pacific Gas and Electric C	ompany			
CO2 Intensity (Ib/MWhr)	203.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjusted per site plan.

Construction Phase - Construction phase timing based on applicant-provided aq questionnaire.

Grading -

Vehicle Trips - Trip rates adjusted per project-specific traffic report.

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	120.00
tblConstructionPhase	NumDays	300.00	120.00
tblConstructionPhase	NumDays	20.00	14.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	10.00	30.00
tblConstructionPhase	PhaseEndDate	11/24/2023	2/23/2023
tblConstructionPhase	PhaseEndDate	9/29/2023	2/9/2023
tblConstructionPhase	PhaseEndDate	10/27/2023	8/25/2022
tblConstructionPhase	PhaseStartDate	10/28/2023	9/9/2022
tblConstructionPhase	PhaseStartDate	8/6/2022	8/26/2022
tblConstructionPhase	PhaseStartDate	9/30/2023	8/6/2022
tblConstructionPhase	PhaseStartDate	6/11/2022	5/15/2022
tblLandUse	LotAcreage	1.44	13.70
tblVehicleTrips	ST_TR	3.35	6.69
tblVehicleTrips	SU_TR	3.35	6.69
tblVehicleTrips	WD_TR	3.35	6.69

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	со	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/o	day							lb/c	lay		
2022	14.7508	38.9003	29.7611	0.0637	19.8049	1.6360	21.4184	10.1417	1.5051	11.6261	0.0000	6,170.824 7	6,170.824 7	1.9503	0.0877	6,221.069 9
2023	14.5638	16.9438	20.5344	0.0392	0.6680	0.7809	1.4490	0.1804	0.7391	0.9195	0.0000	3,804.682 6	3,804.682 6	0.6454	0.0838	3,845.786 1
Maximum	14.7508	38.9003	29.7611	0.0637	19.8049	1.6360	21.4184	10.1417	1.5051	11.6261	0.0000	6,170.824 7	6,170.824 7	1.9503	0.0877	6,221.069 9

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/d	day							lb/c	day		
2022	14.7508	38.9003	29.7611	0.0637	19.8049	1.6360	21.4184	10.1417	1.5051	11.6261	0.0000	6,170.824 7	6,170.824 7	1.9503	0.0877	6,221.069 9
2023	14.5638	16.9438	20.5344	0.0392	0.6680	0.7809	1.4490	0.1804	0.7391	0.9195	0.0000	3,804.682 6	3,804.682 6	0.6454	0.0838	3,845.786 1
Maximum	14.7508	38.9003	29.7611	0.0637	19.8049	1.6360	21.4184	10.1417	1.5051	11.6261	0.0000	6,170.824 7	6,170.824 7	1.9503	0.0877	6,221.069 9

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	со	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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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/c	lay		
Area	1.7766	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005		7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441
Energy	0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526
Mobile	0.9683	1.0625	6.2044	9.8400e- 003	0.8588	0.0117	0.8704	0.2292	0.0110	0.2402		1,011.327 4	1,011.327 4	0.0842	0.0603	1,031.411 4
Total	2.7830	1.4090	6.5147	0.0119	0.8588	0.0381	0.8968	0.2292	0.0374	0.2666		1,427.051 2	1,427.051 2	0.0922	0.0680	1,449.608 1

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/e	day							lb/c	lay		
Area	1.7766	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005		7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441
Energy	0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526
Mobile	0.9484	1.0116	5.9052	9.2800e- 003	0.8077	0.0110	0.8187	0.2156	0.0104	0.2260		953.5028	953.5028	0.0811	0.0576	972.7062
Total	2.7632	1.3582	6.2155	0.0114	0.8077	0.0374	0.8451	0.2156	0.0368	0.2524		1,369.226 6	1,369.226 6	0.0892	0.0653	1,390.902 9

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	со	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	0.71	3.61	4.59	4.70	5.95	1.66	5.77	5.95	1.58	5.34	0.00	4.05	4.05	3.31	3.97	4.05

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/15/2022	6/24/2022	5	30	
2	Grading	Grading	6/25/2022	8/5/2022	5	30	
3	Building Construction	Building Construction	8/26/2022	2/9/2023	5	120	
4	Paving	Paving	8/6/2022	8/25/2022	5	14	
5	Architectural Coating	Architectural Coating	9/9/2022	2/23/2023	5	120	

Acres of Grading (Site Preparation Phase): 45

Acres of Grading (Grading Phase): 90

Acres of Paving: 1.41

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 94,090; Non-Residential Outdoor: 31,363; Striped Parking Area: 3,768 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Grading	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

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
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	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	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

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/d	day							lb/c	lay		
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

	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/o	day							lb/c	lay		
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	0.0856	0.0512	0.6477	1.4100e- 003	0.1479	9.6000e- 004	0.1488	0.0392	8.9000e- 004	0.0401		143.4727	143.4727	5.4400e- 003	4.5000e- 003	144.9486
Total	0.0856	0.0512	0.6477	1.4100e- 003	0.1479	9.6000e- 004	0.1488	0.0392	8.9000e- 004	0.0401		143.4727	143.4727	5.4400e- 003	4.5000e- 003	144.9486

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

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/d	day							lb/c	day		
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

	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/d	day							lb/c	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	0.0856	0.0512	0.6477	1.4100e- 003	0.1479	9.6000e- 004	0.1488	0.0392	8.9000e- 004	0.0401		143.4727	143.4727	5.4400e- 003	4.5000e- 003	144.9486
Total	0.0856	0.0512	0.6477	1.4100e- 003	0.1479	9.6000e- 004	0.1488	0.0392	8.9000e- 004	0.0401		143.4727	143.4727	5.4400e- 003	4.5000e- 003	144.9486

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	со	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/o	day							lb/c	lay		
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	9.2036	1.6349	10.8385	3.6538	1.5041	5.1579		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	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/o	day							lb/c	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	0.0951	0.0569	0.7196	1.5700e- 003	0.1643	1.0700e- 003	0.1654	0.0436	9.9000e- 004	0.0446		159.4141	159.4141	6.0500e- 003	5.0000e- 003	161.0540
Total	0.0951	0.0569	0.7196	1.5700e- 003	0.1643	1.0700e- 003	0.1654	0.0436	9.9000e- 004	0.0446		159.4141	159.4141	6.0500e- 003	5.0000e- 003	161.0540

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

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/d	day							lb/c	day		
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	9.2036	1.6349	10.8385	3.6538	1.5041	5.1579	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	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/o	day							lb/c	lay		
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	0.0951	0.0569	0.7196	1.5700e- 003	0.1643	1.0700e- 003	0.1654	0.0436	9.9000e- 004	0.0446		159.4141	159.4141	6.0500e- 003	5.0000e- 003	161.0540
Total	0.0951	0.0569	0.7196	1.5700e- 003	0.1643	1.0700e- 003	0.1654	0.0436	9.9000e- 004	0.0446		159.4141	159.4141	6.0500e- 003	5.0000e- 003	161.0540

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2022

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/o	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

	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/d	lay		
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	0.0577	1.2939	0.4200	4.5800e- 003	0.1423	0.0132	0.1555	0.0410	0.0127	0.0536		485.0281	485.0281	4.2000e- 003	0.0717	506.5017
Worker	0.2521	0.1507	1.9070	4.1500e- 003	0.4354	2.8400e- 003	0.4382	0.1155	2.6200e- 003	0.1181		422.4474	422.4474	0.0160	0.0132	426.7932
Total	0.3098	1.4446	2.3270	8.7300e- 003	0.5777	0.0161	0.5938	0.1565	0.0153	0.1717		907.4756	907.4756	0.0202	0.0850	933.2949

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2022

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/e	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

	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/d	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	0.0577	1.2939	0.4200	4.5800e- 003	0.1423	0.0132	0.1555	0.0410	0.0127	0.0536		485.0281	485.0281	4.2000e- 003	0.0717	506.5017
Worker	0.2521	0.1507	1.9070	4.1500e- 003	0.4354	2.8400e- 003	0.4382	0.1155	2.6200e- 003	0.1181		422.4474	422.4474	0.0160	0.0132	426.7932
Total	0.3098	1.4446	2.3270	8.7300e- 003	0.5777	0.0161	0.5938	0.1565	0.0153	0.1717		907.4756	907.4756	0.0202	0.0850	933.2949

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

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/o	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	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/c	lay		
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	0.0366	1.0941	0.3750	4.4400e- 003	0.1423	7.1500e- 003	0.1495	0.0410	6.8400e- 003	0.0478		469.6614	469.6614	3.2100e- 003	0.0690	490.3127
Worker	0.2359	0.1340	1.7426	4.0300e- 003	0.4354	2.6600e- 003	0.4380	0.1155	2.4500e- 003	0.1179		412.7071	412.7071	0.0145	0.0122	416.7112
Total	0.2725	1.2281	2.1176	8.4700e- 003	0.5777	9.8100e- 003	0.5875	0.1565	9.2900e- 003	0.1657		882.3685	882.3685	0.0177	0.0813	907.0238

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

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/o	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	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/c	lay		
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	0.0366	1.0941	0.3750	4.4400e- 003	0.1423	7.1500e- 003	0.1495	0.0410	6.8400e- 003	0.0478		469.6614	469.6614	3.2100e- 003	0.0690	490.3127
Worker	0.2359	0.1340	1.7426	4.0300e- 003	0.4354	2.6600e- 003	0.4380	0.1155	2.4500e- 003	0.1179		412.7071	412.7071	0.0145	0.0122	416.7112
Total	0.2725	1.2281	2.1176	8.4700e- 003	0.5777	9.8100e- 003	0.5875	0.1565	9.2900e- 003	0.1657		882.3685	882.3685	0.0177	0.0813	907.0238

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2022

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/e	day							lb/c	day		
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.2639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3667	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

	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/c	lay		
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	0.0714	0.0426	0.5397	1.1800e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		119.5606	119.5606	4.5300e- 003	3.7500e- 003	120.7905
Total	0.0714	0.0426	0.5397	1.1800e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		119.5606	119.5606	4.5300e- 003	3.7500e- 003	120.7905

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	со	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/d	day							lb/c	lay		
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.2639			,,,,,,,		0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3667	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4

	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/e	day							lb/c	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	0.0714	0.0426	0.5397	1.1800e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		119.5606	119.5606	4.5300e- 003	3.7500e- 003	120.7905
Total	0.0714	0.0426	0.5397	1.1800e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		119.5606	119.5606	4.5300e- 003	3.7500e- 003	120.7905

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2022

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/o	day							lb/c	lay		
Archit. Coating	12.4779					0.0000	0.0000		0.0000	0.0000	1		0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	12.6824	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

	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/c	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	0.0523	0.0313	0.3958	8.6000e- 004	0.0904	5.9000e- 004	0.0910	0.0240	5.4000e- 004	0.0245		87.6778	87.6778	3.3200e- 003	2.7500e- 003	88.5797
Total	0.0523	0.0313	0.3958	8.6000e- 004	0.0904	5.9000e- 004	0.0910	0.0240	5.4000e- 004	0.0245		87.6778	87.6778	3.3200e- 003	2.7500e- 003	88.5797

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2022

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/d	day							lb/d	day		
Archit. Coating	12.4779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	12.6824	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

	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/o	day							lb/c	lay		
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	0.0523	0.0313	0.3958	8.6000e- 004	0.0904	5.9000e- 004	0.0910	0.0240	5.4000e- 004	0.0245		87.6778	87.6778	3.3200e- 003	2.7500e- 003	88.5797
Total	0.0523	0.0313	0.3958	8.6000e- 004	0.0904	5.9000e- 004	0.0910	0.0240	5.4000e- 004	0.0245		87.6778	87.6778	3.3200e- 003	2.7500e- 003	88.5797

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

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/o	day							lb/c	lay		
Archit. Coating	12.4779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	12.6696	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

	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/o	day							lb/c	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	0.0490	0.0278	0.3617	8.4000e- 004	0.0904	5.5000e- 004	0.0909	0.0240	5.1000e- 004	0.0245		85.6562	85.6562	3.0000e- 003	2.5400e- 003	86.4872
Total	0.0490	0.0278	0.3617	8.4000e- 004	0.0904	5.5000e- 004	0.0909	0.0240	5.1000e- 004	0.0245		85.6562	85.6562	3.0000e- 003	2.5400e- 003	86.4872

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

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/e	day							lb/c	lay		
Archit. Coating	12.4779					0.0000	0.0000	- - - - -	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	12.6696	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

	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/o	day							lb/c	lay		
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	0.0490	0.0278	0.3617	8.4000e- 004	0.0904	5.5000e- 004	0.0909	0.0240	5.1000e- 004	0.0245		85.6562	85.6562	3.0000e- 003	2.5400e- 003	86.4872
Total	0.0490	0.0278	0.3617	8.4000e- 004	0.0904	5.5000e- 004	0.0909	0.0240	5.1000e- 004	0.0245		85.6562	85.6562	3.0000e- 003	2.5400e- 003	86.4872

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	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/o	day							lb/c	lay		
Mitigated	0.9484	1.0116	5.9052	9.2800e- 003	0.8077	0.0110	0.8187	0.2156	0.0104	0.2260		953.5028	953.5028	0.0811	0.0576	972.7062
Unmitigated	0.9683	1.0625	6.2044	9.8400e- 003	0.8588	0.0117	0.8704	0.2292	0.0110	0.2402		1,011.327 4	1,011.327 4	0.0842	0.0603	1,031.411 4

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Motel	214.08	214.08	214.08	406,274	382,101
Parking Lot	0.00	0.00	0.00		
Total	214.08	214.08	214.08	406,274	382,101

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
Motel	9.50	7.30	7.30	19.00	62.00	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Motel	0.392441	0.066170	0.242659	0.163627	0.054061	0.010052	0.007796	0.013440	0.000833	0.000179	0.040629	0.000634	0.007480
Parking Lot	0.392441	0.066170	0.242659	0.163627	0.054061	0.010052	0.007796	0.013440	0.000833	0.000179	0.040629	0.000634	0.007480

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	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/o	day							lb/c	lay		
NaturalGas Mitigated	0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526
NaturalGas Unmitigated	0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s 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/e	day							lb/c	lay		
Motel	3533.3	0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526
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		0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526

Mitigated

	NaturalGa s Use	ROG	NOx	СО	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/o	day							lb/c	lay		
Motel	3.5333	0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526
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		0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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/e	day							lb/c	day		
Mitigated	1.7766	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005		7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441
Unmitigated	1.7766	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005	r 	7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	СО	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/d	day							lb/d	day		
Architectural Coating	0.4102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7900e- 003	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005		7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441
Total	1.7766	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005		7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					lb/d	day							lb/c	day		
Architectural Coating	0.4102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products						0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7900e- 003	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005		7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441
Total	1.7766	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005		7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441

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 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							
	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
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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 Applied

Northern Queen Inn Expansion Project

Northern Sierra AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Motel	32.00	Room	13.70	62,726.40	0
Parking Lot	157.00	Space	1.41	62,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	72
Climate Zone	1			Operational Year	2023
Utility Company	Pacific Gas and Electric C	ompany			
CO2 Intensity (Ib/MWhr)	203.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjusted per site plan.

Construction Phase - Construction phase timing based on applicant-provided aq questionnaire.

Grading -

Vehicle Trips - Trip rates adjusted per project-specific traffic report.

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	120.00
tblConstructionPhase	NumDays	300.00	120.00
tblConstructionPhase	NumDays	20.00	14.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	10.00	30.00
tblConstructionPhase	PhaseEndDate	11/24/2023	2/23/2023
tblConstructionPhase	PhaseEndDate	9/29/2023	2/9/2023
tblConstructionPhase	PhaseEndDate	10/27/2023	8/25/2022
tblConstructionPhase	PhaseStartDate	10/28/2023	9/9/2022
tblConstructionPhase	PhaseStartDate	8/6/2022	8/26/2022
tblConstructionPhase	PhaseStartDate	9/30/2023	8/6/2022
tblConstructionPhase	PhaseStartDate	6/11/2022	5/15/2022
tblLandUse	LotAcreage	1.44	13.70
tblVehicleTrips	ST_TR	3.35	6.69
tblVehicleTrips	SU_TR	3.35	6.69
tblVehicleTrips	WD_TR	3.35	6.69

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	со	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/d	day							lb/c	lay		
2022	14.7480	38.9185	29.7459	0.0635	19.8049	1.6360	21.4184	10.1417	1.5051	11.6261	0.0000	6,159.615 5	6,159.615 5	1.9513	0.0912	6,210.193 4
2023	14.5612	17.0686	20.5117	0.0389	0.6680	0.7810	1.4490	0.1804	0.7391	0.9195	0.0000	3,770.663 9	3,770.663 9	0.6484	0.0871	3,812.825 2
Maximum	14.7480	38.9185	29.7459	0.0635	19.8049	1.6360	21.4184	10.1417	1.5051	11.6261	0.0000	6,159.615 5	6,159.615 5	1.9513	0.0912	6,210.193 4

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/d	day							lb/c	day		
2022	14.7480	38.9185	29.7459	0.0635	19.8049	1.6360	21.4184	10.1417	1.5051	11.6261	0.0000	6,159.615 5	6,159.615 5	1.9513	0.0912	6,210.193 4
2023	14.5612	17.0686	20.5117	0.0389	0.6680	0.7810	1.4490	0.1804	0.7391	0.9195	0.0000	3,770.663 9	3,770.663 9	0.6484	0.0871	3,812.825 2
Maximum	14.7480	38.9185	29.7459	0.0635	19.8049	1.6360	21.4184	10.1417	1.5051	11.6261	0.0000	6,159.615 5	6,159.615 5	1.9513	0.0912	6,210.193 4

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	со	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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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/e	day							lb/c	lay		
Area	1.7766	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005		7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441
Energy	0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526
Mobile	0.8453	1.2392	7.0900	9.3900e- 003	0.8588	0.0117	0.8704	0.2292	0.0110	0.2402		964.5321	964.5321	0.1027	0.0678	987.3133
Total	2.6600	1.5858	7.4003	0.0115	0.8588	0.0381	0.8968	0.2292	0.0374	0.2666		1,380.255 9	1,380.255 9	0.1108	0.0755	1,405.510 0

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/e	day							lb/c	lay		
Area	1.7766	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005		7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441
Energy	0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526
Mobile	0.8235	1.1805	6.7819	8.8500e- 003	0.8077	0.0110	0.8187	0.2156	0.0104	0.2260		909.5969	909.5969	0.0996	0.0648	931.4093
Total	2.6382	1.5271	7.0922	0.0109	0.8077	0.0374	0.8451	0.2156	0.0368	0.2524		1,325.320 7	1,325.320 7	0.1076	0.0725	1,349.606 0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	со	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	0.82	3.70	4.16	4.71	5.95	1.66	5.77	5.95	1.58	5.34	0.00	3.98	3.98	2.87	3.96	3.98

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/15/2022	6/24/2022	5	30	
2	Grading	Grading	6/25/2022	8/5/2022	5	30	
3	Building Construction	Building Construction	8/26/2022	2/9/2023	5	120	
4	Paving	Paving	8/6/2022	8/25/2022	5	14	
5	Architectural Coating	Architectural Coating	9/9/2022	2/23/2023	5	120	

Acres of Grading (Site Preparation Phase): 45

Acres of Grading (Grading Phase): 90

Acres of Paving: 1.41

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 94,090; Non-Residential Outdoor: 31,363; Striped Parking Area: 3,768 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Grading	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

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
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	53.00	21.00	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	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

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/d	day							lb/c	lay		
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

	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/o	day							lb/d	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	0.0850	0.0675	0.6340	1.3100e- 003	0.1479	9.6000e- 004	0.1488	0.0392	8.9000e- 004	0.0401		133.3844	133.3844	6.3800e- 003	5.4200e- 003	135.1598
Total	0.0850	0.0675	0.6340	1.3100e- 003	0.1479	9.6000e- 004	0.1488	0.0392	8.9000e- 004	0.0401		133.3844	133.3844	6.3800e- 003	5.4200e- 003	135.1598

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

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/d	day							lb/d	lay		
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

	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/o	day							lb/d	lay		
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	0.0850	0.0675	0.6340	1.3100e- 003	0.1479	9.6000e- 004	0.1488	0.0392	8.9000e- 004	0.0401		133.3844	133.3844	6.3800e- 003	5.4200e- 003	135.1598
Total	0.0850	0.0675	0.6340	1.3100e- 003	0.1479	9.6000e- 004	0.1488	0.0392	8.9000e- 004	0.0401		133.3844	133.3844	6.3800e- 003	5.4200e- 003	135.1598

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	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/e	day							lb/d	lay		
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	9.2036	1.6349	10.8385	3.6538	1.5041	5.1579		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	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/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1	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	0.0945	0.0750	0.7044	1.4600e- 003	0.1643	1.0700e- 003	0.1654	0.0436	9.9000e- 004	0.0446		148.2049	148.2049	7.0800e- 003	6.0300e- 003	150.1775
Total	0.0945	0.0750	0.7044	1.4600e- 003	0.1643	1.0700e- 003	0.1654	0.0436	9.9000e- 004	0.0446		148.2049	148.2049	7.0800e- 003	6.0300e- 003	150.1775

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

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/d	day							lb/c	day		
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	9.2036	1.6349	10.8385	3.6538	1.5041	5.1579	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	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	0.0945	0.0750	0.7044	1.4600e- 003	0.1643	1.0700e- 003	0.1654	0.0436	9.9000e- 004	0.0446		148.2049	148.2049	7.0800e- 003	6.0300e- 003	150.1775
Total	0.0945	0.0750	0.7044	1.4600e- 003	0.1643	1.0700e- 003	0.1654	0.0436	9.9000e- 004	0.0446		148.2049	148.2049	7.0800e- 003	6.0300e- 003	150.1775

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2022

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/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090	- 	0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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/d	lay		
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	0.0570	1.3761	0.4371	4.5900e- 003	0.1423	0.0133	0.1556	0.0410	0.0127	0.0537		485.5041	485.5041	4.1200e- 003	0.0719	507.0367
Worker	0.2504	0.1989	1.8667	3.8600e- 003	0.4354	2.8400e- 003	0.4382	0.1155	2.6200e- 003	0.1181		392.7430	392.7430	0.0188	0.0160	397.9705
Total	0.3074	1.5750	2.3038	8.4500e- 003	0.5777	0.0161	0.5938	0.1565	0.0153	0.1718		878.2471	878.2471	0.0229	0.0879	905.0071

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2022

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/e	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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/d	lay		
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	0.0570	1.3761	0.4371	4.5900e- 003	0.1423	0.0133	0.1556	0.0410	0.0127	0.0537		485.5041	485.5041	4.1200e- 003	0.0719	507.0367
Worker	0.2504	0.1989	1.8667	3.8600e- 003	0.4354	2.8400e- 003	0.4382	0.1155	2.6200e- 003	0.1181		392.7430	392.7430	0.0188	0.0160	397.9705
Total	0.3074	1.5750	2.3038	8.4500e- 003	0.5777	0.0161	0.5938	0.1565	0.0153	0.1718		878.2471	878.2471	0.0229	0.0879	905.0071

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

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/o	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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/d	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	0.0357	1.1672	0.3909	4.4500e- 003	0.1423	7.1900e- 003	0.1495	0.0410	6.8800e- 003	0.0479		470.6076	470.6076	3.1300e- 003	0.0693	491.3366
Worker	0.2345	0.1768	1.7106	3.7500e- 003	0.4354	2.6600e- 003	0.4380	0.1155	2.4500e- 003	0.1179		383.7517	383.7517	0.0170	0.0147	388.5675
Total	0.2702	1.3440	2.1015	8.2000e- 003	0.5777	9.8500e- 003	0.5875	0.1565	9.3300e- 003	0.1658		854.3593	854.3593	0.0202	0.0840	879.9041

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

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/e	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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/d	lay		
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	0.0357	1.1672	0.3909	4.4500e- 003	0.1423	7.1900e- 003	0.1495	0.0410	6.8800e- 003	0.0479		470.6076	470.6076	3.1300e- 003	0.0693	491.3366
Worker	0.2345	0.1768	1.7106	3.7500e- 003	0.4354	2.6600e- 003	0.4380	0.1155	2.4500e- 003	0.1179		383.7517	383.7517	0.0170	0.0147	388.5675
Total	0.2702	1.3440	2.1015	8.2000e- 003	0.5777	9.8500e- 003	0.5875	0.1565	9.3300e- 003	0.1658		854.3593	854.3593	0.0202	0.0840	879.9041

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	со	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/d	day							lb/c	lay		
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.2639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3667	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

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/o	day							lb/c	lay		
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	0.0709	0.0563	0.5283	1.0900e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		111.1537	111.1537	5.3100e- 003	4.5200e- 003	112.6332
Total	0.0709	0.0563	0.5283	1.0900e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		111.1537	111.1537	5.3100e- 003	4.5200e- 003	112.6332

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2022

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/e	day							lb/c	lay		
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.2639					0.0000	0.0000		0.0000	0.0000		 - - - -	0.0000			0.0000
Total	1.3667	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4

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/o	day							lb/c	lay		
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	0.0709	0.0563	0.5283	1.0900e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		111.1537	111.1537	5.3100e- 003	4.5200e- 003	112.6332
Total	0.0709	0.0563	0.5283	1.0900e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		111.1537	111.1537	5.3100e- 003	4.5200e- 003	112.6332

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2022

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/d	day							lb/c	lay		
Archit. Coating	12.4779					0.0000	0.0000	- - - - -	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	12.6824	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

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/c	lay		
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	0.0520	0.0413	0.3874	8.0000e- 004	0.0904	5.9000e- 004	0.0910	0.0240	5.4000e- 004	0.0245		81.5127	81.5127	3.9000e- 003	3.3100e- 003	82.5976
Total	0.0520	0.0413	0.3874	8.0000e- 004	0.0904	5.9000e- 004	0.0910	0.0240	5.4000e- 004	0.0245		81.5127	81.5127	3.9000e- 003	3.3100e- 003	82.5976

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2022

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/d	day							lb/d	day		
Archit. Coating	12.4779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	12.6824	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

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/o	day							lb/c	lay		
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	0.0520	0.0413	0.3874	8.0000e- 004	0.0904	5.9000e- 004	0.0910	0.0240	5.4000e- 004	0.0245		81.5127	81.5127	3.9000e- 003	3.3100e- 003	82.5976
Total	0.0520	0.0413	0.3874	8.0000e- 004	0.0904	5.9000e- 004	0.0910	0.0240	5.4000e- 004	0.0245		81.5127	81.5127	3.9000e- 003	3.3100e- 003	82.5976

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

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/o	day							lb/c	lay		
Archit. Coating	12.4779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	12.6696	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

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/c	lay		
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	0.0487	0.0367	0.3550	7.8000e- 004	0.0904	5.5000e- 004	0.0909	0.0240	5.1000e- 004	0.0245		79.6466	79.6466	3.5300e- 003	3.0600e- 003	80.6461
Total	0.0487	0.0367	0.3550	7.8000e- 004	0.0904	5.5000e- 004	0.0909	0.0240	5.1000e- 004	0.0245		79.6466	79.6466	3.5300e- 003	3.0600e- 003	80.6461

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

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/e	day							lb/c	day		
Archit. Coating	12.4779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708	1 1 1 1 1	0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	12.6696	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

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/o	day							lb/c	lay		
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	0.0487	0.0367	0.3550	7.8000e- 004	0.0904	5.5000e- 004	0.0909	0.0240	5.1000e- 004	0.0245		79.6466	79.6466	3.5300e- 003	3.0600e- 003	80.6461
Total	0.0487	0.0367	0.3550	7.8000e- 004	0.0904	5.5000e- 004	0.0909	0.0240	5.1000e- 004	0.0245		79.6466	79.6466	3.5300e- 003	3.0600e- 003	80.6461

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	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/d	day							lb/c	lay		
Mitigated	0.8235	1.1805	6.7819	8.8500e- 003	0.8077	0.0110	0.8187	0.2156	0.0104	0.2260		909.5969	909.5969	0.0996	0.0648	931.4093
Unmitigated	0.8453	1.2392	7.0900	9.3900e- 003	0.8588	0.0117	0.8704	0.2292	0.0110	0.2402		964.5321	964.5321	0.1027	0.0678	987.3133

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Motel	214.08	214.08	214.08	406,274	382,101
Parking Lot	0.00	0.00	0.00		
Total	214.08	214.08	214.08	406,274	382,101

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
Motel	9.50	7.30	7.30	19.00	62.00	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Motel	0.392441	0.066170	0.242659	0.163627	0.054061	0.010052	0.007796	0.013440	0.000833	0.000179	0.040629	0.000634	0.007480
Parking Lot	0.392441	0.066170	0.242659	0.163627	0.054061	0.010052	0.007796	0.013440	0.000833	0.000179	0.040629	0.000634	0.007480

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	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/o	day							lb/c	lay		
NaturalGas Mitigated	0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526
NaturalGas Unmitigated	0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s 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/e	day							lb/c	lay		
Motel	3533.3	0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526
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		0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526

Mitigated

	NaturalGa s Use	ROG	NOx	СО	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/d	day							lb/c	lay		
Motel	3.5333	0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526
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		0.0381	0.3464	0.2910	2.0800e- 003		0.0263	0.0263		0.0263	0.0263		415.6824	415.6824	7.9700e- 003	7.6200e- 003	418.1526

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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/e	day							lb/c	day		
Mitigated	1.7766	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005		7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441
Unmitigated	1.7766	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005	r 	7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441

6.2 Area by SubCategory

<u>Unmitigated</u>

	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/d	day							lb/c	lay		
Architectural Coating	0.4102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7900e- 003	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005		7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441
Total	1.7766	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005		7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	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/d	lay							lb/c	lay		
Architectural Coating	0.4102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7900e- 003	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005		7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441
Total	1.7766	1.8000e- 004	0.0193	0.0000		7.0000e- 005	7.0000e- 005		7.0000e- 005	7.0000e- 005		0.0414	0.0414	1.1000e- 004		0.0441

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 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

|--|

Boilers

Equipment type Number Theat input bay Theat input teal Doner Nating Theat type	Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type

Number

11.0 Vegetation

Page 1 of 11

Northern Queen Inn Expansion Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Northern Sierra AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	со	SO2 Percent I	Exhaust PM10 Reduction	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Page 2 of 11

Northern Queen Inn Expansion Project

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	2	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	4	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	9	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Northern Queen Inn Expansion Project

Equipment Type	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
		Ur	nmitigated tons/yr						Unmitiga	ited mt/yr		
Air Compressors	1.20200E-002	8.24500E-002	1.08770E-001	1.80000E-004	4.69000E-003	4.69000E-003	0.00000E+000	1.53195E+001	1.53195E+001	9.70000E-004	0.00000E+000	1.53438E+001
Cranes	1.93100E-002	2.15000E-001	9.86100E-002	3.00000E-004	8.94000E-003	8.22000E-003	0.00000E+000	2.66154E+001	2.66154E+001	8.61000E-003	0.00000E+000	2.68306E+001
Excavators	6.07000E-003	5.33100E-002	9.76500E-002	1.50000E-004	2.58000E-003	2.37000E-003	0.00000E+000	1.36082E+001	1.36082E+001	4.40000E-003	0.00000E+000	1.37182E+001
Forklifts	1.99700E-002	1.85740E-001	2.07280E-001	2.80000E-004	1.21200E-002	1.11500E-002	0.00000E+000	2.41724E+001	2.41724E+001	7.82000E-003	0.00000E+000	2.43679E+001
Generator Sets	1.94500E-002	1.72610E-001	2.20460E-001	3.90000E-004	8.54000E-003	8.54000E-003	0.00000E+000	3.39125E+001	3.39125E+001	1.58000E-003	0.00000E+000	3.39520E+001
Graders	6.22000E-003	7.88600E-002	2.58300E-002	1.00000E-004	2.51000E-003	2.31000E-003	0.00000E+000	8.72638E+000	8.72638E+000	2.82000E-003	0.00000E+000	8.79693E+000
Pavers	2.90000E-003	2.93800E-002	4.03700E-002	7.00000E-005	1.40000E-003	1.28000E-003	0.00000E+000	5.78204E+000	5.78204E+000	1.87000E-003	0.00000E+000	5.82879E+000
Paving Equipment	2.50000E-003	2.43300E-002	3.56400E-002	6.00000E-005	1.19000E-003	1.09000E-003	0.00000E+000	5.00998E+000	5.00998E+000	1.62000E-003	0.00000E+000	5.05049E+000
Rollers	2.33000E-003	2.41600E-002	2.60400E-002	4.00000E-005	1.39000E-003	1.28000E-003	0.00000E+000	3.22727E+000	3.22727E+000	1.04000E-003	0.00000E+000	3.25336E+000
Rubber Tired Dozers	5.02300E-002	5.27620E-001	2.14920E-001	5.10000E-004	2.50400E-002	2.30400E-002	0.00000E+000	4.50164E+001	4.50164E+001	1.45600E-002	0.00000E+000	4.53804E+001
Scrapers	2.45800E-002	2.68300E-001	1.91270E-001	4.60000E-004	1.04700E-002	9.64000E-003	0.00000E+000	4.00149E+001	4.00149E+001	1.29400E-002	0.00000E+000	4.03384E+001
Tractors/Loaders/ Backhoes	4.02600E-002	4.09390E-001	5.53640E-001	7.70000E-004	2.17600E-002	2.00200E-002	0.00000E+000	6.76483E+001	6.76483E+001	2.18800E-002	0.00000E+000	6.81953E+001
Welders	1.62800E-002	8.71600E-002	1.01490E-001	1.50000E-004	3.71000E-003	3.71000E-003	0.00000E+000	1.12932E+001	1.12932E+001	1.32000E-003	0.00000E+000	1.13263E+001

Page 4 of 11

Northern Queen Inn Expansion Project

Equipment Type	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	1.20200E-002	8.24500E-002	1.08770E-001	1.80000E-004	4.69000E-003	4.69000E-003	0.00000E+000	1.53195E+001	1.53195E+001	9.70000E-004	0.00000E+000	1.53438E+001
Cranes	1.93100E-002	2.15000E-001	9.86100E-002	3.00000E-004	8.94000E-003	8.22000E-003	0.00000E+000	2.66154E+001	2.66154E+001	8.61000E-003	0.00000E+000	2.68306E+001
Excavators	6.07000E-003	5.33100E-002	9.76500E-002	1.50000E-004	2.58000E-003	2.37000E-003	0.00000E+000	1.36082E+001	1.36082E+001	4.40000E-003	0.00000E+000	1.37182E+001
Forklifts	1.99700E-002	1.85740E-001	2.07280E-001	2.80000E-004	1.21200E-002	1.11500E-002	0.00000E+000	2.41724E+001	2.41724E+001	7.82000E-003	0.00000E+000	2.43679E+001
Generator Sets	1.94500E-002	1.72610E-001	2.20460E-001	3.90000E-004	8.54000E-003	8.54000E-003	0.00000E+000	3.39124E+001	3.39124E+001	1.58000E-003	0.00000E+000	3.39520E+001
Graders	6.22000E-003	7.88600E-002	2.58300E-002	1.00000E-004	2.51000E-003	2.31000E-003	0.00000E+000	8.72637E+000	8.72637E+000	2.82000E-003	0.00000E+000	8.79692E+000
Pavers	2.90000E-003	2.93800E-002	4.03700E-002	7.00000E-005	1.40000E-003	1.28000E-003	0.00000E+000	5.78204E+000	5.78204E+000	1.87000E-003	0.00000E+000	5.82879E+000
Paving Equipment	2.50000E-003	2.43300E-002	3.56400E-002	6.00000E-005	1.19000E-003	1.09000E-003	0.00000E+000	5.00997E+000	5.00997E+000	1.62000E-003	0.00000E+000	5.05048E+000
Rollers	2.33000E-003	2.41600E-002	2.60400E-002	4.00000E-005	1.39000E-003	1.28000E-003	0.00000E+000	3.22726E+000	3.22726E+000	1.04000E-003	0.00000E+000	3.25336E+000
Rubber Tired Dozers	5.02300E-002	5.27620E-001	2.14920E-001	5.10000E-004	2.50400E-002	2.30400E-002	0.00000E+000	4.50164E+001	4.50164E+001	1.45600E-002	0.00000E+000	4.53804E+001
Scrapers	2.45800E-002	2.68300E-001	1.91270E-001	4.60000E-004	1.04700E-002	9.64000E-003	0.00000E+000	4.00148E+001	4.00148E+001	1.29400E-002	0.00000E+000	4.03383E+001
Tractors/Loaders/Ba ckhoes	4.02600E-002	4.09390E-001	5.53640E-001	7.70000E-004	2.17600E-002	2.00200E-002	0.00000E+000	6.76482E+001	6.76482E+001	2.18800E-002	0.00000E+000	6.81952E+001
Welders	1.62800E-002	8.71600E-002	1.01490E-001	1.50000E-004	3.71000E-003	3.71000E-003	0.00000E+000	1.12932E+001	1.12932E+001	1.32000E-003	0.00000E+000	1.13263E+001

Page 5 of 11

Northern Queen Inn Expansion Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Percent Reduction											
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.30552E-006	1.30552E-006	0.00000E+000	0.00000E+000	1.30346E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.50289E-006	1.50289E-006	0.00000E+000	0.00000E+000	1.49084E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.46970E-006	1.46970E-006	0.00000E+000	0.00000E+000	1.45792E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.24108E-006	1.24108E-006	0.00000E+000	0.00000E+000	1.23113E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17951E-006	1.17951E-006	0.00000E+000	0.00000E+000	1.17813E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14595E-006	1.14595E-006	0.00000E+000	0.00000E+000	1.13676E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.99602E-006	1.99602E-006	0.00000E+000	0.00000E+000	1.98001E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.09859E-006	3.09859E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.11071E-006	1.11071E-006	0.00000E+000	0.00000E+000	1.10180E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.24954E-006	1.24954E-006	0.00000E+000	0.00000E+000	1.23951E-006
Tractors/Loaders/Ba ckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18259E-006	1.18259E-006	0.00000E+000	0.00000E+000	1.17310E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.77097E-006	1.77097E-006	0.00000E+000	0.00000E+000	8.82901E-007

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation	Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction			

Page 6 of 11

Northern Queen Inn Expansion Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Replace Ground Cover of Are Disturbed	a PM10 Reduction		PM2.5 Reduction			
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

		Unm	itigated	Mi	tigated	Percent I	Reduction
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.03	0.01	0.03	0.01	0.00	0.00
Grading	Fugitive Dust	0.14	0.05	0.14	0.05	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.29	0.15	0.29	0.15	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Northern Queen Inn Expansion Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	ROG	NOx	со	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
			Percent	Reduction								
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	2.47	4.77	4.48	5.81	5.66	5.03	0.00	5.70	5.70	3.30	4.47	5.67
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting: Low Density Suburban

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.10	0.32		•
No	Land Use	Improve Walkability Design	0.00			•
No	Land Use	Improve Destination Accessibility	0.00			•
Yes	Land Use	Increase Transit Accessibility	0.15	0.30		•
No	Land Use	Integrate Below Market Rate Housing	0.00			•
	Land Use	Land Use SubTotal	0.05	,		•

Page 8 of 11

Northern Queen Inn Expansion Project

Yes	Neighborhood Enhancements	Improve Pedestrian Network	1.00 Project Site	
No	Neighborhood Enhancements	Provide Traffic Calming Measures		
No	Neighborhood Enhancements	Implement NEV Network	0.00¦	
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.01¦	
No	Parking Policy Pricing	Limit Parking Supply	0.00	
No	Parking Policy Pricing	Unbundle Parking Costs	0.00	
No	Parking Policy Pricing	On-street Market Pricing	0.00	
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00	
No	Transit Improvements	Provide BRT System	0.00	
No	Transit Improvements	Expand Transit Network	0.00	
No	Transit Improvements	Increase Transit Frequency	0.00	
	Transit Improvements	Transit Improvements Subtotal	0.00	
	· · · · · · · · · · · · · · · · · · ·	Land Use and Site Enhancement Subtotal	0.06	
No	Commute	Implement Trip Reduction Program		
No	Commute	Transit Subsidy		
No	Commute	Implement Employee Parking "Cash Out"	3.00	
No	Commute	Workplace Parking Charge		
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00	
No	Commute	Market Commute Trip Reduction Option	0.00	
No	Commute	Employee Vanpool/Shuttle	0.00	2.00

Page 9 of 11

Date: 8/4/2021 11:35 AM

Northern Queen Inn Expansion Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Commute	Provide Ride Sharing Program	5.00	 	[]]
	Commute	Commute Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.06		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	250.00
No	Use Low VOC Paint (Residential Exterior)	250.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		

Page 10 of 11

Northern Queen Inn Expansion Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Install High Efficiency Lighting	
No	On-site Renewable	

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Page 11 of 11

Northern Queen Inn Expansion Project

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

APPENDIX B

BIOLOGICAL RESOURCES INVENTORY

Biological Resources Inventory and Management Plan for

the Northern Queen Inn in Nevada City, CA

(APNs: 05-470-35, 05-490-19, 37-050-02 & 03, 15.11 Acres)



Prepared for: Heritage Hotel Group Hamid Kazemi, Project Applicant 400 Railroad Avenue Nevada City, CA 95959

Prepared by: Greg Matuzak, Wildlife Biologist 10432 Boulder Street Nevada City, CA 95959 Email: <u>gmatuzak@gmail.com</u>

TABLE OF CONTENTS

1.0 Introduction	1.0
2.0 Methods	2.0
3.0 Results	3.0
4.0 Recommendations and Mitigation	4.0

Appendices

Appendix A Project Vicinity and Project Location Figures Appendix B USDA Soils Map Appendix C National Wetland Inventory Map Appendix D Photo Log Appendix E Parcel Reports Appendix F Plants and Wildlife Observed During Biological Inventory Site Surveys Appendix G CNDDB Locations of Special Status Species within 3 Miles of Project Area Appendix H USFWS Species List for Project Area

1.0 INTRODUCTION

This Biological Resources Inventory and Management Plan contains recommendations for minimizing and mitigating for potential impacts to a 100-foot nondisturbance buffer of Gold Run Creek, a perennial stream, and for other sensitive biological resources with potential to occur within and directly adjacent to the Project area (see Appendix A for a Project Vicinity Map and Project Location Map). Gold Run Creek enters the subject parcels from the southeast of the large flat outdoor events and parking area in the eastern section of the Project area. Gold Run Creek was previously diverted through the southeast section of the Project area, including the creation of a medium sized pond in the far southeast corner of the Project area. An existing dam has created the pond and the creek from that location flows northwest before turning north to connect with the Gold Run Creek main stem that runs along the northern boundary of the Project area.

The subject parcel contains existing development within the 100-foot nondisturbance buffer of the perennial stream. Existing development within the nondisturbance buffer includes the guest registration building, ticket booth, several bridges that cross the stream, a paved and gravel parking lot, several sheds, several rail tracks along the edge of the stream, rail tracks that cross the stream, and paved and dirt roads. The stream runs through the subject parcels and contains sparse riparian vegetation associated with the bed and bank. Given the incised stream channel due to the historic maintenance and manipulation of the natural stream that historically flowed through the Project area, there is no wetland vegetation associated with the stream and there is sparse riparian vegetation associated with the stream. Gold Run Creek within the Project area is located within an area of western ponderosa pine forests and developed and disturbed areas.

This Biological Resources Inventory and Management Plan is being developed for submission and approval by the Nevada City. The subject parcels are located at the location of the Northern Queen Inn just outside of Nevada City in Nevada County, CA. The subject parcels total area is approximately 15.11 acres. The intent of this Biological Resources Inventory and Management Plan is to identify areas of potential sensitivity in terms of the biological and stream resources that are located within the proposed Project area, including areas proposed for disturbance within a 100-foot nondisturbance buffer of Gold Run Creek. In addition, this Biological Resources Inventory and Management Plan provides recommendations on where development within the site and within the non-disturbance buffer would minimize potential negative impacts to such sensitive biological resources.

Site topography outside of the relatively flat developed area within the subject parcels slope generally from east to west and towards the stream channels in the north

and south where the two streams channels are located until they connect in the northcentral area of the proposed Project area. The subject parcels are located at approximately 2,550 feet above mean sea level (MSL). The subject parcels support a ponderosa pine (*Pinus ponderosa*) dominated habitat as well as the stream and developed and disturbed portions of the subject parcels. A USDA soils map and a National Wetland Inventory map covering the subject parcels are included in Appendix B and Appendix C respectively. Appendix D includes a Photo Log of the Project area and Appendix E includes the parcel reports covering the 4 subject parcels that make up the Project area.

PROPOSED PROJECT DESIGN

The proposed Project design is outlined within the attached Site Plan. The development of new structures and access roads will include the following:

- New parking within the existing gravel area near the ticket booth
- New 2 story 20 room motel building (8,400 square feet) to be located within the gravel parking lot near the existing hotel
- New 20-foot driveway that leads from the new motel and parking to new cabins along Gold Run Creek to the east of the existing gravel parking area
- 12 new cabins (approximately 1,050 square feet each) to be constructed to the east of the existing gravel parking area and to be located along Gold Run Creek where existing rail tracks run along the bank of the creek within the proposed cabin area
- Existing rail track and structures to be removed in the proposed cabin construction area
- Additional parking, turnout, and connection toe a mutual emergency access with Inn Town Campground

The first table below outlines the proposed coverage within the subject parcels in relationship to buildings, surfaced area, and permanent open space. The second table below includes the proposed improvements to rooms, the restaurant, and parking located within the subject parcels (Project area).

ITEM	SQUARE FEET	PERCENTAGE
BUILDING COVERAGE	45,610	7
SURFACED AREAS	90,570	14
LANDSCAPED AREAS	11,130	2
PERMANENT OPEN SPACE	510,152	77
TOTAL	658,192	100

Lot Coverage Proposed

ITEM	EXISTING	PROPOSED	TOTAL
ROOMS	76	32	108
RESTAURANT	6,000 SF	0	6,000 SF
PARKING 157 -14 144			
REQUIRED PARKING: 108 FOR ROOM5 + 24 FOR RE5TAURANT = 132			

Proposed Improvements

The purpose of this Biological Resources Inventory and Management Plan is to identify the location and extent of sensitive biological resources within the subject parcel and the 100-foot non-disturbance buffer of Gold Run Creek. Sensitive biological resources include special-status plant and wildlife species, and the presence of stream and wetland features that could potentially meet the Corps' criteria as a "waters of the United States," including wetlands, pursuant to Section 404 of the Clean Water Act (CWA), and streams that could be under the jurisdiction of the California Fish and Wildlife Code Section 1600 *et. seq.* This Biological Resources Inventory and Management Plan also satisfies the Nevada City ordinances and requirements for projects requesting a development variance within non-disturbance stream buffers, including areas that are within 100 feet of the high water mark of perennial streams. Additionally, this Biological Resources Inventory and Management Plan satisfies Nevada City requirements for projects seeking a development permit and a variance application with a zoning determination.

This Biological Resources Inventory and Management Plan follows the Nevada County Land Use and Development Code for oak resources, which defines a landmark tree is any native oak tree species (Quercus species) with a trunk diameter of 36" or greater at diameter breast height (dbh or 4'6") and it identifies landmark groves as hardwood tree groves with 33+% canopy closure, or groves whose size, visual impact, or association with a historically significant structure or event has caused it to be marked for preservation by the county, state, or federal government.

The Nevada City Planning Commission has to make the following findings in order to approve a resource setback as part of the 100-foot non-disturbance buffer to Gold Run Creek within the Project area:

- That there are special circumstances applicable to the property, including (size, topography, lot constraint, etc.), that the strict application of the standard 100-foot setback from Gold Run Creek deprives the property of privileges enjoyed by other Service-Lodge (SL) properties in the vicinity that are also within the SL district.
- 2) Conditions have been applied to this Project that will assure that the Variance to the 100-foot setback shall not constitute a special privileges

inconsistent with the limitations upon other properties in the vicinity and zone in which the such property is situated.

2.0 METHODS

In order to evaluate the Project area for the presence of any sensitive biological resources, baseline information from databases and reporting for similar projects in Nevada City and Nevada County was collected and reviewed prior to conducting reconnaissance-level biological surveys within the subject parcels. The database searches, background research, and reconnaissance-level biological surveys characterized the baseline conditions of the subject parcels. Based on the baseline conditions of the subject parcels. Based on the baseline conditions of the subject parcels. Based on the baseline conditions of the subject parcels. The database or adjacent areas at any time during their life cycles. The baseline conditions also identified the presence of any sensitive habitat or communities, if they were identified within the subject parcels. Though the assessment was conducted for the entirety of the subject parcels this Management Plan focuses on the 100-foot non-disturbance buffer to Gold Run Creek stream and on sensitive biological resources within the entirety of the subject parcels as part of the Biological Resources Inventory compliance required to be included in this report for the proposed Project.

Sensitive Biological Resources

The following information was used to identify potential special-status plant and wildlife species within the region surrounding the subject parcel that could be found to use the subject parcel:

- California Department of Fish and Wildlife's California Natural Diversity Database records search of a 3-mile buffer around the Project area (CDFW, 2019);
- California Native Plant Society's online Inventory of Rare and Endangered Plants of California known to occur within the 7.5-minute Nevada City USGS Quadrangle where the proposed Project is located (CNPS, 2019);
- The U.S. Fish and Wildlife Service Information, Planning, and Consultation System (IPaC) for endangered, threatened, and proposed listed species for the proposed Project area (USFWS, 2019);
- National Wetland Inventory (NWI, 2019);
- United States Department of Agriculture (USDA) Soils Mapper (USDA, 2019);
- Natural Resources Conservation Service (NRCS) Hydric Soils List for Nevada County (NRCS, 2019); and

• Nevada County General Plan (Nevada County, 1996 with subsequent amendments through 2012).

Reconnaissance-level Biological Resources Field Surveys

Reconnaissance-level biological surveys were conducted on foot of the entirety of the Project area by Greg Matuzak, Biological Resources Consultant, on March 4th, 2019. The purpose of the surveys was to identify sensitive habitat and vegetation types within the overall Project area and to identify sensitive riparian vegetation and wetland vegetation associated with Gold Run Creek and the 100-foot non-disturbance buffer associated with the perennial stream. In addition, reconnaissance-level biological surveys were conducted to determine the potential for any special-status plant and wildlife species identified within the desktop analysis and background research to occur within the entirety of the Project area.

An assessment was made based on the results of the background research, reconnaissance-level biological resources surveys, and the site plan associated with the development permit and variance application with zoning determination (dated March 2019) to identify whether the proposed Project would have the potential to impact any sensitive biological resources. A photo log of the subject parcels and a list of plant and wildlife species observed during the reconnaissance-level biological resources survey was compiled (see Appendix D and Appendix F respectively). The results of the CNDDB database search is located in Appendix G and the results of the USFWS database search is located in Appendix H.

3.0 RESULTS

Environmental Setting

The Project area lies in the Sierra Nevada foothills just south of Nevada City in Nevada County, CA. The general topography of the subject parcel is generally flat with a gradual sloping towards the northwest. The site is approximately 2,550 feet above mean sea level (MSL); elevations increase slightly in the southern and western sections of the subject parcels, and eastern section is a large flat, open area. See the attached Site Plan which identifies site topography, a site plan, location of Gold Run Creek, and the location of the 100-foot non-disturbance buffer from the creek and tributary to the creek, and location of trees within the subject parcels.

Plant Communities

Plant communities have been classified based on the California Wildlife Habitat Relationships System developed by the California Department of Fish and Wildlife (CDFW). The CDFW also manages the California Natural Diversity Data Base (CNDDB), which is a database inventory of the previously identified locations of rare and endangered plants, wildlife, and natural communities in California. A list of plants and wildlife documented during the field surveys is attached in Appendix F to this Biological Resources Inventory and Management Plan.

The dominant plant communities are discussed below.

Western Ponderosa Pine Forest

The western ponderosa pine forest habitat within the subject parcels is dominated by ponderosa pine (*Pinus ponderosa*) and includes incense cedar (*Calocedrus decurrens*) and interior live oak (*Quercus wislizeni*). There are also several small to medium California black oak (*Quercus kelloggii*) trees, a few scattered Douglas fir (*Pseudotsuga menziesii*) trees, and some Pacific madrone (*Arbutus menziesii*) trees within the Project area as well. A variety of understory shrub species occur throughout the ponderosa pine forest. In the subject parcel the more common understory including greenleaf manzanita (*Arctostaphylos patula*), coffeeberry (*Rhamnus californica*), mountain misery (*Chamaebatia foliolosa*), poison oak (*Toxicodendron diversilobum*) and honeysuckle (*Lonicera hispidula*). These sparse understory plants and lack of robust shrubs such as manzanita form an open understory easy to walk through. This habitat type is dominant within the undeveloped portions of the subject parcels.

Within the western ponderosa pine forest habitat within the proposed disturbance zones of the subject parcels, a single landmark California black oak tree

was identified adjacent to the proposed new 20-foot wide driveway (approximate 38inch diameter at breast height) was identified within the proposed Project area within the subject parcels. No landmark groves were identified within the subject parcels. Varying sizes of ponderosa pine trees (up to 64-inch diameter at breast height) and incense cedar trees (up to 36-inch diameter at breast height) dominate the tree canopy within the area of proposed disturbance within the subject parcels.

Riparian and Wetland Vegetation

Gold Run Creek enters the subject parcels from the southeast of the large flat outdoor events and parking area in the eastern section of the Project area. Gold Run Creek was previously diverted through the southeast section of the Project area, including the creation of a medium sized pond in the far southeast corner of the Project area. An existing dam has created the pond and the creek from that location flows northwest before turning north to connect with the Gold Run Creek main stem that runs along the northern boundary of the Project area.

There is a narrowly defined riparian zone immediately adjacent to Gold Run Creek and the diverted southern section of the stream that is associated with the existing pond. The riparian vegetation where it occurs is dominated by the invasive, non-native Himalayan blackberry (*Rubus armeniacus*) with some native California blackberry (*Rubus ursinus*). Given the developed and disturbed nature of the diverted section of the creek, including existing rail tracks along the top of the bank of the creek in the southern section of the Project area, there are few riparian trees associated with the creek in that area. Riparian associated trees within the riparian zone along the edges of Gold Run Creek within the northern section of the Project area includes some small willow trees (*Salix* sp.), dogwood (*Cornus* sp.), alder (*Alnus* sp.), and big leaf maple (*Acer macrophyllum*). However, these riparian trees are sparse along Gold Run Creek given the incised nature of the creek within the Project area (see attached photos of the creek zone and riparian vegetation).

Within the stream channels, there is little vegetation present given the incised nature of the channels. The seep stream channels within the subject parcels precludes the banks of the streams from forming developed wetlands given a lack of hydrology and floodplains that are required for such wetland development. Therefore, wetland vegetation is considered non-existent within the stream channels and the riparian vegetation is considered sparse and marginal, dominated by the invasive, non-native blackberry where it is found. The pond within the southeast corner of the subject parcels does contain wetland vegetation dominated by cattails (*Typha sp.*).

SPECIAL STATUS SPECIES

Special-status species were considered for this Biological Resources Inventory and Management Plan based on a current review of the California Natural Diversity Data Base (CNDDB) and database information provided by the United States Fish and Wildlife Service for the subject parcels and overall Project area. The database searches did reveal ten (10) species that have been previously identified within 3 miles of the Project area. The species identified within the CNDDB include: Brandegee's clarkia, dubious pea, finger rush, Pine Hill flannelbush, Scadden Flat checkerbloom, California black rail, coast horned lizard, Cooper's hawk, foothill yellow-legged frog, and western bumble bee. In addition, the USFWS has mapped Designated Critical Habitat (DCH) for the California red-legged frog (CRLF) and it has been mapped within 3 miles to the north and northeast of the Project area and the DCH covers the Rock Creek watershed where the species has been previously identified. CRLF is discussed below. In addition, the western pond turtle is also discussed below given the presence of Gold Run Creek and associated pond within the proposed Project area. None of these species were observed during field surveys.

Below is an assessment of each of the special-status species that have been previously known to occur within 3 miles of the Project area. Included in the assessment below is each species' habitat requirements, how far from the Project area each species has been previously documented, and what the likelihood of each specialstatus species occurring within the Project area.

Brandegee's Clarkia (Clarkia biloba ssp. brandegeeae) – California Native Plant Society List 4.2

Brandegee's clarkia inhabits chaparral, cismontane woodland, and lower montane coniferous/mixed conifer forest habitats. It is most often found in road cuts between 75 and 915 meters above MSL. The species has been documented within 3 miles of the Project area and the closest documented observation of the species is approximately 1.5 miles to the northwest of the Project area. During field surveys this species was not identified within the subject parcels and no suitable habitat for this species is located within the subject parcels. Given that this species is most often found in road cuts on north facing slopes, the likelihood of this species occurring within the subject parcels is considered very low given the subject parcels do not contain any road cuts that are north facing with adequate sunlight. Therefore, the proposed Project would have no impact on this species.

Dubious Pea (Lathyrus sulphureus var. argillaceus) – California Native Plant Society List 3

Dubious pea is a perennial herb that inhabits lower and upper montane coniferous forest and cismontane woodlands, normally between 150 and 930 meters

above MSL. This species has been identified within 3 miles of the subject parcel, approximately 1.0 – 1.5 miles to the west/southwest of the subject parcel and the species is known to associate with western ponderosa pine forest habitats. However, the species was not identified during field surveys within the subject parcels and given the species blooming period is April and May, identification of this species may have been difficult during the March 4th survey of the Project area. Though the proposed disturbance areas within the subject parcels, including the proposed cabins along the edge of the creek, is disturbed and the species has a low probability of being present, Section 4.0 outlines recommendations to conduct a follow up survey for the species during April and May, the species blooming season, to determine whether the species is present within the proposed disturbance areas within the subject parcels. Therefore, the proposed Project would have a less than significant impact on this species with the implementation of mitigation measures outlined in Section 4.0 below.

Finger Rush (Juncus digitatus) – California Native Plant Society List 1B.1

Finger rush inhabits open chaparral habitat surrounded by mixed oak/conifer woodland on low gradient, north-facing, and vernally moist slopes. This species also associates with sandy clay loam soil within substrates underlain by granitic bedrock. This species has been identified within 3 miles of the subject parcels, approximately 0.8 miles to the southeast of the subject parcels. However, the species was not identified during field surveys and suitable habitat for this species does not occur within the subject parcel given the lack of soil types and the vernally moist slopes the species requires. Therefore, the proposed Project would have no impact on this species.

Pine Hill Flannelbush (Fremontodendron decumbens) – Federally Endangered and CA State Rare and California Native Plant Society List 1B.2

Pine Hill flannelbush inhabits rocky ridges on gabbro and serpentine soils within chaparral and cismontane woodlands. This species is endemic to these soil types and is normally documented between 425 and 760 meters above MSL. This species has been identified within 3 miles of the subject parcel, approximately 1.2 miles to the southwest of the subject parcel. The species was not identified during field surveys and suitable habitat for this species does not occur within the subject parcel given a lack of gabbro and serpentine soils within the Project area. Therefore, the proposed Project would have no impact on this species.

Scadden Flat Checkerbloom (Sidalcea stipularis) – Federally and CA State Endangered and California Native Plant Society List 1B.1

Scadden Flat checkerbloom inhabits marshes and swamps. It is found in wet montane marshes fed by springs, normally between 700 and 740 meters above MSL. This species has been identified within 3 miles to the southeast of the subject parcel. The species was not identified during field surveys and suitable habitat for this species does

not occur within the subject parcels given that marsh and swamp habitat does not occur within the subject parcels. Though the pond within the southeast corner of the Project area contains marsh vegetation, the marsh vegetation is contained entirely within a perennial pond. Therefore, the species would not occur within the subject parcels and the proposed Project would have no impact on this species.

California Black Rail (Laterallus jamaicensis coturiculus) - CA State Threatened

California black rail inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. The species requires water depths of about 1 inch that does not fluctuate during the year and dense vegetation for nesting habitat. This species has been identified at a single location in 2007 within 3 miles to the south of the subject parcels. The species was not identified during field surveys and suitable habitat for this species does not occur within the subject parcels given the lack of dense freshwater marsh habitat with an approximate 1-inch nonfluctuating water depth year-round. The perennial pond contains significantly more than the required 1-inch water depth this species requires. In addition, the perennial pond does not contain the density of freshwater marsh habitat or the non-fluctuating depth of water year-round that this species requires. Therefore, this species would not occur within the Project area and the proposed Project would have no impact on this species.

Coast Horned Lizard (Phrynosoma blainvillii) - CA State Species of Concern

The coast horned lizard occurs in open sandy areas, scattered low bushes, chaparral, manzanita, and oak woodland habitats. It is found in the Sierra Nevada foothills from Butte County to Kern County and throughout the central and southern California coast. Coast horned lizards forage on the ground in open areas, usually between shrubs and often near ant nests. The species relies on camouflage for protections. Predators and extreme heat are avoided by burrowing into loose soil. Periods of inactivity and winter hibernation are spent burrowed in the soil under surface objects such as logs or rocks, in mammal burrows, or in crevices (Zeiner et al. 2000). They inhabit mostly open country, especially sandy areas, washes, flood plains and windblown deposits in a wide variety of habitats and can be found at elevations up to 8,000 feet (2,438 meters) (CaliforniaHerps, 2014).

There is a lack of potential suitable habitat within the subject parcels for the coast horned lizard given the lack of rockier and sandy areas that this species requires. This species has been documented within 3 miles of the subject parcels, approximately 2.5 miles to the west/northwest and 3.0 miles to the southwest of the subject parcels. Given the Project area does not contain open areas with scattered oak trees with rockier and sandy soils, it is not likely this species would occur within the subject parcels.

No coast horned lizards were observed during the March 4th, 2019 site visit and survey. The proposed Project would have no impact on this species.

Cooper's hawk (Accipiter cooperii) – CDFW Watch List, MBTA Protected

Cooper's hawks are forest and woodland birds. These hawks are a regular sight in parks, quiet neighborhoods, over fields, at backyard feeders, and even along busy streets if there are trees around. The species has been documented successfully nesting approximately 2.7 miles to the northeast of the Project area in 2014. The species is known to occur and nest in Sierra mixed conifer forest, which is located at higher elevations than where the subject parcels are located. In addition, nesting sites for this species are mainly in riparian growths of deciduous trees in canyon bottoms on river floodplains (CNDDB 2019). Therefore, given the species has been known to successfully nest at higher elevations and the subject parcels do not contain typical nesting habitat for the species, the potential for this species to occur and nest within the subject parcels is considered very low. No Cooper's hawks were observed during the March 4th, 2019 site visit and survey.

Section 4.0 outlines recommendations to conduct raptor nesting surveys prior to the removal of trees or ground disturbing activities; therefore, if trees are to be removed or ground disturbing activities will commence during the active nesting season of this species, a pre-construction raptor nesting survey would be required. Therefore, the proposed Project would have a less than significant impact on this species with the implementation of mitigation measures outlined in Section 4.0 below.

Foothill Yellow-legged Frog (Rana boylii) - Candidate for Listing under the CA ESA

Foothill yellow-legged frogs inhabit partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. The species requires at least some cobblesized substrate for egg laying. The species requires at least 15 weeks to attain metamorphosis. This species has been identified within 3 miles of the subject parcel approximately a mile to the northwest of the subject parcel within Deer Creek outside of Nevada City in 1903. However, this population of foothill yellow-legged frog is considered extirpated at this location and the species is not known from any other stream habitats within 3 miles of the Project area (CNDDB 2019).

This species was not identified during field surveys and suitable habitat for this species does not occur within or adjacent to the subject parcels given the lack of ponding and basking sites within and directly adjacent to the stream. Given the incised and scoured nature of the stream channel within the subject parcels, flows would normally be too high for this species to occur at this location. No foothill yellow-legged frogs were observed during the March 4th, 2019 site visit and survey. Therefore, this

species would not occur within the Project area and the proposed Project would have no impact on this species.

Western bumble bee (Bombus occidentalis) - CDFW \$1

This species was documented within 3 miles of the Project area approximately 1.95 miles to the northeast of the subject parcel in 1968. It is known from a single collection on May 20th of that year. This species is of conservation concern and is listed as \$1, Critically Imperiled, by NatureServe and is listed on the CNDDB. Given the species has only been documented a single time within 3 miles of the subject parcel in 1968, there is a very low probability of the species occurring within the subject parcel. No western bumble bees were observed during the March 4th, 2019 site visit and survey. Therefore, this species would not occur within the Project area and the proposed Project would have no impact on this species.

Western Pond Turtle (Emys marmorata) - CA State Species of Concern

Western pond turtles associate with permanent ponds, lakes, streams, irrigation ditches, and permanent pools along intermittent streams. They are most commonly associated with permanent or nearly permanent water in a wide variety of habitats. This species requires basking sites such as partial submerged logs, rocks, mats of floating vegetation, or open mud banks. During the spring or early summer, females move overland for up to 100 m (325 ft) to find suitable sites for egg laying. This species has not been identified within 3 miles of the subject parcels.

No western pond turtles were observed during the March 4th, 2019 site visit and surveys of the Project area. Suitable habitat for this species does not occur within Gold Run Creek given the high flows that occur within the stream and the incised nature of the stream with no basking sites adjacent to the stream channels. Therefore, Gold Run Creek stream channels within the Project area would not provide suitable habitat for this species. However, given the presence of the perennial pond within the southeast corner of the Project area, the pond does provide marginal suitable habitat for this species. The pond habitat is considered marginal given the lack of basking sites such as partial submerged logs, rocks, mats of floating vegetation, or open mud banks that this species requires. Given the pond provides only marginal suitable habitat for this species and there are no proposed activities within or directly adjacent to the pond as part of the proposed Project, the proposed Project would have no impact on this species.

CA Red-legged Frog (*Rana aurora draytonii*) – Federal Threatened and CA State Species of Concern – Designated Critical Habitat Mapped in Nevada County

CA red-legged frog (CRLF) is known in Nevada County in the North Bloomfield USFS Quadrangle within the Rock Creek watershed. CRLF has not been identified within 3 miles of the subject parcels; however, approximately 3 miles to the north and northeast of the subject parcels Designated Critical Habitat (DCH) for the species has been mapped by the USFWS. The species was not identified during field surveys and given the species has not been previously identified within the Nevada City USGS Quad or within the Gold Run Creek watershed, the species is considered absent from the Project area.

If suitable breeding locations are located within 1.25 miles of a given project area and connected by barrier-free dispersal habitat that is at least 300 feet in width, then suitable dispersal habitat could be located within the overall project area. However, since CRLF have not been identified in the watershed associated with the subject parcels and a minimum of a 300-foot wide barrier-free dispersal habitat from the closest potential suitable breeding location does not occur from where the Project area is situated, the potential for this species to occur within the Project area is extremely low and the species is considered absent from the subject parcel. No CRLF were observed during the March 4th, 2019 site survey of the subject parcels. The proposed Project would have no impact on this species.

Nesting raptors and other migratory birds species - Protected under MBTA, Protected under CA State DFG Code Sections 3503, 3503.5, and 3800

There is a low to moderate potential for nesting raptors and other nesting migratory bird species protected under the MBTA to occur within the subject parcels given the presence of the forested areas within and adjacent to the subject parcels. The subject parcels represent potential habitat for bird species protected under the MBTA, such as ground nesting species like the spotted towhee (*Pipilo maculatus*) and dark-eyed junco (*Junco hyemalis*). Active and inactive nests within and adjacent to the subject parcel of large trees within and adjacent to the subject parcels, there is at least a low, if not a moderate potential for these species to nest within the subject parcels.

Section 4.0 outlines recommendations to conduct raptor and migratory bird nesting surveys prior to the removal of trees or other vegetation, or ground disturbing activities; therefore, if trees or other vegetation are to be removed or ground disturbing activities will commence during the active nesting season of raptors and migratory bird species, a pre-construction avian nesting survey would be required. Therefore, the proposed Project would have a less than significant impact on nesting raptors and migratory bird species with the implementation of mitigation measures outlined in Section 4.0 below.

Critical Deer Habitat

Known migratory deer ranges outlined in the Nevada County General Plan was reviewed for deer migration corridors, critical range, and critical fawning areas. The subject parcels are not located in any known major deer corridors, known deer holding areas, or critical deer fawning area. Per the Migratory Deer Ranges Nevada County General Plan map, the subject parcel is located on the border of two mapped areas, including Deer Winter Range and Resident Deer Herd. The field survey did not record any observations of deer or deer trails within the subject parcels. The subject parcels do not contain any known major deer migration corridors, known deer holding areas, nor critical deer fawning areas.

4.0 RECOMMENDATIONS AND MITIGATION MEASURES

The subject parcel is located within a rural developed setting just south of Nevada City in Nevada County, CA. The subject parcel is adjacent to/nested within a largely developed area given the proximity to SR 49, downtown Nevada City, and the rural residential properties that lie to the east of the subject parcels. Therefore, any development within the subject parcels would have an overall low potential to impact sensitive wildlife and plant resources given the low likelihood of such sensitive biological resources to occur within or immediately adjacent to the subject parcels. However, given the presence of perennial stream that connects downstream to Deer Creek and eventually with the South Yuba River, potential impacts within the 100-foot nondisturbance buffer to the stream could have indirect impacts to the stream from potential erosion, sedimentation, and other related water quality impacts if appropriate measures are not taken to minimize such indirect impacts to the stream.

Given there is existing development and a high level of disturbance within the 100-foot non-disturbance buffer of the stream (see attached Site Plan documenting the 100-foot non-disturbance buffer and the existing development within the buffer areas), the proposed Project, including the development of new parking, a proposed 20 room motel, 20-foot new driveways, and several cabins entirely or partially within the 100-foot non-disturbance buffer could cause indirect impacts to the Gold Run Creek if appropriate measures aren't taken to minimize and mitigate for such potential impacts on the stream. There will be no direct or permanent impacts to Gold Run Creek as part of the proposed Project. Recommendations and measures to minimize such potential impacts to the stream and 100-foot non-disturbance buffer are detailed below. However, the conclusion of this Biological Resources Inventory and Management Plan is that if the measures outlined below are included as part of the proposed Project design and approvals, any potential impacts to the stream non-disturbance buffer area would be less than significant and the proposed Project should be approved given a lack of sensitive biological resources within the buffer zone and the stream itself, and due to the incised and disturbed nature of Gold Run Creek within the subject parcels.

The large interior live oak within the gravel parking area includes 5 branches at or below breast height ranging from 15" to 24" dbh each. This large interior live oak tree is estimated to have a 94" dbh and is a landmark oak tree per the Nevada County definitions and ordinances covering oak trees and oak woodlands (see Appendix B Photo Log and Appendix G Topographic Map). The landmark tree contains an existing septic tank and septic lids within the immediate root zone of the tree. In addition, the landmark oak tree canopy extends partially over the roof of the existing house. The tree is in good health and though it contains an existing septic tank within the root zone and the canopy developed over the existing house, the tree is maintaining it health, vigor, and habitat value to wildlife. The proposed project by the applicant would preserve the landmark oak as it is now and to implement several measures during construction to minimize impacts to the tree and it root system.

Avoidance of Impacts to Protected Avian Nesting Species

Given the subject parcels contain large trees throughout their entirety (see Photo Log), including several within the 100-foot non-disturbance buffer area to the stream corridors, and those trees contain suitable habitat for nesting raptors and MBTA protected nesting bird species, removal of such trees should be done outside the breeding season, if possible, to avoid potential impacts to such nesting species. The breeding season for most protected birds in the vicinity of the subject parcels is generally from March 1 to August 30. Vegetation clearing or tree removal outside of the breeding season for such bird species would not require the implementation of any avoidance, minimization, or mitigation measures. However, construction or development activities during the breeding season could disturb or remove occupied nests of migratory birds or raptors and could require the implementation of a preconstruction survey within 250 feet of the disturbance area within the subject parcels for nesting migratory birds and raptors prior to site disturbance. Pre-construction nesting surveys would be conducted by a qualified biologist. If any nesting raptors or migratory birds are identified during surveys, active nests should be avoided and a nodisturbance buffer should be established around the nesting site to avoid disturbance or destruction of the nest site until after the breeding season or after a wildlife biologist determines that the young have fledged. The extent of these buffers would be determined by a wildlife biologist and would depend on the special-status species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors should be analyzed to make an appropriate decision on buffer distances.

Avoidance of Impacts to Dubious Pea and other Special-Status Plant Species

Given that potential suitable habitat for dubious pea occurs within the forested areas of the Project area, it is recommended that a targeted plant survey be conducted for the species prior to development within those areas of the Project area. The survey conducted on March 4th, 2019 within the Project area did not identify any special-status plant species, including dubious pea. Suitable habitat for other special-status plant species within the Project area was not identified. In order to avoid impacts to dubious pea, avoidance of the plant species is recommended and therefore, conducting a species-specific survey for the dubious pea during its blooming period (for identification purposes during April or May) will be sufficient to identify whether the species occurs within the Project area. Pre-construction surveys would be conducted by a qualified biologist. If the dubious pea is identified during pre-construction surveys and impacts to the species can't be avoided, a Special-Status Plant Species Protection

Plan should be developed that outlines avoidance, minimization, and mitigation measures for the plants identified within the proposed disturbance areas. An example of a potential mitigation measure to be implemented to avoid permanent impacts to such plants is the transplantation of the species outside of the proposed disturbance areas with up to 3 years of monitoring post transplantation to ensure that the transplanted plants survive and are protected from adjacent indirect development impacts. If any other special-status plant species are identified during the dubious pea focused surveys, a Special-Status Plant Species Protection Plan would be developed for those species too to ensure such species are included as part of any avoidance, minimization, and/or mitigation for such species.

ENCROACHMENT INTO THE NON-DISTURBANCE BUFFERS

Temporary impacts include soil disturbance and potential erosion along the slopes adjacent to the stream from additional grading and demolition/construction activities. The project applicant intends to construct the new structures and site access and parking in compliance with Nevada City. The existing parking lot, ticket booth, bridges crossing the creek channels, rail tracks, access roads, guest registration building, sheds, and other structures and items are either entirely or partially constructed within the 100-foot non-disturbance buffer to the stream. For example, the rail tracks are located adjacent to the bank of the creek channel and cross the creek channel along the area proposed for the developments of new cabins. Therefore, the proposed area of disturbance located within the 100-foot non-disturbance buffer to the stream buffer to the stream is already developed and disturbed.

REGULATORY REQUIREMENTS – ORDINANCE REQUIREMENTS

A number of state and federal agencies, including the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), U.S. Fish and Wildlife Service (USFWS), and the California Department of Fish and Wildlife (CDFW) have regulatory authority over special status species and sensitive habitats.

The regulatory aspects include:

• The United States Army Corps of Engineers (USACE) and the Environmental Protection Agency (EPA) regulate the discharge of dredge or fill material into waters of the United States under Section 404 of the CWA ("waters of the United States" include wetlands and lakes, rivers, streams, and their tributaries). Wetlands are defined for regulatory purposes as areas "...inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in

saturated solid conditions." Project proponents must obtain a permit from the USACE for all discharges of fill material into waters of the United States, including wetlands, before proceeding with a proposed action.

- The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over species listed as threatened or endangered under Section 9 of the Federal Endangered Species Act (ESA). The act protects listed species from harm or "take" which is broadly defined as "...the action of harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting, or attempting to engage in any such conduct." For any project involving a federal agency in which a listed species could be affected, the federal agency must consult with the USFWS in accordance with Section 7 of the ESA. The USFWS issues a biological opinion and, if the project does not jeopardize the continued existence of the listed species, issues an incidental-take permit.
- The California Department of Fish and Wildlife (CDFW) has jurisdiction over • species listed as threatened or endangered under section 2080 of the CDFW Code. The California Endangered Species Act (CESA) prohibits take of state-listed threatened and endangered species. The state Act differs from the federal Act in that it does not include habitat destruction in its definition of take. The CDFW defines take as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The CDFW may authorize take under the CESA through Sections 2081 agreements. If the results of a biological survey indicate that a state-listed species would be affected by the project, the CDFW would issue an Agreement under Section 2081 of the CDFW Code and would establish a Memorandum of Understanding for the protection of state-listed species. CDFW maintains lists for threatened, endangered, and candidate species. California candidate species are afforded the same level of protection as listed species. California also designates Species of Special Concern (SSC), which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational or educational values. These species do not have the same legal protection as listed species but may be added to official lists in the future.
- Compliance with Section 401 of the CWA is required for any project requiring a federal action (i.e. USACE) permit or federal funding) with construction that could have an impact to surface water quality. The Regional Water Quality Control Board (RWQCB) is a responsible for administering the Section 401 permitting program in California.
- California Native Plant Society (CNPS) is a non-profit group dedicated to preserving the state's native flora. It has developed lists of plants of special concern in California. The special-status plant species discussed

above is listed as CNPS List 4.2, which characterizes "Plants of Limited Distribution."

• Nevada City ordinances protecting stream resources and oak resources such as landmark groves and landmark oak trees.

MITIGATION FOR ENCROACHMENT INTO THE NON-DISTURBANCE BUFFER AND DRIP LINE OF THE LANDMARK OAK TREE

The Management Plan for the encroachment into the non-disturbance buffer, including areas within 100 feet of the perennial stream channels within the Project area, as detailed below, includes measures to minimize potential impacts to the stream channels, water quality, and the sparse riparian vegetation adjacent to the stream channels. These measures are intended for inclusion into the existing and proposed development within the non-disturbance buffers during and after construction to minimize direct and indirect impacts to water quality during and following construction. In addition, these measures should also be applied to any work to be done within the dripline of the landmark California oak tree located adjacent to the proposed new 20-foot driveway and proposed new parking lot behind the proposed 2 story 20 room motel building to be located within the existing gravel parking area. This will be accomplished by implementing the following during and following construction:

- Limit construction to periods of extended dry weather and the dry summer season;
- Establishing the area around the active stream channel as Environmentally Sensitive Area (ESA) where those areas will not be impacted by construction or thereafter;
- No fill or dredge material will enter or be removed from the stream channels during construction and thereafter;
- Use appropriate machinery and equipment to limit disturbance in the proposed Project disturbance areas;
- No dewatering of the streams will occur during construction or thereafter; and
- Implement Best Management Practices during and following construction.

IMPLEMENTATION OF BEST MANAGEMENT PRACTICES DURING CONSTRUCTION

To protect the stream channels and existing pond within the southeast corner of the Project area, non-disturbance buffer areas, water quality and downstream water resources, and the landmark California black oak tree, the contractor shall implement standard Best Management Practices during and after construction. These measures should include, but are not limited to:

• Minimize the number and size of work areas for equipment and spoil storage sites in the vicinity of the stream. Place staging areas outside of

the 100-foot non-disturbance buffers and the drip line of any landmark oak tree identified within the subject parcels.

- The contractor shall exercise reasonable precaution to protect Gold Run Creek, adjacent non-disturbance buffers, and the landmark California black oak tree from pollution with fuels, oils, and other harmful materials. Construction byproducts and pollutants such as oil, cement, and wash water shall be prevented from discharging into or near these resources and shall be collected for removal off the site. All construction debris and associated materials and litter shall be removed from the work site immediately upon completion.
- No equipment for vehicle maintenance or refueling shall occur within the 100-foot non-disturbance buffers or within the dripline of any landmark oak tree. The contractor shall immediately contain and clean up any petroleum or other chemical spills with absorbent materials such as sawdust or kitty litter. For other hazardous materials, follow the cleanup instruction on the label.
- For ground disturbing and construction related activities occurring within the 100-foot non-disturbance buffer zone, straw bales, straw wattles, or another accepted erosion control and sedimentation BMP should be located between the ground disturbance or construction area(s) and the top of the bank of the stream channels within the Project area. This is to minimize any potential runoff from erosion and sedimentation caused by the proposed Project.

Post Construction Erosion Control

Exposed bare soil along the stream embankment, including the 100-foot nondisturbance buffer should be protected against loss from erosion by the seeding of an erosion control mixture and restored with native grasses and mulching. Non-native species that are known to invade wild lands, such as orchard grass, velvet grass, rose clover, winter and spring vetch, and wild oats should not be used as they displace native species. These erosion control measures should also be implemented around the landmark California black oak tree, where feasible, to limit debris and erosion around the trunk and root zone of the landmark California black oak tree.

Provide Copies of Mitigation Measures to Contractors

To ensure the proper and timely implementation of all mitigation measures contained in this Biological Resources Inventory and Management Plan, as well as the terms and conditions of any other required permits, the applicant shall distribute copies of these mitigation measures and permit requirements to the contractors prior to grading and construction within the non-disturbance buffers and for any work within or adjacent to the dripline of the landmark California black oak tree identified adjacent to the new 20-foot driveway. All contractors shall be completely familiar with the mitigation measures contained above and with the terms and conditions of all permits.

ADDITONAL MITIGATION FOR THE LANDMARK OAK TREE

It is recommended that the following Best Management Practices (BMPs) for oak resources should be implemented during the development of the proposed Project, specifically for work within the root zone and drip line of the landmark California black oak tree:

- **Plans and specifications** should clearly state protection procedures for oak resources within the Project area. The specifications should also require contractors to stay within designated work areas.
- **Protective Fencing** not less than four feet in height shall be placed at the limits of proposed disturbance where the landmark oak tree is located. The fencing should be placed as far away from the trunk of the tree as possible to protect as much of the root zone as feasible. The protective fencing shall be inspected by the contractor prior to commencement of any grading activity within the Project disturbance areas and shall remain in place until construction is completed within each area of ground disturbing activities.
- **Damage to Oak Trees** during construction shall be immediately reported to a qualified biologist or a certified arborist to assess the potential level of impacts to oak resources and determine whether the damage will have a significant impact on the landmark oak tree. If it is determined by the qualified biologist or certified arborist that there is significant damage that could harm the long-term health of the landmark oak tree, work should be halted and the Nevada City should be contacted to discuss appropriate mitigation measures for such damages.
- **Equipment Damage** to limbs, trunks, and roots of all remaining trees within the subject parcels shall be avoided during project construction and development.
- **Grading Restrictions** Care must be taken to limit grade changes near the drip line of the landmark oak tree. Grade changes can lead to plant stress from oxygen deprivation or oak root fungus at the root collar of oaks. Minor grade changes further from the trunk are not as critical but can negatively affect the health of the tree if not carefully monitored by a qualified biologist or certified arborist.
- The Root Protective Zones (Drip Lines) Grade shall not be lowered or raised around the trunks (i.e., within the drip line) of the landmark oak tree. A qualified

biologist or certified arborist should supervise all excavation or grading proposed within the protective zone (drip line) of the landmark oak tree and/or the clearance of vegetation within the protective zone (drip line) of the landmark oak tree. Any major roots encountered shall be conserved to the greatest extent possible and treated as recommended by the qualified biologist or certified arborist.

Annual monitoring of the project area, including all features of the project constructed within or directly adjacent to the designated landmark oak tree should be implemented to identify any indirect impacts (deterioration of health or death of individual tress). A qualified biologist or certified arborist should evaluate the single landmark California black oak tree adjacent to the proposed new 20-fooot driveway (beginning approximately 12 months after site construction has been finalized) and assess the landmark oak tree where the drip line is within or directly adjacent to the project features constructed within or directly adjacent to the designated landmark oak tree. Annual monitoring should occur for up to 3 years post construction completion and should include photo documentation of the landmark oak tree. If the landmark oak tree appears to be deteriorating in health, the qualified biologist or certified arborist should make recommendations for minimizing further impacts to the tree.

In the event that the landmark oak tree is documented to be dying and needs to be removed, further mitigation would be required for the removal of that landmark oak tree. Mitigation to offset the impacts from the removal of the landmark oak tree could include one or a combination of the following as recommended by the qualified biologist or certified arborist conducting the annual monitoring at that time:

- **Conservation Easement**: within the subject parcels to permanently protect landmark oak trees from future development or use impacts. The amount of area and oak resources to be included in such a conservation easement would be made by the qualified biologist or certified arborist conducting the monitoring and would be a minimum of a 1:1 ratio of impact area (dbh and area of canopy cover protected under the easement would have to be at least the dbh and canopy over of the landmark oak tree to be removed) to conservation easement area with the final approval of the mitigation being approved by Nevada City. An offsite conservation easement at the same minimum 1:1 ratio would also be a viable option for using this type of mitigation for impacts to the landmark oak tree.
- Bear Yuba Land Trust (BYLT) In-lieu Fee: payment of an in-lieu fee to a BYLT mitigation fund that shall specify that the fee paid will be used to purchase mitigation for landmark oak trees or groves within Nevada City or Nevada County. An administration fee equal to five percent of the mitigation fee may also be required to cover the Nevada City and/or BYLT costs associated with this option.

- Planting Replacement: at a 2:1 ratio the number of inches of oak trees removed (at dbh). This is the recommendation for planting ratios previously approved by recent Nevada County Planning Department permitted projects requiring similar mitigation. The oak plantings would need to be maintained and monitored to ensure that the number of inches of oak trees removed survive after 5 years from the time that plantings are completed. The final approval of this mitigation type being approved would be with Nevada City.
- Other Mitigation: can be developed between a qualified biologist or certified arborist, the project proponent, and Nevada City with the final approval of the mitigation being approved by Nevada City. However, at a minimum, any other mitigation recommended as part of this Biological Resources Inventory and Management Plan would be required to fully mitigate for the loss of the number of trees (their dbh at a 2:1 ratio).

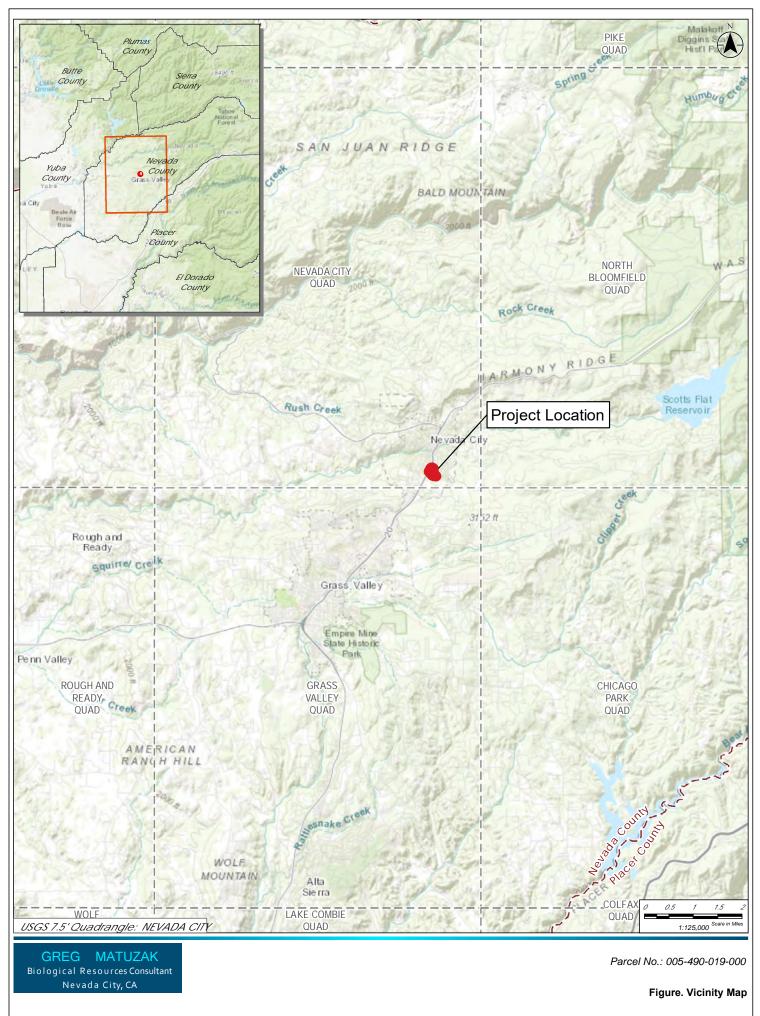
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Appendix A

Project Vicinity Figure and Project Location Figure



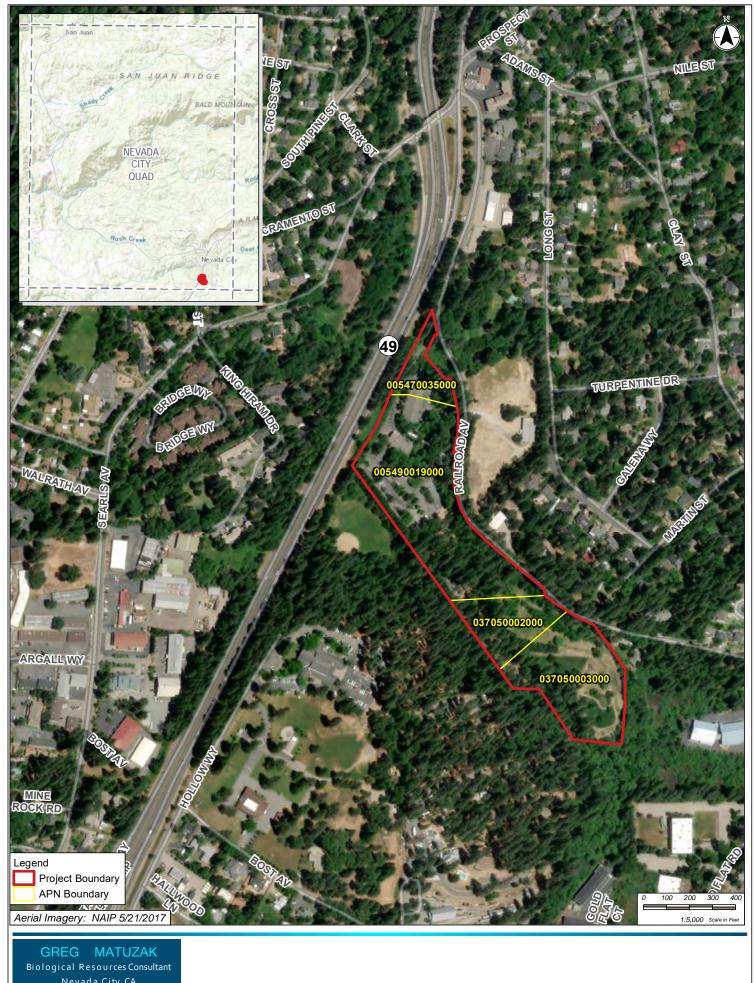
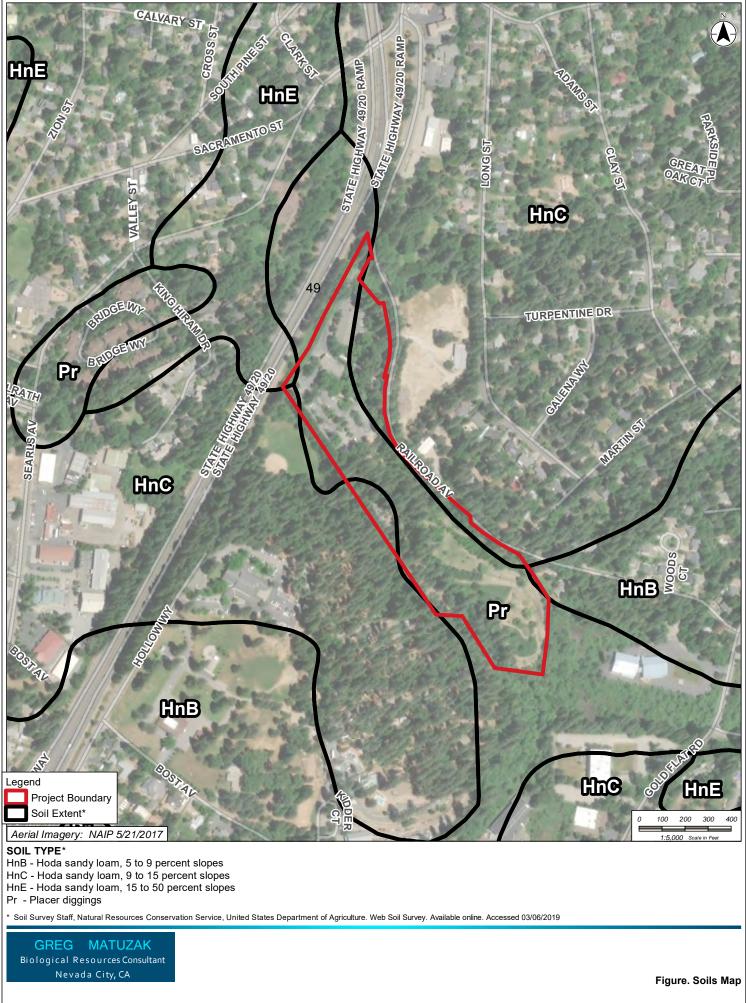


Figure. Project Location Map

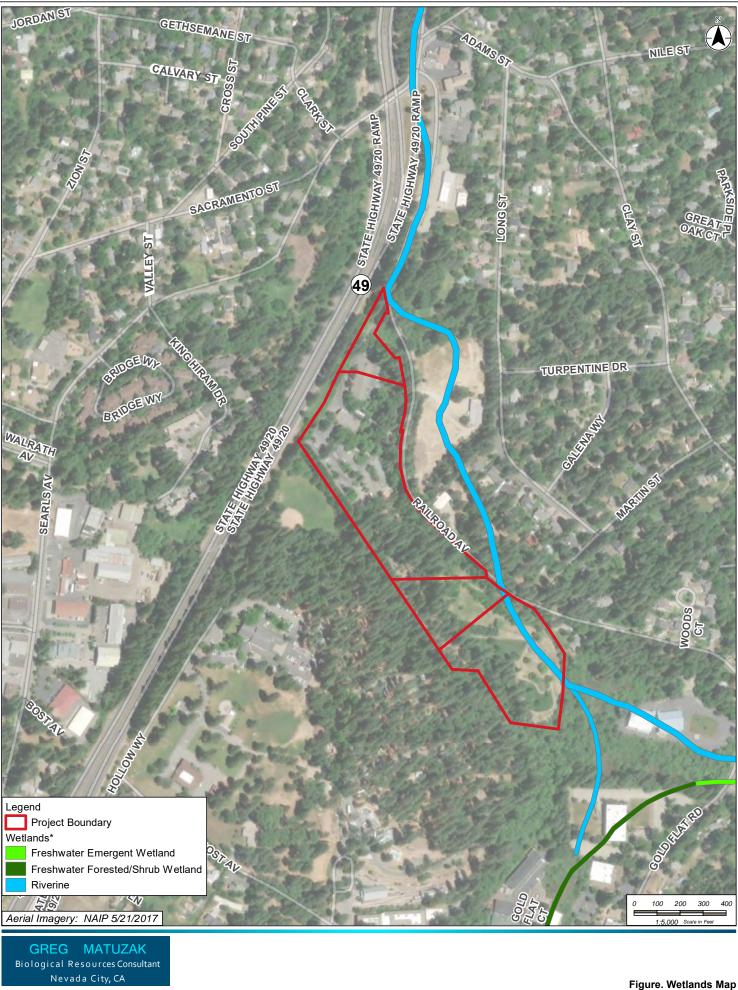
Appendix B

USDA Soils Map



Appendix C

National Wetland Inventory Map



^{*} Data downloaded from https://www.fws.gov/wetlands/Data/Data-Download.html 3/6/2019

Appendix D

Photo Log



Photos of the March 4th, 2019 Site Visit and Field Surveys for the Subject Parcels

Photo 1: Proposed new parking within existing gravel area along edge of creek.



Photo 2: New motel building within existing paved parking area and new parking within gravel area.



Photo 3: Creek crossing under footbridge at the existing ticket booth. New parking are proposed within the existing gravel area to right.



Photo 4: Area proposed for new driveway and cabins. Cabin B is proposed to be located in this area.



Photo 5: Area along creek and rail tracks where new driveway would be constructed. Cabin C would be located within this area to the right of the existing rail tracks.



Photo 6: Rail tracks heading east with creek on the left of the tracks. Cabin C proposed to be constructed right of tracks and cabins D, E, and F proposed upslope behind existing cabins to the right.



Photo 7: Proposed driveway to lead into area of new cabins (G through M) to be constructed.



Photo 8: Approximate area of Cabin G within an upland area with the creek located to the right.



Photo 9: Existing track and structures to be removed in this area and cabins to be constructed where tracks area located. Approximate area of proposed cabin J.



Photo 10: Creek located within deep drainage channel below existing tracks within the area proposed for cabin development. No signs of scouring or flooding along this section of creek.



Photo 11: Creek located within deep drainage channel below existing tracks within the area proposed for cabin development. No signs of scouring or flooding along this section of creek.



Photo 12: Existing dam within the eastern section of the project area. Dam creates pond within an area designated as additional parking and for outdoor events.



Photo 13: Existing pond area with the outdoor events area in the background.



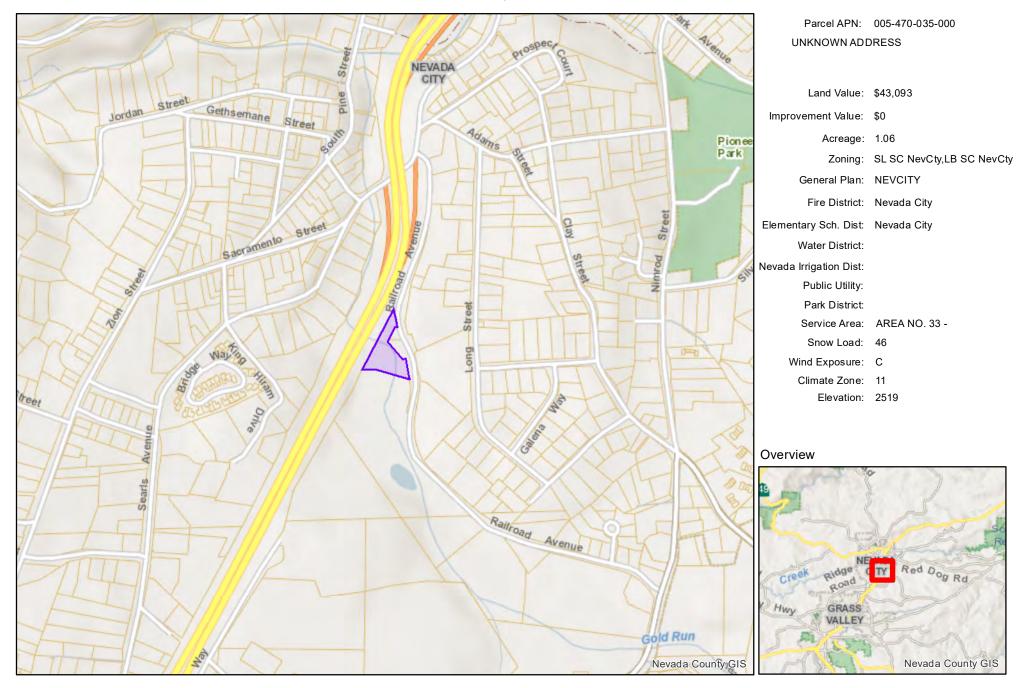
Photo 14: Additional parking area and outdoor events area within the eastern section of project area.



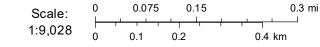
Photo 15: Culvert crossing rail tracks near where creek from eastern pond enters Gold Run Creek.

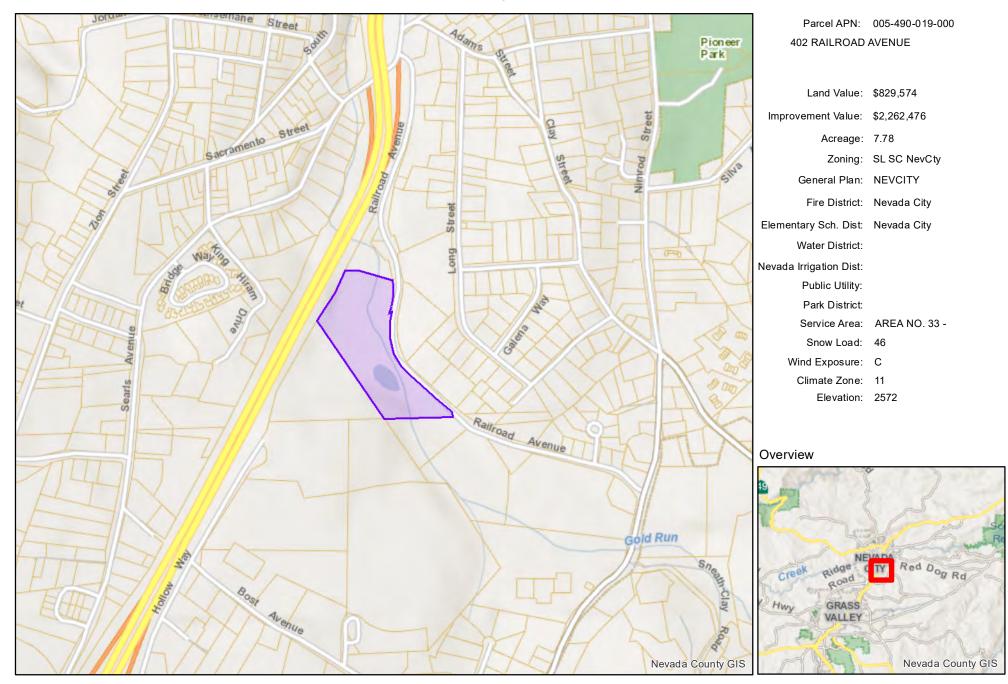
Appendix E

Parcel Reports

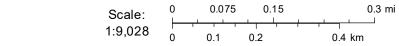


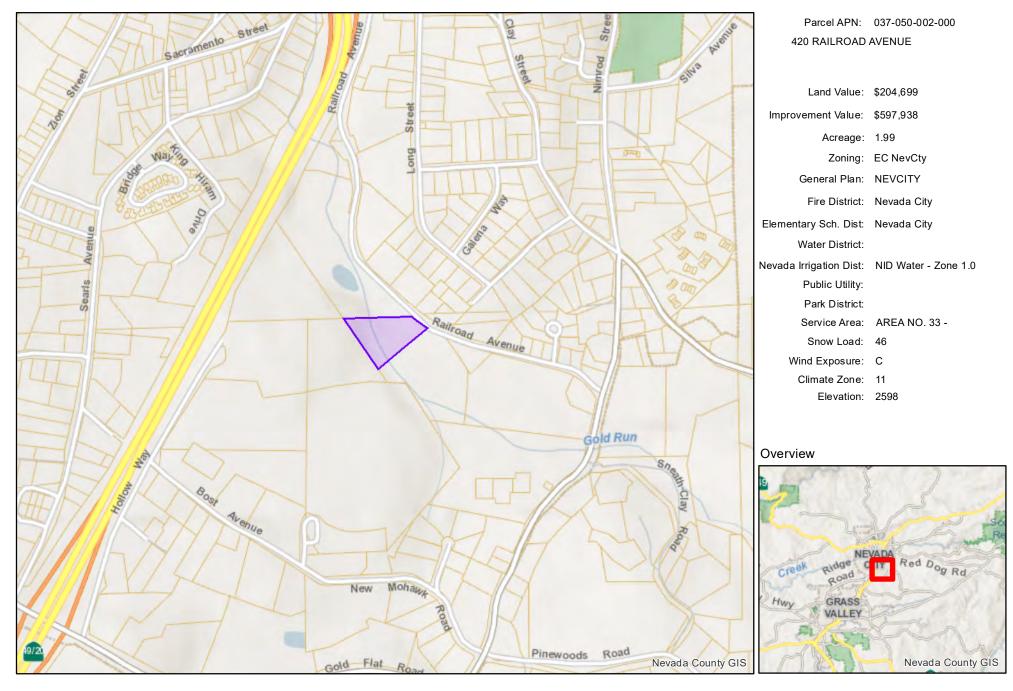
March 10, 2019 © Nevada County GIS 2019



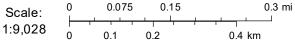


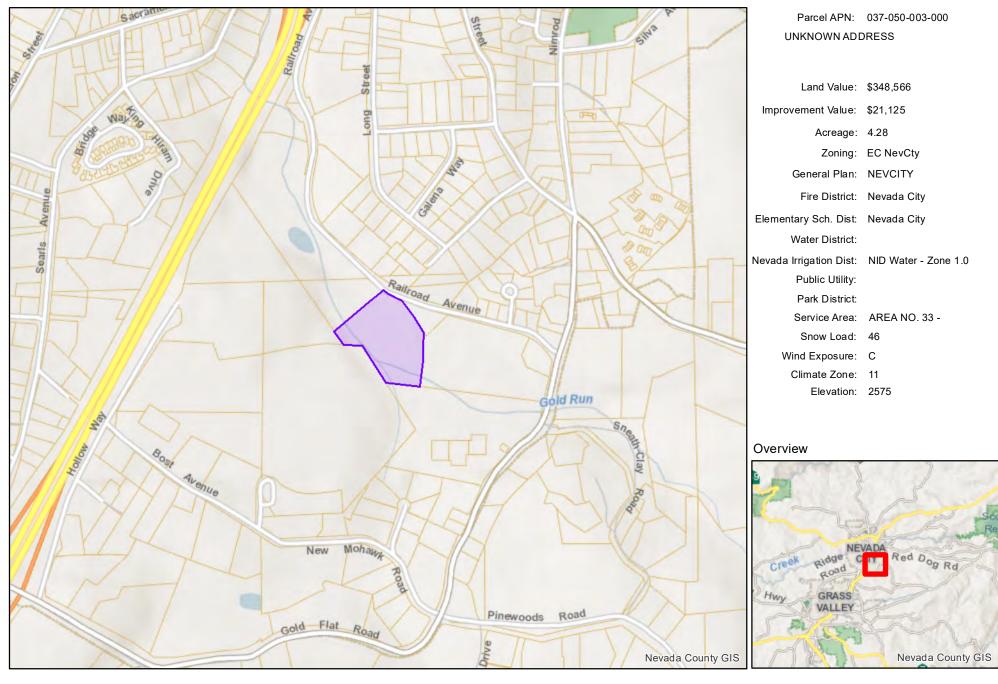
March 6, 2019	
© Nevada County GIS 2019	





March 10, 2019 © Nevada County GIS 2019







Appendix F

Plants and Wildlife Observed

Species observed within the Project area March 4th, 2019

Scientific Name

CRYPTOGAMS

Blechnaceae Woodwardia fimbriata

Dennstaedtiaceae Pteridium aquilinum

Equisetaceae Equisetum arvense

GYMNOSPERMS

Cupressaceae Calocedrus decurrens

Pineaceae Pinus ponderosa Abies concolor Psuedotsuga menziesii

DICOTYLEDONS

Aceraceae Acer macrophyllum

Anacardiaceae Toxicodendron diversilobum

Apiaceae (Umbelliferae) Daucus carota Torilis arvensis

Asteraceae (Compositae) Artemisia douglasiana Aster eatonii Calycadenia spicata **Common Name**

FERNS AND SPIKE-MOSSES

chain fern

Bracken Family bracken fern

Horsetail Family common horsetail

CONIFERS

Cypress Family incense cedar

Pine Family ponderosa pine white fir Douglas fir

FLOWERING PLANTS

Maple Family big-leaf maple

Cashew Family poison oak

Carrot Family wild carrot hedge-parsley

Sunflower Family mugwort Eaton's aster white tarweed Carduus pycnocephala Centaurea solstitialis Cichorium intybus Cirsium occidentale Cirsium vulgare Grindelia hirsutula Leucanthemum sp. Madia elegans ssp. vernalis Madia gracilis Solidago canadensis Sonchus sp. Taraxacum officinale

Betulaceae Alnus rhombifolia

Brassicaceae (Cruciferae) Brassica nigra Lepidium nitidum Rorippa nasturtium-aquaticum

Caprifoliaceae Lonicera hispidula

Cornaceae Cornus nuttallii

Ericaceae Arctostaphylos patula

Fabaceae Lathyrus latifolius Lotus humistratus

Hypericaceae Hypericum perforatum Italian thistle yellow star-thistle chicory western thistle common thistle gum plant ox-eye daisy common madia slender tarweed goldenrod sow thistle common dandelion

Birch Family white alder

Mustard Family black mustard pepper grass water cress

Honeysuckle Family honeysuckle

Dogwood Family California dogwood

Heath Family greenleaf manzanita

Legume Family sweet pea lotus

St. John's Wort Family Klamath weed Juglandaceae Juglans californica

Lamiaceae Prunella vulgaris var. lanceolatus Stachys ajugoides Trichostema lanceolatum

Plantaginaceae Plantago lanceolata

Polemoniaceae Navarretia sp.

Polygonaceae Rumex crispus Rosaceae Malus spp. Oemleria cerasiformis Prunus virginiana Rosa californica Rubus armeniacus Rubus laciniatus Rubus leucodermis

Salicaceae Salix laevigata Salix lasiolepis

Scrophulariaceae *Mimulus guttatus Verbascum blattaria Verbascum thapsus*

Cyperaceae Carex densa (dudleyi) Cyperus eragrostis Walnut Family California black walnut

Mint Family self-heal hedge nettle vinegar weed

Plantain Family common plantain

Phlox Family navarretia

Buckwheat Family curly dock Rose Family pear and apple Several cultivars oso berry choke cherry wild rose Armenian blackberry cut-leaved blackberry blackcap raspberry

Willow Family red willow arroyo willow

Figwort Family seep-spring monkeyflower moth mullein woolly mullein

Sedge Family sedge umbrella sedge Iridaceae Iris sp.

Juncaceae Juncus balticus Juncus bufonius

Lemnaceae Lemna sp.

Liliaceae Chlorogalum pomeridianum

Poaceae *Avena* sp.

Briza minor Bromus diandrus Bromus hordeaceus Cynosurus echinata Dactylis glomerata Elymus glaucus Festuca arundinacea Holcus lanatus Hordeum marinum ssp. gussoneanum Lolium perenne perennial Muhlenbergia rigens Phalaris aquatica Poa pratensis Taeniatherum caput-medusae Iris Family iris

Rush Family Baltic rush toad rush

Duckweed Family duckweed

Lily Family soap plant

Grass Family

wild oats tiny rattlesnake grass ripgut brome soft brome dog-tail grass orchard grass blue wild-rye tall fescue velvet grass Mediterranean barley rye grass deer grass Harding grass Kentucky bluegrass medusa-head grass

Wildlife Species observed within the Project Area March 4th, 2019

Wildlife

Apheloxoma californica Buteo jamaicensis Callipepla californica Melozone crissalis Western scrub jay Red-tailed hawk California quail California towhee Appendix G

CNDDB Database Results

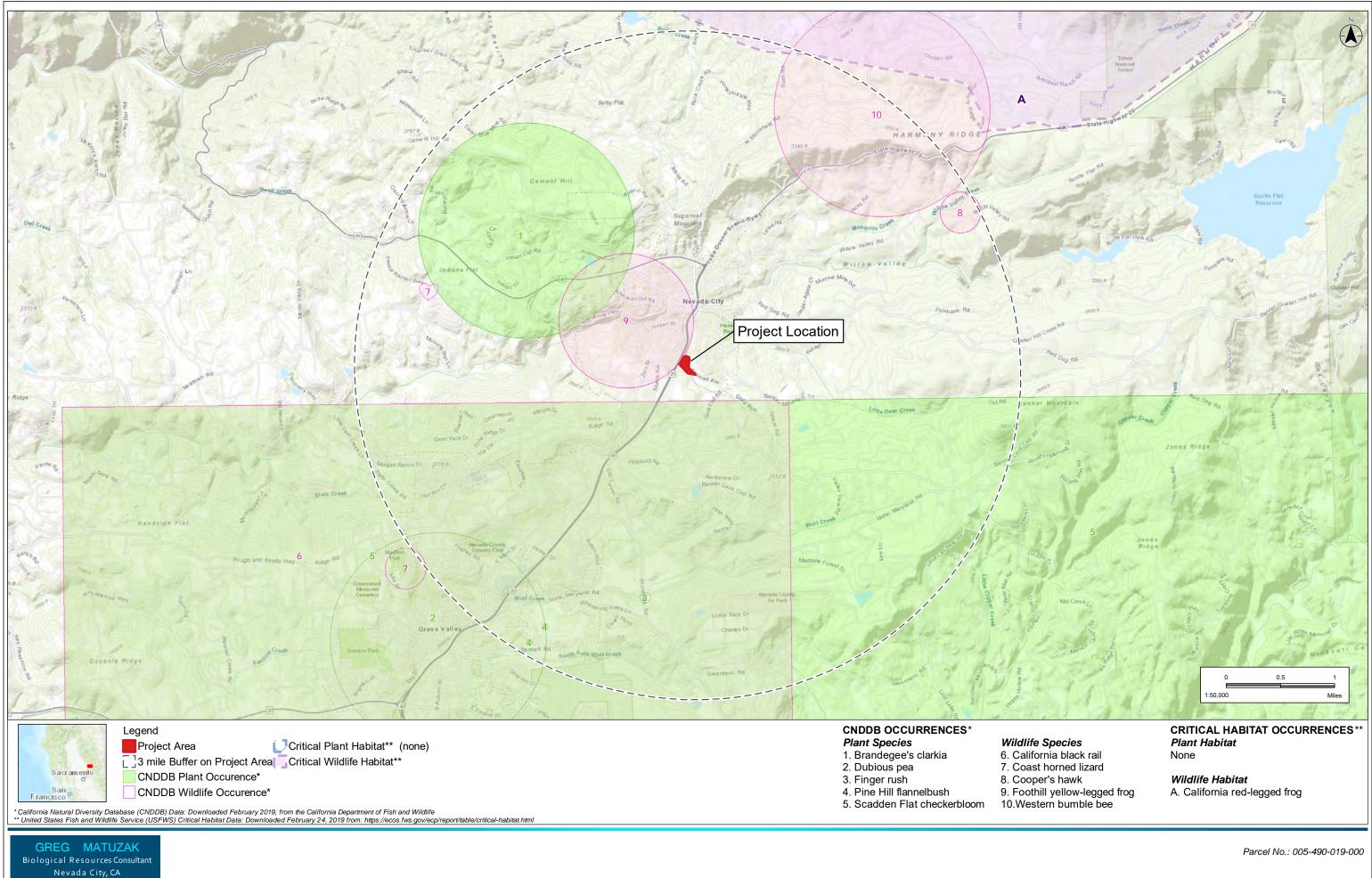


Figure. CNDDB and Critical Habitat Map



California Department of Fish and Wildlife

California Natural Diversity Database



 Query Criteria:
 EOndx IS (102101 OR 110474 OR12076 OR 30554 OR 34885 OR34905 OR 41294 OR 43435 OR68166 OR 79239 OR 83108 OR99737)

Map Index Numl	ber:	48682			EO Index:		110474	
Key Quad:		Vevada City (3	3912131)		Element Code:		AAABH01050	
Occurrence Nur	nber:	1761			Occurrence Last U	pdated:	2018-09-14	
Scientific Name					Common Nomo		lleur le ene el fre e	
Scientific Name	: Ran	a boylii			Common Name:	footnili ye	llow-legged frog	
Listing Status:		Federal:	None		Rare Plant Rank:			
CNDDB Element Ranks		State:	Candidate Threatene	d	Other Lists:	BLM_S-S	ensitive SC-Species of Special Concerr	
		Global:	G3			IUCN_NT	-Near Threatened	I
		State:	S3			USFS_S-	Sensitive	
General Habitat:	:				Micro Habitat:			
PARTLY-SHADE SUBSTRATE IN			IS AND RIFFLES WITH	H A ROCKY			BBLE-SIZED SUBSTRATE FO 5 WEEKS TO ATTAIN METAM	
Last Date Obser	rved: 1	903-06-XX			Occurrence Type:	Natural/N	Native occurrence	
Last Survey Dat	e: 1	903-06-XX			Occurrence Rank:	None		
Owner/Manager	: U	NKNOWN			Trend:	Unknowr	n	
Presence:	E	xtirpated						
Location:								
EAST OF CHAM	PION MIN	IE AND WEST	OF NEVADA CITY.					
Detailed Location	on:							
			AS "NEVADA CITY, OL ADA CITY AND CHAM		, CREEK ON ROAD TO	CHAMPIC	ON MINE." EXACT LOCATION	UNKNOWN.
Ecological:								
Threats:								
General:								
COLLECTED IN	JUN 1903	. ACCORDIN	G TO JENNINGS AND	LIND, RANA E	BOYLII IS EXTIRPATED	O AT THIS	LOCATION.	
PLSS: T16N, F	R08E, Sec	. 12 (M)	Accuracy:	3/	5 mile		Area (acres):	776
UTM: Zone-10) N434755	57 E670060	Latitude/Lo	ngitude: 39	9.26068 / -121.0289		Elevation (feet):	2,400
County Summar	ry:		Quad Sum	mary:				
Nevada			Nevada City	/ (3912131)				
Sources:								
CAR03S0009	CARLSC	DN, J CAS #	4753 COLLECTED FR	OM NEVADA (CITY, OLYMPIC PARK,	, CREEK O	N ROAD TO CHAMPION MINI	E 1903-06-XX
JEN94R0001					SPECIES OF SPECIAL NCHO CORDOVA. 255		N IN CALIFORNIA. FINAL REP 11-01	ORT
JEN96R0001			PTER 31: STATUS OF II. 1996-XX-XX	AMPHIBIANS,	, PP 921-944 IN: SIERF	RA NEVAD	A ECOSYSTEM PROJECT: FI	NAL REPORT
LIN05U0001							MPHIBIAN: DETERMINING AN PHD DISSERTATION, UC DAV	



California Department of Fish and Wildlife



Map Index Number:	A0540		EO Index:		102101	
Key Quad:	North Bloomfi	eld (3912038)	Element Code:		ABNKC12040	
Occurrence Number:	129		Occurrence Last U	Occurrence Last Updated: 2016-06-14		
Scientific Name: A	ccipiter cooperii		Common Name:	Cooper's	hawk	
Listing Status:	Federal:	None	Rare Plant Rank:			
	State:	None	Other Lists:		/L-Watch List	
CNDDB Element Ranks	: Global:	G5		IUCN_LC	-Least Concern	
	State:	S4				
General Habitat:			Micro Habitat:			
WOODLAND, CHIEFLY	OF OPEN, INTE	ERRUPTED OR MARGINAL TYPE			RIAN GROWTHS OF DECIDUO N RIVER FLOOD-PLAINS; ALSO	
Last Date Observed:	2015-06-19		Occurrence Type:	Natural/N	Native occurrence	
Last Survey Date:	2015-06-19		Occurrence Rank:	Unknowr	า	
Owner/Manager:	BLM, UNKNOW	WN	Trend:	Unknown		
Presence:	Presumed Exta	ant				
Location:						
NORTH SIDE OF SCOT	TS VALLEY RD	ABOUT 0.1 MILES NW OF THE E	BURJER RD JUNCTION, W	VILLOW VA	ALLEY.	
Detailed Location:						
	D COORDINATI	ES. EXACT NEST LOCATION NO	T KNOWN.			
AREA.	ER FOREST, UI	NDISTURBED EXCEPT FOR SLO	WET INCREASING KURAL		THAL DEVELOPMENT IN THE C	DENERAL
Threats:						
DEVELOPMENT, DISTI	JRBANCE FRO	M VEHICLES, PEDESTRIANS AN	D DOGS.			
General:						
SUCCESSFUL NESTIN	G OCCURRED 19 JUN 2015, N	IN THE VICINITY IN 2014 (MULTII NEST NOT FOUND.	PLE AND FREQUENT BEG	GING CAI	LLS FROM AT LEAST 2 BIRDS H	HEARD). 1
PLSS: T16N, R09E, S	ec. 4, SE (M)	Accuracy:	1/5 mile		Area (acres):	70
	221 E675003	Latitude/Longitude:	39.27468 / -120.97121		Elevation (feet):	3,003
UTM: Zone-10 N4349						
UTM: Zone-10 N4349 County Summary:		Quad Summary:				



California Department of Fish and Wildlife



	nber:	68011			EO Index:		68166						
Key Quad:		Grass Valley	(3912121)		Element Code:		ABNME03041						
Occurrence Nu	mber:	135			Occurrence Last Updated:		2009-09-24						
Scientific Name	e: Lat	erallus jamaice	ensis coturniculus		Common Name:	California	black rail						
Listing Status:		Federal:	None		Rare Plant Rank:								
* SENSITIVE *	*	State:	Threatened		Other Lists:	BLM_S-S							
CNDDB Elemer	nt Ranks:	ks: Global:	: Global:	Global:	Global:	Global:		G3G4T1			CDFW_FP-Fully Protected IUCN NT-Near Threatened		
		State:	S1				WL-Red Watch List BCC-Birds of Conservation Cor	ncern					
General Habitat	t:				Micro Habitat:								
			WET MEADOWS AND SHALI S BORDERING LARGER BAY		-		ABOUT 1 INCH THAT DO NOT NSE VEGETATION FOR NEST						
ast Date Obse	erved: 2	2007-01-23			Occurrence Type:	Natural/N	Native occurrence						
ast Survey Da	ite: 2	2007-01-23			Occurrence Rank:	Good							
Owner/Manage	r:				Trend:	Unknow	n						
Presence:	I	Presumed Exta	ant										
ocation:													
SENSITIVE* L	OCATION	INFORMATIO	ON SUPPRESSED.										
Detailed Location	on:												
PLEASE CONT/			NATURAL DIVERSITY DATA	ABASE, CA	ALIFORNIA DEPARTI	/IENT OF F	FISH AND WILDLIFE, FOR MO	RF					
NFORMATION:	: (916) 32	2-2493											
	: (916) 32	2-2493											
Ecological: MEADOW/EMEI	RGENT W	/ETLAND HAE					Y TYPHA DOMINGENSIS, CA DED BY HOMES. BISECTED B	REX SP.,					
Ecological: MEADOW/EMEI JUNCUS EFFUS Threats :	RGENT W SUS PAC	/ETLAND HAE FICUS, EPILC	OBIUM SPP, SALIX LESIDEP	PIS, AND R	RUBUS DISCOLOR; S	URROUNE	DED BY HOMES. BISECTED B	REX SP., Y A ROAD.					
Ecological: MEADOW/EMEI JUNCUS EFFUS Fhreats: JPLAND, NOXII	RGENT W SUS PAC	/ETLAND HAE FICUS, EPILC	OBIUM SPP, SALIX LESIDEP	PIS, AND R	RUBUS DISCOLOR; S	URROUNE		REX SP., Y A ROAD.					
Ecological: MEADOW/EMEI JUNCUS EFFUS Threats: JPLAND, NOXII General:	RGENT W SUS PAC	/ETLAND HAE FICUS, EPILC	DBIUM SPP, SALIX LESIDEP	PIS, AND R DOW DEG	RUBUS DISCOLÓR; SI GRADING WETLAND H	URROUNE	DED BY HOMES. BISECTED B	REX SP., Y A ROAD. IN 2007.					
Ecological: MEADOW/EMEI JUNCUS EFFUS Inreats: JPLAND, NOXII General: PLSS:	RGENT W SUS PAC	/ETLAND HAE FICUS, EPILC	DBIUM SPP, SALIX LESIDEP MEADOW. SIPHON IN MEAE Accuracy:	PIS, AND R DOW DEG 80 r	RUBUS DISCOLOR; S	URROUNE	DED BY HOMES. BISECTED B DEVELOPMENT PROPOSED Area (acres):	REX SP., Y A ROAD. IN 2007. 0					
Ecological: MEADOW/EMEI JUNCUS EFFUS Ihreats: JPLAND, NOXII General: PLSS:	RGENT W SUS PAC	/ETLAND HAE FICUS, EPILC	DBIUM SPP, SALIX LESIDEP	PIS, AND R DOW DEG 80 r	RUBUS DISCOLÓR; SI GRADING WETLAND H	URROUNE	DED BY HOMES. BISECTED B	REX SP., Y A ROAD. IN 2007.					
Ecological: MEADOW/EMEI JUNCUS EFFUS Threats: UPLAND, NOXII General: PLSS: UTM:	RGENT W SUS PAC	/ETLAND HAE FICUS, EPILC	DBIUM SPP, SALIX LESIDEP MEADOW. SIPHON IN MEAE Accuracy: Latitude/Longitude Quad Summary:	PIS, AND R DOW DEG 80 r	RUBUS DISCOLÓR; SI GRADING WETLAND H	URROUNE	DED BY HOMES. BISECTED B DEVELOPMENT PROPOSED Area (acres):	REX SP., Y A ROAD. IN 2007. 0					
Ecological: MEADOW/EMEI JUNCUS EFFUS Threats: JPLAND, NOXII General: PLSS: JTM: County Summa	RGENT W SUS PAC	/ETLAND HAE FICUS, EPILC	DBIUM SPP, SALIX LESIDEP MEADOW. SIPHON IN MEAE Accuracy: Latitude/Longitud	PIS, AND R DOW DEG 80 r	RUBUS DISCOLÓR; SI GRADING WETLAND H	URROUNE	DED BY HOMES. BISECTED B DEVELOPMENT PROPOSED Area (acres):	REX SP., Y A ROAD. IN 2007. 0					
Ecological: MEADOW/EMEI JUNCUS EFFUS Inreats: JPLAND, NOXII General: PLSS: JTM: County Summa Nevada Sources:	RGENT W SUS PAC US WEED	/ETLAND HAE FICUS, EPILC IS INVADING	DBIUM SPP, SALIX LESIDEP MEADOW. SIPHON IN MEAE Accuracy: Latitude/Longitur Quad Summary: Grass Valley (391	PIS, AND R DOW DEG 80 r 1 de: 12121)	RUBUS DISCOLÓR; S	URROUNE	DED BY HOMES. BISECTED B DEVELOPMENT PROPOSED Area (acres): Elevation (feet):	REX SP., Y A ROAD. IN 2007. 0 2,225					
Ecological: MEADOW/EMEI UNCUS EFFUS Inreats: JPLAND, NOXII General: PLSS: JTM: County Summa Nevada Sources:	RGENT W SUS PAC US WEED	/ETLAND HAE FICUS, EPILC IS INVADING	DBIUM SPP, SALIX LESIDEP MEADOW. SIPHON IN MEAE Accuracy: Latitude/Longitur Quad Summary: Grass Valley (391	PIS, AND R DOW DEG 80 r 1 de: 12121)	RUBUS DISCOLÓR; S	URROUNE	DED BY HOMES. BISECTED B DEVELOPMENT PROPOSED Area (acres):	REX SP., Y A ROAD. IN 2007. 0 2,225					
Ecological: MEADOW/EMEI JUNCUS EFFUS Threats: UPLAND, NOXII General: PLSS: UTM: County Summa Nevada Sources: MOR07F0001	RGENT W SUS PAC US WEEE ary: MORAN -01-23 RICHM	/ETLAND HAE FICUS, EPILC PS INVADING	DBIUM SPP, SALIX LESIDEP MEADOW. SIPHON IN MEAD Accuracy: Latitude/Longitur Quad Summary: Grass Valley (391 GICAL OUTREACH SERVICE	PIS, AND R DOW DEG 80 r 12121) ES) - FIELL FORNIA, BI	RUBUS DISCOLÓR; S GRADING WETLAND H meters D SURVEY FORM FO ERKELEY) - DISTRIB	HABITAT. I	DED BY HOMES. BISECTED B DEVELOPMENT PROPOSED Area (acres): Elevation (feet):	REX SP., Y A ROAD. IN 2007. 0 2,225 NICULUS 2					
JUNCUS EFFUS Threats:	RGENT W SUS PAC US WEEE ary: MORAN -01-23 RICHM SIERRA TECKL	/ETLAND HAE FICUS, EPILC PS INVADING N, V. (ECOLOC OND O.M. ET NEVADA FO	DBIUM SPP, SALIX LESIDEP MEADOW. SIPHON IN MEAD Accuracy: Latitude/Longitur Quad Summary: Grass Valley (391 GICAL OUTREACH SERVICE AL. (UNIVERSITY OF CALIF DOTHILLS. J. FIELD ORNITHO HAEFER (UNIVERSITY OF C	PIS, AND R DOW DEG 80 r 10de: 12121) ES) - FIELD CORNIA, BI OL. 79(4):3	RUBUS DISCOLÓR; S GRADING WETLAND H meters D SURVEY FORM FO ERKELEY) - DISTRIB 381-390 2008-XX-XX	HABITAT. I R LATERA	DED BY HOMES. BISECTED B DEVELOPMENT PROPOSED Area (acres): Elevation (feet):	REX SP., Y A ROAD. IN 2007. 0 2,225 NICULUS 2 N THE					



California Department of Fish and Wildlife

California Natural Diversity Database



	82117	82117 EO Index:			83108		
Key Quad:	Mortmar (331	1558)	Element Code:		AFCNB02060		
Occurrence Number:	90		Occurrence Last U	Occurrence Last Updated: 201		2011-05-19	
Scientific Name: C	Syprinodon macu	larius	Common Name:	desert pu	pfish		
Listing Status:	Federal:	Endangered	Rare Plant Rank:				
	State:	Endangered	Other Lists:		Endangered		
CNDDB Element Rank	s: Global:	G1		IUCN_VU	J-Vulnerable		
	State:	S1					
General Habitat:			Micro Habitat:				
DESERT PONDS, SPR CALIFORNIA.	INGS, MARSHE	S AND STREAMS IN SOUTHERN		S FROM S	DM FRESHWATER TO 68 PPT; 9 - 45 C AND DISSOLVED OXY		
Last Date Observed:	1966-04-27		Occurrence Type:	Natural/	Native occurrence		
Last Survey Date:	1966-04-27		Occurrence Rank:	Unknow	n		
				rend: Unknown			
Owner/Manager:	BLM, PVT		Trend:	Unknow	n		
Owner/Manager: Presence:	BLM, PVT Presumed Exta	ant	Trend:	Unknow	n		
Presence:	,	ant	Trend:	UNKNOW	n		
Presence: Location: DRAINAGE LEADING	Presumed Exta	ant RBOR, NORTH OF BETZ BEACH,				SIDE	
Presence: Location: DRAINAGE LEADING ⁻ COUNTY.	Presumed Exta					SIDE	
Presence: Location: DRAINAGE LEADING COUNTY. Detailed Location: LOCATION IN CAS MU	Presumed Exta		NNE SIDE OF SALTON S	EA, SALT ; DITCH T	ON SEA STATE PARK, RIVER O BOAT LANDING" & "SALTOI		
Presence: Location: DRAINAGE LEADING T COUNTY. Detailed Location: LOCATION IN CAS MU	Presumed Exta	RBOR, NORTH OF BETZ BEACH, D GIVEN AS "SALTON SEA STATE	NNE SIDE OF SALTON S	EA, SALT ; DITCH T	ON SEA STATE PARK, RIVER O BOAT LANDING" & "SALTOI		
Presence: Location: DRAINAGE LEADING T COUNTY. Detailed Location: LOCATION IN CAS MU PARK HEADQUARTER Ecological: DRAINAGE MAY NO LU	Presumed Exta TO VARNER HAI SEUM RECORE S; FIRST LAGO	RBOR, NORTH OF BETZ BEACH, D GIVEN AS "SALTON SEA STATE	, NNE SIDE OF SALTON S E PARK HEADQUARTERS D DRAINAGE INTO PARK S THAT STATE PARK RD	EA, SALT ; DITCH T BAY ON T	ON SEA STATE PARK, RIVER O BOAT LANDING" & "SALTO OPO MAP.	N SEA STAT	
Presence: Location: DRAINAGE LEADING T COUNTY. Detailed Location: LOCATION IN CAS MU PARK HEADQUARTER Ecological: DRAINAGE MAY NO LU	Presumed Exta TO VARNER HAI SEUM RECORE S; FIRST LAGO	RBOR, NORTH OF BETZ BEACH, O GIVEN AS "SALTON SEA STATE ON SE OF MARINA." MAPPED TO NTO PARK HARBOR; IT APPEAR	, NNE SIDE OF SALTON S E PARK HEADQUARTERS D DRAINAGE INTO PARK S THAT STATE PARK RD	EA, SALT ; DITCH T BAY ON T	ON SEA STATE PARK, RIVER O BOAT LANDING" & "SALTO OPO MAP.	N SEA STAT	
Presence: Location: DRAINAGE LEADING COUNTY. Detailed Location: LOCATION IN CAS MU PARK HEADQUARTER Ecological: DRAINAGE MAY NO LI FLOWS TO LAGOON S Threats:	Presumed Exta TO VARNER HAI SEUM RECORE S; FIRST LAGO	RBOR, NORTH OF BETZ BEACH, O GIVEN AS "SALTON SEA STATE ON SE OF MARINA." MAPPED TO NTO PARK HARBOR; IT APPEAR	, NNE SIDE OF SALTON S E PARK HEADQUARTERS D DRAINAGE INTO PARK S THAT STATE PARK RD	EA, SALT ; DITCH T BAY ON T	ON SEA STATE PARK, RIVER O BOAT LANDING" & "SALTO OPO MAP.	N SEA STAT	
Presence: Location: DRAINAGE LEADING COUNTY. Detailed Location: LOCATION IN CAS MU PARK HEADQUARTER Ecological: DRAINAGE MAY NO LU FLOWS TO LAGOON S Threats: General:	Presumed Exta TO VARNER HAI SEUM RECORE S; FIRST LAGO ONGER FLOW II SOUTH OF PAR	RBOR, NORTH OF BETZ BEACH, O GIVEN AS "SALTON SEA STATE ON SE OF MARINA." MAPPED TO NTO PARK HARBOR; IT APPEAR	, NNE SIDE OF SALTON S E PARK HEADQUARTERS D DRAINAGE INTO PARK S THAT STATE PARK RD 2009, 2010).	EA, SALT ; DITCH T BAY ON T MAY HAV	ON SEA STATE PARK, RIVER O BOAT LANDING" & "SALTO OPO MAP. 'E SEVERED DRAINAGE AND	N SEA STAT CREEK	
Presence: Location: DRAINAGE LEADING T COUNTY. Detailed Location: LOCATION IN CAS MU PARK HEADQUARTER Ecological: DRAINAGE MAY NO LU FLOWS TO LAGOON S Threats: General:	Presumed Exta TO VARNER HAI SEUM RECORE S; FIRST LAGO ONGER FLOW II SOUTH OF PARI	RBOR, NORTH OF BETZ BEACH, O GIVEN AS "SALTON SEA STATE ON SE OF MARINA." MAPPED TO NTO PARK HARBOR; IT APPEAR K HARBOR (AIR PHOTOS 2005, 2	, NNE SIDE OF SALTON S E PARK HEADQUARTERS D DRAINAGE INTO PARK S THAT STATE PARK RD 2009, 2010).	EA, SALT ; DITCH T BAY ON T MAY HAV	ON SEA STATE PARK, RIVER O BOAT LANDING" & "SALTO OPO MAP. 'E SEVERED DRAINAGE AND	N SEA STAT CREEK	
Presence: Location: DRAINAGE LEADING COUNTY. Detailed Location: LOCATION IN CAS MU PARK HEADQUARTER Ecological: DRAINAGE MAY NO LU FLOWS TO LAGOON S Threats: General: 9 SPECIMENS COLLED PLSS: T08S, R10E, S	Presumed Exta TO VARNER HAD SEUM RECORE S; FIRST LAGO ONGER FLOW II SOUTH OF PARP CTED ON 22 AP Sec. 02, S (S)	RBOR, NORTH OF BETZ BEACH, O GIVEN AS "SALTON SEA STATE ON SE OF MARINA." MAPPED TO NTO PARK HARBOR; IT APPEAR < HARBOR (AIR PHOTOS 2005, 2 RIL 1966 (CAS 27104) AND 3 COI	, NNE SIDE OF SALTON S E PARK HEADQUARTERS D DRAINAGE INTO PARK S THAT STATE PARK RD 2009, 2010). LLECTED ON 27 APR 1960	EA, SALT ; DITCH T BAY ON T MAY HAV	ON SEA STATE PARK, RIVER: O BOAT LANDING" & "SALTO! 'OPO MAP. 'E SEVERED DRAINAGE AND 110) BY WILBUR & EVELYN F(N SEA STAT CREEK DLLETT.	
Presence: Location: DRAINAGE LEADING T COUNTY. Detailed Location: LOCATION IN CAS MU PARK HEADQUARTER Ecological: DRAINAGE MAY NO LE FLOWS TO LAGOON S Threats: General: 9 SPECIMENS COLLED PLSS: T08S, R10E, S	Presumed Exta TO VARNER HAD SEUM RECORE S; FIRST LAGO ONGER FLOW II SOUTH OF PARP CTED ON 22 AP Sec. 02, S (S)	RBOR, NORTH OF BETZ BEACH, O GIVEN AS "SALTON SEA STATE ON SE OF MARINA." MAPPED TO NTO PARK HARBOR; IT APPEAR K HARBOR (AIR PHOTOS 2005, 2 RIL 1966 (CAS 27104) AND 3 COI Accuracy:	NNE SIDE OF SALTON S PARK HEADQUARTERS D DRAINAGE INTO PARK S THAT STATE PARK RD 2009, 2010). LLECTED ON 27 APR 1964 nonspecific area	EA, SALT ; DITCH T BAY ON T MAY HAV	ON SEA STATE PARK, RIVER O BOAT LANDING" & "SALTOI OPO MAP. 'E SEVERED DRAINAGE AND 110) BY WILBUR & EVELYN FO Area (acres):	N SEA STAT CREEK DLLETT. 28	

CAS11S0001 CALIFORNIA ACADEMY OF SCIENCES - PRINTOUT OF CYPRINODON HOLDINGS IN CAS FROM CALIFORNIA. 2011-02-10



California Department of Fish and Wildlife

California Natural Diversity Database



np Index Number: 39883			EO Index:		34885		
Key Quad:	Grass Valley ((3912121)	Element Code:		ARACF12100		
Occurrence Number:	599		Occurrence Last Updated: 1998-1		1998-10-01	-10-01	
Scientific Name: P	hrynosoma blain	villii	Common Name:	coast hor	ned lizard		
Listing Status:	Federal:	None	Rare Plant Rank:				
	State:	None	Other Lists:	BLM_S-S			
CNDDB Element Ranks	s: Global:	G3G4		_	SC-Species of Special Concern	n	
	State:	S3S4		_			
General Habitat:			Micro Habitat:				
		BITATS, MOST COMMON IN WITH SCATTERED LOW BUSHE			6, BUSHES FOR COVER, PAT ND ABUNDANT SUPPLY OF A		
ast Date Observed:	1991-XX-XX		Occurrence Type:	Natural/I	Native occurrence		
ast Survey Date:	1991-XX-XX		Occurrence Rank:	:: Poor			
Owner/Manager:	CITY OF GRAS	SS VALLEY	Trend:	Decreasing			
Presence:	Presumed Exta	ant					
ocation:							
GRASS VALLEY TREA	TMENT PLANT,	11808 ALTA VISTA AVE, GRASS	VALLEY.				
Detailed Location:							
Ecological:							
GROUNDS COVERED	WITH PEA GRA	VLE, MANY BUSHES AND SHRU	IBS, MANY ANTS.				
Threats:							
	NDERGOING M	AJOR RECONSTRUCTION.					
General:							
		1991; RESCUED DOZENS OF YO (EAR, WITH ONLY 1 SEEN IN 19		SERVOIR	COVER. YOUNG APPEAR 1S	T 2 WEEKS O	
PLSS: T16N, R08E, S	ec. 22 (M)	Accuracy:	1/5 mile		Area (acres):	0	
	3842 E666824	Latitude/Longitude:	39.22785 / -121.06730		Elevation (feet):	2,560	
JTM: Zone-10 N4343							
JTM: Zone-10 N4343 County Summary:		Quad Summary:					

BEA91F0001 BEATIE, J. - FIELD SURVEY FORM FOR PHRYNOSOMA CORONATUM (FRONTALE POPULATION, CALIFORNIA HORNED LIZARD) 1991-XX-XX



California Department of Fish and Wildlife



	ber: 3	9903		EO Index:		34905			
Key Quad:	Ν	levada City ((3912131)	Element Code:		ARACF12100			
Occurrence Nu	mber: 6	03		Occurrence Last U	Ipdated:	1998-10-06	8-10-06		
Scientific Name	e: Phry	nosoma blair	nvillii	Common Name:	coast hor	rned lizard			
Listing Status:		Federal:	None	Rare Plant Rank:	Rare Plant Rank:				
		State:	None	Other Lists:	BLM_S-S				
CNDDB Elemer	t Ranks:	Global:	G3G4		_	SC-Species of Special Concern C-Least Concern			
		State:	S3S4		_				
General Habitat	:			Micro Habitat:					
			ABITATS, MOST COMMON IN WITH SCATTERED LOW BUS			G, BUSHES FOR COVER, PATC ND ABUNDANT SUPPLY OF AN			
Last Date Obse	rved: 19	91-05-28		Occurrence Type:	Natural/	Native occurrence			
Last Survey Da	te: 19	991-05-28		Occurrence Rank:	Good				
Owner/Manage	r: P\	ЛТ		Trend:	Unknow	'n			
Presence:	Pr	esumed Exta	ant						
Location:									
		10 10017 0							
	KIIES, 104	46, 10347 a	10457 NEWTOWN ROAD, 2.5	AIR MILES FROM JUNCTIO	N OF HIGH	HWAYS 49 & 20, NEVADA CITY.			
		40, 10347 a	. 10457 NEW IOWN ROAD, 2.5	AIR MILES FROM JUNCTIO	N OF HIGH	HWAYS 49 & 20, NEVADA CITY.			
Detailed Locati	on:	·		AIR MILES FROM JUNCTIO	N OF HIGH	HWAYS 49 & 20, NEVADA CITY.			
Detailed Locati LIZARDS ARE S Ecological:	on: SEEN FREG	QUENTLY IN	I THIS AREA.						
Detailed Locati LIZARDS ARE S Ecological: CHAPARRAL W	on: SEEN FREG	QUENTLY IN							
Detailed Locati LIZARDS ARE S Ecological: CHAPARRAL W Threats:	on: SEEN FREG	QUENTLY IN	I THIS AREA.						
Detailed Locati LIZARDS ARE S Ecological: CHAPARRAL W Threats: RESIDENTIAL.	on: SEEN FREG	QUENTLY IN	I THIS AREA.						
Detailed Locati LIZARDS ARE S Ecological: CHAPARRAL W Threats: RESIDENTIAL. General:	on: SEEN FREC	QUENTLY IN	I THIS AREA. IANZANITA, MCNAB CYPRES	S, AND CHAPARRAL PEA, C					
Detailed Locati LIZARDS ARE S Ecological: CHAPARRAL W Threats: RESIDENTIAL. General: 5 (3 ADULTS &	DN: SEEN FREC ITH DIGGE 2 JUVENIL	QUENTLY IN ER PINES, M ES) OBSER	I THIS AREA. IANZANITA, MCNAB CYPRES VED IN 1990. 2 ADULTS OBSE	S, AND CHAPARRAL PEA, O ERVED IN 1991.		NTINE SOIL.			
Detailed Locati LIZARDS ARE S Ecological: CHAPARRAL W Threats: RESIDENTIAL. General: 5 (3 ADULTS & PLSS: T16N, 1	on: SEEN FREC ITH DIGGE 2 JUVENIL R08E, Sec.	QUENTLY IN ER PINES, M ES) OBSERV 10, NE (M)	I THIS AREA. IANZANITA, MCNAB CYPRES VED IN 1990. 2 ADULTS OBSE Accuracy:	S, AND CHAPARRAL PEA, C RVED IN 1991. specific area		NTINE SOIL. Area (acres):	12		
Detailed Locati LIZARDS ARE S Ecological: CHAPARRAL W Threats: RESIDENTIAL. General: 5 (3 ADULTS & PLSS: T16N, 1 UTM: Zone-1	DN: SEEN FREC ITH DIGGE 2 JUVENIL R08E, Sec. 0 N434796	QUENTLY IN ER PINES, M ES) OBSER	I THIS AREA. IANZANITA, MCNAB CYPRES VED IN 1990. 2 ADULTS OBSE Accuracy: Latitude/Longitud	S, AND CHAPARRAL PEA, C RVED IN 1991. specific area		NTINE SOIL.			
Detailed Locati LIZARDS ARE S Ecological: CHAPARRAL W Threats: RESIDENTIAL. General: 5 (3 ADULTS & PLSS: T16N, 1 UTM: Zone-1 County Summa	DN: SEEN FREC ITH DIGGE 2 JUVENIL R08E, Sec. 0 N434796	QUENTLY IN ER PINES, M ES) OBSERV 10, NE (M)	I THIS AREA. IANZANITA, MCNAB CYPRES VED IN 1990. 2 ADULTS OBSE Accuracy: Latitude/Longitud Quad Summary:	S, AND CHAPARRAL PEA, C ERVED IN 1991. specific area e: 39.26496 / -121.06283		NTINE SOIL. Area (acres):	12		
Detailed Locati LIZARDS ARE S Ecological: CHAPARRAL W Threats: RESIDENTIAL. General: 5 (3 ADULTS & PLSS: T16N, 1 UTM: Zone-1 County Summa Nevada	DN: SEEN FREC ITH DIGGE 2 JUVENIL R08E, Sec. 0 N434796	QUENTLY IN ER PINES, M ES) OBSERV 10, NE (M)	I THIS AREA. IANZANITA, MCNAB CYPRES VED IN 1990. 2 ADULTS OBSE Accuracy: Latitude/Longitud	S, AND CHAPARRAL PEA, C ERVED IN 1991. specific area e: 39.26496 / -121.06283		NTINE SOIL. Area (acres):	12		
Detailed Locati LIZARDS ARE S Ecological: CHAPARRAL W Threats: RESIDENTIAL. General: 5 (3 ADULTS & PLSS: T16N, 1 UTM: Zone-1 County Summa Nevada Sources:	on: SEEN FREC ITH DIGGE 2 JUVENIL R08E, Sec. 0 N434796 ry:	QUENTLY IN ER PINES, M ES) OBSER 10, NE (M) 9 E667122	I THIS AREA. IANZANITA, MCNAB CYPRES VED IN 1990. 2 ADULTS OBSE Accuracy: Latitude/Longitud Quad Summary: Nevada City (3912)	S, AND CHAPARRAL PEA, C ERVED IN 1991. specific area e: 39.26496 / -121.06283	N SERPEN	NTINE SOIL. Area (acres):	12 2,500		
Detailed Locati LIZARDS ARE S Ecological: CHAPARRAL W Threats: RESIDENTIAL. General: 5 (3 ADULTS & PLSS: T16N, 1 UTM: Zone-1 County Summa Nevada Sources: HIS90F0003	DITH DIGGE 2 JUVENIL R08E, Sec. 0 N434796 ry: HISCOX,	QUENTLY IN ER PINES, M ES) OBSERV 10, NE (M) 9 E667122 K 3 FIELD S	I THIS AREA. IANZANITA, MCNAB CYPRES VED IN 1990. 2 ADULTS OBSE Accuracy: Latitude/Longitud Quad Summary: Nevada City (3912)	S, AND CHAPARRAL PEA, O ERVED IN 1991. specific area e: 39.26496 / -121.06283 131)	N SERPEN	NTINE SOIL. Area (acres): Elevation (feet):	12 2,500		
Detailed Locati LIZARDS ARE S Ecological: CHAPARRAL W Threats: RESIDENTIAL. General: 5 (3 ADULTS & PLSS: T16N, 1 UTM: Zone-1	DITH DIGGE 2 JUVENIL R08E, Sec. 0 N434796 ry: HISCOX, HISCOX, 1991-05-	QUENTLY IN ER PINES, M ES) OBSER 10, NE (M) 9 E667122 K 3 FIELD J FIELD S 28 I, P FIELD	I THIS AREA. IANZANITA, MCNAB CYPRES VED IN 1990. 2 ADULTS OBSE Accuracy: Latitude/Longitud Quad Summary: Nevada City (3912 O SURVEY FORMS FOR PHRYNC	S, AND CHAPARRAL PEA, O ERVED IN 1991. specific area e: 39.26496 / -121.06283 131) /NOSOMA CORONATUM FR SOMA CORONATUM (FRON	N SERPEN	NTINE SOIL. Area (acres): Elevation (feet): CALIFORNIA HORNED LIZARD)	12 2,500) 1990-09-1 ED LIZARE		



California Department of Fish and Wildlife



Map Index Number:	98319		EO Index:		99737		
Key Quad:	North Bloomfi	eld (3912038)	Element Code:		IIHYM24250		
Occurrence Number:	126		Occurrence Last U	pdated:	2015-12-03		
Scientific Name: E	Sombus occidenta	alis	Common Name:	western b	bumble bee		
Listing Status:	Federal:	None	Rare Plant Rank:				
	State:	None	Other Lists:		-Sensitive		
CNDDB Element Rank	s: Global:	G2G3	3 XERCI		S_IM-Imperiled		
	State:	S1					
General Habitat:			Micro Habitat:				
		ECIES HAS DECLINED TO SOUTHERN B.C., PERHAPS	3				
Last Date Observed:	1968-05-20		Occurrence Type:	Natural/	Native occurrence		
Last Survey Date:	1968-05-20		Occurrence Rank:	Unknow	'n		
Owner/Manager:	UNKNOWN		Trend:	Unknown			
Presence:	Presumed Exta	ant					
Location:							
3 MILES NORTHEAST	OF NEVADA CI	ΓY.					
Detailed Location:							
	KNOWN. MAPPI	ED BY CNDDB 3 AIR MILES NOR	RTHEAST OF NEVADA CIT	Ύ.			
Ecological:							
Threats: General:							
General: COLLECTED 20 MAY 1	068						
		A	1 milo		Area (aarea)	0	
PLSS: T17N, R09E, S	· · /	Accuracy:	1 mile		Area (acres):	0	
	0744 E673823	Latitude/Longitude:	39.28863 / -120.98447		Elevation (feet):	3,000	
County Summary:		Quad Summary:					
Nevada		North Bloomfield (3912	2038), Nevada City (391213	31)			
Sources:							



California Department of Fish and Wildlife



Map Index Number:	28946		EO Index:		30554	
Key Quad:	San Benito Mt	tn. (3612036)	Element Code:		PDMAL0Q020	
Occurrence Number:	5	(0012000)	Occurrence Last U	pdated:	1997-03-20	
Scientific Name: Ma	alacothamnus a	boriainum	Common Name:	Indian Valley bush-mallow		
	Federal:	None	Rare Plant Rank:	1B.2		
Listing Status:	State:	None	Other Lists:	BLM S-S	Consitivo	
CNDDB Element Ranks		G3	Other Lists.		BG-Rancho Santa Ana Botanic	Garden
	State:	S3				
	Sidle.	33				
General Habitat:			Micro Habitat:			
CISMONTANE WOODL	AND, CHAPARF	RAL.	GRANITIC OUTCRO SOILS. 150-1130 M		SANDY BARE SOIL, OFTEN IN	N DISTURBE
Last Date Observed:	1965-07-20		Occurrence Type:	Natural/I	Native occurrence	
Last Survey Date:	1965-07-20		Occurrence Rank:	: Unknown		
Owner/Manager:	UNKNOWN		Trend:	Unknown		
Presence:	Presumed Exta	ant				
Location:						
CLEAR CREEK ROAD,	3.1 MILES EAS	T OF COALINGA ROAD.				
Detailed Location:						
	NANDEZ AND	NORTH OF GOAT MOUNTAIN A	LONG CLEAR CREEK.			
Ecological:						
Threats:						
General:						
		R THIS SITE IS 1965 COLLECTIO	ON BY HESSE.			
PLSS: T18S, R11E, Se	ec. 11, SW (M)	Accuracy:	2/5 mile		Area (acres):	0
UTM: Zone-10 N4027	474 E702628	Latitude/Longitude:	36.37106 / -120.74130		Elevation (feet):	2,530
County Summary:		Quad Summary:				
San Benito		San Benito Mtn. (3612	036), Idria (3612046)			
Sources:						



California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number:	b Index Number: 43435		EO Index:		43435		
Key Quad:	Nevada City ((3912131)	Element Code:		PDONA05053		
Occurrence Number:	15		Occurrence Last U	pdated:	2006-07-20		
Scientific Name: C	larkia biloba ssp	o. brandegeeae	Common Name:	Brandege	e's clarkia		
Listing Status:	Federal:	None	Rare Plant Rank:	4.2			
	State:	None	Other Lists:	BLM_S-S	ensitive		
CNDDB Element Rank	s: Global:	G4G5T4					
	State:	S4					
General Habitat:			Micro Habitat:				
CHAPARRAL, CISMON CONIFEROUS FORES		AND, LOWER MONTANE	OFTEN IN ROADCU	UTS. 75-91	5 M.		
Last Date Observed:	XXXX-XX-XX		Occurrence Type:	Natural/N	lative occurrence		
Last Survey Date:	XXXX-XX-XX		Occurrence Rank:	Unknowr	1		
Owner/Manager:	UNKNOWN		Trend:	Unknowr	ı		
Presence:	Presumed Exta	ant					
Location:							
CEMENT HILL, NEAR I	NDIAN FLAT, JU	JST NORTHWEST OF NEVADA (CITY.				
Detailed Location:							
MAPPED AS BEST GU	ESS BY CNDDE	3; LOCATION GIVEN AS CEMENT	Γ HILL, NEAR INDIAN FLA ⁻	T, 2900 FE	ET ELEVATION.		
Ecological:							
Threats:							
General:							
		#16 FROM "HIGHWAY 49 AT INDI COUNTY BY TRUE; NEEDS FIEL		ADA CITY."	BOTH SIGHTINGS ARE FRO	M A 1973	
PLSS: T16N, R08E, S	Sec. 02 (M)	Accuracy:	1 mile		Area (acres):	0	
	8879 E668562	Latitude/Longitude:	39.27288 / -121.04591		Elevation (feet):	2,900	
		Quad Summary:					

TRU73U0001 TRUE, G. - THE FERNS AND SEEDPLANTS OF NEVADA COUNTY 1973-04-XX



California Department of Fish and Wildlife



Map Index Number:	20297		EO Index:	12076			
Key Quad:	Leech Lake M	tn. (3912381)	Element Code:	PDONA0	060M0		
Occurrence Number:	1		Occurrence Last U	pdated: 2012-12-	12-12-14		
Scientific Name: E	oilobium nivium		Common Name:	Snow Mountain willo	owherb		
Listing Status:	Federal:	None	Rare Plant Rank:	1B.2			
	State:	None	Other Lists:	USFS_S-Sensitive			
CNDDB Element Ranks	: Global:	G2G3					
	State:	S2S3					
General Habitat:			Micro Habitat:				
JPPER MONTANE COM	NIFEROUS FOR	EST, CHAPARRAL.		CANIC AND METAV TALUS. 1400-2200 N		TCROPS	
ast Date Observed:	1975-09-06		Occurrence Type:	Natural/Native occu	urrence		
ast Survey Date:	1975-09-06		Occurrence Rank:	Unknown			
Owner/Manager:	USFS-MENDO	CINO NF	Trend:	Unknown			
resence:	Presumed Exta	nt					
ocation:							
	OM THE SUMM	IIT OF CASTLE PEAK, WESTERI	N EDGE OF YOLLA BOLLY	-MIDDLE EEL WILDI	ERNESS.		
Location: SPUR RUNNING SE FR Detailed Location:	OM THE SUMN	IIT OF CASTLE PEAK, WESTERI	N EDGE OF YOLLA BOLLY	'-MIDDLE EEL WILDI	ERNESS.		
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California Department of Fish and Wildlife



Map Index Nun Key Quad: Occurrence Nu			294 ass Valley (3	3912121)			EO Index: Element Code: Occurrence Last U	pdated:	41294 PDSTE03030 2010-07-28	
Scientific Nam	e: Fi	remo	ntodendron	decumben	s		Common Name:	Pine Hill fl	lannelbush	
Listing Status: CNDDB Eleme	nt Ranks	5:	Federal: State: Global: State:	Endange Rare G1 S1	red		Rare Plant Rank: Other Lists:		3G-Rancho Santa Ana Botanic 3G-UC Berkeley Botanical Garc	
General Habita	t:						Micro Habitat:			
CHAPARRAL, (SMON	TAN	E WOODLAI	ND.			ROCKY RIDGES; G ROCKS AND BOUL		R SERPENTINE ENDEMIC; OF 5-770 M.	TEN AMONG
Last Date Obse	erved:	200	9-06-03				Occurrence Type:	Natural/N	Native occurrence	
Last Survey Da	te:	200	9-06-03				Occurrence Rank:	Fair		
Owner/Manage	r:	PV	Т				Trend:	Unknowr	า	
Presence:		Pre	sumed Extai	nt						
Location:										
NORTH OF BE	NETT F	ROAI	D, ABOUT 0	4 MILE E	AST OF THE ELM RID	GE CE	METERY, GRASS V	ALLEY.		
Detailed Locat	on:									
TWO COLONIE	S MAPF	PD۱	WITHIN THE	NW 1/4 S	E 1/4 SECTION 26 AC	CCORD	ING TO A 1999 CAL	LAHAN MA	AP.	
Ecological:										
									ROSA, P. SABINIANA, QUERC S MACNABIANA, AND TOXICO	
Threats:										
PLANTS ARE L THREATS.	OCATEI	D WI	THIN FLAG	GING FOR	A TIMBER HARVEST	T ZONE	. NEARBY DEVELO	PMENT & I	PROPOSED MINE RE-OPENIN	IG ARE
General:										
									ITS HAS BEEN QUESTIONED; X F. CALIFORNICUM HYBRID	
PLSS: T16N,	R08E, S	ec. 2	26, SE (M)		Accuracy:	spec	ific area		Area (acres):	3
UTM: Zone-1	0 N4342	2776	E668688		Latitude/Longitude:	39.21	1789 / -121.04598		Elevation (feet):	2,520
County Summa	iry:				Quad Summary:					
Nevada				·	Grass Valley (391212	1)				
Sources:										
CAL08F0009	CALL	AHA	N, K FIELD	SURVEY	FORM FOR PERIDE	RIDIA E	BACIGALUPII & FRE	MONTODE	ENDRON DECUMBENS 2008-0)7-13
CAL99F0001	CALL	AHAI	N, K FIELD	SURVEY	FORM FOR FREMO	NTODE	NDRON DECUMBE	NS 1999-0	3-18	
HOR93U0002		IYTY I							MONTODENDRON AT THE NI RAGA, AND W. KELMAN TO M.	
HUG09F0006	HUGH	IES,	C. (SYCAM ENS 2009-06		RONMENTAL CONSU	JLTANT	rs, INC.) - FIELD SU	JRVEY FOF	RM FOR FREMONTODENDRC	N



California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number:	04413		EO Index:		79239	
Key Quad:	Lucerne Valley (3411648) 7		Element Code:		PMPOA6P010 2010-03-09	
Occurrence Number:			Occurrence Last U	pdated:		
Scientific Name: Elymus salina			Common Name:	Salina Pass wild-rye		
Listing Status:	Federal:	None	Rare Plant Rank:	2B.3		
	State:	None	Other Lists:	SB_USD/	A-US Dept of Agriculture	
CNDDB Element Ranks	: Global:	G4G5				
	State:	S2S3				
General Habitat:			Micro Habitat:			
PINYON AND JUNIPER WOODLAND.			ROCKY SITES. 880	ROCKY SITES. 880-2865 M.		
Last Date Observed:	1978-07-06		Occurrence Type:	Natural/N	Native occurrence	
Last Survey Date:	1978-07-06		Occurrence Rank:	: Unknown		
Owner/Manager:	UNKNOWN		Trend:	Unknowi	n	
Presence:	Presumed Exta	ant				
Location:						
RABBIT SPRINGS, 1 MI	LE NW OF LUC	ERNE VALLEY TOWN CENTER,	LUCERNE VALLEY.			
Detailed Location:						
	4N R1W SECTI	ONS 2, 3, 10, 11 SHARING A CO	MMON CORNER.			
Ecological:						
Threats:						
General:						
SITE BASED ON 2 COL	LECTIONS FRO	OM VASEK IN 1978. UNKNOWN I	NUMBER OF PLANTS SEE	N. NEEDS	FIELDWORK.	
PLSS: T04N, R01W, S	ec. 10 (S)	Accuracy:	1/5 mile		Area (acres):	0
UTM: Zone-11 N3812	853 E503339	Latitude/Longitude:	34.45721 / -116.96364		Elevation (feet):	2,900
County Summary:		Quad Summary:	Quad Summary:			
San Bernardino		Lucerne Valley (34116	Lucerne Valley (3411648)			
Sources:						
VAS78S0004 VASE	K, F VASEK S	N UCSB #37675 1978-06-07				

VAS78S0005 VASEK, F. - VASEK SN UCR #16567 1978-07-06

Appendix H

USFWS Species List for Project Area

IPaC

U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.





Sacramento Fish And Wildlife Office

└ (916) 414-6600**i** (916) 414-6713

Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA</u> <u>Fisheries</u> for <u>species under their jurisdiction</u>. IPaC: Explore Location

- 1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information.
- 2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
Fishes	
NAME	STATUS
Delta Smelt Hypomesus transpacificus	Threatened
There is final critical habitat for this species. Your location is outside the critical habitat. <u>https://ecos.fws.gov/ecp/species/321</u>	JL.
217-	

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act^{1} and the Bald and Golden Eagle Protection Act^{2} .

3/26/2019

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <u>http://www.fws.gov/birds/management/managed-species/</u> <u>birds-of-conservation-concern.php</u>
- Measures for avoiding and minimizing impacts to birds <u>http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/</u>

conservation-measures.php

 Nationwide conservation measures for birds <u>http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf</u>

The birds listed below are birds of particular concern either because they occur on the <u>USFWS Birds of Conservation Concern</u> (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ <u>below</u>. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the <u>E-bird data mapping tool</u> (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found <u>below</u>.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE

TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Breeds Jan 1 to Aug 31

Bald Eagle Haliaeetus leucocephalus

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626

California Spotted Owl Strix occidentalis occidentalis

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/7266

Olive-sided Flycatcher Contopus cooperi This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914

Rufous Hummingbird selasphorus rufus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/8002

Williamson's Sapsucker Sphyrapicus thyroideus This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8832

Probability of Presence Summary

Breeds Mar 10 to Jun 15

Breeds May 20 to Aug 31

Breeds elsewhere

Breeds May 1 to Jul 31

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (=)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

3/26/2019

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



IPaC: Explore Location

Williamson's Sapsucker BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

<u>Nationwide Conservation Measures</u> describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. <u>Additional</u> <u>measures</u> and/or <u>permits</u> may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern (BCC)</u> and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>E-bird Explore Data Tool</u>.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u>.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

3/26/2019

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: <u>The Cornell Lab of Ornithology All About Birds Bird Guide</u>, or (if you are unsuccessful in locating the bird of interest there), the <u>Cornell Lab of Ornithology Neotropical Birds guide</u>. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the <u>Northeast Ocean Data Portal</u>. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the <u>NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.</u>

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

IPaC: Explore Location

Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

R5UBF R4SBC

A full description for each wetland code can be found at the <u>National Wetlands Inventory website</u>

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

APPENDIX C

PRELIMINARY GEOTECHNICAL ENGINEERING REPORT

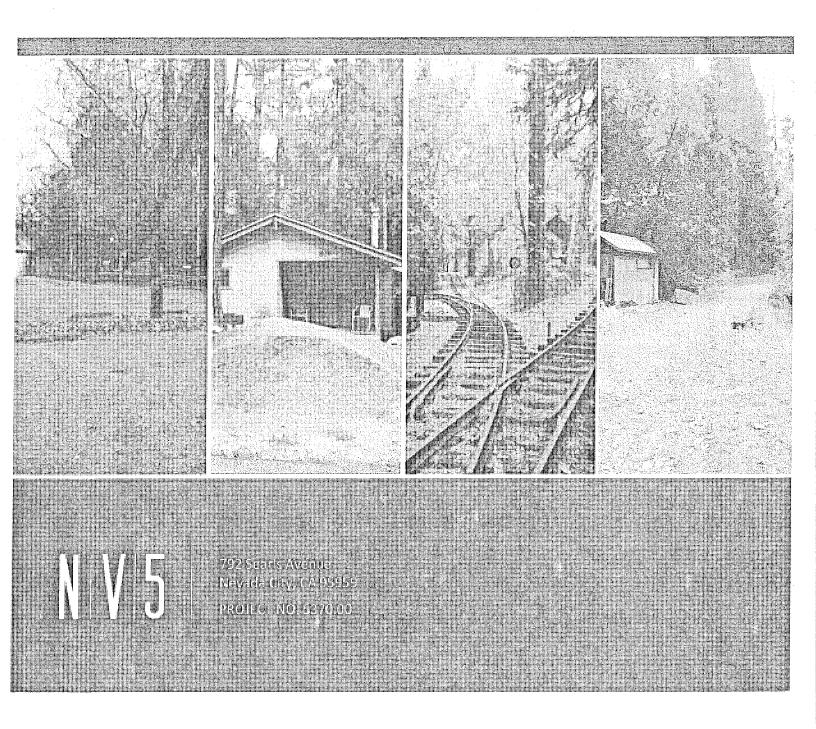
PRELIMINARY GEOTECHNICAL ENGINEERING REPORT NORTHERN QUEEN INN - EXPANSION

400 Railroad Avenue Nevada City, California

November 11, 2019

Prepared For:

Heritage Hotel Group Hamid Kazemi 400 Railroad Avenue Nevada City, CA 95959



Project No. 5370.00 November 11, 2019

Heritage Hotel Group Hamid Kazemi 400 Railroad Avenue Nevada City, CA 95959

Reference: Northern Queen Inn - Expansion 400 Railroad Avenue Nevada City, California

Subject: Preliminary Geotechnical Engineering Report

Dear Mr. Kazemi,

This report presents the results of our preliminary geotechnical engineering investigation for the proposed improvements at the Northern Queen Inn located at 400 Railroad Avenue in Nevada City, California. Based on conversations with Nevada City Engineering, Inc and review of improvement site plans dated January 30 and April 19, 2018, we anticipate the project will include the construction of an 8,400 square foot, two-story motel building, twelve 1,050 square foot, single-story cabins, and associated improvements including retaining structures, paved driveways, underground utilities, and infrastructure elements.

The findings and preliminary recommendations presented in this report are based on our limited surface investigation, review of published geologic literature pertaining to the project site, and our experience with subsurface conditions in the area. Our opinion is that the project appears feasible from a geotechnical engineering standpoint. Our primary concerns, from a geotechnical engineering standpoint, are the presence of existing undocumented fill, oversteepened slopes, and resistant shallow rock, which may affect excavatability.

The purpose of our investigation and report was to provide a description of geologic and geotechnical conditions at the site to facilitate future development. We should be retained to perform a design-level investigation prior to final design to confirm the preliminary recommendations presented in this report and provide geotechnical design criteria and construction recommendations based on the subsurface conditions encountered.

Please contact us if you have any questions regarding our investigation or report.

Sincerely,

NV5 lahina S. Smith

Staff Engineer

No. 2359 Chuck R. Kull, G.E. 2359 Principal Engineer

copies: PDF to Heritage Hotel Group/ Attn: Hamid Kazemi, <u>hkazemi@heritagehotelgroup.com</u> PDF to Nevada City Engineering, Inc/ Attn: Andrew Cassano, <u>andy@nevadacityengineering.com</u>

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792 Searls Avenue | Nevada City, CA 95959 | www.NV5.com | Office 530.478.1305 | Fax 530.478.1019 CONSTRUCTION QUALITY ASSURANCE – INFRASTRUCTURE – ENERGY – PROGRAM MANAGEMENT – ENVIRONMENTAL •

TABLE OF CONTENTS

1.0	INT	RODUCI	10N	1
	1.1	PURPC)SE	1
	1.2		OF SERVICES	
	1.3		CT LOCATION AND DESCRIPTION	
	1.4	PROPC	OSED IMPROVEMENTS	1
2.0	FIEL	D INVES	TIGATION	1
	2.1	GENER	AL SITE CHARACTERISTICS	2
	2.2	SURFA	CE WATER CONDITIONS	2
	2.3	GROUI	NDWATER CONDITIONS	3
	2.4		NG FILL AREAS	
	2.5	HISTOR	RIC MINING ACTIVITIES	3
3.0	GEN	ERAL SC	DIL AND ROCK CONDITIONS	3
4.0	GEO	LOGICS	ETTING	4
	4.1	SITE SE	ISMICITY	4
				_
5.0	CON	ICLUSIO	NS	C
5.0 6.0			NS RY GEOTECHNICAL RECOMMENDATIONS	
		LIMINA		6
	PRE	LIMINA	RY GEOTECHNICAL RECOMMENDATIONS	5
	PRE	L IMINA GRADII	RY GEOTECHNICAL RECOMMENDATIONS	5 5
	PRE	L IMINA GRADII 6.1.1	RY GEOTECHNICAL RECOMMENDATIONS	5
	PRE	L IMINA GRADI 6.1.1 6.1.2	RY GEOTECHNICAL RECOMMENDATIONS	5
	PRE	GRADII 6.1.1 6.1.2 6.1.3 6.1.4 6.1.5	RY GEOTECHNICAL RECOMMENDATIONS	5 5 5 7 7
	PRE	GRADII 6.1.1 6.1.2 6.1.3 6.1.4	RY GEOTECHNICAL RECOMMENDATIONS	5557788
	PRE	GRADII 6.1.1 6.1.2 6.1.3 6.1.4 6.1.5 6.1.6 6.1.7	RY GEOTECHNICAL RECOMMENDATIONS 6 NG 6 Clearing and Grubbing 6 Existing Fill 6 Preparation for Fill Placement 7 Fill Placement 7 Cut/Fill Slope Grading 8 Erosion Control 8 Utility Trenches 9	5 5 5 7 7 8 8
	PRE	GRADII 6.1.1 6.1.2 6.1.3 6.1.4 6.1.5 6.1.6 6.1.7 6.1.8	RY GEOTECHNICAL RECOMMENDATIONS 6 NG 6 Clearing and Grubbing 6 Existing Fill 6 Preparation for Fill Placement 7 Fill Placement 7 Cut/Fill Slope Grading 8 Erosion Control 8 Utility Trenches 9 Subsurface Drainage 9	5 5 5 7 7 8 8 9
	PRE	GRADIA 6.1.1 6.1.2 6.1.3 6.1.4 6.1.5 6.1.6 6.1.7 6.1.8 5.1.7	RY GEOTECHNICAL RECOMMENDATIONS 6 NG 6 Clearing and Grubbing 6 Existing Fill. 6 Preparation for Fill Placement 7 Fill Placement 7 Cut/Fill Slope Grading 8 Erosion Control 8 Utility Trenches 9 Subsurface Drainage 9 Surface Water Drainage 9	5 557788)))
	PRE	GRADII 6.1.1 6.1.2 6.1.3 6.1.4 6.1.5 6.1.6 6.1.7 6.1.8	RY GEOTECHNICAL RECOMMENDATIONS 6 NG 6 Clearing and Grubbing 6 Existing Fill 6 Preparation for Fill Placement 7 Fill Placement 7 Cut/Fill Slope Grading 8 Erosion Control 8 Utility Trenches 9 Subsurface Drainage 9	5 557788)))
	PRE 6.1	GRADII 6.1.1 6.1.2 6.1.3 6.1.4 6.1.5 6.1.6 6.1.7 6.1.8 5.1.7 6.1.9	RY GEOTECHNICAL RECOMMENDATIONS 6 NG 6 Clearing and Grubbing 6 Existing Fill. 6 Preparation for Fill Placement 7 Fill Placement 7 Cut/Fill Slope Grading 8 Erosion Control 8 Utility Trenches 9 Subsurface Drainage 9 Surface Water Drainage 9	5 5 5 5 7 7 8 8 9 9 9

FIGURES

Figure 1: Site Vicinity Map Figure 2: Site Location Map

APPENDIX

Proposal

1.0 INTRODUCTION

1.1 PURPOSE

The purpose of our investigation was to perform a preliminary geotechnical investigation of the site to facilitate future planning and development. This report provides a description of general soil/rock conditions and site geology, as well as preliminary recommendations for site grading, erosion control, foundation design criteria and site drainage.

1.2 SCOPE OF SERVICES

To prepare this report, we performed the following scope of services:

- Reviewed improvement site plans prepared by Nevada City Engineering, Inc, dated January 30 and April 19, 2018.
- Performed a cursory surficial geologic/geotechnical reconnaissance of the project site.
- Reviewed published geologic maps and literature pertaining to the site.
- Reviewed historic maps and publications pertaining to mining near the project site.
- Developed preliminary recommendations regarding site grading, erosion control, foundation design criteria and site drainage.

1.3 PROJECT LOCATION AND DESCRIPTION

The property is located southwest of Railroad Avenue in Nevada City, California, and is comprised of Nevada County assessor's parcel numbers (APNs) 05-490-19, 37-050-02, and 37-050-03. The area of the proposed improvements ("project site") is located in the central and southern areas of the property near the existing guest registration building parking lot and rear cabins. The approximate elevations of the project site range from 2600 feet above mean sea level (AMSL) at the south corner of the property to 2100 feet at the central portion of the eastern and western property boundaries. A site vicinity map is presented as Figure 1.

1.4 PROPOSED IMPROVEMENTS

Our understanding of the project is based on conversations with Nevada City Engineering, Inc and review of improvement site plans dated January 30 and April 19, 2018. The proposed project would include the construction of an 8,400 square foot, two-story motel building, and twelve 1,050 square foot, single-story cabins. Associated improvements would likely include construction of retaining structures, paved driveways, underground utilities, and infrastructure elements.

2.0 FIELD INVESTIGATION

We performed our field investigation on October 23, 2019. Our investigation included a limited surface reconnaissance. The site conditions described below are based on observations made during our field investigation. A site location map showing the project site and site conditions of concern is presented as Figure 2.

2.1 GENERAL SITE CHARACTERISTICS

Much of the project site has been developed, including multiple two-story hotel buildings, a guest registration building, ticket booth, cabins, utility/storage sheds, and associated parking lots and driveways. An oversteepened cut slope was located along the western (upslope) boundary of the project site, and was up to approximately 14 feet high. The cut slope traveled along the western side of the driveway leading to existing cabins. The slopes located in the area of the existing cabins were moderately sloping. Granitic rock outcroppings and large boulders were observed throughout the project site, particularly in the southern area. Boulders appeared to be at least 6 feet in diameter. Dominant vegetation across the site included ponderosa pine, black oak, manzanita, and annual grasses and forbs.

Historic railroad tracks, structures and mining relics were located between the guest registration parking lot and the southern property boundary. East of the guest registration parking lot, next to an existing small pedestrian bridge, we observed a mining "monitor" monument. Further west and south of the monitor were relict railroad tracks and structures associated with the historic Nevada County Narrow Gauge Railroad (NGRR). The railroad tracks traveled north to south across the eastern area of the project site. We observed railroad carts on the tracks, a small covered railcar platform, and other miscellaneous railroad equipment. Directly east of the small railcar platform were abandoned pier footings that extended above ground approximately 1 to 2 feet. The footings may have been associated with an old railroad structure.

Fill material was observed in the areas of the historic railroad tracks and structures, including areas where railroad tracks had appeared to be removed.

Located east of the railroad tracks is Gold Run Creek, which travels approximately south to north through the eastern portion of the project site. Some slopes located between the areas of historic railroad tracks and Gold Run were steep, exceeding 1:1 (H:V).

Areas of debris piles and waste storage were observed. The debris piles contained organic waste, including leaves and wood chips, and were found near the guest registration building parking lot behind existing cabins. The southern area of the project site contained storage sheds and waste storage primarily consisting of appliances, building materials, wood crates and pallets, and miscellaneous trash.

2.2 SURFACE WATER CONDITIONS

According to the USGS Nevada City Quadrangle map (1995), the nearest surface water is Gold Run Creek. Gold Run flows north from the south corner to the north corner of the property. The stream is a tributary of Deer Creek, which is located approximately 0.5 miles north of the project site.

During our field investigation we observed seasonal swales across the site. Surface drainage across the site generally trended eastward towards Gold Run. Saturated soil conditions and seepage may be encountered in drainage swales and onsite excavations during or following extended periods of wet weather.

2.3 GROUNDWATER CONDITIONS

Our experience in the foothill region has been that groundwater lies at various depths depending on the hydrogeologic conditions. In many cases, groundwater is controlled by bedrock fractures; this results in groundwater depths and conditions that are virtually unpredictable without performing an extensive hydrogeologic investigation. In other cases, groundwater may lie in perched zones above a resistant rock type or impermeable soil.

2.4 EXISTING FILL AREAS

We observed several fill areas during our field investigation. We observed undocumented fill underneath and around existing and removed railroad tracks and structures. Based on surface observations, the fill appeared to have an abundant amount of angular gravel and cobbles.

2.5 HISTORIC MINING ACTIVITIES

The subject site is located within the historic Nevada City Mining District. This district was an area of intensive gold mining activities dating back to 1849 when placer gold deposits were discovered in the sediments along Wolf Creek and nearby drainages. Hard rock mining in the area began in the early 1850s. To investigate the historic mining activities at the subject site, we reviewed various maps of mining properties in the Nevada City Mining District dated 1869, 1884, 1913, and 1930.

The maps reviewed did not indicate mining properties located on the subject site. Although we observed a monitor located near the small pedestrian bridge crossing Gold Run and adjacent to NGRR tracks, we did not observe evidence of mining activity, such as glory holes, adits or mining stockpiles onsite during our field investigation.

3.0 GENERAL SOIL AND ROCK CONDITIONS

The soil conditions described in the following paragraphs are generalized, based on a review of published soil survey information.

The Soil Survey of Nevada County Area, California ("soil survey") published by the United States Department of Agriculture Soil Conservation Service and Forest Service (1993) depicts three general soil types at the project site: Hoda sandy loam, 5 to 9 percent slopes, Hoda Sandy Loam, 9 to 15 percent slopes, and Placer Diggins. The Hoda soil types comprise most of the eastern edge of the property boundary and an area near the center of the property along the western property line. The Placer diggings soil type comprises the rest of the project site.

The Hoda soil type is characterized by well-drained surface soil underlain by weathered granodiorite rock at depths of 5 to 8 feet below ground surface (bgs). Depth to weathered rock may be less in cut areas. Areas of resistant rock outcrop typically comprise 10 percent of the total ground surface in areas of Hoda soil types. Rock outcrop areas and boulders were observed during our field investigation.

Project No. 5370.00	Preliminary Geotechnical Engineering Report
November 11, 2019	Northern Queen Inn – Expansion; Nevada City, California

The Placer Diggins soil type is derived from tertiary river deposits in hydraulically mined areas, placer-mined areas, and areas of natural deposits along stream channels. Typically this soil type is composed of stones, cobblestones, or gravel, and bedrock may be exposed along stream channels. We observed exposed rock near Gold Run during our field investigation.

4.0 GEOLOGIC SETTING

The property is located within a region underlain by a complex assemblage of igneous and metamorphic rocks in the western foothills of the Sierra Nevada. The regional structure of the foothills is characterized by the north-northwest trending Foothills Fault System, a feature formed during the Mesozoic era (between 65 million and 230 million years before present [MYBP]) in a compressional tectonic environment. A change to an extensional tectonic environment during the Late Cenozoic (last 9 million years) resulted in normal faulting which has occurred coincident with some segments of the older faults near the site.

To determine the site geology, we reviewed the Geologic Map of Western Nevada County, California (California Department of Conservation, 1990). According to the Geologic Map, the project site is underlain by early Jurassic, Granodiorite. The early Jurassic period encompasses a time frame of approximately 201 to 174 MYBP.

4.1 SITE SEISMICITY

Regional faulting is associated with the central area of the Foothill Fault System which includes the Spenceville Fault, Deadman Fault, Wolf Creek Fault Zone, Giant Gap Fault, Grass Valley Fault, Weimar Fault Zone, Foresthill Fault and the Ramshorn Fault. The Foothill Fault System is a broad zone of northwest trending, east dipping normal faults formed along the margin of the Great Valley and the Sierra Nevada geologic provinces on the western flank of the Sierra Nevada and southern Cascade mountain ranges. The central part of the fault zone is split into branches: the Melones Fault Zone to the east, the Cleveland Hill Fault to the northwest, the Spenceville Fault to the west, the Wolf Creek Fault Zone to the south and the Grass Valley Fault Zone in the area of the subject site.

NV5 reviewed the Official Maps of Earthquake Fault Zones delineated by the California Geological Survey through December 2010, on the internet at <u>http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm</u>. These maps are updates to Special Publication 42, Interim Revision 2007 edition Fault Rupture Hazard Zones in California, which describes active faults and fault zones (activity within 11,000 years) as part of the Alquist-Priolo Earthquake Fault Zoning Act. Special Publication 42 and the 2010 on-line update indicate that the site is not located within an Alquist-Priolo active fault zone. There are currently no proposed earthquake fault zone maps in the immediate area of Grass Valley, California.

According to the Fault Activity Map of California and Adjacent Areas (Jennings, 1994) and the 2010 Fault Activity Map of California by the California Geological Survey, Geologic Data Map No. 6 (accessed at http://www.quake.ca.gov/gmaps/FAM/faultactivitymap.html), the nearest known active fault with surface displacement within Holocene time is the Cleveland Hill Fault. The mapped fault zone is located approximately 32 miles northwest of the subject site and is associated with ground rupture during the Oroville earthquakes of 1975.

5.0 CONCLUSIONS

The conclusions presented in this section are based on information developed from the field investigation and review of published geologic maps and literature pertaining to the site.

- 1. Based on the results of our preliminary geotechnical investigation, our opinion is that the proposed development is feasible from a geotechnical standpoint.
- 2. Our primary geotechnical concerns are the presence of existing undocumented fill, the presence of oversteepened slopes, and resistant rock at shallow depths, which may affect excavatability.
- 3. During our site reconnaissance we encountered historic undocumented fill underneath and around existing and removed railroad tracks and structures. Existing fill should not be relied upon to support proposed improvements without testing and evaluation. We anticipate that existing fill will be mitigated through overexcavation and recompaction during site preparation and grading.
- 4. Based on the soil survey, we anticipate that relatively shallow, resistant rock may be encountered in portions of the site during grading or excavation for utilities. In addition, rock outcroppings and boulders were observed during our limited field investigation. Preliminary recommendations for resistant rock are presented in the following sections. Fill material resulting from excavation onsite may contain significant gravel and oversized rock that will require specific recommendations for use as fill. General recommendations for placement of rock fill and oversized material are presented in this report.
- 5. We anticipate that areas of seepage will likely be encountered during grading onsite, particularly during the rainy season and/or in excavations which reveal the surface soil/weathered rock contact. Preliminary recommendations regarding subsurface drainage are presented in this report.
- 6. During our site reconnaissance we observed oversteepened cut slopes located near the western property boundary across from existing cabins, and relatively steep slopes located between existing railroad tracks and Gold Run near the southern property boundary. In general, cut and fill slopes should be no steeper than 2:1, horizontal to vertical (H:V). Steeper cut slopes may be feasible, if proposed, depending on the soil/rock conditions encountered, but must be evaluated by a geotechnical engineer on a case-by-case basis.
- 7. The site is located in the Sierra Foothills, a region associated with past and present mining. Our map review did not identify historic mining activity at the site, and we did not observe past mining features such as glory holes, adits or mining stockpiles at the project site. However, mining relics or features may be encountered during grading and construction, and if encountered should be evaluated on a case-by-case basis. It is our opinion that the hydraulic mining monitor observed near the NGRR and Gold Run is a monument that did not serve mining operations at the Site.

6.0 PRELIMINARY GEOTECHNICAL RECOMMENDATIONS

The following sections present our preliminary recommendations for site grading, erosion control, site drainage, and foundation design. Our recommendations are based on our understanding of the project as currently proposed. Additional investigation and testing would be necessary to produce a design-level geotechnical report.

6.1 GRADING

6.1.1 Clearing and Grubbing

Areas proposed for fill placement, paved areas, and building pads should be cleared and grubbed of vegetation and other deleterious materials as described below.

- 1. Strip and remove organic surface soil containing shallow vegetation and any other deleterious materials. This organic soil can be stockpiled onsite and used in landscape areas, but is not suitable for use as fill. The actual depth of stripping may vary across the site. Areas of deeper organic surface soil may be encountered in drainage swales and low lying areas.
- 2. Overexcavate any loose fill, debris and/or other onsite excavations to underlying, competent material. Possible excavations include exploratory trenches, mantles or soil test pits, tree stump holes and abandoned drainage improvements.
- 3. Remove all rocks greater than 8 inches in greatest dimension (oversized rock) by scarifying to a depth of 12 inches or to resistant weathered rock, if shallower, in proposed building pads and areas to support pavement, slabs-on-grade, and other flatwork. Oversized rock should be placed in deep fill per the recommendations of the project geotechnical engineer, stockpiled for later use in landscape areas, drainage features, or stacked rock walls, or placed outside areas of proposed improvements.
- 4. Vegetation, tree stumps and exposed root systems, and any other deleterious materials and oversized rocks not used in landscape areas should be removed from areas of proposed improvements.

6.1.2 Existing Fill

One of our concerns regarding the project site is the presence of existing fill within the proposed improvement areas. Loose fill beneath footings may contribute to future differential settlement-induced distress. Our opinion is that the existing fill should not be relied upon to support the proposed improvements without mitigation, as described in the following paragraphs.

Options to mitigate existing fill and loose subsurface conditions include the use of deepened footings, mat foundations, or fill overexcavation and replacement. We anticipate that existing fill will be mitigated through overexcavation and recompaction during site preparation and grading.

Project No. 5370.00	Preliminary Geotechnical Engineering Report
November 11, 2019	Northern Queen Inn – Expansion; Nevada City, California

Relatively loose fill, within and a minimum of 5 feet beyond the proposed structure footprints, shall be overexcavated and stockpiled onsite. The depth of the overexcavation should extend through all loose soil to competent native soil or rock. The fill shall be replaced and compacted using the recommendations presented in the Fill Placement section of this report.

6.1.3 Preparation for Fill Placement

Upon completion of site clearing, grubbing and overexcavation, the exposed native soil should be observed by a representative of our firm prior to placement of fill at the project site. Fill placed on slopes steeper than 5:1, H:V, should be benched into the existing slope to allow placement of fill in horizontal lifts.

6.1.4 Fill Placement

Fill should be placed according to the following guidelines:

- 1. Material used for fill construction should consist of uncontaminated, predominantly granular, non-expansive native soil or approved import soil. Rock used in fill should be no larger than 8 inches in diameter. Rocks larger than 8 inches are considered oversized material and should be placed in deep fill per the recommendations of the project geotechnical engineer, stockpiled for use in landscape areas or rock walls, or removed from the site.
- 2. Oversized material may be windrowed in deeper fill under the observation of the project geotechnical engineer. The windrows should be separated by at least one equipment width. Compacted fill should be worked into the sides of each windrow, and remaining voids should be filled with smaller rock. If the oversized material is to be incorporated into a rock fill that does not permit density testing by nuclear methods, the contractor should prepare a test fill during initial fill placement for observation and testing. The means and methods of subsequent fill placement will be evaluated for conformance with the approved test fill.
- 3. Imported fill material should be predominantly granular, non-expansive and free of deleterious or organic material. If imported material is required to grade the site, it should be submitted to NV5 for approval and laboratory analysis at least 72 hours prior to import to the site.
- 4. Clay soil, if encountered, may be used as fill if mixed with granular soil at a ratio determined by the project geotechnical engineer.
- 5. Fill should be uniformly moisture conditioned and placed in maximum 8-inch thick loose lifts (layers) prior to compacting.
- 6. The moisture content, density and relative compaction of fill should be evaluated by our firm during construction.

6.1.5 Cut/Fill Slope Grading

- 1. Cut and fill slopes should generally be no steeper than 2:1, H:V. Based on our experience in the area, steeper cut slope gradients may be feasible in areas that have significant rock structure. Steeper cut slope gradients must be verified based on the results of laboratory testing and observation of slope conditions. The upper two feet of all cut slopes should be graded to an approximate 2:1, H:V, slope to reduce sloughing and erosion of looser surface soil.
- 2. Fill slopes should be constructed by overbuilding the slope face and then cutting it back to the design slope gradient. Fill slopes should not be constructed or extended horizontally by placing soil on an existing slope face and/or compacted by track walking.
- 3. Benching during placement of fill on an existing slope must extend through loose surface soil into firm material, and be performed at intervals such that no loose soil is left beneath the fill.
- 4. Our observation of rock outcrops across the site and our experience in the area has shown that areas of moderately or slightly weathered rock that is difficult to excavate with conventional grading equipment may be encountered during grading or trenching. Pre-ripping, blasting, or splitting may be required in these areas. The scope of a future design-level investigation should include excavation of exploratory trenches along proposed road and utility trench alignments to allow observation of subsurface soil and rock conditions.

6.1.6 Erosion Control

Graded portions of the site should be seeded following grading to allow vegetation to become established prior to and during the rainy season. In addition, grading that results in greater than one acre of soil disturbance or in sensitive areas may require the preparation of a storm water pollution prevention plan. As a minimum, the following controls should be installed prior to and during grading to reduce erosion.

- 1. Prior to commencement of site work, fiber rolls should be installed down slope of the proposed area of disturbance to reduce migration of sediment and small rocks from the site.
- 2. Soil exposed in permanent slope faces should be hydroseeded or hand seeded/strawed with an appropriate seed mixture compatible with the soil and climate conditions of the site as recommended by the local Resource Conservation District or other local agency.
- 3. Following seeding, jute netting or erosion control blankets should be placed and secured over graded slopes steeper than 2:1, H:V, to keep seeds and straw from being washed or blown away. Tackifiers or binding agents may be used in lieu of jute netting.
- 4. Surface water drainage ditches should be established as necessary to intercept and redirect concentrated surface water away from cut and fill slope faces. Surface water should not be directed over slope faces. The intercepted water should be discharged into natural drainage courses or into other collection and disposal structures.

6.1.7 Utility Trenches

Utility trench excavations in native soil/rock should be stable to a depth of 4 feet without shoring during dry weather. If trenches deeper than 4 feet are anticipated, the contractor should follow CalOSHA guidelines for trench excavation safety. NV5 can provide design of shoring, if requested.

Based on surface conditions observed, we anticipate that resistant rock at shallow depths may limit utility trench excavations. Pre-ripping of the trench alignment, blasting, or splitting may be required, particularly if utility trench excavations are deeper than five feet. Larger grading equipment may be required for deeper cuts or areas of more resistant, moderately to slightly weathered rock.

In addition, large, resistant, subsurface boulders or "floaters" may be encountered within the matrix of severely to moderately weathered rock. If areas of dense, slightly to moderately weathered rock are encountered, blasting or pre-splitting may be required. Our opinion is that blasting or pre-splitting, if needed, will most likely be required in deeper cuts associated with utility trenches or in areas adjacent to exposed or near-surface rock outcrops.

6.1.8 Subsurface Drainage

If grading is performed during or immediately following the rainy season, seepage will likely be encountered. If groundwater or saturated soil conditions are encountered during grading, we anticipate that dewatering may be possible by gravity or by temporary installation of sump pumps in excavations.

Control of subsurface seepage at the base of fill areas can typically be accomplished by placement of an area drain. Underlying, saturated soil is typically removed and replaced with free draining, granular drain rock enveloped in geotextile fabric to an elevation above the encountered groundwater. Fill soil can be placed over the granular rock. NV5 should review proposed drainage improvements with regard to the site conditions prior to construction.

5.1.7 Surface Water Drainage

Proper surface water drainage is important to the successful development of the project. We recommend the following measures to help mitigate surface water drainage problems:

- Slope final grade adjacent to structural areas so that surface water drains away from building pad finish subgrades at a minimum 2 percent slope for a minimum distance of 10 feet. Where interior slabs-on-grade are proposed, we recommend that the exterior subgrade have a minimum slope of 4% away from the structure for a minimum distance of 10 feet. Additional drainage and slab-on-grade construction recommendations would be provided in a design-level geotechnical report.
- 2. Compact and slope all soil placed adjacent to building foundations such that water is not retained to pond or infiltrate. Backfill should be free of deleterious material.
- 3. Direct rain-gutter downspouts to a solid collector pipe which discharges flow to positive drainage and away from building foundations.

4. V-ditches should be excavated at the top of all slopes established onsite to prevent surface water from flowing over slope faces. Surface water collected in V-ditches should be directed away and downslope from the proposed building pad and driveway into a riprap lined drainage channel.

6.1.9 Construction Monitoring

Construction monitoring includes review of plans and specifications and observation of onsite activities during construction as described below.

- 1. We should be retained to review the final grading plans prior to construction to determine whether our recommendations have been implemented, and if necessary, to provide additional and/or modified recommendations.
- 2. We should be retained to perform construction monitoring during grading performed by the contractor to determine whether our recommendations have been implemented, and if necessary, provide additional and/or modified recommendations.

6.2 FOUNDATIONS

Our preliminary opinion is that the site is suitable for one- to two-story structures using conventional perimeter and isolated footings with framed or slab-on-grade floors. Footings should be founded on native, undisturbed soil, weathered rock or compacted and tested fill. Structures to be located in areas of alluvial deposits or steep slopes may require extensive grading and/or deep footings or drilled pier foundations. A design-level geotechnical report should contain foundation design criteria and recommendations specific to each area of the site.

Footings should be deepened through expansive clay soil, if encountered at the base of the footing excavations. Expansive clay soil is typically encountered in relatively thin layers near the soil/weathered rock interface.

Shallow, resistant rock may be encountered during construction which limits footing excavation. The presence of shallow rock within building footprints may require the use of rock anchors or dowels to provide uplift and sliding resistance. NV5 can provide site specific anchor recommendations during construction if requested.

7.0 LIMITATIONS

The following limitations apply to the findings, conclusions and recommendations presented in this report:

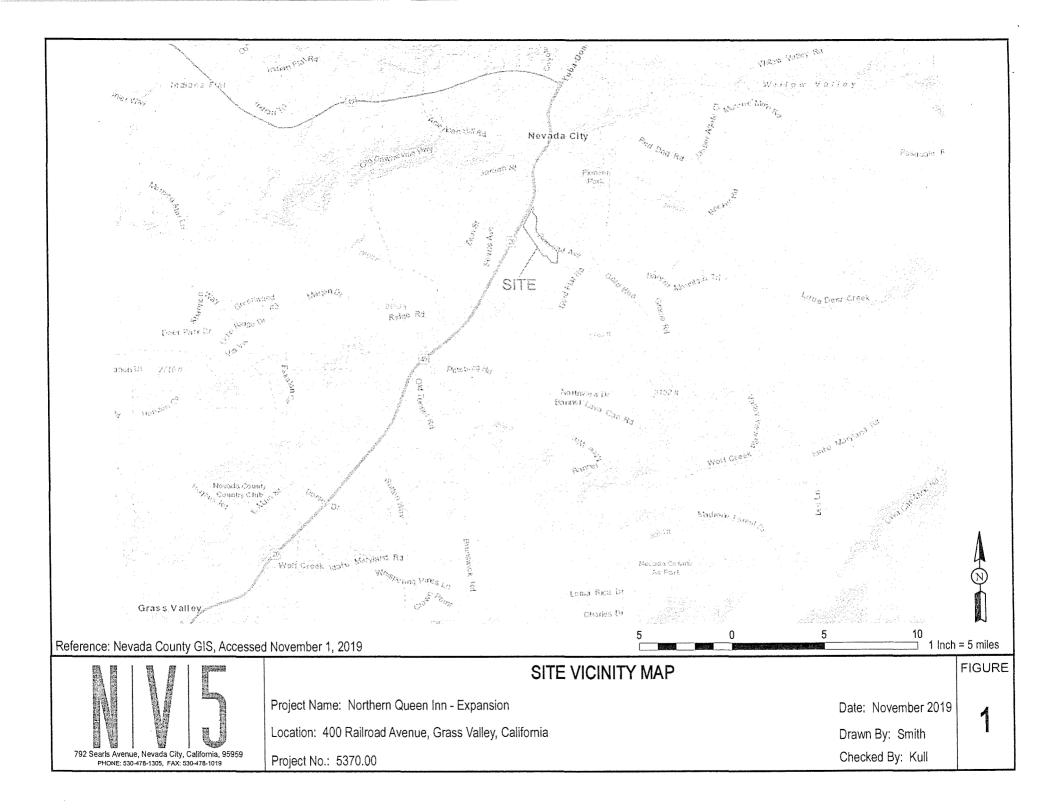
1. The recommendations and conclusions in this report are preliminary in nature based on our understanding of the project and on our limited site reconnaissance. The recommendations provided herein are contingent upon our review of final plans and specifications, and upon completion of a design-level geotechnical investigation.

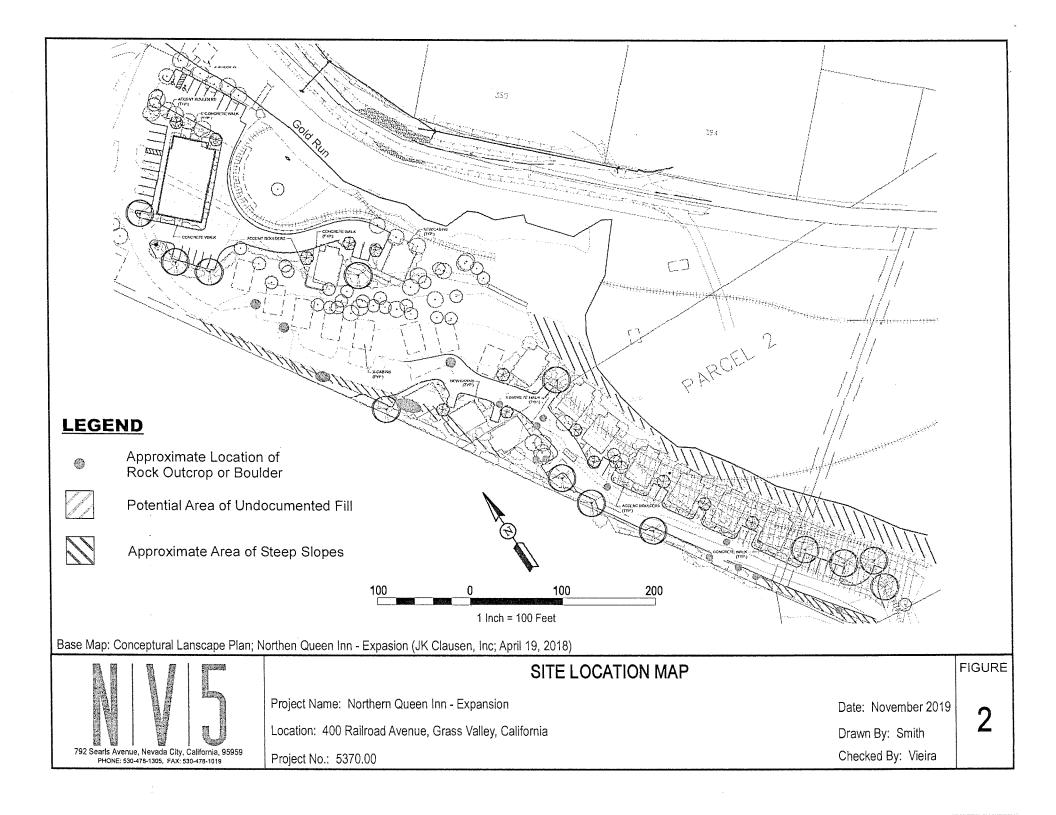
- 2. The preliminary conclusions and recommendations contained herein are professional opinions derived in accordance with the current standards of professional practice. No warranty, expressed or implied, including any implied warranty of merchantability or fitness for the purpose is made or intended in connection with our work. Additional investigation and testing would be necessary to produce a design-level geotechnical report.
- 3. Our scope of services did not include evaluating the project site for the presence of hazardous materials. Project personnel should be careful and take the necessary precautions should hazardous materials be encountered during construction.
- 4. These services were performed consistent with our agreement with our client. We are not responsible for the impacts of any changes in environmental standards, practices or regulations subsequent to performance of our services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report. This report is solely for the use of our client. Any reliance on this report by a third party is at the risk of that party.
- 5. The findings of this report are valid as of the present date. However, changes in the conditions of the property can occur with the passage of time. The changes may be due to natural processes or to the works of man, on the project site or adjacent properties. In addition, changes in applicable or appropriate standards can occur, whether they result from legislation or the broadening of knowledge. Accordingly, our recommendations should not be relied upon after a period of two years without our review.

FIGURES

Figure 1: Site Vicinity Map

Figure 2: Site Location/Geotechnical Hazards Map





APPENDIX

Proposal

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Proposal No. PN19108 July 16, 2019 (Updated September 11, 2019)

Northern Queen Inn c/o: Andy Cassano, Nevada City Engineering 400 Railroad Ave Nevada City, California 95959

Reference: Northern Queen Inn - Expansion 400 Railroad Avenue Nevada City, California 95959

Subject: Proposal for Preliminary Geotechnical Engineering Services

Dear Mr. Cassano:

At your request, NV5 is providing this proposal to perform preliminary geotechnical engineering services regarding the proposed expansion of the Northern Queen Inn, located at 400 Railroad Avenue in Nevada City, California. We understand that the proposed developments will include the construction of new wood framed motel rooms and cabin and site improvements including new asphalt paved roadways, utilities and infrastructure elements. We also understand that the proposed project is currently in the preliminary design development stage, and you are looking for a preliminary investigation to evaluate the feasibility of the proposed development from a geotechnical engineering standpoint.

SCOPE OF SERVICES

Based on our current understanding of the project, we propose to perform the following scope of services.

PLAN AND DOCUMENT REVIEW

NV5 will perform a map and literature review of readily available published documents pertinent to the site including preliminary project plans, geologic maps, readily available historic mining maps, soil survey maps and previous known works on the Site.

SURFACE RECONNAISSANCE

Our surficial reconnaissance investigation will involve a cursory site visit focusing on the proposed development locations. During our site visit, we will observe the existing condition of the subject property as well as rock/soil types observed at the ground surface.

PRELIMINARY GEOTECHNICAL REPORT

Following completion of the above tasks, we will compile a report which will include:

 A brief description of surface soil, geologic exposures and spring or seepage conditions observed during our reconnaissance;

792 Searls Avenue | Nevada City, CA 95959 | www.NV5.com | Office 530.478.1305 | Fax 530.478.1019 CONSTRUCTION QUALITY ASSURANCE - INFRASTRUCTURE - ENERGY - PROGRAM MANAGEMENT - ENVIRONMENTAL

- A map depicting notable findings of our document review, such as mapped geological and soil conditions.
- Our opinions regarding the feasibility of the project from a geotechnical/geologic standpoint;
- Discussion of anticipated materials and conditions to be encountered during grading; and
- Preliminary recommendations regarding suitable foundation systems for support of the proposed structures.

Based on the findings of our preliminary investigation, we will provide an opinion regarding the feasibility of the proposed development from a geotechnical engineering standpoint, and we provide general recommendations regarding geotechnical conditions identified at the site that may impact the proposed development.

Because of the limited nature of our field investigation, the conclusions and recommendations presented in the report must be considered preliminary until confirmed by a future design-level geotechnical engineering investigation, including a subsurface investigation and laboratory testing.

ASSUMPTIONS AND CLIENT RESPONSIBILITIES

This proposal is based on the following assumptions:

- The client will provide NV5 with authorization to access the site.
- This scope of services does not include design-level geotechnical investigation or site-specific
 geotechnical design recommendations, plan review or construction observation and testing, nor
 does it include the determination or evaluation of the presence or absence of hazardous
 materials, toxic mold or the corrosion potential of the site soils/rock or providing provisions for
 controlling moisture vapor migration through slabs.
- Upon completion, a PDF digital copy of the report will be provided to the client and/or the client's engineers and architects.
- Client meetings, report revisions and consultation services following report submittal are not included in the fee estimate but can be provided on a time and materials basis at the client's request.
- This proposal and our associated fee are based on the use of the attached terms and conditions.

FEE

We propose to perform the services outlined herein for a fixed unit fee of \$. A billing invoice will be issued for the full amount upon completion of our services. If this proposal is acceptable, please review and sign the attached agreement and return one copy to our Nevada City office as our authorization to proceed.

ADDITIONAL SERVICES

The following services are not included in our fee estimate but should be considered and anticipated pursuant to the standard of practice. We can provide a proposal for these services upon request.

DESIGN-LEVEL GEOTECHNICAL INVESTIGATION

We anticipate that a design-level geotechnical investigation will be required in general accordance with the 2016 California Building Code (CBC). A design-level geotechnical engineering investigation typically

includes subsurface exploration and laboratory testing to determine soil engineering material properties, and data analysis to develop geotechnical design criteria for the proposed development.

REVIEW OF PLANS AND SPECIFICATIONS

Prior to construction, the geotechnical engineer should be retained to review the project plans and specifications to confirm that the findings of our geotechnical engineering investigation are incorporated into the project geotechnical design.

CONSTRUCTION OBSERVATION AND TESTING

Geotechnical engineering recommendations must be validated by the geotechnical engineer during construction to confirm that the project is constructed in accordance with the geotechnical engineering recommendations and to verify the subsurface conditions encountered during the geotechnical investigation.

SCHEDULE

We can typically perform our field investigation within four weeks of receiving authorization to proceed. We anticipate the preliminary geotechnical report can be issued within four weeks of the field investigation.

Thank you for the opportunity to provide this proposal. If you have any questions, please contact our office.

Sincerely,

NV5

Prepared by:

Daniel Vieira Project Geologist

Reviewed by:

ADN WHICH

Jason W. Muir, PE, GE Associate Engineer

Attached: Agreement for Geotechnical Engineering Services

Copy: PDF to Nevada City Engineering /Attn: Andy Cassano, andy@nevadacityengineering.com

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APPENDIX D

TRIP GENERATION AND VMT ANALYSIS

LSC TRANSPORTATION CONSULTANTS, INC.



2690 Lake Forest Road, Suite C P. O. Box 5875 Tahoe City, CA 96145 (530) 583-4053 FAX (530) 583-5966 Email: lsc@lsctahoe.com Website: www.lsctrans.com

September 28, 2021

Andy Cassano, Former CEO & Managing Partner Nevada City Engineering, Inc. 505 Coyote Street, Suite B Nevada City, CA 95959

> RE: Northern Queen Inn – Trip Generation and Vehicle Miles Traveled (VMT) Analysis

Dear Mr. Cassano:

Per your request, LSC Transportation Consultants, Inc. has prepared a limited traffic analysis for additional lodging units at the Northern Queen Inn located at 400 Railroad Avenue in Nevada City, California. The project proposes to add 20 hotel rooms and 12 cabins to the existing Inn. Access to the project would continue to be provided via the existing driveways on Railroad Avenue.

Trip Generation

Trip generation is the evaluation of the number of vehicle-trips that will either have an origin or destination at the project site. Daily one-way vehicle-trips and peak-hour one-way vehicle-trips must be determined in order to analyze the potential impacts from the proposed project development. The basis for the trip generation analysis is the data contained in the Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition manual (2017) for the Hotel land use.

The standard ITE trip rates are generally based on data collected at development sites with little or no public transit service and little or no convenient pedestrian access. Additional reductions for non-auto mode choice are based on the characteristics of the community and population, and on the quality and quantity of bicycle, pedestrian, and transit facilities. A 20-percent reduction is applied to the project, based on the on-site restaurant and the project's close proximity to downtown Nevada City (0.6 miles, or roughly a 15-minute walk).

Applying the trip generation rates to the proposed land use quantities and applying reductions for non-auto travel yields a total vehicular trip generation of approximately 214 daily one-way trips, including 16 trips (8 entering and 8 exiting) during the PM peak hour.

The *Traffic Impact Analysis Guidelines for the County of Nevada* (June 2020) states that a traffic memo or study is required if a project generates 100 or more new peak hour vehicle trips. As shown in table 1, this project generates less than 100 PM peak hour trips, therefore no additional traffic analysis is required.

Vehicle Miles of Travel

Vehicle-Miles of Travel (VMT) is a measure of the total traffic activity generated by a proposed land use. VMT was analyzed based on the methodologies found in *Senate Bill 743 Vehicle Miles Traveled Implementation Prepared for Nevada County Transportation Commission (NCTC)* (Fehr and Peers, July 2020) as well as in Nevada City's *Resolution No. 2021-11* (February 2021). The applicable screening criteria is shown in Nevada City's Resolution Exhibit B (last bullet) stating that the project is screened out if:

"The project is a work-related land use and the TAZ home-based work VMT per employee is equal to or less than 14.3% below the Nevada City subarea mean. The project should also be consistent with the jurisdiction's general plan and the Regional Transportation Plan."

The VMT screening tool located at <u>https://apps.fehrandpeers.com/NCTCVMT/</u> was used for the two parcels (APN 5470035000 and 5490019000) encompassing the project which are in Traffic Analysis Zone 558. The resulting TAZ VMT was 13.5 VMT per worker, as shown in Table 2.

The threshold, again provided by the screening tool, was determined to be 18 VMT per worker which is 14.3 percent below the 21 VMT per worker subarea mean. The project's VMT is less than the threshold and is therefore screened out of further VMT analysis.

Conclusion

- The project generates 214 daily trips and 16 PM peak hour trips. Since the project generates less than 100 PM peak hour trips, no additional traffic analysis is required.
- The project generates 13.5 VMT per worker which is less than the threshold of 18 VMT per worker and is therefore screened out of any further VMT analysis.

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

By Lesti Sur

Leslie Suen, PE, Senior Engineer

Encl: Table 1-2

Table 1: No	orthern G)ueen	Inn - T	rip Ge	nerati	on A	naly	sis ar	nd VMT				
					Trip (Genera	tion Ra	ites ¹		Project Trips at			
						PM	Peak	Hour	Percent Reduction		PM	Peak	Hour
Description	ITE Land Use	Code	Quantity	Unit	Daily	In	Out	Total	for Non- Auto Trips	Daily	In	Out	Total
Hotel	Hotel	310	20	Rooms	8.36	0.31	0.29	0.60	20%	134	5	5	10
Cabins	Hotel	310	12	Rooms	8.36	0.31	0.29	0.60	20%	80	3	3	6
PROJECT TO	TAL									214	8	8	16

Table 2: VMT Results from NCTC Screening Tool

Assessor Parcel Number (APN)	5470035000	5490019000			
Traffic Analysis Zone (TAZ)	558	558			
Subarea	Nevada City	Nevada City			
TAZ VMT	13.5	13.5			
Subarea VMT	21	21			
% Difference	-35.70%	-35.70%			
VNAT Matria	Home-Based Work VMT	Home-Based Work VMT			
VMT Metric	per Worker	per Worker			
Threshold	18	18			
Subareas have different thresholds (1=Yes, 0=No)	0	0			
Within a low VMT generating TAZ?	Yes (Pass)	Yes (Pass)			