

Draft Environmental Impact Report

State Clearinghouse Number 2022070047

YREKA TRAVEL CENTER AND HOTEL PROJECT PUD AMENDMENT AND CUP AMENDMENT

City of Yreka, California

CEQA Lead Agency:



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SUMMARY

S.1 Introduction

This Draft Environmental Impact Report (DEIR) evaluates the potential environmental effects of the proposed construction and operation of the Yreka Travel Center and Hotel Project (Proposed Project) in the City of Yreka, Siskiyou County, California. The City of Yreka is the Lead Agency responsible for preparation of this DEIR. This DEIR was prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et. seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000 et seq). CEQA requires that the Lead Agency, in this case City of Yreka, consider the information contained in the EIR prior to taking any discretionary action on the Project. The Lead Agency is the agency with primary responsibility for approval of a project. Other public agencies may also use this EIR to inform discretionary actions related to the Proposed Project.

This Summary has been prepared in accordance with the CEQA Guidelines Section 15123, which states that an EIR should contain a brief summary of the Proposed Project and its consequences, and should identify:

1. each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect,
2. areas of public controversy known to the lead agency, including issues raised by the agencies and the public, and
3. issues to be resolved, including the choice among alternatives and how to mitigate the significant effects.

S.2 Project Location and Setting

The Project Site is located in the northeast area of the City of Yreka south of Montague Road/SR 3. The assigned addresses for the four undeveloped parcels of the Project Site are 717, 727, 737 and 747 Montague Road/SR-3. The Proposed Project is located in a mostly rural area of the City of Yreka with sparse development surrounding the site. The 4.97-acre Project Site is vacant of structures and relatively flat, gently sloping from east to west, with elevations between 2,630 and 2,660 AMSL for the site. The site had been previously graded and there are a few small mounds on the site as a result of grading activities. The site is primarily composed of disturbed grassland habitat with patches of shrubs.

Surrounding uses include the Yreka RV Park, vacant land with a drainage basin, and large lot single family uses to the south, and a Holiday Inn Hotel, and Interstate 5 (I-5) to the west. North of the site is Montague Road/SR 3 with vacant land beyond. The Yreka Truck Stop is east of the site, with vacant land and a lumber yard and mini-storage beyond.

S.3 Description of Proposed Project

Development of the Project would require the approval by the City Council of an amendment to PUD 5-98 and associated Use Permit No. 2883. The Project is proposed to be completed in two phases and includes the following: Phase I - a 12,300 square-foot building consisting of a convenience store, a food hall, and retail shop open 7 days a week, 24 hours a day; a fuel center, with eight dispensers for automobiles and RVs, a separate fuel center with four diesel dispensers for semi-trucks, and a 99-space parking lot; Phase II - a 70-room, three-story hotel, and parking. Section 2.0 of this DEIR contains a detailed description of the Proposed Project.

S.4 Project Objectives

The Yreka Travel Center and Hotel Project includes the following objectives that incorporate a variety of uses for the traveling and local public that complement each other with the ultimate objective to enhance the local community by:

1. Developing travel facilities that serve the needs of the Interstate 5 traveler, enhance the adjacent uses (neighboring hotel/RV park) and providing a destination for locals to enjoy and relax as well.
2. Provide a naturally lit food hall that offers a variety of fresh food options in addition to the typical convenience store fare and will have a clean inviting interior.
3. Develop the convenience store, fuel center, food hall, Inn & Suites as a destination of high quality design.

S.5 Project Alternatives

The CEQA Guidelines Section 15126.6 specifies that an EIR must describe and evaluate a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the significant effects of the project. Chapter 5 of this DEIR describes the alternatives to the Proposed Project. These alternatives include:

- Alternative 1: No Project;
- Alternative 2: No Hotel; and
- Alternative 3: Smaller Project.

S.5.1 Alternative 1: No Project

Under the No Project, development of the Proposed Project would not occur. However, because PUD 5-98 and CUP 2883 only allows the construction of a "Quick Service/Full Service Restaurant" on the Project Site, this type of use is assumed to be development in the future. Because this use was approved under a previous CEQA Initial study/Mitigated Negative Declaration by the City, no additional CEQA environmental analysis is required if a quick service/full service restaurant were to be proposed for the site. Therefore, Alternative 1 assumes that this type of facility will be built on the site.

S.5.2 Alternative 2: No Hotel

Alternative 2 would be the Project as proposed but without the hotel and associated parking and landscaping. Phase II of the Proposed Project would not be developed for Alternative 2. The land area assigned for Phase II would remain vacant. Alternative 2 would include the following: a convenience store, a food hall, bar, retail shop, and outdoor patio, all in one building, a fuel center with eight dispensers, a separate fuel center with four diesel dispensers for semi-trucks, above ground and underground gasoline/diesel fuel tanks and a propane tank, parking areas, pet park, and landscaping.

S.5.3 Alternative 3: Smaller Project

Alternative 3 would be the development of the Project with the same proposed uses of the Project but on a smaller scale of approximately 75 percent of the Proposed Project's size. These include the following:

Phase I

- a 9,225-sf building including a convenience store, a food hall, bar, retail shop, and outdoor patio, open 7 days a week, 24 hours a day,
- a fuel center with six dispensers for automobiles and RVs ,
- a separate fuel center with three diesel dispensers for semi-trucks,
- two underground gasoline/diesel fuel tanks, two 12,000-gallon above-ground diesel tanks, and a 10-foot propane tank.
- parking accommodating 75 spaces, including 9 spaces for Electric Vehicle (EV)s charging,
- a pet park area,
- two monument signs and a goalpost sign, and
- perimeter landscaping (33,500 sf total for Phases I and II).

Phase II

- a 52-room, two-story hotel (33 feet tall, 12,774 sf).
- parking accommodating 57 spaces, including two spaces for EV charging,
- a goalpost sign, and
- perimeter landscaping (33,500 sf total for Phases I and II).

S.6 Areas of Controversy/Issues to be Resolved by Lead Agency

CEQA Guidelines Section 15123(b)(2) requires an EIR to identify areas of controversy or public interest. Prior to the preparation of this EIR, an Initial Study and Notice of Preparation (NOP) were prepared for the Project (Appendix A). The City of Yreka distributed the NOP for review and comment to Responsible and Trustee Agencies, the State Clearinghouse, and other interested parties for a 30-day scoping period from July 6, 2022 to August 4, 2022. Additionally, the City held two scoping meetings on August 1st and August 15th 2022. No comments were provided by the public or agencies during these meetings. The City received four comment letters by state agencies as a result of the NOP. All comment letters are included in Appendix A of this DEIR.

The only issue that was raised as a part of the NOP comments was a recommendation for the City to require the existing detention basin be replaced/retrofitted with a bioretention basin to receive runoff from the Project area. The City requires adequate storm water detention as part of project design. Review of storm drainage facilities are completed by the City engineer as a part of project review.

S.7 Summary of Impacts and Mitigation Measures

Table S.7-1 presents a summary of Project-specific environmental impacts analyzed and identified in this DEIR, the mitigation measures proposed for those impacts, and the level of significance after mitigation.

The analysis in this DEIR concludes that, although certain impacts are considered significant or potentially significant, all such impacts could be avoided or reduced to less than significant with implementation of mitigation measures. No impact was identified that would remain significant with implementation of the mitigation measures identified in Chapter 3, and each of those mitigation measures is feasible. Therefore, the Proposed Project would not result in any significant and unavoidable environmental effects.

Shown below are the various levels of impact as shown in Table S7-1 and throughout this Draft EIR:

No Impact (NI) = The project would not have an effect on the resource

Less than Significant Impact (LTS) = The project would have an effect on the resource but this effect would be less than significant

Less than Significant with Mitigation Incorporated (LSTM) = The project would have a significant effect on the resources to the level that mitigation for this effect is required.

Significant and Unavoidable (SU) = The project would have a significant effect on the resources and complete mitigation of this effect is not possible with feasible mitigation measures.

Less than Cumulatively considerable (LTCC) = The project, along with any pending, proposed, or foreseeable development in the project vicinity, does not result in cumulative effect on the resource in which no mitigation is necessary or can be mitigated to a less than significant level.

Cumulative Considerable (CC) = The project, along with any pending, proposed, or foreseeable development in the project vicinity, results in cumulative effect on the resource which cannot be mitigated.

Table S.7-1. Summary of Proposed Project Impacts and Mitigation Measures		
Environmental Impacts	Mitigation Measures	Residual Impact (with Mitigation)*
BIOLOGICAL RESOURCES		
BIO-1: Project implementation could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Impact Determination: <i>Less than Significant with Mitigation</i>	BIO-1: Special-Status Plants. Three special-status plant species have potential to occur with the site including California androsace, Ashland thistle, and Shasta orthocarpus. The following measures shall be implemented to minimize potential impacts to special-status plant species: • Perform the focused plant surveys according to USFWS, CDFW, and CNPS protocol. Surveys will be timed according to the blooming period for target species and known reference populations, if available, and/or local herbaria will be visited prior to surveys to confirm the appropriate phenological state of the target species. • If special-status plant species are found, avoidance zones may be established around plants to clearly demarcate areas for avoidance. Avoidance measures and buffer distances may vary between species and the specific avoidance zone distance will be determined in coordination with appropriate resource agencies (CDFW and USFWS). • If special-status plant species are found within the Project and avoidance of the species is not possible, additional measures such as seed collection and/or translocation may be developed in consultation with the appropriate agencies. • If no special-status plants are found, no further measures pertaining to special-status plants are necessary.	LTS

Table S.7-1. Summary of Proposed Project Impacts and Mitigation Measures

Environmental Impacts	Mitigation Measures	Residual Impact (with Mitigation)*
BIO-4: Project implementation could interfere substantially with the movement of any native resident or migratory fish or wildlife species with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. Impact Determination: <i>Less than Significant with Mitigation</i>	BIO-2: Migratory Bird Treaty Act Birds. For construction and other ground-disturbing activities with potential to affect birds and active nests protected under the MBTA, the following measures shall be implemented to prevent potential impacts to active bird nests. • To the extent feasible, vegetation removal shall occur prior to the nesting season, September 16 through January 31. • For Project activities that begin between February 1 and September 15, including vegetation removal, qualified biologists shall conduct preconstruction nesting bird surveys onsite and accessible areas within 100 feet of the Project site. The surveys shall be conducted within 14 days before the beginning of any construction activities between February 1 and September 15. • Impacts to special-status bird and MBTA bird nests shall be avoided by establishing appropriate buffers around active raptor nests identified during preconstruction surveys; buffers shall be determined by a qualified biologist in consultation with CDFW. Project activity shall not commence within the buffer areas until a qualified biologist has determined, in coordination with CDFW, that the young have fledged, the nest is no longer active, or reducing the buffer would not result in nest abandonment. The size of the buffer may be adjusted if a qualified biologist and the applicant, in consultation with CDFW, determine that such an adjustment would not be likely to adversely affect the nest. Monitoring of the nest by a qualified biologist during construction activities may be necessary. • If no active nests are found during preconstruction surveys, no further measures relating to protected birds is necessary.	LTS

Table S.7-1. Summary of Proposed Project Impacts and Mitigation Measures		
Environmental Impacts	Mitigation Measures	Residual Impact (with Mitigation)*
CULTURAL RESOURCES		
CUL-1: Project implementation could cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. Impact Determination: <i>Less than Significant with Mitigation</i>	CUL-1: Cultural or Archaeological Resource Discovery. All subdivision improvement plans and grading plans shall include the following: If subsurface deposits believed to be cultural or human in origin are discovered during any roadway or future construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find: • If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required. • If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, they shall immediately notify the City and landowner. If the find is determined to be eligible for inclusion in the NRHP or California Register of Historic Places (CRHR), the City shall consult on a finding of eligibility and implement appropriate treatment measures. Work may not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: 1) is not eligible for the NRHP or CRHR; or 2) that the treatment measures have been completed to its satisfaction. • If the find includes human remains, or remains that are	LTS

Table S.7-1. Summary of Proposed Project Impacts and Mitigation Measures

Environmental Impacts	Mitigation Measures	Residual Impact (with Mitigation)*
	potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Siskiyou County Coroner (in accordance with Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California PRC, and AB 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (Section 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate information center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.	

Table S.7-1. Summary of Proposed Project Impacts and Mitigation Measures		
Environmental Impacts	Mitigation Measures	Residual Impact (with Mitigation)*
CUL-2: Project implementation could cause a substantial adverse change in the significance of an archeological resource pursuant to CEQA Guidelines Section 15064.5. Impact Determination: <i>Less than Significant with Mitigation</i>	Implement mitigation measure CUL-1	LTS
CUL-3: Project implementation could disturb any human remains, including those interred outside of formal cemeteries. Impact Determination: <i>Less than Significant with Mitigation</i>	Implement mitigation measure CUL-1	LTS
GEOLOGY, SOILS AND PALEONTOLOGICAL RESOURCES		
GEO-1: Project implementation could directly or indirectly destroy a unique paleontological resource or site or unique geological feature. Impact Determination: <i>Less than Significant with Mitigation</i>	PALEO-1 Discovery of Unknown Paleontological Resources. If paleontological or other geologically sensitive resources are identified during any phase of project development, the construction manager shall cease operation at the site of the discovery and immediately notify the City. The City shall retain a qualified paleontologist to evaluate the find and to prescribe mitigation measures to reduce impacts to a less than significant level. In considering any suggested mitigation proposed by the consulting paleontologist, City shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, land use assumptions, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for paleontological resources is carried out.	LTS

Table S.7-1. Summary of Proposed Project Impacts and Mitigation Measures		
Environmental Impacts	Mitigation Measures	Residual Impact (with Mitigation)*
TRANSPORTATION		
TR-1: Project implementation could conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities. Impact Determination: <i>Less than Significant with Mitigation</i>	Improvements to the Montague Road/ I-5 SB Ramps. The Project proponent shall be responsible to convert intersection to all-way stop-control AWSC, or other traffic control mechanism approved by Caltrans, at the Montague Road/I-5 Southbound Ramps to the satisfaction of the City Engineer and Caltrans.	LTS
TR-2: Under cumulative conditions, the Project would cumulatively contribute to cumulative traffic volumes on local roadways that result in significant impacts to level of service and operations. Impact Determination: <i>Cumulatively Considerable</i>	TR-2: Improvements to the Montague Road/I-5 Northbound Ramps. The Project proponent shall be responsible for the following: • Conversion of the intersection to all-way stop-control AWSC, or other traffic control mechanism approved by Caltrans, at the Montague Road/I-5 Northbound Ramps to the satisfaction of the City Engineer and Caltrans. • Addition of a westbound right-turn pocket at the Montague Road/I-5 Northbound Ramps to the satisfaction of the City Engineer and Caltrans.	LTCC
TRIBAL CULTURAL RESOURCES		
TCR-1: Project implementation could cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074. Impact Determination: <i>Less than Significant</i>	Implementation of mitigation measure CUL-1.	LTS

Notes: LTS = Less than Significant, LTCC = Less Than Cumulatively Considerable

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ACRONYMS AND ABBREVIATIONS

Term	Definition
µg/m ³	Micrograms per cubic meter
°F	Degrees Fahrenheit
AB	Assembly Bill
ADT	Average Daily Trips
APN	Assessor's Parcel Number
AQMD	Air Quality Management District
ASF	Age Sensitivity Factor
ATCM	Airborne Toxics Control Measure
AWSC	All Way Stop Control
BCC	Birds Of Conservation Concern
BLM	Bureau of Land Management
BMP	Best Management Practice
BO	Biological Opinion
BRA	Biological Resources Assessment
CAA	Clean Air Act
CAISO	California Independent System Operator
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CARI	California Aquatic Resource Inventory
CC&Rs	Codes, Covenants and Regulations
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH ₄	Methane
City	City of Yreka
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO ₂	Carbon Dioxide

Term	Definition
CO ₂ e	Carbon Dioxide Equivalents
CPUC	California Public Utilities Commission
CRHR	California Register of Historic Resources
CRPR	California Rare Plant Rank
CUP	Conditional Use Permit
CWA	Clean Water Act
cy	Cubic Yards
dB	Decibel
dBA	A-weighted Decibel
DEIR	Draft Environmental Impact Report
DPM	Diesel Particulate Matter
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EMFAC	CARB Emission FACTor
EO	Executive Order
EPS	Emissions Performance Standard
ESA	Endangered Species Act
EV	Electric Vehicle
FAH	Fraction Of Time At Home
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHR	Flood Hazard Reduction
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FTA	Federal Transit Administration
GHD	GHD Group Pty Ltd
GHG	Greenhouse Gas
GLO	General Land Office
GWP	Global Warming Potential
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
hp	Horsepower
HPSR	Historic Properties Survey Report
HRA	Health Risk Assessment
HWC	Highway Capacity
Hz	Hertz
I-5	Interstate 5
ICE	Intersection Control Evaluation
IEPR	Integrated Energy Policy Report

Term	Definition
IPaC	Information, Planning, and Consultation System
IS	Initial Study
ITE	Institute of Traffic Engineers
kWh	Kilowatt Hours
L/kg	Liters per kilogram
L _{dn}	Daily Noise Level
Leq	Equivalent Noise Level
LSA	Lake or Streambed Alteration
Lead Agency	City of Yreka Council
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
MEIR	Maximumly Exposed Individual Resident
MEIW	Maximumly Exposed Individual Worker
MLD	Most Likely Descendant
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
MS4	Municipal Separate Storm Sewer System
MSL	Mean Sea Level
MW	Megawatts
MWh	Megawatt Hour
N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEIC	Northeast Information Center
NHPA	National Historic Preservation Act
NIOSH	National Institute for Occupational Safety and Health
NMFS	National Marine Fisheries Service
NO ₂	Nitrogen Dioxide
NOA	Naturally Occurring Asbestos
NOAA	National Oceanic and Atmospheric Administration
NOC	Notice of Completion
NOP	Notice of Preparation
No _x	Nitric Oxide
NPAB	Northeast Plautau Air Basin
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places

Term	Definition
O ₃	Ozone
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PM	Particulate Matter
PM ₁₀	Coarse Particulate Matter
PM _{2.5}	Fine Particulate Matter
ppm	Parts per million
PPV	Peak Particle Velocity
PRC	Public Resources Code
Proposed Project	Yreka Travel Center and Hotel Project
PRPA	Paleontological Resources Preservation Act
PUD	Planned Unit Development
REL	Reference Exposure Level
ROG	Reactive Organic Gas
RMS	Root Mean Square
RPS	Renewables Portfolio Standard
RV	Recreational Vehicle
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAPCD	Siskiyou County Air Pollution Control District
SCAQMD	South Coast Air Quality Management District
SCH	State Clearinghouse
SDSU	San Diego State University
sf	square foot/feet
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
SR	State Route
SSC	Species Of Special Concern
STAGE	Siskiyou Transit and General Express
STC	Sound Transmission Class
Strategy	Mobile Source Strategy
SWPPP	Stormwater Pollution And Prevention Plan
TAC	Toxic Air Contaminant
TCRs	Tribal Cultural Resources
TWSC	Two-Way Stop Control
UCMP	University of California Museum of Paleontology
USACE	U.S. Army Corps of Engineers

Term	Definition
USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VFP	Vehicle Fueling Positions
VMT	Vehicle Miles Traveled
WEAL	Western Electro-Acoustic Laboratory, Inc.

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1.0 INTRODUCTION

1.1 Purpose of the Draft EIR

This Draft Environmental Impact Report (DEIR) identifies and evaluates the potential environmental impacts associated with the implementation of the Yreka Travel Center and Hotel Project (Proposed Project). The Project includes the construction of a 12,300-square-foot (sf) commercial building, a fuel center with eight dispensers for automobiles and Recreational Vehicles (RV), a separate fuel center with four diesel dispensers for semi-trucks, and 70-room hotel. The Proposed Project is located on approximately 4.97 acres of land. Development of the Project would require the approval of an amendment to Planned Unit Development (PUD) 5-98 and associated Use Permit No. 2883.

As described in California Environmental Quality Act (CEQA) Guidelines Section 15121(a), an EIR is an informational document that informs agency decision makers and the general public of the potentially significant environmental impacts of a project, identifies ways to minimize the significant impacts, and describes a reasonable range of alternatives to the project. CEQA requires that an EIR be prepared by the agency with primary responsibility over the approval of a project (referred to as the Lead Agency). The Lead Agency, the City of Yreka (City) has prepared this Draft Environmental Impact Report (DEIR or Draft EIR) in accordance with the CEQA (Public Resources Code [PRC] Sections 21000 et. seq.) and the Guidelines for the Implementation of CEQA (California Code of Regulations [CCR], Title 14, Sections 15000 et seq.).

This DEIR is intended to provide information to public agencies and the general public regarding the potential direct, indirect, and cumulative environmental impacts associated with the Proposed Project. Public agencies are charged with the duty to consider and minimize environmental impacts of proposed development, where feasible, and are obligated to balance a variety of public objectives including economic, environmental, and social factors in their decision making. The City has determined that an EIR is the appropriate CEQA documentation due to the potential for significant environmental impacts that could result from approval of the requested actions and development of the Proposed Project. This Draft EIR evaluates the existing environmental conditions in the area, analyzes potential environmental impacts due to the Project implementation, and identifies feasible mitigation measures that could avoid or reduce the magnitude of those impacts. CEQA requires a Lead Agency neither approve nor implement a project unless significant environmental impacts have been reduced, or, if a Lead Agency approves the project even though significant impacts identified in the DEIR cannot be fully mitigated, the Lead Agency must state in writing the reasons for its action by adopting Findings and a Statement of Overriding Considerations (CEQA Guidelines Section 15091).

1.2 Lead Agency

The lead agency is the public agency with primary responsibility for a proposed project. Where two or more public agencies will be involved with a project, CEQA Guidelines Section 15051 provides criteria for identifying the lead agency. In accordance with CEQA Guidelines Section 15051(b)(1), "the lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an

agency with a single or limited purpose.” Based on the criteria above, the City is the lead agency for the Proposed Project.

Table 1.1-1. Anticipated Lead Agency Approvals and Reviews	
Lead Agency	Permit or Approval
City of Yreka City Council	■ Certification of the EIR ■ Approval of amendment to PUD 5-98 ■ Approval of Use Permit No. 2883.

1.3 Known Trustee and Responsible Agencies

Other public agencies may use this DEIR to issue approvals and permits related to the Proposed Project. For the purpose of CEQA, the term *trustee agency* means a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of California. In CEQA, the term *responsible agency* includes all public agencies other than the lead agency that may have approval authority in some regard associated with the Proposed Project. A list of agency approvals that may be required to implement the Proposed Project is provided in Table 1.1-1. The types of actions that these agencies, as well as other agencies not included on this list, may take in connection with the Proposed Project include, but may not be limited to the following:

- Approve, adopt, or amend applicable plans, policies, or programs
- Make findings of consistency
- Approve and issue permits
- Approve agreements
- Provide authorization and approval of funding
- Provide service

Table 1.1-2. Potential Trustee and Responsible Agency Approvals and Reviews	
Caltrans	• encroachment permit
Siskiyou County AQMD	• authority to construct gasoline dispensing/storage facility • dust control plan
North Coast Regional Water Quality Control Board	• construction general permit
Siskiyou County Environmental Health Department	• fuel storage tanks • storage and management of hazardous materials • food facility permits

AQMD=Air Quality Management District

1.4 Type of Document

CEQA and the CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR is for a specific development project with defined parameters. As such, this EIR is a *project* EIR. Project EIRs are defined by CEQA Guidelines (Section 15161) below:

“The most common type of EIR examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction, and operation.”

1.5 Intended Use of the EIR

This Draft EIR is intended to evaluate the environmental impacts of the Project based on an equal level analysis of the three proposed alternatives. This EIR in its final form will be used by the City in considering approval of the Proposed Project. In accordance with CEQA Guidelines Section 15126, the EIR will be used as the primary environmental document in consideration of all subsequent planning and permitting actions associated with the Project, to the extent such actions require CEQA compliance and as otherwise permitted under applicable law.

1.6 Draft EIR Organization

This DEIR is organized as follows:

- The **Summary** provides summary information on the Project location and setting, Project characteristics, areas of controversy and issues to be resolved, Project alternatives, and a summary of impacts and mitigation measures.
- **Section 1.0** of the DEIR provides an introduction to the Proposed Project, the purpose of the DEIR, a description of the organization of the DEIR, the intended uses of the DEIR, and a description of the public review process.
- **Section 2.0** provides a description of the Project location, Project objectives, and the elements of the Proposed Project.
- **Section 3.0** provides the environmental analysis of the Proposed Project. This includes the description of the regulatory background, environmental setting (existing conditions), the analysis of environmental impacts, and a discussion of mitigation measures to reduce or eliminate any significant environmental impacts.
- **Section 4.0** addresses other aspects of compliance with CEQA including a description of significant and unavoidable adverse impacts, effects found not to be significant, significant irreversible environmental changes, and growth-inducing impacts.
- **Section 5.0** discusses the alternatives considered and rejected, alternatives considered and analyzed, and potential environmental impacts of implementing alternatives to the Proposed

Project, including the No Project Alternative. This chapter also identifies the Environmentally Superior Alternative in accordance with CEQA Guidelines Section 15126.6(e)(2).

- **Section 6.0** provides the references used to prepare the EIR.
- **Section 7.0** provides a list of the DEIR preparers.
- Appendices contain information that supplements or supports the DEIR.

1.7 Environmental Review Process

1.7.1 Notice of Preparation and Initial Study

In accordance with the CEQA Guidelines, the City of Yreka, as Lead Agency, prepared an Initial Study (IS) and Notice of Preparation (NOP) for an EIR on the Proposed Project. A copy of the IS and NOP are provided in Appendix 1.0. The City of Yreka distributed the IS and NOP for review and comment to the State Clearinghouse ([SCH, #2022070047) and interested parties for a 30-day comment period from July 6 to August 4, 2022.

CEQA Guidelines Section 15063 (c) provides the purpose and use of an Initial Study. Section 15063(c) is as follows:

- (c) Purposes. The purposes of an Initial Study are to:
- (1) Provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or a Negative Declaration.
 - (2) Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration.
 - (3) Assist in the preparation of an EIR, if one is required, by:
 - (A) Focusing the EIR on the effects determined to be significant,
 - (B) Identifying the effects determined not to be significant,
 - (C) Explaining the reasons for determining that potentially significant effects would not be significant, and
 - (D) Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.
 - (4) Facilitate environmental assessment early in the design of a project;
 - (5) Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment;
 - (6) Eliminate unnecessary EIRs;
 - (7) Determine whether a previously prepared EIR could be used with the project.

The Initial Study determined that the Proposed Project would have a less than significant impact or no impacts in the following Initial Study analysis areas:

Aesthetics	Public Resources
Agriculture and Forest Resources	Recreation
Hazards and Hazardous Materials	Transportation
Land use and Planning	Utilities (except for water facilities and water supply), and
Mineral Resources	Wildfires
Population and Housing	

The NOP and Initial Study are provided in Appendix 1.0.

1.7.2 **Scoping Meeting**

The scoping meeting the meeting was advertised with the publication of the NOP on June 6, 2022 and scheduled for August 1, 2022 in order to allow early public/agency input and comments about the Project, the Initial Study and future environmental review. While the City held this meeting as scheduled, it happened to transpire during the McKinney wildfire, which started on July 29, 2022. A portion of the city was under mandatory evacuation orders at the time and no one attended the meeting. Anticipating that the meeting would be sparsely attended, the City scheduled a second scoping meeting to occur 2 weeks after the first meeting and advertised accordingly. The second scoping meeting was held via online video conference on August 15, 2022 from 4:00 to 6:00 p.m. No members of the public and agencies attended this meeting. In addition to a second scoping meeting, the public review period was extended until August 18, 2022 allowing the public additional time to provide written comments on the NOP and the Initial Study. The City received four NOP comment letters, summarized in Table 1.0-3. The comment letters are included in Appendix 1.0-A2. These comments were considered as a part of the EIR analysis.

Table 1.0-3. NOP Comments	
Name of Commenter/Agency	Comment Summary
Native American Heritage Commission	Reminder of SB18 and AB 25 regulations regarding Native American consultation.
North Coast Regional Water Quality Control Board	Recommendation for the City to require the existing detention basin be replaced/retrofitted with a bioretention basin to receive runoff from the Project Area. Alternatively, if the recommendation cannot be met, a meeting with RWQCB staff to discuss the proposed BMP design and ensure the city meets its MS4 Stormwater Permit requirements.
California Department of Fish and Wildlife	The Department looks forward to reviewing the DEIR.
Siskiyou County Air Pollution Control District	Prior to construction, the SCAPCD requires submittals for an Authority to Construct a NOA Dust Mitigation Plan and registration of diesel powered equipment with greater than 50 horsepower.

AB=Assembly Bill

BMP=Best Management Practice

NOA=Naturally Occurring Asbestos

RWQCB=Regional Water Quality Control Board

SB=Senate Bill

SCAPCD=Siskiyou County Air Pollution Control District

1.7.3 *Draft EIR*

As a result of the IS analysis and comments received during the NOP scoping meeting and public review period, the City determined that the Proposed Project could have significant environmental impacts to certain environmental resources, and that an EIR should be prepared. These environmental resources include air quality, biological resources, cultural and, energy, geology and soils (paleontological resources), greenhouse gas and climate change, noise, transportation, and tribal cultural resources. This Draft EIR provides this analysis.

This document constitutes the Draft EIR. The Draft EIR contains a description of the Project, a description of the environmental setting, identification of Project impacts, alternatives, and feasible mitigation measures for impacts found to be significant. Upon completion of the Draft EIR, the City will file the Notice of Completion (NOC) with the California Office of Planning and Research (OPR) to begin the public review period (PRC Section 21161).

1.7.4 *Public Notice/Public Review*

Concurrent with the NOC, the City will provide public notice of the availability of the Draft EIR for public review and invite comment from the general public, agencies, organizations, and other interested parties. The public review and comment period is 45 days. Notice of the time and location of any public meetings and hearings will be published prior to the meeting/hearing in accordance with applicable law. All comments or questions regarding the Draft EIR should be addressed to:

Juliana Lucchesi, Planning Director
City of Yreka
701 Fourth Street
Yreka , California 96097

Comments may also be sent to Ms. Lucchesi via e-mail at: jlucchesi@ci.yreka.ca.us.

1.7.5 *Response to Comments/Final EIR*

Following the public review period, a Final EIR (FEIR) will be prepared. The FEIR will respond to all comments received during the public review period that raise significant environmental concerns and may contain revisions to the Draft EIR, if necessary. The Draft EIR, as revised and combined with responses to comments, will constitute the Final EIR.

1.7.6 *Certification of the EIR/Project Consideration*

The sCity Council will review and consider the FEIR. If the City Council finds that the FEIR is "adequate and complete," the City Council may certify the FEIR. Additionally, upon review and consideration of the FEIR, the Council may take action to approve, revise, or reject the Proposed Project. Any decision to approve the Project would be accompanied by written findings in accordance with CEQA Guidelines Sections 15091 and 15093. A Mitigation Monitoring and Reporting Program (MMRP), as described below, must also be adopted for mitigation measures that have been incorporated into or imposed on the Project to

reduce or avoid significant effects on the environment. The MMRP will be designed to ensure that these measures are enforceable and conducted during Project implementation.

1.7.7 Mitigation Monitoring and Reporting Program

CEQA Section 21081.6(a) requires lead agencies to adopt an MMRP to describe measures that will be adopted and made a condition of Project approval in order to mitigate or avoid significant effects on the environment. The specific reporting or monitoring program required by CEQA is not required to be included in the EIR; however, it must be presented to the City Council for adoption.

Throughout the EIR, mitigation measures for potentially significant environmental impacts have been clearly identified and presented in language that will facilitate establishment of an MMRP. Any mitigation measures adopted by the City Council as conditions for approval of the Project will be included in an MMRP to ensure enforceability and verify compliance.

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2.0 PROJECT DESCRIPTION

2.1 Project Location and Surrounding Uses

The Project Site is located in the northeast area of the City of Yreka south of Montague Road/State Route (SR) 3. The assigned addresses for the four undeveloped parcels of the Project Site are 717, 727, 737 and 747 Montague Road/SR-3 (Figures 2.0-1 and 2.0-2). The Project is located on the following four parcels:

Accessor's Parcel Numbers			
053-642-350	053-642-360	053-642-370	053-642-380

The 4.97-acre Project Site is undeveloped vacant land. Surrounding uses include the Yreka RV Park, vacant land with a drainage basin, and large lot single-family uses to the south, and a Holiday Inn Hotel, and Interstate 5 (I-5) to the west. North of the site is Montague Road/SR 3 with vacant land beyond. The Yreka Truck Stop is east of the site, with vacant land and a lumber yard and mini storage beyond (Figure 2.0-3).

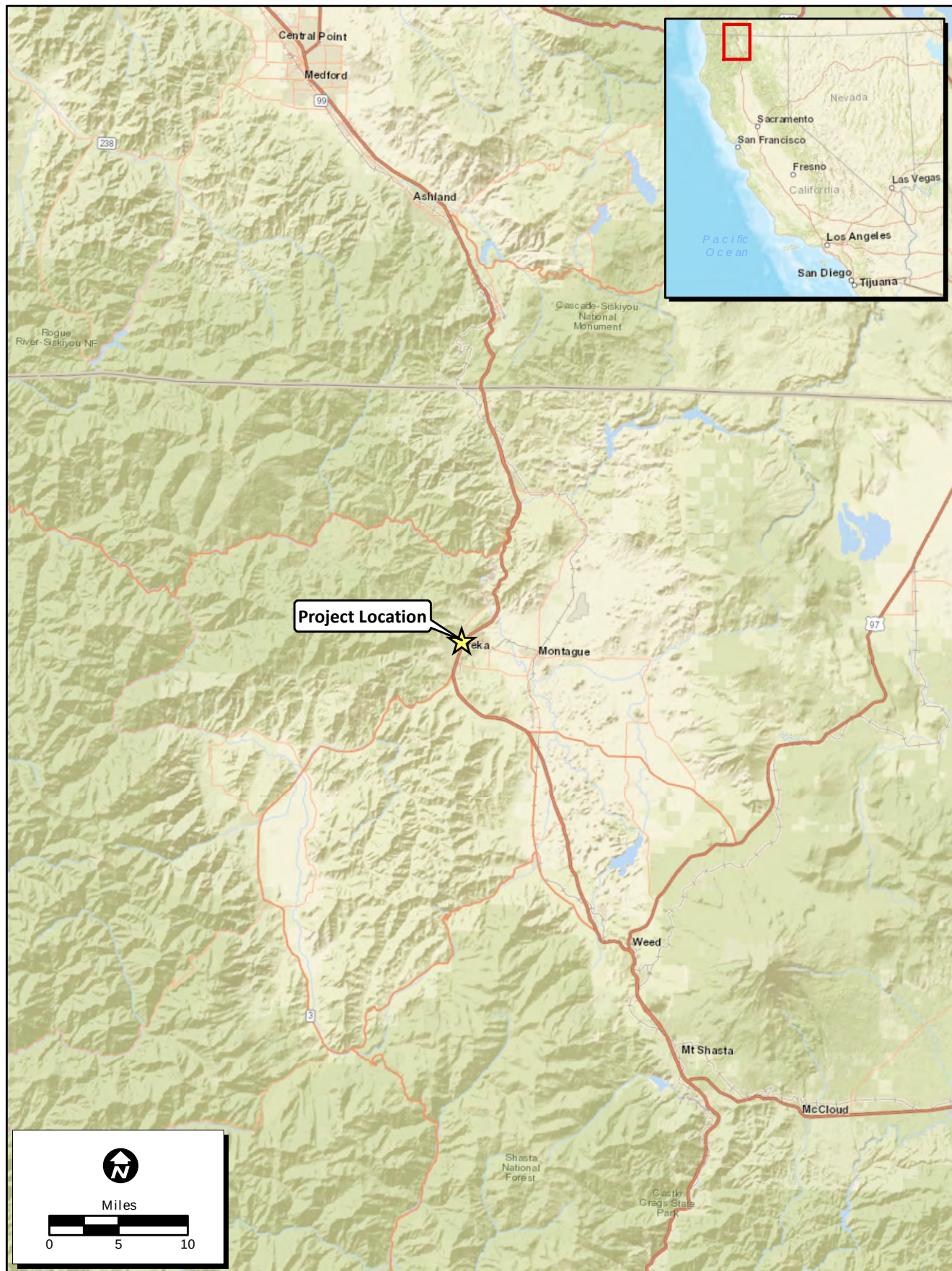
2.2 Project History

The Project applicant submitted a development application to the City in 2019 for the construction of a convenience store, restaurant, Arco AM/PM gas station, diesel station, a food court with several restaurants, a bar, an exterior patio, laundry, showers, restrooms, and a truck shop.

The Proposed Project is located within PUD 5-98, which the City Council approved in May 1998 via Use Permit No. 2883 (Conditional Use Permit [CUP] 2883). The Project Site has been identified in PUD 5-98 for the development of a *Quick Service/Full Service Restaurant*. Because the previously proposed Yreka Travel Center and Hotel Project proposed uses that were not consistent with the approved zoning for the Project Site in PUD 5-98, an amendment to PUD 5-98 and CUP 2883 (resulting in a new CUP, 2021-04) specific to the Project was required. CEQA review was required because this is considered a discretionary action and the PUD amendment and CUP require approval by the Planning Commission and City Council.

As such, a Draft IS and resultant MND, (SCH #2021040260) was completed for the Yreka Travel Center and Hotel Project and provided for public review. The 30-day public review period was from April 12 to May 11, 2021.

The Project applicant decided to revise the Project as a result of comments received on the 2021 Draft IS/MND. These revisions resulted in proposed uses not included in the previous project. Additionally, the 2021 CEQA analysis was never completed and adopted by the City. Therefore, a new CEQA environmental review is required.



Map Date: 5/10/2022

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

Figure 2.0-1. Regional Location

Yreka Travel Center and Hotel



Figure 2.0-2. Site Location
Yreka Travel Center and Hotel



Figure 2.0-3. Surrounding Uses
Yreka Travel Center and Hotel

2.3 Environmental Setting

The Proposed Project is located in a mostly rural area of the City of Yreka with sparse development surrounding the site. The 4.97-acre Project Site is vacant of structures and relatively flat, gently sloping from east to west, with elevations between 2,630 and 2,660 feet above mean sea level for the site. The site had been previously graded and there are a few small mounds on the site as a result of grading activities. The site is primarily composed of disturbed grassland habitat with patches of shrubs. The dominant herbaceous plants onsite include medusahead grass (*Elymus caput-medusae*) and cheat grass (*Bromus tectorum*), with scattered rabbitbrush (*Ericameria* sp.) and yellow star-thistle (*Centaurea solstitialis*). The site is surrounded on three sides by roadways. There are no ponds, creeks or other water features on the site.

2.4 Project Objectives

Project objectives are required to be provided in an EIR. CEQA Guidelines Section 15124(b) states that:

“[a] clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the Project and may discuss the Project benefits.”

The Proposed Project includes the following objectives that incorporate a variety of complementary uses for the traveling and local public with the ultimate objective to enhance the local community by:

1. Develop travel facilities that serve the needs of the I-5 traveler, enhance the adjacent uses (e.g., neighboring hotel/RV park) and providing a destination for locals to enjoy and relax as well.
2. Provide a naturally lit food hall that offers a variety of fresh food options in addition to the typical convenience store fare and will have a clean inviting interior.
3. Develop the convenience store, fuel center, food hall, inn and suites as a destination of high quality design.

2.5 Project Description

Project development would require the approval by the Planning Commission and City Council of an amendment to PUD 5-98, associated CUP No. 2883, and variance to increase the height of the hotel building. The Proposed Project is located on approximately 4.97 acres of land, currently identified as four separate parcels by the Siskiyou County Assessor's Map records (Assessor's Parcel Numbers (APN) 053-642 350, -360, -370, and -380). The Project Site is within the City's GC (General Commercial) General Plan land use designation and is zoned Planned Unit Development (PUD 5-98). The site is bounded by existing commercial uses (hotel) to the west, an RV park to the south, the Yreka Truck Stop and vacant land to the west, and Montague Road/SR-3 and vacant lands to the north.

The Project is proposed to be completed in the following two phases:

2.5.1 **Phase I**

- A 12,300-sf building including a convenience store, a food hall, bar, retail shop, and outdoor patio, open 7 days a week, 24 hours a day
- A fuel center with a 6,298-sf canopy, with eight dispensers (16 fueling stations) for automobiles and RVs
- A separate fuel center with 1,872-sf canopy, with four diesel dispensers (4 fueling stations) for semi-trucks
- Two underground gasoline/diesel fuel tanks (size to be determined), three 12,000-gallon above-ground diesel tanks, and a 10-foot propane tank
- Parking accommodating 99 spaces, including 12 spaces for Electric Vehicles (EV) charging
- A pet park area
- Two monument signs and a goalpost sign
- Perimeter landscaping (44,676 sf total for Phases I and II)

Anticipated average throughput of gasoline and diesel fuel per day when the Project is in operation is as follows:

- Approximately 6,500 gallons of gasoline per day
- Approximately 7,000 gallons of diesel fuel per day

2.5.2 **Phase II**

- A 70-room, three-story hotel (44 feet tall, 17,032 sf)
- Parking accommodating 76 spaces, including two spaces for EV charging
- A goalpost sign
- Perimeter landscaping (44,676 sf total for Phases I and II)

Once completed, the Project is estimated to employ 40 to 50 persons overall with approximately 12 to 15 employees per shift.

Access to the site is provided by two driveways for the convenience store/fueling site and two driveways for the hotel site, all via an existing private road from Montague Road/SR 3 (Figures 2.0-4 through 2.0-7).

The existing unnamed private roadway serves various properties within PUD 5-98. According to the Siskiyou County Assessor's Office, this road is a private road currently owned by A1 Investments LLC, 9950 Koa Lane, Elk Grove California 95624-5009. The Project applicant has submitted a copy of the *Yreka Travel Plaza Association Declaration of Covenants, Conditions and Restrictions* (CC&Rs) to the City. The Yreka Travel Plaza Association was the consortium of owners in the original PUD 5-98. According to the CC&Rs, the Project has full access and use of the private road, known as the *Common Area* in the CC&Rs. In addition, the CC&Rs provide the maintenance responsibilities of the Common Area, required and shared between landowners in

PUD 5-98. All current and future maintenance of this roadway and roadway landscaping is the responsibility of the landowners within PUD 5-98.

The Project Site is vacant of structures and relatively flat, gently sloping from east to west, with elevations between 2,630 and 2,660 feet above mean sea level for the site.

Project development would require the approval by the Planning Commission and City Council of an amendment to PUD 5-98 and associated CUP No. 2883. The Proposed Project is located within the PUD 5-98. The Project Site has been identified in PUD 5-98 for the development of a *Quick Service/Full Service Restaurant*. Since the proposed Yreka Travel Center and Hotel Project proposes uses that are not consistent with this approved use, an amendment to PUD 5-98 and CUP No. 2883 is required. Additionally, the Project applicant is requesting a Variance to increase the height of the hotel from the zoning code maximum of 35 to 44 feet(16.58.010(a) Yreka Municipal Code).

2.5.3 Construction Details

The following construction details are anticipated for the Project:

1. Construction timing: anticipated start and end dates for construction by Phase (Phases I and II)
 - a. Phase I – anticipated construction period is from June 2023 to May 2024 (approximately 12 months) includes grading of both travel center and hotel site.
 - b. Phase II – anticipated construction period is from June 2024 to May 2025 (approximately 12 months).
2. Construction employees: anticipated construction employees by Phase will depend on the construction underway at that time. The average of number of workers is approximately four to 10 workers on the job site per day.
3. Grading: amount of import and export of soils. The preliminary grading plan estimates that the earthwork volume is 160 cubic yards (cy) of cut and 35,900 cy of fill.

2.6 Regulatory Requirements, Permits, and Approvals

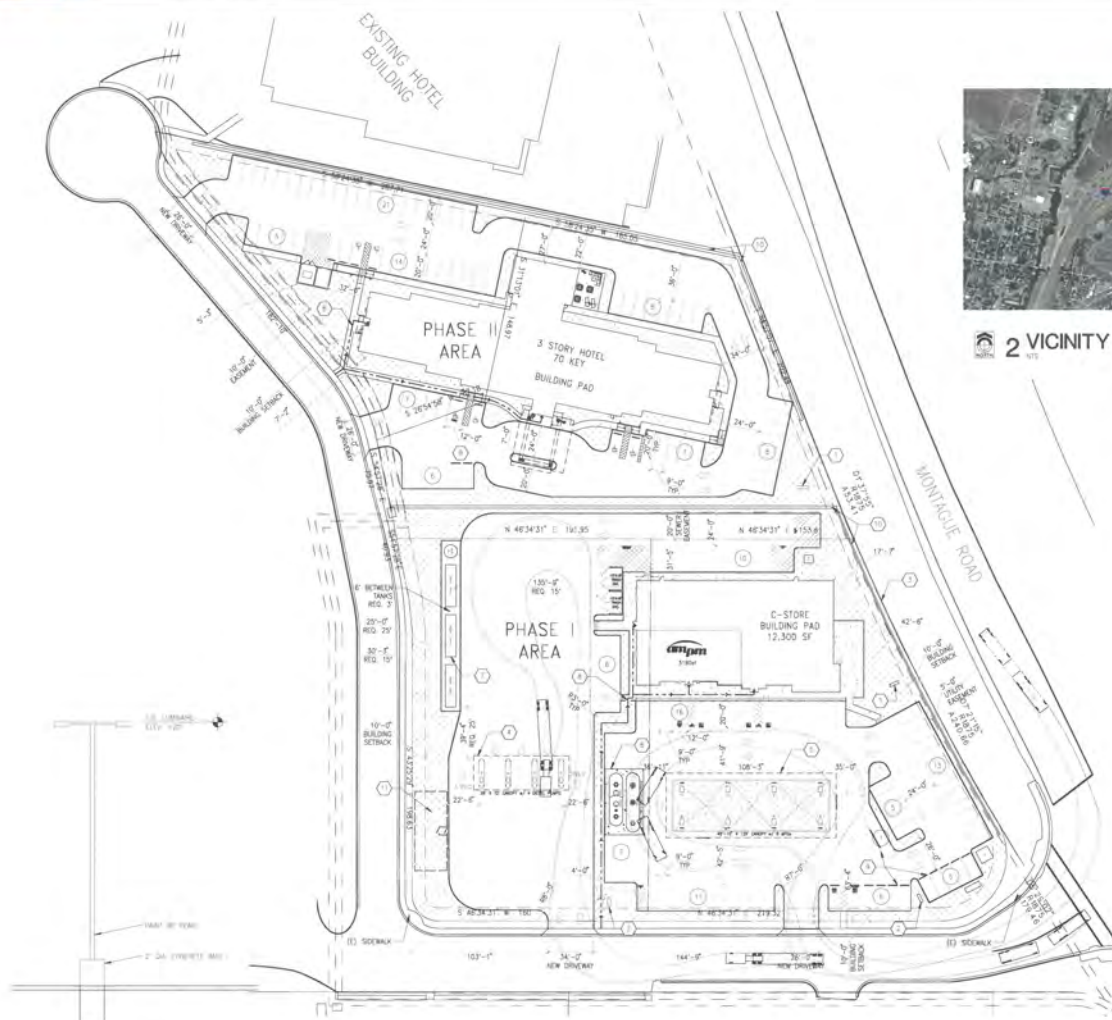
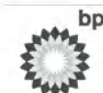
The following approvals and regulatory permits would be required for implementation of the Proposed Project.

2.6.1 Lead Agency Approval

As the lead agency, the City of Yreka has the ultimate authority for Project approval or denial. The Proposed Project may require the following discretionary approvals and permits by the City for actions proposed as part of the Project:

- Certification of the EIR
- Adoption of PUD 5-98 amendment
- Adoption of CUP

I-5 at Montague Road
Yreka, California
APN: 053-642-350 THRU 380



2 VICINITY MAP

SITE DATA

TOTAL AREA = 4.81 ACRES
PHASE I AREA = 2.86 ACRES
PHASE II AREA = 1.95 ACRES
TOTAL = 24 (SHEET) (SHEET(S))
MAX BUILDING HEIGHT = 70 FEET

PHASE I FACILITIES

12,300 SF TRAVEL CENTER WITH FOOD HALL, CONVENIENCE STORE, AND RETAIL SHOP
AUTO (C) CANYON WITH 8 MULTIPLE PRODUCT DISPENSERS
GASOLINE (G) CANYON WITH 4 DISPENSERS

PHASE II FACILITIES

70-80 RV & SUITES

KEYED NOTES

- 1 GROUND POLE SIGN
- 2 MINIMUM SIGN
- 3 PROPERTY LINE
- 4 FUEL STATION CANYON W/ 4 DIESEL PUMPS
- 5 FUEL STATION CANYON W/ 8 MULTIPLE PRODUCT DISPENSERS
- 6 UNDERGROUND FUEL TANKS
- 7 ABOVEGROUND FUEL TANKS
- 8 ACCESSIBLE PATH OF TRAVEL
- 9 EXISTING DRIVE
- 10 EXISTING WALL
- 11 FET PARK

SITE LEGEND

- NEW CONCRETE SIDEWALK/PAVING
- NEW LANDSCAPE AREA

Center Loaded-Guest Room Count Breakdown

	GROUND FL.	2ND FLOOR	3RD FLOOR	TOTAL
KING	3	6	6	15
DOUBLE QUEEN	6	12	12	30
KING STUDIO	7	6	6	19
ACCESSIBLE KING	9	1	1	11
ACCESSIBLE DOUBLE QUEEN	3	1	1	5
ACCESSIBLE KING STUDIO	1	1	1	3
TOTAL	11	26	21	58

Room Sizes

KING	14'0" x 22'0"
DOUBLE QUEEN	12'0" x 28'0"
DOUBLE QUEEN EXTENDED	12'0" x 27'0"
DOUBLE QUEEN EXTENDED & WIDE	14'0" x 27'0"
KING STUDIO	18'0" x 20'0"
WIDE KING STUDIO	18'0" x 22'0"
KPT (KING) DOUBLE QUEEN STUDIO	22'0" x 28'0"
ACCESSIBLE KING	14'0" x 28'0"
ACCESSIBLE DOUBLE QUEEN	14'0" x 28'0"
ACCESSIBLE KING STUDIO	22'0" x 22'0"
KPT (KING) ACCESSIBLE DOUBLE QUEEN STUDIO	22'0" x 28'0"

ARCO 75'

FIRST PART WIDTH	18.50	LOCK TO LOCK TIME	16.0
TRAILER WIDTH	18.50	STEERING ANGLE	136.0
FIRST PART TRACK	18.50	ARTICULATING ANGLE	170.0

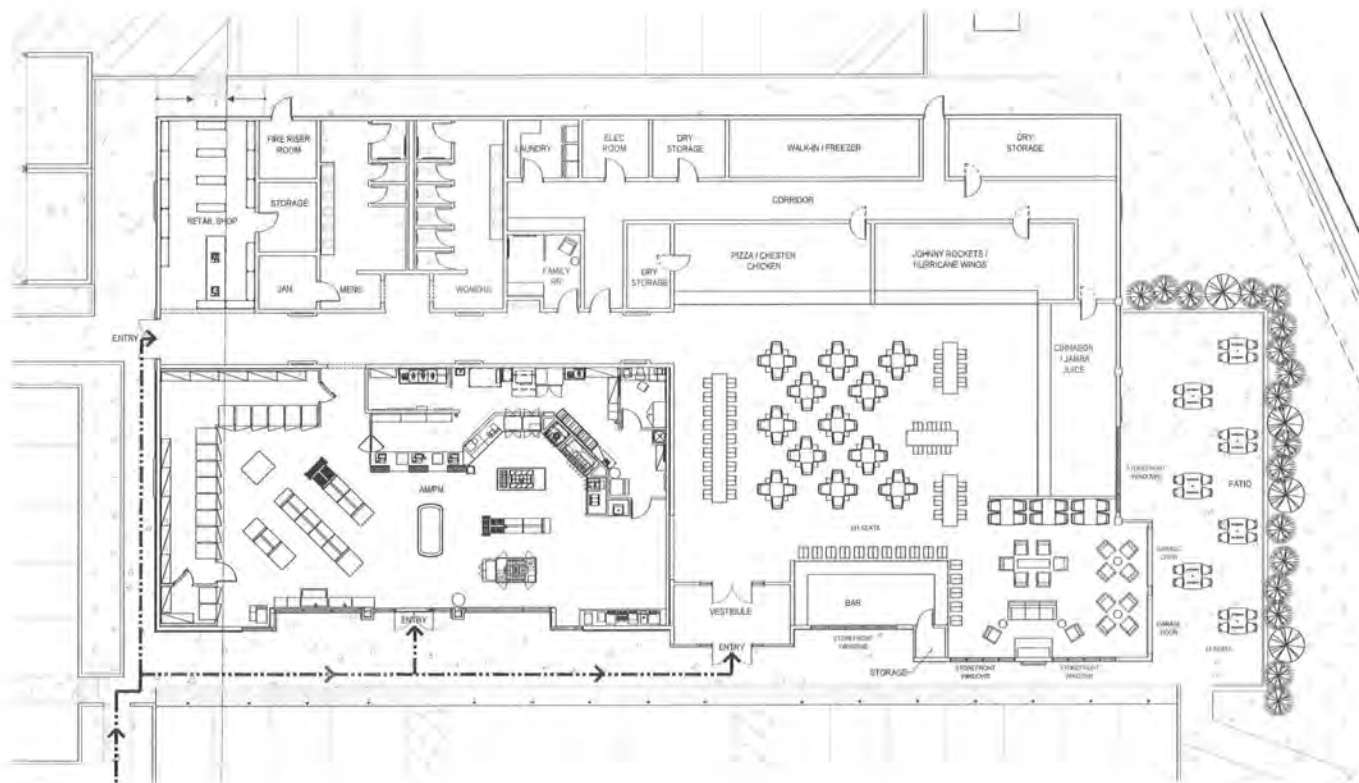
3 SITE LIGHTING
SCALE: 1/4" = 1'-0"

1 SITE PLAN
SCALE: 1" = 40'-0"

SITE PLAN

Conditional Use Permit Package | A2

I-5 at Montague Road
Yreka, California
APN: 053-642-350 THRU 380



bp



ARCO



TRAVEL CENTER FLOOR PLAN

PRELIMINARY FLOOR PLAN

Conditional Use Permit Package | A2.1

20171.0



ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 2.0-5. Travel Center Floor Plan
Yreka Travel Center and Hotel

I-5 at Montague Road
Yreka, California
APN: 053-642-350 THRU 380



INN & SUITES FLOOR PLAN

PRELIMINARY FLOOR PLAN

Conditional Use Permit Package | A2.2

20171.0



ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 2.0-6. Hotel Floor Plan
Yreka Travel Center and Hotel



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FRONT ELEVATION
SCALE 1/8"=1'-0"



RIGHT ELEVATION
SCALE 1/8"=1'-0"



LEFT ELEVATION
SCALE 1/8"=1'-0"



REAR ELEVATION
SCALE 1/8"=1'-0"

GENERAL NOTES

A. HORIZONTAL BRIDGE AND VERTICAL JOINT LOCATIONS IN FRESH SYSTEMS SHOWN ARE TO ALIGN AS CLOSELY AS POSSIBLE TO ELEVATIONS.

COLOR LEGEND

- P-1 BRUSHED PINKISH BROWN
TOLUOL PLUMS GOLDEN SATIN
P-201
- P-2 BRUSHED PINKISH BROWN
BRUSHED CREAM WHITE P-201
- P-3 BRUSHED PINKISH BROWN
P-201 HIGH GLOSS FINISH
- P-4 BRUSHED PINKISH BROWN
P-201 HIGH GLOSS FINISH

MATERIAL LEGEND

- AK-1 ALUMINUM COMPOSITE MATERIAL
ALUMINUM COMPOSITE MATERIAL
- AK-2 ALUMINUM COMPOSITE MATERIAL
ALUMINUM COMPOSITE MATERIAL
- AK-3 ALUMINUM COMPOSITE MATERIAL
ALUMINUM COMPOSITE MATERIAL
- AK-4 ALUMINUM COMPOSITE MATERIAL
ALUMINUM COMPOSITE MATERIAL
- AK-5 ALUMINUM COMPOSITE MATERIAL
ALUMINUM COMPOSITE MATERIAL

EXTERIOR ELEVATIONS

Conditional Use Permit Package - A5.1

- Approval of Variance for Increased Height Maximum

In addition to the above City actions, the Project may require approvals, permits, and entitlements from other public agencies for which this IS and the EIR may be used, including, without limitation, those provided below.

2.6.2 North Coast Regional Water Quality Control Board

The North Coast RWQCB typically requires a Construction General Permit be obtained for projects that disturb more than 1 acre of soil. Typical conditions issued with such a permit include the submittal of and adherence to a Stormwater Pollution And Prevention Plan (SWPPP), as well as prohibitions on the release of oils, grease, or other hazardous materials.

2.6.3 Siskiyou County Air Quality Management District

The Proposed Project is located in an area falling under the jurisdiction of the SCAPCD. The Project applicant will be required to obtain approval of a dust control plan from the SCAPCD prior to any soil-disturbing activities on the site.

2.6.4 Siskiyou County Environmental Health Department

The Proposed Project will be required to obtain approval by the Environmental Health Department for the use of fuel storage tanks, storage and management of hazardous materials, as well as food facility permits.

2.6.5 California Department of Transportation

A portion of the Proposed Project would be located within a California Department of Transportation (Caltrans) right-of-way for SR 3 (Montague Road). The Project applicant will be required to obtain an encroachment permit from Caltrans prior to any work within the Caltrans right-of-way.

2.7 Relationship of Project to Other Plans and Projects

2.7.1 City of Yreka General Plan

The Proposed Project would be located in Yreka. The *City of Yreka General Plan 2002-2022* was adopted by the City Council on December 18, 2003. The General Plan is the fundamental document governing land use development in the incorporated areas of the City. It includes numerous goals and policies pertaining to land use, circulation, housing, conservation, open space, parks and recreation, noise, public health and safety, and public facilities. The Proposed Project will be required to abide by all applicable goals and policies included in the adopted General Plan.

2.7.2 City of Yreka Flood Damage Prevention Ordinance

The Project will not be subject to the City's Flood Damage Prevention Ordinance (Municipal Code Chapter 11.34), which regulates improvements in flood zones. Chapter 11.34 applies to special flood hazard areas, which are defined as areas having special flood or flood-related erosion hazards and shown on a Flood Hazard Boundary Map or Flood Insurance Rate Map (FIRM) as Zone A, AO, A1-30, AE, A99, or AH. The Project Site is shown on the Federal Emergency Management Agency (FEMA) FIRM 06093C1557D. The

Proposed Project Site is located in Flood Zone X, meaning that no portion of the site is located within the 100-year floodplain (FEMA 2011). Therefore, the Project is not subject to the requirements of Chapter 11.34.

2.7.3 City of Yreka Stormwater Quality Management & Discharge Control Ordinance

The Project will be subject to the City's Stormwater Quality Management & Discharge Control Ordinance (Municipal Code Chapter 12.40). The City of Yreka is a Phase II, Small MS4 permittee under the *Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges*. The purpose and intent of this ordinance is to comply with the requirements imposed upon the City in the Phase II Small MS4 permit and to protect and promote the health, safety, and general welfare of citizens, and protect and enhance the water quality of watercourses, water bodies, and wetlands in a manner pursuant to and consistent with the federal Clean Water Act (CWA, 33 U.S. Code [USC] Section 1251 et seq.), and the Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.), so that, to the maximum extent practicable, stormwater will not cause or contribute to any exceedances of water quality standards contained in the statewide Water Quality Control Plan, the California Toxics Rule, or in the North Coast RWQCB Basin Plan amended and supplanted, and by prohibiting non-stormwater discharges to the storm drain system, excepting non-significant non-stormwater contributors.

2.7.4 Consultation with California Native American Tribe(s)

AB 52 (2014) requires that prior to the release of a CEQA document for a project, an agency begin consultation with a California Native American tribe traditionally and culturally affiliated with the geographic area of the Proposed Project if:

1. the California Native American tribe requested to the lead agency, in writing, to be informed by the Lead Agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and
2. the California Native American tribe responds in writing, within 30 days of receipt of the formal notification, and requests the consultation.

The City of Yreka notified the Shasta Indian Nation and the Karuk Tribe of the Proposed Project on June 28, 2022. At the time of this writing, the City has not received any responses from the Shasta Indian Nation or the Karuk Tribe. Further information on potential Tribal Cultural Resources (TCRs) in the Project Area is provided in Section 3.9 of this DEIR.

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3.0 ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION

3.0.1 Introduction

Section 3.0 of this DEIR provides separate sections for each environmental topic. Each section describes the environmental setting (existing conditions) and regulatory setting; direct, indirect, and cumulative impacts from the Proposed Project; and mitigation measures to reduce or avoid significant impacts.

As part of the scoping process described in Section 1.7, the City of Yreka prepared an IS and NOP for an EIR on the Proposed Project and received comments on the scope of the EIR from interested agencies, organizations and individuals (Appendix A). As a result of the scoping process and IS, the City determined that the following environmental issue areas should be evaluated in the DEIR:

Air Quality	Greenhouse Gas and Climate Change
Biological Resources	Noise
Cultural Resources	Transportation
Energy	Tribal Cultural Resources
Paleontological Resources	

3.0.2 Issues Not Included for Further Review in this DEIR

In addition to the resource subjects listed in Section 3.1., the City considered other resource subject areas in determining the potential of the Project to result in significant effects. CEQA Guidelines Section 15060(d) enables the lead agency to focus the EIR on the issue areas on which the Project could have significant effect, but the lead agency must provide a brief explanation of the reasons for determining that other effects would not be significant or potentially significant.

Specifically, CEQA contemplates using an IS to identify a project's insignificant and potentially significant effects, and then focusing the Project EIR analysis on the areas where potentially significant effects have been identified:

"Effects dismissed in an Initial Study as clearly insignificant and unlikely to occur need not be discussed further in the EIR unless the Lead Agency subsequently receives information inconsistent with the finding in the Initial Study. A copy of the Initial Study may be attached to the EIR to provide the basis for limiting the impacts discussed." (CEQA Guidelines, Section 15143.)

"An EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Such a statement may be contained in an attached copy of an Initial Study" [CEQA Guidelines § 15128. See also: Pub. Res. Code §§ 21002.1(e), 21100(c); CEQA Guidelines, §§ 15006(d), 15063(c)(3)].

As discussed in Section 1.7, the City prepared and circulated the NOP and IS for this DEIR in July 2022. The NOP and IS are included with this DEIR as Appendix 1.0. The discussion below describes the resource subjects that were previously analyzed in the Initial Study and determined to not require further analysis

in this DEIR. For each of the issues listed, the 2022 IS found the Project to have no impact or a less-than-significant impact. Mitigation measures to reduce the level of impact were neither recommended nor required to avoid potentially significant impacts in each of these issue areas.

The decision not to pursue further evaluation in this DEIR took into consideration all four comment letters on the NOP/IS. As a result of the scoping process and IS, the City determined that the environmental issue areas not to be evaluated in the DEIR are as follows:

Aesthetics,	Mineral Resources,
Agriculture And Forest Resources,	Population and Housing,
Geology And Soils (only paleontological resources are considered in this DEIR),	Public Services,
Hazards and Hazardous Materials,	Recreation,
Hydrology and Water Quality,	Utilities and Service Systems, and
Land Use and Planning,	Wildfire

3.0.3 Environmental Baseline

Pursuant to the State CEQA Guidelines (Section 15125(a)), the environmental setting used to determine the impacts associated with the Project normally is based on the environmental conditions that existed in the Project Area at the time the NOP was published. However, the CEQA Guidelines (Section 15125(a)) also says that where existing conditions change or fluctuate over time, a lead agency may define existing conditions by referencing historic conditions, conditions expected when a project becomes operational, or projected future conditions beyond the date of initial project operations, if doing so would meet CEQA's objective of giving the public and decisionmakers the most accurate and understandable picture practically possible of the project's likely near- and long-term impacts.

For purposes of this DEIR, environmental baseline is generally defined as conditions that existed within the Project Area at the time of NOP circulation, or July 6, 2022. This provides the basis for the determination of the majority of Project impacts, i.e., the changes to those conditions brought about by Project construction and operation either directly or indirectly. When the environmental baseline is substantially different than described above, the specific conditions and assumptions relied on for the issue area are described, such as in Section 3.8 Transportation.

3.0.4 Impact and Mitigation Measure Terminology

This DEIR analyzes the potential direct, indirect, and cumulative environmental impacts of the proposed Project. The determination of whether an impact is considered significant is based on specific significance criteria. Under CEQA, these criteria (also called thresholds of significance) are used to make a determination of significance for each environmental impact evaluated. An adverse impact that exceeds the significance criteria is considered significant, and an impact that does not exceed the criteria is considered less than significant. The CEQA significance criteria used in this DEIR are based on CEQA's

mandatory findings of significance (as summarized in State CEQA Guidelines Section 15065); the checklist presented in Appendix G of the State CEQA Guidelines in effect when the Draft EIR was prepared; and, where appropriate, factual or scientific data and regulatory standards of federal, state, and local agencies. For CEQA purposes, impacts in this DEIR are classified as the following:

No Impact – There would not be any change to the environment as a result of the project.

Less than Significant Impact - A project impact is considered less than significant if it would not exceed the threshold of significance and therefore would not cause a substantial adverse change in the environment. No mitigation is required for a less-than-significant impact.

Less than Significant Impact with Mitigation - A project impact is considered significant if it results in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the comparison of the project's effects to the established thresholds of significance. Mitigation measures are identified, where feasible, to avoid, minimize, rectify, reduce, or compensate for significant impacts of the project, in accordance with the State CEQA Guidelines (Section 15126.4). If project impacts would be reduced to a less than significant level after the implementation of mitigation, the impact is classified as less than significant with mitigation.

Significant and Unavoidable Impact - A project impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment and if that impact would remain significant even after the implementation of mitigation. A lead agency can approve a project with significant unavoidable impacts if the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse effects. In this case, the lead agency must adopt a statement of overriding considerations describing the specific reasons to support its action (State CEQA Guidelines Section 15093(b)).

3.0.5 Cumulative Impact Scenario

Section 15130(a) of the CEQA Guidelines requires a discussion of cumulative impacts of a project "when the project's incremental effect is cumulatively considerable." The CEQA Guidelines, Section 15355, defines a cumulative impact as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Cumulatively considerable impacts are defined in Section 15065(a)(3) of the CEQA Guidelines: "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

Section 15130(b) of the CEQA Guidelines states:

"[t]he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness and should focus on the cumulative impact to which the identified other project contribute rather than the attributes of other projects which do not contribute to the cumulative impact."

As defined by CEQA Guidelines Section 15355, cumulative impact refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

- (a) The individual effects may be changes resulting from a single project or a number of separate projects.
- (b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

To analyze the cumulative impacts of the Project in combination with other expected projects, the amount and location of development expected to occur must be predicted. Section 15130(b) of the CEQA Guidelines allows two methods of prediction:

"Either:

- (A) A list of relevant past, present and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or
- (B) A summary of projections contained in adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect..."

Other than the Proposed Project, no other development is pending or proposed in the city or the surrounding area. While the City has a number of roadway, water and wastewater pipeline improvements pending, these are for the improvement of existing conditions and do not include the construction of new residential, commercial, or industrial structures. Therefore, for the purpose of this DEIR, the Yreka General Plan growth projections are the basis of the cumulative analysis.

Tables 1-7 and 1-8 of the 2002 General Plan Land Use Element provide the available land area and buildout projections for the city. These tables, provided below, are the basis for cumulative impact discussions in this Draft EIR.

Table 3.0-1. Developed/Undeveloped Land for the Area Within the City Limits			
General Plan Designation	Acres	Developed	Underdeveloped
RA, Residential Agriculture	846	100	746
LDR, Low Density Residential	2,265	713	1,552
MDR, Medium Density Residential	182	72	110
HDR, High Density Residential	290	167	123
HD, Historic District	17	16	

Table 3.0-1. Developed/Undeveloped Land for the Area Within the City Limits

General Plan Designation	Acres	Developed	Underdeveloped
GC, General Commercial	405	201	204
I, Industrial	1,037	363	674
O, Open Space	923	298	625
Roads and Highways ¹	419	441	0
Total:	6,406	2,371	4,035

Source: City of Yreka 2002, Table 1-7

Notes: ¹Parcel coverage contains empty space that includes roads, alleys and Highway 5**Table 3.0-2. Buildout for the Area Within the City Limits**

General Plan Designation	Total Acres	Units/Acre	Total Units	Persons/Unit	Estimated Population¹
RA, Residential Agriculture	846	2	1,692	3	5,076
LDR, Low Density Residential	2,265	4	9,060	3	27,180
MDR, Medium Density Residential	182	10	1,820	2	3,640
HDR, High Density Residential	290	15	4,350	2	8,700
Total:	3,583		16,922		44,596

Source: City of Yreka 2002, Table 1-8

Notes: ¹Area outside the City was considered underdeveloped. Parcels greater than five (5) acres were considered underdeveloped if containing only one house or otherwise not completely developed.

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3.1 AIR QUALITY

This section evaluates the Project-related effects to air quality. This section is based on the Air Quality and Greenhouse Gas Emissions Assessment prepared for the Project (ECORP 2022a, Appendix 3.1). The information provided below is an abridged version of this report. This analysis was prepared using methodologies and assumptions recommended by the SCAPCD. Regional and local existing conditions are presented, along with pertinent standards and regulations. The purpose of this assessment is to estimate Project-generated criteria air pollutant emissions attributable to the Project and to determine the level of impact the Project would have on the environment and to provide feasible mitigation measures for these impacts.

3.1.1 *Environmental Setting*

The City of Yreka and the Project Site are located in a region identified as the Northeast Plateau Air Basin (NPAB), which principally includes Siskiyou, Modoc, and Lassen counties. This larger air basin is divided into local air districts, which are charged with the responsibility of implementing air quality programs. The local air quality agency affecting Yreka is the SCAPCD. Within the SCAPCD, the primary sources of air pollution are wood-burning stoves, wildfires, farming operations, unpaved road dust, managed burning and disposal, and motor vehicles. The Project Site is currently vacant.

The SCAPCD adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs and regulates agricultural and nonagricultural burning. Other district responsibilities include monitoring air quality, preparing air quality plans, and responding to citizen air quality complaints.

3.1.1.1 **Ambient Air Quality Standards**

Air quality standards are set at both the federal and state levels of government. The federal Clean Air Act (CAA) requires the US Environmental Protection Agency (USEPA) to establish ambient air quality standards for six criteria air pollutants: Ozone (O₃), Carbon Monoxide (CO), Nitrogen Dioxide (NO₂), Sulfur Dioxide (SO₂), lead, Coarse Particulate Matter (PM₁₀), and Fine Particulate Matter (PM_{2.5}). The California Clean Air Act (CCAA) also sets ambient air quality standards. The state standards are more stringent than the federal standards, and they include other pollutants in addition to those regulated by the federal standards. When the concentrations of pollutants are below the maximum allowed standards in an area, that area is considered to be in attainment of the standards. The Siskiyou County Portion of the NPAB is designated as being in attainment or unclassified for all state and federal standards (CARB 2019).

3.1.1.2 **Toxic Air Contaminants**

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that

there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

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

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

Diesel Particulate Matter

DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled engines contribute approximately 24 percent of the statewide total, with an additional 71 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources contribute about 5 percent of total DPM. It should be noted that CARB has developed several plans and programs to reduce diesel emissions such as the Diesel Risk Reduction Plan, the Statewide Portable Equipment Registration Program, and the Diesel Off-Road Reporting System.

Diesel exhaust and many individual components (including arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by the Office of Environmental Health Hazard Assessment (OEHHA). CARB estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from diesel exhaust particles.

In its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment, including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term occupational exposure to diesel exhaust increases the risk of lung cancer. Using information from OEHHA's assessment, CARB estimates that diesel particle levels measured in California's air in the year 2000 could cause 540 excess cancers in a population of one million people over a 70-year lifetime. Other researchers and scientific

organizations, including the National Institute for Occupational Safety and Health (NIOSH), have calculated cancer risks from diesel exhaust similar to those developed by OEHHA and CARB.

Exposure to diesel exhaust can have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Diesel engines are a major source of fine particulate pollution. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particulate pollution. Numerous studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Because children's lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. In California, diesel exhaust particles have been identified as a carcinogen.

Benzene

Approximately 84 percent of the benzene emitted in California comes from motor vehicles, including evaporative leakage and unburned fuel exhaust. Benzene is highly carcinogenic and occurs throughout California. Benzene also has non-cancer health effects. Brief inhalation exposure to high concentrations can cause central nervous system symptoms of nausea, tremors, drowsiness, dizziness, headache, intoxication, and unconsciousness.

Ingestion of large amounts of benzene may result in vomiting, dizziness, and convulsions. Exposure to liquid and vapor may irritate the skin, eyes, and upper respiratory tract. Redness and blisters may result from dermal exposure to benzene. Chronic inhalation of certain levels of benzene causes blood disorders because benzene specifically affects bone marrow, which produces blood cells. Aplastic anemia, excessive bleeding, and damage to the immune system by changes in blood levels of antibodies and loss of white blood cells may develop. Increased incidence of leukemia, which is a cancer of the tissues that form white blood cells, has been observed in humans occupationally exposed to benzene.

3.1.1.3 Sensitive Receptors

Sensitive receptors are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive land use receptor is a single-family residence located 580 feet southwest of the Project Site beyond the Project Access Roadway and RV park.

3.1.2 Regulatory Setting

3.1.2.1 Federal

Clean Air Act

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

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

The USEPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. As previously described, the Siskiyou County Portion of the NPAB is designated as being in attainment or unclassified for all state and federal standards (CARB 2019).

3.1.2.2 State

California Clean Air Act

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

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

CARB's statewide comprehensive air toxics program was established in 1983 with AB 1807, the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an Airborne Toxics Control Measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no

toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

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

Mobile Source Strategy

In 2016 CARB released the update to the Mobile Source Strategy (Strategy). This demonstrates how the state will meet air quality standards, achieve GHG emission reduction targets, decrease health risks from transportation emissions, and reduce petroleum consumption over the next 15 years. This includes engine technology that is effectively 90 percent cleaner than today's current standards, with clean, renewable fuels comprising half the fuels burned.

The Strategy also relies on the increased use of renewable fuels to ensure that air pollutant reductions are achieved while meeting the ongoing demand for liquid and gaseous fuels in applications where combustion technologies remain, including in heavy-duty trucks and equipment and light-duty hybrid vehicles. The estimated benefits of the Strategy in reducing emissions from mobile sources includes an 80 percent reduction of O₃-forming emissions (Reactive Organic Gases [ROG] and Nitric Oxide [NO_x]). Statewide, the Strategy would also result in a 45-percent reduction of GHG emissions and a 50-percent reduction in the consumption of petroleum-based fuels.

Governor's Sustainable Freight Action Plan

Under the Governor's Sustainable Freight Action Plan strategy, CARB is working with agency partners and stakeholders to implement a broad program that includes regulations, incentives, and policies designed to support the transformation to a more sustainable freight system and reduce community impacts from freight operations in California. The Governor's Sustainable Freight Action Plan identifies strategies and actions to achieve a sustainable freight transportation system that meets California's environmental, energy, mobility, safety and economic needs. The plan also identifies and initiates corridor-level freight pilot projects within the state's primary trade corridors that integrate advanced technologies, alternative fuels, freight and fuel infrastructure and local economic development opportunities. The plan seeks to improve the state freight system efficiency 25 percent by "increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030" as well as to deploy more than 100,000 zero-emission freight vehicles and equipment and maximizing near-zero equipment and equipment powered by renewable energy by 2030.

Truck and Bus Regulations Reducing Emissions from Diesel Vehicles

In 2008, CARB approved the Truck and Bus Regulation to significantly reduce PM and NO_x emissions from existing diesel vehicles operating in California. The regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Heavier trucks had to be retrofitted with PM filters beginning January 1, 2012 and older trucks had to be replaced by January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010-model-year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds. Small fleets with three or fewer diesel trucks can delay compliance for heavier trucks by reporting and there are a number of extensions for low-mileage construction trucks, early PM filter retrofits, adding cleaner vehicles, and other situations. Privately and publicly owned school buses have different requirements.

Heavy-Duty Vehicle Idling Emission Reduction Program

The purpose of CARB's ATCM *to Limit Diesel-Fueled Commercial Motor Vehicle Idling* is to reduce public exposure to DPM and criteria pollutants by limiting the idling of diesel-fueled commercial vehicles.¹ The driver of any vehicle subject to this ATCM is prohibited from idling the vehicle's primary diesel engine for greater than 5 minutes at any location and is prohibited from idling a diesel-fueled auxiliary power system for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if it has a sleeper berth and the truck is located within 100 feet of a restricted area (e.g., homes and schools).

CARB Final Regulation Order, *Requirements to Reduce Idling Emissions from New and In-Use Trucks*, which began in 2008, requires that new 2008 and subsequent model-year heavy-duty diesel engines be equipped with an engine shutdown system that automatically shuts down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to *neutral* or *park*, and the parking brake is engaged.

3.1.2.3 Local

Siskiyou County Air Pollution Control District

As noted above, the SCAPCD is the local air quality agency with jurisdiction over the Project Site. The SCAPCD adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs and regulates agricultural and nonagricultural burning. Other district responsibilities include monitoring air quality, preparing air quality plans, and responding to citizen air quality complaints.

All projects in the County are subject to applicable SCAPCD rules and regulations in effect at the time of construction. Descriptions of specific rules applicable to construction resulting from implementation of the Proposed Project may include, but are not limited to the following:

¹ *The ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling is codified in Title 13 of the CCR, Chapter 10, Section 2485.*

SCAPCD Rule 2.1-A (Authorities to Construct/Permits to Operate) – Allows any person to use construction equipment for construction activities and must obtain a permit to operate prior to installation activities.

SCAPCD Rule 2.14-A (Compliance With CEQA) – In making a determination to issue a permit for a project under these regulations, the Air Pollution Control Officer may make findings as required by the California Environmental Quality Act ("CEQA"), Public Resources Code section 21000 et seq., including, but not limited to, the determinations that a permit is exempt from CEQA, that a negative declaration should be adopted, or an environmental impact report ("EIR") has been prepared and should be certified as adequate.

SCAPCD Rule 4.2-A (Nuisance) – No person shall discharge from any source whatsoever, such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.

SCAPCD Rule 4.4 (Specific Air Contaminants) – This rule controls the amount of air contaminants allowed to be discharged into the atmosphere.

SCAPCD Rule 4.5 (Particulate Matter) – No person shall discharge from any non-combustion source particulate matter in excess of 0.30 grains per cubic foot of exhaust gas at standard conditions, or in any one hour total quantities in excess of the amount shown in Rule 4.5 Table I.

SCAPCD Rule 4.7 A-B (Gasoline Storage) – Except as provided in this rule, no person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is a pressure tank as described in Section 41951, or is equipped with a vapor recovery system as described in Section 41952 or with a floating roof as described in Section 41953 or unless such tank is equipped with other apparatus of equal efficiency which has been approved by the Control Officer.

No person shall install any gasoline tank with a capacity of 250 gallons or more which does not meet these requirements.

SCAPCD Rule 6.1 (Construction Permit Standards for Criteria Air Pollutants) – The Control Officer shall deny a permit to construct for any new stationary source or modification or any portion thereof, unless the applicant certifies that all other stationary sources in the State, which are owned or operated by the applicant are in compliance or are on an approved schedule for compliance, with all applicable emission limitations and standards under the Clean Air Act (42 USC 7401 et. seq.) and all applicable emission limitations and standards which are part of the SIP approved by the EPA.

- B.1 Sections B., C., D., E., F., G., H., and I. shall apply to new stationary sources and modifications which result in either:*
- a. A net increase in emissions of 250 or more pounds during any day of any pollutant for which there is a national ambient air quality standard (excluding carbon monoxide), or any precursor of such a pollutant; or*
 - b. A net increase in emissions of 2,500 or more pounds of carbon monoxide during any day.*

SCAPCD Rule 6.4-A (Construction Permit Standards for Hazardous Air Pollutants) – This rule requires the installation of best available control technology for toxics (T-BACT) at any constructed or reconstructed major source of hazardous air pollutants (HAPs).

SCAPCD Rule 8.1-A (Benzene Emissions From Retail Service Stations) – To comply with California Code of Regulations, Section 93101, by reducing airborne benzene emissions from retail service stations. Requirements under California Code of Regulations Section 93101 for Phase I and Phase II vapor recovery systems are as follows:

- A. Phase I – “No owner or operator shall transfer, permit the transfer, or provide equipment for the transfer of gasoline, and no other person shall transfer gasoline from a gasoline delivery tank equipped with a vapor recovery system into a stationary storage tank at a retail service station unless an ARB-certified Phase I vapor recovery system is installed on the stationary storage tank and used during the transfer.”*
- B. Phase II – “No owner or operator shall transfer, permit the transfer or provide equipment for the transfer of gasoline from a stationary storage tank at a retail service station into a motor vehicle fuel tank unless an ARB-certified Phase II vapor recovery system is installed and used during the transfer.*

In addition to the Phase I and II requirements under SCAPCD Rule 8.1, the operator of each retail facility using a Phase II vapor recovery system shall conspicuously post operating instructions for the system in the gasoline dispensing area. The instructions shall clearly describe how to correctly fuel vehicles with vapor recovery nozzles used at the station and shall include a warning that topping off may result in spillage or recirculation of gasoline and is prohibited. Furthermore, the instructions shall include a prominent display of toll-free numbers for SCAPCD or CARB for complaints.

All Phase I and Phase II gasoline vapor recovery equipment shall be installed as required by CARB certification and operated as recommended by the manufacturer and shall be maintained to be leak-free, vapor tight, and in good working order.

3.1.3 Environmental Impacts

3.1.3.1 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, air quality impacts are considered significant if implementation of the Proposed Project would:

- Conflict with or obstruct implementation of an applicable air quality plan;
- 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations;
- Result in other emissions (such as those leading to odors adversely affecting a substantial number of people).

Regional Thresholds

The SCAPCD has no established thresholds for air quality impacts under CEQA. For the purpose of this analysis, emissions of criteria air pollutants are compared against current SCAPCD rules and regulations pertaining to air quality management. Section 6 “New Source Siting” Rule 6.1 – *Construction Permit Standards for Criteria Air Pollutants* includes thresholds for new stationary sources and are consistent with the New Source Review Rule 110 adopted by the SCAPCD as required by the CCAA. While the Proposed Project is not considered a stationary source, Project comparison to Rule 6.1 for emissions is appropriate in the absence of established CEQA-related thresholds. The thresholds of significance are summarized in Table 3.1-1:

Table 3.1-1. Thresholds of Significance in Pounds per Day						
Thresholds	Emission (Maximum Pounds/Day)					
	NO_x	ROG	CO	SO₂	PM₁₀	PM_{2.5}
SCAPCD Significance Threshold	250	250	2,500	250	250	250

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

3.1.3.2 Health Risk Thresholds

In addition to the emission of criteria air pollutants, this Projects evaluates the health risk from operations of the Proposed Project. Specifically, the Project would be a source of gasoline vapors such as benzene, methyl tertiary-butyl ether, toluene, and xylene. Additionally, the Project would be a source of DPM generated by Project vehicular traffic exiting and entering I-5 and traveling on local roadways to the Project Site.

The SCAPCD thresholds for what constitute an exposure of substantial air toxics are as follows.

- *Cancer Risk*: Emit carcinogenic or toxic contaminants that exceed the maximum individual cancer risk of 10 in one million.
- *Non-Cancer Risk*: Emit toxic contaminants that exceed the maximum hazard quotient of one in one million.

CARB identifies benzene as the primary TAC of concern associated with gas stations. Benzene is highly carcinogenic and occurs throughout California. According to the California Air Pollution Control Officers Association (CAPCOA), benzene is the most important substance driving cancer risk, while xylene, another air toxic associated with gasoline stations, is the only substance which is associated with acute adverse health effects (CAPCOA 1997). According to CAPCOA, the emissions of xylene don't begin to cause acute adverse health effects until the benzene emissions are three orders of magnitude above the rate of an increase of 10 per million cancer risk. The SCAPCD has stringent requirements for the control of gasoline vapor emissions from gasoline dispensing facilities. SCAPCD Rule 8.1, *Benzene Emissions From Retail Service Stations*, prohibits the transfer or allowance of the transfer of gasoline into stationary tanks at a gasoline-dispensing facility unless a CARB-certified Phase I vapor recovery system is used. Additionally, Rule 8.1 further prohibits the transfer or allowance of the transfer of gasoline from stationary tanks into motor vehicle fuel tanks at a gasoline-dispensing facility unless a CARB-certified Phase II vapor recovery system is used during each transfer. Vapor recovery systems collect gasoline vapors that would otherwise escape into the air during bulk fuel delivery (Phase I) or fuel storage and vehicle refueling (Phase II). Phase I vapor recovery system components include the couplers that connect tanker trucks to the underground tanks, spill containment drain valves, overfill prevention devices, and vent pressure/vacuum valves. Phase II vapor recovery system components include gasoline dispensers, nozzles, piping, break away, hoses, face plates, vapor processors, and system monitors.

Stationary sources having the potential to emit TACs, including gas stations such as those proposed by the Project, are required to obtain permits from the SCAPCD. Permits may be granted to these operations provided they are operated in accordance with applicable SCAPCD rules and regulations. SCAPCD's gasoline station permitting process provides for the review of gasoline TAC emissions in order to evaluate potential public exposure and health risk, to mitigate potentially significant health risks resulting from these exposures, and to provide net health risk benefits by improving the level of control when existing sources are modified or replaced. SCAPCD's permitting procedures require substantial control of emissions, and permits are not issued unless TAC risk screening or TAC risk assessment can show that risks are not significant. In addition, California has statewide limits on the benzene content in gasoline, which greatly reduces the toxic potential of gasoline emissions.

Additionally, CARB identifies DPM as a TAC. Mobile sources (including trucks, buses, automobiles, trains, ships, and farm equipment) are by far the largest source of diesel emissions. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Diesel exhaust is composed of two phases, either gas or particulate; both contribute to the risk. The gas phase is composed of many of the urban hazardous air pollutants, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particulate phase has many different types that can be classified by size or composition. The sizes of diesel particulates of greatest health concern are fine and ultrafine particles. These particles may be composed of elemental carbon with adsorbed compounds such as organics, sulfates, nitrates, metals, and other trace elements. Diesel exhaust is emitted from a broad range of on- and off-road diesel engines. The Project's diesel fuel dispensing center would attract heavy-duty trucks, a source of DPM.

3.1.3.3 Methods of Analysis

Air quality impacts were assessed in accordance with methodologies recommended by the SCAPCD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for Siskiyou County coupled with details associated with construction timing and duration provided by the Project proponent. Operational air pollutant emissions were based on Project Site plans and traffic trip generation rates from GHD (2022). Lastly, CalEEMod does not account for ROG emissions associated with gasoline vapors that are released during fuel dispensing activities. In order to calculate these emissions, CAPCOA's Gasoline Service Station Industry Wide Risk Assessment Guidelines (1997) is employed.

Additionally, DPM and benzene concentrations associated with heavy-duty trucks and the proposed gasoline dispensing station as a result of Project operations were modeled using the HARP2 modeling program provided by CARB, with regulatory default settings, to perform the dispersion and health risk modeling for this analysis. HARP2 implements the latest regulatory guidance to develop inputs to the USEPA AERMOD dispersion model for dispersion and as the inputs for calculations for the various health risk levels. AERMOD is a steady-state plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. The resultant concentration values at vicinity sensitive receptors were then used to calculate chronic and carcinogenic health risk using the standardized equations contained in the *Office of Environment Health Hazard Assessment (OEHHA) Guidance Manual for Preparation of Health Risk Assessments* (2015).

3.1.3.4 Project Impacts and Mitigation Measures

Impact AIR-1	Air pollutant emissions associated with the Proposed Project could conflict with or obstruct the applicable air quality plan.
<i>Impact Determination</i>	<i>No Impact.</i>
<i>Threshold</i>	<i>Conflict with or obstruct implementation of the applicable air quality plan.</i>

Impact Discussion

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. The SIP is a legal agreement between each state and the federal government to commit resources to improving air quality. It serves as the template for conducting regional and project-level air quality analysis. CARB is the lead agency for developing the SIP in California. Local air districts prepare air quality attainment plans or air quality management plans and submit them to CARB for review, approval, and incorporation into the applicable SIP. The air districts develop the strategies stated in the SIPs for achieving air quality standards on a regional basis. The Project region of the NPAB is classified as attainment or unclassified for all federal standards (CARB 2019). Therefore, there is no SIP required for Siskiyou County. No impact would occur.

Mitigation Measures

No mitigation measures are required.

Impact AIR-2	Project implementation could result in a cumulatively considerable net increase of any criteria air pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
<i>Impact Determination</i>	<i>Less than Significant.</i>
<i>Threshold</i>	<i>Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).</i>

Impact Discussion

Project Construction-Generated Criteria Air Quality Emissions

Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through construction of the Proposed Project: operation of the construction vehicles (i.e., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation.

Construction-generated emissions associated with the Proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Appendix 3.1 provides more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

Predicted maximum daily construction-generated emissions for the Proposed Project are summarized in Table 3.1-2. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAPCD Rule 6.1 thresholds of significance.

Table 3.1-2. Construction-Related Emissions

Construction Year	Pollutant (pounds per day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Construction Year One (Phase 1)	4.76	59.09	32.25	0.17	25.50	12.70
Construction Year Two (Phase 1 & Phase 2)	17.00	82.62	64.03	0.21	27.08	13.82
Construction Year Three (Phase 2)	12.22	22.30	31.73	0.05	1.45	1.02
<i>Significance Threshold</i>	<i>250</i>	<i>250</i>	<i>2,500</i>	<i>250</i>	<i>250</i>	<i>250</i>
Exceed Threshold?	No	No	No	No	No	No

Source: CalEEMod version 2020.4.0. Refer to Appendix 3.1 for Model Data Outputs.

Notes: Emissions taken from the season (summer or winter) with the highest output. Building construction, paving, and painting assumed to occur simultaneously. Emissions account for the cut of 160 cy of soil and fill of 35,900 cy of soil distributed evenly between the two construction phases.

As shown in Table 3.1-2, emissions generated during Project construction would not exceed the SCAPCD Rule 6.1 thresholds of significance. Therefore, criteria pollutant emissions generated during Project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard. Construction air quality impacts would be less than significant.

Project Operations Criteria Air Quality Emissions

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM₁₀, PM_{2.5}, CO, and SO₂ as well as O₃ precursors such as ROG and NO_x. As previously described, operational air pollutant emissions were based on the Project Site plans and traffic trip generation rates from GHD Group Pty Ltd. (2022). ROG emissions are based on the amount of Project daily throughput. Long-term operational emissions attributable to the Project are identified in Table 3.1-3 and compared to the operational significance thresholds promulgated by the SCAPCD Rule 6.1.

Table 3.1-3. Operational-Related Criteria Air Pollutant Emissions

	Pollutant (pounds per day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Summer Emissions						
Area	11.53	0.00	0.02	0.00	0.00	0.00
Energy	0.06	0.58	0.49	0.00	0.04	0.04

Table 3.1-3. Operational-Related Criteria Air Pollutant Emissions

	Pollutant (pounds per day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Mobile	9.36	12.36	66.22	0.12	12.08	3.32
Total:	20.95	12.94	66.73	0.12	12.12	3.36
Winter Emissions						
Area	11.53	0.00	0.02	0.00	0.00	0.00
Energy	0.06	0.58	0.49	0.00	0.04	0.04
Mobile	9.22	14.81	80.72	0.12	12.08	3.32
Total:	20.81	15.39	81.23	0.12	12.12	3.36
<i>Significance Threshold</i>	<i>250</i>	<i>250</i>	<i>2,500</i>	<i>250</i>	<i>250</i>	<i>250</i>
Exceed Threshold?	No	No	No	No	No	No

Source: CalEEMod version 2020.4.0. Refer to Appendix 3.1 for Model Data Outputs.

Notes: Operational emissions were calculated using a combination of model defaults for Siskiyou County and a calculated project trip generation rate of 2,619 average daily trips (GHD 2022). Refer to Appendix 3.1 for Model Data Outputs. Area source emissions for the gasoline station include ROG released gasoline vapor during dispensing activities. Gasoline vapor emissions are calculated based on an emission factor of 1.27 pounds per 1,000 gallons of gasoline dispensed (CAPCOA 1997) and the prediction of 6,500 gallons of gasoline dispensed per day ($6,500 \times 365 = 2,372,500$ gallons annually) as provided by the Project applicant [$(2,372,500 / 1,000) \times 1.27 = 3,013$ pounds annually. $3,013 / 365 = 8.25$ pounds daily].

As shown in Table 3.1-3, the Proposed Project's emissions would not exceed the SCAPCD Rule 6.1 thresholds of significance for any criteria air pollutants during operation. Operational air quality impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Impact AIR-3	Construction and/or operation of the Proposed Project could expose sensitive receptors to substantial pollutant concentrations.
<i>Impact Determination</i>	<i>Less than Significant.</i>
<i>Threshold</i>	<i>Exposure of sensitive receptors to substantial pollutant concentrations.</i>

Impact Discussion

As previously described, sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. As previously stated, the nearest sensitive land use receptor consists of a single-family residence 580 feet southwest of the Project Site beyond the Project Access Roadway and RV Park.

Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of DPM, ROG, NO_x, CO, and PM₁₀ from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. The City of Yreka portion of the NPAB is listed as being in attainment or unclassified for all state and federal standards (CARB 2019). Thus, existing emission levels in the Project portion of the NPAB are currently at acceptable levels. Additionally, as shown in Table 3.1-2 the Project would not exceed the SCAPCD Rule 6.1 significance thresholds for construction emissions.

The health effects associated with O₃ are generally associated with reduced lung function. Because the Project would not involve construction activities that would result in O₃ precursor emissions (ROG or NO_x) in excess of the SCAPCD thresholds, the Project is not anticipated to substantially contribute to regional O₃ concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the SCAPCD Rule 6.1 thresholds. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM₁₀ and PM_{2.5}) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary TAC of concern. PM₁₀ exhaust is considered a surrogate for DPM as all diesel exhaust is considered to be DPM. As with O₃ and NO_x, the Project would not generate emissions of PM₁₀ or PM_{2.5} that would exceed the SCAPCD Rule 6.1 thresholds. Accordingly, the Project's PM₁₀ and PM_{2.5} emissions are not expected to cause any increase in related regional health effects for these pollutants.

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

Operational Health Risk

Operation of the Proposed Project would result in the development of sources of air toxins. Specifically, the Project would be a source of gasoline vapors such as benzene, toluene, and xylene. Additionally, the Project would be a source of DPM generated by Project heavy-duty truck traffic exiting and entering I-5 and traveling on local roadways to the Project Site.

CARB identifies benzene as the primary TAC of concern associated with gas stations. Benzene is highly carcinogenic and occurs throughout California. According to CAPCOA, benzene is the most important substance driving cancer risk, while xylene, another air toxic associated with gasoline stations, is the only substance which is associated with acute adverse health effects (CAPCOA 1997). According to CAPCOA, not until the benzene emissions are three orders of magnitude above the rate of an increase of 10 per million cancer risk, do the emissions of xylene begin to cause acute adverse health effects.

The SCAPCD has stringent requirements for the control of gasoline vapor emissions from gasoline dispensing facilities. SCAPCD Rule 8.1, *Benzene Emissions From Retail Service Stations*, prohibits the transfer or allowance of the transfer of gasoline into stationary tanks at a gasoline-dispensing facility unless a CARB-certified Phase I vapor recovery system is used. Additionally, Rule 8.1 further prohibits the transfer or allowance of the transfer of gasoline from stationary tanks into motor vehicle fuel tanks at a gasoline-dispensing facility unless a CARB-certified Phase II vapor recovery system is used during each transfer. Vapor recovery systems collect gasoline vapors that would otherwise escape into the air during bulk fuel delivery (Phase I) or fuel storage and vehicle refueling (Phase II). Phase I vapor recovery system components include the couplers that connect tanker trucks to the underground tanks, spill containment drain valves, overfill prevention devices, and vent pressure/vacuum valves. Phase II vapor recovery system components include gasoline dispensers, nozzles, piping, break away, hoses, face plates, vapor processors, and system monitors.

Stationary sources having the potential to emit TACs, including gas stations, are required to obtain permits from the SCAPCD. Permits may be granted to these operations provided they are operated in accordance with applicable SCAPCD rules and regulations. SCAPCD's gasoline station permitting process provides for the review of gasoline TAC emissions in order to evaluate potential public exposure and health risk, to mitigate potentially significant health risks resulting from these exposures, and to provide net health risk benefits by improving the level of control when existing sources are modified or replaced. SCAPCD's permitting procedures require substantial control of emissions, and permits are not issued unless TAC risk screening or TAC risk assessment can show that risks are not significant. In addition, California has statewide limits on the benzene content in gasoline, which greatly reduces the toxic potential of gasoline emissions.

Additionally, CARB identifies DPM as a TAC. Mobile sources (including trucks, buses, automobiles, trains, ships, and farm equipment) are by far the largest source of diesel emissions. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic.

Diesel exhaust is composed of two phases, gas or particulate; both contribute to the risk. The gas phase is composed of many of the urban hazardous air pollutants, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particulate phase has many different types that can be classified by size or composition. The sizes of diesel particulates of greatest health concern are fine and ultrafine particles. These particles may be composed of elemental carbon with adsorbed compounds such as organics, sulfates, nitrates, metals, and other trace elements. Diesel exhaust is emitted from a broad range of on- and off-road diesel engines.

Dispersion Modeling

The air dispersion modeling for the HRA was performed using the USEPA AERMOD Version 22112 dispersion model. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources. A 30-meter DEM file was used for the elevation data as provided by the Lakes AERMOD View software data gathering feature.

AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Pre-processed meteorological data files provided by CARB using USEPA's AERMET program on meteorological data collected at the Siskiyou County Airport. AERMET is designed to create AERMOD input files with the most representative meteorology based on proximity to the Project. The location of the meteorological monitoring site is shown in Appendix 3.1.

The unit emission rate of 1 gram per second was utilized in AERMOD to create plot files containing the dispersion factor (X/Q) for each source group. The Lakes AERMOD View Software was utilized to create *line-volume* sources *links* with uniform emission rates for each of the Project routes. The *line-volume* source utilizes multiple volume sources to model emissions from trucks along defined *routes* which better capture the dispersion characteristics than a line source. Emissions for each source group as described above were input into the HARP2 model to calculate the Ground Level Concentrations related to Project operations. AERMOD summary files, calculations and figures can be found in Appendix 3.1.

The fueling station was modeled as point sources and volume sources per the latest guidance for Gasoline Service Station Risk Assessment (CARB 2022). Per the latest guidance, the working and breathing loss from the underground gasoline storage tanks were modeled as point sources. The other sources of ROG/VOC emissions during fueling of customer vehicles including spillage and hose permeation were modeled as four volume sources. These four sources each accounted for four pumps or one station or island. The dispersion modeling parameters for the fueling station volume and point sources were obtained from Tables 14 and 15 of CARB's Gasoline Service Station Risk Assessment (CARB 2022).

A uniform grid was placed over the Project Area with a spacing of no more than 50 x 50 meters encompassing 0.7 mile and including 626 receptors. The grid was placed evenly over the area surrounding the Project. No onsite receptors were modeled for this analysis. In addition, receptors were placed on the surrounding schools to model health risk.

Risk during construction and operations was also modeled utilizing worker factors and residential factors to find the Maximumly Exposed Individual Resident (MEIR), Maximumly Exposed Individual Worker

(MEIW), Point of Maximum Impact (PMI) and maximumly exposed school child. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the OEHHA Guidance Manual (2015) as implemented in CARB's HARP2 program (CARB 2022). All regulatory defaults were used for dispersion modeling as configured in the latest version of HARP2 (2118). The risk associated with traffic emissions related to Project operations was assessed as risk associated with future Project operations.

Based on the OEHHA methodology, the residential inhalation cancer risk from the annual average TAC concentrations is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the Age Sensitivity Factor (ASF), the frequency of time spent at home, and the exposure duration divided by averaging time, to yield the excess cancer risk. These factors are discussed in more detail below. Cancer risk must be separately calculated for specified age groups, because of age differences in sensitivity to carcinogens and age differences in intake rates (per kg body weight). Separate risk estimates for these age groups provide a health-protective estimate of cancer risk by accounting for greater susceptibility in early life, including both age-related sensitivity and amount of exposure.

Exposure through inhalation (Dose-air) is a function of the breathing rate, the exposure frequency, and the concentration of a substance in the air. For residential exposure, the breathing rates are determined for specific age groups, so Dose-air is calculated for each of these age groups, 3rd trimester, 0<2, 2<9, 2<16, 16<30 and 16-70 years. To estimate cancer risk, the dose was estimated by applying the following formula to each ground-level concentration:

$$\text{Dose-air} = (C_{\text{air}} * \{BR/BW\} * A * EF * 10^{-6})$$

Where:

Dose-air	=	dose through inhalation (mg/kg/day)
C_{air}	=	air concentration ($\mu\text{g}/\text{m}^3$) from air dispersion model
$\{BR/BW\}$	=	daily breathing rate normalized to body weight (L/kg body weight – day) (361 L/kg BW-day for 3 rd Trimester, 1,090 L/kg BW-day for 0<2 years, 861 L/kg BW-day for 2<9 years, 745 L/kg BW-day for 2<16 years, 335 L/kg BW-day for 16<30 years, and 290 L/kg BW-day 16<70 years)
A	=	Inhalation absorption factor (unitless [1])
EF	=	exposure frequency (unitless), days/365 days (0.96 [approximately 350 days per year])
10^{-6}	=	conversion factor (micrograms to milligrams, liters to cubic meters)

OEHHA developed ASFs to take into account the increased sensitivity to carcinogens during early-in-life exposure. In the absence of chemical-specific data, OEHHA recommends a default ASF of 10 for the third trimester to age 2 years, an ASF of 3 for ages 2 through 15 years to account for potential increased sensitivity to carcinogens during childhood and an ASF of 1 for ages 16 through 70 years.

Fraction Of Time At Home (FAH) during the day is used to adjust exposure duration and cancer risk from a specific facility's emissions, based on the assumption that exposure to the facility's emissions are not occurring away from home. OEHHA recommends the following FAH values: from the third trimester to

age <2 years, 85 percent of time is spent at home; from age 2 through <16 years, 72 percent of time is spent at home; from age 16 years and greater, 73 percent of time is spent at home.

To estimate the cancer risk, the dose is multiplied by the cancer potency factor, the ASF, the exposure duration divided by averaging time, and the frequency of time spent at home (for residents only):

$$\text{Risk}_{\text{inh-res}} = (\text{Dose}_{\text{air}} * \text{CPH} * \text{ASF} * \text{ED/AT} * \text{FAH})$$

Where:

$\text{Risk}_{\text{inh-res}}$	=	residential inhalation cancer risk (potential chances per million)
Dose_{air}	=	daily dose through inhalation (mg/kg-day)
CPF	=	inhalation cancer potency factor (mg/kg-day ⁻¹)
ASF	=	age sensitivity factor for a specified age group (unitless)
ED	=	exposure duration (in years) for a specified age group (0.25 years for 3 rd trimester, 2 years for 0<2, 7 years for 2<9, 14 years for 2<16, 14 years for 16<30, 54 years for 16-70)
AT	=	averaging time of lifetime cancer risk (years)
FAH	=	fraction of time spent at home (unitless)

Non-cancer chronic impacts are calculated by dividing the annual average concentration by the Reference Exposure Level (REL) for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The following equation was used to determine the non-cancer risk:

$$\text{Hazard Quotient} = \text{Ci}/\text{RELi}$$

Where:

Ci	=	Concentration in the air of substance i (annual average concentration in µg/m ³)
RELi	=	Chronic noncancer Reference Exposure Level for substance i (µg/m ³)

Cancer Risk

Operational cancer risk calculations for existing residential receptors are based on 70-, 30-, and 9-year exposure periods and worker receptors are based on a 25-year exposure period to for operations. The calculated cancer risk accounts for 350 days per year of exposure to residential receptors. While the average American spends 87 percent of their life indoors (USEPA 2001), neither the pollutant dispersion modeling nor the health risk calculations account for the reduced exposure structures provide. Instead, health risk calculations account for the equivalent exposure of continual outdoor living. The calculated carcinogenic risk at Project vicinity receptors is depicted in Table 3.1-4.

Table 3.1-4. Maximum Cancer Risk Summary

Maximum Exposure Scenario	Total Maximum Risk
Project Operations	
70-Year Exposure Resident	2.38
30-Year Exposure Resident	1.96
9-Year Exposure Resident	1.41
25-Year Exposure Worker	0.44
Maximum School Child (9-Year)	0.08
Exceed Threshold?	No

Source: ECORP Consulting, Inc. 2022, Appendix 3.1.

As shown, impacts related to cancer risk for all modeled scenarios would be below the 10 in one million threshold for Project operations. These calculations do not account for any pollutant-reducing remedial components inherent to the Project or the Project site.

The MEIR for operational emissions is located along the Project's southern boundary at a single-family home located at the northern end of Herzog Boulevard directly east of I-5. The MEIW for Project operations is located at the RV Park along the Project's southern fence line. The offsite PMI is located along the Project's northern fence line. All the above listed points are presented on the Cancer Risk Location Map in Appendix 3.1. In addition, the maximum cancer risk at nearby schools is located at the southern field of Yreka High School.

Table 3.1-5 shows the Cancer risk by pollutant for the various exposure scenarios. Table 3.1-5 shows that the primary driver of health risk from this Project is DPM. All cancer risk is via the inhalation pathway.

Table 3.1-5. Maximum Operational Cancer Risk Summary by Pollutant

Scenario	Diesel Particulate Matter	Benzene	Ethyl Benzene	Naphthalene
Cancer Risk by Pollutant (per million)				
70-Year Exposure Resident	2.27	0.094	0.002	0.011
30-Year Exposure Resident	1.92	0.079	0.002	0.009
9-Year Exposure Resident	1.33	0.055	0.001	0.006
25-Year Exposure Worker	0.19	0.220	0.004	0.026

Source: ECORP Consulting, Inc. 2022.

Non-Carcinogenic Hazards

In addition to cancer risk, the significance thresholds for TAC exposure require an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. The potential for chronic non-cancer hazards is evaluated by comparing the maximum long-term exposure level to a chronic REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts.

An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the REL. The highest maximum chronic hazard indexes for residents and workers in the Project vicinity as a result of Project air toxics is shown in Table 3.1-6. It is noted that the TACs associated with vapor emissions from a fueling station have associated acute risk while DPM does not. Thus, the acute risk associated with this Project is a result of fueling operations only.

Table 3.1-6. Maximum Non-Carcinogenic Hazard Index Health Risk Summary			
Chronic Health Hazard Index			
Exposure Scenario	Maximum (70 yr.) Residential Hazard	Maximum (25 yr.) Worker Hazard	Maximum (9 yr.) School Hazard
Operation	0.0004	0.0131	0.0001
<i>Significance Threshold</i>	<i>1</i>	<i>1</i>	<i>1</i>
Exceed Threshold?	No	No	No
Acute Health Hazard Index			
Exposure Scenario	Maximum Residential Hazard	Maximum Worker Hazard	Maximum School Hazard
Operation	0.1992	0.8586	0.0581
<i>Significance Threshold</i>	<i>1</i>	<i>1</i>	<i>1</i>
Exceed Threshold?	No	No	No

Source: ECORP Consulting, Inc. 2022, Appendix 3.1.

As shown in Table 3.1-6, impacts related to non-cancer risk (chronic hazard index) as a result of the Project site would not surpass significance thresholds. Table 3.1-7 provides the non-carcinogenic risk by pollutant. Table 3.1-7 shows that chronic non-carcinogenic risk is driven by DPM and benzene, while acute

risk is primarily due to benzene. The locations of the maximum hazard points presented below can be found in the Chronic and Acute Risk Point Maps presented in Appendix 3.1.

Table 3.1-7. Maximum Non-Carcinogenic Health Risk by Pollutant								
Scenario	DPM	Benzene	Ethyl Benzene	Hexane	Naphthalene	Propylene	Toluene	Xylenes
Inhalation Chronic Risk by Pollutant (Hazard Index)								
70 Year Residential	0.0022	0.0010	0.0002	0.00003	0.0001	0.0001	0.0024	0.0009
25 Year Worker	0.003	0.034	0.008	0.001	0.003	0.003	0.083	0.030
Max Acute Risk by Pollutant All Pathways (Hazard Index)								
Residential	--	0.157	--	--	--	--	0.002	0.0002
Worker	--	0.859	--	--	--	--	0.011	0.001

Carbon Monoxide Hot Spots

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

A CO *hot spot* would occur if an exceedance of the state 1-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The analysis prepared for CO attainment in the South Coast Air Quality Management District's (SCAQMD's) 1992 *Federal Attainment Plan for Carbon Monoxide* in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 Air Quality Management Plan can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD is the air pollution control officer for much of Southern California. The

SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992). In order to establish a more accurate record of baseline CO concentrations affecting the Los Angeles area, a CO *hot spot* analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This *hot spot* analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest 8-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway. Thus, there was no violation of CO standards.

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

According to the Traffic Study Technical Memorandum provided by GHD (2022), the Proposed Project is expected to have a trip generation of 2,619 average daily traffic trips. Thus, the Proposed Project would not generate traffic volumes at any intersection of more than 100,000 vehicles per day (or 44,000 vehicles per day) and there is no likelihood of the Project traffic exceeding CO values. A less than significant impact would occur.

Mitigation Measures

No mitigation measures are required.

Impact AIR-4	Project implementation could result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.
<i>Impact Determination</i>	<i>Less than Significant.</i>
<i>Threshold</i>	<i>Result in the release of other emissions (such as those leading to odors) adversely affecting a substantial number of people).</i>

Impact Discussion

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

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

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

During construction, the Proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Therefore, construction odors would not adversely affect a substantial number of people to odor emissions.

The Project Site could be considered a source of unpleasant odors by some given its proposed use as a gasoline dispensing station; however, as previously stated, SCAPCD has stringent requirements for the control of gasoline vapor emissions from gasoline-dispensing facilities as articulated in SCAPCD Rule 4.7. Adherence to these rules would ensure a substantial number of people are not adversely affected by operational odor emissions.

This impact would be less than significant.

Mitigation Measures

No mitigation measures are required.

3.1.4 Cumulative Setting, Impacts, and Mitigation Measures

The cumulative air quality setting associated with the Proposed Project includes approved, proposed, planned, and other reasonably foreseeable projects and development in the City of Yreka and Greater Siskiyou County. Developments and planned land uses, including the Proposed Project, would cumulatively contribute to air quality impacts.

3.1.4.1 Cumulative Impacts and Mitigation Measures

Impact AIR-5	Would implementation of the Proposed Project, in combination with existing, approved, proposed, and reasonably foreseeable development in Siskiyou County, result in a cumulatively considerable air quality impact?
<i>Impact Determination</i>	<i>Less than cumulatively considerable</i>
<i>Threshold</i>	<i>Would Implementation of the proposed project, along with any foreseeable development in the project vicinity, result in cumulative impacts to air quality?</i>

Impact Discussion

As previously described, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulatively considerable. As identified in the analysis above, the Project would not exceed significance thresholds or otherwise result in any project-level impact. Thus, the Project is considered less than cumulatively considerable in terms of air quality-related impacts.

Mitigation Measures

No mitigation measures are required.

3.2 BIOLOGICAL RESOURCES

This section presents an evaluation of potential biological resources impacts associated with the Project. The section assesses whether construction and operation of the Project would result in significant impacts on terrestrial and aquatic biological resources. In preparing the evaluation, all substantive comments received in response to the NOP for this DEIR pertinent to biological resources were considered. This section includes a description of the existing environmental conditions, regulatory setting, an overview of the methods used for assessing impact, impact significance thresholds, and the impacts associated with construction and operation of the Proposed Project. Where significant impacts are identified, feasible and effective mitigation measures are presented to reduce those impacts to levels considered less than significant.

Resource information presented herein is based on the following technical studies:

- *Biological Resources Assessment (BRA) Refresh Travel Center Project* (ECORP 2021a) (DEIR Appendix 3.2);

Please note: While the BRA was written for the previous version of the Proposed Project, it covers the exact same 4.97 acres as the current Project, was written in 2021 and is therefore within the 5-year life span of a BRA. As such, this BRA is adequate to provide biological analysis for the Proposed Project. For the BRA, the Study Area was defined as the limits of 4.97-acre Project Site. The Study Area and Project site represent the same area and are interchangeable in this section of the DEIR.

3.2.1 *Environmental Setting*

3.2.1.1 **Site Characteristics and Land Use**

The Study Area is located in a heavily impacted area in the southeastern quadrant of the I-5/Montague Road intersection. This Study Area is located within hilly terrain situated at an elevational range of approximately 2,630 to 2,660 feet above Mean Sea Level (MSL) at the interface between the California floristic province/Cascade Ranges Region and the Great Basin floristic province/Modoc Plateau Region of California (ECORP 2021a). The average winter low temperature in the vicinity of the Study Area is 25.8 degrees Fahrenheit (°F) and the average summer high temperature is 88.4°F. Average annual precipitation is approximately 19.95 inches (ECORP 2021a).

The Study Area is comprised of fallow undeveloped land that appears to have been mass-graded around 2004 as the area was undergoing development. A Google Earth aerial photograph dated December 2004 shows evidence of construction grading within the Study Area and surrounding parcels. At present, the Study Area remains undeveloped and is sparsely vegetated with weedy plants.

3.2.1.2 Biological Setting

Soils

According to the Web Soil Survey (Natural Resources Conservation Service [NRCS] 2021) one soil unit, or type, has been mapped within the Study Area.

- 152 – Facey loam, 5 to 15 percent slopes

The Facey soil series consists of deep, well-drained soils on mountains. These soils formed in residuum derived from metamorphosed rock. No soil units derived from serpentinite or other ultramafic parent materials are known to occur within the Study Area (ECORP 2021a).

Vegetation Communities and Land Cover Types

The Study Area was mass-graded for construction around 2004 but site construction did not occur. As such, the vegetation composition found onsite is largely comprised of weedy species. The vegetation community most closely resembling the conditions onsite is the *Bromus tectorum-Taeniatherum (Elymus) caput-medusae* herbaceous semi-natural alliance (cheatgrass-medusahead grassland). The dominant herbaceous plants onsite include medusahead grass and cheat grass, with scattered rabbitbrush and yellow star-thistle.

3.2.1.3 Aquatic Resources

An aquatic resources delineation to identify potential Waters of the U.S./State was not conducted for the Study Area. No aquatic resources were found onsite during the site assessment in January 2021. The Study Area has been previously mass graded for construction and is generally sloped and terraced with no basins or drainageways that could support aquatic resources. According to the California Aquatic Resource Inventory (CARI), there are no previously mapped aquatic resources for the Study Area (ECORP 2021a).

3.2.1.4 Wildlife Observations

The Study Area is surrounded on all sides by developed lands, including Montague Road to the north, a Holiday Inn Express to the west, an RV park to the south, and the Yreka Truck Stop to the east. Wildlife use is expected to be minimal and include species accustomed to human activities. There are no wildlife movement corridors and nursery sites present.

3.2.2 Evaluation of Special-Status Species Identified in the Literature Search

The BRA completed for the Project listed all the special-status plant and wildlife species identified in the literature review as potentially occurring within the vicinity of the Study Area. This assessment included a preliminary analysis of impacts on biological resources anticipated to result from the Project, as presently defined. For the purposes of this assessment, special-status species are defined as plants or animals that:

- are listed, proposed for listing, or candidates for future listing as threatened or endangered under the federal Endangered Species Act (ESA);
- are listed or candidates for future listing as threatened or endangered under the California ESA;
- meet the definitions of endangered or rare under Section 15380 of the CEQA Guidelines;
- are identified as a Species Of Special Concern (SSC) by the California Department of Fish and Wildlife (CDFW);
- are birds identified as Birds Of Conservation Concern (BCC) by the U.S. Fish and Wildlife Service (USFWS);
- are plants considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered in California" (California Rare Plant Rank [CRPR] 1 and 2), "plants about which more information is needed" (i.e., species with a CRPR of 3), or "plants of limited distribution – a watch list" (i.e., species with a CRPR of 4);
- are plants listed as rare under the California Native Plant Protection Act (NPPA; California Fish and Game Code, Section 1900 et seq.); or
- are fully protected in California in accordance with the California Fish and Game Code, Sections 3511 (birds), 4700 (mammals), 5050 (amphibians and reptiles), and 5515 (fishes).

Only species that fall into one of the above-listed groups were considered for the biological assessment. While other species (e.g., special-status lichens, mosses and bryophytes, California Natural Diversity Database- (CNDDDB) tracked species with no special status) are sometimes found in database searches or within the literature, these species were not included within the BRA analysis as these species are not identified as special-status species.

A complete summary of special-status species and their potential to occur within the Study Area are described in Table 1 of the BRA (Appendix 3.2). Potential for occurrence was determined by reviewing database queries from federal and state agencies and evaluating habitat characteristics. Species with some potential to occur on the Project Site, as determined by the BRA, are listed in Table 3.2-1. Three plant species have some potential to occur on the Project Site. These species are discussed further below. Species that were considered to be absent from the Project Site due to lack of suitable habitat or because the known distribution of the species does not include the Project Site vicinity, are not discussed further in this document. A complete list of special-status species known to exist in the region and the results of the database queries are included in the BRA included in Appendix 3.2.

Table 3.2-1. Potentially Occurring Animal Special-Status Species

Common Name (<i>Scientific Name</i>)	Status			Habitat Description	Survey Period	Potential to Occur On-Site
	ESA	CESA/ NPPA	Other			
Plants						
California androsace <i>(Androsace elongata ssp. acuta)</i>	-	-	4.3	Chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, and valley and foothill grassland (492'– 4,281').	March– June	Low potential to occur. Marginally suitable potential habitat (disturbed grassland) within Study Area.
Ashland thistle <i>(Cirsium ciliolatum)</i>	-	-	2B.1	Cismontane woodland, valley and foothill grassland (2,625'– 4,593').	June– August	Potential to occur. Suitable habitat within Study Area.
Shasta orthocarpus <i>(Orthocarpus pachystachyus)</i>	-	-	1B.1	Great Basin scrub, meadows and seeps, and valley and foothill grassland (2,756' – 2,789').	May	Low potential to occur. Marginally suitable potential habitat (disturbed grassland) within Study Area.

Status Codes

FESA Federal Endangered Species Act
 CESA California Endangered Species Act

CNDDDB Species that is tracked by CDFG's CNDDDB but does not have any of the above special-status designations otherwise.

1B CRPR/Rare or Endangered in California and elsewhere.

2B Plants rare, threatened, or endangered in California but more common elsewhere.

4 CRPR/Plants of Limited Distribution – A Watch List.

0.1 Threat Rank/Seriously threatened in California (over 80 percent of occurrences threatened/ high degree and immediacy of threat)

0.3 Threat Rank/Not very threatened in California (less than 20 percent of occurrences threatened /low degree and immediacy of threat or no current threats known)

Source: ECORP 2021a

Notes: This table only identifies those species potentially impacted by the Project. A complete summary of special-status species and their potential to occur within the Study Area are described in Table 1 of the BRA (Appendix 3.2).

3.2.2.1 Evaluation of Special-Status Plants

Thirty-five special-status plant species were identified by the literature review as having the potential to occur within the vicinity of the Study Area. All but three of these special-status plant species were determined to be absent from the Study Area due to the lack of suitable habitat and/or the species is not

known to occur at the elevation of the Study Area (Table 3.2-1). No further discussion of those species is provided in this assessment. A brief discussion of the three special-status plants with potential to occur onsite follows.

California Androsace

California androsace (*Androsace elongata* ssp. *acuta*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 4.2 species. This species is an herbaceous annual that occurs in chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, and valley and foothill grassland. California androsace blooms from March through June and is known to occur at elevations ranging from 492 to 4,280 feet above MSL. The current range of this species in California includes Alameda, Colusa, Contra Costa, Fresno, Glenn, Kern, Los Angeles, Merced, Monterey, Riverside, San Benito, San Bernardino, San Diego, San Joaquin, San Luis Obispo, San Mateo, Santa Clara, Siskiyou, Stanislaus, and Tehama counties (ECORP 2021a).

There are no CNDDDB occurrences of this species within 5 miles of the Study Area (ECORP 2021a). The disturbed grassland habitat onsite represents marginally suitable habitat for this species.

Ashland Thistle

Ashland thistle (*Cirsium ciliolatum*) is not listed pursuant to either the federal ESA but listed as Endangered pursuant to the California ESA but is designated as a CRPR 2B.1 species. This species is an herbaceous perennial that occurs in cismontane woodlands, valley and foothill grassland. Ashland thistle blooms from June through August and is known to occur at elevations ranging from 2,625 to 4,595 feet above MSL. Ashland thistle is a near-endemic to Oregon, and in California, it has only been found in Siskiyou County (ECORP 2021a).

There are no CNDDDB occurrences of this species within 5 miles of the Study Area (ECORP 2021a). The disturbed grassland habitat onsite represents suitable habitat for this species.

Shasta Orthocarpus

Shasta orthocarpus (*Orthocarpus pachystachyus*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 1B.1 species. This species is an herbaceous annual that occurs in Great Basin scrub, meadows and seeps, and valley and foothill grassland. Shasta orthocarpus blooms in May and is known to occur at elevations ranging from 2,755 to 2,790 feet above MSL. Its current range includes Siskiyou County (ECORP 2021a).

There is one occurrence of this species documented in the CNDDDB reportedly from the "north end of Yreka" (ECORP 2021a). The disturbed grassland onsite represents marginally suitable habitat for this species.

3.2.2.2 Invertebrates

Five special-status invertebrate species were identified as having potential to occur in the Study Area based on the literature review. However, upon further analysis and after the site visit, all of these species

were considered to be absent from the site due to the lack of suitable habitat. No further discussion of these species is provided within this assessment (ECORP 2021a).

3.2.2.3 Fish

Four special-status fish were identified as having potential to occur in the Study Area based on the literature review. However, upon further analysis and after the site visit, all of these special-status species were considered absent from the Site due to the lack of suitable habitat. No further discussion of these species is provided within this assessment (ECORP 2021a).

3.2.2.4 Essential Fish Habitat

Coho salmon (*Oncorhynchus kisutch*) and Chinook salmon (*Oncorhynchus tshawytscha*) Essential Fish Habitat (EFH) were identified for the Yreka, California and Montague, California 7.5-minute quadrangles. There is no EFH within the Study Area (ECORP 2021a).

3.2.2.5 Amphibians

Two special-status amphibians were identified as having potential to occur in the Study Area based on the literature review. However, upon further analysis and after the site visit, both of these special-status species were considered absent from the Site due to the lack of suitable habitat. No further discussion of these species is provided within this assessment (ECORP 2021a).

3.2.2.6 Reptiles

One special-status reptile was identified as having the potential to occur in the Study Area based on the literature review. However, upon further analysis and after the site visit, this special-status species was considered absent from the Site due to the lack of suitable habitat. No further discussion of this species is provided within this assessment (ECORP 2021a).

3.2.2.7 Birds

Ten special-status bird species were identified as having the potential to occur within the Study Area based on the literature review. However, upon further analysis and after the site visit, all of these species were considered absent from the Site due to the lack of suitable habitat and/or the Study Area is outside the known breeding range of the species. No further discussion of these species is provided in this analysis (ECORP 2021a).

3.2.2.8 Migratory Bird Treaty Act Birds

The disturbed grasslands and scattered shrubs within the Study Area support potential nesting habitat for a variety of common birds protected under the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Section 3503, among others (ECORP 2021a).

3.2.2.9 Mammals

One special-status mammal species was identified as having the potential to occur within the Study Area based on the literature review (Table 1). However, upon further analysis and after the site visit this species was considered to be absent from the site due to the lack of suitable habitat. No further discussion of this species is provided within this assessment (ECORP 2021a).

3.2.2.10 Sensitive Natural Communities

Vegetation communities were mapped according to the *Manual of California Vegetation, Second Edition* (Sawyer et al. 2009) during the site assessment on January 19, 2021.

The Study Area is comprised of a previously graded and disturbed grassland community. There are no sensitive natural communities onsite (ECORP 2021a).

3.2.3 Regulatory Setting

3.2.3.1 Federal

Federal Endangered Species Act

The ESA protects plants and animals that are listed as endangered or threatened by the USFWS and the National Marine Fisheries Service (NMFS). Section 9 of the ESA prohibits the taking of listed wildlife, where take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant on federal land and removing, cutting, digging up, damaging, or destroying any listed plant on non-federal land in knowing violation of state law (16 USC 1538). Under Section 7 of the ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Section 10 of the ESA provides for issuance of incidental take permits where no other federal actions are necessary provided a Habitat Conservation Plan (HCP) is developed.

Section 7

Section 7 of the ESA mandates that all federal agencies consult with USFWS and/or NMFS to ensure that federal agencies' actions do not jeopardize the continued existence of a listed species or adversely modify Critical Habitat for listed species. If adverse effects to a species or its Critical Habitat are likely, the applicant must conduct a Biological Assessment for the purpose of analyzing the potential effects of the Project on listed species and critical habitat to establish and justify an *effect determination*. The federal agency reviews the Biological Assessment; if it concludes that the project may adversely affect a listed species or its habitat, it prepares a Biological Opinion (BO). Through consultation and the issuance of a BO, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. The BO may recommend "reasonable and prudent alternatives" to the project to avoid

jeopardizing or adversely modifying habitat. If direct and/or indirect effects will occur to Critical Habitat that appreciably diminish the value of Critical Habitat for both the survival and recovery of a species, the adverse modifications will require formal consultation with USFWS or NMFS.

Critical Habitat

Critical Habitat is defined in Section 3 of the ESA as:

1. the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the ESA, on which are found those physical or biological features essential to the conservation of the species and that may require special management considerations or protection; and
2. specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

For inclusion in a Critical Habitat designation, habitat within the geographical area occupied by the species at the time it was listed must first have features that are essential to the conservation of the species. Critical Habitat designations identify, to the extent known and using the best scientific data available, the physical or biological features needed for life processes. Physical and biological features that are essential to the conservation of the species may require special management considerations or protection. These include but are not limited to:

- space for individual and population growth and for normal behavior;
- food, water, air, light, minerals, or other nutritional or physiological requirements;
- cover or shelter;
- sites for breeding, reproduction, or rearing (or development) of offspring; or
- habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

Migratory Bird Treaty Act

The MBTA implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (i.e., rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code.

Federal Clean Water Act

The purpose of the federal CWA is to "...restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into Waters of the U.S. without a permit from the U.S. Army Corps of Engineers (USACE). *Discharges of fill material* is defined as the addition of fill material into Waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes, and subaqueous utility lines [33 CFR Section 328.2(f)]. In addition, Section 401 of the CWA (33 USC 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into Waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Substantial impacts to Waters of the U.S. (more than 0.5 acre of impact) may require an individual permit. Projects that only minimally affect Waters of the U.S. (less than 0.5 acre of impact) may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the RWQCB.

Magnuson-Stevens Fishery Conservation and Management Act

The 1996 Magnuson-Stevens Fishery Conservation and Management Act, as amended (16 USC 1801), requires federal agencies to consult with NMFS whenever a proposed action has a potential to adversely affect EFH. Although states are not required to consult with NMFS, NMFS is required to develop EFH conservation recommendations for any state agency activities with the potential to affect EFH. EFH is defined as "...those waters and substrates necessary to fish for spawning, breeding, feeding or growth to maturity" and includes the necessary habitat for managed fish to complete their life cycles and contribute to a sustainable fishery and healthy ecosystem. Although the concept of EFH is similar to the ESA definition of Critical Habitat, measures recommended by NMFS or a regional fisheries management council to protect EFH are advisory, rather than prescriptive (NMFS 1998).

3.2.3.2 State

California Endangered Species Act

The California ESA (California Fish and Game Code Sections 2050-2116) protects species of fish, wildlife, and plants listed by the State as endangered or threatened. Species identified as candidates for listing may also receive protection. Section 2080 of the California ESA prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California ESA allows for take incidental to otherwise lawful projects under permits issued by CDFW.

Fully Protected Species

The State of California first began to designate species as *fully protected* prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESAs. Fully protected species are identified in the California Fish and Game Code Section 4700 for mammals, Section 3511 for birds, Section 5050 for reptiles and amphibians, and Section 5515 for fish.

These sections of the California Fish and Game Code provide that fully protected species may not be taken or possessed at any time, including prohibition of CDFW from issuing incidental take permits for fully protected species under the California ESA. CDFW will issue licenses or permits for take of these species for necessary scientific research or live capture and relocation pursuant to the permit and may allow incidental take for lawful activities carried out under an approved Natural Community Conservation Plan within which such species are covered.

Native Plant Protection Act

The NPPA of 1977 (California Fish and Game Code Sections 1900-1913) was established with the intent to “preserve, protect and enhance rare and endangered plants in this state.” The NPPA is administered by CDFW. The Fish and Game Commission has the authority to designate native plants as *endangered* or *rare*. The NPPA prohibits the take of plants listed under the NPPA, though the NPPA contains exemptions to this prohibition that have not been clarified by regulation or judicial rule. In 1984, the California ESA brought under its protection all plants previously listed as endangered under NPPA. Plants listed as rare under NPPA are not protected under the California ESA but are still protected under the provisions of NPPA. The Fish and Game Commission no longer lists plants under NPPA, reserving all listings to the California ESA.

California Fish and Game Code Special Protections for Birds

In addition to protections contained within the California ESA and California Fish and Game Code Section 3511 described above, the California Fish and Game Code includes a several sections that specifically protect certain birds:

- Section 3800 states that it is unlawful to take nongame birds, such as those occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds, except when in accordance with regulations of the California Fish and Game Commission or a mitigation plan approved by CDFW for mining operations.
- Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird.
- Section 3503.5 protects birds of prey (which includes eagles, hawks, falcons, kites, ospreys, and owls) and prohibits the take, possession, or destruction of any birds and their nests.

- Section 3505 makes it unlawful to take, sell, or purchase egrets, ospreys, and several exotic nonnative species, or any part of these birds.
- Section 3513 specifically prohibits the take or possession of any migratory nongame bird as designated in the MBTA.

Lake or Streambed Alteration Agreements

Section 1602 of the California Fish and Game Code requires individuals or agencies to provide a Notification of Lake or Streambed Alteration (LSA) to CDFW for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.” CDFW reviews the proposed actions and, if necessary, proposed measures to protect affected fish and wildlife resources. The final proposal mutually agreed upon by CDFW and the applicant is the LSA Agreement.

Porter-Cologne Water Quality Act

The RWQCB implements water quality regulations under the federal CWA and the State Porter-Cologne Water Quality Act. These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of storm water runoff associated with construction activities. General Construction Permits for projects that disturb one or more acres of land require development and implementation of a SWPPP. Under the Porter-Cologne Water Quality Act, the RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, with any region that could affect the water of the state” (Water Code 13260(a)). Waters of the State are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code 13050 (e)). The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State that are not regulated by the USACE due to a lack of connectivity with a navigable water body. The RWQCB may require issuance of Waste Discharge Requirements for these activities.

California Environmental Quality Act

In accordance with CEQA Guidelines Section 15380, a species or subspecies not specifically protected under the federal or California ESAs or NPPA may be considered endangered, rare, or threatened for CEQA review purposes if the species meets certain criteria specified in the Guidelines. These criteria parallel the definitions used in the ESA, California ESA, and NPPA. Section 15380 was included in the CEQA Guidelines primarily to address situations in which a project under review may have a significant effect on a species that has not been listed under the ESA, California ESA, or NPPA, but that may meet the definition of endangered, rare, or threatened. Animal species identified as SSC by CDFW, birds identified as BCC by USFWS, and plants identified by the CNPS as rare, threatened, or endangered may meet the CEQA definition of rare or endangered.

Species of Special Concern

The CDFW defines SSC as a species, subspecies, or distinct population of an animal native to California that are not legally protected under the federal ESA, California ESA, or California Fish and Game Code, but currently satisfies one or more of the following criteria:

- The species has been completely extirpated from the state or, as in the case of birds, it has been extirpated from its primary seasonal or breeding role.
- The species is listed as federally (but not state) threatened or endangered or meets the state definition of threatened or endangered but has not formally been listed.
- The species has or is experiencing serious (nonscyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status.
- The species has naturally small populations that exhibit high susceptibility to risk from any factor that if realized, could lead to declines that would qualify it for state threatened or endangered status.
- SSC are typically associated with habitats that are threatened.

Depending on the policy of the lead agency, projects that result in substantial impacts to SSC may be considered significant under CEQA.

U.S. Fish and Wildlife Birds of Conservation Concern

The 1988 amendment to the Fish and Wildlife Conservation Act mandates USFWS “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under ESA.” To meet this requirement, USFWS published a list of BCC (USFWS 2021) for the U.S. The list identifies the migratory and nonmigratory bird species (beyond those already designated as federally threatened or endangered) that represent USFWS’ highest conservation priorities. Depending on the policy of the lead agency, projects that result in substantial impacts to BCC may be considered significant under CEQA.

Sensitive Natural Communities

The CDFW maintains the California Natural Community List (CDFW 2021a), which provides a list of vegetation alliances, associations, and special stands as defined in *A Manual of California Vegetation* (Sawyer et al. 2009), along with their respective state and global rarity ranks. Natural communities with a state rarity rank of S1, S2, or S3 are considered sensitive natural communities. Depending on the policy of the lead agency, impacts to sensitive natural communities may be considered significant under CEQA.

California Rare Plant Ranks

The CNPS maintains the Inventory of Rare and Endangered Plants of California (CNPS 2022), which provides a list of plant species native to California that are threatened with extinction, have limited distributions, and/or low populations. Plant species meeting one of these criteria are assigned to one of

six CRPRs. The rank system was developed in collaboration with government, academia, nongovernmental organizations, and private-sector botanists, and is jointly managed by CDFW and the CNPS. The CRPRs are currently recognized in the CNDDDB. The following are definitions of the CNPS CRPRs:

- Rare Plant Rank 1A – presumed extirpated in California and either rare or extinct elsewhere
- Rare Plant Rank 1B – rare, threatened, or endangered in California and elsewhere
- Rare Plant Rank 2A – presumed extirpated in California, but more common elsewhere
- Rare Plant Rank 2B – rare, threatened, or endangered in California but more common elsewhere
- Rare Plant Rank 3 – a review list of plants about which more information is needed
- Rare Plant Rank 4 – a watch list of plants of limited distribution

Additionally, CNPS has defined Threat Ranks that are added to the CRPR as an extension. Threat Ranks designate the level of threat on a scale of 1 through 3, with 1 being the most threatened and 3 being the least threatened. Threat Ranks are generally present for all plants ranked 1B, 2B, or 4, and for the majority of plants ranked 3. Plant species ranked 1A and 2A (presumed extirpated in California), and some species ranked 3, which lack threat information, do not typically have a Threat Rank extension. The following are definitions of the CNPS Threat Ranks:

- Threat Rank 0.1 – Seriously threatened in California (more than 80 percent of occurrences threatened/high degree and immediacy of threat)
- Threat Rank 0.2 – Moderately threatened in California (20 to 80 percent occurrences threatened/moderate degree and immediacy of threat).
- Threat Rank 0.3 – Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

Factors such as habitat vulnerability and specificity, distribution, and condition of occurrences are considered in setting the Threat Rank; and differences in Threat Ranks do not constitute additional or different protection (CNPS 2022).

Depending on the policy of the lead agency, substantial impacts to plants ranked 1A, 1B, 2, and 3 are typically considered significant under CEQA Guidelines Section 15380. Significance under CEQA is typically evaluated on a case-by-case basis for plants ranked 4 and at the discretion of the CEQA lead agency.

California Environmental Quality Act Significance Criteria

Sections 15063-15065 of the CEQA Guidelines address how an impact is identified as significant. Generally, impacts to listed (rare, threatened, or endangered) species are considered significant. Assessment of *impact significance* to populations of nonlisted species (e.g., SSC) usually considers the proportion of the species' range that will be affected by a project, impacts to habitat, and the regional and population level effects.

Specifically, Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded IS checklist contained in Appendix G of the CEQA Guidelines, which provides examples of impacts that would normally be considered significant.

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant under CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population-wide or region-wide basis.

3.2.3.3 Local

Yreka 2022 General Plan

The Conservation, Open Space, Parks and Recreation Element of the Yreka General Plan Update 2002-2022 (City of Yreka 2003) includes "A conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other water, harbors, fisheries, wildlife, minerals, and other natural resources." The General Plan is required to address various open space issues, including the preservation of natural resources (e.g., fish and wildlife habitat), managed production of resources (e.g., food, fiber, and mineral resources), outdoor recreation including areas of scenic, historic and cultural value, and open space for health and safety.

The following General Plan Goals and Programs are pertinent to biological resources for this Project:

Goal CO.4: Minimize impacts to wildlife and wildlife habitat as new development occurs within Yreka.

Program CO.4.A: Apply appropriate mitigation measures to development projects to minimize impacts to biological resources during and after construction.

Program CO.4.C: Applicants for new development proposals shall be responsible for costs related to determining the potential for occurrence of protected plant and wildlife species within the proposed project area. City staff shall make the determination on the degree of field investigation required based on the projects location in relation to known occurrences.

Program CO.4.D: If the presence of protected species is determined to be likely, the project applicant shall be responsible for all costs associated with investigating species presence and preparation of any required mitigation plans.

3.2.4 Environmental Impacts

3.2.4.1 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. For purposes of this EIR, implementation of the Project would be considered to have a significant adverse impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS.
- Have a substantial adverse effect on state or federally protected wetlands, as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.), either individually or cumulatively, through direct removal, filling, hydrological interruption, or other means.
- 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 biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.2.4.2 Methods of Analysis

Literature Review

The following resources were queried to determine the special-status species that had been documented within or in the vicinity of the Study Area:

- CDFW CNDDDB data for the "Yreka, California" and "Montague, California" 7.5-minute U.S. Geological Survey (USGS) quadrangles (CDFW 2021a).
- USFWS Information, Planning, and Consultation System (IPaC) Resource Report List for the Study Area (USFWS 2021).
- CNPS' electronic Inventory of Rare and Endangered Plants of California for the "Yreka, California" and "Montague, California" 7.5-minute USGS quadrangles and the 10 surrounding USGS quadrangles (CNPS 2021).
- National Oceanic and Atmospheric Administration (NOAA)/NMFS species list (NOAA/NMFS 2021).

- Biogeographic Information and Observation System, Terrestrial Connectivity, Areas of Conservation Emphasis (CDFW 2021b).

The results of the CNPS, CNDDDB, USFWS, and NOAA/NMFS database queries are included in Attachment A of the BRA.

Field Surveys Conducted

This biological resource assessment includes a reconnaissance level site visit to generally characterize onsite resources, including plant communities, wildlife, special-status species, aquatic resources (i.e., potential Waters of the U.S./State), and sensitive natural communities.

ECORP biologist Keith Kwan conducted a biological resources field assessment on January 19, 2021. The purpose of this assessment was to identify potential biological resources constraints (e.g., aquatic resources, special-status species) onsite, identify regulatory requirements for development of the site, and assess potential mitigation needs. The following biological resource information was collected during the assessment:

- Direct observations of special-status species;
- Animal and plant species directly observed;
- Habitat and vegetation communities; and
- Aquatic resources.

This assessment did not include focused technical studies. The aquatic resources assessment was intended for general planning purposes and was not performed in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) or the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008).

Special-Status Species Considered for the Study Area

ECORP generated a list of special-status species considered to have the potential to occur within the Study Area based on species occurrence information from the literature review and field observations (Table 1). Each of the species that were considered as potentially occurring within the Study Area or vicinity was evaluated based on the following criteria:

- **Present** - Species was observed during field surveys or is known to occur within the Study Area based on documented occurrences within the CNDDDB or other literature.
- **Potential to Occur** - Habitat (including soils and elevation requirements) for the species occurs within the Study Area.
- **Low Potential to Occur** - Marginal or limited amounts of habitat occur, and/or the species is not known to occur within the vicinity of the Study Area based on CNDDDB records and other available documentation.

- **Absent** - No suitable habitat (including soils and elevation requirements), and/or the species is not known to occur within the Study Area or the vicinity of the Study Area based on CNDDDB records and other documentation or determinate field surveys.

3.2.4.3 Project Impacts and Mitigation Measures

Impact BIO-1	Project implementation could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
<i>Impact Determination</i>	<i>Less than Significant with Mitigation</i>
<i>Threshold</i>	<i>Substantial adverse impact, either directly or through habitat modifications, on any plant fish or wildlife species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.</i>

Impact Discussion

The BRA identifies that the Project site is potential habitat for three special-status plant species: California Androsace, Ashland Thistle and Shasta Orthocarpus. As such, Mitigation Measure BIO-1 is required to mitigate these impacts. Impacts to special-status species would be less than significant with implementation of BIO-1.

Mitigation Measures

The following mitigation measure shall apply to the Proposed Project.

- BIO-1: Special-Status Plants.** Three special-status plant species have potential to occur with the site including California androsace, Ashland thistle, and Shasta orthocarpus. The following measures shall be implemented to minimize potential impacts to special-status plant species:
- Perform the focused plant surveys according to USFWS, CDFW, and CNPS protocol. Surveys will be timed according to the blooming period for target species and known reference populations, if available, and/or local herbaria will be visited prior to surveys to confirm the appropriate phenological state of the target species.
 - If special-status plant species are found, avoidance zones may be established around plants to clearly demarcate areas for avoidance. Avoidance measures and buffer distances may vary between species and the specific avoidance zone distance will be determined in coordination with appropriate resource agencies (CDFW and USFWS).

- If special-status plant species are found within the Project and avoidance of the species is not possible, additional measures such as seed collection and/or translocation may be developed in consultation with the appropriate agencies.
- If no special-status plants are found, no further measures pertaining to special-status plants are necessary.

Timing/Implementation: *Prior to commencement of any grading*

Monitoring/Enforcement: *The City of Yreka Planning Department*

Residual Impact After Mitigation

Impacts would be less than significant after mitigation.

Impact BIO-2	Project implementation could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.
<i>Impact Determination</i>	<i>No Impact</i>
<i>Threshold</i>	<i>Substantial adverse impact on any riparian habitat or sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.</i>

Impact Discussion

The Study Area is comprised of a previously graded and disturbed grassland community. There are no riparian habitat or sensitive natural communities onsite. Therefore, there would be no impact to riparian habitat or other sensitive natural community.

Mitigation Measures

No mitigation measures are required.

Impact BIO-3	Project implementation could cause a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
<i>Impact Determination</i>	<i>No Impact</i>
<i>Threshold</i>	<i>Substantial adverse effect on state or federally protected wetlands.</i>

Impact Discussion

No aquatic resources were found onsite during the January 2021 site assessment. The Study Area has been previously mass graded for construction and is generally sloped and terraced with no basins or drainageways that could support aquatic resources. According to the CARI, there are no previously mapped aquatic resources for the Study Area. Therefore, there would be no impact to state or federally protected wetlands.

Mitigation Measures

No mitigation measures are required.

Impact BIO-4	Project implementation could interfere substantially with the movement of any native resident or migratory fish or wildlife species with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
<i>Impact Determination</i>	<i>Less than Significant with Mitigation</i>
<i>Threshold</i>	<i>Substantial interference with the movement of any native resident or migratory fish or wildlife species with established native resident or migratory wildlife corridors or substantially impede the use of wildlife nursery sites.</i>

Impact Discussion

The disturbed grasslands and scattered shrubs within the Study Area support potential nesting habitat for a variety of common birds protected under the MBTA and California Fish and Game Code Section 3503, among others. For construction and other ground-disturbing activities with potential to affect birds and active nests protected under the MBTA, the following measures are recommended to prevent potential impacts to active bird nests.

Mitigation Measures

The following mitigation measure shall apply to the Proposed Project.

BIO-2: Migratory Bird Treaty Act Birds. For construction and other ground-disturbing activities with potential to affect birds and active nests protected under the MBTA, the following measures shall be implemented to prevent potential impacts to active bird nests.

- To the extent feasible, vegetation removal shall occur prior to the nesting season, September 16 through January 31.
- For Project activities that begin between February 1 and September 15, including vegetation removal, qualified biologists shall conduct preconstruction nesting bird surveys onsite and accessible areas within 100 feet of the Project site. The surveys shall be conducted within 14 days before the beginning of any construction activities between February 1 and September 15.
- Impacts to special-status bird and MBTA bird nests shall be avoided by establishing appropriate buffers around active raptor nests identified during preconstruction surveys; buffers shall be determined by a qualified biologist in consultation with CDFW. Project activity shall not commence within the buffer areas until a qualified biologist has determined, in coordination with CDFW, that the young have fledged, the nest is no longer active, or reducing the buffer would not result in nest abandonment. The size of the buffer may be adjusted if a qualified biologist and the applicant, in consultation with CDFW, determine that such an adjustment would not be likely to adversely affect the nest. Monitoring of the nest by a qualified biologist during construction activities may be necessary.
- If no active nests are found during preconstruction surveys, no further measures relating to protected birds is necessary.

Timing/Implementation: Prior to commencement of construction and during construction

Monitoring/Enforcement: The City of Yreka Planning Department

Residual Impact After Mitigation

Impacts would be less than significant after mitigation.

Impact BIO-5	Project implementation could conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
<i>Impact Determination</i>	<i>No Impact</i>
<i>Threshold</i>	<i>Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.</i>

Impact Discussion

There are no protected biological resources found on the Project Site in which implementation of the Proposed Project would conflict with any local policies or ordinances. Therefore, there is no impact.

Mitigation Measures

No mitigation measures are required.

Impact BIO-6	Project implementation could conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plans.
<i>Impact Determination</i>	<i>No Impact</i>
<i>Threshold</i>	<i>Conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plans.</i>

Impact Discussion

There were no adopted HCP or other approved local, regional, or state habitat conservation plans within or adjacent to the Project Site. Therefore, there is no impact.

Mitigation Measures

No mitigation measures are required.

3.2.5 Cumulative Setting, Impacts, and Mitigation Measures

Section 3.0 provides the baseline for cumulative setting and is based on General Plan projections. While this is helpful for biological resources cumulative impacts, it does not necessarily provide a specific cumulative impact setting for these resources as the impacts to these resources are generally more site specific. Therefore, the cumulative setting for biological resources includes the Project Site as well as the remaining undeveloped areas surrounding the Project site where the impacts of urbanization and threats to biological diversity and sensitive biological resources are considered most serious. Cumulative impacts on biological resources are primarily the result of the area's urbanization, habitat fragmentation, water pollution, and conversion of natural land to residential, commercial, and recreational use.

3.2.5.1 Cumulative Impacts and Mitigation Measures

Impact BIO-7	Would implementation of the proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development in the immediate area of the Proposed Project, result in the conversion of habitat and impact biological resources.
<i>Impact Determination</i>	<i>Less than cumulatively considerable</i>
<i>Threshold</i>	<i>Cumulatively result in the conversion of habitat and impact biological resources.</i>

Impact Discussion

Implementation of Mitigation Measure BIO-1 will ensure that impacts to special-status plant species are avoided. Mitigation Measure BIO-2 will reduce potential impacts to birds and active nests protected under the MBTA. Though the development of the Proposed Project will act as a continuation of the existing commercialization and urbanization of the area. As discussed previously, the Project itself would cause few to no impacts to special-status species, riparian habitat or other sensitive natural communities, wetlands, or migratory wildlife. Implementation of Mitigation Measures BIO-1 and BIO-2 would reduce the only potential impacts to biological resources to a less than significant level. These factors have effectively reduced the Project's contribution to cumulative impacts. As a result, the Proposed Project would have a less than cumulatively considerable impact.

Mitigation Measures

No mitigation measures are required.

3.3 CULTURAL RESOURCES

This section evaluates the potential impacts of the Proposed Project on cultural resources. Cultural resources are defined as pre-contact (prehistoric) and historic sites, buildings, objects, structures, and districts or any other physical evidence associated with human activity considered important to a culture, or a community for scientific, traditional, or religious reasons. This section is based on the Cultural Resources Inventory Report prepared by ECORP (2021b). The information provided below summarizes this report.

Due to the sensitive nature of cultural resources, which is restricted from public distribution by state and federal law, the cultural resources report is not included in the EIR appendices; however, all pertinent information necessary for impact determinations is included in this section.

While this section includes Native American pre-contact and historic information, TCRs (Section 3.9 of this Draft EIR) includes further analysis of the ethnography of the Project Area and potential Project impacts to TCRs.

3.3.1 *Environmental Setting*

3.3.1.1 Local Prehistory

Much of the territory now known as Siskiyou County was occupied by the Shasta Indian peoples at the time of initial contact with European-Americans, circa 1826. The traditional territory of the Shastan peoples extended into southern Oregon and to Northern California as far south as Mount Shasta. The western boundary included Seiad Valley on the Klamath River, southwest to the New River area, and east to the area of Beswick, California. Ethnographic descriptions of the Shasta people are provided by anthropologists/ethnographers who used the assistance of surviving Shasta elders. Accounts by European-American travelers and settlers supplemented this information. According to information in the Cultural Resources Records Search and Literature Review, several Shastan villages were located in the general Yreka area. One village, called Kusta (No. 120), may have been located at the site of present Yreka on the west side of Yreka Creek. The exact location of this village is not known and has not been documented archaeologically; it may have been destroyed either from mining, flooding, or freeway construction. Additional archaeological information documents at least one other village along Yreka Creek: Ar-rah-ah. This village was located north of the city at the site of present Hawkinsville on Yreka Creek.

Many of the resources significant to the Shasta to support their lifeways were found in Yreka and its vicinity. The Shastan people developed a subsistence economy based on seasonal hunting, fishing, and gathering patterns. Base camps were located in key resource areas and were visited once a year, depending on the availability of the targeted subsistence resource. After the food-gathering cycle was over, they would return to their permanent villages (largely along rivers) with their food stores to spend the winters. Structures in winter villages might include rectangular multi-family dwellings, assembly houses, communal men's sweathouses, smaller communal sweathouses, and menstrual huts.

The Karuk Tribe is also located within the surrounding area of Yreka and the Project site. The Karuk Tribe is a federally recognized Indian tribe from the far northwestern portion of California, inland along the middle section of the Klamath River. Karuk means *upstream*, as opposed to the word for their neighbors, Yurok, which means *downstream*. Culturally, the Karuk were similar to the neighboring Yurok and Hupa. Their language is one of the Hokan language family. They traditionally relied on the salmon runs that occur twice each year, as well as on gathering foods. Karuk population in the 18th century is estimated to have been around 1,500. Today, the Karuk are one of the largest tribes in California, with approximately 4,800 members, although the tribe has a small land base. Today, the Karuk live in the Orleans district in Humboldt County, the Happy Camp district, the Yreka district, along the Forks of the Salmon region in Siskiyou County, and in southern Oregon (San Diego State University [SDSU] 2022).

3.3.1.2 Regional History

The first European-Americans to pass through the locality of Yreka were the early explorers and the Hudson's Bay trappers in the mid-1820s. Among these early explorers was Peter Skene Ogden in 1926 to 1927. However, it wasn't until the discovery of gold by Abraham Thompson in March 1851 that the massive influx of European-American miners populated the early gold town of Thompson's Dry Diggings, just north of present-day Yreka. Placer deposits were found at various locations along Yreka Creek and its tributaries during the 1850s.

This sudden influx of White miners to the region was the cause of the eventual dismantling of the Shasta Indian aboriginal way of life. The Shasta Native Americans living in the Yreka area were hit hard with wholesale massacre, disease, and famine from the destruction of their food supply.

In 1852, Thompson's Dry Diggings mining camp was moved to its present location and was soon renamed Shasta Butte City, and then Yreka. According to the Cultural Resources Survey, the name Yreka was anglicized and came from the Shasta word Wai'ika, the Shasta Native American name for Mount Shasta. Early Siskiyou County history describes the beginning of the Yreka settlement with miners and settlers in 1851. Soon a few public spirited men began to lay out streets for a town. Main and Miner's streets (west and north of the Central Reach) formed the heart of the town. Aside from mining, the creek area was used for cultivation. Alvy Boles started cultivating about 140 acres "along the creek" [presumably Yreka Creek], and he raised barley, wheat, corn, potatoes, cabbages, turnips, and beets.

Early travel to Yreka from the east was along the Yreka Trail, an emigrant trail pioneered in 1852. The Yreka Trail was part of the overland emigrant trail system, and it opened shortly after gold was discovered in Yreka in 1851. The trail departed from the Applegate emigrant trail and headed west toward the foot of Mount Shasta on its northeast side. The trail was used by emigrants, miners, and the military; the latter were deployed to protect overland travelers from Native American attacks. Segments of the Yreka Trail (F.S. Site No. 05-05-57-32/CA-SIS-1728H) were recorded on public and private lands by Richard Silva and the Klamath National Forest. The route of the Yreka Trail occurs within the Master Plan area, but is today Oberlin Road, a major paved street in Yreka. There are no traces of the original emigrant trail.

The natural forces of flooding of Yreka Creek helped shape the surrounding landscape. Historic floods were a major factor shaping the city. Records indicate that in November 1861, Yreka Creek overflowed its

banks and a torrent of water came rushing down Main Street. The whole lower portion of the city was under water, and all the flats and lowlands along the creek were flooded. Yreka Creek became a 300-foot-wide swiftly rolling river. A similar flood occurred in 1864 and 1865. Once the easy gold was played out, Chinese and Portuguese miners may have mined Yreka Creek and the surrounding creeks. Chinatown was eventually located on the east side of the creek in 1886, when it moved from its original locations, first on Miner Street then on Center Street. A heavy storm in 1890 caused Yreka Creek to flood, which resulted in heavy damage to Chinatown.

In 1854, Yreka became an incorporated town. Yreka can attribute its beginning and growth as the county seat to its ability to function as a hub for trade for the miners in the area from the 1850s to the 1870s. Yreka became the county seat for Siskiyou County because of the location as a business center. To further solidify Yreka's importance in Siskiyou County, in 1889 the Yreka Western Railroad was built to link the town to the mainline of the Southern Pacific Railroad to the east (in the Montague area). A remnant of this railroad is within the Flood Hazard Reduction (FHR) Project area. This venture proved to be advantageous to Yreka's growth as a commercial center for Northern California. The broad Shasta Valley filled with cattle ranches east and southeast of Yreka/Hawkinsville. With big irrigation projects after 1900, the volcanic soil of this semi-arid vicinity produced substantial crops of alfalfa hay. The initial incursion of European-American miners and lumbermen soon led to the arrival of Chinese and Kanaka (Hawaiian) laborers, as well as ranchers, and businessmen to supply goods and materials to the mines and farms.

Lumber mills and sawmills were booming in the Yreka area after World War II. The Pine Mountain Lumber Company was one of the mills created during this boom. Pine Mountain Lumber Company was a northern subsidiary of Penberthy Lumber Company, which acquired the property in the late 1930s. The Yreka facility included sawing, milling, drying, and shipping capabilities. The mill initially cut softwoods for the war effort and later expanded into an exotic lumber market. Remnants of the Pine Mountain Lumber Mill are located outside the Master Plan Area and the FHR Project Area, with the majority of building concentrating around Sharps Road; a few buildings are also located south of Oberlin Road.

3.3.2 *Known Cultural Resources in the Project Area*

Eleven previous cultural resources investigations have been conducted within 0.5 mile of the property, covering approximately 50 percent of the total area surrounding the property within the records search radius. These studies revealed the presence of three historic-period resources within the 0.5-mile radius of the Project Area. The previous surveys were conducted between 1977 and 2015.

The results of the records search indicate that a small portion of the property has been previously surveyed for cultural resources in 1977; however, this survey was conducted 44 years ago under obsolete standards. The records search also determined that three previously recorded historic-period cultural resources are located within 0.5 mile of the Project Area. No cultural have been previously recorded within the Project Area.

3.3.3 Regulatory Framework

3.3.3.1 Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA) requires that the federal government list significant historic resources on the National Register of Historic Places (NRHP), which is the nation's master inventory of known historic resources. The NRHP is administered by the National Park Service (NPS) and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

Structures, sites, buildings, districts, and objects over 50 years of age can be listed in the NRHP as significant historic resources. However, properties under 50 years of age that are of exceptional importance or are contributors to a historic district can also be included in the NRHP.¹ The criteria for listing in the NRHP include resources that:

- a) are associated with events that have made a significant contribution to the broad patterns of history;
- b) are associated with the lives of persons significant in our past;
- c) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d) have yielded or may likely yield information important in prehistory or history.

3.3.3.2 State

California Register of Historical Resources

The State Historical Resources Commission designed the California Register of Historic Resources (CRHR) for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The CRHR is the authoritative guide to the state's significant historical and archaeological resources. This program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding, and affords certain protections under CEQA.

California Environmental Quality Act

Under CEQA, public agencies must consider the effects of their actions on both historical resources and unique archaeological resources. Pursuant to PRC Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect

¹ A [historic] district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development (NPS 1983).

on the environment.” Section 21083.2 requires agencies to determine whether proposed projects would have effects on unique archaeological resources.

Historical resource is a term with a defined statutory meaning (PRC Section 21084.1; determining significant impacts to historical and archaeological resources is described in CEQA Guidelines Section 15064.5[a], [b]). Under CEQA Guidelines Section 15064.5(a), historical resources include the following:

- A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CRHR (PRC Section 5024.1).
- A resource included in a local register of historical resources, as defined in PRC § 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC § 5024.1(g), will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing in the California Register of Historical Resources (PRC Section 5024.1), including the following:
 - a) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
 - b) Is associated with the lives of persons important in our past;
 - c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
 - d) Has yielded, or may be likely to yield, information important in prehistory or history.

The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to PRC Section 5020.1(k)), or identified in a historical resources survey (meeting the criteria in PRC Section 5024.1(g)) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

Historic resources are usually 45 years old or older and must meet at least one of the criteria for listing in the CRHR, described above (i.e., association with historical events, important people, or architectural significance), in addition to maintaining a sufficient level of physical integrity.

Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be historical resources for purposes of CEQA unless a preponderance of evidence indicates otherwise (PRC Section 5024.1 and CCR), Title 14, Section

4850). Unless a resource listed in a survey has been demolished, lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource to be potentially eligible for the CRHR.

For historic structures, CEQA Guidelines Section 15064.5(b)(3) indicates that a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995) is considered as mitigating impacts to a less than significant level.

As noted above, CEQA also requires lead agencies to consider whether projects will impact unique archaeological resources. PRC Section 21083.2(g) states:

"Unique archaeological resource" means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person."

Treatment options under PRC Section 21083.2 include activities that preserve such resources in place in an undisturbed state. Other acceptable methods of mitigation under Section 21083.2 include excavation and curation or study in place without excavation and curation (if the study finds that the artifacts would not meet one or more of the criteria for defining a unique archaeological resource).

Section 7050.5(b) of the California Health and Safety Code specifies protocol when human remains are discovered, as follows:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

CEQA Guidelines Section 15064.5(e) requires that excavation activities stop whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner

determines that the remains are those of Native Americans, the Native American Heritage Commission (NAHC) must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as timely identified by the NAHC. Section 15064.5 directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

In addition to the mitigation provisions pertaining to accidental discovery of human remains, the CEQA Guidelines also require that a lead agency make provisions for the accidental discovery of historical or archaeological resources, generally. Pursuant to Section 15064.5(f), these provisions should include “an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place.”

3.3.3.3 Local

City of Yreka General Plan Update 2002-2022

The City of Yreka General Plan emphasizes the importance of historic and cultural resource preservation to the City of Orland. The following goal and programs relates to historic preservation:

Goal LU.12: To protect and preserve the historical resources of the City of Yreka.

- Program LU.12.A: An archaeological record search shall be required on all discretionary projects, on land not previously developed or approved for a parcel map or subdivision. This record shall be supplied by the applicant, to determine if there is the potential for archaeological resources on the project site. If the record search determines there is a high probability of such resources, an on-site investigation shall occur by a professional approved by the City.*
- Program LU.12.B: If during the course of disturbance of a project site human remains are discovered, construction shall stop immediately and such find reported to the County Coroner. Work on the site with the potential for disturbing such remains shall not occur until authorized by the Coroner.*
- Program LU.12.C: The exterior modification or demolition of any building located outside of the Historic District which was constructed prior to 1910, shall not occur until it has been determined that such modification or demolition will not cause any significant impact to a historic resources.*

3.3.4 Environmental Impacts

3.3.4.1 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. For purposes of this EIR, implementation of the Proposed Project would have a significant adverse impact on cultural resources if it would result in any of the following:

1. Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5.
2. Cause a substantial adverse change in the significance of an archeological resource pursuant to CEQA Guidelines Section 15064.5.
3. Disturb any human remains, including those interred outside of formal cemeteries.

CEQA Guidelines Section 15064.5 defines *substantial adverse change* as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource is materially impaired.

CEQA Guidelines Section 15064.5(b)(2) defines *materially impaired* for purposes of the definition of substantial adverse change as follows:

The significance of an historical resource is materially impaired when a project:

1. demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
2. demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
3. demolishes or materially alters in an adverse manner those physical characteristics of a Historical Resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

CEQA requires that alternative plans or mitigation measures must be considered if a project would result in an effect that may cause a substantial adverse change in the significance of a historical resource or would cause significant effects on a unique archaeological resource. Therefore, prior to assessing effects or developing mitigation measures, the Lead Agency must determine if a historical resource or unique archaeological resource is present that may be affected by the project. The steps that are normally taken in a cultural resources investigation for CEQA compliance are as follows:

- a) Identify potential historical resources and unique archaeological resources;
- b) Evaluate the significance of the potential historical resources; and

- c) Evaluate the effects of the project on eligible (significant) historical resources and unique archaeological resources.

3.3.4.2 Methods of Analysis

As a part of the *Cultural Resources Records Search and Literature Review*, ECORP requested a records search for the property from the Northeast Information Center (NEIC) of the California Historical Resources Information System at California State University, Chico on January 14, 2021. The purpose of the records search was to determine the extent of previous surveys within a 0.5-mile (800-meter) radius of the property, and whether previously documented pre-contact (prehistoric) or historic archaeological sites, architectural resources, cultural landscapes, or ethnic resources exist within this area. The records search was completed by NEIC and returned to ECORP on February 11, 2021.

In addition to the records search, other literature reviewed included survey reports, archaeological site records, historic maps, and listings of resources on the NRHP, California Register of Historical Resources, California Points of Historical Interest, California Historical Landmarks, and National Historic Landmarks. Additionally, ECORP completed a RealQuest Property Search (based on Assessor's records) and reviewed historic General Land Office (GLO) land patent records from the Bureau of Land Management (BLM). ECORP also contacted the NAHC to request a search of its Sacred Lands File for the presence of traditional cultural properties or sacred, religious, or otherwise important Native American resources on January 14, 2021. ECORP also mailed a letter to the Siskiyou County Historical Society on January 14, 2021 to solicit comments or obtain historical information that the repository might have regarding events, people, or resources of historical significance in the area.

Previous Research

Eleven previous cultural resources investigations have been conducted within 0.5 mile of the property, covering approximately 50 percent of the total area surrounding the property within the records search radius (Table 3.3-1). These studies revealed the presence of one historic-age resource within the 0.5-mile radius of the Project site. The previous surveys were conducted between 1991 and 2015.

Table 3.3-1. Previous Cultural Studies within 0.5 Mile of the Project Site				
Report Number	Author(s)	Report Title	Year	Includes Portion of the Area of Potential Effects?
501	Peter Jenson	Archaeological Reconnaissance of 14 Acres Near the Junction of Interstate 5 and State Route 3, Near Yreka, California	1977	Yes
2135	Peter Jenson	Historic Properties Survey Report (HPSR) - Negative, for the Proposed City of Yreka's Proposed East Side Sewer System Project	1998	No

Table 3.3-1. Previous Cultural Studies within 0.5 Mile of the Project Site

Report Number	Author(s)	Report Title	Year	Includes Portion of the Area of Potential Effects?
5285	James Rock	Archaeological Survey for the Rezone and General Plan Amendment for the Roman Catholic Diocese of Sacramento and Yreka Western Railroad Property, Co.	1999	No
5755	Peter Jenson	Archaeological Inventory Survey City of Yreka Sewer Improvement Project, Yreka, Siskiyou County, California	2003	No
7646	Dennis Gray	Cultural Resource Inventory, Rogue Valley Manor Residential Housing Project, Siskiyou County, California	1994	No
8670	James Rock	Archaeological Inventory Report: Yreka Creek R.V. Park Project for RV-Group Partnership	2005	No
10584	Sean Michael Jensen	Archaeological Inventory Survey Proposed Yreka Creek Greenway Development Project c. 8 Acres, City of Yreka, Siskiyou county, California	2009	No
11478	Hamusek, Blossom	Archaeological Survey Report for the Juniper Left Turn Lane Project, Siskiyou County, California	2011	No
11702	Candice Cook-Slette and Jeff LaLande	Archaeological and Historical Resource Report for the Yreka Wastewater Treatment and Collection System Improvement Project	2012	No
12842	Brian Ludwig	State Route 3, State Route 97, and Interstate 5 Encroachment Permit Areas – Yreka to Wedd Archaeological Survey Report	2015	No
13495	John Furry	Archaeological Inventory Survey For the Proposed North View Estates Subdivision Project Involving c. 110 Acres Located North of Yreka, Siskiyou County, California	1991	No

Source: ECORP Consulting 2021b

The records search also determined that three previously recorded historic-period cultural resources are located within 0.5 mile of the Project site (Table 3.3-2). No cultural have been previously recorded within the Project site.

Table 3.3-2. Previously Recorded Cultural Resources In or Within 0.5 Mile of the Project Site

Site Number CA-SIS-	Primary Number P-47-	Recorder and Year	Age/ Period	Site Description	Within Project site?
4410H	4410	Sean M. Jensen 2009	Historic	Yreka Wastewater Treatment Facility	No
4745H	4745	Blossom Hamusek and D. McGann 2011	Historic	Yreka Chinese Cemetery	No
4746H	4746	Blossom Hamusek and D. McGann 2011	Historic	Trash scatter	No

Source: ECORP Consulting 2021b

Literature Review

A search of the NAHC's Sacred Lands File failed to indicate the presence of Native American cultural resources in the Project Area.

On June 28, 2022, as part of outreach for the Project pursuant to AB 52, the City of Yreka sent a certified letter to the Shasta Indian Nation and Karuk Tribe informing them of the Project and offering an opportunity to consult about the potential for TCRs to exist in the Project Area. TCRs may be synonymous with cultural resources. The City did not receive a response from the Shasta Indian Nation or Karuk Tribe about the Project Site.

A letter was sent to the Siskiyou County Historical Society on January 14, 2021 to solicit comments or obtain historical information that the repository might have regarding events, people, or resources of historical significance in the area (Attachment A to the Cultural Resources Report,). The Siskiyou County Historical Society responded on January 30, 2021 via email stating that the historical society has identified two Historical cemeteries in the area. These cemeteries include a cemetery located southeast of the Project Area and on Foothill Road. Topographic maps, including Figure 1, mark the location of this cemetery and it is located 0.22 mile east of the Project Area. The second Historical cemetery is a Chinese Cemetery that is not marked on the topographic map. The Chinese Cemetery is located north of SR 3 and approximately 0.4 mile northeast of the Project Area. Neither cemetery is located within the Project Area and the historical society did not identified any historical significance within the Project Area.

The *Office of Historic Preservation's Built Environment Resource Directory* for Siskiyou County (dated March 3, 2020) did not include any resources within the Project Area (Office of Historic Preservation [OHP] 2020). No built environment resources are listed along Montague Road in the City of Yreka.

The National Register Information System (NPS 2021) failed to reveal any significant properties within the Project Area. The nearest listed properties (Lewis Falkenstein's House, The Forest House, The West Miner Street-Third Street Historic District, and the Yreka Carnegie Library) are located approximately 1 mile southwest of the Project Area in Historic Yreka.

Resources listed as California Historical Landmarks (OHP 1996) and on the OHP California Historical Landmarks Website (OHP 2021) were reviewed on January 12, 2021. The nearest listed landmark is Historical Landmark number 901, the West Miner Street-Third Street Historic District in Yreka. Gold was discovered in nearby flats in 1851, resulting in Yreka becoming a commercial and transportation hub for the surrounding mining camps. The Historic District consists of three blocks on West Miner Street and four blocks of Third Street, approximately 0.65 mile southwest of the Project Area.

A review of *Historic Spots in California* (Kyle 2002) mentions that Siskiyou is a Cree word for bob-tailed horse, borrowed by the Chinook Jargon from the Oregon territory. Kyle mentions that gold was discovered by Abraham Thompson, a mule train packer, in the Yreka Flats in March 1851. The discovery location, a knoll near the intersection of today's Discovery and Yama streets in Yreka, was called Thompson Dry Diggings. The discovery of gold brought 2,000 men to the flats. Miners set up camp along Yreka Creek from Greenhorn to Hawkinsville. By May 1851, the townsite for Yreka was laid out. Yreka was designated the county seat when Siskiyou County was formally organized in 1852.

According to *California Place Names* (Gudde 1969), Yreka was first called Thompson's Dry Diggings and later Shasta Butte City. The town name was later changed in 1852 to Wyreka which was derived from an indigenous word for Mount Shasta. The spelling of the name was changed to Yreka due to a clerical error.

Historic GLO land patent records from the BLM's patent information database (BLM 2021) revealed that Jerome Churchill and the City of Yreka received a patent for 511 acres of land, including the Project Area, on July 1, 1874. The Yreka townsite included Sections 22, 23, 26, and 27 of Township 45 North, Range 7 West. Later, Charles Herzog Senior received a homestead patent for 137.7 acres of land within Section 23, including the Project Area, on November 13, 1895. The Herzog family owned and operated the City Meat Market beginning in 1854.

A RealQuest online property search for APNs 053-642-350, 053-642-360, 053-642-370, and 053-642-380 revealed that the Project Area is located on four parcels totaling 4.81 acres of vacant commercial land. No other property history information was on record with RealQuest.

The *Handbook of North American Indians* (Silver 1978) lists the nearest Native American village as Kusta, located in Yreka.

3.3.5 Project Impacts and Mitigation Measures

Impact CUL-1	Project implementation would cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5.
<i>Impact Determination</i>	<i>Less than Significant with Mitigation</i>
<i>Threshold</i>	<i>Substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?</i>

Impact Discussion

Based on the results of the records search and literature review, only a portion of the property has been surveyed for cultural resources and no previously recorded resources are known to exist within the Project Site. The property is situated in an area considered to have low to moderate sensitivity for pre-contact resources and a relatively low potential for historic-era cultural resources. The proximity of the Project Site to Yreka Creek, coupled with the fact that the location of Yreka was noted in the ethnographic literature as a Native American Village indicates there is potential for buried pre-contact resources in the Project Site. However, the soil type and age of the underlying geomorphology somewhat lessen that possibility. There is a relatively low potential for the presence of historic-period cultural resources on this property. Map review did not indicate any past structures, and the three previously recorded historic-period resources within the 0.5-mile records search radius have clearly delineated boundaries.

There is no available information to indicate that archaeological sites are present on the property; however, the property has not been surveyed by archaeologists who meet the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology. Therefore, ground disturbance associated with development of the site has the potential to impact previously unknown, subsurface historic resources should any be present. Construction personnel may not be able to identify such deposits as cultural resources without a training session. As such, mitigation is required. Therefore, Mitigation Measure CUL-1, has been included to reduce the potential impact to historical resources to be less than significant with mitigation incorporated.

Mitigation Measures

The following mitigation measure shall apply to the Proposed Project.

CUL-1: Cultural or Archaeological Resource Discovery. All subdivision improvement plans and grading plans shall include the following:

If subsurface deposits believed to be cultural or human in origin are discovered during any roadway or future construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
- If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, they shall immediately notify the City and landowner. If the find is determined to be eligible for inclusion in the NRHP or California Register of Historic Places (CRHR), the City shall consult on a finding of eligibility and implement appropriate treatment measures. Work may not resume

within the no-work radius until the City, through consultation as appropriate, determines that the site either: 1) is not eligible for the NRHP or CRHR; or 2) that the treatment measures have been completed to its satisfaction.

- If the find includes human remains, or remains that are potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Siskiyou County Coroner (in accordance with Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California PRC, and AB 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (Section 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate information center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

Timing/Implementation: *During construction*

Monitoring/Enforcement: *The City of Yreka Planning Department and Project Construction Manager*

Residual Impact After Mitigation

Impacts would be less than significant after mitigation.

Impact CUL-2	Project implementation could cause a substantial adverse change in the significance of an archeological resource pursuant to CEQA Guidelines Section 15064.5.
<i>Impact Determination</i>	<i>Less than Significant with Mitigation</i>
<i>Threshold</i>	<i>Substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?</i>

Impact Discussion

ECORP's cultural investigation shows that there is a relatively low potential for the presence of prehistoric cultural resources on the Project Site. There is no available information to indicate that archaeological sites are present on the property; however, the site has not been surveyed by archaeologists who meet the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology. Therefore, Mitigation Measure CUL-1 is provided to address the potential for the discovery of any unrecorded or previously unknown archaeological resources. With implementation of this mitigation, impacts would be less than significant.

Mitigation Measures

Implement mitigation measure CUL-1.

Residual Impact After Mitigation

Impacts would be less than significant after mitigation.

Impact CUL-3	Project implementation could disturb any human remains, including those interred outside of formal cemeteries.
<i>Impact Determination</i>	<i>Less than Significant with Mitigation</i>
<i>Threshold</i>	<i>Disturbance of any human remains, including those interred outside of formal cemeteries.</i>

Impact Discussion

Previous cultural resource investigations conducted for projects in the vicinity of the Project Area indicate there is little likelihood for Native American archaeological sites or burial sites to be present in the area. Regardless, there is a possibility of the unanticipated and accidental discovery of human remains during ground-disturbing Project-related activities. As such, Implementation of Mitigation Measure CUL-1 would assure that any discovery of human remains within the Project Area would be subject to these procedural requirements. Implementation of this mitigation measure would reduce impacts associated with the discovery/disturbance of human remains to be less than significant with mitigation incorporated.

Mitigation Measures

Implement mitigation measure CUL-1.

Residual Impact After Mitigation

Impacts would be less than significant after mitigation.

3.3.6 Cumulative Setting, Impacts, and Mitigation Measures

3.3.6.1 Cumulative Setting

Section 3.0 provides the baseline for cumulative setting and is based on General Plan projections. While this is helpful for cultural resources cumulative impacts, it does not necessarily provide a specific cumulative impact setting for these resources as the impacts to these resources are generally more site specific. Therefore, the cumulative setting for cultural resources includes the Project site as well as the remaining undeveloped areas surrounding the Project site where the impacts of urbanization and potential for impacts to cultural resources are considered most serious. Cumulative impacts on cultural resources are primarily the result of the area's urbanization and conversion of undisturbed land to urban use. Developments and planned land uses, including the Proposed Project, would cumulatively contribute to impacts to known and unknown cultural resources in the area. As previously discussed, Section 3.3.1 Existing Setting provides an overview of cultural resources and the history of the region.

3.3.6.2 Cumulative Impacts and Mitigation Measures

Impact CUL-4	Would Implementation of the proposed project, along with any foreseeable development in the project vicinity, could result in cumulative impacts to cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts and features)?
<i>Impact Determination</i>	<i>Less than Cumulatively Considerable</i>
<i>Threshold</i>	<i>Result in cumulative impacts to cultural resources.</i>

Impact Discussion

As mitigated, the direct impacts associated with the Project will be reduced to a less than significant level. While it is possible that grading and development will result in the discovery of cultural resources, mitigation measures and state and federal laws already in place will set in motion actions designed to mitigate these potential impacts. The Project is adjacent to existing residential and commercial developments. Future development of the area may also affect cultural resources. However, mitigation proposed in this section and existing federal and state laws would reduce the Project's potential cultural resources impacts to a less than significant level. Therefore, the Project's impact is considered less than cumulatively considerable.

3.3.6.3 Cumulative Mitigation Measures

None required.

3.4 ENERGY

This section describes the energy consumption associated with the Project due to the potential direct and indirect environmental impacts. Such impacts include the depletion of nonrenewable resources (e.g., oil, natural gas, coal) and emissions of pollutants during the construction and operational phases. The impact analysis focuses on the three relevant energy sources for Proposed Project: electricity, the equipment-fuel necessary for Project construction, and the automotive fuel necessary for Project operations.

3.4.1 *Environmental Setting*

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

3.4.1.1 Energy Types and Sources

California relies on a regional power system comprised of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Natural gas provides California with a majority of its electricity, closely followed by renewables, large hydroelectric and nuclear (California Energy Commission [CEC] 2022a). PacifiCorp provides electricity services to Yreka, which encompasses the Project Area. PacifiCorp provides energy and electricity services to California, Washington, and Oregon. They own approximately 11,668 Megawatts (MW) of generation capacity from a diverse mix of hydro, wind, natural gas, coal, solar and geothermal resources. In 2021, PacifiCorp unveiled their Integrated Resource Plan, which incorporates more renewable energy resources in their electricity generation (PacifiCorp 2022). This plan is expected to result in a 69-percent reduction of the company's greenhouse gas emissions from 2005 levels by 2030. There are currently no natural gas utility companies that service the Project Site area, resulting in residences and businesses acquiring propane from various local sources.

3.4.1.2 Energy Consumption

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

Table 3.4-1 shows electricity consumption associated with all nonresidential uses in Siskiyou County from 2017 to 2021. As indicated, the demand has generally increased since 2017.

Table 3.4-1. Non-Residential Electricity Consumption in Siskiyou County 2017-2021

Year	Electricity Consumption (kWh)
2021	292,332,504
2020	285,052,808
2019	269,141,808
2018	273,575,109
2017	273,820,430

Source: CEC 2022b
kWh=Kilowatt Hours

Automotive fuel consumption in Siskiyou County from 2017 to 2021 is shown in Table 3.4-2. Fuel consumption demand has decreased slightly since 2017.

Table 3.4-2. Automotive Fuel Consumption in Siskiyou County 2017-2021

Year	Total Fuel Consumption (gallons)
2021	84,449,047
2020	77,721,252
2019	83,580,514
2018	83,725,556
2017	84,791,909

Source: CARB 2021

3.4.2 Regulatory Setting

3.4.2.1 State

Senate Bill 1389 Integrated Energy Policy Report

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety (PRC Section 25301a). The CEC prepares these assessments and associated policy recommendations every 2 years, with updates on alternate years, as part of the Integrated Energy Policy Report (IEPR).

The 2017 IEPR focuses on next steps for transforming transportation energy use in California. The 2017 IEPR addresses the role of transportation in meeting state climate, air quality, and energy goals; the transportation fuel supply; the Alternative and Renewable Fuel and Vehicle Technology Program; current and potential funding mechanisms to advance transportation policy; transportation energy demand forecasts; the status of statewide plug-in electric vehicle infrastructure; challenges and opportunities for electric vehicle infrastructure.

Executive Order B-55-18

Governor Edmund (Jerry) Brown, Jr. Signed Executive Order (EO) B-55-18 in September 2018, which established a new statewide goal “to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter.” Carbon neutrality refers to achieving a net zero carbon dioxide emissions. This can be achieved by reducing or eliminating carbon emissions, balancing carbon emissions with carbon removal, or a combination thereof. This goal is in addition to existing statewide targets for greenhouse gas emission reduction. EO B-55-18 requires the CARB to “work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.”

Senate Bill 1368

On September 29, 2006, Governor Arnold Schwarzenegger signed into law SB 1368 (Perata, Chapter 598, Statutes of 2006). The law limits long-term investments in baseload generation by the state's utilities to those power plants that meet an emissions performance standard jointly established by the CEC and the California Public Utilities Commission (CPUC).

The CEC has designed regulations that do the following:

- Establish a standard for baseload generation owned by, or under long-term contract to, publicly owned utilities, of 1,100 pounds carbon dioxide per Megawatt Hour (MWh). This would encourage the development of power plants that meet California's growing energy needs while minimizing their emissions of greenhouse gas.
- Require posting of notices of public deliberations by publicly owned utilities on long-term investments on the CEC website. This would facilitate public awareness of utility efforts to meet customer needs for energy over the long term while meeting the State's standards for environmental impact.
- Establish a public process for determining the compliance of proposed investments with the Emissions Performance Standard (EPS) (Perata, Chapter 598, Statutes of 2006).

Renewable Energy Sources (Renewable Portfolio Standards)

Established in 2002 under SB 1078 and accelerated by SB 107 (2006) and SB 2 (2011), California's Renewables Portfolio Standard (RPS) obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent of their electricity from renewable energy sources by 2020. Eligible renewable resources are defined in the 2013 RPS to include biodiesel; biomass; hydroelectric and small hydro (30 MW or less); Los Angeles Aqueduct hydro power plants; digester gas;

fuel cells; geothermal; landfill gas; municipal solid waste; ocean thermal, ocean wave, and tidal current technologies; renewable derived biogas; multi-fuel facilities using renewable fuels; solar photovoltaic; solar thermal electric; wind; and other renewables that may be defined later. Governor Brown signed SB 350 on October 7, 2015, which expands the RPS by establishing a goal of 60 percent of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses of retail customers (such as heating, cooling, lighting, or class of energy uses upon which an energy efficiency program is focused) through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal. SB 350 also provides for the transformation of the California Independent System Operator (CAISO) into a regional organization to promote the development of regional electricity transmission markets in the western states and to improve the access of consumers served by the CAISO to those markets, pursuant to a specified process. In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

3.4.3 Environmental Impacts

3.4.3.1 Thresholds of Significance

CEQA Guidelines Appendix G states that a project may have a significant effect on the environment if implementation would result in any of the following:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

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

3.4.3.2 Methods of Analysis

Construction and operational related energy consumption estimated to be consumed by the Project include the number of kWh of electricity and gallons of gasoline. Modeling was based on Project-specific information. The amount of total construction-related fuel used was estimated using ratios provided in the *Climate Registry's General Reporting Protocol for the Voluntary Reporting Program, Version 2.1* (Climate Registry 2016). Electricity consumption estimates were calculated using the CalEEMod, version 2020.4.0 (ECORP 2022a, Appendix 3.1). CalEEMod is a statewide land use computer model designed to quantify

resources associated with both construction and operations from a variety of land use projects. Operational automotive fuel consumption has been calculated with the CARB Emission FACTor (EMFAC) 2021. EMFAC 2021 is a mathematical model that was developed to calculate emission rates and rates of gasoline consumption from motor vehicles that operate on California's highways, freeways, and local roads.

3.4.3.3 Project Impacts and Mitigation Measures

Impact ENERGY-1	Project implementation could result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction of operation.
<i>Impact Determination</i>	<i>Less than Significant.</i>
<i>Threshold</i>	<i>Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.</i>

Impact Discussion

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

Energy consumption associated with the Proposed Project is summarized in Table 3.4-3. Energy consumption calculations are provided in Appendix 3.4.

Table 3.4-3. Proposed Project Energy and Fuel Consumption		
Energy Type	Annual Energy Consumption	Percentage Increase Countywide
Building Energy Consumption		
Electricity Consumption ¹	933,379 kilowatt-hours	0.3193
Automotive Fuel Consumption		
Project Construction Year 1	43,054 gallons	0.0509
Project Construction Year 2	69,557 gallons	0.0824
Project Construction Year 3	26,305 gallons	0.0311
Project Operations ³	395,962 gallons	0.4689

Source: ¹CalEEMod; ²Climate Registry 2016; ³EMFAC2021 (CARB 2021)

Notes: The Project increases in electricity consumption are compared with all of the non-residential buildings in Siskiyou County in 2021, the latest data available. The Project increases in construction and operations automotive fuel consumption are compared with the countywide fuel consumption in 2021, the most recent full year of data.

Operation of the Proposed Project only includes electricity usage. As shown in Table 3.4-3, the annual electricity consumption due to operations would be 933,379 kWh, resulting in a negligible increase (0.3193 percent) in the typical annual electricity consumption attributable to all non-residential uses in Siskiyou County. This is potentially a conservative estimate since in September 2018 Governor Brown signed EO B-55-18, which established a new statewide goal “to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter.” Carbon neutrality refers to achieving a net-zero carbon dioxide emissions. This can be achieved by reducing or eliminating carbon emissions, balancing carbon emissions with carbon removal, or a combination of the two. This goal is in addition to existing statewide targets for Greenhouse Gas (GHG) emission reduction. Governor’s EO B-55-18 requires CARB to “work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.” For these reasons, the Project would not result in the inefficient, wasteful, or unnecessary consumption of building energy.

Fuel necessary for Project construction would be required for the operation and maintenance of construction equipment and the transportation of materials to the Project site. The fuel expenditure necessary to construct the physical building and infrastructure would be temporary, lasting only as long as Project construction. As further indicated in Table 3.4-3, the Project’s gasoline fuel consumption during the one-time construction period is estimated to be 43,054 gallons over the course of the first year of construction, 69,557 gallons in the second year of construction, and 26,305 gallons in the third year of construction. This would increase the annual construction related fuel use in the county by 0.0509, 0.0824, and 0.0311 percent, respectively. As such, Project construction would have a nominal effect on local and regional energy supplies. No unusual Project characteristics would necessitate the use of construction

equipment that would be less energy-efficient than at comparable construction sites in the region or the state. Construction contractors would purchase their own gasoline and diesel fuel from local suppliers and would judiciously use fuel supplies to minimize costs due to waste and subsequently maximize profits. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency, combined with state regulations limiting engine idling times and requiring recycling of construction debris would further reduce the amount of transportation fuel demand during Project construction. For these reasons, it is expected that construction fuel consumption associated with the Project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature.

The Project is estimated to generate approximately 2,619 daily trips (GHD 2022a). As indicated in Table 3.4-3, this would result in the consumption of approximately 88,100 gallons of automotive fuel per year, which would increase the annual countywide automotive fuel consumption by 0.013 percent. This analysis conservatively assumes that all of the automobile trips projected to arrive at the Project during operations would be new to Siskiyou County. Fuel consumption associated with the vehicle trips generated by the Project during operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

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

Mitigation Measures

No mitigation measures are required.

Impact ENERGY-2	Project implementation could conflict with or obstruct a state or local plan for renewable energy or energy efficiency.
<i>Impact Determination</i>	<i>Less than Significant.</i>
<i>Threshold</i>	<i>Conflict with or obstruction of a state or local plan for renewable energy or energy efficiency.</i>

Impact Discussion

The Project would be designed in a manner consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. The Project will be built to the Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the CCR (Title 24). Title 24 was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every 3 years; the 2016 standards became effective January 1, 2017. The 2022 Title 24 updates went into effect on January 1, 2020. The 2022 Energy Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2022 update to the Energy Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and

alterations to existing buildings. The 2022 Energy Standards are a major step toward meeting Zero Net Energy. Buildings permitted on or after January 1, 2020 must comply with the 2022 Standards. Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments. Additionally, in January 2010, the State of California adopted the California Green Building Standards Code (CalGreen) that establishes mandatory green building standards for all buildings in California. The code was subsequently updated in 2013. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. With these building standards in place, the Project would not obstruct any state or local plan for renewable energy or energy efficiency.

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

Mitigation Measures

No mitigation measures are required.

3.4.4 Cumulative Setting, Impacts, and Mitigation Measures

The cumulative setting associated with the Proposed Project includes approved, proposed, planned, and other reasonably foreseeable projects and development in the City of Yreka and Siskiyou County. Developments and planned land uses, including the Proposed Project, would cumulatively contribute to impacts resulting in energy consumption. However, no other projects of this type are approved, proposed, planned, and other reasonably foreseeable at this time.

3.4.4.1 Cumulative Impacts and Mitigation Measures

Impact ENERGY-3	Implementation of the proposed project, along with any foreseeable development in the project vicinity, could result in cumulative impacts to energy consumption.
<i>Impact Determination</i>	<i>Less than Significant.</i>
<i>Threshold</i>	<i>Cumulatively result in cumulative impacts to energy consumption?</i>

Impact Discussion

As previously described, the impact analysis contained herein focuses on the fuel consumption needed for Project implementation. As shown, Project fuel consumption would be negligible and would not be considered inefficient, wasteful, or unnecessary with regard to energy. Thus, the Proposed Project's impacts are considered less than considerable contribution to cumulative impacts regarding energy consumption.

Mitigation Measures

No mitigation measures are required.

3.5 GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES

The purpose of this section is to disclose and analyze the potential impacts associated with the paleontological resources of the Project Site.

The IS completed for the Proposed Project determined that there were no impact or a less than significant impact to the majority of subjects listed in the Geology and Soil impact areas. These include the following:

- Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving the rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, and landslides;
- Result in substantial soil erosion or the loss of topsoil;
- 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;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property; and
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

As such, these impact areas will not be discussed further in this section.

3.5.1 *Environmental Setting*

3.5.1.1 **Paleontological Resources**

A paleontological records search was completed using the University of California Museum of Paleontology (UCMP) Locality Search website on April 28, 2021. The search included a review of the institution's paleontology specimen collection records for Siskiyou County, including the Project Area and vicinity. In addition, ECRP conducted queries of the UCMP catalog records, a review of regional geologic maps from the California Geological Survey (CGS), a review of local soils data, and a review of existing literature on paleontological resources of Siskiyou County. The purpose of the assessment was to determine the sensitivity of the Project Area, if known occurrences of paleontological resources are present within or immediately adjacent to the Project Area, and if Project implementation could result in significant impacts to paleontological resources. Paleontological resources include mineralized (fossilized) or unmineralized bones, teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains.

The results of the search of the UCMP indicated that 125 paleontological specimens were recorded from 53 identified localities and 72 unidentified localities in Siskiyou County. Paleontological resources include fossilized remains of plants, mammals, fish, mollusks, and microfossils. No paleontological resources have been previously recorded within or near the Proposed Project Site (UCMP 2022).

3.5.2 Regulatory Setting

3.5.2.1 Federal

Paleontological Resources Preservation Act

The Paleontological Resources Preservation Act (PRPA), Title VI, Subtitle D in the Omnibus Public Lands Act of 2009, Public Law 111-011 directs the secretaries of Interior and Agriculture to manage and protect paleontological resources on federal land using scientific principles and expertise. With the passage of the PRPA, Congress officially recognized the importance of paleontological resources on federal lands by declaring that fossils from federal lands are federal property that must be preserved and protected using scientific principles and expertise.

Code of Federal Regulations, Title 43.

Under Title 43, CFR Section 8365.1-5, the collection of scientific and paleontological resources, including vertebrate fossils, on federal land is prohibited. The collection of a *reasonable amount* of common invertebrate or plant fossils for non-commercial purposes is permissible (43 CFR 8365.1-5).

3.5.2.2 State

California Public Resources Code

Paleontological resources are classified as nonrenewable scientific resources. PRC Section 5097.5 et seq. makes it a misdemeanor for anyone to knowingly disturb any archaeological, paleontological, or historical features situated on public lands. No state or local agencies have specific jurisdiction over paleontological resources. No state or local agency requires a paleontological collecting permit to allow for the recovery of fossil remains discovered as a result of construction-related earth-moving on state or private land on a project site.

3.5.3 Environmental Impacts

3.5.3.1 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. For purposes of this EIR, implementation of the Proposed Project may have a significant adverse impact on paleontological resources if it would:

- directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

3.5.3.2 Methods of Analysis

For the purposes of this DEIR, ECORP analyzed information provided by the UCMP Locality Search website to determine the potential for paleontological resources within the area of the Proposed Project. The search included a review of the institution's paleontology specimen collection records for Siskiyou County, including the Project Area and vicinity. In addition, ECORP completed a query of the UCMP catalog

records, a review of regional geologic maps from the CGS, a review of local soils data, and a review of existing literature on paleontological resources of Siskiyou County.

3.5.3.3 Project Impacts and Mitigation Measures

Impact GEO-1	Project implementation could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
<i>Impact Determination</i>	<i>Less than Significant with Mitigation</i>
Threshold	Substantial adverse change in the significance of a unique paleontological resource or site or unique geologic feature

Impact Discussion

As described above, a search of the UCMP failed to indicate the presence of paleontological resources in the areas potentially affected by construction activities for the Proposed Project. Although paleontological resource sites were not identified in the areas affected by the Project, there is a possibility that unanticipated paleontological resources will be encountered during ground-disturbing Project construction activities. As such, this is considered a potentially significant impact requiring mitigation. Implementation of Mitigation Measure PALEO-1, addresses the potential discovery of previously unknown unique paleontological resources and implements actions to avoid impact to those resources. For this reason, the impact is considered less than significant with mitigation incorporated.

Mitigation Measures

The following mitigation measures shall apply to the Proposed Project.

PALEO-1: Discovery of Unknown Paleontological Resources.

If paleontological or other geologically sensitive resources are identified during any phase of Project development, the construction manager shall cease operation at the site of the discovery and immediately notify the City. The City shall retain a qualified paleontologist to evaluate the find and to prescribe mitigation measures to reduce impacts to a less than significant level. In considering any suggested mitigation proposed by the consulting paleontologist, City shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, Project design, costs, land use assumptions, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the Project site while mitigation for paleontological resources is carried out.

Timing/Implementation: *Prior to and during construction*

Monitoring/Enforcement: *City of Yreka Planning Department and Project Construction Manager*

Residual Impact After Mitigation

Impacts would be less than significant after mitigation.

3.5.4 Cumulative Setting, Impacts, and Mitigation Measures**3.5.4.1 Cumulative Setting**

Section 3.0 provides the baseline for cumulative setting and is based on General Plan projections. While this is helpful for cultural resources cumulative impacts, it does not necessarily provide a specific cumulative impact setting for these resources as the impacts to these resources are generally more site-specific. Therefore, the cumulative setting for cultural resources includes the Project site as well as the remaining undeveloped areas surrounding the Project site where the impacts of urbanization and potential for impacts to cultural resources are considered most serious. Cumulative impacts on cultural resources are primarily the result of the area's urbanization and conversion of undisturbed land to urban use. Developments and planned land uses, including the Proposed Project, would cumulatively contribute to impacts to known and unknown cultural resources in the area. As previously discussed, Section 3.3.1 *Existing Setting* provides an overview of cultural resources and the history of the region.

Impact GEO-2	Would Implementation of the proposed project, along with any foreseeable development in the project vicinity, could result in cumulative impacts to unique paleontological resource or site or unique geologic feature?
<i>Impact Determination</i>	<i>Less than Cumulatively Considerable</i>
Threshold	Result in cumulative impacts to a unique paleontological resource or site or unique geologic feature.

Impact Discussion

As mitigated, the direct impacts associated with the Project will be reduced to a less than significant level. While it is possible that grading and development will result in the discovery of paleontological resources, Mitigation Measure PALEO-1 will set in motion actions designed to mitigate these potential impacts. The Project is adjacent to existing sparse residential and commercial developments. Future development of the area may also affect paleontological resources. However, mitigation proposed in this section would reduce the Project's potential paleontological resources impacts to a less than significant level. Therefore, the Project's impact is considered less than cumulatively considerable.

3.6 GREENHOUSE GAS EMISSIONS

This section documents the results of a GHG emissions analysis. This section is based on the *Air Quality & Greenhouse Gas Emissions Assessment* prepared for the Project (ECORP 2022, Appendix 3.1). The information provided below is an abridged version of this report. This analysis was prepared using methodologies and assumptions recommended by the SCAPCD. Regional and local existing conditions are presented, along with pertinent GHG emissions-related standards and regulations. The purpose of this assessment is to estimate Project-generated GHG emissions and to determine the level of impact the Project would have on the environment. Mitigation measures are also provided for significant impacts.

3.6.1 Environmental Setting

GHGs are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), and chlorofluorocarbons, creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH₄ traps more than 25 times more heat per molecule than CO₂, and N₂O absorbs 298 times more heat per molecule than CO₂. Often, estimates of GHG emissions are presented in Carbon Dioxide Equivalents (CO₂e). Expressing GHG emissions in CO₂e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

3.6.1.1 State

Executive Order S-3-05

Governor Arnold Schwarzenegger signed EO S-3-05 in 2005, which proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

Assembly Bill 32 Climate Change Scoping Plan and Updates

In 2006, the California legislature passed AB 32 (Health and Safety Code Section 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 required CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25-percent reduction in emissions). Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which outlined measures to meet the 2020 GHG

reduction goals. California exceeded the target of reducing GHG emissions to 1990 levels by the year 2017.

AB 32 requires the Scoping Plan to be updated at least every 5 years. The latest update, the 2017 Scoping Plan Update, addresses the 2030 target established by SB 32 as discussed below and establishes a proposed framework of action for California to meet a 40-percent reduction in GHG emissions by 2030 compared to 1990 levels. The key programs that the Scoping Plan Update builds on include increasing the use of renewable energy in the state, the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and reduction of methane emissions from agricultural and other wastes.

Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030.

Senate Bill X1-2 of 2011, Senate Bill 350 of 2015, and Senate Bill 100 of 2018

In 2018, SB 100 was signed codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings

The Building and Efficiency Standards (Energy Standards) were first adopted and put into effect in 1978 and have been updated periodically in the intervening years. These standards are a unique California asset that have placed the State on the forefront of energy efficiency, sustainability, energy independence and climate change issues. The 2022 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2022 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The 2022 standards are a major step toward meeting Zero Net Energy. The most significant efficiency improvement to the residential Standards includes the introduction of photovoltaic into the perspective package, improvements for attics, walls, water heating and lighting. Buildings permitted on or after January 1, 2020 must comply with the 2022 Standards.

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CalGreen and establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. Like Part 6 of Title 24, the CalGreen standards are periodically updated, with increasing energy savings and efficiencies associated with each code update. CalGreen contains voluntary *Tier 1* and *Tier 2* standards that are not mandatory statewide but could be required by a City or County. These are *reach* standards that can be adopted by local jurisdictions and may be incorporated as mandatory standards in future code cycles.

Phase 1 and Phase 2 Heavy-Duty Vehicle GHG Standards

CARB has adopted a new regulation for GHG emissions from heavy-duty trucks and engines sold in California. It establishes GHG emission limits on truck and engine manufacturers and harmonizes with the USEPA rule for new trucks and engines nationally. Existing heavy-duty truck vehicle regulations in California include engine criteria emission standards, tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy-Duty Tractor-Trailer Greenhouse Gas Regulation), and in-use fleet retrofit requirements such as the Truck and Bus Regulation. In September 2011, the USEPA adopted their new rule for heavy-duty trucks and engines. The USEPA rule has compliance requirements for new compression and spark ignition engines, as well as trucks from Classes 2b through 8. Compliance requirements begin with model year 2014 with stringency levels increasing through model year 2018. The rule organizes truck compliance into three groupings:

- a) heavy-duty pickups and vans;
- b) vocational vehicles; and
- c) combination tractors.

The USEPA rule does not regulate trailers. CARB staff has worked jointly with the USEPA and the National Highway Traffic Safety Administration on the next phase of federal GHG emission standards for medium-duty trucks and heavy-duty truck vehicles, called federal Phase 2. The federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later model year heavy-duty truck vehicles, including trailers. In February 2019, the Office of Administrative Law approved the Phase 2 Heavy-Duty Vehicle GHG Standards, which became effective April 1, 2019. The Phase 2 GHG standards are needed to offset projected Vehicle Miles Traveled (VMT) growth and keep heavy-duty truck CO₂ emissions declining. The federal Phase 2 standards establish for the first time, federal emissions requirements for trailers hauled by heavy-duty tractors. The federal Phase 2 standards are more technology-forcing than the federal Phase 1 standards, requiring manufacturers to improve existing technologies or develop modern technologies to meet the standards. The federal Phase 2 standards for tractors, vocational vehicles, and heavy-duty Pick-Up Trucks And Vans will be phased-in from 2021-2027, additionally for trailers, the standards are phased-in from 2018 (2020 in California) through 2027.

3.6.1.2 Local

Siskiyou County Air Pollution Control District

The SCAPCD has primary responsibility for developing and implementing rules and regulations to maintain national and state air quality standards, permitting new or modified sources, developing air quality management plans, and adopting and enforcing air pollution regulations for all projects in Siskiyou County. The AB 32 Scoping Plan does not specify an explicit role for local air districts with respect to implementing statewide GHG reduction strategies, but it does state that CARB will work actively with air districts in coordinating emissions reporting, encouraging and coordinating GHG reductions, and providing technical assistance in quantifying reductions. The ability of air districts to control emissions (both criteria pollutants and GHGs) is provided primarily through permitting, but also via their role as a

CEQA lead or commenting agency, the establishment of CEQA thresholds, and the development of analytical requirements for CEQA documents.

The SCAPCD has not adopted thresholds of significance for the analysis of GHG emissions under CEQA.

3.6.2 Environmental Impacts

3.6.2.1 Thresholds of Significance

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

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

The Appendix G thresholds for GHG emissions do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or other performance-based standards." (14 CCR 15064.4(b)). A lead agency may use a *model or methodology* to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change." (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the Project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the Project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that:

"[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies,

or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence” (14 CCR 15064.7(c)).

The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA’s requirements for cumulative impact analysis (see CEQA Guidelines Section 15130). As a note, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines Section 15064(h)(3), a project’s incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a “water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions.” Put another way, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

As previously stated, the SCAPCD has not adopted thresholds of significance for the analysis of GHG emissions under CEQA. Therefore, the significance of the Project’s GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Specifically, the Project will be assessed for consistency with the California AB 32 Scoping Plan and subsequent updates, described in detail above.

3.6.2.2 Methods of Analysis

Where GHG emission quantification was required, emissions were modeled using CalEEMod, version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Project construction generated GHG emissions were calculated a combination of CalEEMod model defaults for Siskiyou County coupled with details associated with construction timing and duration provided by the Project proponent. Operational GHG emissions were based on the Project site plans and traffic trip generation rates from GHD (2022).

3.6.2.3 Project Greenhouse Gas Emissions

In view of the above considerations, this assessment quantifies the Project’s total annual GHG emissions.

Construction

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project Site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 3.6-1 illustrates the specific construction generated GHG emissions that would result from construction of the Project. Once construction is complete, the generation of these GHG emissions would cease.

Table 3.6-1. Construction-Related Greenhouse Gas Emissions	
Emissions Source	CO₂e (Metric Tons/Year)
Construction Year One (Phase 1)	436
Construction Year Two (Phases 1 & 2)	705
Construction Year Three (Phase 2)	266

Source: CalEEMod version 2020.4.0. Refer to Appendix 3.1 for Model Data Outputs.

Notes: Building construction, paving, and painting assumed to occur simultaneously. Emissions account for the cut of 160 cy of soil and fill of 35,900 cy of soil distributed evenly between the two construction phases.

As shown in Table 3.6-1, Project construction would result in the generation of approximately 436 metric tons of CO₂e during the first year of construction, 705 metric tons of CO₂e during the second year of construction, and 266 metric tons of CO₂e during the third year of construction. Once construction is complete, the generation of these GHG emissions would cease. Furthermore, GHG emissions generated by the construction sector have been declining in recent years. For instance, construction equipment engine efficiency has continued to improve year after year. The first federal standards (Tier 1) for new off-road diesel engines were adopted in 1994 for engines over 50 Horsepower (hp) and were phased in from 1996 to 2000. In 1996, a Statement of Principles pertaining to off-road diesel engines was signed between the USEPA, CARB, and engine makers (including Caterpillar, Cummins, Deere, Detroit Diesel, Deutz, Isuzu, Komatsu, Kubota, Mitsubishi, Navistar, New Holland, Wis- Con, and Yanmar). On August 27, 1998, the USEPA signed the final rule reflecting the provisions of the Statement of Principles. The 1998 regulation introduced Tier 1 standards for equipment under 50 hp and increasingly more stringent Tier 2 and Tier 3 standards for all equipment with phase-in schedules from 2000 to 2008. As a result, all off-road, diesel-fueled construction equipment manufactured in 2006 or later has been manufactured to Tier 3 standards. Tier 3 engine standards reduce precursor and subset GHG emissions such as nitrogen oxide by as much as 60 percent. On May 11, 2004, the USEPA signed the final rule introducing Tier 4 emission standards, which were phased in over the period of 2008 to 2015. The Tier 4 standards require that emissions of nitrogen oxide be further reduced by about 90 percent. All off-road, diesel-fueled construction equipment manufactured in 2015 or later will be manufactured to Tier 4 standards.

In addition, the CEC recently released the 2022 Building Energy Efficiency Standards contained in the CCR, Title 24, Part 6 (also known as the California Energy Code). The 2022 updates to the Building Energy Efficiency Standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions, and alterations to existing buildings. For instance, effective January 1, 2017,

owners/builders of construction projects have been required to divert (recycle) 65 percent of construction waste materials generated during the project construction phase. This requirement greatly reduces the generation of GHG emissions by reducing decomposition at landfills, which is a source of CH₄, and reducing demand for natural resources.

Operations

Operation of the Project would result in an increase in GHG emissions primarily associated with motor vehicle trips. Long-term operational GHG emissions attributed to the Project are identified in Table 3.6-2.

Table 3.6-2. Operational Greenhouse Gas Emissions	
Emissions Source	CO₂e (Metric Tons/Year)
Area Source	0
Energy	620
Mobile	2,156
Waste	43
Water	14
Total:	2,833

Source: CalEEMod version 2020.4.0. Refer to Appendix 3.1 for Model Data Outputs.

Notes: Emission projections predominately based on CalEEMod model defaults for Siskiyou County. Average daily vehicle trips provided by GHD (2022).

As shown in Table 3.6-2 Project operations would result in the generation of 2,833 metric tons of CO₂e annually. A large majority of these emissions would be generated by mobile sources, which is an emission source that cannot be regulated by the City. Additionally, GHG emissions are global pollutants. They can be carried miles away from the original source and have long atmospheric lifetimes compared to local pollutants. GHG Emissions do not directly pose a threat to human health but can have numerous indirect effects. As previously stated, GHG emissions have been directly correlated to climate change. This can lead to events such as droughts, heat waves, increased intensity in storm events and rising sea levels. These can result in decreased precipitation, increased wildfires, saltwater infiltration of groundwater tables and decreased crop yields. A reduction of vehicle trips to and from the Proposed Project Site would reduce the amounts of mobile emissions. Methods of reducing vehicle trips include carpooling, transit, cycling, and pedestrian connections. However, this Project is proposing a fueling center, convenience store, and hotel. The reduction of vehicle trips is only feasible for the employees working in the facilities, though the majority of traffic trips instigated by the Project would be related to long-distance traveler and hauling trips.

As stated above, the State of California has implemented numerous strategies pertaining to automobiles and trucks and the reduction of emissions that directly apply to the Project. Urban goods delivery is an essential component of the greater freight system and vital to the urban economy. While urban goods delivery represents a small share of urban traffic, it generates a disproportionate amount of GHG emissions. The State of California promulgates policies designed and implemented to improve the efficiency and environmental footprint of the urban freight system, including the introduction of zero and near-zero emission vehicles - a strategy embedded in the Governor's Sustainable Freight Action Plan as well as CARB's AB 32 Scoping Plan and Mobile Source Strategy.

Additionally, the Project Site is located approximately 0.3 mile east of I-5, a major regional freeway corridor. Further, I-5 has been identified as a *Major International Trade Highway Route* in the *California State Goods Movement Action Plan* (CalEPA 2007) and therefore serves to accommodate existing truck trips along the interstate. The Goods Movement Action Plan is a statewide initiative to improve and expand California's goods movement industry and infrastructure in a manner which will increase mobility and relieve traffic congestion as well as reduce GHG emissions.

3.6.2.4 Project Impacts and Mitigation Measures

Impact GHG-1	Generation of Greenhouse Gas Emissions Resulting in Conflicts with any Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases.
<i>Impact Determination</i>	<i>Less than Significant.</i>
<i>Threshold</i>	<i>Substantial greenhouse gas emissions generated.</i>

Impact Discussion

As previously described, the significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Specifically, the Project will be assessed for consistency with the California Scoping Plan and subsequent updates.

The Scoping Plan (approved by CARB in 2008 and updated in 2014 and 2017) provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is neither directly applicable to specific projects nor intended to be used for project-level evaluations. It does not provide recommendations for lead agencies to develop evidence-based numeric thresholds consistent with the Scoping Plan, the state's long-term GHG goals, and climate change science. Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other

state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of the Scoping Plan and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. Table 3.6-3 highlights measures that have been, or will be, developed under the Scoping Plan and presents the Project's consistency with Scoping Plan measures. The Project would comply with all regulations adopted in furtherance of the Scoping Plan to the extent required by law and to the extent that they are applicable to the Project.

Table 3.6-3. Project Consistency with Scoping Plan GHG Emission Reduction Strategies		
Scoping Plan Measure	Measure Number	Proposed Project Consistency
Transportation Sector		
Advanced Clean Cars	T-1	<i>Consistent.</i> The Project's employees and customers would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Low Carbon Fuel Standard	T-2	<i>Consistent.</i> Motor vehicles driven by the Project's employees and customers would use compliant fuels.
Regional Transportation-Related GHG Targets	T-3	<i>Consistent.</i> The Siskiyou County Regional Transportation Plan establishes to several goals, policies, and implementation measures.
Advanced Clean Transit	N/A	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure.
Last-Mile Delivery	N/A	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure.
Reduction in VMT	N/A	<i>Consistent.</i> The Project would result in a VMT reductions with the implementation of the required City, County, State, and federal policies and actions needed for Project approval. Additionally, the Project Site can be identified for its <i>location efficiency</i> . Location efficiency describes the location of the Project Site relative to the type of urban landscape within which it's proposed to fit. In general, compared to the statewide average, a project could realize vehicle miles traveled (VMT) reductions up to 65 percent in a urbanized area, and thus reductions in GHG emissions. The Project is in proximity to residential land uses and thus would provide nearby shopping and employment opportunities for the existing residents in the Project vicinity. The increases in land use diversity and mix of uses in the Project Area would reduce vehicle trips and VMT by encouraging short vehicular trips, walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related emissions.

Table 3.6-3. Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Vehicle Efficiency Measure 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low-Friction Oil 4. Solar-Reflective Automotive Paint and Window Glazing	T-4	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure.
Ship Electrification at Ports (Shore Power)	T-5	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure.
Goods Movement Efficiency Measures 1. Port Drayage Trucks 2. Transport Refrigeration Units Cold Storage Prohibition 3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification 4. Goods Movement Systemwide Efficiency Improvements 5. Commercial Harbor Craft Maintenance and Design Efficiency 6. Clean Ships 7. Vessel Speed Reduction	T-6	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure.
Heavy-Duty Vehicle GHG Emission Reduction Tractor-Trailer GHG Regulation Heavy-Duty GHG Standards for New Vehicle and Engines (Phase I)	T-7	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure.
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Proposed Project	T-8	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure.
Medium and Heavy-Duty GHG Phase 2	N/A	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure.
High-Speed Rail	T-9	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure.

Table 3.6-3. Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Electricity and Natural Gas Sector		
Energy Efficiency Measures (Electricity)	E-1	<i>Consistent.</i> The Project would be constructed in accordance with CalGreen and Title 24 building standards.
Energy Efficiency Measures (Natural Gas)	CR-1	<i>Consistent.</i> The Project would be constructed in accordance with CalGreen and Title 24 building standards.
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Combined Heat and Power	E-2	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Renewables Portfolio Standard (33% by 2020)	E-3	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Renewables Portfolio Standard (60% by 2030)	N/A	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
SB 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs	E-4	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Water Sector		
Water Use Efficiency	W-1	<i>Consistent.</i> The Project would be constructed in accordance with CalGreen and Title 24 building standards.
Water Recycling	W-2	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Water System Energy Efficiency	W-3	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Reuse Urban Runoff	W-4	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Renewable Energy Production	W-5	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Green Buildings		
State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	<i>Consistent.</i> The Project would be constructed in accordance with CalGreen and Title 24 building standards.

Table 3.6-3. Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential, and Commercial Buildings)	GB-1	<i>Consistent.</i> The Project would be constructed in accordance with CalGreen and Title 24 building standards. Additionally, the state is poised to increase the use of green building practices. The Proposed Project would implement required green building strategies through existing regulation that requires the Proposed Project to comply with various CalGreen requirements. The Project includes sustainability design features that support the Green Building Strategy.
Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-1	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Industry Sector		
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Oil and Gas Extraction GHG Emissions Reduction	I-2	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Reduce GHG Emissions by 20% in Oil Refinery Sector	N/A	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Refinery Flare Recovery Process Improvements	I-4	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Work with the Local Air Districts to Evaluate Amendments to Their Existing Leak Detection and Repair Rules for Industrial Facilities to Include Methane Leaks	I-5	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Recycling and Waste Management Sector		
Landfill Methane Control Measure	RW-1	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Increasing the Efficiency of Landfill Methane Capture	RW-2	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Mandatory Commercial Recycling	RW-3	<i>Consistent.</i> The Project would include recycling during both construction and operation consistent with the requirements of the Title 24 Building Standards

Table 3.6-3. Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Increase Production and Markets for Compost and Other Organics	RW-3	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Anaerobic/Aerobic Digestion	RW-3	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Extended Producer Responsibility	RW-3	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Environmentally Preferable Purchasing	RW-3	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Forests Sector		
Sustainable Forest Target	F-1	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Motor Vehicle Air Condition Systems: Reduction of Refrigerant Emissions from Non-Professional Servicing	H-1	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
SF ₆ Limits in Non-Utility and Non-Semiconductor Applications	H-2	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Reduction of Perfluorocarbons in Semiconductor Manufacturing	H-3	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Limit High GWP Use in Consumer Products	H-4	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
SF ₆ Leak Reduction Gas Insulated Switchgear	H-6	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure

Table 3.6-3. Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
40% Reduction in Methane and Hydrofluorocarbon Emissions	N/A	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
50% Reduction in Black Carbon Emissions	N/A	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure
Agriculture Sector		
Methane Capture at Large Dairies	A-1	<i>Not applicable.</i> The Project would not prevent CARB from implementing this measure

GWP=Global Warming Potential
SF₆=Sulfur hexafluoride

Based on the analysis in Table 3.6-3, the Project would be consistent with the applicable strategies and measures in the Scoping Plan.

The Project would not impede the attainment of the GHG reduction goals for 2030 or 2050 identified in EO S-03-05 and SB 32. EO S-03-05 establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. SB 32 establishes a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, ensures that statewide GHG emissions are reduced to at least 40 percent below 1990 levels by December 31, 2030. While there are no established protocols or thresholds of significance for that future year analysis, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory toward meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

To begin, CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). With regard to the 2050 target for reducing GHG emissions to 80 percent below 1990 levels, the First Update to the Climate Change Scoping Plan states the following (CARB 2014):

This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in SB 32 and EO S-03-05. This is confirmed in the Second Update, which states (CARB 2017):

The Proposed Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasibility and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Proposed Plan is developed to be consistent with requirements set forth in AB 32, SB 32, and AB 197.

As discussed previously, the Project is consistent with the GHG emission reduction measures in the Scoping Plan and would not conflict with the state's trajectory toward future GHG reductions. In addition, since the specific path to compliance for the state in regard to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional mitigation measures for the Project would be speculative and cannot be identified at this time. The Project's consistency would assist in meeting the City's contribution to GHG emission reduction targets in California. With respect to future GHG targets under SB 32 and EO S-03-05, CARB has also made clear its legal interpretation is that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet SB 32's 40-percent reduction target by 2030 and EO S-03-05's 80-percent reduction target by 2050; this legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the state on its trajectory toward meeting these future GHG targets. The Project would not interfere with implementation of any of the previously described GHG reduction goals for 2030 or 2050 or impede the state's trajectory toward the previously described statewide GHG reduction goals for 2030 or 2050.

Mitigation Measures

No mitigation measures are required.

3.6.3 Cumulative Setting, Impacts, and Mitigation Measures

The cumulative setting associated with the Proposed Project includes approved, proposed, planned, and other reasonably foreseeable projects and development in the City of Yreka and Greater Siskiyou County. Developments and planned land uses, including the Proposed Project, would cumulatively contribute to GHG emissions.

3.6.3.1 Cumulative Impacts and Mitigation Measures

Impact GHG-2	Would implementation of the Proposed Project, in combination with existing, approved, proposed, and reasonably foreseeable development in Siskiyou County, result in a cumulatively considerable greenhouse gas-related impact?
<i>Impact Determination</i>	<i>Less than cumulatively considerable</i>
<i>Threshold</i>	<i>Would Implementation of the proposed project, along with any foreseeable development in the project vicinity, result in cumulative impacts related to greenhouse gas emissions?</i>

Impact Discussion

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have much longer atmospheric lifetimes of 1 year to several thousand years that allow them to be dispersed around the globe. It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (CEQA Guidelines Section 15130). The additive effect of Project-related GHGs would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change as the Project was not found to have any cumulatively significant impacts. Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. As previously discussed, the Project would not interfere with implementation of any of the statewide GHG reduction goals for 2030 or 2050 or impede the state's trajectory toward the previously described statewide GHG reduction goals for 2030 or 2050. Therefore, the Proposed Project would have a less than considerable contribution to cumulative impacts regarding GHG emissions.

Mitigation Measures

No mitigation measures are required.

3.7 NOISE

This section describes the environmental setting for noise, including the existing site conditions, and presents a noise evaluation as a comparison of the Project's predicted noise levels and compares them to the noise standards promulgated by the City of Yreka General Plan Noise Element. More information can be found in Appendix 3.7, the Yreka Travel Plaza and Noise Assessment (ECORP 2022b).

3.7.1 *Environmental Noise and Groundborne Vibration Analysis*

3.7.1.1 Fundamentals of Noise and Environmental Sound

Addition of Decibels

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

Typical noise levels associated with common noise sources are depicted in Figure 3.7-1.

Sound Propagation and Attenuation

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

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet Fly-over at 300m (1000 ft)	110	Rock Band
Gas Lawn Mower at 1 m (3 ft)	100	
Diesel Truck at 15 m (50 ft), at 80 km (50 mph)	90	Food Blender at 1 m (3 ft)
Noisy Urban Area, Daytime	80	Garbage Disposal at 1 m (3 ft)
Gas Lawn Mower, 30 m (100 ft)	70	Vacuum Cleaner at 3 m (10 ft)
Commercial Area		Normal Speech at 1 m (3 ft)
Heavy Traffic at 90 m (300 ft)	60	
Quiet Urban Daytime	50	Large Business Office
		Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime		Library
Quiet Rural Nighttime	30	Bedroom at Night, Concert Hall (Background)
	20	Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: California Department of Transportation (Caltrans) 2020a



Figure 3.7-1. Common Noise Levels

Noise levels may also be reduced by intervening structures; generally, a single row of detached buildings between the receptor and the noise source reduces the noise level by about 5 dBA (FHWA 2006), while a solid wall or berm generally reduces noise levels by 10 to 20 dBA (FHWA 2011). However, noise barriers or enclosures specifically designed to reduce site-specific construction noise can provide a sound reduction of 35 dBA or greater (Western Electro-Acoustic Laboratory, Inc. [WEAL] 2000). To achieve the most potent noise-reducing effect, a noise enclosure/barrier must physically fit in the available space, must completely break the *line of sight* between the noise source and the receptors, must be free of degrading holes or gaps, and must not be flanked by nearby reflective surfaces. Noise barriers must be sizable enough to cover the entire noise source and extend lengthwise and vertically as far as feasibly possible to be most effective. The limiting factor for a noise barrier is not the component of noise transmitted through the material, but rather the amount of noise flanking around and over the barrier. In general, barriers contribute to decreasing noise levels only when the structure breaks the *line of sight* between the source and the receiver.

The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (Caltrans 2002). The exterior-to-interior reduction of newer residential units is generally 30 dBA or more (Harris Miller, Miller & Hanson Inc. 2006). Generally, in exterior noise environments ranging from 60 dBA Community Noise Equivalent Level (CNEL) to 65 dBA CNEL, interior noise levels can typically be maintained below 45 dBA, a typical residential interior noise standard, with the incorporation of an adequate forced air mechanical ventilation system in each residential building, and standard thermal-pane residential windows/doors with a minimum rating of Sound Transmission Class (STC) 28¹. In exterior noise environments of 65 dBA CNEL or greater, a combination of forced-air mechanical ventilation and sound-rated construction methods is often required to meet the interior noise level limit. Attaining the necessary noise reduction from exterior to interior spaces is readily achievable in noise environments less than 75 dBA CNEL with proper wall construction techniques following California Building Code methods, the selections of proper windows and doors, and the incorporation of forced-air mechanical ventilation systems.

Noise Descriptors

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

¹ STC is an integer rating of how well a building partition attenuates airborne sound. In the U.S., it is widely used to rate interior partitions, ceilings, floors, doors, windows, and exterior wall configurations.

- Equivalent Noise Level (L_{eq}) is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- Day-Night Average (Ldn) is a 24-hour average L_{eq} with a 10-dBA *weighting* added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA Ldn.
- Community Noise Equivalent Level (CNEL) is a 24-hour average L_{eq} with a 5-dBA weighting during the hours of 7:00 p.m. to 10:00 p.m. and a 10-dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

Table 3.7-1 provides a list of other common acoustical descriptors.

Table 3.7-1. Common Acoustical Descriptors	
Descriptor	Definition
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micropascals (or 20 micronewtons per square meter), where 1 pascal is the pressure resulting from a force of 1 newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micropascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hertz (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sounds are below 20 Hz and ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high-frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
L_{max} , L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01} , L_{10} , L_{50} , L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.

Table 3.7-1. Common Acoustical Descriptors

Descriptor	Definition
Day/Night Noise Level, L_{dn} or DNL	A 24-hour average L_{eq} with a 10 dBA “weighting” added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn} .
Community Noise Equivalent Level, CNEL	A 24-hour average L_{eq} with a 5 dBA weighting during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA “weighting” added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.7 dBA CNEL.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends on its amplitude, duration, frequency, and time of occurrence and tonal or informational content, as well as the prevailing ambient noise level.
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.

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

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

Human Response to Noise

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

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL or L_{dn} is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20

dBa and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in A-weighted noise levels (dBA), the following relationships should be noted in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference.
- A change in level of at least 5 dBA is required before any noticeable change in community response is expected. An increase of 5 dBA is typically considered substantial.
- A 10-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

Effects of Noise on People

Hearing Loss

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

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

Annoyance

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

3.7.1.2 Fundamentals of Environmental Groundborne Vibration

Vibration Sources and Characteristics

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

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

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

Table 3.7-2 displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high-noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

Table 3.7-2. Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibration Levels

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

Source: Caltrans 2020

Ground vibration can be a concern in instances where buildings shake, and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. For instance, heavy-duty trucks generally generate groundborne vibration velocity levels of 0.006 PPV at 50 feet under typical circumstances, which as identified in Table 3.7-2 is considered very unlikely to cause damage to buildings of any type. Common sources for groundborne vibration are planes, trains, and construction activities such as earthmoving which requires the use of heavy-duty earth moving equipment.

3.7.2 Existing Environmental Noise Setting

3.7.2.1 Noise Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their

intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as hospitals, historic sites, cemeteries, and certain recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The nearest existing noise-sensitive land uses to the Project Site is an RV Park approximately 45 feet south of the Project Site boundary. There are assumed to be both long- and short-term residents that live at the RV Park. There is a Holiday Inn Express located approximately 38 feet northeast of the Project Site boundary. Hotel land uses can be considered a noise-sensitive receptor during the nighttime hours (10:00 p.m. to 7:00 a.m.), during which occupants expect conditions suitable for sleeping. However, this is not considered a sensitive noise land use during the daytime hours. Furthermore, only the hotel interior would be considered noise sensitive. As previously described, an exterior-to-interior noise level attenuation of at least 20 dBA could be expected. There is also a residential neighborhood to the south of the Project Site, with the closest residence located on Herzog Boulevard, approximately 580 feet distant.

3.7.2.2 Existing Ambient Noise Environment

The most common and significant source of noise in the Project Area is mobile noise generated by transportation-related sources. The Project Area is located along I-5 and SR 3, both sources of traffic and vehicle noise. Existing ambient noise conditions onsite are also influenced by trains on the nearby Yreka Western Railroad track, which is approximately 438 feet east of the Project Site. Trains intermittently pass by the Project Site, where noise generated by freight rail is primarily generated by the train's steel wheels rolling on steel rails. Other sources of noise are the various land uses (i.e., residential, industrial, and commercial) that generate stationary-source noise. The Project Site is currently vacant and surrounded by residential, commercial, and transient lodging land uses. As shown in Table 3.7-3, the ambient recorded noise levels range from 43.0 to 63.9 dBA L_{eq} near the Project Site.

Table 3.7-3. Existing (Baseline) Noise Measurements						
Location Number	Location	dBA				Time
		L _{dn}	L _{eq}	L _{min}	L _{max}	
Short-Term Measurements						
1	On the Project Site, adjacent to Holiday Inn Express on Montague Road	N/A	53.7	41.8	69.6	2:47 p.m. – 3:02 p.m.
2	Adjacent to Juniper Terrace Apartments	N/A	43.0	35.9	58.1	3:30 p.m. – 3:45 p.m.
3	Entrance of RV Park, Adjacent to Truck Parking Lot	N/A	63.9	60.5	75.3	3:07 p.m. – 3:22 p.m.

Table 3.7-3. Existing (Baseline) Noise Measurements

4	502 E. Lennox St, on large field	N/A	48.7	37.1	56.8	3:53 p.m. – 4:08 p.m.
Long-Term Measurement						
5	Adjacent to single-family residence, south of Holiday Inn, west of RV Park.	62.8	57.3	35.9	79.6	4:37 p.m. -4:37 p.m.

Source: Measurements were taken by ECorp Consulting, Inc. with a Larson Davis SoundExpert LxT precision sound level meter, which satisfies the American National Standards Institute for general environmental noise measurement instrumentation. Prior to the measurements, the SoundExpert LxT sound level meter was calibrated according to manufacturer specifications with a Larson Davis CAL200 Class I Calibrator. See Appendix 3.7 for noise measurement outputs.

Notes: L_{eq} is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. L_{min} is the minimum noise level during the measurement period and L_{max} is the maximum noise level during the measurement period. L_{dn} is a 24-hour average L_{eq} with a 10-dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime.

Existing Ambient Noise Measurements

As previously stated, the Project Site is currently a vacant site. In order to quantify existing ambient noise levels in the Project Area, ECorp conducted four short-term noise measurements (15 minutes) and one long-term noise measurement (24 hours) in the areas surrounding the Project Site. These short-term noise measurements are representative of typical existing noise exposure within and immediately adjacent to the Project Site (Appendix 3.7). The 15-minute measurements were taken between 2:47 p.m. and 4:08 p.m. on September 16, 2022. The long-term noise measurement was taken from 4:37 p.m. on September 16 to 4:37 p.m. on September 17. The average noise levels at each location are listed in Table 3.7-3.

As shown in Table 3.7-3, the ambient recorded noise levels range from 43.0 to 63.9 dBA L_{eq} over the course of the four short-term noise measurements taken in the Project Vicinity. The long-term measurement, which was adjacent to the nearest residential property south of the Project Site, yielded an ambient noise level of 62.8 L_{dn} . The most common noise in the Project vicinity is produced by automotive vehicles (e.g., cars, trucks, buses, motorcycles) traversing I-5.

Existing Roadway Noise Levels

Existing roadway noise levels were calculated for SR 3 (Montague Road), which traverses the northeast boundary of the Project Site. This task was accomplished using the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108, Appendix 3.7) and traffic volumes from the Project's Traffic Study & VMT Analysis Technical Memorandum (GHD 2022). The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) used in the FHWA model have been modified to reflect average vehicle noise rates identified for California by Caltrans. The Caltrans data shows that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck

noise is 0.3 to 3.0 dBA lower than national levels. The average daily noise levels along these roadway segments are presented in Table 3.7-4.

Table 3.7-4. Existing (Baseline) Traffic Noise Levels		
Roadway Segment	Surrounding Uses	L_{dn} 100 feet from Centerline of Roadway
North Main Street		
North of Montague Road	Residential	53.2
South of Montague Road	Residential and Commercial	53.9
Montague Road		
Between N. Main Street and Deer Creek Way	Commercial and Lodging	61.5
Deer Creek Way		
North of Montague Road	Residential	41.2
Interstate 5 (I-5) Offramp		
Between I-5 Mainline and Private (Unnamed) Road	Lodging	59.1
Private (Unnamed) Road		
Southwest of Montague Road	Residential and Commercial	49.1
Between Holiday Inn Hotel and Yreka Truck Stop	Residential	58.4

Source: Traffic noise levels were calculated by ECORP using the FHWA roadway noise prediction model in conjunction with the trip generation rate identified by GHD (2022). Refer to Appendix 3.7 for traffic noise modeling assumptions and results.

As shown, the existing traffic-generated noise level on Project-vicinity roadways currently ranges from 41.2 to 61.5 dBA L_{dn} at a distance of 100 feet from the centerline. As previously described, L_{dn} is a 24-hour average L_{eq} with a 10-dBA *weighting* added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. It should be noted that the modeled noise levels depicted in Table 3.7-4 may differ from measured levels in Table 3.7-3 because the measurements represent noise levels at different locations around the Project Site. The short-term measurements are also reported in a different noise metric (e.g., short-term noise measurements are the L_{eq} values and traffic noise levels are reported in L_{dn}).

3.7.3 Regulatory Framework

3.7.3.1 Federal

Occupational Safety and Health Act of 1970

OSHA regulates onsite noise levels and protects workers from occupational noise exposure. To protect hearing, worker noise exposure is limited to 90 decibels with A-weighting (dBA) over an 8-hour work shift (29 CCR 1910.95). Employers are required to develop a hearing conservation program when employees are exposed to noise levels exceeding 85 dBA. These programs include provision of hearing protection devices and testing employees for hearing loss on a periodic basis.

National Institute of Occupational Safety and Health

A division of the U.S. Department of Health and Human Services, NIOSH has established a construction-related noise level threshold as identified in the *Criteria for a Recommended Standard: Occupational Noise Exposure* prepared in 1998. NIOSH identifies a noise level threshold based on the duration of exposure to the source. The NIOSH construction-related noise level threshold starts at 85 dBA for more than 8 hours per day; for every 3-dBA increase, the exposure time is cut in half. This reduction results in noise level thresholds of 88 dBA for more than 4 hours per day, 92 dBA for more than 1 hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. The intention of these thresholds is to protect people from hearing losses resulting from occupational noise exposure.

3.7.3.2 State

State of California General Plan Guidelines

The State of California regulates vehicular and freeway noise affecting classrooms, sets standards for sound transmission and occupational noise control, and identifies noise insulation standards and airport noise/land-use compatibility criteria. The State of California General Plan Guidelines (State of California 2003), published by the Governor's OPR, also provides guidance for the acceptability of projects within specific CNEL/ L_{dn} contours. The guidelines also present adjustment factors that may be used in order to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

State Office of Planning and Research Noise Element Guidelines

The State OPR *Noise Element Guidelines* include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The Noise Element Guidelines contain a Land Use Compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of the CNEL.

California Department of Transportation

In 2020, Caltrans published the *Transportation and Construction Vibration Manual* (2020). The manual provides general guidance on vibration issues associated with the construction and operation of projects

concerning human perception and structural damage. Table 3.7-2 presents recommendations for levels of vibration that could result in damage to structures exposed to continuous vibration.

3.7.3.3 Local

City of Yreka General Plan Noise Element

The Noise Section of the City Yreka General Plan Noise Element addresses noise-related issues within the community. This section contains goals and policies that are intended to protect noise sensitive uses from excessive noise levels. The following policies are applicable to the Proposed Project:

- Policy 8: Where the noise level standards of Table [3.7-5] are predicted to be exceeded at new uses proposed within the City of Yreka which are affected by or include non-transportation noise sources, appropriate noise mitigation measures shall be included in the project design to reduce projected noise levels to a state of compliance with the Table [3.7-5] standards.*
- Policy 9: Noise associated with construction noise shall be exempt from Table [3.7-5].*
- Policy 10: Construction activities shall be limited to the hours of 7 a.m. to 5 p.m. unless an exemption is received from the City to cover special circumstances.*
- Policy 11: All internal combustion engines used in conjunction with construction activities shall be muffled according to the equipment manufacturers requirements.*

The City of Yreka General Plan Noise Element *Non-Transportation Noise Source Policy 6* regulates non-transportation sources. These standards are design to protect people from objectionable stationary sources of noise, such as machinery, pumps, and other noise causing equipment. The City's exterior and interior standards for Daytime (7:00 a.m. to 10:00 p.m.) and Nighttime (10:00 p.m. to 7:00 m a.m.) are summarized in Table 3.7-5.

Table 3.7-5 City of Yreka Noise Standards for Non-Transportation Uses			
New Land Use Category	Outdoor Activity Area - L_{eq}		Interior Area - L_{eq} Daytime and Nighttime (dBA)
	Daytime (dBA)	Nighttime(dBA)	
All Residential	50	45	35
Transient Lodging	55	--	40
Hospitals & Nursing Homes	50	45	35
Theaters & Auditoriums	--	--	35

Table 3.7-5 City of Yreka Noise Standards for Non-Transportation Uses

New Land Use Category	Outdoor Activity Area - L_{eq}		Interior Area - L_{eq} Daytime and Nighttime (dBA)
	Daytime (dBA)	Nighttime(dBA)	
Churches, Meeting Halls, Schools, Libraries, etc.	55	--	40
Office Buildings	55	--	45
Commercial Buildings	55	--	45
Playgrounds, Parks, etc.	65	--	--
Industry	65	65	50

Source: City of Yreka General Plan Noise Element (1998)

The Project Site has several sensitive land uses nearby. The adjacent hotel and RV Park are considered *Transient Lodging* land uses. However, these land uses are only sensitive during nighttime hours (10:00 p.m. to 7:00 a.m.), when guests may expect to sleep. The nearest residential sensitive receptor on Herzog Boulevard is approximately 580 feet to the southwest of the Project Site. Under normal circumstances, the Project would be subject to maintaining the standards shown in Table 3.7-5 for this residential land use. However, the long-term baseline noise measurement shown in Table 3.7-3 identifies that the ambient noise measurement taken adjacent to the residence on Herzog Boulevard is already experiencing noise levels of 57.3 dBA L_{eq} , which is above the 50 dBA L_{eq} exterior residential standard. Therefore, for the purposes of this analysis, onsite Project-generated noise, as experienced at this residence, is considered a significant impact if it increases the exterior noise level by 5.0 dBA (62.3 dBA total). As previously described, a change in level of at least 5 dBA is required before any noticeable change in community response would be expected. An increase of 5 dBA is typically considered substantial.

The City of Yreka General Plan Noise Element also provides compatibility standards for the traffic and transportation-related noise, as shown in Table 3.7-6. All Project-related increases in transportation must adhere to these standards. The City's General Plan Noise Element states that if the standards shown in Table 3.7-6 are to be exceeded, appropriate noise mitigation measures shall be implemented in the Project's design.

Table 3.7-6. City of Yreka Noise Standards for Transportation Uses

New Land Use Category	Outdoor Activity Area - L_{dn} (dBA)	Interior Area - L_{dn} (dBA)
All Residential	60-65	45
Transient Lodging	65	45

Table 3.7-6. City of Yreka Noise Standards for Transportation Uses

New Land Use Category	Outdoor Activity Area - L_{dn} (dBA)	Interior Area – L_{dn} (dBA)
Hospitals & Nursing Homes	60	45
Theaters & Auditoriums	--	35
Churches, Meeting Halls, Schools, Libraries, etc.	60	40
Office Buildings	65	45
Commercial Buildings	65	50
Playgrounds, Parks, etc.	70	--
Industry	65	50

Source: City of Yreka General Plan Noise Element (1998)

As shown in Table 3.7-6, the transportation and traffic compatibility exterior noise standard for residences is 60 to 65 dBA L_{dn} and transient lodging is 65 dBA L_{dn}. The existing baseline traffic noise levels in the Project vicinity, shown in Table 3.7-4, are below these standards.

3.7.4 Environmental Impacts

3.7.4.1 Thresholds of Significance

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

- 1) 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;
- 2) generation of excessive groundborne vibration or groundborne noise levels; or
- 3) for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

The City does not promulgate a numeric threshold pertaining to the noise associated with construction. This is because construction noise is temporary, short term, intermittent in nature, and would cease on Project completion. Instead, Project construction activities are subject to the City of Yreka General Plan Noise Element's *Policy 10*, which sets a daily limit on construction noise, stating that construction may only occur from 7:00 a.m. to 5:00 p.m. daily. The Project would be required to comply with this Municipal Code requirement. In order to evaluate the potential health-related effects (i.e., physical damage to the

ear and mental damage from lack of sleep or focus) from construction noise, construction equipment noise levels are calculated and compared against the construction-related noise level threshold established by NIOSH. For vibrational-related impacts, Caltrans (2020) has recommended the standard of 0.3 inch per second PPV with respect to the prevention of structural damage for older residential buildings to be used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings.

The City of Yreka has established traffic and transportation-related noise standards, as shown in Table 3.7-6. These thresholds will be used to evaluate the Project's traffic noise. The City of Yreka has established stationary (onsite) noise standards, as shown in Table 3.7-5. These thresholds would be used to evaluate the Project's onsite noise.

3.7.4.2 Methods of Analysis

This analysis of the existing and future noise environments is based on empirical observations and noise prediction modeling. Predicted construction noise levels were calculated utilizing the FHWA's Roadway Construction Noise Model (2006). Groundborne vibration levels associated with construction-related activities for the Project have been evaluated utilizing typical groundborne vibration levels associated with construction equipment, as identified by the FTA and Caltrans. Potential groundborne vibration impacts related to structural damage and human annoyance were evaluated, taking into account the distance from construction activities to nearby structures and typically applied criteria for structural damage and human annoyance.

Transportation-source noise levels associated with the Project were calculated using the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108) with trip generation rates provided by GHD (2022). Onsite operational, stationary source noise levels associated with the Project have been calculated with the SoundPLAN 3D noise model, which predicts noise propagation from a noise source based on the location, noise level, and frequency spectra of the noise sources as well as the geometry and reflective properties of the local terrain, buildings and barriers.

3.7.4.3 Project Impacts and Mitigation Measures

Impact NOI-1	Project implementation could result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
<i>Impact Determination</i>	<i>Less than Significant.</i>
<i>Threshold</i>	<i>Substantial increase in ambient noise levels in the project vicinity above levels existing without the project.</i>

Impact Discussion

Project Construction Noise

Construction noise associated with the Proposed Project would be temporary and would vary depending on the specific nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., site preparation, excavation, paving). Noise generated by construction equipment, including earth movers, pile drivers, and portable generators, can reach high levels. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than 1 minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). During construction, exterior noise levels could negatively affect sensitive land uses in the vicinity of the construction site.

As previously discussed, the Project would be subject to the City of Yreka General Plan Noise Element Policy 10, which states construction may only occur between the hours of 7:00 a.m. to 5:00 p.m. The Project would be required to comply with this policy and therefore the Project would not conflict with this City standard.

To estimate the worst-case onsite construction noise levels that may occur at the nearest noise-sensitive receptors and in order to evaluate the potential health-related effects (e.g., physical damage to the ear) from construction noise, the construction equipment noise levels were calculated using the FHWA's Roadway Noise Construction Model and compared against the construction-related noise level threshold established in the Criteria for a *Recommended Standard: Occupational Noise Exposure* prepared in 1998 by NIOSH. A division of the U.S. Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The NIOSH construction-related noise level threshold starts at 85 dBA for more than 8 hours per day; for every 3-dBA increase, the exposure time is cut in half. This reduction results in noise level thresholds of 88 dBA for more than 4 hours per day, 92 dBA for more than 1 hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of this analysis, the lowest, more conservative threshold of 85 dBA L_{eq} is used as an acceptable threshold for construction noise at the nearby sensitive receptors. As previously described, the adjacent hotel and RV land uses can be considered a noise-sensitive receptor during the nighttime hours (10:00 p.m. to 7:00 a.m.), during which occupants expect conditions suitable for sleeping. However, this is not considered a sensitive noise land use during the daytime hours. The nearest sensitive daytime land use is the single-family residence on Herzog Boulevard, which is approximately 580 feet south from the Project Site's boundary. The Project's construction would be completed in two phases, Phase I and Phase II. The anticipated short-term construction noise levels generated for the necessary equipment are presented in Table 3.7-7.

Table 3.7-7. Construction Average (dBA) Noise Levels at Nearest Receptors

Construction Phase	Estimated Exterior Construction Noise Level @ Closest Noise Sensitive Receptor (dBA L_{eq})	Construction Noise Standard (dBA L_{eq})	Exceeds Standards?
Phase 1			
Site Preparation	66.3	85	No
Grading	66.0	85	No
Building Construction, Architectural Coating & Paving	69.7	85	No
Phase 2			
Site Preparation	66.3	85	No
Grading	66.0	85	No
Building Construction, Architectural Coating & Paving	69.7	85	No

Source: Construction noise levels were calculated by ECORP Consulting, Inc. using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Appendix 3.7 for Model Data Outputs.

Notes: Construction equipment was provided by CalEEMod default values. Construction noise was modeled 580 feet, which is the distance to the nearest sensitive receptor. Building construction, architectural coating & paving would occur simultaneously.

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

As shown in Table 3.7-7, construction activities would not exceed the NIOSH construction noise standards for the nearest sensitive residences. It is noted that construction noise was modeled on a worst-case basis. It is very unlikely that all pieces of construction equipment would be operating at the same time for the various phases of Project construction as well as at the point closest to residences.

The Project's construction would result in a less than significant impact.

Project Operational Noise

As previously described, noise-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise-sensitive and may warrant unique measures for protection from intruding noise. The nearest existing noise-sensitive land use to the Project Site is a residential neighborhood to the south of the Project Site, with the closest residence on Herzog Boulevard located approximately 580 feet away. Additionally, a RV Park approximately 45 feet south from the Project Site boundary. There is a Holiday Inn Express located approximately 38 feet northeast from the Project Site boundary. Hotel and other transient lodging land

uses like the RV Park can be considered a noise-sensitive receptor during the nighttime hours (10:00 p.m. to 7:00 a.m.), during which occupants expect conditions suitable for sleeping. However, this is not considered a sensitive noise land use during the daytime hours. Furthermore, only the hotel interior would be considered noise sensitive. As previously described, an exterior-to-interior noise level attenuation of at least 20 dBA could be expected. Once construction is complete, the hotel component of the Proposed Project would be considered a noise-sensitive receptor during the nighttime hours.

Operational Traffic Noise

Future traffic noise levels throughout the Project vicinity (i.e., vicinity roadway segments that traverse noise sensitive land uses) were modeled based on the traffic volumes identified by GHD (2022) to determine the noise levels along Project vicinity roadways. Table 3.7-8 shows the calculated offsite roadway noise levels under predicted traffic levels once the Project is completed.

Table 3.7-8. Existing Plus Project Traffic Noise Levels		
Roadway Segment	Surrounding Uses	L_{dn} at 100 feet from Centerline of Roadway
N. Main Street		
North of Montague Road	Residential	54.6
South of Montague Road	Residential and Commercial	55.7
Montague Road		
Between N. Main Street and Deer Creek Way	Commercial and Lodging	61.5
Deer Creek Way		
North of Montague Road	Residential	40.8
Interstate 5 (I-5) Offramp		
Between I-5 Mainline and Private (Unnamed) Road	Lodging	60.5
Private Road		
Southwest of Montague Road	Residential and Commercial	54.7
Between Holiday Inn Hotel and Yreka Truck Stop	Residential	60.4

Source: Traffic noise levels were calculated by ECORP Consulting, Inc. using the FHWA roadway noise prediction model in conjunction with the trip generation rate identified by GHD (2022). Refer to Appendix 3.7 for traffic noise modeling assumptions and results.

As shown in Table 3.7-8 the predicted traffic noise in the Project vicinity would range from 40.8 to 61.5 dBA under the Existing plus Project scenario. These predicted noise levels are consistent with the transportation and traffic compatibility exterior noise standard, which is shown in Table 3.7-6 above. The

exterior noise standard for residences is 60 to 65 dBA and transient lodging is 65 dBA. The projected existing conditions plus the Project will result in noise levels under the upper range (65 dBA) standard.

Therefore, the Project would result in a less than significant impact concerning operational traffic noise.

Operational Noise

The Project is proposing to develop a Travel Plaza, consisting of a 12,300-sf building with a convenience store, a food hall, bar, retail shop, and outdoor patio, fueling centers, fuel tanks, pet park, and 17,032-sf hotel. Onsite noise associated with the Proposed Project has been calculated using the SoundPLAN 3D noise model. The modeling scenario accounts for parking lot activity (i.e., people talking, internal circulation, car door opening and closing, stereo music) occurring in the areas adjacent to the hotel and gas station. Additionally, internal truck circulation, occurring at the diesel fueling station, was modeled as line sources traversing the path of travel proposed on the Project Site plan.

For the purposes of this analysis, the City of Yreka noise standards (Table 3.7-5) will be used to evaluate Project related impacts as they provide thresholds for residential and transient lodging land uses. However, the long-term baseline noise measurement shown in Table 3.7-3 identifies that the ambient noise measurement taken adjacent to the residence on Herzog Boulevard is already experiencing noise levels of 57.3 dBA L_{eq} , which is above the 50 dBA L_{eq} exterior residential standard. Therefore, for the purposes of this analysis, onsite Project-generated noise, as experienced at this residence, is considered a significant impact if it increases the exterior noise level by 5.0 dBA (62.3 dBA total). As previously described, a change in level of at least 5 dBA is required before any noticeable change in community response would be expected. An increase of 5 dBA is typically considered substantial. Per information provided by the Project applicant, the operational hours for the Yreka Travel Plaza and Hotel are open 24 hours.

Table 3.7-9 shows the predicted Project noise levels at six noise-sensitive locations in the Project vicinity including the RV Park, Holiday Inn Express and nearest residence off Herzog Boulevard as predicted by SoundPLAN. Additionally, a noise contour graphic for each scenario (see Figure 3.7-2) has been prepared to provide a visual depiction of the predicted noise levels in the Project vicinity from Project operations.

Table 3.7-9. Modeled Operational Noise Levels			
Location	Modeled Operational Noise Attributed to the Project (dBA L_{eq})	Daytime/ Nighttime Exterior Noise Standards (dBA L_{eq})	Exceed Daytime/ Nighttime Exterior Standard?
#1 Holiday Inn Express	50.6	55 / --	No
#2 Nearest Residence off Herzog Boulevard	30.8	50 / 45	No
#3 RV Park	46.8	55 / --	No

Table 3.7-9. Modeled Operational Noise Levels

Location	Modeled Operational Noise Attributed to the Project (dBA L_{eq})	Daytime/ Nighttime Exterior Noise Standards (dBA L_{eq})	Exceed Daytime/ Nighttime Exterior Standard?
#4 RV Park	51.7	55 / --	No
#5 RV Park	49.3	55 / --	No
#6 RV Park	48.9	55 / --	No

Source: SoundPLAN v 8.2. Refer to Appendix 3.7 for Model Data Outputs.

As shown in Table 3.7-9, Project operational noise would not exceed the daytime or nighttime exterior noise standards at any location. Additionally, as described in Table 3.7-5, the City has interior noise standards for residential and transient lodging land uses, the noise sensitive land uses in the Project Area. Residential land uses have an interior noise standard of 35 dBA L_{eq} and transient lodging land uses have an interior noise standard of 40 dBA L_{eq}. As previously stated, the manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (Caltrans 2002). Thus, using the conservative reduction of 20 dBA, these values would fall below the interior noise standards as well. Furthermore, it is noted that the modeled noise levels identified are a worst-case scenario. Not all events taking place on the Project Site would generate as much noise as predicted.

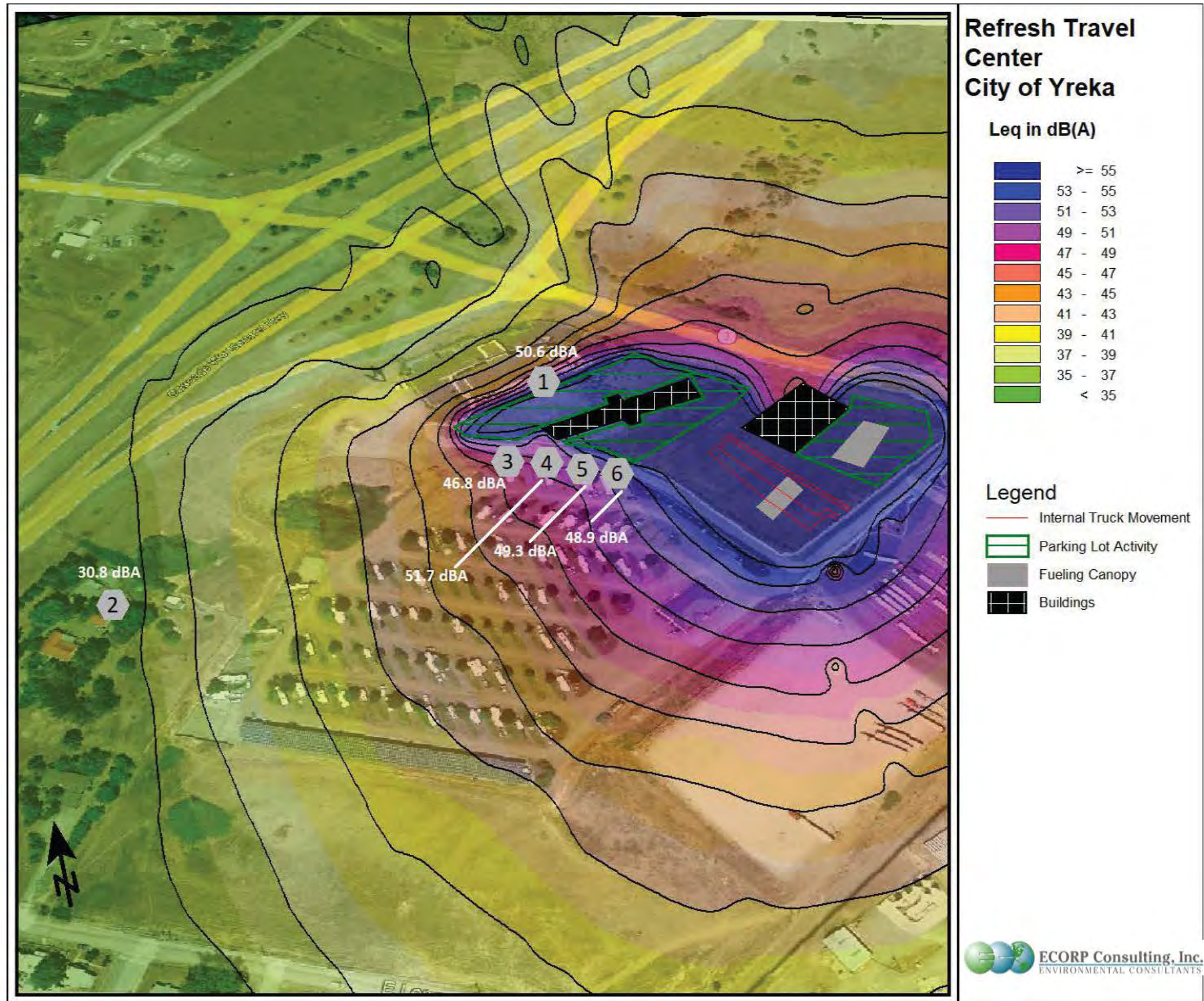
Therefore, the operational noise impacts of the Project are less than significant.

Mitigation Measures

No mitigation measures are required.

Impact NOI-2	Project implementation could generate excessive groundborne vibrations and groundborne noise during construction.
<i>Impact Determination</i>	<i>Less than Significant</i>
<i>Threshold</i>	<i>Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.</i>

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Map Date: 11/30/2022
Photo (or Base) Source: SoundPLAN8.2

Figure 3.7-2. Modeled Operational Noise Levels

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Impact Discussion

Groundborne Vibrational Impacts During Construction

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

Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. It is not anticipated that pile drivers would be necessary during Project construction. Vibration decreases rapidly with distance, and it is acknowledged that construction activities would occur throughout the Project Site and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with construction equipment are summarized in Table 3.7-10.

Table 3.7-10. Representative Vibration Source Levels for Construction Equipment	
Equipment Type	Peak Particle Velocity at 25 Feet (inches per second)
Large Bulldozer	0.089
Pile Driver	0.170
Loaded Trucks	0.076
Hoe Ram	0.089
Jackhammer	0.035
Small Bulldozer/Tractor	0.003
Vibratory Roller	0.210

Source: Caltrans 2020; FTA 2018

The City of Yreka does not have a numeric threshold associated with construction vibrations. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2020) recommended standard of 0.3 inch per second PPV with respect to the prevention of structural damage for older residential buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings. The nearest structure of concern to the construction site, with regard to groundborne vibrations, is the single-family residence southwest of the Project Site on Herzog Boulevard, approximately 580 feet away from the Project Site at the nearest.

Based on the representative vibration levels presented for various construction equipment types in Table 3.7-10 and the construction vibration assessment methodology published by the FTA (2018), it is possible to estimate the potential Project construction vibration levels. The FTA provides the following equation:

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

Table 3.7-11 presents the expected Project related vibration levels at a distance of 580 feet.

Table 3.7-11. Construction Vibration Levels at 580 Feet							
Receiver PPV Levels (inches per second)¹					Peak Vibration	Threshold	Exceed Thresh- old?
Large Bulldozer, Caisson Drilling, & Hoe Ram	Loaded Trucks	Jackhammer	Pile Driver	Vibratory Roller			
0.0008	0.0007	0.0003	0.002	0.002	0.002	0.3	No

Notes: ¹Based on the Vibration Source Levels of Construction Equipment included on Table 3.7-10 (FTA 2018). Distance to the nearest structure of concern is approximately 580 feet measured from Project Site boundary.

As shown in Table 3.7-11, vibration as a result of onsite construction activities on the Project Site would not exceed 0.3 PPV at the nearest structure. Thus, onsite Project construction would not exceed the recommended threshold.

Because of these reasons, the ground borne vibrational impacts during construction would be less than significant.

Groundborne Vibrational Impacts During Operations

Project operations would not include the use of any stationary equipment that would result in excessive vibration levels. While the Project may accommodate heavy-duty trucks for fueling, these vehicles can only generate groundborne vibration velocity levels of 0.006 PPV at 50 feet under typical circumstances. Therefore, the Project would result in negligible groundborne vibration impacts during operations.

Therefore, the impacts to groundborne vibration impacts during the Project's operation would be less than significant.

Mitigation Measures

No mitigation measures are required.

Impact NOI-3	If the Proposed Project is 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, the Proposed Project could expose people residing or working in the project area to excessive noise levels.
<i>Impact Determination</i>	<i>Less than Significant.</i>
<i>Threshold</i>	<i>Exposure of excessive noise levels to people residing or working in the Project area due to proximity to an airport.</i>

Impact Discussion

The Project Site is located approximately 4.15 miles west of the Montague-Yreka Airport. Although aircraft flight patterns may cover the Project Site, noise from aircrafts is not a significant issue in the City. Implementation of the Proposed Project would not affect airport operations, nor result in increased exposure of those on the Project Site to aircraft noise. Because of this, the Project's impact would be less than significant.

Mitigation Measures

No mitigation measures are required.

3.7.5 Cumulative Setting, Impacts, and Mitigation Measures

The cumulative setting associated with the Proposed Project includes approved, proposed, planned, and other reasonably foreseeable projects and development in the City of Yreka and Greater Siskiyou County. Developments and planned land uses, including the Proposed Project, would cumulatively contribute to noise impacts during construction. However, once construction is completed, the Project would not have any noise related impact. Additionally, no other projects of this type are approved, proposed, planned, and other reasonably foreseeable at this time.

3.7.5.1 Cumulative Impacts and Mitigation Measures

Impact NOI-4	Would implementation of the Proposed Project, in combination with existing, approved, proposed, and reasonably foreseeable development in Siskiyou County, result in a cumulatively considerable noise impact?
<i>Impact Determination</i>	<i>Less than cumulatively considerable</i>
<i>Threshold</i>	<i>Would Implementation of the proposed project, along with any foreseeable development in the project vicinity, result in cumulative impacts related to noise?</i>

Cumulative Noise Impacts During Construction

Construction activities associated with the Proposed Project and other construction projects in the area may overlap, resulting in construction noise in the area. However, construction noise impacts primarily affect the areas adjacent to the construction site. Construction noise for the Project was determined to be less than significant following compliance with City noise standards. Cumulative development in the vicinity of the Project Site could result in elevated construction noise levels at sensitive receptors in the Project vicinity. However, each project would be required to comply with the applicable noise limitations on construction.

Therefore, the Project would not contribute to cumulative impacts during construction.

Cumulative Noise Impacts from Offsite Traffic

As described previously, Project operations would result in minimal additional traffic on adjacent roadways. The visitors to the site would be that of travelers and local residents looking to refuel or visit the restaurant, and those looking to stay at the hotel. Thus, any cumulative noise impacts from Project-related traffic would be minimal. Furthermore, other than the Proposed Project, no other development is pending or proposed in the city or the surrounding area. While the City has a number of roadway, water and wastewater pipelines improvements pending, these are for the improvement of existing conditions and do not include the construction of new residential, commercial, or industrial structures. Therefore, for the purpose of this DEIR, the Yreka General Plan growth projections are the basis of the cumulative analysis.

Therefore, the Project's contribution to cumulative noise impacts from traffic would be less than cumulatively considerable.

Cumulative Noise Impacts from a Stationary Noise Source

Long-term stationary noise sources associated with the development of the Proposed Project, combined with other cumulative projects, could cause local noise level increases. Noise levels associated with the Proposed Project and related cumulative projects together could result in higher noise levels than

considered separately. As previously described, onsite noise sources associated with the Proposed Project was found to be acceptable. Furthermore, other than the Proposed Project, no other development is pending or proposed in the city or the surrounding area. While the City has a number of roadway, water and wastewater pipelines improvements pending, these are for the improvement of existing conditions and do not include the construction of new residential, commercial, or industrial structures. Therefore, for the purpose of this DEIR, the Yreka General Plan growth projections are the basis of the cumulative analysis.

Therefore, the Project would not contribute to cumulative impacts during operations.

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3.8 TRANSPORTATION

This section describes the environmental setting for transportation, including the existing site conditions and regulatory setting, impacts that would result from the Proposed Project, and, if significant impacts are identified, the mitigation measures that would reduce these impacts.

This section presents a summary of the Traffic Study & VMT Analysis Technical Memorandum (Traffic Study) prepared by GHD (2022) for the Project, provided as Appendix 3.8. The Traffic Study evaluated the potential impacts to traffic and circulation associated with development of the Project and recommended improvements to mitigate impacts considered significant in comparison to established regulatory thresholds.

3.8.1 *Environmental Setting*

3.8.1.1 Existing Transportation System

Existing Street and Highway System

The City is located in northern Siskiyou County and is served by I-5, SR 3 and SR 263, and A12 (Grenada) to State Highway 97. Within the City, there are a number of significant roadways, including Main Street, Oregon Street, and Miner Street, that provide internal circulation and connection to the Siskiyou County Roadway system (City of Yreka 2002).

Traversing in a north-south direction, I-5 bisects a portion of the City and provides access to Yreka at the north, central and south interchanges. State Route 3, which provides access from Scott Valley to the southwest and from Montague to the east, traverses the full length of Yreka following Main Street and Montague Road. State Route 263 provides access to Yreka from the Klamath River area and ends at its intersection with SR 3 (Main Street) in Yreka. Significant Siskiyou County roads serving the Yreka area are Old Highway 99 to the south, Oberlin Road to the east and Yreka/Ager Road to the northeast. Other County roads lie within the Planning Area but primarily serve local traffic and carry low volumes of traffic (City of Yreka 2002).

Transit Service

The County of Siskiyou provides a public bus system, the Siskiyou Transit and General Express (STAGE), which makes several stops in Yreka, while providing transportation to the communities in Siskiyou County generally along I-5. Another STAGE route travels SR 3 from Etna into Yreka and returns along the same route. A senior bus service is also provided in Yreka by the Yreka Senior Center. This service works in conjunction with STAGE to provide a greater service area for STAGE.

Pedestrian and Bicycle Facilities

The terrain and layout of Yreka is favorable for bicycle and pedestrian circulation. There are sidewalks on most streets. Most streets have sufficient width and low traffic volumes, permitting their safe use by bicyclists. Streets in Yreka have designated areas between the vehicle travelway and the edge of pavement of sufficient width to accommodate bicyclists. These include SR 3 throughout the City, Oregon Street, and

SR 263 from SR 3 north. The Yreka Creek Greenway is identified as a future Class I bike path facility, identified as a separate right-of-way for the exclusive use of bicycles and pedestrians (City of Yreka 2006).

3.8.2 Existing Conditions Scenario

The Existing conditions scenario represents existing transportation facilities serving the Project site and establishes the current traffic conditions for those facilities. Existing conditions intersection operations are presented in the following tables. Existing intersection peak hour turning movement volumes are presented in Figure 3.8-1.

The Traffic Study identified the following five existing intersections that may be affected by the Proposed Project:

1. Montague Road & Main Street
2. Montague Road & Deer Creek Way
3. Montague Road & I-5 Southbound On-Off Ramps
4. Montague Road & I-5 Northbound On-Off Ramps
5. Montague Road & unnamed private road (Project Access)

Peak hour turning movement counts were collected at these intersections on Tuesday, May 17, 2022.

These locations have been evaluated for average weekday AM and PM peak hour operations under all analysis scenarios. The AM peak hour is defined as the one hour of peak traffic flow (which is the highest total volume count over four consecutive 15-minute count periods) counted between 7:00 am and 9:00 am on a typical weekday. The PM peak hour is defined as the one hour of peak traffic flow counted between 4:00 p.m. and 6:00 p.m. on a typical weekday. Existing geometry including lane usage and storage capacity at the study locations have been determined based on current aerial images.

3.8.2.1 Level of Service Policies

Caltrans

Caltrans' Guide for the Preparation of Traffic Impact Studies contains the following policy pertaining to the Level of Service (LOS) standards within Caltrans jurisdiction:

Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities, however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS

Consistent with Caltrans practice, the Traffic Study considered LOS "D" as the standard threshold acceptable operations for any intersection under Caltrans jurisdiction

City of Yreka

The City of Yreka's General Plan Circulation Element contains the following policy pertaining to roadway LOS standards:

Goal CI.2: To maintain a functional performance of roadways throughout the community at a Level of Service C or better;

Goal CI.4: Ensure that circulation improvements are adequate to serve transportation demands of new development within Yreka.

Consistent with the City's policies, the Traffic Study considered LOS "C" as the standard threshold acceptable operations for any roadway under the City of Yreka jurisdiction.

3.8.2.2 Existing Conditions Intersection Operations

Existing conditions for weekday AM and PM peak hour intersection operations were quantified utilizing the existing traffic volumes and intersection lane geometrics and control. Table 3.8-1 provides the delay (in sec/veh) and resulting LOS for the five study intersections under Existing conditions. As shown in Table 3.8-1, all study intersections operate above the target LOS during the Existing conditions AM and PM peak hours.

Table 3.8-1. Intersection LOS – Existing Conditions							
#	Intersection	Control Type ^{1,2}	Target LOS	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
1	Montague Road/Main Street	AWSC	C	20.4	C	11.0	B
2	Montague Road/Deer Creek Way	TWSC	C	12.6	B	10.8	B
3	Montague Road/I-5 Southbound Ramps	TWSC	D	14.4	B	10.7	B
4	Montague Road/I-5 Northbound Ramps	TWSC	D	17.7	C	11.1	B
5	Montague Road/Project Access Drive	Signal	C	6.3	A	7.6	A

Notes:

1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control
2. LOS = Delay based on worst minor street approach for TWSC intersections, average of all approaches for AWSC, Signal,

Source: GHD 2022

Roadway Classification

Montague Road (SR 3) is classified as an arterial street in the City's General Plan Circulation element with a designated capacity of 5,000 Average Daily Trips (ADT, LOS C threshold). Based on traffic counts collected on Tuesday, May 17, 2022 on Montague Road near the Project Site, the roadway has a daily traffic volume of 4,832 vehicles east of I-5 and 5,056 vehicles west of I-5.

3.8.3 Regulatory Setting

3.8.3.1 State

Department of Transportation

Caltrans is responsible for the design, construction, maintenance, and operation of the California State Highway System, as well as that portion of the Interstate Highway System within the state's boundaries. Alone and in partnership with Amtrak, Caltrans is also involved in the support of intercity passenger rail service in California and is a leader in promoting the use of alternative modes of transportation.

Transportation facilities under the jurisdiction of Caltrans within the vicinity of the Project Site include I-5 (including on- and off-ramps) and Montague Road (SR-3).

Caltrans' Guide for the Preparation of Traffic Impact Studies contains the following policy pertaining to the LOS standards within Caltrans jurisdiction

Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities, however, Caltrans acknowledges that this may not be always feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS.

Consistent with Caltrans practice, the Traffic Study considered LOS "D" as the standard threshold acceptable operations for any intersection under Caltrans jurisdiction

3.8.3.2 Local

City of Yreka 2007 General Plan

Regional access to the Project site is provided by I-5, which extends north to the Canada boarder and south to Los Angeles, California. In addition, Yreka is served by SR 3, SR 263, and A12 (Grenada) to State Highway 97. SR 3 runs parallel to the Project site. The City of Yreka General Plan contains the following transportation goals and policies related to construction and operation of commercial development, which may result from the Proposed Project:

Goal Cl.2. To maintain a functional performance of roadways throughout the community at a Level of Service C or better.

Goal Cl.4. Ensure that circulation improvements are adequate to serve transportation demands of new development within Yreka.

Program Cl.4.F: New development shall provide improvements as needed to avoid creating significant traffic impacts on streets surrounding the proposed project.

Traffic impacts are considered significant if they result in traffic that exceeds the "Environmental Capacity" of ADTs as defined below:

Local: Greater than 1,500 ADT;

Collector: Greater than 2,500 ADT
 Arterial: Greater than 5,000 ADT

Consistent with the City's policies, the Traffic Study considered LOS "C" as the standard threshold acceptable operations for any roadway under the City of Yreka jurisdiction.

3.8.4 Environmental Impacts

3.8.4.1 Thresholds of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. Transportation impacts are considered significant when the project would:

Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities.

Conflict or be inconsistent with CEQA Guidelines Section 1564.3, subdivision (b).

Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Result in inadequate emergency access.

3.8.4.2 Methods of Analysis

The following section outlines the analysis parameters and methodologies that were used in the Traffic Study to quantify potential project impacts for the analysis scenarios.

Vehicle Miles Travelled (VMT)

SB 743 was signed into law in 2013, with the intent to better align CEQA practices with statewide sustainability goals related to efficient land use, greater multimodal choices, and greenhouse gas reductions. The provisions of SB 743 became effective Statewide on July 1, 2020. Under SB 743, automobile delay, traditionally measured as the level of service (LOS), is no longer considered an environmental impact under CEQA. Instead, impacts are determined by changes to VMT. VMT measures the number and length of vehicle trips made on a daily basis. VMT is a useful indicator of overall land use and transportation efficiency, where the most efficient system is one that minimizes VMT by encouraging shorter vehicle trip lengths, more walking and biking, or increased carpooling and transit. In recognition that the character of communities, availability of travel modes options and geographic areas all differ throughout the State, each jurisdiction, from regional agency, to County, to City, has been given the opportunity to establish their own VMT thresholds consistent with the State's guidelines and regulatory framework. For this analysis, VMT will be analyzed to determine compliance under CEQA.

Approach to VMT Analysis

Project-generated VMT will be estimated using the *big data* platform Replica to evaluate the amount and distance of automobile travel attributable to the project. The business model for the travel center and

hotel is to attract people who are already traveling on I-5 within the Project vicinity. The following approaches and corresponding significance thresholds were used to evaluate VMT associated with the travel center and hotel:

Employee VMT: Home-based work VMT per Employee exceeds 85 percent of the average rate of home-based work VMT per Employee for jobs located in Siskiyou County;

Customer VMT: VMT attributable to customers (convenience store, retail, restaurant, and hotel) results in a significant net increase in total regional (County-level) VMT. The criteria for evaluating customer VMT is based on OPR's recommended method of evaluating VMT for customer-serving retail uses.

The analysis of net VMT considers that travel centers attract guests already visiting or traveling through Yreka that would otherwise utilize these land uses located along I-5.

Level of Service Methodologies

In addition to VMT, traffic operations have been quantified through the determination of LOS. LOS is a qualitative measure of traffic operating conditions, whereby a letter grade "A" through "F" is assigned to an intersection, or roadway segment, representing progressively worsening traffic conditions. LOS "A" represents free-flow operating conditions and LOS "F" represents over-capacity conditions. Levels of Service will be calculated for all intersection control types using the methods documented in the Transportation Research Board publication *Highway Capacity (HWC) Manual, Sixth Edition, A Guide for Multimodal Mobility Analysis*, 2016 (HCM 6).

Intersection Operations

The Synchro 10 (Trafficware) software program was used to implement the HCM 6 analysis methodologies. Synchro 10 has the capability to produce results based on HCM 2000, HCM 2010, HCM 6, or Synchro methodologies, and takes into account intersection signal timing and queuing constraints when calculating delay, the corresponding delay, and queue lengths. Intersection LOS has been calculated for all control types using the methods documented in HCM 6. For signalized or AWSC intersections, a LOS determination is based on the calculated averaged delay for all approaches and movements. For two-way or side-street stop-controlled (TWSC) intersections, a LOS determination is based upon the calculated average delay for all movements of the worst performing approach. The vehicular-based LOS criteria for various types of intersection controls are presented in Table 3.8-2.

Table 3.8-2. Level of Service (LOS) Criteria for Intersections

LOS	Type of Flow	Delay	Maneuverability	Stopped Delay per Vehicle	
				Signalized	Un-signalized
A	Stable Flow	Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	≤10.0	≤10.0
B	Stable Flow	Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	>10.0 and ≤20.0	>10.0 and ≤15.0
C	Stable Flow	Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted	>20.0 and ≤35.0	>15.0 and ≤25.0
D	Approaching Unstable Flow	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	Maneuverability is severely limited during short periods due to temporary back-ups.	>35.0 and ≤55.0	>25.0 and ≤35.0
E	Unstable Flow	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	>55.0 and ≤80.0	>35.0 and ≤50.0
F	Forced Flow	Generally considered to be unacceptable to most drivers. Often occurs with over saturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	>80.0	>50.0

Source: GHD 2022

Technical Analysis Parameters

This Traffic Study focuses on a *planning level* evaluation of traffic operating conditions. The planning level evaluation incorporates appropriate heavy vehicle adjustment factors, peak hour factors, and signal lost time factors and reports the resulting operational analysis as estimated using the HCM 6-based analysis methodologies. Assessments of *design level* parameters (e.g., queuing on intersection lane groups, stacking length requirements) are not included in this study.

Table 3.8-3 presents the technical parameters that will be utilized for the evaluation of the study intersections and ramp segments for the analysis scenarios. All parameters not listed are assumed as default values or calculated based on the parameters listed.

Table 3.8-2. Technical Parameter Assumptions	
Technical Parameter	Assumption
Intersection Peak Hour Factor	Based on counts, intersection overall
Intersection Heavy Vehicle Percent	Based on counts, intersection overall (minimum of 2%)
Intersection Peak Hour Factor	Existing scenarios: based on counts

Source: GHD 2022

3.8.4.3 Project Impacts and Mitigation Measures

Impact TR-1	Project implementation could conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities.
<i>Impact Determination</i>	<i>Less than Significant with Mitigation</i>
<i>Threshold</i>	<i>Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities.</i>

Impact Discussion

Project Trip Generation

Project site trip generation for Phase I has been estimated for the total number of vehicles fueling position (Institute of Transportation Engineers [ITE] Code 945), the food hall square footage (ITE Code 930), and the retail square footage (ITE Code 851). Project site trip generation for Phase II has been estimated for the total number of hotel rooms (ITE Code 310). These estimations were achieved by utilizing the ITE publication *Trip Generation Manual (11th Ed.)*

Gas stations and convenience stores generally serve drivers that are on the roadway system and need to stop for services. Due to the proximity of the Project Site to I-5, a reduction of project trips was applied to account for vehicle trips already on the adjacent roadway network that stop at the proposed gas station and convenience store. These types of trips are typically considered pass-by trips. In addition, internal capture reduction was applied to the retail store and food hall to account for trips between these two destinations within the Project Site. Table 4.1 presents the project trip generation for Plus Project conditions for both Phase I and Phase II.

Table 3.8-4. Project Trip Generation							
Land Use Category (ITE Code)	Unit¹	AM Peak Hour Trip Rate/Unit			PM Peak Hour Trip Rate/Unit		
		Total	In %	Out %	Total	In %	Out %
Convenience Store (851)	KSF	62.54	50	50	49.11	51	49
Convenience Store/Gas Station (945)	VFP	16.06	50	50	18.42	50	50
Fast Casual restaurant (930)	KSF	1.43	50	50	12.55	55	45
Hotel (310)	Rooms	0.40	56	44	0.34	51	49
Phase I							
Retail	0.55	34	17	17	27	14	13
Convenience Store/Fuel Center	20	321	160	161	368	184	184
Restaurant/Food Hall	8.57	12	6	6	108	59	49
Phase I Total New Project Trips:		367	183	184	503	257	246
Pass-By Reduction for Convenience Store/Gas Station							
AM	62%	-199	-99	-100	-		
PM	56%	-			-206	-103	-103
Internal Capture (between Retail & Restaurant/Food Hall)		-4	-2	-2	-20	-10	-10
Phase I Net New Project Trips:		164	82	82	277	144	133
Phase II							
Hotel/Inn	70 rooms	28	16	12	24	12	12
Additional Internal Capture with Hotel/Inn		0	0	0	-10	-5	-5

Table 3.8-4. Project Trip Generation

Land Use Category (ITE Code)	Unit ¹	AM Peak Hour Trip Rate/Unit			PM Peak Hour Trip Rate/Unit		
		Total	In %	Out %	Total	In %	Out %
Phase II Net New Project Trips:		28	16	12	14	7	7
Total Phase I/Phase II Net New Project Trips:		192	98	94	291	151	140

Notes:

- 1 ksf = 1,000 square feet VFP = Vehicle Fueling Positions
- Trip rates based on ITE Trip Generation Manual 11th edition fitted-curve equations or average rates
- Trip reductions based on ITE Trip Generation Handbook 3rd Edition (September 2017) for Code 945.
- Internal Capture rates based on ITE Trip Generation Handbook, 3rd Edition

Source: GHD 2022

Project Trip Distribution and Assignment

Figure 3.8-2 presents the distribution of Project-generated vehicle trips under Plus Project conditions. The assignment of proposed project trips is consistent with previous traffic analyses conducted for the Project Site¹, which was informed by existing traffic conditions and the location of the Proposed Project Site relative to I-5 and SR 3 (Montague Road) access.

During the AM peak hour, 35 percent of the site's traffic would come from northbound I-5 and 50 percent of the site's traffic would come from southbound I-5. During the PM peak hour, these directional splits would be reversed with 50 percent project trips from northbound I-5 and 35 percent from southbound I-5. The remaining 15 percent of proposed project trips would be to/from the east and west on Montague Road.

Existing Plus Project Phase I Conditions

Existing Plus Phase I Project Conditions were simulated by superimposing traffic generated by the Proposed Project onto existing intersection traffic volumes. Existing plus Project Phase I intersection peak hour turning movement volumes are presented in Figure 3.8-3.

Intersection Operations

Table 3.8-5 presents a summary of the intersection operations for the weekday AM and PM peak hour scenarios for the Existing Plus Phase I Project Conditions. As shown, the Montague Road/I-5 Southbound Ramp intersection would be operating at LOS F (61.8 seconds of delay in the southbound approach) during the AM peak hour under Existing plus Phase I Project conditions. All remaining study intersections operate at the acceptable target LOS during the Existing Plus Phase I Project AM and PM peak hours.

¹ GHD, LTD, Refresh Plaza Travel Center, City of Yreka, Technical Memo, June 21, 2020

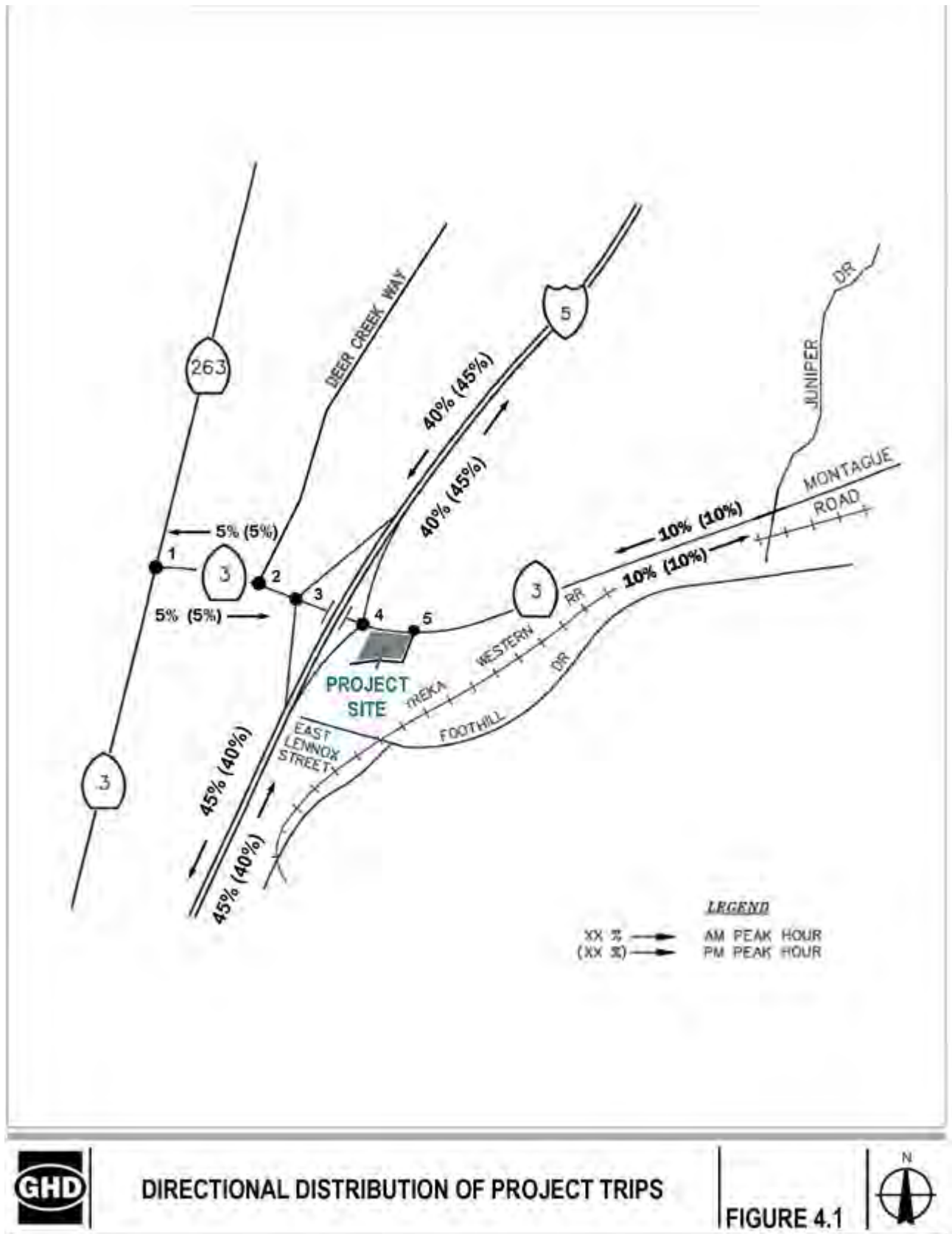


Figure 3.8-2. Directional Distribution of Project Trips

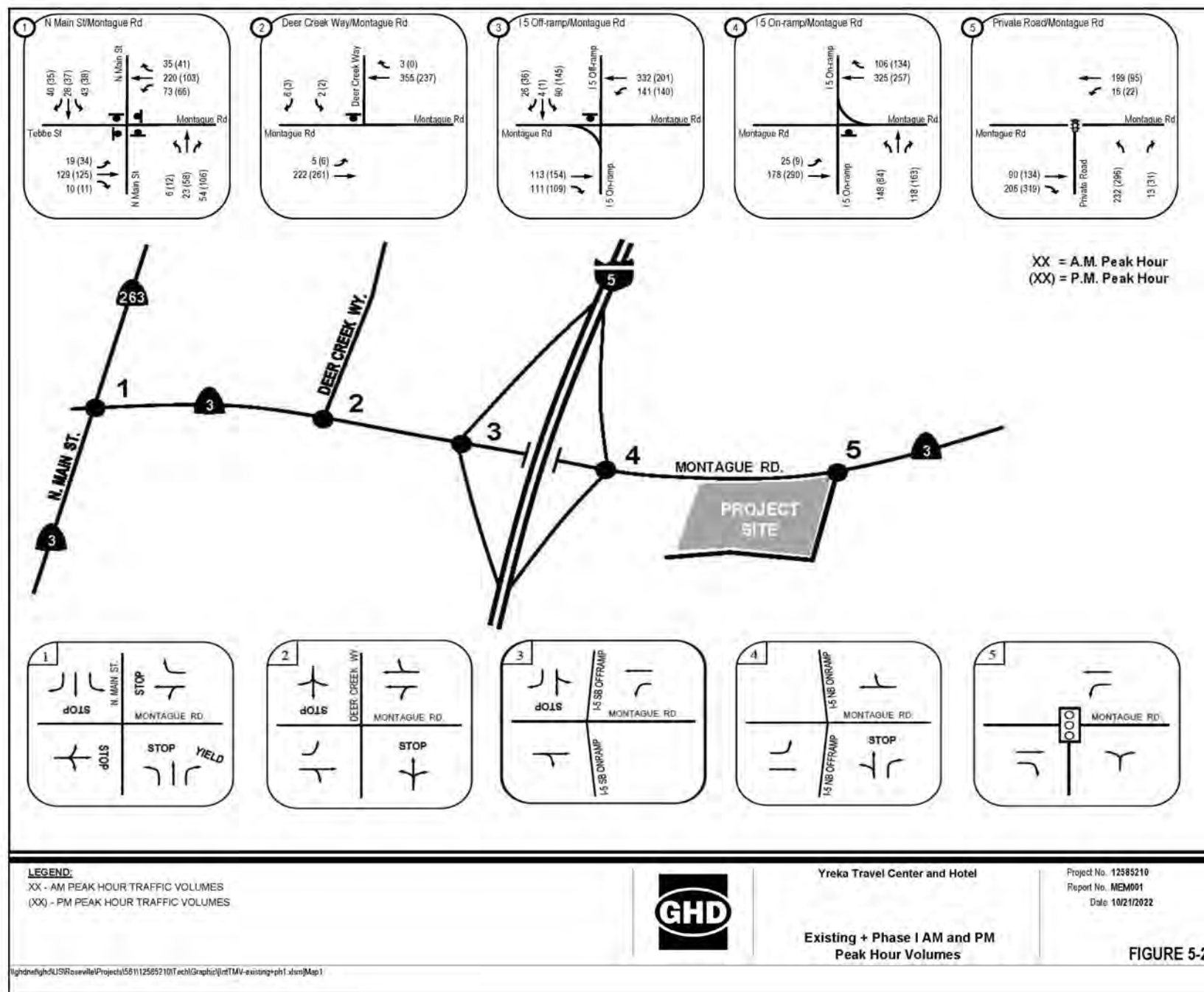


Figure 3.8-3. Existing + Phase I AM and PM Peak Hour Volumes
 Yreka Travel Center and Hotel

Table 3.8-5. Intersection LOS – Existing Conditions Plus Project Phase I							
#	Intersection	Control Type ^{1,2}	Target LOS	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
1	Montague Road/Main Street	AWSC	C	22.0	C	11.2	B
2	Montague Road/Deer Creek Way	TWSC	C	12.8	B	10.9	B
3	Montague Road/I-5 Southbound Ramps	TWSC	D	61.8	F	22.5	C
4	Montague Road/I-5 Northbound Ramps	TWSC	D	23.8	C	13.6	B
5	Montague Road/Project Access Drive	Signal	C	10.5	B	25.9	C

Notes:

1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control
2. LOS = Delay based on worst minor street approach for TWSC intersections, average of all approaches for AWSC and Signal.
3. Bold = Unacceptable Conditions

Source: GHD 2022

Plus Project Roadway Volumes

Under Project Phase I, Montague Road (SR 3) would experience an increase of 164 AM and 277 PM peak hour trips. Under Project Phase II, Montague Road (SR 3) would experience an additional increase of 28 AM and 14 PM peak hour trips. Due to the lack of daily volume rates for internal capture reduction, daily volume increase on Montague Road cannot be estimated. However, the addition of the Project to the roadway is anticipated to result in total traffic volumes that exceed the daily roadway capacity of 5,000.

Conclusion

As shown in Table 3.8-5, under Existing Plus Project conditions, the implementation of the Project would result in LOS F at the Montague Road/I-5 Southbound Ramps intersection. This would exceed both the City's LOS C standard and the Caltrans standard of LOS D. As such, the Project would conflict with the City's General Plan and Caltrans's LOS policies addressing the circulation system and roadways. Mitigation is required to reduce this potential impact. Since the Montague Road/I-5 Southbound Ramps intersection is a Caltrans facility, any improvements to Caltrans intersections would be subject to the Intersection Control Evaluation (ICE) process.

Mitigation Measures

TR-1: Improvements to the Montague Road/ I-5 Southbound Ramps. The Project proponent shall be responsible to convert intersection to all-way stop-control AWSC, or other traffic control mechanism approved by Caltrans, at the Montague Road/I-5 Southbound Ramps to the satisfaction of the City Engineer and Caltrans.

Timing/Implementation: Prior to issuance of a certificate of occupation for Phase I of the Project.

Enforcement/Monitoring: City of Yreka and Caltrans

Residual Impact After Mitigation

Table 3.8.6 presents the intersection LOS under *Existing Plus Project* conditions with implementation of Mitigation Measure TR-1. As shown, the intersection can be improved to acceptable LOS with conversion to AWSC at the Montague Road/I-5 Southbound Ramp. Although the all-way stop would achieve acceptable operations, any improvements to Caltrans intersections would be subject to the ICE process. Impacts would be less than significant after mitigation.

Table 3.8-6. Intersection LOS – Improved Existing Plus Project Conditions							
#	Intersection	Control Type ^{1,2}	Target LOS	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
3	Montague Road/I-5 Southbound Ramps	AWSC	D	21.2	C	12.3	B

Notes:

1. AWSC = All Way Stop Control
2. LOS = Delay based on average of all approaches for AWSC.

Source: GHD 2022

Impact TR-2	Project implementation could conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).
<i>Impact Determination</i>	<i>Less than Significant</i>
<i>Threshold</i>	<i>Conflict or inconsistency with CEQA Guidelines Section 15064.3, subdivision (b).</i>

Impact Discussion

SB 743 was signed into law in 2013, with the intent to better align CEQA practices with statewide sustainability goals related to efficient land use, greater multimodal choices, and GHG reductions. The provisions of SB 743 become effective Statewide on July 1, 2020. Under SB 743, impacts will be

determined by changes to VMT. VMT measures the number and length of vehicle trips made on a daily basis. VMT is a useful indicator of overall land use and transportation efficiency, where the most efficient system is one that minimizes VMT by encouraging shorter vehicle trip lengths, more walking and biking, or increased carpooling and transit. CEQA Guidelines Section 15064.3 describes specific considerations for evaluating a project's transportation impacts and states that "[g]enerally, VMT is the most appropriate measure of transportation impacts."

Project VMT Analysis

Existing and future VMT were estimated using the *big data* platform Replica to evaluate the potential VMT attributable to the project for both employees and customers. The Traffic Study considered the following approaches to determine if the proposed project results in a significant impact under CEQA:

Employee VMT: VMT per Employee exceeds 85 percent of the average rate of home-based work VMT per Employee for jobs located in Siskiyou County;

Customer VMT: VMT attributable to customers (convenience store, retail, restaurant, and hotel) results in a significant net increase in total regional (County-level) VMT. The criteria for evaluating customer VMT is based on OPR's recommended method of evaluating VMT for customer-serving retail uses.

The analysis of net VMT considers that travel centers attract guests already visiting or traveling through Yreka that would otherwise utilize these land uses located along I-5.

Employee VMT was evaluated under both Pre-COVID 19 and COVID 19 conditions using average trip lengths for work trips within the City of Yreka compared to those within Siskiyou County, as shown in Table 3.8-7. As shown, the average trip length per employee within the City of Yreka is approximately 67 percent (2019) and 64 percent (2021) of the County average.

Table 3.8-7. City of Yreka & Siskiyou County Employee VMT Comparison		
Location	Average Trip Length for Work Trips (miles)	Percent of County Average
Pre-COVID 19: Sept - Nov 2019		
City of Yreka	11.35	67
Siskiyou County	16.89	-
COVID 19: March - May 2021		
City of Yreka	12.61	64
Siskiyou County	19.56	-

Source: GHD 2022

Additional analysis was done to compare the average trip lengths for work trips within the smallest zone available on the Replica platform in which the Project Site is located (Tract 7.02 within Siskiyou County). As shown in Table 3.8-8, the average trip length per employee within this zone is approximately 71 percent (2019) and 58 percent (2021) for total work trips, and 70 percent (2019) and 50 percent (2021) for retail work trips.

Table 3.8-8. City of Yreka & Siskiyou County Employee VMT Comparison		
Location	Average Trip Length for Work Trips (miles)	Percent of County Average
Pre-COVID 19: Sept - Nov 2019		
Retail Only	11.82	70
Total	11.92	71
COVID 19: March - May 2021		
Retail Only	9.76	50
Total	11.37	58

Source: GHD 2022

Due to the significantly lower average trip lengths for employees within both the City of Yreka and Tract 7.02 zone compared to Siskiyou County, employee trips generated by the Proposed Project are not anticipated to exceed the threshold of 85 percent of the average employee trip rate within Siskiyou County.

In addition, as the business model for the travel center and hotel is to attract people who are already traveling on I-5 within the Project vicinity, it can be assumed that the majority of Project trips attributed to customers or hotel guests are not *new trips* on the roadway network and their diversion to the Project Site would result in minimal increases in trip distances given the site's proximity to the I-5 interchange. As such, customer VMT attributed to the Project is not anticipated to significantly increase total VMT within Siskiyou County.

Mitigation Measures

No mitigation measures are required.

Impact TR-3	Project implementation could substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersection) or incompatible uses (e.g., farm equipment).
<i>Impact Determination</i>	<i>Less than Significant with Mitigation</i>
<i>Threshold</i>	<i>Substantial increase in hazards due to geometric design feature or incompatible uses.</i>

Impact Discussion

As shown in Figure 2.0-4, the gas station, retail store, and food hall will primarily be access via the existing unnamed private road along the eastern edge of the site, connecting to Montague Road. Guest parking spaces and a truck turnaround zone will be accessible from this entrance. Under Phase II, site access to the hotel will be located along the southern edge of the development, connecting to the existing roadway that is currently providing access to the Holiday Inn Express. The Project does not propose any new roadways or changes to the existing roadway system. The Project would not result in a substantial increase in hazards due to geometric design feature or incompatible uses.

Mitigation Measures

No mitigation measures are required.

Impact TR-4	Project implementation could result in inadequate emergency access.
<i>Impact Determination</i>	<i>Less than Significant</i>
<i>Threshold</i>	<i>Inadequate emergency access.</i>

Impact Discussion

Access to the Project site is provided via Montague Road/SR 3, that would provide adequate emergency access upon Project completion. Development of the Project Site would include the construction of four driveway entrances/exits. These entrances/exits would provide emergency access redundancy. A less than significant impact would occur.

Mitigation Measures

No mitigation measures are required.

3.8.5 Cumulative Setting, Impacts, and Mitigation Measures

3.8.5.1 Cumulative Conditions No Project

Cumulative conditions refer to the analysis scenarios that reflect future conditions represented by local and regional growth in approximately 20 years in the future. Cumulative No Project conditions analyses the scenario that considers the projected 20-year development forecast, including the currently planned and approved developments, but without the Proposed Project. The Cumulative Plus Project condition is the analysis scenario in which traffic associated with the proposed Yreka Travel Center and Hotel development are compared to the Cumulative No Project conditions.

Given the varying rates of historical traffic growth found on the adjacent roadway segments and undeveloped approved projects; a conservative 20 percent growth rate was applied to Existing volumes in

addition to the expected trip generation from the Proposed Project to generate a forecast of Cumulative conditions without the proposed project. Cumulative intersection peak hour turning movement volumes are presented in Figure 3.8-4.

Table 3.8-9 provides the delay (in sec/veh) and resulting LOS for the five study intersections under Existing conditions. As shown, the intersection of Montague Road/Main Street is projected to operate unacceptably at LOS E during the AM peak hour.

Table 3.8-9. Intersection LOS – Cumulative Conditions No Project							
#	Intersection	Control Type ^{1,2}	Target LOS	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
1	Montague Road/Main Street	AWSC	C	39.4	E	12.5	B
2	Montague Road/Deer Creek Way	TWSC	C	15.6	C	12.3	B
3	Montague Road/I-5 Southbound Ramps	TWSC	D	16.2	C	11.4	B
4	Montague Road/I-5 Northbound Ramps	TWSC	D	24.6	C	11.9	B
5	Montague Road/Project Access Drive	Signal	C	6.4	A	7.8	A

Notes:

1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control
2. LOS = Delay based on worst minor street approach for TWSC intersections, average of all approaches for AWSC and Signal.
3. Bold = Unacceptable Conditions

Source: GHD 2022

3.8.5.2 Cumulative Impacts and Mitigation Measures

Impact TR-5	Would the project, when considered with existing, proposed, planned, and approved development in the region, implementation of the proposed project would contribute to cumulative traffic volumes on local roadways that result in significant impacts to level of service and operations?
<i>Impact Determination</i>	<i>Less than cumulatively considerable with mitigation</i>
<i>Threshold</i>	<i>Cumulatively contribute to cumulative traffic volumes on local roadways that result in significant impacts to level of service and operations.</i>

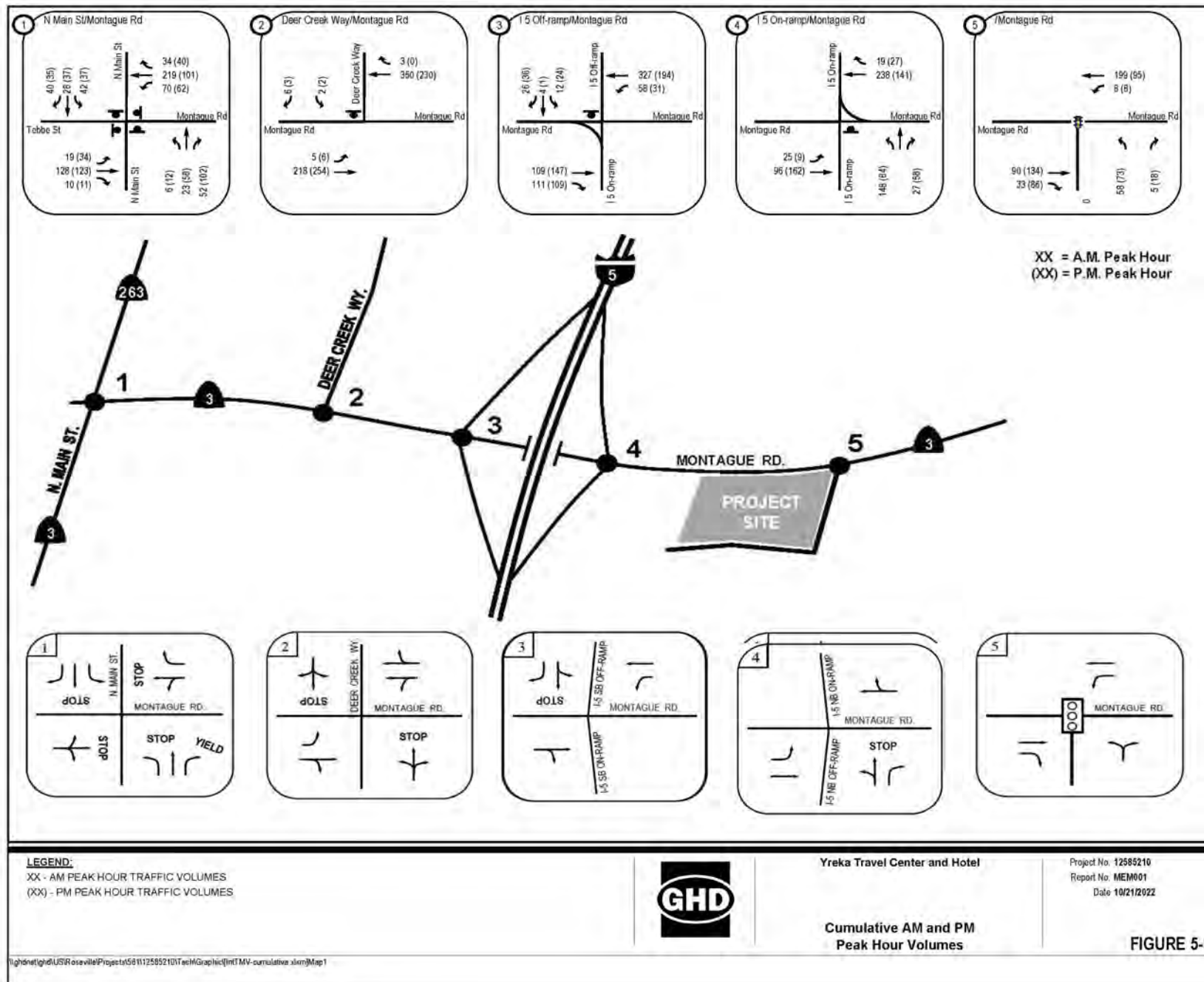


Figure 3.8-4. Cumulative No Project AM and PM Peak Hour Volumes
Yreka Travel Center and Hotel

Impact Discussion

Cumulative Plus Project Conditions

Cumulative Plus Phase I and Cumulative Plus Phase II Project Conditions were simulated by superimposing traffic generated by the Proposed Project onto existing intersection traffic volumes. Cumulative plus Project Phase I and Phase II intersection peak hour turning movement volumes are presented in Figures 3.8-5 and 3.8-6, respectively.

Cumulative Plus Project Phase I Intersection Operations

Table 3.8-10 presents a summary of the intersection operations for the weekday AM and PM peak hour scenarios for the Cumulative Plus Phase I Project Conditions. With the addition of the Project, the intersection of Montague Road/Main Street is anticipated to continue to operate at LOS E, and the I-5 ramp intersections on Montague Road are anticipated to operate unacceptably.

Table 3.8-10. Intersection LOS – Cumulative Conditions Plus project Phase I							
#	Intersection	Control Type ^{1,2}	Target LOS	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
1	Montague Road/Main Street	AWSC	C	41.5	E	12.7	B
2	Montague Road/Deer Creek Way	TWSC	C	14.1	B	11.2	B
3	Montague Road/I-5 Southbound Ramps	TWSC	D	89.0	F	25.2	D
4	Montague Road/I-5 Northbound Ramps	TWSC	D	41.0	E	14.7	B
5	Montague Road/Project Access Drive	Signal	C	10.2	B	28.3	C

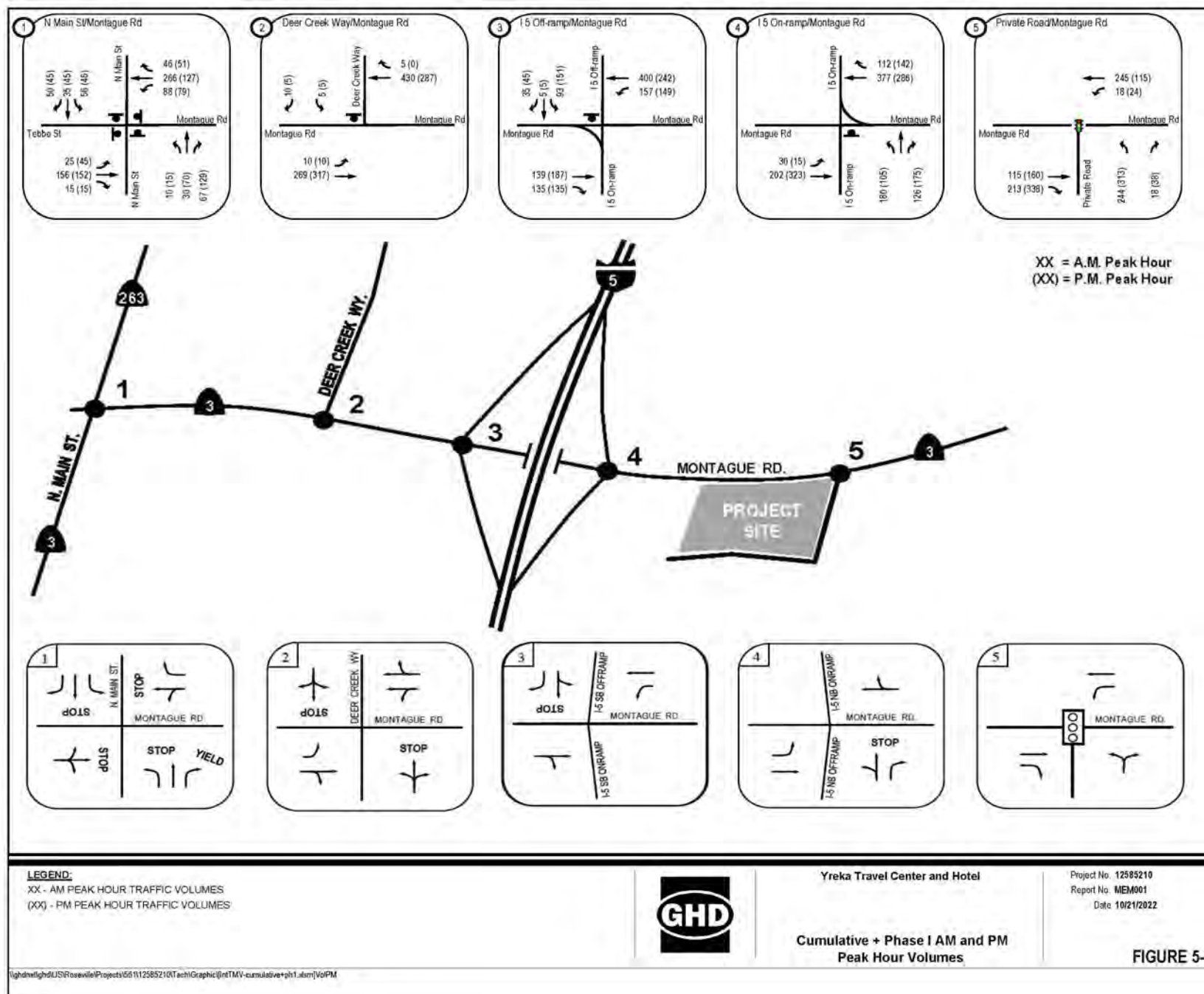
Notes:

1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control
2. LOS = Delay based on worst minor street approach for TWSC intersections, average of all approaches for AWSC and Signal.
3. Bold = Unacceptable Conditions

Source: GHD 2022

Cumulative Plus Project Phase II Intersection Operations

Table 3.8-11 presents a summary of the intersection operations for the weekday AM and PM peak hour scenarios for the Cumulative Plus Phase II Project Conditions with the hotel. With the addition of the Project, the intersection of Montague Road/Main Street is anticipated to continue to operate at LOS E, and the I-5 ramp intersections on Montague Road are anticipated to operate unacceptably.



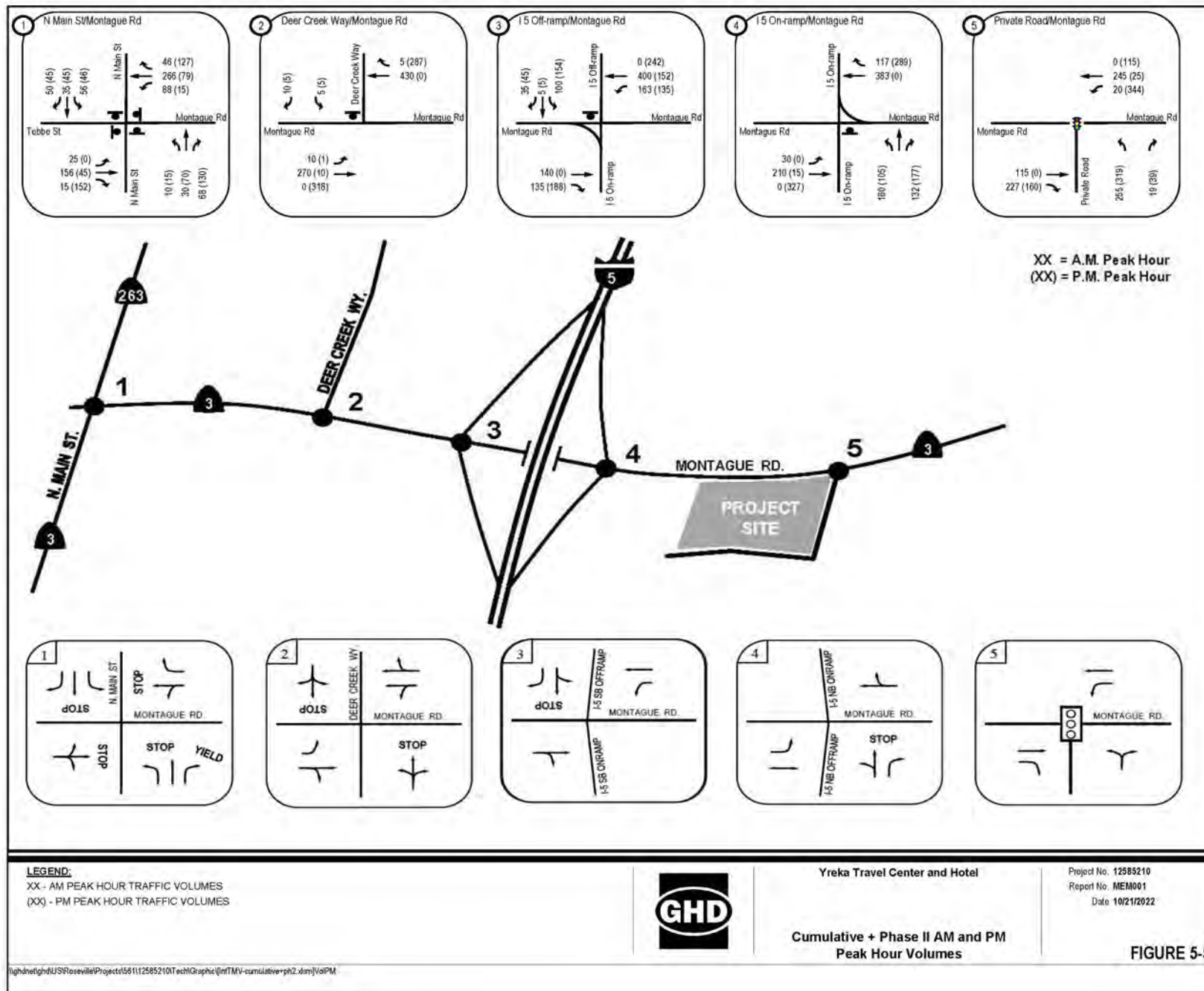


Table 3.8-11. Intersection LOS – Cumulative Conditions Plus Project Phase II

#	Intersection	Control Type ^{1,2}	Target LOS	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
1	Montague Road/Main Street	AWSC	C	41.7	E	12.7	B
2	Montague Road/Deer Creek Way	TWSC	C	14.1	B	11.2	B
3	Montague Road/I-5 Southbound Ramps	TWSC	D	113.1	F	26.2	D
4	Montague Road/I-5 Northbound Ramps	TWSC	D	43.3	E	14.8	B
5	Montague Road/Project Access Drive	Signal	C	10.6	B	31.3	C

Notes:

1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control
2. LOS = Delay based on worst minor street approach for TWSC intersections, average of all approaches for AWSC and Signal.
3. Bold = Unacceptable Conditions

Source: GHD 2022

Conclusion

As shown in Tables 3.8-4 and 3.8-5, under Cumulative Plus Project conditions, the implementation of the Project would result in LOS F at the Montague Road/I-5 Southbound Ramps intersection and LOS E at the Montague Road/Main Street intersection. These would exceed both the City's LOS C standard and the Caltrans standard of LOS D. However, the Project is not considered to adversely affect operations at the intersection of Montague Road/Main Street due to the minimal increase in seconds of delay compared to "No Project" conditions. Therefore no mitigation is required for this intersection. For the Montague Road/I-5 Southbound Ramps intersection, implementation of Mitigation Measure TR-1, discussed previously, would reduce this impact to less than significant.

Construction of the Project would result in LOS E at the Montague Road/I-5 Northbound Ramps intersection. As such, the Project would conflict with the City's General Plan and Caltrans's LOS policies addressing the circulation system and roadways. Mitigation is required to reduce this potential impact. Since the Montague Road/I-5 Northbound Ramps intersection is a Caltrans facility, any improvements to Caltrans intersections would be subject to the ICE process.

Mitigation Measures

TR-2: Improvements to the Montague Road/ I-5 Northbound Ramps. The Project proponent shall be responsible for the following:

- Conversion of the intersection to all-way stop-control AWSC, or other traffic control mechanism approved by Caltrans, at the Montague Road/I-5 Northbound Ramps to the satisfaction of the City Engineer and Caltrans.
- Addition of a westbound right-turn pocket at the Montague Road/I-5 Northbound Ramps to the satisfaction of the City Engineer and Caltrans.

Timing/Implementation: Prior to issuance of a certificate of occupation for Phase I of the Project.

Enforcement/Monitoring: City of Yreka and Caltrans

Residual Impact After Mitigation

Table 3.8.12 presents the intersection LOS under *Cumulative Plus Project* conditions with implementation of Mitigation Measures TR-1 and TR-2. As shown, the Montague Road/I-5 Southbound Ramp intersection can be improved to acceptable LOS with conversion to AWSC. Further, the addition of an AWSC and a right-turn pocket on the Montague Road/I-5 Northbound Ramp would be improved to an acceptable LOS. Although the all-way stops would achieve acceptable operations, any improvements to Caltrans intersections would be subject to the ICE process. Impacts would be less than significant after mitigation.

Table 3.8-12. Intersection LOS – Improved Cumulative Plus Project Conditions							
#	Intersection	Control Type ^{1,2}	Target LOS	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
Cumulative + Phase I							
3	Montague Road/I-5 Southbound Ramps	AWSC	D	31.7	D	13.5	B
4	Montague Road/I-5 Northbound Ramps	AWSC	D	32.0	D	15.3	C
Cumulative + Phase II							
3	Montague Road/I-5 Southbound Ramps	AWSC	D	32.8	D	13.6	B
4	Montague Road/I-5 Northbound Ramps	AWSC	D	34.2	D	15.5	C

Notes:

1. AWSC = All Way Stop Control

2. LOS = Delay based on average of all approaches for AWSC.

Source: GHD 2022

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3.9 TRIBAL CULTURAL RESOURCES

This section describes the affected environment and regulatory setting for TCRs in the Project Area. The following analysis of the potential environmental impacts related to TCRs is derived primarily from the following sources and agencies:

- California Native American Heritage Commission Sacred Lands File Search, January 14, 2021
- *The Cultural Resources Records Search and Literature Review for the Refresh Travel Center Project*, (ECORP 2021b)
- Tribal consultation under AB 52 completed by the City of Yreka for the Proposed Project
- *2016 Greenway Master Plan and Flood Reduction Project Draft Environmental Impact Report*

3.9.1 Environmental Setting

3.9.1.1 Ethnography

Ethnographically, the Project Site is located in the territory occupied by the Shasta Indian peoples at the time of initial contact with European-Americans, circa 1826. The traditional territory of the Shastan peoples extended into southern Oregon and to Northern California as far south as Mount Shasta. The western boundary included Seiad Valley on the Klamath River, southwest to the New River area, and east to the area of Beswick, California. Ethnographic descriptions of the Shasta people are provided by anthropologists and ethnographers who used the assistance of surviving Shasta elders. Accounts by European-American travelers and settlers supplemented this information. According to information in the Cultural Resources Survey, several Shastan villages were located in the general Yreka area. One village, called Kusta (No. 120), may have been located at the site of present Yreka on the west side of Yreka Creek. The exact location of this village is not known and has not been documented archaeologically; it may have been destroyed either from mining, flooding, or freeway construction. Shasta informants suggest that the name may have been applied to many villages in the generalized area of Yreka and not for a single village site. Additional archaeological information documents at least one other village along Yreka Creek: Ar-rah-ah. This village was located north of the city at the site of present Hawkinsville on Yreka Creek.

There are few archaeological manifestations of Shasta villages in the Yreka area. A button, possibly made from a clam shell, was found at the village O-ko-ho'-i'-wah (No. 121). Clam shell disc beads, which had one center hole, were more commonly used on a necklace, with many disc beads and used as exchange currency. This location on a flat on Greenhorn Creek has been tentatively located on the west side of Main Street north of Ranch Lane; though it is within the Greenway Master Plan area, it is outside the FHR Project Area. Another reference to Native American artifacts was identified in the Siskiyou Pioneer in 1965. The article notes artifacts such as abalone shell and Native American beads, as well as Hudson Bay beads, turned up by farm machinery from a sawmill behind Forest House Ranch. This find might be associated with the village called Maht-te-Kwar (Kwaht-te-kwar, No. 123). This location is outside the Project Area.

Another archaeological site—a small prehistoric lithic scatter—was recently found approximately 0.5 mile east of Yreka Creek outside the Yreka Creek floodplain .

Many of the resources significant to the Shasta to support their lifeways were found in Yreka and its vicinity. The Shastan people developed a subsistence economy based on seasonal hunting, fishing, and gathering patterns. Base camps were located in key resource areas and were visited once a year, depending on the availability of the targeted subsistence resource. After the food-gathering cycle was over, they would return to their permanent villages (largely along rivers) with their food stores to spend the winters. Structures in winter villages might include rectangular multi-family dwellings, assembly houses, communal men's sweathouses, smaller communal sweathouses, and menstrual huts.

The Karuk Tribe is also located within the surrounding area of Yreka and the Project site. The Karuk Tribe is a federally recognized Native American tribe of Karuk people. A tribe from the far northwestern portion of California, inland along the middle section of the Klamath River. Karuk means *upstream*, as opposed to the word for their neighbors, Yurok, which means *downstream*. Culturally, the Karuk were similar to the neighboring Yurok and Hupa. Their language is one of the Hokan language family. They traditionally relied on the salmon runs that occur twice each year, as well as on gathering foods. Karuk population in the 18th century is estimated to have been around 1,500. Today, the Karuk are one of the largest tribes in California, with approximately 4,800 members, although the tribe has a small land base. Today, Karuk Native Americans live in the Orleans district in Humboldt County, the Happy Camp district, the Yreka district, along the Forks of the Salmon region in Siskiyou County, and in southern Oregon (SDSU 2022).

3.9.2 Known Cultural Resources in the Project Area

Existing Northeast Information Center (NEIC) records document that all of the Project Site has been subjected to prior archeological investigation. Per the NEIC records, no prehistoric or historic era sites have been documented in the Project Site (ECORP 2021b). Additionally, The City of Yreka notified the Shasta Indian Nation and the Karuk Tribe of the Proposed Project on June 28, 2022. Neither tribe has indicated that there were known TCRs on the Project site.

3.9.3 Regulatory Framework

3.9.3.1 Federal

National Historic Preservation Act

The NHPA) requires that the federal government list significant historic resources on the NRHP), which is the nation's master inventory of known historic resources. The NRHP is administered by the NPS) and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

Structures, sites, buildings, districts, and objects more than 50 years of age can be listed in the NRHP as significant historic resources. However, properties under 50 years of age that are of exceptional

importance or are contributors to a historic district can also be included in the NRHP.¹ The criteria for listing in the NRHP include resources that:

- a) are associated with events that have made a significant contribution to the broad patterns of history;
- b) are associated with the lives of persons significant in our past;
- c) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d) have yielded or may likely yield information important in prehistory or history.

Additionally, the NRHP guidelines describe a type of cultural significance for which properties may be eligible for inclusion in the NRHP. A property with traditional cultural significance will be found eligible for the NRHP because it is associated with cultural practices or beliefs of a living community that:

- a) are rooted in that community's history, and
- b) are important in maintaining the continuity of the cultural identity of the community.

This type of significance is grounded in the cultural patterns of thought and behavior of a living community and refers specifically to the association between their cultural traditions and a historic property.

3.9.3.2 State

Assembly Bill 52

Effective July 1, 2015, AB 52 amended CEQA to require that:

- 1) a lead agency provide notice to those California Native American tribes that requested notice of projects proposed by the lead agency; and
- 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe.

Topics that may be addressed during consultation include TCRs, the potential significance of project impacts, type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

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

¹ A [historic] district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development (NPS 1983).

Section 21074(a) of the PRC defines TCRs for the purpose of CEQA as:

- 1) Sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - a. included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or
 - b. included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or
 - c. a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

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

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

In accordance with Section 21082.3(c)(1) of the PRC:

“... information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with subdivision (r) of Section 6254 of, and Section 6254.10 of, the Government Code, and subdivision (d) of Section 15120 of Title 14 of the CCR, without the prior consent of the tribe that provided the information.”

Therefore, the details of tribal consultation summarized herein are provided in a confidential administrative record and not available for public disclosure without written permission from the tribes.

3.9.4 *Environmental Impacts*

3.9.4.1 *Thresholds of Significance*

Following Appendix G of the CEQA Guidelines, TCR impacts are considered to be significant if the project would result in any of the following:

1. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - a. Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC § 5020.1(k), or
 - 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 PRC § 5024.1. In applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe?

3.9.4.2 Methods of Analysis

As a part of the Cultural Resources Records Search and Literature Review, ECORP (2021b) requested a records search for the property from the NEIC of the CHRIS at California State University, Chico on January 14, 2021. The purpose of the records search was to determine the extent of previous surveys within a 0.5-mile (800-meter) radius of the property, and whether previously documented pre-contact (prehistoric) or historic archaeological sites, architectural resources, cultural landscapes, or ethnic resources exist within this area. The records search was completed by NEIC and returned to ECORP on February 11, 2021.

In addition to the records search, other literature reviewed included survey reports, archaeological site records, historic maps, and listings of resources on the NRHP, CRHR, California Points of Historical Interest, California Historical Landmarks, and National Historic Landmarks. Additionally, ECORP completed a RealQuest Property Search (based on Assessor's records) and reviewed historic GLO land patent records from the BLM. ECORP also contacted the NAHC to request a search of its Sacred Lands File for the presence of traditional cultural properties or sacred, religious, or otherwise important Native American resources on January 14, 2021. ECORP also mailed a letter to the Siskiyou County Historical Society on January 14, 2021 to solicit comments or obtain historical information that the repository might have regarding events, people, or resources of historical significance in the area.

Previous Research

Eleven previous cultural resources investigations have been conducted within 0.5 mile of the property, covering approximately 50 percent of the total area surrounding the property within the records search radius (Table 3.9-1). These studies revealed the presence of one historic-age resource within the 0.5-mile radius of the Project site. The previous surveys were conducted between 1991 and 2015.

Table 3.9-1. Previous Cultural Studies within 0.5 Mile of the Project Site

Report Number	Author(s)	Report Title	Year	Includes Portion of the APE?
501	Peter Jenson	Archaeological Reconnaissance of 14 Acres Near the Junction of Interstate 5 and State Route 3, Near Yreka, California	1977	Yes
2135	Peter Jenson	Historic Properties Survey Report (HPSR) - Negative, for the Proposed City of Yreka's Proposed East Side Sewer System Project	1998	No
5285	James Rock	Archaeological Survey for the Rezone and General Plan Amendment for the Roman Catholic Diocese of Sacramento and Yreka Western Railroad Property, Co.	1999	No
5755	Peter Jenson	Archaeological Inventory Survey City of Yreka Sewer Improvement Project, Yreka, Siskiyou County, California	2003	No
7646	Dennis Gray	Cultural Resource Inventory, Rogue Valley Manor Residential Housing Project, Siskiyou County, California	1994	No
8670	James Rock	Archaeological Inventory Report: Yreka Creek R.V. Park Project for RV-Group Partnership	2005	No
10584	Sean Michael Jensen	Archaeological Inventory Survey Proposed Yreka Creek Greenway Development Project c. 8 Acres, City of Yreka, Siskiyou county, California	2009	No
11478	Hamusek, Blossom	Archaeological Survey Report for the Juniper Left Turn Lane Project, Siskiyou County, California	2011	No
11702	Candice Cook-Slette and Jeff LaLande	Archaeological and Historical Resource Report for the Yreka Wastewater Treatment and Collection System Improvement Project	2012	No
12842	Brian Ludwig	State Route 3, State Route 97, and Interstate 5 Encroachment Permit Areas – Yreka to Wedd Archaeological Survey Report	2015	No
13495	John Furry	Archaeological Inventory Survey For the Proposed North View Estates Subdivision Project Involving c. 110 Acres Located North of Yreka, Siskiyou County, California	1991	No

Source: ECORP Consulting 2021b

The records search also determined that three previously recorded historic-period cultural resources are located within 0.5 mile of the Project site (Table 3.9-2). No cultural have been previously recorded within the Project site.

Table 3.9-2. Previously Recorded Cultural Resources In or Within 0.5 Mile of the Project Site

Site Number CA-SIS-	Primary Number P-47-	Recorder and Year	Age/ Period	Site Description	Within Project site?
4410H	4410	Sean M. Jensen 2009	Historic	Yreka Wastewater Treatment Facility	No
4745H	4745	Blossom Hamusek and D. McGann 2011	Historic	Yreka Chinese Cemetery	No
4746H	4746	Blossom Hamusek and D. McGann 2011	Historic	Trash scatter	No

Source: ECORP Consulting 2021b

Literature Review

A search of the NAHC's Sacred Lands File failed to indicate the presence of Native American cultural resources in the Project Area.

On June 28, 2022, as part of outreach for the Project pursuant to AB 52, the City of Yreka sent a certified letter to the Shasta Indian Nation and Karuk Tribe informing them of the Project and offering an opportunity to consult about the potential existence of TCRs in the Project Area. TCRs may be synonymous with cultural resources. The City did not receive a response from the Shasta Indian Nation or Karuk Tribe about the Project Site.

A letter was sent to the Siskiyou County Historical Society on January 14, 2021 to solicit comments or obtain historical information that the repository might have regarding events, people, or resources of historical significance in the area (Attachment A of the *Cultural Resources Record Search and Literature Review* (ECORP 2021b)). The Siskiyou County Historical Society responded on January 30, 2021 via email stating that the historical society has identified two historical cemeteries in the area. These cemeteries include a cemetery located southeast of the Project Area and on Foothill Road. Topographic maps, including Figure 1 in Appendix 3.3, mark the location of this cemetery; it is located 0.22 mile east of the Project Area. The second Historical cemetery is a Chinese Cemetery that is not marked on the topographic map. The Chinese Cemetery is located north of SR 3 and approximately 0.4 mile northeast of the Project Area. Neither cemetery is located within the Project Area and the historical society did not identified any historical significance within the Project Area.

The *Office of Historic Preservation's Built Environment Resource Directory* for Siskiyou County (dated March 3, 2020) did not include any resources within the Project Area (OHP 2020). No built environment resources are listed along Montague Road in the City of Yreka.

The National Register Information System (NPS 2021) failed to reveal any significant properties within the Project Area. The nearest listed properties (Lewis Falkenstein's House, The Forest House, The West Miner Street-Third Street Historic District, and the Yreka Carnegie Library) are located approximately 1 mile southwest of the Project Area in Historic Yreka.

Resources listed as California Historical Landmarks (OHP 1996) and on the OHP California Historical Landmarks Website (OHP 2021) were reviewed on January 12, 2021. The nearest listed landmark is Historical Landmark number 901, the West Miner Street-Third Street Historic District in Yreka. Gold was discovered in nearby flats in 1851, resulting in Yreka becoming a commercial and transportation hub for the surrounding mining camps. The Historic District consists of three blocks on West Miner Street and four blocks of Third Street, approximately 0.65 mile southwest of the Project Area.

A review of *Historic Spots in California* (Kyle 2002) mentions that Siskiyou is a Cree word for bob-tailed horse, borrowed by the Chinook Jargon from the Oregon territory. Kyle mentions that gold was discovered by Abraham Thompson, a mule train packer, in the Yreka Flats in March 1851. The discovery location, a knoll near the intersection of today's Discovery and Yama streets in Yreka, was called Thompson Dry Diggings. The discovery of gold brought 2,000 men to the flats. Miners set up camp along Yreka Creek from Greenhorn to Hawkinsville. By May 1851, the townsite for Yreka was laid out. Yreka was designated the county seat when Siskiyou County was formally organized in 1852.

According to *California Place Names* (Gudde 1969), Yreka was first called Thompson's Dry Diggings and later Shasta Butte City. The town name was later changed in 1852 to Wyreka which was derived from an indigenous word for Mount Shasta. The spelling of the name was changed to Yreka due to a clerical error.

Historic GLO land patent records from the BLM's patent information database (BLM 2021) revealed that Jerome Churchill and the City of Yreka received a patent for 511 acres of land, including the Project Area, on July 1, 1874. The Yreka townsite included Sections 22, 23, 26, and 27 of Township 45 North, Range 7 West. Later, Charles Herzog Senior received a homestead patent for 137.7 acres of land within Section 23, including the Project Area, on November 13, 1895. The Herzog family owned and operated the City Meat Market beginning in 1854.

A RealQuest online property search for APNs 053-642-350, 053-642-360, 053-642-370, and 053-642-380 revealed that the Project Area is located on four parcels totaling 4.81 acres of vacant commercial land. No other property history information was on record with RealQuest.

The *Handbook of North American Indians* (Silver 1978) lists the nearest Native American village as Kusta, located in Yreka.

3.9.5 Project Impacts and Mitigation Measures

Impact TCR-1	Project implementation would cause a substantial adverse change in the significance of a Tribal Cultural Resource
<i>Impact Determination</i>	<i>Less than Significant with Mitigation</i>
<i>Threshold</i>	<i>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:</i> <i>Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or</i> <i>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?</i>

Impact Discussion

Based on the results of the records search and literature review, only a portion of the property has been surveyed for cultural resources and no previously recorded resources are known to exist within the Project Site. The property is situated in an area considered to have low to moderate sensitivity for pre-contact resources and a relatively low potential for historic-era cultural resources. The proximity of the Project Site to Yreka Creek, coupled with the fact that the location of Yreka was noted in the ethnographic literature as a Native American Village indicates there is potential for buried pre-contact resources in the Project Site. However, the soil type and age of the underlying geomorphology somewhat lessen that possibility. There is a relatively low potential for the presence of historic-period cultural resources on this property. Map review did not indicate any past structures, and the three previously recorded historic-period resources within the 0.5-mile records search radius have clearly delineated boundaries.

There is no available information to indicate that archaeological sites are present on the property; however, the property has not been surveyed by archaeologists who meet the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology. Therefore, ground disturbance associated with development of the site has the potential to impact previously unknown, subsurface historic resources should any be present. Construction personnel may not be able to identify such deposits as cultural resources without a training session. As such, mitigation is required. Therefore,

Mitigation Measure CUL-1, has been included to reduce the potential impact to historical resources to be less than significant with mitigation incorporated.

Mitigation Measures

Implementation of Mitigation Measure CUL-1.

Residual Impact After Mitigation

Impacts would be less than significant after mitigation.

3.9.6 Cumulative Setting, Impacts, and Mitigation Measures

3.9.6.1 Cumulative Setting

Section 3.0 provides the baseline for cumulative setting and is based on General Plan projections. While this is helpful for cultural resources cumulative impacts, it does not necessarily provide a specific cumulative impact setting for these resources as the impacts to these resources are generally more site specific. Therefore, the cumulative setting for tribal cultural resources includes the Project site as well as the remaining undeveloped areas surrounding the Project site where the impacts of urbanization and potential for impacts to cultural resources are considered most serious. Cumulative impacts on TCRs are primarily the result of the area's urbanization and conversion of undisturbed land to urban use.

Developments and planned land uses, including the Proposed Project, would cumulatively contribute to impacts to known and unknown TCRs in the area. As previously discussed, Section 3.9.1 Existing Setting provides an overview of TCRs and the history of the region.

3.9.6.2 Cumulative Impacts and Mitigation Measures

Impact TRC-2	Would Implementation of the proposed project, along with any foreseeable development in the project vicinity, could result in cumulative impacts to tribal cultural resources?
<i>Impact Determination</i>	<i>Less than Cumulatively Considerable</i>
<i>Threshold</i>	<i>Result in cumulative impacts to tribal cultural resources.</i>

Impact Discussion

As mitigated, TCR impacts associated with the Project will be reduced to a less than significant level. While it is possible that grading and development will result in the discovery of unknown resources, mitigation measures and state and federal laws already in place will set in motion actions designed to mitigate these potential impacts. The Project is adjacent to existing relatively sparse residential and commercial developments. Future development of the area may also affect TCRs. However, mitigation proposed in this section, and existing federal and state laws would reduce the Project's potential cultural resources impacts to a less than significant level. Additionally, The City of Yreka notified the Shasta Indian Nation and the Karuk Tribe of the Proposed Project on June 28, 2022. Neither of these tribes has indicated that

there were known TCRs on the Project site. Therefore, the Project's impact is considered less than cumulatively considerable.

3.9.6.3 Cumulative Mitigation Measures

None required.

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4.0 OTHER REQUIRED CEQA ANALYSIS

This section discusses additional topics statutorily required by CEQA, including growth-inducing impacts, significant environmental effects which cannot be avoided if the Proposed Project is implemented, and significant irreversible environmental changes.

4.1 Growth-Inducing Impacts

CEQA Guidelines Section 15126.2(e) require that an EIR “discuss the ways in which the Proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.”

According to Section 15126.2(e), a project may induce economic or population growth, or additional housing, either directly or indirectly, in a geographic area if it would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects that would remove obstacles to population growth, such as extensions or expansion of infrastructure. CEQA does not automatically consider growth inducement to be a significant, adverse impact. Typically, the growth-inducing potential of a project is considered to be significant if it fosters growth in excess of what is assumed in adopted planning document. In December 2019, the California OPR updated the growth inducement question in the CEQA IS (CEQA Guidelines Appendix G) to clarify that effects from substantial growth inducement would be significant if the impacts were unplanned (emphasis added).

The State CEQA Guidelines do not provide specific methods for evaluating growth inducement and state that growth in any area is not “necessarily beneficial, detrimental, or of little significance to the environment” (State CEQA Guidelines Section 15126.2[e]). CEQA does not require separate mitigation for growth inducement as it is assumed that these impacts are already captured in the analysis of environmental impacts (see Chapter 3.0 *Environmental Setting, Impacts and Mitigation Measures*). According to the State CEQA Guidelines, a project would have potential to induce growth if it would result in either of the following.

Remove obstacles to unplanned population growth (e.g., through the expansion of public services into an area that does not currently receive these services), or through the provision of new access to an area, or a change in a restrictive zoning or general plan land use designation.

Result in economic expansion and population growth through employment opportunities and/or construction of new housing.

4.1.1 Project-Specific Growth Inducing Impacts

The Project proposes the construction of 12,300-sf building including a convenience store, a food hall, bar, retail shop, and outdoor patio, both gasoline and diesel fueling areas and a hotel. Once completed, the Project is estimated to employ 40 to 50 persons. While the addition of new employment opportunities could increase the City’s population, it is anticipated that the majority of new employees would likely be current residents of the City or surrounding area. As such, the Project is not expected to have growth-

inducing impacts as it will not attract new permanent residents to the area by providing additional housing or a substantial number of employees requiring new housing. Construction of the Project would not bring any public services to the area that are not already available in the Project vicinity. No new public roadways or public infrastructure is proposed or needed for development of the Project. For these reasons, the Project would not result in growth inducement.

4.2 Significant and Unavoidable Impacts

CEQA Guidelines require that an EIR identify and focus on significant environmental effects, including significant irreversible environmental changes that would be caused by the Project should the Project be implemented.

Section 15126.2(c) of the State CEQA Guidelines require that an EIR describe any significant impacts, including those that can be mitigated but not reduced to a less than significant level. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should also be described.

A significant and unavoidable impact is one that would cause a substantial adverse effect on the environment and for which no mitigation is available to reduce the impact to a less than significant level. All of the impacts of the Proposed Project would be less than significant or would be mitigated to a less than significant level. Development of the Project would not result in any impacts that would be significant and unavoidable after mitigation.

4.2.1 Significant and Irreversible Environmental Effects

Section 15126.2(d) of the State CEQA Guidelines requires that an EIR address any significant irreversible changes that would result from a Proposed Project. The State CEQA Guidelines describe three distinct categories of significant irreversible changes, including changes in land use that would commit future generations to specific uses, irreversible changes from environmental accidents, and consumption of nonrenewable resources.

Implementation of the Proposed Project would result in an irretrievable commitment of renewable and nonrenewable resources including land, water, energy resources, and construction materials. Nonrenewable and limited resources that would likely be consumed as part of Project construction and operation would include, but are not limited to, oil, gasoline and diesel fuel, lumber, sand and gravel, steel, and other materials use in the construction of improvements necessary for implementation of the Project. Operation of the Project includes, but is not limited to, oil, gasoline and diesel fuel consumption. However, the amount of resources to be committed is not considered to be significant and are comparable to other developments of this type. No special construction materials or resources are anticipated to be needed as part of the Project.

The Project does not change the site to the extent that redevelopment of the site to another use is not possible, such as a new reservoir or highway. As such, the Project would not commit future generations to specific use.

While the Project proposes the use of a gasoline and diesel fueling stations, the Project is subject to routine inspection by federal, state, and local regulatory agencies with jurisdiction over fuel-dispensing facilities. The Project is also required to comply with all underground and above ground fuel storage regulations including those limiting the impact from accidental spills. These inspections and regulations limit the potential for environmental accidents from these uses and would not cause irreversible changes from environmental accidents.

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5.0 ALTERNATIVES TO THE PROPOSED PROJECT

The alternatives analysis consists of the following components: An overview of CEQA requirements for alternatives analysis, descriptions of the alternatives evaluated, a comparison between the anticipated environmental effects of the alternatives and those of the Proposed Project, and identification of an environmentally superior alternative.

5.1 Introduction

The California CCR Section 15126.6(a) (State CEQA Guidelines) requires EIRs to describe:

“a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a range of potentially feasible alternatives that will avoid or substantially lessen the significant adverse impacts of a project, and foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.”

This section of the State CEQA Guidelines also provides guidance regarding what the alternatives analysis should consider. Subsection (b) further states:

“[b]ecause an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code [PRC] Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.”

The State CEQA Guidelines require that the EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative must be discussed, but in less detail than the significant effects of the project as proposed (CCR Section 15126.6[d]).

The State CEQA Guidelines further require that the No Project Alternative be considered (CCR Section 15126.6[e]). The purpose of describing and analyzing the No Project Alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving the Proposed Project. If the No Project Alternative is the environmentally superior alternative, CEQA requires

that the EIR "...shall also identify an environmentally superior alternative among the other alternatives." (CCR Section 15126[e][2]).

In defining "feasibility" (e.g., "... feasibly attain most of the basic objectives of the project ..."), CCR Section 15126.6(f) (1) states, in part that "[a]mong the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives."

In determining what alternatives should be considered in the EIR, it is important to consider the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of potentially feasible alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency's decision-making body, in this case the [Lead Agency name]. (See PRC Sections 21081.5, 21081[a] [3].)

5.2 Considerations for Selection of Alternatives

The purpose of the alternatives analysis is to determine if a variation of Proposed Project would reduce or eliminate significant project impacts, while attaining most of the project's basic objectives.

5.2.1 Project Objectives

One of the key factors in considering project alternatives under CEQA is whether they can feasibly attain most of the basic objectives of the project. As discussed previously in Section 2.0, the Proposed Project's objectives are:

1. Developing travel facilities that serve the needs of the Interstate 5 traveler, enhance the adjacent uses (neighboring hotel/RV park) and providing a destination for locals to enjoy and relax as well.
2. Provide a naturally lit food hall that offers a variety of fresh food options in addition to the typical convenience store fare and will have a clean inviting interior.
3. Develop the convenience store, fuel center, food hall, Inn & Suites as a destination of high quality design.

5.2.2 Significant Effects of the Proposed Project

Impacts associated with implementation of the Proposed Project are evaluated in Chapter 3 of this EIR. The Proposed Project would have the potential to cause the following significant but mitigable environmental impacts:

Impact BIO-1: Project implementation could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or

special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

- Impact BIO-4:** Project implementation could interfere substantially with the movement of any native resident or migratory fish or wildlife species with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- Impact CUL-1:** Project implementation would cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5.
- Impact CUL-2:** Project implementation could cause a substantial adverse change in the significance of an archeological resource pursuant to CEQA Guidelines Section 15064.5.
- Impact CUL-3:** Project implementation could disturb any human remains, including those interred outside of formal cemeteries.
- Impact GEO-1:** Project implementation could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- Impact TR-1:** Project implementation could conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities.
- Impact TR-5:** The project, when considered with existing, proposed, planned, and approved development in the region, implementation of the proposed project would contribute to cumulative traffic volumes on local roadways that result in significant impacts to level of service and operations.
- Impact TCR-1:** Project implementation would cause a substantial adverse change in the significance of a Tribal Cultural Resource

As discussed in the technical sections of this EIR, all potentially significant impacts would be reduced to a less than significant level with implementation of mitigation measures provided in this DEIR.

5.3 Alternatives Considered and Eliminated from Further Evaluation

Section 15126.6(a) of the CEQA Guidelines states:

“An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad

rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.”

CEQA Guidelines Section 15126.6(f)(2)(A) states, “[o]nly locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.” Further, CEQA Guidelines Section 15126.6(f)(2)(B) states in part, “[i]f the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR...”

In preparing this DEIR, a number of alternatives were considered for review but were eliminated from further analysis because it was determined they did not meet the guidelines set forth in Section 15126.6(a). Alternatives considered but eliminated from further analysis in this DEIR are discussed below.

5.3.1 *Alternate Site Alternative*

The proposed uses for the Project could be accommodated under the C-2 (Commercial Downtown), CH (Commercial Highway) or CT (Commercial Tourist) zoning districts with approval of a use permit. There are a number of parcels within the City boundaries that are vacant and zoned for C-2, CH and CT able to accommodate this type of development. However, while these parcels are zoned correctly for the type of use proposed for the Proposed Project, these parcels were considered but rejected for a number of reasons including: because purchasing and assembling properties in another location that are of the necessary acreage for the Project would be cost prohibitive and infeasible, some of these parcels are located adjacent to sensitive uses, inadequate access to I-5 for a project of this type, lack of existing infrastructure, environmental impacts would be similar or potential greater than the Project Site, and the Project developer has no control over these parcels at this time. As such, the Project’s proposed site is considered to be a better location with regard to potential environmental impacts than other available sites.

5.4 Alternatives Considered for Detailed Evaluation

5.4.1 *Description of Alternatives*

5.4.1.1 Alternative 1: No Project

Under CEQA, an EIR must include a comparative analysis of a No Project Alternative (see CEQA Guidelines Section 15126.6(e)). This requirement encourages a Lead Agency to compare the environmental effects of approving a proposed project with the effects of not approving it. The No Project Alternative generally assumes that the land area affected by Project construction would remain in its existing state, while taking into account what would be reasonably expected to occur in the foreseeable future if the Project were not approved.

The Project Site is currently vacant land with no development. The Project Site is located within Planned Unit Development 5-98 (PUD 5-98). The City Council approved PUD 5-98 in May 1998 via Use Permit No. 2883 (CUP 2883). The Project Site has been identified in PUD 5-98 for the development of a *Quick*

Service/Full Service Restaurant. While a Quick Service/Full Service Restaurant has not been proposed for the site since approval of PUD 5-98, development of the rest of the parcels in PUD 5-98 has occurred and interest in development of the site has increased. Therefore, it is safe to assume that the site could be developed in the near future as a Quick Service/Full Service Restaurant for the No Project Alternative. As such, Alternative 1 includes the development of a Quick Service/Full Service Restaurant in accordance with PUD 5-98. No additional CEQA analysis would be required for the development of this Quick Service/Full Service Restaurant as CEQA environmental review was completed for CUP 2883 in May 1998 and approval of a Quick Service/Full Service Restaurant on the site would be a ministerial process.

5.4.1.2 Alternative 2: No Hotel

Alternative 2 would be the Project as proposed but without the hotel and associated parking and landscaping. Phase II would not be developed for Alternative 2. The land area assigned for Phase II would remain vacant. Alternative 2 would require a PUD amendment and CUP approval similar to the Proposed Project as the proposed uses under Alternative 2 are not allowed under PUD 5-98 and CUP 2993. As such, Alternative 2 would be a discretionary project pursuant to CEQA and require CEQA environmental review. Alternative 2 would include all attributes of Phase I of the Proposed Project as shown below:

- A 12,300-sf building including a convenience store, a food hall, bar, retail shop, and outdoor patio, open 7 days a week, 24 hours a day,

- A fuel center with a 6,298-sf canopy, with eight dispensers for automobiles and RVs ,

- A separate fuel center with 1,872-sf canopy, with four diesel dispensers for semi-trucks,

- Two underground gasoline/diesel fuel tanks (size to be determined), three 12,000-gallon above-ground diesel tanks, and a 10-foot propane tank.

- Parking accommodating 99 spaces, including 12 spaces for EV charging,

- A pet park area,

- Two monument signs and a goalpost sign

- Perimeter landscaping (22,338 sf total for Phases I and II).

5.4.1.3 Alternative 3: Reduced Project

Alternative 3 would require a PUD amendment and CUP approval similar to the Proposed Project as the proposed uses under Alternative 3 are not allowed under PUD 5-98 and CUP 2993. As such, Alternative 3 would be a discretionary project pursuant to CEQA and require CEQA environmental review. Alternative 3 would be the development of the Project with the same proposed uses of the Project but on a reduced scale of approximately 75 percent of the Proposed Project's size. These include the following:

Phase I

- A 9,225-sf building including a convenience store, a food hall, bar, retail shop, and outdoor patio, open 7 days a week, 24 hours a day

A fuel center with six dispensers for automobiles and RVs

A separate fuel center with three diesel dispensers for semi-trucks

Two underground gasoline/diesel fuel tanks, two 12,000-gallon above-ground diesel tanks, and a 10-foot propane tank

Parking accommodating 75 spaces, including 9 spaces for Electric Vehicle (EV)s charging

A pet park area

Two monument signs and a goalpost sign

Perimeter landscaping (33,500 sf total for Phases I and II)

Phase II

A 52-room, two-story hotel (33 feet tall, 12,774 sf)

Parking accommodating 57 spaces, including two spaces for EV charging

A goalpost sign

Perimeter landscaping (33,500 sf total for Phases I and II).

5.4.2 Analysis of Alternatives

Because the IS determined that only certain impact analysis areas were to be analyzed in this EIR, each alternative is compared to the Proposed Project using the analysis presented in this DEIR. The Project alternatives are evaluated in less detail than those of the Proposed Project, and the impacts are described in terms of difference in outcome compared with implementing the Proposed Project. Table 5.0-1 at the end of this section provides an at-a-glance comparison of the environmental impacts of each alternative. Table 5.0-2 compares how the alternatives meet the Project Objectives as compared to the Proposed Project.

5.4.2.1 Alternative 1: No Project

Under the No Project Alternative, development of the Proposed Project would not occur. However, because PUD 5-98 and CUP 2883 only allow the construction of a Quick Service/Full Service Restaurant on the Project Site, this type of use is assumed to be developed in the future. Because this use was approved by the City under a previous CEQA IS/MND, no additional CEQA environmental analysis is required if a Quick Service/Full Service Restaurant were to be proposed for the site. Therefore, Alternative 1 assumes that this type of facility will be built on the site.

Air Quality

The analysis provided in Section 3.1 determined that the Proposed Project would not result in substantial impacts to air quality and therefore no mitigation is necessary.

Alternative 1 would potentially allow for the construction of a restaurant on the site. However, as a comparison, the Proposed Project also includes the construction of a food hall as well as a convenience store and bar, which may be similar in air quality emissions to a Quick Service/Full Service Restaurant. In addition, the Project would have other uses that would have air quality emissions, in combination with the food hall, convenience store and bar, that would be much greater in air quality emissions. Because the Proposed Project would have a less than significant impact to air quality, it could rationally be argued that Alternative 1 would also result in a less than significant impact to air quality but even to a lesser degree because Alternative 1 would have less development intensity. Therefore, Alternative 1 is considered superior to the Proposed Project with regard to air quality impacts.

Biological Resources

As noted in Section 3.2, the BRA completed for the Proposed Project would result in potential impacts to three special-status plant species: California Androsace, Ashland Thistle, and Shasta Orthocarpus. Further, the Project Site's disturbed grasslands and scattered shrubs support potential nesting habitat for a variety of common birds protected under the MBTA and California Fish and Game Code Section 3503. However, implementation of Mitigation Measure BIO-1 will ensure that impacts to special-status plant species are avoided and reduce the impact to a less than significant level. Mitigation Measure BIO-2 will reduce potential impacts to birds and active nests protected under the MBTA and Section 3503 to a less than significant level.

Comparatively, because it is on the same site as the Proposed Project, Alternative 1 would also potentially result in impacts to California Androsace, Ashland Thistle and Shasta Orthocarpus and bird species protected under the MBTA and Section 3503. A CEQA mitigated negative declaration was completed by the City in 1997 for CUP 2883. This document is no longer available and as such, it has to be assumed that no mitigation to protect these species can be implemented as there is no record of what the mitigation would be. Additionally, the CUP 2883 Conditions of Approval does not list any requirements for the protection of biological species. Alternative 1 would only require ministerial approval because it was approved as part of CUP 2883, and as such subsequent CEQA environmental analysis would not be required. Thus, the Project is considered superior to Alternative 1 with regard to impacts to biological resources, as the potential impacts to these resources would be greater with the Alternative 1 than with the Proposed Project.

Cultural Resources

The EIR prepared for the Proposed Project determined that the Project would result in potential impacts to unknown/undiscovered historical, archaeological resources. However, as defined in the EIR, Mitigation Measure CUL-1 would reduce these potential impacts to a less than significant level.

Alternative 1 would include the construction of a restaurant on the site and therefore have similar potential impacts to unknown/undiscovered historical, archaeological to the Project. Much like the biological resources impacts for Alternative 1 as discussed above, Alternative 1 could have a cultural impact because no record of required mitigation is available. However, there are state regulations (California Health and Safety Code 7050.5(b)) and a General Plan program (Program LU.12.B) for the protection of human remains. These would provide some mitigation in this area, however not to the degree of

Mitigation Measure CUL-1. Thus, the Project is considered superior to Alternative 1 with regard to impacts to cultural resources, as the potential impacts to these resources would be greater with the Alternative 1 than with the Proposed Project.

Energy

As discussed in Section 3.4, the Proposed Project would annually result in 933,379 kWh of electricity consumption and 395,962 gallons for fuel consumption during operation; this would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. No mitigation is required.

Alternative 1 would not have the same level of use as the Proposed Project as Alternative 1 would only be the construction of a Quick Service/Full Service Restaurant without the other uses proposed as a part of the Project. Therefore, Alternative 1 would use less energy than the Project and therefore would be considered superior to the Project with regard to energy use.

Geology, Soils, and Paleontology

The EIR prepared for the Proposed Project determined that the Project would result in potential impacts to unknown/undiscovered paleontological resources. However, as defined in the EIR, Mitigation Measure GEO-1 would reduce these potential impacts to a less than significant level.

Alternative 1 would include the construction of a restaurant on the site and therefore have similar potential impacts to unknown/undiscovered paleontological resources to the Project. Much like the biological resources impacts for Alternative 1 as discussed above, Alternative 1 could have a paleontological resources impact because no record of required mitigation is available. Thus, the Project is considered superior to Alternative 1 with regard to impacts to paleontological resources, as the potential impacts to these resources would be greater with the Alternative 1 than with the Proposed Project.

Greenhouse Gases

The Proposed Project would produce an estimated total of 1,407 metric tons of CO₂e during the 3-year construction period and 2,833 metric tons of CO₂e during operations. SCAPCD has not adopted thresholds of significance for the analysis of GHG emissions under CEQA. Therefore, the significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. As stated in Section 3.6, the Project is consistent with the GHG emission reduction measures in the Scoping Plan and would not conflict with the state's trajectory toward future GHG reductions.

While Alternative 1 would be a less intense development, it would have a similar result with respect to GHG emissions and their impact to the Scoping Plan. However, because Alternative 1 would be a smaller project than the Proposed Project, the GHG emissions would be less and as such, environmentally speaking, Alternative 1 would be superior to the Proposed Project with regard to GHG emissions.

Noise

The noise analysis provided in Section 3.7 determined that the Proposed Project would be required to follow Yreka General Plan Policy 10 limiting construction to only occur to the hours of 7:00 a.m. and 5:00 p.m. The nearest sensitive receptor is 580 feet south of the Project Site boundary and construction noise would not exceed the NIOSH construction noise standards at this location. Additionally, the Proposed Project would not exceed City noise standards during operation of the Project. Therefore, no mitigations measures are required. Further, the Project would not result in excessive groundborne vibrations during construction.

Alternative 1 would also result in construction noise most likely similar to the Proposed Project, although maybe for a shorter time period because it would be a smaller construction project. Operational noise levels would also be similar, but most likely for shorter time periods as customer counts may not be as large as the Proposed Project. As such, Alternative 1 would be superior to the Proposed Project with regard to construction and operational noise.

Transportation and Circulation

The Project would have impacts to the Montague Road/I-5 Southbound ramp intersection under Existing Plus Project conditions and Montague Road/I-5 Northbound ramp intersection under Cumulative Plus Project conditions. However, implementation of Mitigation Measures TR-1 and TR-2 would reduce these impacts to a less than significant level.

Alternative 1 would include the potential for a future quick service/full service restaurant on the site as it is an identified permitted use under PUD 5-98 and CUP 2883. Because this use would be subject to ministerial approval only, a traffic analysis would not be required and mitigation for any potential transportation impacts would also not be required. Therefore, the Project is considered superior to Alternative 1 with regard to impacts to transportation, as the potential impacts to this area would be greater with the Alternative 1 than with the Proposed Project.

Tribal Cultural Resources

The EIR prepared for the Proposed Project determined that the Project would result in potential impacts to unknown/undiscovered TCRs. However, as defined in the EIR, Mitigation Measure CUL-1 would reduce these potential impacts to a less than significant level.

Alternative 1 would include the construction of a restaurant on the site and therefore have similar potential impacts to Tribal resources as the Project. In 1998, identification of potential impacts to TCRs was not required by CEQA and as such, mitigation for potential impacts to TCRs was not included in any CEQA analysis. Because the Project does required mitigation for the impacts to TCRs, the Project is considered superior to Alternative 1 with regard to impacts to cultural resources, as the potential impacts to these resources would be greater with the Alternative 1 than with the Proposed Project.

5.4.2.2 Alternative 2: No Hotel

Alternative 2 would be the Project as proposed but without the hotel and associated parking and landscaping. Phase II of the Proposed Project would not be developed for Alternative 2. The land area assigned for Phase II would remain vacant. Alternative 2 would include the following: a convenience store, a food hall, bar, retail shop, and outdoor patio, all in one building, a fuel center with eight dispensers, a separate fuel center with four diesel dispensers for semi-trucks, above ground and underground gasoline/diesel fuel tanks and a propane tank, parking areas, pet park, and landscaping. Alternative 2 would be a discretionary project pursuant to CEQA and require CEQA environmental review.

Air Quality

The analysis provided in Section 3.1 determined that the Proposed Project would not result in substantial impacts to air quality and therefore no mitigation is necessary.

Alternative 2 would have the same construction air quality emissions as Phase 1 of the Proposed Project. Phase 1 emissions are shown in Tables 5.01.

Table 5.0-1. Alternative 2 Construction-Related Emissions						
Construction Year	Pollutant (pounds per day)					
	ROG	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
Construction Year One (Phase 1)	4.76	59.10	32.26	0.17	25.50	12.70
Construction Year Two (Phase 1)	4.60	24.32	32.06	0.06	1.62	1.16
<i>Significance Threshold</i>	<i>250</i>	<i>250</i>	<i>2,500</i>	<i>250</i>	<i>250</i>	<i>250</i>
Exceed Threshold?	No	No	No	No	No	No

Source: CalEEMod version 2020.4.0. Refer to Appendix 3.1 for Model Data Outputs.

Notes: Emissions taken from the season (summer or winter) with the highest output. Building construction, paving, and painting assumed to occur simultaneously. Emissions account for the cut of 80 cubic yards of soil and fill of 17,950 cubic yards of soil distributed for Phase 1.

As shown, Alternative 2 would not exceed the SCAPCD thresholds and therefore would have a similar impact to the Proposed Project for construction-related air quality emissions, that of less than significant.

Because Alternative 2 only includes Phase 1 of the Proposed Project, operational emissions would be less for Alternative 2. Table 3.1-3 illustrates the operational air quality emissions for the Proposed Project. As shown, the Proposed Project would not exceed SCAPCD thresholds under operational conditions. Alternative 2 would have a similar result and would therefore not exceed SCAPCD thresholds. Although the Proposed Project would not result in air quality impact, because Alternative 2 is a smaller project, Alternative 2 is considered superior to the Proposed Project with regard to air quality impacts.

Biological Resources

Proposed Project would result in potential impacts to three special-status plant species: California Androsace, Ashland Thistle and Shasta Orthocarpus. Further, the Project Site's disturbed grasslands and scattered shrubs support potential nesting habitat for a variety of common birds protected under the MBTA and California Fish and Game Code Section 3503. However, implementation of Mitigation Measure BIO-1 will ensure that impacts to special-status plant species are avoided and reduce the impact to a less than significant level. Mitigation Measure BIO-2 will reduce potential impacts to birds and active nests protected under the MBTA and Section 3503 to a less than significant level.

While the hotel and associate parking and landscaping would not be part of Alternative 2, because Alternative 2 is on the same site as the Proposed Project, Alternative 2 would have similar potential impacts to Androsace, Ashland Thistle and Shasta Orthocarpus and migratory birds. As such, this Alternative would require mitigation to protect these resources. This mitigation would also reduce impacts to these species to a less than significant impact similar to the Proposed Project. Alternative 2 is considered equivalent to the Proposed Project with regard to potential impacts to biological resources.

Cultural Resources

The EIR prepared for the Proposed Project determined that the Project would result in potential impacts to unknown/undiscovered historical, archaeological resources. However, as defined in the EIR, Mitigation Measure CUL-1 would reduce these potential impacts to a less than significant level.

Alternative 2 would include the construction of similar uses to the Project but without the hotel and associated parking and landscaping. However, Alternative 2 would be on the site and therefore have similar potential impacts to unknown/undiscovered historical, archaeological cultural resources to the Project. While the hotel and associate parking and landscaping would not be part of Alternative 2, because Alternative 2 is on the same site as the Proposed Project, Alternative 2 would have similar potential impacts to cultural resources. As such, Alternative 2 would require mitigation to protect these resources. This mitigation would also reduce impacts to these species to a less than significant impact similar to the Proposed Project. Alternative 2 is considered equivalent to the Proposed Project with regard to potential impacts to cultural resources.

Energy

As discussed in Section 3.4, the Proposed Project would annually result in 933,379 kWh of electricity consumption and 395,962 gallons for fuel consumption during operation; this would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. No mitigation is required.

Alternative 2 would not have the same level of use as the Proposed Project as Alternative 2 would only be the construction of Phase 1 of the Proposed Project. Therefore, Alternative 2 would use less energy than the Project and therefore would be considered superior to the Project with regard to energy use.

Geology, Soils, and Paleontology

The EIR prepared for the Proposed Project determined that the Project would result in potential impacts to unknown/undiscovered paleontological resources. However, as defined in the EIR, Mitigation Measure GEO-1 would reduce these potential impacts to a less than significant level.

Alternative 2 would also result in the development of the site and therefore have similar potential impacts to unknown/undiscovered paleontological resources to the Project. As such, Alternative 2 would require mitigation to protect these resources. This mitigation would also reduce impacts to these species to a less than significant impact similar to the Proposed Project. Alternative 2 is considered equivalent to the Proposed Project with regard to potential impacts to cultural resources.

Greenhouse Gases

The Proposed Project would produce an estimated total of 1,407 metric tons of CO₂e during the 3-year construction period and 2,833 metric tons of CO₂e during operations. SCAPCD has not adopted thresholds of significance for the analysis of GHG emissions under CEQA. Therefore, the significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. As stated in Section 3.6, the Project is consistent with the GHG emission reduction measures in the Scoping Plan and would not conflict with the state's trajectory toward future GHG reductions.

While Alternative 2 would be a less intense development, Alternative 2 would have a similar result with respect to GHG emissions and their impact to the Scoping Plan. However, because Alternative 2 would be a smaller project than the Proposed Project, the GHG emissions would be less and as such, environmentally speaking, Alternative 2 would be superior to the Proposed Project with regard to GHG emissions.

Noise

The noise analysis provided in Section 3.7 determined that the Proposed Project would be required to follow Yreka General Plan Policy 10 limiting construction to only occur to the hours of 7:00 a.m. and 5:00 p.m. and the nearest sensitive receptor is 580 feet south of the Project Site boundary. Construction noise would not exceed the NIOSH construction noise standards at this location. Additionally, the Proposed Project would not exceed City noise standards during operation of the Project. Therefore, no mitigations measures are required. Further, the Project would not result in excessive groundborne vibrations during construction.

Alternative 2 would also result in construction noise most likely similar to the Proposed Project, although for a shorter time period because it would be a smaller construction project. Operational noise levels would also be similar to the however, most likely for shorter time periods as customer counts may not be as large as the Proposed Project. Additionally, because the hotel would not be constructed as a part of Alternative 2, noise related to the hotel would not occur. As such, Alternative 2 would be superior to the Proposed Project with regard to construction and operational noise.

Transportation and Circulation

The Project would have impacts to the Montague Road/I-5 Southbound ramp intersection under Existing Plus Project conditions and Montague Road/I-5 Northbound ramp intersection under Cumulative Plus Project conditions. However, implementation of Mitigation Measures TR-1 and TR-2 would reduce these impacts to a less than significant level.

Alternative 2 would include the construction of similar uses to the Project but without the hotel and associated parking and landscaping. Alternate 2 has the same attributes as Phase I of the Proposed Project. Therefore, impacts to transportation from Alternative 2 can be identified from the Traffic Study for the Project using the Phase I determinations.

As identified in Section 3.8, Table 3.8-5, the Montague Road/I-5 Southbound Ramp intersection would be operating at LOS F (61.8 seconds of delay in the southbound approach) during the AM peak hour under Existing plus Phase I Project conditions. All remaining study intersections operate at the acceptable target LOS during the Existing Plus Phase I Project AM and PM peak hours. Alternative 2 would have the same impacts to Project roadways as Phase I of the Project.

In addition, Table 3.8-10 provides a summary of the intersection operations for the weekday AM and PM peak hour scenarios for the Cumulative Plus Phase I Project Conditions. With the addition of the Phase I of the Project, the I-5 ramp intersections on Montague Road are anticipated to operate unacceptably. Alternative 2 would have the same cumulative impacts to Project roadways as Phase I of the Project.

As such, Alternative 2 would require mitigation similar to the Proposed Project for impacts to the Montague Road/I-5 Southbound intersection, the Ramp intersection, and the Montague Road/I-5 Northbound intersection and could be reduced to a less than significant level.

While Alternative 2 would include the same uses as Phase I of the Project, Alternative 2 would not include the Project's Phase II traffic impacts. A comparison of delay times for Phase I and Phase II under cumulative conditions (Tables 3.8-10 and 3.8-11) indicate that while Phase II of the Project does add some small amount of additional delay at most Project intersections, it adds a fairly substantial amount of delay (24.1 seconds) to the Montague Road/I-5 Southbound Ramps. Additionally, Phase II would add traffic to the existing local roadways surrounding the site. Alternative 2 would not have this increase in delay or traffic. Therefore, the Alternative 2 is considered superior to the Project with regard to impacts to transportation, as the potential impacts to this area would be greater with the Project than with Alternative 2.

Tribal Cultural Resources

The EIR prepared for the Proposed Project determined that the Project would result in potential impacts to unknown/undiscovered TCRs. However, as defined in the EIR, Mitigation Measure CUL-1 would reduce these potential impacts to a less than significant level.

Alternative 2 would include the construction of similar uses to the Project as proposed but without the hotel and associated parking and landscaping. However, Alternative 2 would be on the site and therefore have similar potential impacts to unknown/undiscovered TCRs to the Project. While the hotel and

associated parking and landscaping would not be part of Alternative 2, because Alternative 2 is on the same site as the Proposed Project, Alternative 2 would have similar potential impacts to cultural resources. As such, Alternative 2 would require mitigation to protect these resources. This mitigation would also reduce impacts to these species to a less than significant impact similar to the Proposed Project. Alternative 2 is considered equivalent to the Proposed Project with regard to potential impacts to TCRs.

5.4.2.3 Alternative 3: Reduced Project

Alternative 3 would be the development of the Project with the same proposed uses of the Project but on a smaller scale of approximately 75 percent of the Proposed Project's size. Alternative 3 would require a PUD amendment and CUP approval similar to the Proposed Project. As such, Alternative 3 would be a discretionary project pursuant to CEQA and require CEQA environmental review.

Air Quality

The analysis provided in Section 3.1 determined that the Proposed Project would not result in substantial impacts to air quality and therefore no mitigation is necessary.

Because Alternative 3 is a project approximately 75 percent the size of the Proposed Project, Alternative 3 would have less air quality emissions than the Proposed Project. However, the Proposed Project would have a less than significant impact to air quality, therefore Alternative 3 would also result in a less than significant impact to air quality but even to a lesser degree because Alternative 3 would have less development intensity. Therefore, Alternative 3 is considered superior to the Proposed Project with regard to air quality impacts.

Biological Resources

Proposed Project would result in potential impacts to three special-status plant species: California Androsace, Ashland Thistle and Shasta Orthocarpus. Further, the Project Site's disturbed grasslands and scattered shrubs support potential nesting habitat for a variety of common birds protected under the MBTA and California Fish and Game Code Section 3503. However, implementation of Mitigation Measure BIO-1 will ensure that impacts to special-status plant species are avoided and reduce the impact to a less than significant level. Mitigation measures BIO-2 will reduce potential impacts to birds and active nests protected under the MBTA and Section 3503 to a less than significant level.

Because Alternative 3 is on the same site as the Proposed Project and has similar uses, although to a lesser degree, Alternative 3 would have similar potential impacts to Androsace, Ashland Thistle and Shasta Orthocarpus and migratory birds. As such, Alternative 3 would require mitigation to protect these resources. This mitigation would also reduce impacts to these species to a less than significant impact similar to the Proposed Project. Alternative 3 is considered equivalent to the Proposed Project with regard to potential impacts to biological resources.

Cultural Resources

The EIR prepared for the Proposed Project determined that the Project would result in potential impacts to unknown/undiscovered historical, archaeological resources. However, as defined in the EIR, Mitigation Measure CUL-1 would reduce these potential impacts to a less than significant level.

Alternative 3 would include the construction of similar uses to the Project but at a 75 percent reduction in size. However, Alternative 3 would be on the site and therefore have similar potential impacts to unknown/undiscovered historical, archaeological cultural resources to the Project. Because Alternative 3 is on the same site as the Proposed Project, Alternative 3 would have similar potential impacts to cultural resources. As such, Alternative 3 would require mitigation to protect these resources. This mitigation would also reduce impacts to these species to a less than significant impact similar to the Proposed Project. Alternative 3 is considered equivalent to the Proposed Project with regard to potential impacts to cultural resources.

Energy

As discussed in Section 3.4, the Proposed Project would annually result in 933,379 kWh of electricity consumption and 395,962 gallons for fuel consumption during operation; this would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. No mitigation is required.

Alternative 3 would be approximately 75 percent the size of the Proposed Project. Using a proportional reduction of 25 percent, Alternative 3 would annually result in 700,034 kWh of electricity consumption and 296,971 gallons for fuel consumption during operation. Because the Proposed Project annual use of electricity and fuel during operation is considered less than significant, Alternative 3 would also result in a less than significant impact to energy. Alternative 1 would use less energy than the Project and therefore would be considered superior to the Project with regard to energy use.

Geology, Soils, and Paleontology

The EIR prepared for the Proposed Project determined that the Project would result in potential impacts to unknown/undiscovered paleontological resources. However, as defined in the EIR, Mitigation Measure GEO-1 would reduce these potential impacts to a less than significant level.

Alternative 3 would also result in the development of the site and therefore have similar potential impacts to unknown/undiscovered paleontological resources to the Project. However, as a discretionary project like the Proposed Project, Alternative 3 would be required to comply with CEQA and require environmental review. As such, Alternative 3 would require mitigation to protect these resources. This mitigation would also reduce impacts to these species to a less than significant impact similar to the Proposed Project. Alternative 3 is considered equivalent to the Proposed Project with regard to potential impacts to cultural resources.

Greenhouse Gases

The Proposed Project would produce an estimated total of 1,407 metric tons of CO₂e during the 3-year construction period and 2,833 metric tons of CO₂e during operations. SCAPCD has not adopted

thresholds of significance for the analysis of GHG emissions under CEQA. Therefore, the significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. As stated in Section 3.6, the Project is consistent with the GHG emission reduction measures in the Scoping Plan and would not conflict with the state's trajectory toward future GHG reductions.

While Alternative 3 would be approximately 75 percent of the size of the Proposed Project, assuming a 25 percent reduction in GHG emissions, Alternative 3 would produce 1,055 metric tons of CO₂e during the 3-year construction period and 2,124 metric tons of CO₂e during operations. Alternative 3 would have a similar result with respect to GHG emissions and their impact to the Scoping Plan. However, because Alternative 3 would be a smaller project than the Proposed Project, the GHG emissions would be less. As such, Alternative 3 would be superior to the Proposed Project with regard to GHG emissions.

Noise

The noise analysis provide in Section 3.7 determined that the Proposed Project would be required to follow Yreka General Plan Policy 10 limiting construction to only occur to the hours of 7:00 a.m. and 5:00 p.m. The nearest sensitive receptor is 580 feet south of the Project Site boundary and construction noise would not exceed the NIOSH construction noise standards at this location. Additionally, the Proposed Project would not exceed City noise standards during operation of the Project. Therefore, no mitigations measures are required. Further, the Project would not result in excessive groundborne vibrations during construction.

Alternative 3 would also result in construction noise similar to the Proposed Project, although maybe for a shorter time period because it would be a smaller construction project. Operational noise levels would also be similar in noise levels even though Alternative 3 is a smaller project because noise increases exponentially, meaning that noise does not double in level because twice as many cars are using a site. As such, Alternative 3 would be the same as the Proposed Project with regard to construction and operational noise.

Transportation and Circulation

The Project would have impacts to the Montague Road/I-5 Southbound ramp intersection under Existing Plus Project conditions and Montague Road/I-5 Northbound ramp intersection under Cumulative Plus Project conditions. However, implementation of Mitigation Measures TR-1 and TR-2 would reduce these impacts to a less than significant level.

Alternative 3 is a smaller project than the Proposed Project by about 25 percent in size. While a separate traffic study for Alternative 3 is not required for this alternative analysis, an estimate of Alternative 3's vehicle trips can be made using Table 3.8-4 and reducing the calculations by 25 percent. As shown in Table 5.0-1, Alternative 3 would result in a total of 144 AM Peak Hour trips and 215 PM Peak Hour trips. The Proposed Project has a total of 192 AM Peak Hour trips and 291 PM Peak Hour trips. While this provides an indication of potential Alternative 3 Peak Hour trips, it does not provide how these trips would affect the Project roadways. Also, as Alternative 3 may also require mitigation similar to the

Proposed Project, it has to be assumed that because Alternative 3 a smaller project by about 25 percent of the Proposed Project's size, Alternative 3 would have less impact to area roadways. Therefore, the Alternative 3 is considered superior to the Project with regard to impacts to transportation, as the potential impacts to this area would be greater with the Project than with Alternative 3.

Table 5.0-1. Alternative 3 Trip Generation							
Land Use Category (ITE Code)	Unit¹	AM Peak Hour Trip Rate/Unit			PM Peak Hour Trip Rate/Unit		
		Total	In %	Out %	Total	In %	Out %
Convenience Store (851)	KSF	62.54	50	50	49.11	51	49
Convenience Store/Gas Station (945)	VFP	16.06	50	50	18.42	50	50
Fast Casual restaurant (930)	KSF	1.43	50	50	12.55	55	45
Hotel (310)	Rooms	0.4	56	44	0.34	51	49
Phase I							
Retail	0.41	26	13	13	20	11	10
Convenience Store/Fuel Center	15	241	120	121	276	138	138
Restaurant/Food Hall	6.43	9	5	5	81	44	37
Phase I Total New Project Trips		275	137	138	377	193	185
Pass-By Reduction for Convenience Store/Gas Station							
AM	62%	-149	-74	-75	-		
PM	56%	-			-155	-77	-77
Internal Capture (between Retail & Restaurant/Food Hall)		-3	-2	-2	-18	-8	-8
Phase I Net New Project Trips:		123	61	61	205	144	133
Phase II							
Hotel/Inn	52 rooms	21	12	9	18	9	9
Additional Internal Capture with Hotel/Inn		0	0	0	-8	-4	-4
Phase II Net New Project Trips:		21	12	9	11	5	5
Total Phase I/Phase II Net New Project Trips:		144	73	70	215	149	138

Tribal Cultural Resources

The EIR prepared for the Proposed Project determined that the Project would result in potential impacts to unknown/undiscovered TCRs. However, as defined in the EIR, Mitigation Measure CUL-1 would reduce these potential impacts to a less than significant level.

Alternative 3 would include the construction of similar uses to the Project but at about 75 percent in size. However, Alternative 3 would be on the site and therefore have similar potential impacts to unknown/undiscovered TCRs to the Project. As such, Alternative 3 would have similar potential impacts to TCRs. and as such, would require mitigation to protect these resources. This mitigation would also reduce impacts to these species to a less than significant impact similar to the Proposed Project. Alternative 3 is considered equivalent to the Proposed Project with regard to potential impacts to tribal cultural resources.

5.5 Environmentally Superior Alternative

An EIR must describe a reasonable range of alternatives to a project that would feasibly attain the basic project objectives while avoiding or reducing one or more of the project's significant effects (CEQA Guidelines Section 15126.6(a)).

Table 5.0-1 summarizes the potential impacts of the alternatives evaluated in this section, as compared with the potential impacts of the Proposed Project. Table 5.0-2 identifies how well an alternative meets the Project objectives. As shown in Table 5.0-1, Alternative 1 would result in five impacts greater than the Proposed Project and three less than the Proposed Project. Alternative 2 would result in no impacts greater than the Proposed Project, four the same as the Project and five less than the Proposed Project. Alternative 3 would result in no impacts greater than the Proposed Project, five the same as the Project and four less than the Proposed Project.

Table 5.0-2 illustrates a comparison of the alternatives to the basic Project objectives. As shown in this table, Alternative 1 does not meet any of the Project objectives, and Alternative 2 meet two of the three Project objectives and Alternative 3 meets all three of the objectives.

Based on the evaluation contained in Section 5.4, and Tables 5.0-1 and 5.0-2 Alternative 3, Reduced Project would be the environmentally superior alternative, as it would result in fewer impacts to four resource categories when compared to the Proposed Project and still meet all of Project objectives.

Table 5.0-1. Alternatives Impacts Comparison

Environmental Issue	Proposed Project Impact Finding (Mitigated)	Alternatives		
		1	2	3
Air Quality	Less Than Significant	+	+	+
Biological Resources	Less Than Significant	-	=	=
Cultural Resources	Less Than Significant	-	=	=
Energy	Less Than Significant	+	+	+
Geology, Soils, and Paleontology	Less Than Significant	-	=	=
Greenhouse Gases and Climate Change	Less Than Significant	+	+	+
Noise	Less Than Significant	+	+	=
Transportation and Circulation	Less Than Significant	-	+	+
Tribal Resources	Less Than Significant	-	=	=
Overall Determination		-	+	+

- + Alternative is environmentally superior, impacts are less than those of the Proposed Project,
 - Alternative is environmentally inferior, impacts are greater than those of the Proposed Project,
 = Alternative is environmentally the same, impacts similar to those of the Proposed Project, or no better or worse

Table 5.0-2. Comparison of Alternatives by Project Objectives

	Alternatives		
	1	2	3
Developing travel facilities that serve the needs of the Interstate 5 traveler, enhance the adjacent uses (neighboring hotel/RV park) and providing a destination for locals to enjoy and relax as well.	=	=	=
Provide a naturally lit food hall that offers a variety of fresh food options in addition to the typical convenience store fare and will have a clean inviting interior.	-	=	=
Develop the convenience store, fuel center, food hall, Inn & Suites as a destination of high quality design.	-	-	=
Total Project Objectives Met:	1	2	3

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