DRAFT
INITIAL STUDY

for the

PFEIFFER BIG SUR STATE PARK CAMPGROUND CABIN PROJECT

Lead Agency:

State of California
DEPARTMENT OF PARKS AND RECREATION
Monterey District
Contact: Matthew Allen
Senior Environmental Scientist Supervisor

Prepared by:

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May 2021

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BACKGROUND INFORMATION

Project Title:	Pfeiffer Big Sur State Park Campground Cabin Project
Project Location(s):	Pfeiffer Big Sur State Park in Monterey County, California
Name of Property Owner:	California Department of Parks and Recreation
Name of Project Proponent:	California Department of Parks and Recreation
Assessor's Parcel Number(s):	419031002000
Acreage of Parcel:	814
General Plan Designation:	Outdoor Recreation
Zoning District:	Outdoor Recreation
Lead Agency:	California Department of Parks and Recreation
Prepared By:	DD&A, Inc.
Date Prepared:	May 2021
Contact Person:	Matthew Allen, Senior Environmental Scientist Supervisor
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List of Abbreviations

Acronym or Abbreviation	Definition
3CE	Central Coast Community Energy
AB	California Assembly Bill
ACOE	U.S. Army Corps of Engineers
ADA	Americans with Disabilities Act
AFY	acre-feet per year
AMBAG	Association of Monterey Bay Area Governments
API	Area of Potential Impact
AQMP	2012-2015 Air Quality Management Plan
BAU	Business as usual
Big Sur Coast LUP	Big Sur Coast Local Use Plan
BMPs	Best Management Practices
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
Cal Fire	California Department of Forestry and Fire Protection
CalEPA	California Environmental Protection Agency
CalGreen	California Green Building Standards Code
CalRecycle	California Integrated Waste Management Board
CARB	California Air Resources Board
CCC	Civilian Conservation Corps
CCR	California Code of Regulations
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CESA	California Endangered Species Act
CFCs	Chlorofluorocarbons
CH_4	methane
CIP	Coastal Implementation Plan
CLOMR	Conditional Letter of Map Revision
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNPPA	California Native Plant Protection Act
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	Carbon dioxide
Coastal Act	California Coastal Act
Coastal Conservancy	California Coastal Conservancy
County	Monterey County, California

CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Ranks
cy	cubic yards
dB	Decibel
dBA	A-weighted sound level
DOT	U.S. Department of Transportation
DTSC	California Department of Toxic Substances Control
EHSA	Environmentally Sensitive Habitat Areas
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
ESA	federal Endangered Species Act
Esselen Tribe	Esselen Tribe of Monterey County
Far Western	Far Western Anthropological Research Group, Inc.
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FMP	Forest Management Plan
GHGs	greenhouse gases
GPD	gallons per day
HCD	Housing & Community Development
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
LRA	Local Responsibility Area
MBARD	Monterey Bay Air Resources District
MLD	most likely descended
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MRWMD	Monterey Regional Waste Management District
$MTCO_2e$	metric tons of CO_2e
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCAAB	North Central Coast Air Basin
NMFS	National Oceanic and Atmospheric Administration Marine Fisheries Service
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NWIC	Northwest Information Center
O_3	Ozone
OCEN	Ohlone/Costanoan-Esselen Nation
OPR	Office of Planning and Research
PBSSP or Park	Pfeiffer Big Sur State Park

PG&E	Pacific Gas and Electric
PM_{10}	respirable particulate matter
$PM_{2.5}$	fine particulate matter
Porter-Cologne	Porter-Cologne Water Quality Control Act of 1969
Project or Proposed Project	Pfeiffer Big Sur Campground Cabin Project
project site or site	Proposed Project Site
RCRA	Resources Conservation and Recovery Act
RPS	Renewables Portfolio Standard
RWD	Reports of Waste Discharge
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
Salinan Tribe	Salinan Tribe of San Luis Obispo and Monterey Counties
SB	Senate Bill
S-CCC steelhead	south-central California Coast steelhead
Sierra Geotech	Sierra Geotech DBVE, Inc.
SLF	Sacred Lands File
So_x	sulfur oxides
SPCP	Spill Prevention and Control Plan
SR	State Route
SRA	State Responsibility Area
State Board or SWRCB	State Water Resources Control Board
State Parks or Parks	California Department of Parks and Recreation
TAMC	Transportation Agency for Monterey County
TAMC Fee	regional development impact fee
TCP	Traditional Cultural Property
TDM Plan	Big Sur Sustainable Transportation Demand Management Plan
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	urban water management plan
Ventana Power	Ventana Power Company
VHFHSZ	Very-High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
waters of the U.S.	Waters of the United States
Waterway Management Plan	Big Sur River Protected Waterway Management Plan
WDRs	waste discharge requirements
WWTP	wastewater treatment facility

Chapter 1: INTRODUCTION AND PROJECT DESCRIPTION

1.1 INTRODUCTION

The California Department of Parks and Recreation ("State Parks" or "Parks") prepared this Initial Study/Mitigated Negative Declaration ("IS/MND") to evaluate the potential environmental effects associated with the Pfeiffer Big Sur Campground Cabin Project ("Project" or "Proposed Project"), located in Monterey County, California ("County"). State Parks prepared this document in accordance with the California Environmental Quality Act ("CEQA"), Public Resources Code Section 21000 et. seq., and the State CEQA Guidelines, California Code of Regulations ("CCR") Section 15000 et. seq.

An Initial Study is an informational document prepared by a lead agency to determine if a project may have a significant effect on the environment (CEQA Guidelines Section 15063 (a)). If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report ("EIR") must be prepared, in accordance with CEQA Guidelines Section 15064(a). However, if the lead agency determines that revisions in the project plans or proposals made by or agreed to by the applicant mitigate the potentially significant effects to a less than significant level, a Mitigated Negative Declaration may be prepared instead of an EIR (CEQA Guidelines Section 15070(b)). The lead agency prepares a written statement describing the reasons a proposed project would not have a significant effect on the environment and, therefore, why an EIR need not be prepared. This IS/MND conforms to the content requirements under CEQA Guidelines Section 15071.

State Parks is acting as the Lead Agency pursuant to CEQA Guidelines Section 15050(a). As the Lead Agency, State Parks prepared this IS/MND pursuant to CEQA Guidelines Section 15063, Section 15070, and Section 15152. State Parks will circulate this IS/MND for agency and public review during a 30-day public review period, as required pursuant to CEQA Guidelines Section 15073. State Parks will consider all comments raising a substantive environmental issue under CEQA as part of the deliberative process in accordance with CEQA Guidelines Section 15074.

This IS/MND is a "tiered" Mitigated Negative Declaration pursuant to CEQA Guidelines Section 15152(a)[1] and tiers off previous environmental analysis conducted by State Parks in connection with the Pfeiffer Big Sur State Park ("PBSSP" or "Park") General Plan. State Parks adopted the General Plan in 1999. The General Plan contained an evaluation of potential environmental effects associated with future use of PBSSP, including the development of recreational amenities (e.g., cabins) and other park features. The General Plan contained a generalized analysis of

[1] Pursuant to CEQA Guideilnes Section 15152, the analysis of general matters contained in a broader EIR may be incorporated into a later EIR or Negative Declaration on a narrower project wherein the previous analysis is incorporated by reference. This process allows future environmental analysis on narrower projects to focus on those issues that are specific to a later project. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy, or program to an EIR or Negative Declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration (CEQA Guidelines Section 15152(b)).

potential environmental effects and identified that State Parks would conduct future site-specific environmental review for future projects. This IS/MND incorporates, by reference, the previous environmental analysis conducted in support of the PBSSP General Plan pursuant to the requirements of CEQA Guidelines Section 15152(a) and Section 15150. This IS/MND provides additional, site-specific analysis and identifies appropriate mitigation, where necessary, to address the specific environmental impacts of the Proposed Project.

State Parks prepared the following section consistent with the requirements of CEQA Guidelines Section 15124 to the extent that it applies to the Project. This section contains a detailed description of the project site's historical background, including previous use, State Parks' alternative analysis and site design process, the project location, project components and relevant project characteristics, and applicable regulatory requirements.

1.2 PROJECT LOCATION

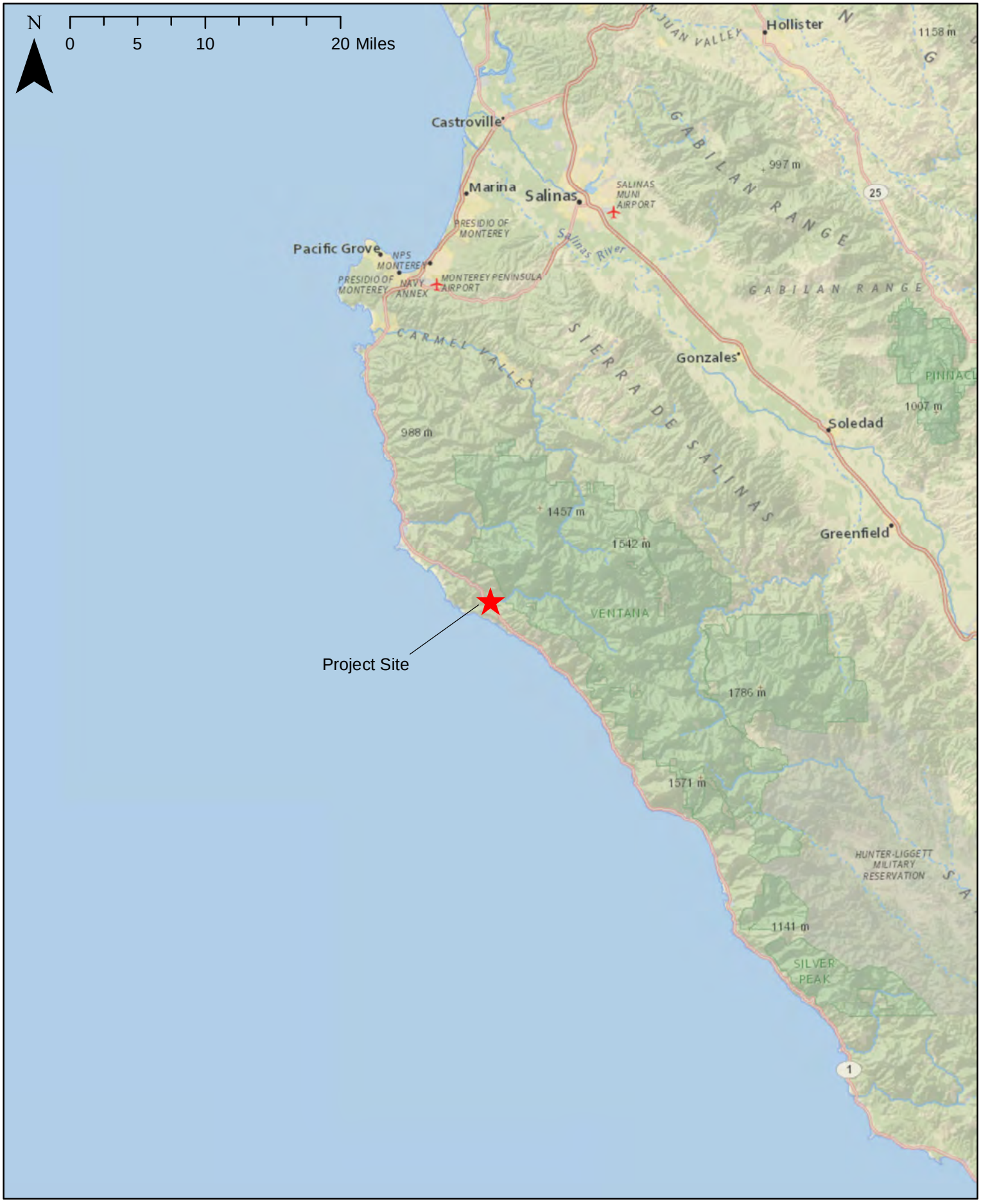
1.2.1 REGIONAL LOCATION

The Project, described below, is within PBSSP, located within northern Big Sur in unincorporated Monterey County, California (see **Figure 1, Regional Location**). State Route ("SR") 1, which bisects PBSSP, serves as the only access road to the Park. PBSSP lies approximately 25 miles south of the City of Monterey and is one (1) mile east of the Pacific Ocean on the western slope of the Santa Lucia Mountain Range, one of California's most rugged landscapes. Los Padres National Forest, including the Ventana Wilderness, lies east and northeast of PBSSP. A combination of National Forest land and private property, most of which is undeveloped, borders the Park to the west. The Big Sur River meanders through many of the primary use areas of the Park before crossing into the adjacent Andrew Molera State Park and emptying into the Pacific Ocean.

The Proposed Project site ("project site" or "site") lies in the middle of PBSSP and comprises approximately three (3) acres of the approximately 1,000-acre Park (see **Figure 2, Project Site**).

1.2.2 HISTORICAL USE

PBSSP is a popular visitor destination in Big Sur, averaging 400,710 visitors annually. The Park was established in 1933 from the original campground and lodge facilities, which the Michael Pfeiffer family established in the early part of the 20th century. The project site was historically used for a variety of purposes by the Ventana Power Company ("Ventana Power"), the Civilian Conservation Corps ("CCC"), and the public, and was improved with a variety of utility, habitation, and recreational structures, some of which are still present today (see **Figure 3, Historical Use**, **Figure 4a, Site Photos, Figure 4b, Historical Site Photos**).



Regional Location

Date	Scale	Figure
2/16/2021	1 in = 50,000 ft	1

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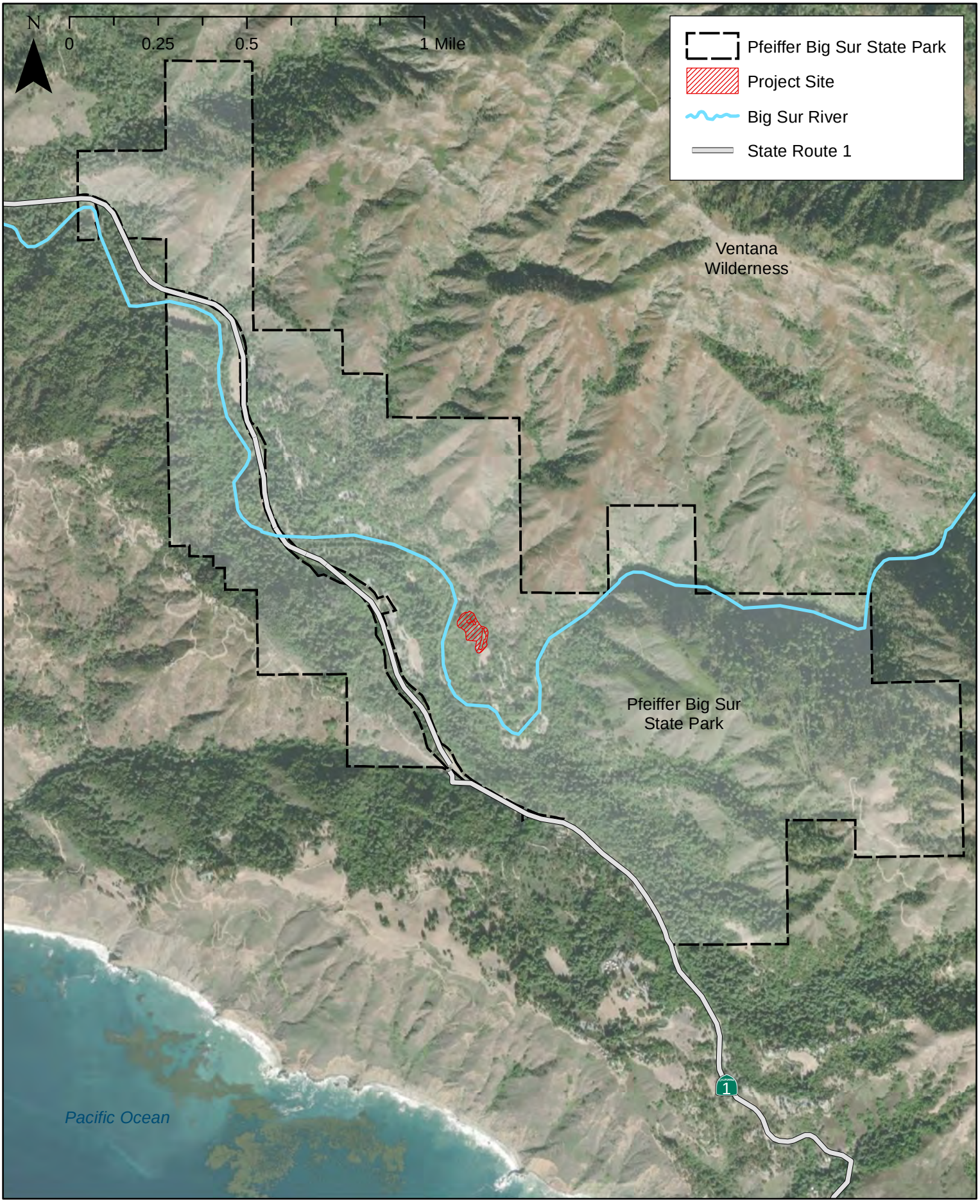
Path: D:\GIS\GIS_Projects\2019-04 - Pfeiffer Campground Cabins\Final Products\CEQA\Fig 1 - Regional Map.mxd



Project Site

Date
2/25/2021

Scale
1 in = 2,000 ft

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Figure
2

Path: D:\GIS\GIS_Projects\2019-04 - Pfeiffer Campground Cabins\Final Products\CEQA\Fig 2 - Project Site.mxd

Historical Use

Date
2/16/2021

Scale
1 in = 80 ft

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Figure
3

Path: D:\GIS\GIS_Projects\2019-04 - Pfeiffer Campground Cabins\Final Products\CEQA\Fig 3 - Historical Use.mxd

Photo 1. Looking north towards existing PBSSP facilities.

Photo 2. Typical, densely-vegetated poison oak understory.

Photo 3. Looking northeast towards previous locations of the concrete pool and the Ventana Power buildings, where the canopy is less dense.

Photo 4. Looking northwest at existing paved parking lot and vegetation screening.

Site Photos (Existing Conditions)

Date
2/24/2021

Scale
N/A

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Figure
4a

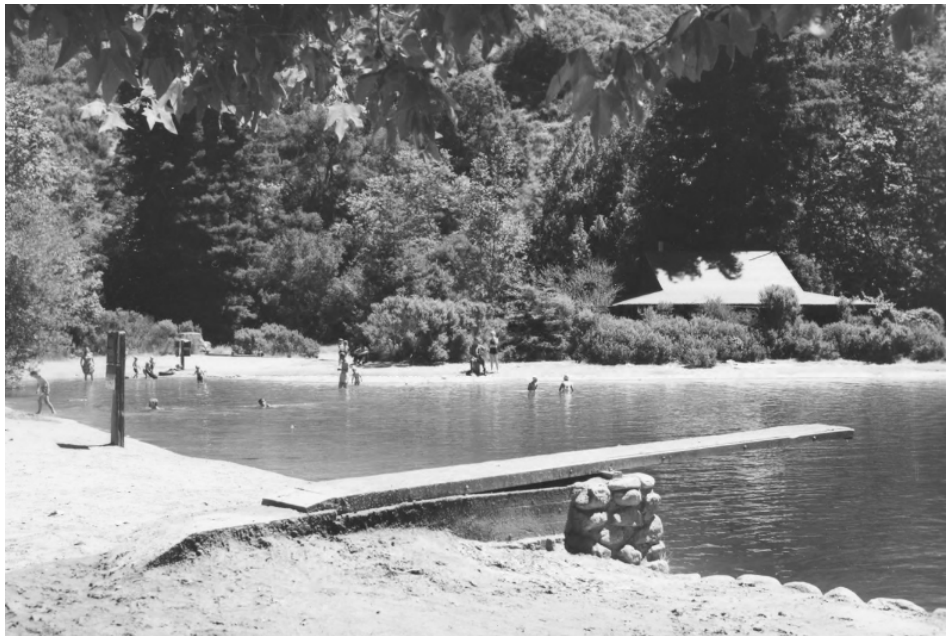


Photo 5. 1940s-era photo of the concrete pool.

Photo 6. 1960s-era photo of the concrete pool.

Site Photos (Historical Conditions)	Date 2/24/2021	Denise Duffy & Associates, Inc. PLANNING AND ENVIRONMENTAL CONSULTING	Figure 4b
	Scale N/A		

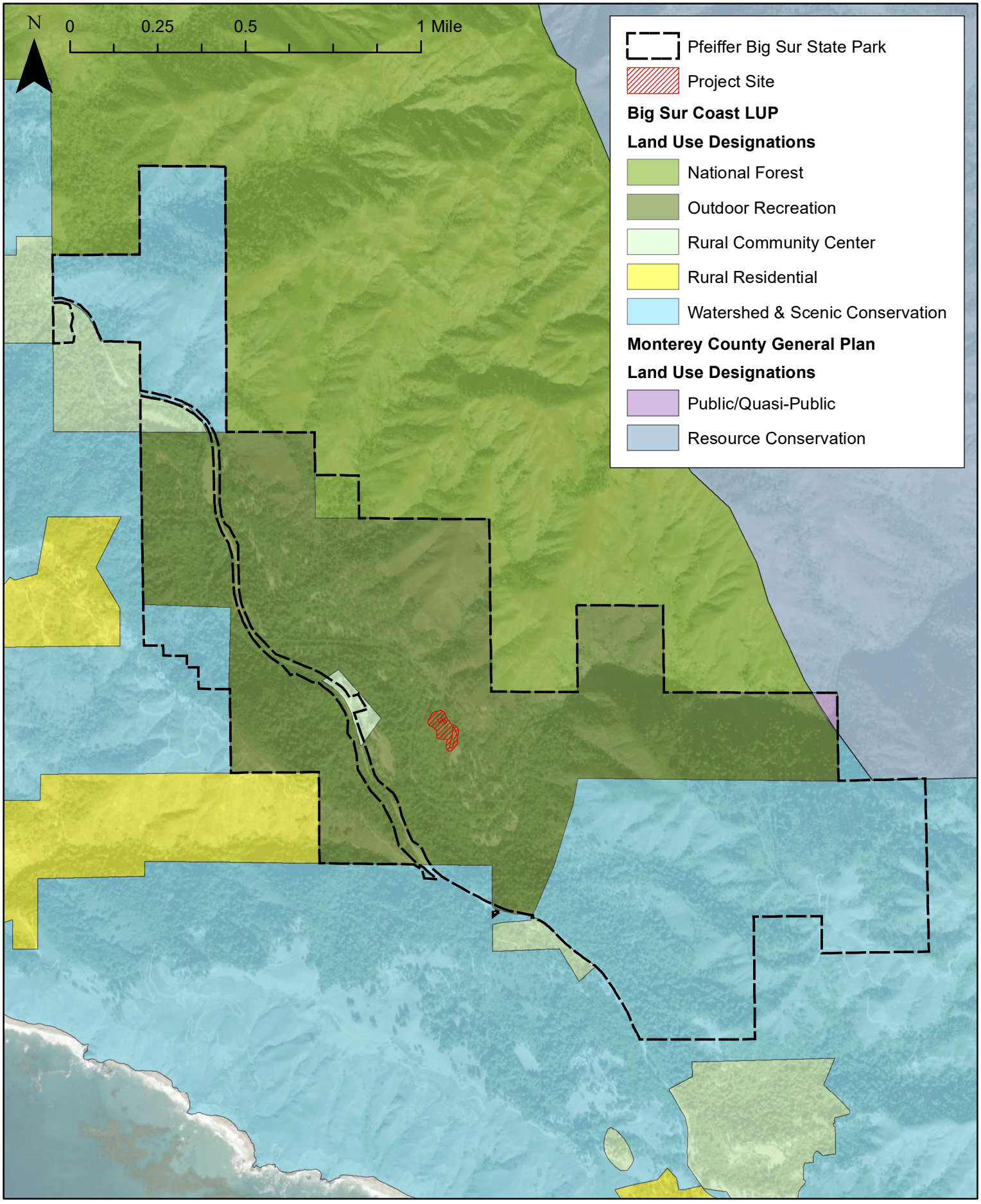
Prior to the establishment of PBSSP, Ventana Power operated small hydroelectric dams in the vicinity and built a house (the “Clark House”), a shack, a garage, and a utility yard within the project site. The CCC adopted the three Ventana Power buildings when the Park was established and, in 1938, removed the utility yard structures to make room for a public day-use area. The day-use area included a group picnic area and a large, concrete-lined swimming pool. The picnic area included a stone barbeque stove, stone picnic tables, and a comfort station. The swimming pool was designed with a natural appearance and was fed directly by the Big Sur River via a small diversion dam and a concrete inlet canal. It was solar-heated and included swimming and wading areas, a diving platform, four sandy beaches, floating canals, and a large, forested island. The pool was a popular attraction at PBSSP and, after 20 years of heavy use, it was drained for repairs in 1958.

In 1959, swimmers were temporarily diverted to a swimming hole in the Big Sur River, which was formed by the diversion dam. The swimming pool was repaired with a new coat of sprayed concrete and was reopened in 1960. Due to perceived public hazards, the pool and related infrastructure were destroyed in the late 1960s. The resulting debris was later capped with mudslide sediment from the 1972 Molera fire; however, some remnant debris is still visible within the project site. The three Ventana Power buildings remained as campground facilities until at least 1955; they were subsequently moved and eventually demolished, although it is unknown when they were demolished (off-site).

1.2.3 EXISTING AND SURROUNDING LAND USES

PBSSP is a relatively small State Park with high-intensity visitor-serving and park operations facilities occupying much of the Park’s flat or gently sloping land, which is mostly located adjacent to the Big Sur River. The Park is open year-round and accommodates hikers, bikers, swimmers, car campers, and RVers. Some 6.2 miles of trails trace the valley and hillsides of PBSSP. They offer visitors access to mountain-top overlooks, quiet meadows, the meandering Big Sur River, cascading waterfalls, and redwood forests. Many picnic areas, including three group picnic sites with grills and tables that can accommodate up to 100 to 125 people per site, are available for public day-use. A Campfire Center offers evening programs on the weekends during peak season. Overnight lodgings include 189 tent and RV campsites and one cabin. Amenities include comfort stations with showers, a laundromat, an RV sanitation station, educational kiosks, and a supply store.

Land uses and development activities within PBSSP are governed by the Land Use Plan for the Big Sur Coast segment of the County’s Local Coastal Program (“Big Sur Coast LUP”), one of the County planning areas, and the PBSSP General Plan. The project site’s land use designation under the Big Sur Coast LUP is *Outdoor Recreation* (see **Figure 5, Land Use Designations**). This designation allows for low-intensity recreational and educational uses compatible with the area's natural resources and requires a minimum level of development to serve basic user functions.



Land Use Designations

Date
2/16/2021

Scale
1 in = 2,000 ft

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Figure
5

Path: D:\GIS\GIS_Projects\2019-04 - Pfeiffer Campground Cabins\Final Products\CEQA\Fig 5 - Land Use.mxd

The PBSSP General Plan identifies the following existing primary land uses within the Park:

- Visitor day use,
- Visitor overnight,
- Concession operations,
- Park operations, and
- Open space.

These existing land uses abut one another throughout the valley and lower slopes of the mountains over which the Park's boundaries run. The Park is mostly bordered by National Forest land, including portions of the Ventana Wilderness. Some private, primarily undeveloped land borders the Park on its southern and western boundaries.

The proposed project site has historically been used for a variety of purposes, including utility, residential, and, most recently, recreational uses. The proposed project site is currently open space, although it was extensively developed in connection with prior use. A paved parking lot and paved road connect the site to SR 1 and other facilities within PBSSP. Within the undeveloped areas, vegetation is dominated by coast live oak trees and poison oak. The project site is surrounded by the Big Sur River and SR 1 to the west, camp sites and other recreational amenities to the north and south, and open space to the east.

1.3 ALTERNATIVES ANALYSIS

State Parks, working with the California Coastal Conservancy ("Coastal Conservancy"), conducted a comprehensive alternatives analysis as part of the site selection and design process for the Project. As part of this process, State Parks considered a variety of factors to ensure that the final selected site design avoided, and where necessary mitigated, potential environmental effects. Applicable factors influencing site design included site circulation, the proximity of existing infrastructure, historic use and prior disturbance of the site, proximity to sensitive resources (e.g., riparian habitat, cultural resources, etc.), and proximity to other planned site improvements (e.g., trails). State Parks conducted various site-specific surveys to inform site design, including a comprehensive tree inventory, a biological resource evaluation, a cultural assessment, utility surveys, and other supporting technical analyses. In addition, State Parks also considered an alternative project location within PBSSP, but ultimately determined that an alternative site was not feasible due to existing cultural resource constraints.

State Parks developed and considered multiple design alternatives. These alternatives varied in terms of site design and layout, infrastructure improvements, internal circulation, location of amenities (e.g., comfort station, etc.), cabin location, and the number of cabins. In addition, State Parks also considered design alternatives that included potential trail improvements along the Big Sur River. This process entailed multiple meetings with State Park resource specialists, design professionals, environmental scientists, and other resource experts to develop a carefully designed project compatible with its natural surroundings and minimizes potential resource impacts to the maximum extent feasible through avoidance and site design.

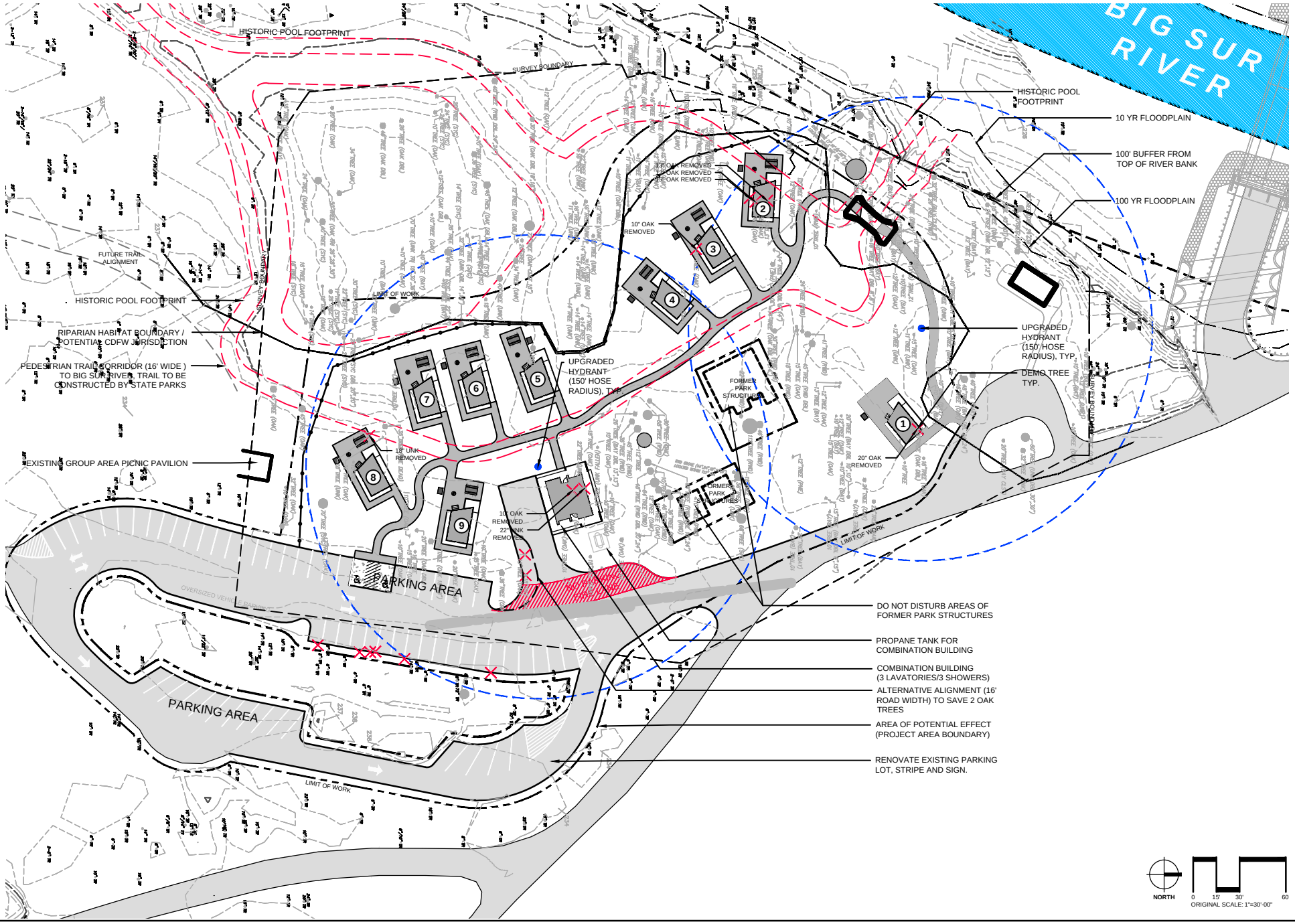
Ultimately, State Parks determined that the various design alternatives were not feasible or preferable for a variety of reasons and modified the site design. Specifically, State Parks modified the design to minimize potential tree removal, prioritize the removal of non-native tree species, and relocate cabins to avoid potential impacts to existing mature redwood trees. State Parks also modified the site design to minimize and, wherever feasible, avoid potential impacts to riparian habitat. This entailed modifying the site design to relocate five (5) cabins that would have encroached or partially encroached on riparian areas. Similarly, State Parks also modified the site design to avoid cultural sensitivity areas and relocated cabins to avoid potential cultural resource-related impacts. State Parks also reduced the total number of proposed cabins from 14 to nine (9) to further minimize potential environmental effects. Finally, State Parks prioritized locating improvements in historic disturbance areas associated with prior use of the site.

State Park's design process resulted in a carefully designed and environmentally preferrable site layout, which is further described below and evaluated in this IS/MND.

1.4 PROJECT DESCRIPTION

The Proposed Project consists of the construction and operation of new camping facilities (i.e., low-cost visitor-serving accommodations) and associated infrastructure within the Park. More specifically, the Proposed Project would result in the construction and operation of new low-cost overnight accommodations consisting of nine (9) cabins and related infrastructure. The Project would be compliant with the Americans with Disabilities Act ("ADA") and with State Parks' 2015 Accessibility Guidelines. **Figure 6, Site Plan**, shows the anticipated location of proposed improvements, which include the following:

- Nine (9) prefabricated hard wall camping cabins with accessible ramps and exterior amenities (e.g., picnic table, fire pit, etc.)
- A comfort station (combination restroom and shower building) consisting of three (3) lavatories and three (3) showers,
- Renovation of the existing parking lot,
- Internal campground paths,
- Split rail cedar fencing around the outer perimeter of the site to preclude access and associated direct and indirect effects to adjacent sensitive habitats (i.e., riparian),
- Infrastructure improvements, including extending existing utilities to the site and upgrading existing water distribution lines and sanitary sewer facilities,
- Restoration and landscaping in temporarily disturbed areas, as well as other associated environmental enhancements to create, restore, and enhance existing habitat values, and
- Other miscellaneous site improvements (e.g., signage, interpretive elements, maintenance, lighting, fire hydrants, etc.).



Site Plan

Date
2/16/2021

Scale
N/A

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Figure
6

The following discussion provides a more detailed description of key project elements, including site access, grading requirements, off-site improvements, and other physical elements of the Project that have the potential to affect the environment.

1.4.1 ACCESS AND INTERNAL CIRCULATION

Regional access to the project site would be provided exclusively from SR 1. Internal vehicle access within PBSSP would be provided via an existing paved road that connects the project site to SR 1 and other camping facilities in the Park.

State Parks designed the project layout and internal circulation to maximize pedestrian connectivity while enhancing existing road access. The Project includes internal circulation improvements (i.e., aggregate paths) to connect the proposed cabins with the existing parking area, comfort station, and other amenities. The Project would also renovate the existing parking lot to provide dedicated on-site parking for the campsite. Two (2) parking spaces would be available for each cabin site. In addition, the Park also would include two (2) ADA accessible parking spaces.

1.4.2 INFRASTRUCTURE

1.4.2.1 Water Supply

PBSSP's existing water distribution system would serve the Project. The existing system consists of two (2) water tanks, which have a combined capacity of 300,000 gallons of water and pump over 200,000 gallons per day ("GPD"), and 6,400 lineal feet of water distribution lines serving the Park. The Project would extend existing water supply infrastructure to the Project. This would entail the installation of approximately 530 feet of new 6-inch pipeline. This improvement would occur within the existing PBSSP internal access road and would extend utilities to the proposed comfort station and new fire hydrants. All work associated with infrastructure improvements would occur within the project site or within existing disturbed areas within the Park (i.e., paved roads). Once the Project is operational, the Proposed Project would generate a peak water demand of approximately 2,700 GPD or approximately 3.02 acre-feet per year ("AFY").

1.4.2.2 Sanitary Sewer and Wastewater

PBSSP utilizes an existing state-permitted wastewater treatment facility ("WWTP") for wastewater disposal, which has a permitted capacity of 100,000 GPD. The existing WWTP currently treats 55,000 GPD during peak season demand (July/August) with peak flows of 75,000 GPD. Sanitary sewer infrastructure would be extended to the project site via existing PBSSP infrastructure. A new sewer lateral would be installed from the new comfort station to the sewer main in the existing parking lot. All work associated with infrastructure improvements would occur within the project site or within existing disturbed areas within the Park (i.e., paved roads). Wastewater would be generated in direct relation to the water demand. Therefore, the wastewater is estimated to peak at 2,700 GPD.

1.4.2.3 Stormwater and Drainage

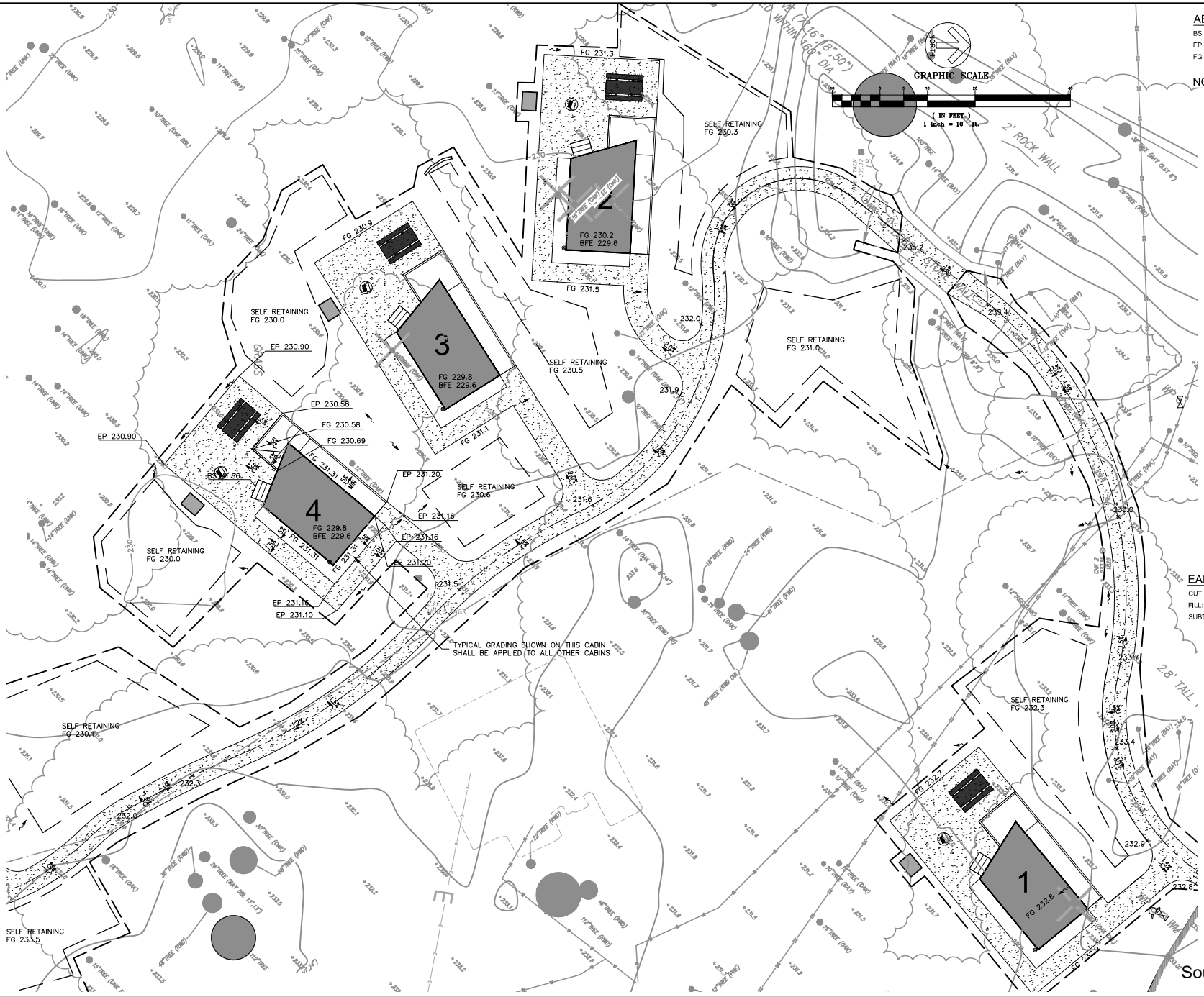
Runoff from new impervious surfaces and areas with decreased permeability (e.g., new cabin structures, comfort station, aggregate paths, etc.) would flow to self-retaining areas which would be scattered throughout the project site. Self-retaining areas would be 3-inch deep depressions and would collect, hold, and percolate runoff. They would be at least twice as large as the contributing impervious surfaces. No stormwater drainage system is proposed; overflow from self-retaining areas would flow overland and eventually into the Big Sur River.

1.4.3 GRADING

Due to existing site topography and existing paved infrastructure, construction of the Project would require minimal grading. Grading would be accomplished with hand tools; no heavy equipment would be used. Approximately 400 cubic yards ("cy") of cut and 280 cy of fill is anticipated (see **Figure 7a – 7c, Grading Plan**). 120 cy would be exported off-site.

1.4.4 TREE REMOVAL

Construction of the Project would result in the removal of up to 30 trees, including three (3) landmark trees (i.e., trees which are 24 inches or more in diameter when measured two feet above the ground, or trees which are visually significant, historically significant, or exemplary of their species). Existing native trees would be maintained where possible, and the Project would preserve the existing redwood grove located in the middle of the site. See **Table 1, Trees Proposed for Removal** and **Figure 8, Tree Removal Plan** for the species, size, condition, and location of each tree which is proposed for removal.



ABBREVIATIONS:

BS	BOTTOM OF STEP
EP	EDGE OF PAVEMENT
FG	FINISH GRADE

NOTES:

1. A SINGLE CABIN SITE HAS BEEN DETAIL GRADED ALL OTHERS SHOW REFERENCE GRADES AT FRONT AND BACK AND SHOULD BE GRADED IN A SIMILAR FASHION.
2. THE INTENT OF THE PAVEMENT REHABILITATION IS TO SUBSTANTIALLY RETAIN THE EXISTING GRADES. THE CONTRACTOR SHALL INSURE THAT SLOPES AT THE TWO ADA STALLS HAVE SLOPES UNDER 2% IN ANY DIRECTION.
3. THE BUILDING PAD SHALL BE SLOPED AT 5% AWAY FROM A RIDGE IN THE MIDDLE TO THE PATHWAY WHICH SHALL ALSO BE SLOPED AWAY FROM THE CABIN AT 1.5% TO 2$ MAX SLOPE.
4. THE CABIN SHALL BE LOWERED TO AN ELEVATION THAT WILL ALLOW AN ADA COMPLIANT RAMP WITH LANDING AT THE DESIGN GRADE SHOWN ON THIS SHEET. SEE THE STRUCTURAL AND ARCHITECTURAL PLANS FOR THE CABIN AND RAMP CONSTRUCTION.
5. AREAS LABELED SELF RETAINING ARE INTENDED TO PERCOLATE RUNOFF FROM NEW IMPERVIOUS AND AREAS WITH REDUCED PERMEABILITY. THESE AREAS ARE TO POND 3" DEPTH BEFORE RUNOFF RELEASES.
6. ALL GRADING AND SUBGRADE PREPARATION SHALL CONFORM TO THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT.
7. STRIPPED FOREST LITTER AND MULCHED TREES SHOULD BE SPREAD OVER THE SURFACE OF DISTURBED AREAS AS PERMANENT EROSION CONTROL.
8. ALL DISTURBED AREAS MUST BE PROTECTED FROM EROSION . NO SEDIMENT SHALL BE ALLOWED TO LEAVE THE DEVELOPMENT AREA. FOLLOW THE EROSION CONTROL PLAN AS A GUIDE AND ADJUST AS NECESSARY.
9. BFE = BASE FLOOD ELEVATION IS BASED ON APPENDIX A OF FLOODPLAIN ANALYSIS DATED MARCH 2004 BY MICHAEL LINDQUIST.

EARTHWORK:

CUT:	400 CY
FILL:	280 CY
SUBTOTAL:	120 CY EXPORT

Source: BKF Engineers, 2021

Grading Plan

Date
5/12/2021

Scale
1 in = 400 ft

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Figure
7a

Source: BKF Engineers, 2021

Grading Plan

Date	Figure
5/12/2021	7b
Scale: 1 in = 400 ft	

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Source: BKF Engineers, 2021

Grading Plan

Date	Figure
5/12/2021	7c
Scale: 1 in = 400 ft	

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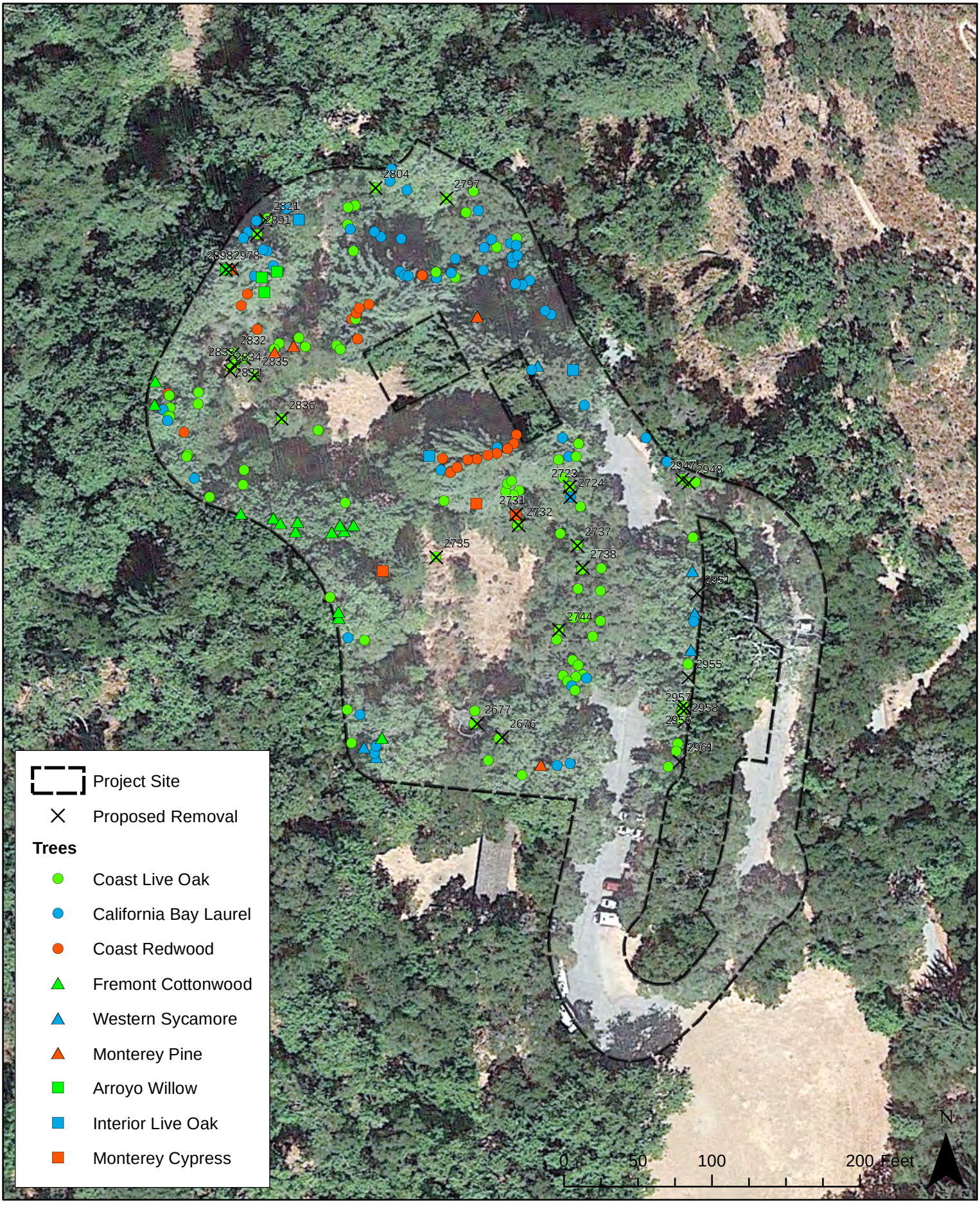

Tree Removal Plan

Date
2/25/2021

Scale
1 in = 80 ft

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Figure
8

Path: D:\GIS\GIS_Projects\2019-04 - Pfeiffer Campground Cabins\Final Products\CEQA\Fig 8 - Tree Removal Plan.mxd

Table 1 Trees Proposed for Removal				
Tree ID	**Scientific Name**	**Common Name**	**Diameter**	**Condition[1]**
2676	*Quercus agrifolia*	Coast Live Oak	10	Poor
2677	*Quercus agrifolia*	Coast Live Oak	23	Fair
2723	*Quercus agrifolia*	Coast Live Oak	6	Fair
2724	*Umbellularia californica*	California Bay Laurel	21	Fair
2731	*Hesperocyparis macrocarpa*	Monterey Cypress	29	Good
2732	*Quercus agrifolia*	Coast Live Oak	11	Fair
2735	*Quercus agrifolia*	Coast Live Oak	7	Good
2737	*Quercus agrifolia*	Coast Live Oak	6	Fair
2738	*Quercus agrifolia*	Coast Live Oak	17	Fair
2744	*Quercus agrifolia*	Coast Live Oak	7	Fair
2797	*Quercus agrifolia*	Coast Live Oak	34	Fair
2804	*Quercus agrifolia*	Coast Live Oak	6	Poor
2821	*Quercus agrifolia*	Coast Live Oak	13	Fair
2831	*Quercus agrifolia*	Coast Live Oak	7	Fair
2832	*Quercus agrifolia*	Coast Live Oak	13	Fair
2833	*Quercus agrifolia*	Coast Live Oak	13	Fair
2834	*Quercus agrifolia*	Coast Live Oak	17	Fair
2835	*Quercus agrifolia*	Coast Live Oak	9	Fair
2836	*Quercus agrifolia*	Coast Live Oak	11	Fair
2891	*Quercus agrifolia*	Coast Live Oak	6	Fair
2898	*Pinus radiata*	Monterey Pine	7	Good
2947	*Quercus agrifolia*	Coast Live Oak	10	Fair
2948	*Quercus agrifolia*	Coast Live Oak	13	Fair
2951	*Plantanus racemosa*	Western Sycamore	35	Fair
2955	*Quercus agrifolia*	Coast Live Oak	12	Fair
2956	*Quercus agrifolia*	Coast Live Oak	8	Fair
2957	*Quercus agrifolia*	Coast Live Oak	14	Fair
2958	*Quercus agrifolia*	Coast Live Oak	6	Fair
2961	*Quercus agrifolia*	Coast Live Oak	6	Poor
2978	*Salix lasiolepis*	Arroyo Willow	7	Good

Note:
1. Tree health was recorded based on the following definitions:
   - **Good**. Tree is healthy and vigorous, as indicated by foliage color and density, and has no apparent signs of insect, disease, structural defects, or mechanical injury. Tree has good form and structure.
   - **Fair**. Tree is in average condition and vigor for the area, but may show minor insect, disease, or physiological problems. Trees in fair condition may be improved with correctional pruning.
   - **Poor**. Tree is in a general state of decline. Tree may show severe structural or mechanical defects which may lead to failure, and may have insect or disease damage, but is not dead.

Source: Denise Duffy & Associates, Inc., Forest Management Plan, April 2021

1.4.5 LANDSCAPING AND RESTORATION

The Project includes landscaping and on-site restoration to enhance and restore areas temporarily disturbed during construction and provide additional environmental benefits associated with the Proposed Project (see **Figure 9a, Conceptual On-site Restoration Plan**). Sensitive biological areas adjacent to and within the project site have primarily been avoided through site design (see **Section 4.3 Biological Resources** for more information). All areas temporarily impacted during construction would be restored following construction. Restoration would ensure that temporary construction-related effects would be addressed through Project design. Similarly, State Parks has also identified an additional restoration site located off-site, but within PBSSP. (see **Figure 9b, Potential Off-Site Restoration Location**). This site is currently

disturbed and State Parks determined that it is suitable for restoration purposes. This site would be restored and enhanced to compensate for the Project's permanent impacts, including impacts associated with proposed tree removal that cannot be accommodated within the identified on-site restoration areas. As noted above, the Project includes the removal of up to 30 trees of various sizes and types. The Project, consistent with the requirements of the Big Sur LUP, would include the replanting of 30 trees of the same type as those removed to compensate for the Project's impacts related to tree removal. Overall, State Parks has avoided impacts where feasible and identified future areas of on-site and off-site restoration to compensate for the Project's temporary and permanent impacts.

1.4.6 SCHEDULE

Construction of the Proposed Project is anticipated to begin in August 2023 and end in August 2024. Grading and site preparation activities are anticipated to occur over an approximately two- to four-month period. Following initial site preparation and grading activities, construction of the cabins and associated improvements would be completed in approximately six to eight months.

1.5 REQUIRED PERMITS AND APPROVALS

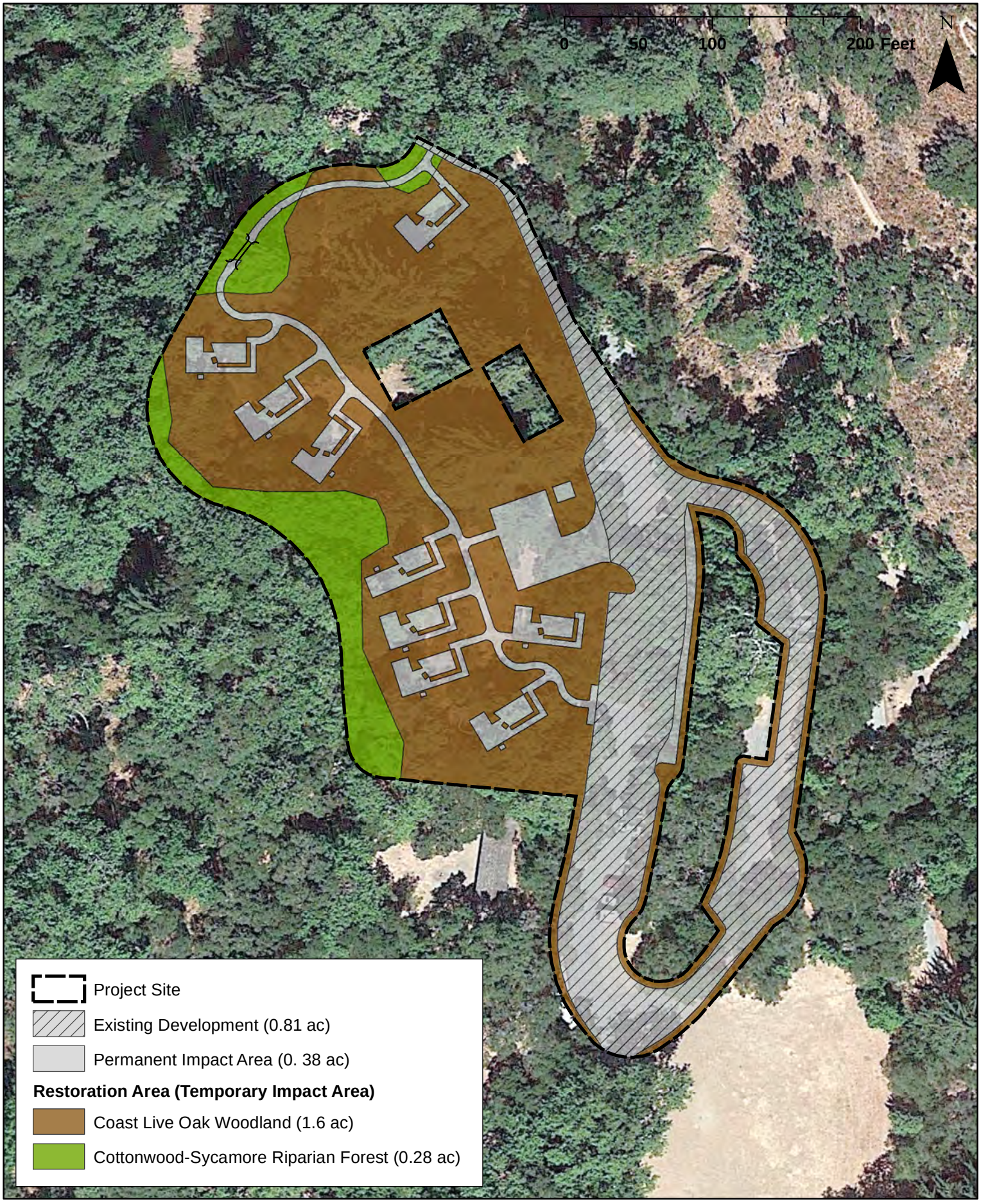
This IS/MND is an informational document for both agency decision-makers and the public. State Parks is the Lead Agency responsible for certification of this IS/MND. The Project would be subject to other laws and applicable agency reviews, including, but not limited to, the federal and state Endangered Species Acts, Clean Water Act, and California Department of Fish and Game Code. Below is a general list of federal, state, and local agencies that may have jurisdiction over the Project and may issue permits in connection with site development. This list is not considered exhaustive and additional agencies and/or jurisdictions may have permitting authority.

1.5.1 STATE AGENCIES

- California Department of Fish and Wildlife, Streambed Alteration Agreement
- Central Coast Regional Water Quality Control Board – General Permit/Notice of Intent
- Central Coast Regional Water Quality Control Board – Wastewater Discharge Requirements

1.5.2 LOCAL AGENCIES

- Monterey County – Coastal Development Permit



Conceptual Restoration Plan

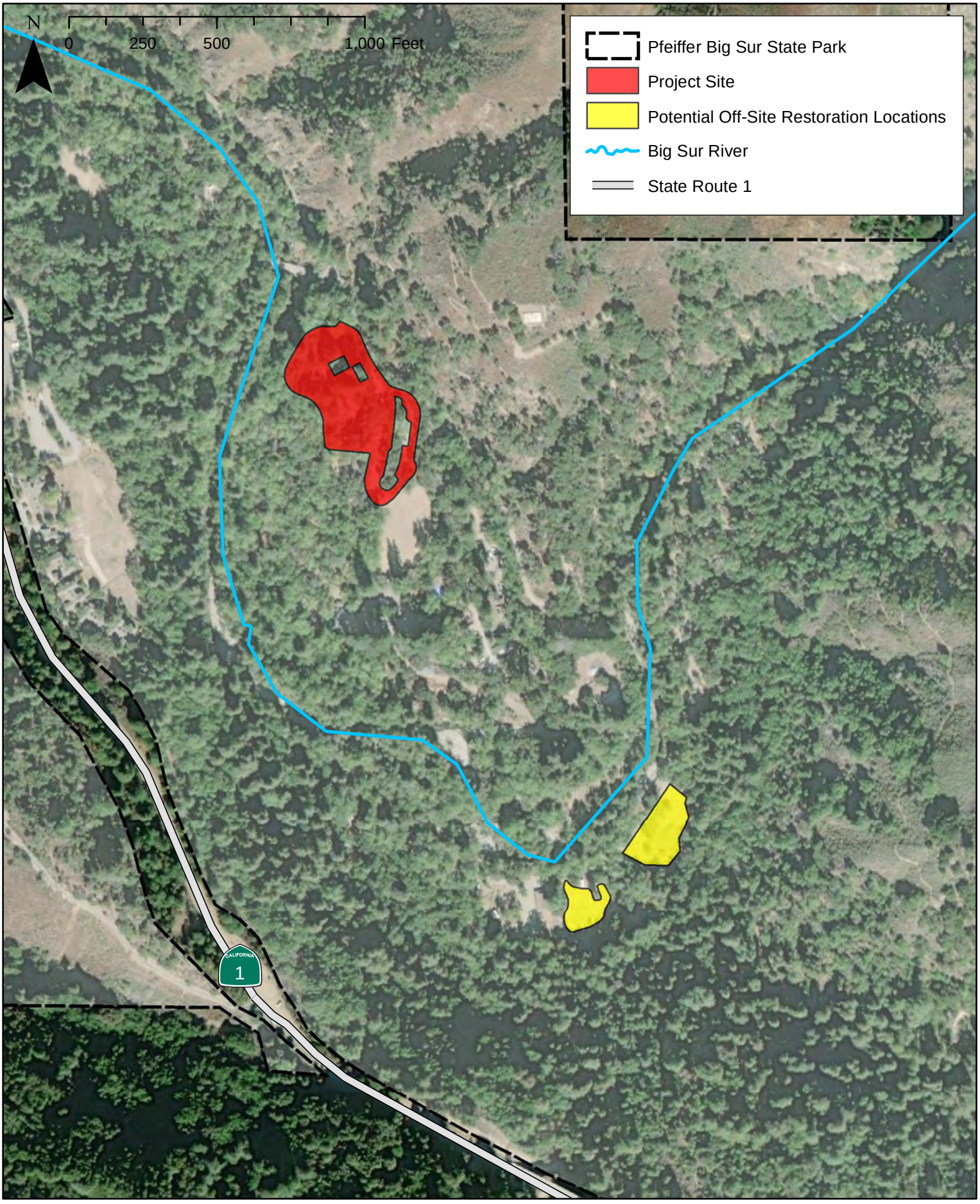
Date
2/25/2021

Scale
1 in = 80 ft

Denise Duffy & Associates, Inc.
PLANNING AND ENVIRONMENTAL CONSULTING

Figure
9a

Path: D:\GIS\GIS_Projects\2019-04 - Pfeiffer Campground Cabins\Final Products\CEQA\Fig 9 - Restoration Plan.mxd



Potential Off-Site Restoration Locations

Date
5/6/2021

Scale
1 in = 400 ft

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
9b

Path: D:\GIS\GIS_Projects\2019-04 - Pfeiffer Campground Cabins\Final Products\CEQA\Fig 9b - Off-Site Restoration Location.mxd

Chapter 2: ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "potentially significant impact", as discussed within the Initial Study checklist analysis on the following pages.

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

Environmental Factors Not Affected

As part of the scoping and environmental analysis conducted for the Project, the following environmental resources were considered. The potential for adverse impacts to these resources were not identified. Consequently, there is no further discussion regarding these resources in this document.

Agricultural Resources: No known agricultural resources have been identified in the Project area. The Project would not impact agricultural resources since no portion of the project site contains farmland.

Mineral Resources: The project site is not within a mapped California Geological Survey Mineral Resource Zone. Furthermore, the Project is consistent with the zoning designation of the project site and would not result in any large-scale development or other activities requiring the removal of mineral deposits. Therefore, the Project would not impact mineral resources.

Population and Housing: The Project would not induce substantial population growth, either directly or indirectly, nor would it displace a substantial number of existing housing units. The project would not impact population or housing.

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Chapter 3: DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Matthew Allen	5/27/2021
Signature	Date
Matthew Allen	Department of Parks and Recreation
Printed Name	For

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Chapter 4: INITIAL STUDY ENVIRONMENTAL CHECKLIST

The following chapter assesses the environmental consequences associated with the Proposed Project. Mitigation, where appropriate, are identified to address potential impacts.

EVALUATION OF ENVIRONMENTAL IMPACTS:

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

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

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

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level mitigation measures.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

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

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

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

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

9. The explanation of each issue should identify:
   a) The significance criteria or threshold, if any, used to evaluate each question; and
   b) The mitigation measure identified, if any, to reduce the impact to less than significance.

4.1 AESTHETICS

4.1.1 INTRODUCTION

This section assesses the existing visual quality of the project site and potential changes to the visual and aesthetic environment that could occur due to the implementation of the Project. Photographs were taken from points that characterize the existing visual character of the site and surrounding area. **Figure 4a, Site Photos** contains representative site photographs.

4.1.2 METHODOLOGY AND TERMINOLOGY

As part of the visual analysis, the visual character and quality of the project site and adjacent areas located in and around the subject property were characterized using the criteria for visual impact assessments developed by the Federal Highway Administration ("FHWA"). While these criteria were developed to evaluate the potential visual impacts associated with highway projects, the criteria are useful for evaluating potential aesthetics-related impacts associated with the Proposed Project. This IS/MND relies on the terminology developed by FHWA to describe the existing visual quality and character of a particular area to analyze potential visual impacts, as summarized below.

- **Vividness** is the degree of drama, memorability, or distinctiveness of the landscape components. Vividness is composed of four elements—landform, vegetation, water features, and human-made elements—that usually influence the degree of vividness.

- **Intactness** is a measure of the visual integrity of the natural and human-built landscape and its freedom from encroaching elements. This factor can be present in well-kept urban and rural landscapes, as well as in natural settings. High intactness means that the landscape is free of eyesores and is not broken up by features that appear to be out of place. Intactness is composed of two primary elements—development and encroachment—that influence the degree of intactness.

- **Unity** is the degree of visual coherence and compositional harmony of the landscape when it is considered as a whole. High unity frequently attests to the careful design of individual components and their relationship in the landscape.

The FHWA's Visual Impact Assessment methodology typically assigns numeric ratings to the three criteria – vividness, intactness, and unity - to determine visual quality and then averages the ratings to establish an overall visual quality score. This analysis relies on a qualitative assessment, which assigns a value of "high, medium or low," rather than using numerical ratings. Applying this approach yields a scale that reasonably represents the range of visual quality within the project site's vicinity. This approach is appropriate for the purposes of a) determining the visual quality of the project site and its surroundings and b) determining whether the Project would (or would not) result in a change in the visual environment that would constitute an adverse environmental impact. The overall visual quality for each of the criteria identified above is described as low, medium, or high, which are defined as follows:

- **Low Visual Quality**. Features seem visually out of place, lack visual coherence, do not have compositional harmony, and contain eyesores.

- **Medium Visual Quality**. Pleasant appearing but may lack distinctiveness, memorability, drama, and compositional harmony, or may simply be common and ordinary landscapes.

- **High Visual Quality**. Memorable, distinctive, unique (in a positive way), intact natural or park-like areas, or urban areas with strong and consistent architectural and urban design features.

In addition to the criteria described above, this analysis considers other important factors (e.g., viewer sensitivity, PBSSP General Plan policies, CEQA Guidelines, etc.) to determine the relative importance of existing views and scenic resources. Although the importance of an existing view could be subject to the viewer's perspective, CEQA states that certain visual elements, such as scenic vistas, warrant consideration; impacts to these resources should be identified and mitigated where appropriate.

4.1.3 ENVIRONMENTAL SETTING

The Proposed Project is located within PBSSP in northern Big Sur. Located on the western slope of the Santa Lucia Mountains, the peaks of PBSSP tower high above the Big Sur River Gorge, where the Big Sur River enters the Park. SR 1, a state-designated scenic highway, lies west of the Park. The project site is located within the center portion of PBSSP, adjacent to existing day-use and other camping facilities. As described in **Section 1.2.2, Historical Use**, the project site was historically disturbed in association with the concrete-lined pool. However, the area is currently open space with a moderate to dense canopy of native trees, including coast live oak, California bay laurel, western sycamore, and coast redwood, except where the existing day-use parking lot is present. Remnant debris from the pool is still present and visible within the site.

Due to vegetation cover, topography, and distance from affected viewers (i.e., vehicle traffic on SR 1), the project site is not visible from SR 1. The site is only visible from within the boundaries of PBSSP; and even within the Park, views of the site are limited due to dense vegetation cover. Views from the project site consist primarily of vegetation and the existing paved parking lot. Existing PBSSP facilities are visible from a few areas within the site where vegetation is less dense; however, these views are generally limited.

Using the terminology developed by FHWA, the project site's visual character consists of moderate degrees of vividness, intactness, and unity. As described above, the site is surrounded by views of native oak woodland but also includes views of the paved parking lot, adjacent use areas, existing recreational facilities, and remnant debris, which detract from the intactness and unity of the site. These elements create a mostly natural image which is pleasant but lacks distinctiveness, memorability, and drama. As a result, the overall visual quality of the site is moderate.

4.1.4 REGULATORY SETTING

4.1.4.1 State

California State Scenic Highway Program

The State Legislature created the California State Scenic Highway program in 1963. Its purpose is to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. The program includes a list of highways that are either designated or eligible for designation as a scenic highway. Portions of SR 1 along the California coastline are either designated as a State Scenic Highway or eligible for State Scenic Highway's designation. The section of SR 1 adjacent to the PBSSP is an officially designated scenic highway. This section of SR 1 follows the California coastline from the Carmel River south to the San Luis Obispo county line and offers dramatic views of the rugged central California coast as the Santa Lucia Mountains rise abruptly from the Pacific Ocean.

California Coastal Act

The State Legislature enacted the California Coastal Act ("Coastal Act") in 1976 to provide long-term protection of the State's 1,100-mile coastline for the benefit of current and future generations. The Coastal Commission, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. California's coastal zone generally extends 1,000 yards inland from the mean high tide line. In significant coastal estuarine habitat and recreational areas, it extends inland to the first major ridgeline or five miles from the mean high tide line, whichever is less. In developed urban areas, the boundary is generally less than 1,000 yards. Development activities, which the Coastal Act broadly defines include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters.

The Coastal Act includes specific policies (see Division 20 of the Public Resources Code) that address issues such as shoreline public access and recreation, lower cost visitor accommodations, terrestrial and marine habitat protection, visual resources, landform alteration, agricultural lands, commercial fisheries, industrial uses, water quality, offshore oil and gas development, transportation, development design, power plants, ports, and public works. The following portion of the Coastal Act is pertinent to scenic and visual resources.

Section 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alternation of natural landforms, to be visually compatible with the character of surrounding areas, and where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

2010 Monterey County General Plan/Big Sur Coast LUP

The 2010 Monterey County General Plan and the Big Sur Coast LUP contain numerous policies related to the preservation and protection of scenic resources. These policies are intended to preserve and enhance the County's scenic character, minimize visual impacts on scenic resources, and ensure that future development activities are consistent with the visual character of the area. The County's basic policy is to prohibit public or private development visible from SR 1 and major public viewing areas.

PBSSP General Plan

A primary management goal of the PBSSP General Plan is the protection and enhancement of the aesthetic values most often associated with the rugged Big Sur Coast-wild rivers, riparian habitat, and redwood groves. The General Plan requires that any relocated or new development within the Park must be carefully and appropriately sited in accordance with the Big Sur Coast LUP. Specifically, new development should be subordinate and blend with its environment, using materials or colors that will achieve that effect; scenic qualities of wilderness character should be the primary view of the Park by passing motorists along SR 1; where existing facilities are visible from SR 1, they eventually should be removed, if feasible, or screened with vegetation.

4.1.5 THRESHOLDS OF SIGNIFICANCE

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista? (Source: 1, 7, 10, 13, 14)	☐	☐	■	☐
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (Source: 1, 7, 10, 13, 14)	☐	☐	■	☐
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area would the project conflict with applicable zoning and other regulations governing scenic quality? (Source: 1, 7, 13, 14)	☐	☐	■	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Source: 1, 7, 13, 14)	☐	☐	■	☐

4.1.6 IMPACT ANALYSIS

a) *Have a substantial adverse effect on a scenic vista?*

For the purposes of this analysis, views of the Pacific Ocean and the Santa Lucia Mountains represent scenic vistas. In addition, due to the importance of oak woodland and redwood forests as part of the visual integrity of the SR 1 corridor, these vegetation communities are also considered a scenic vista for the purpose of this analysis. Obstruction of views of any of these resources would constitute a potentially significant impact.

Development of the Proposed Project would result in the construction of new facilities and structures on the project site. However, no new facilities or structures proposed by the Project would obstruct and/or otherwise significantly impact views of an existing scenic vista. Existing topography and vegetation cover obstruct views of the Project from SR 1. Some tree removal would occur during construction; however, most of the trees within the site would be retained and views from SR 1 would remain unchanged. While portions of the Project (e.g., cabins and the comfort station) would be visible from within PBSSP, these elements would generally be screened by existing vegetation and topography and would be consistent with the existing visual character of the Park. Furthermore, site design and layout techniques would minimize aesthetic-related impacts. Applicable design techniques include retaining the site's relatively undeveloped character, minimizing building heights, and restoring native vegetation to visually shield the project's primary components and enhance views from within PBSSP. This represents a less than significant impact.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

PBSSP is located adjacent to a portion of SR 1, which is a designated state scenic highway; however, the project site itself lies within the middle of the Park and, due to topography and vegetation screening, is not visible from SR 1. Scenic resources visible from SR 1 include the Pacific Ocean, the Santa Lucia Mountains, and the oak woodland and redwood forests which are typical along this stretch of the SR 1 corridor.

The construction of the Proposed Project would result in the introduction of new physical elements on a site that was historically developed in connection with prior recreational use in the 1950s and 1960s. Although the Project would include some tree removal, most of the trees within the project site would be retained and the introduction of new features would not be visible from SR 1 or impact views of scenic resources as perceived from SR 1. As a result, the Project would have no impact on views from within a state scenic highway. This represents a less than significant impact.

c) *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area would the project conflict with applicable zoning and other regulations governing scenic quality?*

The Project could adversely impact the existing visual character of the site and its surroundings through the introduction of new physical elements on a partially undeveloped site. The introduction of the proposed cabins and associated improvements would permanently alter the site's existing visual character, including the removal of existing native vegetation. While PBSSP users expect to see recreational facilities, the introduction of new physical site improvements, inappropriate siting, or use of inappropriate building materials could potentially adversely affect the existing visual character or quality of public views of the site.

The Proposed Project minimizes visual impacts by locating improvements in the least visually sensitive areas of PBSSP to minimize potential aesthetic-related impacts. The Project is surrounded by native trees and is not generally visible from areas outside of PBSSP (please refer to Response 4.1.6(b) for more information). Per the PBSSP General Plan requirements, the Project has also been carefully designed to be visually compatible with the site's existing natural character, historic use, and adjacent Park uses. The proposed site design and layout would ensure that the Project would not substantially degrade the site's existing visual character or quality and surroundings. Moreover, site restoration and landscaping would ensure that the new cabins and associated facilities would be visually compatible with the surrounding environment and existing recreational uses at PBSSP. State Parks designed the Proposed Project to minimize potential aesthetic-related effects and identified a site design that is visually compatible with existing recreational uses within PBSSP.

Construction of the Project would permanently alter the site's existing visual character by introducing buildings, pathways, signage, and lighting. As a result, the Project would alter the appearance of the Project site. However, visual effects associated with the Proposed Project are generally consistent with existing recreational uses within PBSSP and are not considered significant for the reasons described above. Therefore, this represents a less than significant impact.

d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Except for the existing paved areas associated with the site's existing/historic use, the project site is undeveloped. There are no existing sources of lighting or glare on-site. SR 1 traffic and existing campground lighting provide a varying amount of glare and light, particularly at night, in the Park, although existing sources of lightning near the site are generally limited. The Project would create new sources of lighting and glare due the introduction of new low-cost overnight accommodations (i.e., cabins) and related improvements. The Project would include lighting for security and site recognition purposes. Overall, the Project would increase the amount of artificial light on-site as compared to existing conditions. Existing topography and vegetative screening would minimize

the extent of potential impacts. In addition, the site is not located in an area that is visible from areas outside of PBSSP. Nevertheless, artificial lighting within the site could impact nighttime views within PBSSP by altering the natural landscape and, in sufficient quantity, lighting up the nighttime sky and reducing astronomical features' visibility. Further, daytime glare could occur as light reflects off pavement, vehicles, rooftops, and structures. While the Proposed Project would increase the amount of lighting and glare on-site, the Proposed Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. In fact, overall site lighting would be limited, and all exterior lighting would be downward lit and shield to prevent spillover lighting in unintended areas. Similarly, glare from vehicles and/or new structures would be limited and generally shielded by existing vegetation. Potential glare from vehicles accessing the site (i.e., parking) would be comparable to existing conditions since the existing parking area is currently used for parking purposes. This would not constitute a new source of substantial light or glare. This represents a less than significant impact.

4.2 AIR QUALITY

4.2.1 INTRODUCTION

This section assesses the potential air quality affects associated with construction and operation of the Project. Potential air quality affects were quantified using CalEEMod; air quality calculations are provided in **Appendix A, CalEEMod Results**.

4.2.2 ENVIRONMENTAL SETTING

The Project is located within the North Central Coast Air Basin (“NCCAB”), one of 14 statewide basins designated by the California Air Resources Board (“CARB”). This basin includes Monterey, Santa Cruz, and San Benito Counties, and is regulated by the Monterey Bay Air Resources District (“MBARD”).

The U.S. EPA administers the National Ambient Air Quality Standards (“NAAQS”) under the Federal Clean Air Act. The U.S. EPA sets the NAAQS and determines if areas meet those standards. Violations of ambient air quality standards are based on air pollutant monitoring data and evaluated for each air pollutant. Areas that do not violate ambient air quality standards are considered to have attained the standard. The NCCAB is in attainment for all NAAQS and for all California Ambient Air Quality Standards (“CAAQS”) except O_3 and PM_{10}. The primary sources of O_3 and PM_{10} in the NCAAB are from automobile engine combustion. To address the exceedance of these CAAQS, the MBARD has developed and implemented several plans, including the 2005 Particulate Matter Plan, the 2007 Federal Maintenance Plan, and the 2012-2015 Air Quality Management Plan. NCCAB Attainment Status to National and California Ambient Air Quality can be found in **Table 2, NCCAB Attainment Status Designations**.

Plans to attain these standards already accommodate the future growth projections available at the time these plans were prepared. Any development project capable of generating air pollutant emissions exceeding regionally established criteria is considered significant for purposes of CEQA, whether or not such emissions have been accounted for in regional air planning.

Furthermore, any project that would directly cause or substantially contribute to a localized violation of an air quality standard would generate substantial air pollution impacts. The same is true for a project that generates a substantial increase in health risks from toxic air contaminants or introduces future occupants to a site exposed to substantial health risks associated with such contaminants.

Sensitive receptors are more susceptible to the effects of air pollution than the general population. Land uses that are considered sensitive receptors include residences, schools, and health care facilities. The nearest sensitive receptors to the Project are residences west of SR 1; however, for the purposes of this analysis, recreational users within PBSSP may also be considered sensitive receptors.

Table 2
NCCAB Attainment Status Designations

Pollutant	State Standards[1]	National Standards
Ozone (O_3)	Nonattainment [1]	Attainment/Unclassified[2]
Inhalable Particulates (PM_{10})	Nonattainment	Unclassified
Fine Particulates ($PM_{2.5}$)	Attainment	Attainment/Unclassified[3]
Carbon Monoxide (CO)	Monterey County-Attainment San Benito County-Unclassified Santa Cruz County-Unclassified	Attainment/Unclassified
Nitrogen Dioxide (NO_2)	Attainment	Attainment/Unclassified[4]
Sulfur Dioxide (SO_2)	Attainment	Attainment/Unclassified[5]
Lead	Attainment	Attainment/Unclassified[6]

Notes:
1) Effective July 26, 2007, the ARB designated the NCCAB a nonattainment area for the state ozone standard, which was revised in 2006 to include an 8-hour standard of 0.070 ppm.
2) In 2015, EPA adopted a new 8-hour ozone standard of 0.070 ppm.
3) This includes the 2006 24-hour standard of 35 µg/m3 and the 2012 annual standard of 12 µg/m3.
4) In 2012, EPA designated the entire state as attainment/unclassified for the 2010 NO_2 standard.
5) In June 2011, the ARB recommended to EPA that the entire state be designated as attainment for the 2010 primary SO_2 standard. Final designations to be addressed in future EPA actions.
6) On October 15, 2008, EPA lowered the NAAQS for lead to 0.15 µg/m^3. Final designations were made by EPA in November 2011.

Source: ARB 2020, MBARD 2020.

4.2.2.1 Climate and Topography

Climatological conditions, an area's topography, and the quantity and type of pollutants released commonly determine ambient air quality. The NCCAB covers an area of 5,159 square miles along the central coast. The northwest sector of the NCCAB is dominated by the Santa Cruz Mountains. The Diablo Range marks the northeastern boundary. The Santa Clara Valley extends into the northeastern tip of the basin. Further south, the Santa Clara Valley becomes the San Benito Valley, which runs northwest-southeast, with the Gabilan Range as its western boundary. To the west of the Gabilan Range is the Salinas Valley, which extends from Salinas at the northwest end to south of King City. The coastal Santa Lucia Range defines the western side of the valley.

Climate, or the average weather condition, affects air quality in several ways. Wind patterns can remove or add air pollutants emitted by stationary or mobile sources. Inversion, a condition where warm air traps cooler air underneath it, can hold pollutants near the ground by limiting upward mixing (dilution). Communities with cold climates may burn wood or other fuels for residential heating, whereas areas with hot climates may have higher emissions or some pollutants from automobiles. Topography also plays a part, and valleys often trap emissions by limiting lateral dispersal.

A semi-permanent high-pressure cell in the eastern Pacific, the Pacific High, is the basic controlling factor in the climate of the NCCAB. In the summer, the high-pressure cell is dominant and causes persistent west and northwest winds over the entire coast. Air descends in the Pacific High, forming a stable temperature inversion of hot air over a cool coastal layer of air. The onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal valleys. The warmer air aloft acts as a lid to inhibit vertical air movement. During the winter, the Pacific High migrates southward and has less influence on the NCCAB. Air frequently flows in a southeasterly direction out of the Salinas and San Benito Valleys, especially during night and morning hours. The general absence of deep, persistent inversions and the occasional storm systems usually result in good air quality for the basin as a whole in winter and early spring.

4.2.3 REGULATORY SETTING

4.2.3.1 Federal

The CAA of 1970, as amended, establishes air quality standards for several pollutants NAAQS are established for six (6) "criteria" air pollutants: carbon monoxide ("CO"), nitrogen oxides ("NO_x"), ozone ("O_3"), respirable particulate matter ("PM_{10}"), fine particulate matter ("$PM_{2.5}$"), sulfur oxides ("SO_x"), and lead. Pursuant to the California Clean Air Act, the State of California has also established ambient air quality standards, the CAAQS. These standards are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. **Table 3, Overview of Key Pollutants** identifies the characteristics, health effects, and typical sources of the six (6) federal air pollutants.

In addition to major pollutants, the U.S. regulates Hazardous Air Pollutants. One means by which the U.S. Environmental Protection Agency ("EPA") addresses Hazardous Air Pollutant exposure is through the National Emission Standards for Hazardous Air Pollutants[2], which include source-specific regulations that limit allowable emissions of such pollutants.

4.2.3.2 State

CARB coordinates and oversees both state and federal air pollution control programs in California. As part of this responsibility, CARB monitors existing air quality, establishes state air quality standards, and limits allowable emissions from vehicular sources. Local air pollution

[2] The National Emission Standards for Hazardous Air Pollutants are promulgated under Title 40 of the Code of Federal Regulations, Parts 61 & 63.

control agencies provide regulatory authority within established air basins, which control stationary-source and most categories of area-source emissions and develop regional air quality plans. The Project is located within the jurisdiction of the MBARD.

California has established its own set of ambient air quality standards for the seven (7) pollutants with federal standards. In addition, California has standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. The standards for the criteria pollutants are presented in **Table 4, Federal and State Ambient Air Quality Standards**. The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soils, water, visibility, materials, vegetation, and other aspects of general welfare.

Table 3
Overview of Key Pollutants

Pollutant	Characteristics	Health Effects	Major Sources
Ozone (O_3)	A highly reactive photochemical pollutant created by the action of sunshine on ozone precursors (primarily reactive hydrocarbons and oxides of nitrogen). Often called photochemical smog. Highest concentrations of ozone are found downwind of urban areas.	Respiratory function impairment.	Sources of ozone precursors (nitrogen oxides and reactive hydrocarbons) are combustion sources, such as factories and automobiles and evaporation of solvents and fuels.
Carbon Monoxide (CO)	Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels. CO concentrations are highest in the winter, when radiation inversions over large areas can limit vertical dispersion.	Impairment of oxygen transport in the bloodstream. Aggravation of cardiovascular disease. Fatigue, headache, confusion, dizziness. Can be fatal in the case of very high concentrations.	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces.
Nitrogen Dioxide (NO_2)	Nitrogen dioxide is a reddish-brown gas that discolors the air, which formed during combustion. Nitrogen dioxide levels in California have decreased in recent years due to improved automobile emissions. Ambient standards are typically not exceeded in North Central Coast Air Basin.	Increased risk of acute and chronic respiratory disease.	Automobile and diesel truck exhaust, industrial processes, and fossil-fuel powered plants. Also formed via atmospheric reactions.

Table 3 Overview of Key Pollutants			
Pollutant	**Characteristics**	**Health Effects**	**Major Sources**
Sulfur Dioxide (SO_2)	Sulfur dioxide is a colorless gas with a pungent, irritating odor. Ambient standards for sulfur dioxide are rarely exceeded in the North Central Coast Air Basin.	Aggravation of chronic obstruction lung disease. Increased risk of acute and chronic respiratory disease.	Diesel vehicle exhaust, oil-powered power plants, industrial processes.
PM_{10} & $PM_{2.5}$	Solid and liquid particles of dust, soot, aerosols and other matter that are small enough to remain suspended in the air for a long period of time. PM_{10} is particulate matter with diameter less than 10 microns. $PM_{2.5}$ is particulate matter with diameter less than 2.5 microns. $PM_{2.5}$ has been found to be more harmful to humans.	Aggravation of chronic disease and heart/lung disease symptoms.	Combustion, automobiles, field burning, factories, and unpaved roads. Also, formed secondarily by photochemical processes of combustion emissions. $PM_{2.5}$ is primarily a secondary pollutant.

Table 4 Federal and State Ambient Air Quality Standards				
Pollutant	**Averaging Time**	**California Standard [a,c]**	**Federal Standard [b]**	
			Primary [c,d]	**Secondary [c,e]**
Ozone (O_3)	1-Hour	0.09 ppm (180 µg/m^3)	- -	- -
	8-Hour	0.07 ppm (137 µg/m^3)	0.075 ppm (147 ug/m^3)	0.075 ppm (147 µg/m^3)
Carbon Monoxide (CO)	1-Hour	20 ppm (23mg/m^3)	35.0 ppm (40mg/m^3)	- -
	8-Hour	9.0 ppm (10mg/m^3)	9.0 ppm (10mg/m^3)	- -
Nitrogen Dioxide (NO_2)	1-Hour	0.18 ppm (339 µg/m^3)	- -	- -
	Annual [f]	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	0.053 ppm (100 µg/m^3)
Sulfur Dioxide (SO_2)	1-Hour	0.25 ppm (655 µg/m^3)	- -	- -
	3-Hour	- -	- -	0.5 ppm (1,300 µg/m^3)
	24-Hour	0.04 ppm (105 µg/m^3)	0.14 ppm (365 µg/m^3)	- -
	Annual [f]	- -	0.030 ppm (80 µg/m^3)	- -
PM_{10}	24-Hour	50 µg/m^3	150 µg/m^3	150 µg/m^3
	Annual[f]	20 µg/m^3	- -	- -
$PM_{2.5}$	24-Hour	no separate state standard	35 µg/m^3	35 µg/m^3
	Annual [f]	12 µg/m^3	15 µg/m^3	15 µg/m^3
Lead[f]	Calendar quarter	- -	1.5 µg/m^3	1.5 µg/m^3
	30-day	1.5 µg/m^3	- -	- -
	3-Month[h]	- -	0.15 µg/m^3	0.15 µg/m^3
Sulfate	24-Hour	25 µg/m^3	- -	- -
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	- -	- -
Vinyl Chloride[g]	24-Hour	0.010 ppm (26 µg/m^3)	- -	- -

Table 4 Federal and State Ambient Air Quality Standards				
Pollutant	**Averaging Time**	**California Standard [a,c]**	**Federal Standard [b]**	
			Primary [c,d]	**Secondary [c,e]**
Visibility Reducing Particles	8-hours (10 am - 6 pm)	In sufficient amounts to reduce prevailing visibility to < 10 miles when relative humidity is < 70% w/ equivalent instrument method	- -	- -

ppm = Parts per Million by volume (or micromoles of pollutant per mole of gas)
$\mu g/m^3$ = Micrograms per Cubic Meter
(a) Standards for ozone, carbon monoxide, sulfur dioxide (1 and 24-hour), nitrogen dioxide, suspended particulate matter – PM_{10} and $PM_{2.5}$, and visibility reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
(b) National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three (3) years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over three (3) years, are equal to or less than the standard. Contact U.S. Environmental Protection Agency for further clarification and current federal policies.
(c) Concentrations expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to match reference temperature and pressure.
(d) National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
(e) National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
(f) Annual Arithmetic Mean
(g) The California Air Resources Board has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse heal effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
(h) National lead standard, rolling 3-month average: final rule signed October 15, 2008.
Source: California Air Resources Board. 2008. Ambient Air Quality Standards. Nov. 11. http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.

The state also regulates Toxic Air Contaminants separately from those pollutants with California Ambient Air Quality Standards, primarily through the Tanner Air Toxics Act (Assembly Bill 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (Assembly Bill 2588). Within California, the Office of Environmental Health Hazard Assessment works with CARB to address health risk issues associated with toxic air contaminants. The Office of Environmental Health Hazard Assessment establishes Reference Exposure Levels as indicators of potential adverse health effects. In addition, in 2007 CARB approved a new regulation to reduce emissions from existing off-road diesel vehicles in California in construction, mining, and other industries. The regulation requires vehicle fleets to either meet a set of fleet average targets for NO_x and particulate matter or to turn over and apply exhaust retrofits to a certain percent of the fleets' horsepower per year.

4.2.3.3 Local

Monterey Bay Air Resources District

The MBARD regulates air quality in the NCCAB and is responsible for attainment planning related to criteria air pollutants, district rule development, and enforcement. It also reviews air quality analyses prepared for CEQA assessments and has published the CEQA Air Quality Guidelines document for use in the evaluation of air quality impacts. At the local level, the MBARD is responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws. Air quality is also managed through land use

and development planning practices. The MBARD has adopted emission thresholds to determine the level of significance of a project's emissions. MBARD adopted the 2012-2015 Air Quality Management Plan ("AQMP") in 2017. NCCAB Attainment Status to National and California Ambient Air Quality are presented in **Table 2, NCCAB Attainment Status Designations**.

4.2.4 THRESHOLDS OF SIGNIFICANCE

AIR QUALITY

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

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan? (Source: 1, 26, 27)	☐	☐	☐	■
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? (Source: 1, 25, 26, 27)	☐	☐	■	☐
c)	Expose sensitive receptors to substantial pollutant concentrations? (Source: 1, 26, 27)	☐	☐	■	☐
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? (Source: 1, 26, 27)	☐	☐	■	☐

4.2.5 IMPACT ANALYSIS

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

CEQA Guidelines Section 15125(b) requires that a project be evaluated for consistency with applicable regional plans, including the AQMP. The most recent AQMP update was approved in March 2017. This plan addresses attainment of the State ozone standard and federal air quality standard. The AQMP accommodates growth by projecting growth in emissions based on population forecasts prepared by the Association of Monterey Bay Area Governments ("AMBAG") and other indicators. Consistency determinations are issued for commercial, industrial, residential, and infrastructure-related projects that have the potential to induce population growth. A project is considered inconsistent with the AQMP if it has not been accommodated in the forecast projections considered in the AQMP. The Project would not cause and/or otherwise induce population growth and conflict with and/or otherwise obstruct the implementation of MBARD's AQMP. As a result, the Proposed Project would have no impact.

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

The MBARD 2016 CEQA Air Quality Guidelines contain standards of significance for evaluating potential air quality effects of projects subject to the requirements of CEQA. According to MBARD, a project would violate an air quality standard and/or contribute to an existing or projected violation if it would emit (from all sources, including exhaust and fugitive dust) less than:

- 137 pounds per day of oxides of nitrogen (NO_x),
- 137 pounds per day of reactive organic gases (ROG),
- 82 pounds per day of respirable particulate matter (PM_{10}),
- 55 pounds per day of fine particulate matter ($PM_{2.5}$), and
- 550 pounds per day carbon monoxide (CO).

Construction Emissions

The project site would require minor grading to accommodate the proposed campsite (approximately 400 cy of cut and 280 cy of fill). Construction would involve use of construction equipment to haul materials. According to the MBARD's criteria for determining construction impacts, a project would result in a potentially significant impact if it would result in 8.1 acres of minimal earthmoving per day or 2.2 acres per day with major grading and excavation. Construction of the Proposed Project would not exceed MBARD's significance criteria. The Proposed Project would result in minimal ground-disturbing activities. These activities would disturb a maximum of 2.26 acres. However, ground-disturbing activities associated with the Proposed Project would occur over a period of two to four months. As a result, daily grading activities would not exceed MBARD's daily threshold of significance. Moreover, as identified in **Table 5a, Construction Air Quality Emissions,** construction would not exceed any of MBARD's thresholds of significance. As a result, construction of the Proposed Project would not result in a significant construction-related air quality effect. In addition, construction would implement standard construction Best Management Practices ("BMPs") related to dust suppression, which would include: 1) watering active construction areas; 2) prohibiting grading activities during periods of high wind (over 15 mph); 3) covering trucks hauling soil; and 4) covering exposed stockpiles. The implementation of BMPs would further ensure that potential construction-related emissions would be minimized. Since the proposed project is under the threshold for construction air quality impacts, this impact is considered a less than significant.

Table 5a
Construction Air Quality Emissions

Source	Emissions (pounds/day)				
	NO_X	**ROG**	**PM_{10}**	**$PM_{2.5}$**	**CO**
Project Emissions	6.71	49.25	1.19	0.72	7.84
MBARD Threshold	*137*	*137*	*82*	*55*	*550*
Threshold Exceeded?	**No**	**No**	***N/A***	**No**	***N/A***

Source: DD&A, CalEEMod Output

Operational Emissions

The Project would also result in operational emissions primarily in connection with cabin operation and vehicle traffic generated in connection with the Project. Project-generated traffic would not, however, significantly affect existing levels of service (see **Section 4.12 Transportation and Traffic** for more information concerning traffic), such that an adverse air quality impact would occur. More specifically, the Proposed Project would not increase traffic trips beyond existing levels considered under the PBSSP General Plan. As discussed in more detail in **Section 4.12 Transportation and Traffic,** the Proposed Project would not increase the total number of allowable camping facilities identified in the PBSSP General Plan and associated EIR. Additionally, State Parks has eliminated 19 existing campsites at PBSSP for resource protection purposes thereby reducing the overall total number of available campsites at the Park. As a result, the Proposed Project is not anticipated to increase operational traffic beyond existing traffic levels contemplated under the PBSSP General Plan. Operational traffic associated with the Proposed Project, therefore, would not result in a substantial increase in operational air quality emissions such that the Project would cause an adverse operational air quality effect.

While the Proposed Project would not increase operational traffic beyond existing levels contemplated under the PBSSP General Plan, operational emissions associated with the Project were quantified using CalEEMod (see **Appendix A, CalEEMod Results).** The results of the air quality modeling indicate that the Project would not exceed any of the applicable MBARD thresholds of significance identified above. All operational emissions would be substantially less than the applicable thresholds, as shown below in **Table 5b, Operational Air Quality Emissions**. This represents a less than significant impact.

Table 5b
Operational Air Quality Emissions

Source	Emissions (pounds/day)*				
	NO_X	**ROG**	**PM_{10}**	**$PM_{2.5}$**	**CO**
Project Emissions	0.55	0.55	0.23	0.08	1.09
MBARD Threshold	*137*	*137*	*82*	*55*	*550*
Threshold Exceeded?	**No**	**No**	***N/A***	**No**	***N/A***

Source: DD&A, CalEEMod Output
* Does not include pollutants from campfire rings.

While cabin operation would result in a negligible increase in air quality emissions, the Project would result in additional air quality impacts associated with campfire use. Smoke generated during campfire use would result in additional PM_{10} emissions. Due to the relatively minor nature of campfire use, a quantitative analysis of air quality effects was not performed. In addition, recreational or warming fires are exempt from MBARD smoke management requirements and "no-burn" day regulations, pursuant to MBARD Rule 438 (see Section 1.3.2 and Section 1.3.3). Potential operational impacts due to campfire use are therefore less than significant.

c) *Expose sensitive receptors to substantial pollutant concentrations?*

The Project would not expose sensitive receptors to substantial pollutant concentrations. No sensitive receptors are in the immediate vicinity of the Project. While there are no sensitive receptors (e.g., residences, hospitals, schools, etc.) in the immediate vicinity, recreational users could be exposed to potential air quality effects; however, these impacts would not be significant. The Project would result in temporary air quality emissions during construction, as described above. However, as described in Response 4.2.5(b), construction-related emissions would be temporary and minor in nature. Additionally, potential construction-related emissions would be minimized through the implementation of standard BMPs. The Project would also result in increased emissions during operation. As described in Response 4.2.5(b), operational emissions would be below established MBARD thresholds and would be relatively minor in nature. As a result, no sensitive receptor or recreational user would be exposed to a substantial pollutant concentration. This represents a less than significant impact.

d) *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The Project could generate intermittent odors from construction associated with diesel exhaust that could be noticeable at times to nearby PBSSP users. However, given the limited construction duration, these potential intermittent odors are not anticipated to result in odor impacts nor affect a substantial number of people. Any odors generated during construction activities would cease upon completion. The Project would also generate operational campfire odors that could be noticeable to PBSSP users; however, campfire odors would be consistent with the existing use and would not be considered offensive to Park visitors. This represents a less than significant impact.

4.3 BIOLOGICAL RESOURCES

4.3.1 INTRODUCTION

This section assesses the Project's potential impacts to biological resources. Potential effects to biological resources associated with Project were assessed based on an evaluation of historic and current conditions in the context of the Project.

4.3.2 ENVIRONMENTAL SETTING

Located on the western slope of the Santa Lucia Mountains, the peaks of PBSSP tower high above the Big Sur River Gorge, where the Big Sur River enters the park. As described in **Section 1.2.2 Historical Use**, the project site was historically disturbed in association with a concrete-lined pool; however, the area is currently open space with a moderate to dense canopy of native trees. Common wildlife species in the Park include bobcats, black-tail deer, gray squirrels, raccoons, skunks, and birds.

4.3.3 SURVEY METHODOLOGY

DD&A Senior Environmental Scientist Jami Davis and Associate Environmental Scientist Patric Krabacher conducted surveys of the project site on April 19 and June 10, 2019. Survey methods included walking the project site and immediately adjacent areas and using aerial maps and GPS to identify general habitat types and potential sensitive habitat types. Ms. Davis and Mr. Krabacher also conducted focused surveys for special-status plant species and conducted reconnaissance-level wildlife habitat surveys to identify any special-status wildlife species or suitable habitat for such species within the site.

The project site was surveyed for botanical resources following the applicable guidelines outlined in the U.S. Fish and Wildlife Service ("USFWS") *Guidelines for Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* (USFWS, 2000), the California Department of Fish and Wildlife ("CDFW") *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW, 2018), and the California Native Plant Society ("CNPS") *Botanical Survey Guidelines* (CNPS, 2001). The survey also included an assessment of potentially jurisdictional wetlands and waters within the project site in accordance with the requirements set forth in *The Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual* (Wetland Training Institute, 1995) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (U.S. Army Corps of Engineers ["ACOE"], 2008). General and sensitive habitat types were mapped during the survey effort using a combination of GPS and hand drawing on aerial maps, which were later digitized using ArcGIS software.

State Parks representatives accompanied DD&A biologists during various survey efforts. DD&A, in coordination with State Parks, used data collected during the surveys to assess the environmental conditions of the project site and its surroundings, evaluate environmental constraints at the site and within the local vicinity, and provide a basis for recommendations to minimize and avoid impacts to biological resources.

4.3.3.1 Special-Status Species

Special-status species are those plants and animals that have been formally listed or proposed for listing as endangered or threatened, or are candidates for such listing, under the federal Endangered Species Act ("ESA") or the California Endangered Species Act ("CESA"). Listed species are afforded legal protection under the ESA and CESA. Species that meet the definition of rare or endangered under the CEQA Guidelines Section 15380 are also considered special-status species. Animals on the CDFW's list of "species of special concern" (most of which are species whose breeding populations in California may face extirpation if current population trends continue) meet this definition and are typically provided management consideration through the CEQA process, although they are not legally protected under the ESA or CESA. To note, CDFW includes some animal species that are not assigned any of the other status designations in the California Natural Diversity Database ("CNDDB") "Special Animals" list; however, these species have no legal or protection status and are not analyzed in this IS/MND.

Plants listed as rare under the California Native Plant Protection Act ("CNPPA") or included in CNPS California Rare Plant Ranks ("CRPR"; formerly known as CNPS Lists) 1A, 1B, 2A, and 2B are also treated as special-status species as they meet the definitions of Sections 2062 and 2067 of the CESA and in accordance with CEQA Guidelines Section 15380.[3] In general, the CDFW requires that plant species on CRPR 1A (Plants presumed extirpated in California and Either Rare or Extinct Elsewhere), CRPR 1B (Plants rare, threatened, or endangered in California and elsewhere), CRPR 2A (Plants presumed extirpated in California, but more common elsewhere); and CRPR 2B (Plants rare, threatened, or endangered in California, but more common elsewhere) of the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2020) be fully considered during the preparation of environmental documents under CEQA. CNPS CRPR 4 species (plants of limited distribution) may, but generally do not, meet the definitions of Sections 2062 and 2067 of CESA, and are not typically considered in environmental documents relating to CEQA. While other species (i.e., CRPR 3 or 4 species) are sometimes found in database searches or within the literature, these do not meet the definitions of Section 2062 and Section 2067 of CESA and are not analyzed in this IS/MND.

Raptors (e.g., eagles, hawks, and owls) and their nests are protected in California under Fish and Game Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except otherwise provided by this code or any regulation adopted pursuant thereto." In addition, protected species under Fish and Game Code Section 3511 (birds), Section 4700 (mammals), Section 5515 (fish), and Section 5050 (reptiles and amphibians) are also considered special-status animal species. Species with no formal special-status designation but thought by experts to be rare or in serious decline may also be considered special-status animal species in some cases, depending on project-specific analysis and relevant, localized conservation needs or precedence.

State Parks obtained current agency status information from the USFWS and CDFW for species that are listed, proposed for listing, or are candidates for listing as Threatened or Endangered under ESA or CESA, or are CDFW species of special concern (USFWS, 2019 and CDFW, 2019). State Parks reviewed CNDDB reports for special-status species occurrences in the U.S. Geological Survey ("USGS") quadrangle containing the project site (Pfeiffer Point) and the four (4) surrounding quadrangles (Big Sur, Partington Ridge, Point Sur, and Ventana Cones). Special-status plant and wildlife species known to occur or with the potential to occur within the project vicinity, along with their legal status, habitat requirements, and likelihood to occur within the project site, are included in **Appendix B, Special-Status Species Table.**

4.3.3.2 Sensitive Habitats

Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species, areas of high biological diversity, areas supporting rare or special-status wildlife habitat, wildlife corridors, and unusual or regionally restricted habitat types. Vegetation communities considered

[3] CNPS initially created five (5) CRPR to categorize degrees of concern; however, to better define and categorize rarity in California's flora, the CNPS Rare Plant Program and Rare Plant Program Committee have developed the new CRPR 2A and CRPR 2B.

sensitive include those listed on CDFW's *California Natural Communities List* (i.e., those habitats that are rare or endangered within the borders of California) (CDFW, 2020), those that are occupied by species listed under the ESA or are critical habitat in accordance with ESA, and those that are defined as Environmentally Sensitive Habitat Areas ("ESHA") under the Coastal Act. Specific habitats may also be identified as sensitive in city or county general plans or ordinances. Sensitive habitats are regulated under federal regulations (such as the Clean Water Act ["CWA"] and Executive Order ["EO"] 11990 – Protection of Wetlands), state regulations (such as CEQA and the CDFW Streambed Alteration Program), or local ordinances or policies (such as city or county tree ordinances and general plan policies).

4.3.4 EXISTING CONDITIONS

4.3.4.1 Habitat Types

Two (2) habitat types, coast live oak woodland and cottonwood-sycamore riparian forest, occur within the project site (**Figure 10, Habitat Types**). In addition, a portion of the project site is developed (paved). The following sections provide an overview of each habitat type.

Coast Live Oak Woodland

Coast live oak woodland (*Quercus agrifolia-Umbellularia californica*/*Toxicodendron diversilobum* association) is the dominant habitat type within the project site (**Figure 10, Habitat Types**). Within these areas, coast live oak (*Quercus agrifolia*) is dominant within the canopy; however, California bay laurel (*Umbellularia californica*) is common throughout, and a stand of coast redwood (*Sequoia sempervirens*) is present near the center of the project site. The canopy is moderately dense, but small open areas are occasionally present. The understory is dense and is almost entirely dominated by poison oak (*Toxicodendron diversilobum*). Approximately 1.9 acres of coast live oak woodland occurs within the project site.

Coast live oak woodland is an important habitat for many wildlife species. Oaks provide nesting sites for many avian species and cover for a variety of mammals. Special-status wildlife species that may be present within coast live oak woodlands within the project site include Monterey dusky-footed woodrat (*Neotoma macrotis luciana*, "MDFW"), western pond turtle (*Emys marmorata*), and nesting raptors and other protected avian species. No special-status plant species were identified within coast live oak woodlands during 2019 biological surveys (**Appendix B, Special-Status Species Table**).

Cottonwood-Sycamore Riparian Forest

Cottonwood-sycamore riparian forest (*Platanus racemosa-Populus fremontii* association) occurs adjacent to and on the western edges of the project site (**Figure 10, Habitat Types**). Riparian areas are those plant communities supporting woody vegetation found along rivers, creeks, streams, and canyon bottom drainages. They can range from a dense thicket of shrubs to a closed canopy of large mature trees. Approximately 0.29 acres of riparian forest, supported by the Big Sur River, are present within the project site. The canopy is co-dominated by western sycamore (*Platanus racemosa*), Fremont's cottonwood (*Populus fremontii*), California bay laurel, and coast

live oak. Like oak woodland areas within the project site, the understory is dense and almost entirely dominated by poison oak.

Riparian areas provide habitat for many wildlife species, particularly birds and herpetofauna. Special-status wildlife species that may be present within the riparian areas within the project site include MDFW, western pond turtle, and nesting raptors and other protected avian species. No special-status plant species were identified within riparian areas during 2019 biological surveys (**Appendix B, Special-Status Species Table**).

Developed

Developed areas within the project site include approximately 0.81 acres of existing paved road and parking lot (**Figure 10, Habitat Types**). No suitable habitat for special-status species is present within developed areas.

4.3.4.2 Sensitive Habitats

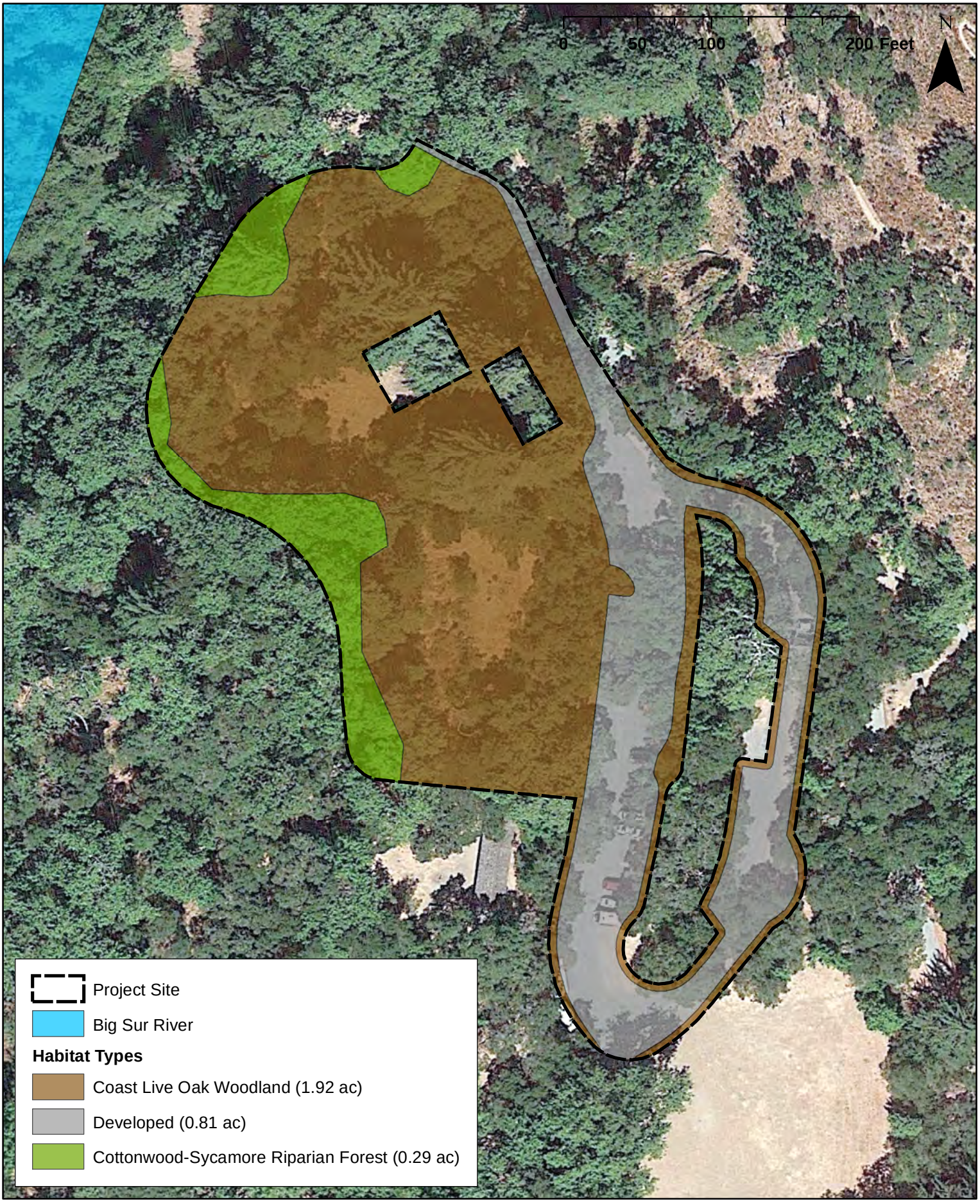
Riparian Habitat

The western sycamore and Fremont's cottonwood floristic alliance occurring within the project site (*Platanus racemosa-Populus fremontii* association) is considered a sensitive natural community in the *California Natural Communities List* (CDFW, 2019a). In addition, riparian habitat is regulated by CDFW under Section 1602 of the Fish and Game Code. Within the Coastal Zone, riparian habitat may also be considered ESHA under the Coastal Act.

Critical Habitat

The entire project site lies within the USFWS's critical habitat mapping unit MNT-3 for the California red-legged frog (*Rana draytonii,* "CRLF"). No aquatic breeding, aquatic non-breeding, or upland habitat for CRLF is present within or adjacent to the project site (including the portion of the Big Sur River adjacent to the site, which flows too quickly to provide suitable breeding habitat for this species). The project site provides potential dispersal habitat for CRLF; however, dispersal habitat is ubiquitous and migrating CRLF are widely distributed across the landscape in space and time. Therefore, the potential for CRLF to occur within the project site is low.

Critical habitat for south-central California Coast ("S-CCC") steelhead (*Oncorhynchus mykiss iredeus*) occurs within the Big Sur River. The lateral extent of critical habitat for steelhead is the stream channel's width, defined by the ACOE in 33 CFR 329.11 as the ordinary high-water mark. In areas for which ordinary high water has not been defined pursuant to 33 CFR 329.11, the width of the stream channel is defined by its bank full elevation. As the project site is located outside of ordinary high water, critical habitat for S-CCC steelhead is not present within the project site.



Habitat Types

Date
2/19/2021

Scale
1 in = 80 ft

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PLANNING AND ENVIRONMENTAL CONSULTING

Figure
10

Path: D:\GIS\GIS_Projects\2019-04 - Pfeiffer Campground Cabins\Final Products\CEQA\Fig 10 - Habitat Types.mxd

Environmentally Sensitive Habitat Areas

The Big Sur Coast LUP considers habitats for special-status species and other areas of rare or unique biological value, such as sensitive habitats identified by CDFW, as ESHA under the Coastal Act. CRLF critical habitat, S-CCC critical habitat, and riparian areas within and adjacent to the project site may be considered ESHA. Therefore, all undeveloped areas of the project site may be considered ESHA under the jurisdiction of the County under the Big Sur Coast LUP.

4.3.4.3 Special-Status Wildlife Species

Published occurrence data within the project area and surrounding USGS quadrangles were evaluated to compile a table of special-status species known to occur in the vicinity of the project site (see **Section 4.3.3 Survey Methodology** and **Appendix B, Special-Status Species Table**). Each of these species was evaluated for their likelihood to occur within and immediately adjacent to the site. The special-status species that are known to occur or have been determined to have a moderate or high potential to occur within or immediately adjacent to the project site are discussed below. Based on the species-specific reasons presented in **Appendix B, Special-Status Species Table**, all other species are assumed unlikely to occur or have a low potential to occur within the project site, are therefore unlikely to be impacted by the project, and are not discussed further[4].

Monterey Dusky-Footed Woodrat

The MDFW is a CDFW species of special concern. This is a subspecies of the dusky-footed woodrat *(Neotoma macrotis)*, which is common to oak woodlands and other forest types throughout California. Dusky-footed woodrats are frequently found in forest habitats with moderate canopy cover and a moderate to dense understory, including riparian forests; however, they may also be found in chaparral communities. Relatively large nests are constructed of grass, leaves, sticks, and feathers and are built in protected spots, such as rocky outcrops or dense brambles of blackberry and/or poison oak. Typical food sources for this species include leaves, flowers, nuts, berries, and truffles. Dusky-footed woodrats may be a significant food source for small- to medium-sized predators. Populations of this species may be limited by the availability of nest material. Within suitable habitat, nests are often found near each other.

The CNDDB does not report any occurrences of MDFW within the quadrangles reviewed; however, this species is known to occur throughout the County of Monterey in various habitats, and nests of this species were observed within oak woodland and riparian areas of the project site. Therefore, MDFW is assumed to be present within all areas of the project site.

California Red-Legged Frog

CRLF is a federally Threatened species and a CDFW species of special concern. It was listed as a federally Threatened species on June 24, 1996 (61 FR 25813-25833), and its critical habitat was designated on April 13, 2006 (71 FR 19244-19346) and revised on March 17, 2010 (75 FR 12816-12959). The CRLF is the largest native frog in California (44-131 mm snout-vent length)

[4] CRLF has a low potential to occur within the project site; however, it is included in this discussion due to the presence of critical habitat for this species within the site.

and was historically widely distributed in the central and southern portions of the state (Jennings and Hayes, 1994). Adults generally inhabit aquatic habitats with riparian vegetation, overhanging banks, or plunge pools for cover, especially during the breeding season (Jennings and Hayes, 1988). They may take refuge in small mammal burrows, leaf litter, or other moist areas during periods of inactivity or to avoid desiccation (Rathbun, et al., 1993; Jennings and Hayes, 1994). Radio telemetry data indicates that adults engage in straight-line breeding season movements irrespective of riparian corridors or topography and they may move up to two (2) miles between non-breeding and breeding sites (Bulger et. al., 2003).

This species requires still or slow-moving water during the breeding season where it can deposit large egg masses, which are most often attached to submergent or emergent vegetation. Breeding typically occurs between December and April, depending on annual environmental conditions and locality. Eggs require six (6) to 12 days to hatch and metamorphosis generally occurs after 3.5 to seven (7) months, although larvae are also capable of over-wintering. During the non-breeding season, CRLF use a wider variety of aquatic habitats, including small pools in coastal streams, springs, water traps, and other ephemeral water bodies (Service, 1996). CRLF may also move up to 300 feet from aquatic habitats into surrounding uplands, especially following rains, where individuals may spend days or weeks (Bulger et al., 2003).

The CNDDB reports 10 occurrences of CRLF species within the quadrangles reviewed, the nearest located approximately 1.2 miles from the project site; however, no occurrences are known from the adjacent Big Sur River. As described above, no suitable breeding or non-breeding aquatic habitat is present within or immediately adjacent to the project site. In addition, no suitable upland habitat is present because the site is not within 300 feet of a known or potential breeding resource. The project site is within dispersal range for this species, and suitable dispersal habitat is present; however, dispersal habitat is ubiquitous and migrating CRLF are widely distributed across the landscape in space and time. Therefore, the potential for CRLF to occur within the project site is low.

Western Pond Turtle

The western pond turtle is a CDFW species of special concern. This species is uncommon to common in permanent or nearly permanent aquatic resources in a wide variety of habitats throughout California, and requires basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. The home range of western pond turtles is typically restricted; however, ongoing research indicates that in many areas, turtles may leave the watercourse in late fall and move into upland habitats where they burrow into duff and/or soil and overwinter (Holland, 1994). In spring or early summer, females move overland for up to 100 meters to find suitable nesting sites. Nests are typically excavated in compact, dry soils in areas characterized by sparse vegetation, usually short grasses or forbs (Holland, 1994). Three (3) to 11 eggs are laid from March to August depending on local conditions (Ernst and Barbour, 1972). Food sources include aquatic plant material, beetles, and a wide variety of aquatic invertebrates. Fishes, frogs, and carrion have also been reported among their food sources (Stebbins, 1972).

The CNDDB reports four occurrences of this species within the quadrangles reviewed, the nearest located approximately 4.3 miles downstream of the project site within the Big Sur River riparian corridor. No suitable breeding habitat for this species is present within the project site; however, suitable nesting and overwintering habitat for this species is present within oak woodland and riparian areas of the project site. Therefore, there is a moderate potential for western pond turtle to occur within the site.

South-Central California Coast Steelhead

Steelhead is currently designated as federally Threatened in all naturally spawned populations (and their progeny) in streams from the Pajaro River (inclusive) located in Santa Cruz County, CA, to (but not including) the Santa Maria River (71 FR 833-862) in San Luis Obispo County. In North America, steelhead are found in Pacific Ocean drainages from southern California to Alaska. In California, known spawning populations are found in coastal streams from Malibu Creek in Los Angeles County to the Smith River near the Oregon border, and in the Sacramento and San Joaquin River systems. The present distribution and abundance of steelhead in California has been greatly reduced from historical levels. In general, steelhead migrate to sea as two-year-old fish, spend two years in the ocean, then return to fresh water to spawn. Peak spawning for steelhead occurs from December through April in small streams and tributaries. Unlike Pacific salmon, steelhead do not necessarily die after spawning, although repeat spawning rates are generally low and vary considerably among populations. Steelhead have traditionally been grouped into seasonal runs according to their peak migration period; in California there are well-defined winter, spring, and fall runs.

The CNDDB reports an occurrence of S-CCC steelhead adjacent to the project site within the Big Sur River. Further, the river is designated critical habitat for this species (see the discussion on *Critical Habitat* above). Although the project is located outside of ordinary high water, S-CCC is assumed present adjacent to the project site within the Big Sur river.

Raptors

Raptors, their nests, and other nesting birds are protected under California Fish and Game Code. While the life histories of these species vary, overlapping nesting and foraging similarities allow for their concurrent discussion. Most raptors are breeding residents throughout most of the wooded portions of the state. Stands of live oak, riparian deciduous, or other forest vegetation types, as well as open grasslands, are used most frequently for nesting. Breeding occurs February through September, with peak activity May through July. Prey for these species includes small birds, small mammals, and some reptiles and amphibians. Many raptor species hunt in open woodland and habitat edges.

Various common raptor species, such as red-tailed hawk, red-shouldered hawk, great horned owl, western screech owl, American kestrel, and turkey vulture, have the potential to nest within any of the large trees present within the project site.

4.3.4.4 Special-Status Plant Species

No special-status plant species were identified within the project site during focused botanical surveys in April and June 2019 (**Appendix B, Special-Status Species Table**).

4.3.5 REGULATORY SETTING

4.3.5.1 Federal

Federal Endangered Species Act

Provisions of the ESA of 1973 (16 USC 1532 et seq., as amended) protect federally listed threatened or endangered species and their habitats from unlawful take. Listed species include those for which proposed, and final rules have been published in the Federal Register. The ESA is administered by the USFWS or National Oceanic and Atmospheric Administration Marine Fisheries Service ("NMFS"). In general, the NMFS is responsible for the protection of ESA-listed marine species and anadromous fish, whereas other listed species are under USFWS jurisdiction.

Section 9 of ESA prohibits the take of any fish or wildlife species listed under ESA as endangered or threatened. Take, as defined by ESA, is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Harm is defined as "any act that kills or injures the fish or wildlife…including significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife." In addition, Section 9 prohibits removing, digging up, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction. Section 9 does not prohibit take of federally listed plants on sites not under federal jurisdiction. If there is the potential for incidental take of a federally listed fish or wildlife species, take of listed species can be authorized through either the Section 7 consultation process for federal actions or a Section 10 incidental take permit process for non-federal actions. Federal agency actions include activities that are on federal land, conducted by a federal agency, funded by a federal agency, or authorized by a federal agency (including issuance of federal permits).

Clean Water Act

The ACOE and EPA regulate discharge of dredged and fill material into "Waters of the United States" ("waters of the U.S.") under Section 404 of the CWA. In 2020, the ACOE and EPA published the Navigable Waters Protection Rule, which became effective on June 22, 2020 and revised the definition of Waters of the U.S. to include four categories of waters: territorial seas and navigable waters; perennial and intermittent tributaries to those waters; certain lakes, ponds, and impoundments; and wetlands adjacent to jurisdictional waters. The rule also details 12 categories of exclusions (i.e., features that are not waters of the U.S.), such as features that only contain water in direct response to rainfall (e.g., ephemeral features), groundwater, many ditches, prior converted cropland, and waste treatment systems. Discharge into waters of the U.S. requires a Section 404 permit from the ACOE.

Under Section 401 of the CWA, any applicant receiving a Section 404 permit from the ACOE must also obtain a Section 401 Water Quality Certification from the Regional Water Quality Control

Board (“RWQCB”). A Section 401 Water Quality Certification is issued when a project is demonstrated to comply with state water quality standards and other aquatic resource protection requirements.

4.3.5.2 State

California Endangered Species Act

The CESA was enacted in 1984. The California Code of Regulations (Title 14, Section 670.5) lists animal species considered endangered or threatened by the state. Section 2090 of CESA requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. Section 2080 of the Fish and Game Code prohibits "take" of any species that the commission determines to be an endangered species or a threatened species. “Take” is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." A Section 2081 Incidental Take Permit from the CDFW may be obtained to authorize “take” of any state listed species.

California Native Plant Protection Act

The CNPPA of 1977 directed CDFW to carry out the legislature’s intent to “preserve, protect and enhance rare and Endangered plants in the State.” The CNPPA prohibits importing rare and Endangered plants into California, taking rare and Endangered plants, and selling rare and Endangered plants. The CESA and CNPPA authorized the Fish and Game Commission to designate endangered, threatened, and rare species and to regulate the taking of these species (Sections 2050-2098, Fish and Game Code). Plants listed as rare under the CNPPA are not protected under CESA; however, these plants may not be taken or possessed at any time, and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research.

California Fish and Game Code

Birds. Section 3503 of the Fish and Game Code states that it is “unlawful to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Section 3503.5 prohibits the killing, possession, or destruction of any birds in the orders Falconiformes or Strigiformes (birds-of-prey). Section 3511 prohibits take or possession of fully protected birds. Section 3513 prohibits the take or possession of any migratory nongame birds designated under the federal Migratory Bird Treaty Act. Section 3800 prohibits take of nongame birds.

Fully Protected Species. The classification of fully protected was the state's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish (Section 5515), mammals (Section 4700), amphibians and reptiles (Section 5050), and birds (Section 3511). Most fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations. Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Species of Special Concern. As noted above, the CDFW also maintains a list of wildlife "species of special concern." Although these species have no legal status, the CDFW recommends considering these species during the analysis of project impacts to protect declining populations and avoid the need to list them as endangered in the future.

Lake or Streambed Alteration. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW's jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 ("Porter-Cologne") is California's statutory authority for the protection of water quality and applies to surface waters, wetlands, and groundwater, and to both point and nonpoint sources. Under the Porter-Cologne, the State Water Resources Control Board ("State Board" or "SWRCB") has the ultimate authority over State water rights and water quality policy. However, Porter-Cologne also establishes nine RWQCBs to oversee water quality on a day-to-day basis at the local/regional level. The project site is located within Central Coast RWQCB (Region 3). Porter-Cologne incorporates many federal CWA provisions, such as delegation to the State Board and RWQCBs of the National Pollutant Discharge Elimination System ("NPDES") permitting program.

Under Porter-Cologne, the state must adopt water quality policies, plans, and objectives that protect the state's waters for the people's use and enjoyment. Regional authority for planning, permitting, and enforcement is delegate to the nine RWQCBs. The regional boards are required to formulate and adopt water quality control plans for all areas in the region and establish water quality objectives in the plans. The Porter-Cologne sets forth the obligations of the State Board and RWQCBs to adopt and periodically update water quality control plans (basin plans). The act also requires waste dischargers to notify the RWQCBs of such activities through filing of Reports of Waste Discharge ("RWD") and authorizes the State Board and RWQCBs to issue and enforce waste discharge requirements ("WDRs"), NPDES permits, Section 401 water quality certifications, or other approvals. The RWQCBs also have authority to issue waivers to RWD requirements and WDRs for broad categories of "low threat" discharge activities that have minimal potential for adverse water quality effects, when implemented according to prescribed terms and conditions.

The term "Waters of the State" is defined by Porter-Cologne as "any surface water or groundwater, including saline waters, within the boundaries of the state." The RWQCB protects all waters in its regulatory scope but has special responsibility for wetlands, riparian areas, and headwaters, including isolated wetlands, and waters that may not be regulated by the ACOE under Section 404 of the CWA. Waters of the State are regulated by the RWQCB under the State Water Quality Certification Program, which regulates discharges of fill and dredged material under Section 401 of the CWA and the Porter-Cologne.

California Coastal Act

As described in **Section 4.1 Aesthetics**, the Coastal Commission, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. Development activities within the coastal zone generally require a CDP from either the Coastal Commission or the local government if an LCP has been certified. A CDP is required in addition to any other permit required from resource agencies.

The Coastal Commission or the local government may designate areas of rare or unique biological value, such as wetland and riparian habitat and habitats for special-status species, as ESHA. Section 30107.5 of the Coastal Act defines an "environmentally sensitive area" as any area in which plant or animal life or their habitat are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. Development is restricted within the coastal zone and prohibited within designated ESHA, unless the development is coastal dependent and does not have a significant effect on the resources. Section 30240 of the Coastal Act states that "environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas." This section also states that "development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas."

4.3.5.3 Local

Big Sur Coast Land Use Plan

The project site lies within the coastal zone and is regulated by the Big Sur Coast LUP, which is the certified LCP for the region. The Big Sur Coast LUP identifies ESHA within its boundaries as Areas of Special Biological Significance identified by the State Water Resources Control Board; rare and endangered species habitat; all coastal wetlands and lagoons; all marine wildlife haul-out, breeding and nesting area; education, research and wildlife reserves, including all tideland portions of the California Sea Otter State Fish and Game Refuge; nearshore reefs; tidepools; sea caves; islets and offshore rocks; kelp beds; indigenous dune plant habitats; Monarch butterfly mass overwintering sites; and wilderness and primitive areas.

The Big Sur Coast LUP and the County's Coastal Implementation Plan ("CIP") regulate the removal of trees within the Big Sur Coast LUP. Except as exempted by the Big Sur Coast LUP, a CDP is required to remove native trees within the Big Sur Coast LUP. Further, in accordance with the Big Sur Coast LUP and the CIP, a Forest Management Plan is required to remove, damage, or relocate trees within the Big Sur Coast LUP.

PBSSP General Plan

The PBSSP General Plan includes management guidelines to preserve the Big Sur River riparian corridor by minimizing visitor impacts and maintaining the vitality and health of the Park's riparian habitat. Specific guidelines relevant to biological resources include restoring the essence of the

original riparian vegetation adjacent to the Big Sur River by removing or relocating, reducing, or controlling visitor activities (e.g., camping, volunteer trails, etc.).

4.3.6 THRESHOLDS OF SIGNIFICANCE

BIOLOGICAL RESOURCES Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? (Source: 1, 3, 4, 8, 9, 32, 33)	☐	■	☐	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? (Source: 1, 5, 29, 33, 34)	☐	■	☐	☐
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal filling, hydrological interruption, or other means? (Source: 1, 5, 29, 33, 34)	☐	☐	■	☐
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (Source: 1, 3, 4, 8, 9, 32, 33)	☐	☐	■	☐
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (Source: 1, 3, 4, 8, 9, 32, 33, 37)	☐	☐	■	☐
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (Source: 1, 3, 4, 8, 9, 32, 33)	☐	☐	☐	■

4.3.7 IMPACT ANALYSIS

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

Several special-status species, including MDFW, western pond turtle, and raptors and other nesting bird species, are known or have the potential to occur within and immediately adjacent to the project site. In addition, S-CCC steelhead is assumed to be present adjacent to the project site within the Big Sur River, and the project site provides critical dispersal habitat for CRLF. If present within the project site, construction, and operation of the Project could result in direct and/or indirect impacts to these species.

Potential Impacts to Federally Listed Species

S-CCC steelhead is assumed to be present adjacent to the project site within the Big Sur River. Construction of the Project could indirectly impact this species due to erosion, sedimentation, or the introduction of hazardous materials into the river. The potential for CRLF to occur within the project site is low; however, in the unlikely event that this species is present within the site during construction, the project's construction could result in direct mortality of individuals. Impacts to S-CCC steelhead and/or CRLF would be considered take of a federally listed species and a significant impact under CEQA. Implementation of the mitigation below would ensure that the project's construction would be unlikely to adversely affect these species, minimizing potential impacts to a less than significant level.

The Project could also result in long-term, operational impacts to S-CCC steelhead and/or CRLF due to increased recreational use of the project site. Potential operational impacts could include wildlife harassment or mortality, noise, trampling, dust, habitat loss due to increased night lighting, introduction and spread of non-native, invasive species, and introduction or spill hazardous materials. The project has been designed to minimize long-term operational impacts to the greatest extent feasible. Resource protection fencing would be installed along the outer perimeter of the site to prevent off-trail use and pedestrian trespass into sensitive riparian habitat (see **Figure 6, Site Plan**). The project would also include signage and educational materials to prevent the overuse of sensitive habitats. Further, mitigation measures included in **Section 4.8 Hazards and Hazardous Materials** would minimize the potential for spill of hazardous materials into the environment during construction and operation of the Project. In addition, and as described above, the potential for CRLF to occur within the project site is low; due to the minor nature of impacts relating to Park activities, it is unlikely that a CRLF individual would occur within the project site or be impacted by Project activities. Therefore, potential operational impacts would be less than significant.

Potential Impacts to Other Special-Status Species

Construction of the Project could result in short-term, temporary direct and indirect impacts to MDFW, western pond turtle, and raptors and other nesting bird species (e.g., wildlife harassment or mortality, nest abandonment, habitat loss) associated with construction activities (e.g., soil

compaction, noise, dust, vegetation removal, erosion and sedimentation, hazardous material spills, and introduction and spread of non-native, invasive species). This is a potentially significant impact that can be reduced to less than significant with implementation of the mitigation below.

Operation of the project could also result in impacts to MDFW, western pond turtle, and raptors and other nesting bird species due to increased recreational use of the project site. Potential operational impacts could include wildlife harassment or mortality, nest abandonment, and habitat loss due to increased night lighting, noise, trampling, dust, and the introduction and spread of non-native species. As described above, the project has been designed to minimize long-term operational impacts to the greatest extent feasible. Resource protection fencing would be installed along the outer perimeter of the site to prevent off-trail use and pedestrian trespass into sensitive riparian habitat, and the Project would include signage and educational materials to prevent overuse of sensitive habitats. Therefore, operational impacts to special-status species have already been addressed as part of the design of the Project; no additional mitigation is required.

Mitigation

4.3-1 State Parks shall implement the following Best Management Practices measures during all phases of construction (i.e., pre-, during, and post-):

- A qualified biologist will conduct an Employee Education Program for the construction crew prior to construction activities. The qualified biologist will meet with the construction crew at the onset of construction at the project site to educate the construction crew on the following: a review of the project boundaries; all special-status species that may be present, their habitat, and proper identification; the specific mitigation measures that will be incorporated into the construction effort; the general provisions and protections afforded by the regulatory agencies; and the proper procedures if a special-status animal is encountered within the project site.
- Trees and vegetation not planned for removal or trimming, and sensitive habitats immediately adjacent to the project site will be protected prior to and during construction to the maximum extent possible with protective fencing. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact. Protective fencing may include straw bales, protective wood barriers, or orange construction fencing. Only certified weed-free straw will be used to avoid the introduction of non-native, invasive species.
- Following construction, State Parks will restore all disturbed areas to pre-project contours to the maximum extent possible and revegetate using locally occurring native species and native erosion control seed mix, per the recommendations of a qualified biologist.
- Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and implemented in consultation with a qualified hydrologist, engineer, or erosion control specialist, and will utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation and sensitive habitats.

- All trash that may attract predators shall be properly contained, removed from the construction site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

4.3-2 State Parks shall implement the following measures to reduce the introduction and spread of non-native, invasive species:

- All landscaping, planting, and seeding will use native species from local stock, approved by State Parks.
- Any landscaping or replanting required for the project shall not use species listed as noxious by the California Department of Food and Agriculture ("CDFA").
- Bare and disturbed soil will be landscaped with CDFA recommended seed mix or plantings from locally adopted species to preclude the invasion on noxious weeds in the project site.
- Before mobilizing to arrive at the construction site and before leaving the construction site, construction equipment shall be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds.
- All non-native, invasive plant species shall be removed from disturbed areas prior to replanting.

4.3-3 Construction activities that may affect nesting raptors and other protected avian species can be timed to avoid the avian nesting season (February 1 through September 15). Specifically, vegetation and/or tree removal can be scheduled between September 16 and January 31. If this is not possible, pre-construction surveys for protected avian species shall be conducted by a qualified biologist within 15 days prior to the commencement of construction activities in all areas that may provide suitable nesting habitat that exist in or within 300 feet of the project boundary. If nesting birds are identified during pre-construction surveys, an appropriate buffer should be imposed within which no construction activities or disturbance will take place (generally 300 feet in all directions). A qualified biologist should be on-site during work re-initiation in the vicinity of the nest offset to ensure that the buffer is adequate and that the nest is not stressed and/or abandoned. No work should proceed in the vicinity of an active nest until such time as all young are fledged, as determined by the qualified biologist, or until after September 15 (when young are assumed fledged).

4.3-4 No more than seven days prior to construction, a qualified biologist will conduct pre-construction surveys for MDFW nests within the project site and in a buffer zone 25 feet out from the project site. All nests within 25 feet of the project site shall be flagged for avoidance and protected during project activities. Nests that cannot be avoided shall be manually deconstructed prior to land clearing activities to allow animals to escape harm. If a litter of young is found or suspected, nest material shall be replaced, and the nest shall left alone for two to three weeks before a re-check to verify that young are capable of independent survival before proceeding with nest dismantling.

4.3-5 No more than three days prior to construction, a qualified biologist shall conduct a pre-construction survey for western pond turtles and their nests within the project site. If a western pond turtle nest is found, it will be monitored and avoided until the eggs hatch. All western pond turtles discovered within the project site immediately prior to or during project activities shall be allowed to move out of the area of their own volition. If this is not feasible, they shall be captured by a qualified biologist and relocated out of harm's way to the nearest suitable habitat at least 100 feet upstream or downstream from the project site where the individual was found.

4.3-6 State Parks shall implement the following measures to avoid potential impacts to CRLF:

- A qualified biologist will survey the project site and immediately adjacent areas 48 hours before and the morning of the onset of work activities for the presence of CRLF. If any life stage of CRLF is observed, construction activities will not commence until the USFWS is consulted and appropriate actions are taken to allow project activities to continue.
- During ground disturbing and vegetation removal activities, a qualified biologist shall survey appropriate areas of the construction site daily before the onset of work activities for the presence of CRLF. The qualified biologist shall remain available to come to the site if a CRLF is identified until all ground disturbing activities are completed. If any life stage of CRLF is found and these individuals are likely to be killed or injured by work activities, the qualified biologist shall be contacted, and work shall stop in that area until the CRLF has moved on its own out of the work area and the USFWS has been contacted. Construction activities will not resume until the USFWS is consulted and appropriate actions are taken to allow project activities to continue.
- After ground disturbing and vegetation removal activities are complete, or earlier if determined appropriate by the qualified biologist, the qualified biologist will designate a construction monitor to oversee on-site compliance with all avoidance and minimization measures. The qualified biologist shall ensure that this construction monitor receives the sufficient training in the identification of CRLF. The construction monitor or the qualified biologist is authorized to stop work if the avoidance and/or minimization measures are not being followed. If work is stopped, the USFWS shall be notified. The qualified biologist and the construction monitor shall complete a daily log summarizing activities and environmental compliance throughout the duration of the proposed project.
- To prevent inadvertent entrapment of CRLF during project construction, all excavated, steep-walled holes or trenches more than two feet deep will be covered at the close of each working day with plywood or similar materials. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals.
- Only tightly woven fiber netting or similar material may be used for erosion control at the project site. Coconut coir matting is an acceptable erosion control material. No

plastic mono-filament matting will be used for erosion control, as this material may ensnare wildlife, including CRLF.

- Because dusk and dawn are often the times when CRLF are most actively foraging and dispersing, all construction activities should cease one half hour before sunset and should not begin prior to one half hour after sunrise.

4.3-7 To protect S-CCC steelhead critical habitat, water quality, and riparian habitat during construction, the following measures shall be included on the construction specifications, with construction oversight by a qualified biological monitor:

- The project contractor shall ensure that trenching, excavating, and any other activities that involve substantial soil disturbance adjacent to riparian habitat and the Big Sur River are implemented in consultation with a qualified hydrologist, engineer, or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to these sensitive areas.
- Stationary equipment such as motors, generators, and welders located within 100 feet of the Big Sur River and riparian habitat shall be stored overnight at staging areas and shall be positioned over drip pans.
- No debris, soil, silt, sand, oil, petroleum products, cement, concrete, or washings thereof shall be allowed to enter—or be placed where they may be washed by rainfall or runoff—into riparian areas or the Big Sur River.
- All construction debris and associated materials stored in staging areas shall be removed from the work site upon completion of the project.
- Whenever possible, cleaning or refueling of equipment shall take place within turnouts or staging areas at least 50 feet from riparian areas and the Big Sur River.
- All refueling shall be conducted over plastic bags filled with sawdust or other highly absorbent material. Clean-up materials for spills shall be kept on hand at all times. Any accidental spills of fuel or other contaminants shall be cleaned up immediately.

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

The Project could potentially result in adverse effects to riparian habitat and/or other sensitive natural communities. Riparian habitat occurs within and adjacent to the project site. In addition, the project site is adjacent to USFWS-designated critical habitat for S-CCC steelhead (i.e., the lateral extent of the Big Sur River), and the entire project site lies within designated critical habitat for CRLF. The Big Sur Coast LUP considers all sensitive habitats and habitat for special-status species as ESHA under the Coastal Act. Therefore, for the purposes of this analysis, all undeveloped areas of the project site may be considered sensitive habitat. In accordance with the PBSSP General Plan, State Parks designed the Project to reduce impacts to sensitive habitats by locating the proposed cabins more than 100 feet away from the Big Sur River, reducing the area of riparian habitat impacted, and installing resource protection fencing around the outer

perimeter of the site. Although potential impacts were minimized and avoided where feasible, the Project could result in direct and indirect impacts to cottonwood-sycamore riparian forest and CRLF critical dispersal habitat and indirect impacts to S-CCC critical habitat.

The Project would not result in direct impacts to S-CCC steelhead critical habitat, which is adjacent to but not within the project site; however, the Project could result in indirect impacts to S-CCC steelhead critical habitat due to erosion, sedimentation, or introduction of hazardous materials into the Big Sur River. Implementation of **Mitigation Measures 4.3.1** and **4.3.7**, along with standard construction BMPs described in **Section 4.8 Hazards and Hazardous Materials**, would minimize the potential for Project-related erosion, sedimentation, or introduction of hazardous materials into the river. Therefore, the Project is unlikely to adversely modify critical habitat for S-CCC steelhead. Potential impacts to CRLF dispersal habitat include vegetation removal, soil compaction, erosion and sedimentation, hazardous material spills, introduction and spread of non-native, invasive species, and conversion of habitat to development. The Project would result in temporary impacts (i.e., grading and vegetation removal) of up to 1.83 acres of CRLF dispersal habitat and would permanently impact (i.e., conversion to development) approximately 0.31 acre of CRLF dispersal habitat. As described in Response 4.3.7(a), the Project is unlikely to adversely affect CRLF. In addition, the Project would restore all temporarily impacted areas and would include resource protection fencing and signage to prevent pedestrian trespass into sensitive areas. In light of the Project's minimal impact relative to habitat for this species outside of the project site, and with implementation of **Mitigation Measures 4.3.1** and **4.3.2** and the mitigation measures below, the Project is unlikely to adversely modify critical habitat for CRLF. This represents a less than significant impact.

Potential impacts to riparian habitat include vegetation removal, soil compaction, erosion and sedimentation, hazardous material spills, introduction and spread of non-native, invasive species, and conversion of habitat to development. The Project would result in temporary impacts (i.e., grading and vegetation removal) to up to 0.28 acre of riparian habitat and would permanently affect (i.e., convert to aggregate path) approximately 618 ft^2 (0.01 acre) of riparian habitat[5] and result in the removal of one (1) arroyo willow tree ((see **Table 1, Trees Proposed for Removal** and **Figure 8, Tree Removal Plan**). For potential impacts to riparian habitat, State Parks would be required to acquire a Streambed Alteration Agreement ("SAA") from CDFW and implement any measures identified in the SAA. Compliance with the SAA and implementation of **Mitigation Measures 4.3.1** and **4.3.2** and the mitigation measures below would ensure that potential impacts are minimized to a less than significant level.

Mitigation

4.3-8 Riparian habitat shall be avoided to the greatest extent feasible. Riparian habitat adjacent to the project site that will not be impacted by the Project shall be protected during construction with protective fencing. Protective fencing shall be installed prior to construction and a biological monitor shall supervise the installation of the fencing and monitor at least once per week until construction is complete to ensure that the protective

[5] CRLF dispersal habitat includes riparian habitat; therfore, acreage of impacts to riparian habitat and CRLF dispersal habitat overlap.

fencing remains intact. Impacts to riparian habitat shall be quantified during construction and habitat shall be restored following construction. Riparian habitat shall be restored on-site at a 1:1 ratio for temporary impacts and off-site (within PBSSP or within another unit) at a 3:1 ratio for permanent impacts.

4.3-9 Prior to construction, a qualified biologist shall prepare a restoration plan for impacts to riparian habitat. The plan should include, but is not limited to:

- On-site restoration at a 1:1 ratio for temporary impacts,
- Off-site restoration (within PBSSP or within another unit) at a 3:1 for permanent impacts,
- Planting and/or seeding of only locally occurring native species collected from the project vicinity,
- Procedures to control non-native species invasion,
- Provisions to ensure compliance with the requirements of the plan,
- A detailed description of seeding and planting specifications, and
- A description of a monitoring program, including specific methods of vegetation monitoring, data collection and analysis, goals and objectives, success criteria, adaptive management if the criteria are not met, reporting protocols, and a funding mechanism.

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

The project site does not contain any federally protected wetlands. However, the Big Sur River is likely jurisdictional waters of the U.S. and state. Potentially adverse indirect impacts to potentially jurisdictional waters may occur through erosion, sedimentation, and introduction of hazardous materials. Implementation of **Mitigation Measure 4.3-7**, above, would reduce potential impacts to potentially jurisdictional waters of the U.S. and state (located off-site) to a less than significant level.

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

The Project would result in the construction of various facilities but would not substantially interfere with the movement of any native wildlife species or established wildlife corridors. The Project would connect to an existing road within PFSSP and would not create substantial new barriers to wildlife movement. Further, the habitat connectivity of PFSSP would remain unconstrained to the west and south. This represents a less than significant impact.

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The Project may result in the removal and/or trimming of up to 30 trees of varying size and health, including three (3) landmark trees (see **Table 1, Trees Proposed for Removal** and **Figure 8, Tree Removal Plan**). In accordance with the Big Sur Coast LUP and the CIP, a Forest Management Plan ("FMP") was prepared for the Project (**Appendix C, Forest Management Plan**). In order to minimize the effects of potential tree removal, the FMP recommended that that State Parks install protective fencing around trees within the project site which are not scheduled for removal and replace trees which are removed at a 1:1 ratio following construction. While the Proposed Project would result in the removal of up to 30 trees, the FMP concluded that because the project site and surrounding areas are densely forested, proposed tree removal would not significantly impact the canopy or density of the forest or result in an adverse environmental impact. Moreover, as discussed previously, State Parks modified the design of the Proposed Project to minimize tree removal to the maximum extent feasible. As part of the design process, State Parks considered multiple alternatives that would achieve the basic objectives of the Project while avoiding and/or minimizing potential impacts. State Parks ultimately determined to proceed with a modified design (i.e., the Proposed Project) that included fewer cabins to minimize the extent of potential tree removal, including associated indirect effects associated with operation of the Proposed Project. State Parks specifically designed the Proposed Project to avoid impacts to redwoods and minimize removal of riparian tree species to the maximum extent feasible. Compliance with the recommendations contained in the FMP would ensure that the Proposed Project would not conflict with any local policies or ordinances related to tree removal. This represents a less than significant impact.

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

The Project is not located within an adopted Habitat Conservation Plan or Natural Community Conservation Plan area. No impact would occur.

4.4 CULTURAL AND TRIBAL RESOURCES

4.4.1 INTRODUCTION

This section evaluates the potential impacts on cultural resources, including archaeological, historical, tribal resources, and human remains. The following analysis includes an evaluation of the Project's potential impacts on cultural resources, such as damage to historic or culturally significant structures, changes to historic settings, or activities that could compromise or damage resources for future study, collection, or preservation.

The following section is based on a *Cultural Resources Assessment Report* prepared by Far Western Anthropological Research Group, Inc. ("Far Western") in July 2020. That assessment consisted of background research and field reconnaissance of the Project's Area of Potential Impact ("API"). Background research included a comprehensive literature review and records

search covering the project site and the history of PBSSP. More specifically, the search included a records search from the Northwest Information Center ("NWIC"), a search of the Native American Heritage Commission ("NAHC") Sacred Lands File ("SLF"), Native American consultation with the Esselen Tribe of Monterey County ("Esselen Tribe"), the Ohlone/Costanoan-Esselen Nation ("OCEN"), and the Salinan Tribe of San Luis Obispo and Monterey Counties ("Salinan Tribe"), and historical society outreach. The field reconnaissance consisted of a pedestrian survey of the API on May 15, 2020, to identify any previously unrecorded precontact or historic-era cultural resources, formally record existing improvements within the API, and identify any remains associated with the former pool and buildings.

4.4.2 ENVIRONMENTAL SETTING

4.4.2.1 Regional History

Radiocarbon and archaeological evidence indicate that human occupation of the California Coast began at least 10,000 years ago. Settlement of the coastal areas of Monterey County, however, did not begin until around 5,000 B.C. Prior to Euro-American contact, the area now known as Big Sur was inhabited by native speakers of the Costanoan, Esselen, and Salinan languages. The traditional way of life for the native inhabitants was largely destroyed in the 1770s with the arrival of Euro-Americans.

European contact began with the arrival of Spanish explorers in the 16th Century. However, it was not until 1770 that the Portola expedition arrived in Monterey Bay and established the first mission and Royal Presidio. With the arrival of the Portola expedition and the establishment of the first mission, a period of intense Native American conversion to Catholicism began. After Mexico gained its independence from Spain in 1820, a period of secularization ensued, and the remaining Native American groups were employed as ranch hands and domestic servants. By 1840, the Mission was in a state of ruin, and many Native Americans returned to pre-Spanish food collecting and hunting practices. As the competition for land increased with the arrival of Anglo settlers, Native American communities began to disappear.

4.4.2.2 Project Site History

The Michael Pfeiffer family arrived on the Big Sur coast in 1869, staking a claim of 160 acres for ranching and farming. Between 1891 and 1915, John Martin Pfeiffer purchased additional land in the Big Sur Valley, all of which would become the majority of the 634 acres sold to the state in 1933 to become PBSSP. Prior to the establishment of PBSSP, Ventana Power operated small hydroelectric dams in the vicinity and built a house (known as "This Old House"), a shack, a garage, and a utility yard within the project site. The CCC adopted the three (3) Ventana Power buildings when the Park was established. The CCC set up camp at the Park and worked seven and a half years building a state campground facility, clearing trails and campground areas, building roads into the hills and out to the coast, and fighting forest fires. CCC facilities built throughout the campground to support the work included barracks, garages and shops, warehouses, a recreation hall, and mess hall, which were intended to be removed following completion of the campground. The campground included roads, fences, bridges, picnic areas,

waste and water disposal systems, and a custodian‘s cottage, which still serves as State Parks’ Big Sur District Office. Park rustic style was reflected in the use of local river cobbles in the construction of stoves, drinking fountains, retaining walls, foundations, and un-milled redwood in buildings and bridges.

As described in **Section 1.2.2 Historical Use**, the CCC removed the Ventana Power utility yard structures in 1938 to make room for a public day-use area with a concrete-lined swimming pool. The day-use area included a group picnic area and a large, concrete-lined swimming pool. The pool was a popular attraction at PBSSP but, due to perceived public hazards, the pool and related infrastructure were destroyed in the late 1960s. The resulting debris was later capped with mudslide sediment from the 1972 Molera fire; however, some remnant debris is still visible within the project site. The three (3) Ventana Power buildings remained as campground facilities until at least 1955; it is not known when they were demolished.

4.4.2.3 Native American Consultation

State Parks conducted Native American consultation with three tribes: the Esselen Tribe, the OCEN, and the Salinan Tribe. Consultation included notification of the project in 2019 during ongoing regular consultation discussions. As part of the consultation process, State Parks representatives met with Native American representatives at the project site to discuss the Proposed Project. During the consultation process, OCEN requested that a tribal monitor was present during any ground disturbance associated with the Project. The Salinan Tribe requested to be kept informed. The Esselen Tribe requested monitoring of the cultural resources survey and expressed the importance for the tribe to retain access to important spiritual resources and lands. The tribe considers the Big Sur area as a Traditional Cultural Property (“TCP”) where they and their ancestors have returned for generations for ceremonial and traditional practices. The Esselen Tribe requested that State Parks work with them to develop a Memorandum of Understanding (“MOU”) or Memorandum of Agreement (“MOA”) to allow continue access to PBBSP for ceremonial and traditional practices, as well as incorporate interpretive aspects into the Proposed Project to highlight the importance of PBSSP as a TCP.

4.4.3 REGULATORY SETTING

4.4.3.1 State

California Register of Historical Resources

The California Register of Historical Resources (“CRHR”) is “an authoritative listing and guide to be used by state and local agencies, private groups and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1[a]). The CRHR includes buildings, sites, structures, objects, and districts significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. The CRHR is maintained by California State Parks’ Office of History Preservation (OHP).

California Public Resources Code

Several sections of the California PRC protect cultural resources located on public land. Under PRC Section 5097.5, no person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site (including fossilized footprints), inscriptions made by human agency, rock art, or any other archaeological, paleontological, or historical feature situated on public lands, except with the express permission of the public agency that has jurisdiction over the lands. Violation of this section is a misdemeanor.

PRC Section 5097.98 states that if Native American human remains are identified within a project area, the landowner must work with the Native American Most Likely Descendant as identified by the NAHC to develop a plan for the treatment or disposition of the human remains and any items associated with Native American burials with appropriate dignity. These procedures are also addressed in Section 15064.5 of the State CEQA Guidelines. California Health and Safety Code Section 7050.5 prohibits disinterring, disturbing, or removing human remains from a location other than a dedicated cemetery. Section 30244 of the PRC requires reasonable mitigation for impacts on paleontological and archaeological resources that occur as a result of development on public lands.

California Health and Safety Code

California Health and Safety Code Section 7050.5 regulates the treatment of human remains. 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 that the remains are not subject to his or her authority. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact the NAHC by telephone within 24 hours.

Assembly Bill 52

California Assembly Bill (“AB”) 52, in effect since July 2015, provides CEQA protections for tribal cultural resources. All lead agencies approving projects under CEQA are required, if formally requested by a culturally affiliated California Native American Tribe, to consult with such tribe regarding the potential impact of a project on tribal cultural resources before releasing an environmental document. Under California Public Resources Code Section 21074, tribal cultural resources include site features, places, cultural landscapes, sacred places, or objects that are of cultural value to a tribe and that are eligible for or listed on the CRHR or a local historic register, or that the lead agency has determined to be of significant tribal cultural value.

4.4.3.2 Local

Big Sur Coast LUP

A key policy of the County is to protect, maintain, and where feasible, enhance and restore the cultural heritage of the County and its man-made resources and traditions. The Big Sur LUP

requires that new development protect significant historical buildings, landmarks, and districts, where appropriate. Big Sur's archaeological resources, including those areas considered to be archaeologically sensitive but not yet surveyed and mapped, must be maintained and protected for their scientific and cultural heritage values. New land uses and development, both public and private, may be considered compatible with this objective only where they incorporate all site planning and design features necessary to avoid or mitigate impacts to archaeological resources.

PBSSP General Plan

The PBSSP General Plan contains management guidelines to protect cultural resources. Specifically, the General Plan encourages adaptive reuses for historic CCC buildings and establishing appropriate low-impact public uses for retained CCC buildings.

4.4.4 THRESHOLDS OF SIGNIFICANCE

CULTURAL AND TRIBAL RESOURCES Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to 15064.5? (Source: 1, 7, 13, 14, 22)	☐	■	☐	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5? (Source: 1, 7, 13, 14, 22)	☐	■	☐	☐
c)	Disturb any human remains, including those interred outside of formal cemeteries? (Source: 1, 22)	☐	■	☐	☐
d)	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:				
d*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 (Source: 1, 22)	☐	■	☐	☐
d*ii*)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section5024.1, the lead agency shall consider the significance of the resource to a California Native America Tribe. (Source: 1, 22)	☐	■	☐	☐

4.4.5 IMPACT ANALYSIS

a) *Cause a substantial adverse change in the significance of a historical resource pursuant to 15064.5?*

CEQA Guidelines Section 15064.5 describes a historical resources as: 1) any resource that is listed in, or determine to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources; 2) a resource included in a local register of historical resources; and, 3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant based on substantial evidence in light of the whole record. The fact that a resource is not listed or determined to be eligible for listing does not preclude a lead agency from determining that the resource may be a historical resource (CEQA Guidelines Section 15064.5(4)). A substantial change includes the physical demolition, destruction, relocation, or alteration of a resource or its immediate surroundings such that the significance would be materially impaired (CEQA Guidelines Section 15064.5(b)).

Far Western identified several historical features within and adjacent to the project site during the field reconnaissance. These include a stone footbridge and stone drinking fountain built by the CCC between 1937 and 1938, a comfort station north of the project site, and the existing paved parking lot associated with prior CCC use of the site. A single surface artifact, composed of two (2) combined alcoholic beverage containers dating to the late 1960s, was also discovered. No surface evidence of the three (3) former Ventana Power buildings or the swimming pool were found. The cabins would be built primarily within the former swimming pool's footprint, which was previously destroyed in the 1960s. The parking lot would be renovated but would not be adversely impacted by the Project. The footbridge, drinking fountain, and comfort station outside of the project site would be preserved in place and would not be impacted by the Project. In addition, State Parks designed the Project to avoid the mapped locations of the Ventana Power buildings, preventing direct impacts to any potentially buried resources. Because of the Project's proximity to these resources, however, there is a potential that unrecorded historical resources are present beneath the ground surface and that such resources could be exposed and damaged during construction of the Project. This is a potentially significant impact that would be reduced to a less than significant level with implementation of **Mitigation Measure 4.4-1**, below.

The Proposed Project would provide additional, low-cost visitor serving, recreational facilities within PBSSP, which could increase recreational use on the project site and could result in indirect effects to potential historical resources. However, as described elsewhere in this IS/MND State Parks designed the Proposed Project to specifically avoid culturally and historically sensitive areas within PBSSP. Additionally, the Proposed Project includes protective fencing to ensure that potential impacts to potentially historic resources adjacent to the Project site are avoided. As a result, operation of the Project would not cause a change in the significance of a historical resource. This represents a less than significant impact with incorporation of mitigation.

Mitigation

4.4-1. To minimize potential impacts to previously unknown or subsurface historical or archaeological resources, a qualified archaeologist shall monitor all ground-disturbing

Project activities. All work shall stop if a cultural resource is discovered during construction. A qualified professional will evaluate the resource to determine whether the finding is significant. If the finding is a historical resource or unique archaeological resource, avoidance measures or appropriate mitigation shall be implemented. Work will cease in the immediate vicinity of the find until mitigation can be implemented. In accordance with CEQA Guidelines Section 15064.5(f), work may continue in other parts of the project site during the implementation of potential resource mitigation (if necessary). State Parks will be responsible for reviewing and approving the mitigation plan in consultation with the qualified professional prior to the resumption of ground-disturbing activities.

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?*

Public Resources Code Section 21083.2 requires that lead agencies evaluate potential impacts to archaeological resources. Specifically, lead agencies must determine whether a project may have a significant effect or cause a substantial adverse change in the significance of an archaeological resource. No archaeological resources were identified within the project site during the Cultural Resources Assessment; however, it is possible that unrecorded archaeological resources are present beneath the ground surface and that such resources could be exposed and damaged during construction. This is a potentially significant impact that would be reduced to a less than significant level with the implementation of **Mitigation Measure 4.4-1**.

c) *Disturb any human remains, including those interred outside of formal cemeteries?*

No known human remains, including those interred outside of formal cemeteries, are known to occur within the project site. Human remains are, however, known to occur within PBSSP. As a result, the Proposed Project could disturb human remains, including those interred outside of formal cemeteries, in connection with ground-disturbing activities.

While the Proposed Project could potentially disturb human remains since remains are known to occur within PBSSP, the likelihood that the Proposed Project would disturb human remains is low. As discussed elsewhere, the site has been historically used for a variety of purposes and has been extensively disturbed in connection with prior use. For instance, Ventana Power improved the site with a house, garage, utility yard and other improvements. The Civilian Conservation Corps also utilized the site for a variety of purposes following Ventana Power. In 1938, the Civilian Conservation Corps removed the utility yard and constructed a variety of day-use recreational facilities on the site, including a group picnic area and a large concrete-lined swimming pool. The existing structures and pool were eventually removed, and the site was capped with mudslide sediment from the 1972 Molera fire.

Given the site's historical use for utility and recreational purposes, it is unlikely that the limited ground-disturbing activities associated with the Proposed Project would disturb any human remains. Nevertheless, human remains are known to occur within PBSSP. Therefore, State Parks

has identified the following mitigation measure identified below to ensure that impacts would be less than significant. This measure is in addition to **Mitigation Measure 4.4-3** requiring that a Native American monitor be present during ground-disturbing activities. These measures would ensure that impacts would be less than significant.

Mitigation

4.4-2. To minimize potential impacts to unknown buried human remains to less than significant, State Parks will immediately halt work in the event of the discovery or recognition of any human remains. No further excavation or ground disturbing activities will occur at the site or nearby area suspected to overlie adjacent remains until the Monterey County coroner has been contacted in accordance with Section 7050.5 of the California Health and Safety Code. If the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four hours of the determination, as required by California Health and Safety Code Section 7050.5(c) and PRC 5097. The NAHC shall identify the person or persons it believes to be most likely descended ("MLD") from the deceased Native American (PRC Section 5097.98). The designated MLD then has 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains (AB 2641). If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). 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 document with the county in which the property is located (AB 2641). Work will not resume in the immediate area of the discovery until such time the remains have been appropriately removed from the site.

d*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 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)?*

The Proposed Project would not result in a substantial adverse change in the significance of a tribal cultural resource, as defined in Public Resources Code Section 21074, that is listed or eligible for listing in the California Register of Historic Resources,[6] or in a local register of historic

[6] A resource may be listed as a historical resource in the California Register if it meets any of the following criteria: 1) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage. 2) is associated with the lives of persons important in our past. 3) embodies the districtive charactersitics of a type, period, region, or method of construction, or represents that work of an important creative individual, or possesses high artistic values. 4) has yieled, or may be likely to yield, information important in prehistory of history. (Public Resources Code Sec. 5024.1(c)).

resources. Public Resources Code Sec. 21074 defines a tribal cultural resource as “sites, features, places, cultural landscapes, 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, [or] b) included in a local register of historical resources as defined in subdivision (k) of [Public Resources Code] Section 5020.1” (Public Resources Code Sec. 21027(a)).

The Proposed Project site is not listed in the California Register of Historic Resources nor is the site included in a local register of historical resources as defined in Public Resources Code Sec. 5020.1(k). Similarly, the Proposed Project site is not listed as eligible, nor has the site previously been identified as eligible for listing on the California Register of Historic Resources. The Project site is also not identified in a local register as defined in Public Resources Code Sec. 5020.1(k). Moreover, the NAHC review of their Sacred Lands Files did not yield any results for the project site. Far Western also did not identify any potential tribal cultural resources as part of the Cultural Resources Assessment Report (Far Western, 2020) prepared for the Proposed Project.

Although the Project site has not been listed in the California Register of Historic Resources, identified as eligible for listing, or included in the NAHC Sacred Land Files, Native American representatives contacted during the tribal consultation process identified that they consider PBSSP as a TCP.[7] In addition, Native American representatives also identified that although no resources are known to occur on-site, the Project site is still, nevertheless, part of the broader cultural landscape that has cultural significance. Moreover, Native American representatives also identified concerns that tribal cultural resources could still be present on the site despite no formally identified resources. The tribal consultation process also identified potential concerns associated with increased visitation and use of the site due to scale of the Project.[8] The Native American representatives identified that they were not opposed to the Proposed Project but wanted to make sure appropriate measures were incorporated into the Project to minimize potential impacts, as well as incorporate interpretative elements that highlight the importance of PBSSP as a TCP.

While the tribal consultation process revealed potential concerns associated with the development of the Proposed Project, it is important to recognize that the Proposed Project site has been extensively disturbed in connection with historical use of the site for utility and infrastructure purposes and prior recreational use of the site. This included the construction (and ultimately removal) of Ventana Power facilities, Civilian Conservation Corps improvements (and removal of

[7] A traditional cultural property is defined “as one that is eligible for inclusion in the National Register [of Historic Places] because of its association 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 continuing cultural identity of the community.” U.S. Department of Interior, National Park Service, Bulletin 38 (1992), Guidelines for Evaluating and Documenting Traditional Cultural Properties.

[8] At the time formal consultation occurred, State Parks was considering a larger project (i.e., 18 rustic cabins on-site). It should be noted that State Parks substantially modified Proposed Project to address potential biological and cultural resource related concerns. This entailed State Parks substantially reducing the scale of the Project. The reduced scale of the Project also addressed some of the concerns articulated by Native American representatives by minimizing the project footprint, concentrating new facilities in areas that were previously disturbed in connection with prior/historical use of the site, and reducing the extent of vegetation removal (i.e., trees) that are part of the broader cultural landscape.

some Ventana facilities by the Civilian Conservation Corps), and substantial recreational improvements (e.g., concrete-lined pool with associated beaches, day-use facilities, etc.). Additionally, the site was also disturbed when the site was capped with debris flow from the Molera fire in 1972 following the destruction of the concrete pool and related improvements. Given the historic site disturbance associated with prior use, it is unlikely that the Proposed Project would affect an unknown or previously unidentified tribal cultural resource.

While the site has been extensively disturbed and modified over the course of the last century, the Native American representatives offered several recommendations to ensure that potential impacts associated with the Proposed Project would be minimized. These recommendations included incorporating interpretative elements as part of the Proposed Project that speak to the cultural significance of PBSSP as a TCP, requiring tribal monitors during construction, and working with State Parks to develop a MOU or a MOA concerning future use of PBSSP for ceremonial and traditional practices. State Parks takes these concerns seriously and is committed to working with the Native American community to ensure that these concerns are incorporated into the Project, to the extent appropriate, and more broadly as part of on-going PBSSP operation.

As identified in Section 1.4, the Proposed Project includes interpretive elements, and State Parks is committed to working with Native American representatives to incorporate interpretative elements that speak to the significance of PBSSP as a TCP as part of the Proposed Project. Similarly, State Parks is also committed to working with tribal representatives to develop a MOU or MOA to ensure on-going access and use of PBSSP for ceremonial and traditional tribal practices. State Parks intends to work directly with Native American representatives to develop a MOU or MOA to allow continued use of PBSSP for ceremonial and traditional practices. Because the MOU or MOA is not specifically related to the Proposed Project and would apply to the entire PBSSP, State Parks believes that it is appropriate to pursue these discussions separately from the Proposed Project. Finally, State Parks has identified **Mitigation Measure 4.4-3** below to ensure that a tribal monitor will be present during ground-disturbing activities. The incorporation of this mitigation measure and the interpretative elements associated with the Proposed Project combined with the efforts undertaken by State Parks to modify and redesign the Project for resource protection purposes ensure that potential impacts would be less than significant.

Mitigation

4.4-3. To minimize potential impacts to previously unknown or subsurface tribal cultural resources, Native American tribes shall be notified prior to ground-disturbing activities and shall be allowed to monitor all such activities. All work shall stop if a tribal cultural resource is discovered during construction. The Native American monitor will evaluate the resource to determine whether the finding is significant. If the finding is a historical resource or unique tribal cultural resource, avoidance measures or appropriate mitigation shall be implemented. Work will cease in the immediate vicinity of the find until mitigation can be implemented. In accordance with CEQA Guidelines Section 15064.5(f), work may continue in other parts of the project site during the implementation of potential resource mitigation (if necessary). State Parks will be responsible for reviewing and approving the

mitigation plan in consultation with the Native American monitor prior to the resumption of ground-disturbing activities.

d*ii*) *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 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 Section5024.1, the lead agency shall consider the significance of the resource to a California Native America Tribe.*

As described under Response 4.4.5(d)(i), above, the NAHC review of their Sacred Lands Files did not yield any results for the project site, and the potential for discovery of tribal cultural resources within the project site is likely low due to prior site disturbance. Although unlikely, it is possible that unrecorded tribal cultural resources are present beneath the ground surface and that such resources could be exposed and damaged during construction of the Project. Furthermore, Native American representatives requested to monitor any ground disturbance associated with the Project. This is a potentially significant impact that would be reduced to a less than significant level with the implementation of **Mitigation Measure 4.4-3**.

4.5 ENERGY

4.5.1 INTRODUCTION

This section addresses the Project's effect on energy use and evaluates the potential for wasteful, inefficient, or unnecessary consumption of energy from the Project.

4.5.2 ENVIRONMENTAL SETTING

Pacific Gas and Electric ("PG&E") provides electricity and natural gas to PBSSP. Beginning in 2018, all PG&E customers within Monterey, San Benito, and Santa Cruz Counties were automatically enrolled in Central Coast Community Energy ("3CE"). 3CE is a locally controlled public agency providing carbon-free electricity to residents and businesses. 3CE is a joint powers authority, and based on a local energy model called community choice energy. 3CE partners with PG&E, which continues to provide billing, power transmission and distribution, customer service, grid maintenance services, and natural gas services to Monterey County.

4.5.3 REGULATORY SETTING

4.5.3.1 State

California Renewable Energy Standards

In 2002, California established its Renewables Portfolio Standard ("RPS") Program, with the goal of increasing the percentage of renewable energy in the State's electricity mix to 20 percent of retail sales by 2010. In 2006, California's 20 percent by 2010 RPS goal was codified under Senate Bill ("SB") 107. Under the provisions of SB 107 (signed into law in 2006), investor-owned utilities were required to generate 20 percent of their retail electricity using qualified renewable energy technologies by the end of 2010. In 2008, Executive Order S-14-08 was signed into law and requires that retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. As described previously, PG&E's (the electricity provider to the Project site) 2015 electricity mix was 30 percent renewable.

In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 for retail sellers and publicly owned utilities requires them to procure 50 percent of the State's electricity from renewable sources by 2030.

California Building Codes

At the State level, the Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three (3) years. Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.

The California Green Building Standards Code ("CalGreen") establishes mandatory green building standards for all buildings in California. The code covers five (5) categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality.

4.5.4 THRESHOLDS OF SIGNIFICANCE

ENERGY Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation? (Source: 1)	☐	☐	■	☐
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (Source: 1)	☐	☐	■	☐

4.5.5 IMPACT ANALYSIS

a) *Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?*

The Proposed Project would not result in a potentially significant environmental effect due to the wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during Project construction or operation. The Project would result in the temporary use of energy during Project construction and operational energy use in connection with the operation of the cabins and associated facilities. Energy use associated with the Project would not constitute an adverse effect under CEQA.

The impacts from construction of the Project would be temporary. Construction would require energy for the procurement and transportation of materials and preparation of the project site (e.g., minor grading, materials hauling). Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these activities. The construction energy use has not been quantified; however, the Project would not cause inefficient, wasteful, or unnecessary consumption of energy because 1) the construction schedule and process is designed to be efficient to avoid excess monetary costs,[9] and 2) energy use required to complete construction would occur over approximately one (1) year and all energy demand associated with construction would be temporary in nature.

The Proposed Project would generate operational energy demand associated with operation of vehicular traffic and on-going use and maintenance of the site. The increase demand in operational energy associated with the on-going use and maintenance of the site would not, however, cause a significant impact due to wasteful, inefficient, or unnecessary consumption or energy, or wasteful use of energy resources. The Proposed Project consists of the operation of nine (9) low-cost cabins to improve coastal access and provide additional camping amenities at PBSSP. Potential energy associated with operation and maintenance of new recreational facilities to improve coastal access does not constitute the wasteful or inefficient use of energy. The Proposed Project is intended to improve coastal access by providing low-cost visitor serving overnight accommodations. The addition of 22 new users would not significantly increase energy use or cause wasteful, inefficient, or unnecessary consumption of energy. Moreover, as noted in **4.14 Transportation and Traffic,** the Proposed Project would not increase operational traffic trips beyond existing levels contemplated under the PBSSP General Plan. As a result, operational energy use associated with vehicular traffic and site operation would not result in the wasteful or inefficient use of energy. This represents a less than significant impact.

[9] For example, equipment and fuel are not typically used wastefully during construction due to the added expenses associated with renting, maintaining, and fueling the equipment.

b) *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

See Response 4.5.5(a) above. The construction and operation of the Proposed Project would have a less than significant impact related to energy usage and efficiency. Thus, the Project would comply with existing state energy standards and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

4.6 GEOLOGY AND SOILS

4.6.1 INTRODUCTION

This section describes the geology, soils, and seismicity conditions in the vicinity of the Project and evaluates the extent to which the Project could expose people or structures to potential seismic, liquefaction, landslide, and expansive soil impacts, and the extent to which the project could result in substantial soil erosion or loss of topsoil. This section is partially based on a geotechnical report prepared for the Project prepared by Sierra Geotech DBVE, Inc. ("Sierra Geotech") in July 2020 (see **Appendix D, Geotechnical Report**). The geotechnical report was prepared to support preliminary site planning and design. As a result, the geotechnical report evaluated an earlier iteration of the Project that anticipated the construction of 12 cabins rather than nine (9), as currently proposed. Nevertheless, the preliminary findings from the geotechnical report are still pertinent to the Project.

4.6.2 ENVIRONMENTAL SETTING

4.6.2.1 Regional Overview

Geologic structure in central California is primarily the result of tectonic events during the past 30 million years. It is widely believed that the numerous faults in this area are due to movements along the boundary between the Pacific and North American tectonic plates. The relative motion between these two tectonic plates is taken up largely along the northwest-trending San Andreas Fault system, which defines the regional boundary between the two plates. Changes in sea level and tectonic uplift resulted in a complicated depositional environment that produced the Monterey Bay region's complex geology. Faulting and folding deformed and displaced the geologic units in the region, and the granitic basement and overlying Tertiary deposits have been juxtaposed along many of the northwest/southeast-trending faults.

PBSSP lies within the Coast Ranges Geomorphic Province, a discontinuous series of northwest-southeast trending mountain ranges, ridges, and intervening valleys characterized by complex folding and faulting. The Park is an irregularly shaped area of about one square mile in the lower valley of the Big Sur River, which rises in the Santa Lucia Mountains and empties into the Pacific Ocean south of Point Sur. The Big Sur River has cut a steep-sided narrow gorge in the higher eastern part of the Park and flows over a gentle grade into the valley below. Repeated uplift in late geologic time has caused the river to leave a series of gravel covered benches or terraces at several levels near its course. Present topography is the result of repeated near-vertical uplift and erosion in late Quaternary time (County, 1986b). The local surficial geology is described as Quaternary alluvium of the Holocene era (less than 11,000 years old).

4.6.2.2 Site Characteristics

Seismicity and Fault Zones

The rugged terrain of the Big Sur coast is in part the result of seismic activity associated with movement of continental plates. The plates intersect at the San Andreas Fault, which parallels the coast some 40 miles inland. The series of faults paralleling the San Andreas account for the orientation of the ridges, valleys, and the shoreline. The two (2) principal faults in the Big Sur coast are the San Gregorio-Palo Colorado Fault and the Sur-Nacimiento Fault, which are both seismically active. The San Gregorio fault zone passes through the site. **Table 6, Regional Faults** lists potentially active faults in the vicinity of the Project. Potential seismic hazards include ground rupture, shaking, and failure.

Table 6
Regional Faults

Fault	Approximate Distance from Project Site	Direction from Project Site
San Gregorio	550 ft	West
Sierra Hill	1000 ft	East
Unnamed	2000 ft	West
Pfeiffer	6000 ft	Northwest
Coast Ridge	2.5 mi	Southeast
San Andreas	40 mi	East

Source: County of Monterey, 2014

Soils

The Natural Resources Conservation Service characterizes soils within the project site as mostly *Fluvents, stony* with some *Xerorthents, dissected* soils (NRCS, 2020). *Fluvents, stony* lands consist of nearly level to strongly sloping stony and cobbly areas on floodplains, in drainage ways, and on alluvial fans. These areas are subject to flooding, deposition, and scouring during high- or medium-intensity storms. Drainage is somewhat excessive, and permeability ranges from moderately rapid to very rapid. Runoff ranges from medium to very slow. The erosion hazard is moderate in some areas because of channeling and deposition (USDA, 1978).

Xerorthents, dissected, are steep to extremely steep soils on bluffs along major rivers, on steep escarpments of fans and terraces, and on the banks of deeply entrenched streams and gullies that have narrow bottoms. These soils consist mostly of unconsolidated or weakly consolidated alluvium that commonly contains pebbles, cobblestones, and stones. Runoff is rapid or very rapid, and the potential for erosion and deposition of soil material is high (USDA, 1978).

4.6.3 REGULATORY SETTING

4.6.3.1 State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate surface faulting's hazard to structures for human occupancy. In accordance with this act, the State Geologist established regulatory zones, called “earthquake fault zones,” around the surface traces of active faults and published maps showing these zones. Within these zones, buildings for human occupancy cannot be constructed across the surface trace of active faults. Because many active faults are complex and consist of more than one branch, each earthquake fault zone extends approximately 200 to 500 feet on either side of the mapped fault trace.

Title 14 of the CCR, Section 3601(e), defines buildings intended for human occupancy as those that would be inhabited for more than 2,000 hours per year. The Project does not cross an Alquist-Priolo Earthquake Fault Zone. Therefore, these provisions of the Act do not apply to the project.

Seismic Hazards Mapping Act

The purpose of the Seismic Hazards Mapping Act of 1990 (PRC Sections 2690–2699.6) is to reduce damage resulting from earthquakes. The Seismic Hazards Mapping Act addresses earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. The state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within mapped Seismic Hazard Zones. Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for sites within Seismic Hazard Zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

California Coastal Act

The California Coastal Act (Public Resources Code, Section 30000 et seq.) requires that new development minimize risks to life and property in areas of high geologic, flood, and fire hazard, assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs (Public Resources Code, Section 30253).

4.6.3.2 Local

Big Sur Coast LUP

The Big Sur Coast LUP restricts development in areas of high geologic hazard. For any development proposed in high hazard areas, an environmental or geotechnical report is required prior to County review of the project. Soils and geologic reports are required for all new land divisions and for the construction of roads and structures, excluding minor structures not occupied

by people, in areas of known or suspected geologic hazards. Areas requiring submission of such reports include the 100-year floodplain, landslide areas and other locations showing evidence of recent ground movement, earthquake fault zones, sites falling within the area of demonstration as provided in the Statewide Interpretive Guidelines for Blufftop Development (as amended February 4, 1981), and any other geologic high hazard area for which a geotechnical report is required.

4.6.4 THRESHOLDS OF SIGNIFICANCE

GEOLOGY AND SOILS Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. (Source: 1, 15, 38)	☐	☐	☐	■
ii) Strong seismic ground shaking? (Source: 1, 11, 12, 13, 14, 38)	☐	☐	■	☐
iii) Seismic-related ground failure, including liquefaction? (Source: 1, 11, 12, 13, 14, 19, 38)	☐	☐	■	☐
iv) Landslides? (Source: 1, 11, 12, 13, 14, 18, 38)	☐	☐	■	☐
b) Result in substantial soil erosion or the loss of topsoil? (Source: 1, 11, 12, 13, 14, 30, 31)	☐	☐	■	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? (Source: 1, 11, 12, 13, 14, 30, 31, 38)	☐	☐	■	☐
d) Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? (Source: 1, 11, 12, 13, 14, 30, 31)	☐	☐	■	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (Source: 1)	☐	☐	☐	■
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Source: 1, 13)	☐	☐	☐	■

4.6.5 IMPACT ANALYSIS

a) *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

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

The project site is not located within an Alquist-Priolo Earthquake Fault Zone. No impact would occur. Potential effects associated with the rupture of known faults are discussed separately below; please refer to Response 4.6.5(a)(ii) for more information.

a*ii) Strong seismic ground shaking?*

The project site is in a seismically active region. The San Gregorio fault zone passes through the site, which is near several active and potentially active faults (see **Table 6, Regional Faults**). Although the risk of ground rupture within the project site is low, a major seismic event could cause severe ground shaking in the area. However, the geotechnical report determined that the project site is suitable for the proposed development from a geotechnical and engineering standpoint. The Project would be constructed in accordance with the recommendations of the geotechnical report, standard engineering and seismic safety design techniques, and applicable Big Sur Coast LUP guidelines, thereby minimizing potential impacts. This represents a less than significant impact.

a*iii) Seismic related ground failure, including liquefaction?*

The County's General Plan maps the project site as an area of high liquefaction susceptibility. Due to the loose soils within the project site, the Project could result in (or be exposed to) potential seismic-related hazards, including liquefaction. However, as described under Response 4.6.5(a)(ii), above, the geotechnical report determined that the project site is suitable for the proposed development from a geotechnical and engineering standpoint. The Project would be constructed in accordance with the recommendations of the geotechnical report, standard engineering and seismic safety design techniques, and applicable Big Sur Coast LUP guidelines, thereby minimizing potential impacts. This represents a less than significant impact.

a*iv) Landslides?*

Landslides are common in Monterey County due to the combination of uplifting mountains, fractured and weak rocks, and periodic intense rainfall along the coast. The level of susceptibility of an area is dependent on the local geologic conditions. The County's General Plan maps the project site as an area of low landslide susceptibility. Furthermore, as described under Response 4.6.5(a)(ii), above, the geotechnical report determined that the project site is suitable for the

proposed development from a geotechnical and engineering standpoint. The Project would be constructed in accordance with the recommendations of the geotechnical report, standard engineering and seismic safety design techniques, and applicable Big Sur Coast LUP guidelines, thereby minimizing potential impacts. This represents a less than significant impact.

b) *Result in substantial soil erosion or the loss of topsoil?*

Soils within the project site have moderate to high erosion potential. Construction of the Project could result in temporary increases in erosion due to grading activities. However, grading would be minor and would be accomplished primarily by hand. All ground-disturbing activities would be subject to erosion control requirements, including re-planting of disturbed areas, watering, and other physical erosion control methods. The Project would implement an Erosion Control Plan and BMPs to minimize temporary increases in erosion during construction. Construction-related erosion would be temporary in nature and would not result in a substantial increase in erosion. This represents a less than significant impact.

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

Soils within the project site have a high liquefaction potential. Lateral spreading may also occur if liquefiable soils are present. As identified previously (see Response 4.6.5(a)(iii)), the Project could result in potential impacts due to liquefaction and landslide-related hazards. However, the geotechnical report determined that the project site is suitable for the proposed development from a geotechnical and engineering standpoint. The Project would be constructed in accordance with the recommendations of the geotechnical report, standard engineering and seismic safety design techniques, and applicable Big Sur Coast LUP guidelines, thereby minimizing potential impacts. This represents a less than significant impact.

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

Due to the high percentage of coarse-grained materials that underlie PBSSP, expansive soils are not considered a potential hazard. This represents a less than significant impact.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The Project would connect to existing PBSSP sewer infrastructure; no septic system is proposed. No impact would occur.

f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Significant paleontological resources are fossils or assemblages of fossils that are unique, unusual, rare, uncommon, and diagnostically or stratigraphically important, as well as those that add to an existing body of knowledge in specific areas, stratigraphically, taxonomically, or regionally. They include fossil remains of large to very small aquatic and terrestrial vertebrates, remains of plants and animals previously not represented in certain portions of the stratigraphy, and assemblages of fossils that might aid stratigraphic correlations—particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, paleoclimatology, and the relationships of aquatic and terrestrial species. Most of the fossils found in Monterey County are of marine life forms and form a record of the region's geologic history of advancing and retreating sea levels. A review of nearly 700 known fossil localities within the County was conducted by paleontologists in 2001; 12 fossil sites were identified as having outstanding scientific value. The project site is not located on or near any of those sites. No impact would occur.

4.7 GREENHOUSE GAS EMISSIONS

4.7.1 INTRODUCTION

This section describes greenhouse gas emissions conditions globally and evaluates potential effects of the Project on cumulative GHG emissions.

4.7.2 ENVIRONMENTAL SETTING

Various gases in the earth's atmosphere, classified as atmospheric greenhouse gases ("GHGs"), play a critical role in determining the earth's surface temperature. Solar radiation enters the atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is retained, resulting in a warming of the atmosphere.

This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect, or climate change, are carbon dioxide ("CO_2"), methane ("CH_4"), ozone ("O_3"), water vapor, nitrous oxide ("N_2O"), and chlorofluorocarbons ("CFCs"). Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for enhancing the greenhouse effect. Climate change is a cumulative effect from local, regional, and global GHG emission contributions. According to the EPA on a Global scale, CARB on a state

scale, and BAAQMD on a County scale, the transportation sector is the largest emitter of GHG emissions, followed by electricity generation and the industrial sector.[10] [11] [12]

4.7.3 REGULATORY SETTING

4.7.3.1 Federal

The Federal Clean Air Act ("CAA"), first passed in 1970, is the overarching federal-level law that, as of 2007 via the U.S. Supreme court decision in Massachusetts v. EPA, enables the U.S. EPA to provide regulations of key GHG emissions sources (mobile emissions), established a mandatory emissions reporting program for large stationary emitters, and implementation of vehicle fuel efficiency standards.

4.7.3.2 State

Assembly Bill 32 – California Global Warming Solutions Act

AB 32, the Global Warming Solutions Act of 2006, codifies the State of California's GHG emissions target by directing CARB to reduce the state's global warming emissions to 1990 levels by 2020. AB 32 was signed and passed into law by Governor Schwarzenegger on September 27, 2006. Since that time, the CARB, the California Energy Commission ("CEC"), the California Public Utilities Commission ("CPUC"), and the Building Standards Commission have all been developing regulations that will help meet the goals of AB 32 and Executive Order S-3-05.[13]

A Scoping Plan for AB 32 was adopted by CARB in December 2008. It contains the State of California's main strategies to reduce GHGs from business as usual ("BAU") emissions projected in 2020 back down to 1990 levels. BAU is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures. The Scoping Plan has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. It required CARB and other state agencies to develop and adopt regulations and other initiatives reducing GHGs by 2012.

As directed by AB 32, CARB has also approved a statewide GHG emissions limit. On December 6, 2007, CARB staff resolved an amount of 427 MMT of CO_2e as the total statewide GHG 1990 emissions level and 2020 emissions limit. The limit is a cumulative statewide limit, not a sector-or facility-specific limit. CARB updated the future 2020 BAU annual emissions forecast, in light of the economic downturn, to 545 MMT of CO_2e. Two (2) GHG emissions reduction measures currently enacted that were not previously included in the 2008 Scoping Plan baseline inventory were included, further reducing the baseline inventory to 507 MMT of CO_2e. Thus, an estimated

[10] EPA, https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks
[11] CARB, https://ww2.arb.ca.gov/ghg-inventory-data
[12] BAAQMD, https://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/Emission%20Inventory/BY2011_GHGSummary.ashx?la=en&la=en
[13] Note that AB 197 was adopted in September 2016 to provide more legislative oversight of CARB.

reduction of 80 MMT of CO_2e is necessary to reduce statewide emissions to meet the AB 32 target by 2020.

CARB prepared an updated Scoping Plan which was released in 2017. The 2017 Scoping Plan identifies ways for California to reach the statewide 2030 climate target and next steps for reaching the 2050 target goal.

Senate Bill 1368

SB 1368 is the companion bill of AB 32 and was signed by Governor Schwarzenegger in September 2006. SB 1368 required the CPUC to establish a greenhouse gas emission performance standard. Therefore, on January 25, 2007, the CPUC adopted an interim GHG Emissions Performance Standard in an effort to help mitigate climate change. The Emissions Performance Standard is a facility-based emissions standard requiring that all new long-term commitments for baseload generation to serve California consumers be with power plants that have emissions no greater than a combined cycle gas turbine plant. That level is established at 1,100 pounds of CO_2 per megawatt-hour. "New long-term commitment" refers to new plant investments (new construction), new or renewal contracts with a term of five (5) years or more, or major investments by the utility in its existing baseload power plants. In addition, the CEC established a similar standard for local publicly owned utilities that cannot exceed the greenhouse gas emission rate from a baseload combined-cycle natural gas fired plant. On July 29, 2007, the Office of Administrative Law disapproved the CEC's proposed Greenhouse Gases Emission Performance Standard rulemaking action and subsequently, the CEC revised the proposed regulations. SB 1368 further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the CPUC and CEC.

Senate Bill 350 – Clean Energy and Pollution Reduction Act

In September 2015, the California Legislature passed SB 350 (de Leon 2015), which increases the State's RPS for content of electrical generation from the 33 percent target for 2020 to a 50 percent renewables target by 2030.

Executive Order S-03-05

On June 1, 2005 Governor Schwarzenegger signed Executive Order S-03-05, the purpose of which was to implement requirements for the California Environmental Protection Agency ("CalEPA") to provide ongoing reporting on a biennial basis to the State Legislature and Governor's Office on how global warming is affecting the State. Required areas of impact reporting include public health, water supply, agriculture, coastline, and forestry. The CalEPA secretary is required to prepare and report on ongoing and upcoming mitigation designed to counteract these impacts.

Executive Order B-30-15

On April 15, 2015 Governor Brown signed Executive Order B-30-15, the purpose of which is to establish a GHG reduction of 40 percent below 1990 levels by 2030. The Executive Order is intended to help the State work towards a further emissions reduction target of 80 percent below 1990 levels by the year 2050. The order directed state agencies to prepare for climate change impacts through prioritization of adaptation actions to reduce GHG emissions, preparation for

uncertain climate impacts through implementation of flexible approaches, protection of vulnerable populations, and prioritization of natural infrastructure approaches.

Executive Order B-55-18 and SB 100 – 100 Percent Clean Energy Act of 2018

On September 10, 2018 Governor Brown signed both SB 100 – 100 Percent Clean Energy Act of 2018 and Executive Order B-55-18 to Achieve Carbon Neutrality. SB 100 sets California on course to achieving carbon-free emissions from the electric power production sector by 2045. SB100 also increases the required emissions reduction generated by retail sales to 60% by 2030, an increase in 10% compared to previous goals. B-55-18 establishes a new goal of achieving statewide "carbon neutrality as early as possible and no later than 2045, and to achieve and maintain net negative emissions thereafter".

California Building Code

The CBC contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The CBC is adopted every three years by the BSC. In the interim, the BSC also adopts annual updates to make necessary mid-term corrections. The CBC standards apply statewide; however, a local jurisdiction may amend a CBC standard if it makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

4.7.4 THRESHOLDS OF SIGNIFICANCE

	GREENHOUSE GAS EMISSIONS Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (Source: 1, 2, 35)	☐	☐	■	☐
b)	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (Source: 1, 2, 35)	☐	☐	■	☐

4.7.5 IMPACT ANALYSIS

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

The Project is in the NCCAB, where air quality is regulated by MBARD. MBARD determined that if a project emits less than 10,000 metric tons of CO_2e ("$MTCO_2e$") per year, its GHG emissions impact would be less than significant. This calculation is made by combining the estimated greenhouse gas emissions generated by construction, amortized over a 30-year period, with the estimated annual GHG emissions resulting from operation of the project. The Project would generate temporary construction related GHG emissions; however, potential effects from GHG generation during construction would be short-term and temporary. Estimated GHG emissions

associated with construction of the Project were generated using CalEEMod (**Appendix A, CalEEMod Results**) and are summarized in **Table 7, Construction GHG Emissions**. As depicted, construction of the Project would generate approximately 2.83 $MTCO_2e$ per year, amortized over 30 years. There would also be a small amount of GHG emissions from waste generated during construction; however, this amount is speculative. Construction-generated emissions would vary depending on the final construction schedules, equipment required, and activities conducted.

Table 7
Construction GHG Emissions

Construction Activity	Annual Emissions ($MTCO_2e$/Year)
Site Preparation	9.14
Grading	12.01
Construction	63.72
TOTAL	**84.87**

Operational GHG emissions for the Project were generated using CalEEMod (**Appendix A, CalEEMod Results**) and are summarized in **Table 8, Operational GHG Emissions**. As depicted, operation of the Project would generate approximately 127.54 $MTCO_2e$ per year. Mobile sources are projected to account for roughly 34 percent of total operational GHG emissions. As noted elsewhere in this IS/MND, operational traffic associated with the Proposed Project, however, represent replacement trips associated with the removal of approximately 19 existing campsites that State Parks removed for resource protection purposes. Traffic trips associated with the Proposed Project would not exceed existing levels contemplated under the PBSSP General Plan. Therefore, the Proposed Project would not increase operational emissions beyond existing levels associated with operation of PBSSP. Actual operational emissions would, therefore, be less than identified in **Table 8, Operational GHG Emissions.** Operational emissions would be primarily associated with energy use, water use, and waste generation. While the Proposed Project would not increase traffic beyond existing levels contemplated under the PBSSP General Plan and associated EIR, this IS/MND nevertheless includes anticipated mobile emissions since GHG emissions were not a topical issue area considered at the time State Parks prepared the PBSSP General Plan and EIR. Project-generated GHG emissions are projected to decrease in future years due largely to improvements in vehicle emissions.

Table 8
Operational GHG Emissions

Source	Annual Emissions ($MTCO_2e$/Year)
Energy Use	81.22
Mobile	43.17
Waste	2.45
Water	0.70
TOTAL	**127.54**

NOTE: The information contained in **Table 8** relies on the output data from CalEEMod (see **Appendix A, CalEEMod Results**) to determine construction and operational emissions associated with the Proposed Project. CalEEMod does not have a specific preset for cabins or campsites. The closest comparable use (i.e., overnight accommodations) is the "Motel" preset. This preset likely overstates the potential operational emissions due to the Proposed Project given that cabins have a much lower energy use compared to a motel; therefore, it is assumed that operational GHG emissions would be less than depicted in **Table 8.**

The Project would not exceed MBARD's significance metric of 10,000 $MTCO_2e$/year. This represents a less than significant impact.

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

As described above, the Project is not expected to generate GHG emissions that would exceed applicable thresholds. Therefore, the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases as described above. This represents a less than significant impact.

4.8 HAZARDS AND HAZARDOUS MATERIALS

4.8.1 INTRODUCTION

This section assesses the potential public health and safety impacts of the Project. **Sections 4.6 Geology and Soils, 4.9 Hydrology and Water Quality,** and **4.16 Wildfire** address potential geologic, flooding, and wildfire hazards.

4.8.2 ENVIRONMENTAL SETTING

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. Hazardous materials and waste can result in public health hazards if improperly handled, released into the soil or groundwater, or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer.

The California Department of Toxic Substances Control's ("DTSC") EnviroStor database, an online data management system for tracking DTSC's cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known or suspected contamination issues, does not identify any contaminated sites within the vicinity of PBSSP. No hazardous materials are stored within the project site.

4.8.3 REGULATORY SETTING

4.8.3.1 Federal

The EPA is responsible for enforcing regulations at the federal level pertaining to hazardous materials and wastes. The primary federal hazardous materials and wastes laws are contained in the Resources Conservation and Recovery Act ("RCRA") of 1976 and in the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") of 1980. CERCLA, more commonly known as Superfund, established the National Priorities List for identifying and obtaining funding for remediation of severely contaminated sites. Federal regulations pertaining

to hazardous materials and wastes are contained in the Code of Federal Regulations (40 CFR). The regulations contain specific guidelines for determining whether a waste is hazardous, based on either the source of generation or the characteristics of the waste.

Transportation of hazardous materials by truck and rail is regulated by the U.S. Department of Transportation ("DOT"). DOT regulations establish criteria for safe handling procedures. Federal safety standards are also included in the California Administrative Code.

4.8.3.2 State

The EPA has delegated much of its regulatory authority to individual states whenever adequate state regulatory programs exist. The Department of Toxic Substance Control Division of CAL EPA is the agency empowered to enforce federal hazardous materials and waste regulations in California, in conjunction with the EPA.

California hazardous materials and waste laws incorporate federal standards, but in many respects, are stricter. For example, the California Hazardous Waste Control Law, the state equivalent of RCRA, contains a much broader definition of hazardous materials and waste. State hazardous materials and waste laws are contained in the California Code of Regulations, Titles 22 and 26. Regulations implementing the California Hazardous Waste Control Law list hazardous chemicals; establish criteria for identifying, packaging, and labeling hazardous wastes; prescribe management of hazardous wastes; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in landfills.

4.8.4 THRESHOLDS OF SIGNIFICANCE

	HAZARDS AND HAZARDOUS MATERIALS Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Source:1, 20)	☐	☐	■	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (Source: 1, 20)	☐	☐	■	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (Source: 1, 20, 23)	☐	☐	☐	■
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (Source: 1, 20)	☐	☐	☐	■

	HAZARDS AND HAZARDOUS MATERIALS Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? (Source: 1, 13, 14)	☐	☐	☐	■
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Source: 1, 13, 14)	☐	☐	■	☐
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (Source: 1, 6)	☐	☐	■	☐

4.8.5 IMPACT ANALYSIS

a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Construction and operation of the Project would not involve the routine transport, use, or disposal of hazardous materials. Construction activities would require the temporary use of hazardous substances, such as fuel for construction equipment. These impacts would be temporary in nature and are addressed below (see Response 4.7.5(b)). Minor hazardous materials may also be used during Project operation (i.e., cleaning and maintenance materials). Minor hazardous materials used during construction and operation would not constitute a significant hazard to the public due to the routine transport, use, or disposal of hazardous materials. Additionally, any handling of potential hazardous materials would be required to comply with all existing laws pertaining to the transport, use, and disposal of hazardous materials. This represents a less than significant impact.

b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Construction and operation of the Project would require minor use of hazardous materials (e.g., fuel, cleaning materials, etc.). Operation of the Project could also generate surface runoff that may contain urban pollutants from vehicles, including oil, grease, and heavy metals. Hazardous materials would be handled and stored in compliance with all local, state, and federal regulations pertaining to hazardous materials. In addition, State Parks would implement standard BMPs and erosion control measures (e.g., minimize grading, re-vegetate disturbed areas, etc.) that would minimize potential impacts associated with the Project. Pedestrian pathways would consist of semi-permeable aggregate and would be designed to drain to adjacent landscaping, where runoff

would be retained and infiltrated to minimize impacts from the release of urban pollutants. However, the Project could result in the exposure of persons and/or the environment, including the Big Sur River, to an adverse environmental impact due to the accidental release of a hazardous material.

To ensure that potential impacts due to accidental release of a hazardous material are minimized, State Parks would prepare a Spill Prevention and Control Plan ("SPCP") prior to the start of construction. The SPCP would identify applicable safety and clean-up procedures in the event of a spill, designate construction staging areas where hazardous materials may be stored, identify applicable emergency notification procedures, identify locations where spill kits will be maintained during construction, and identify dedicated storage areas where material may be stored. In addition, the final design and reconfiguration of the existing parking lot will also include methods to ensure that the incidental release of contaminants from vehicles do not adversely affect the environment. Applicable methods may include the installation of filtering media, as well as on-going maintenance activities as part of existing park operations. The implementation of these measures, as well as on-going maintenance activities conducted by State Parks as part of existing operations, would ensure that impacts would be less than significant.

c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

There are no schools within one-quarter mile of the project site. No impact would occur.

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

The Project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impact would occur.

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

The Project is not located within an airport land use plan or within two miles of an airport. No impact would occur.

f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Construction and operation of the Project would not interfere with an adopted emergency response plan or emergency evacuation plan. The project site is not part of vehicle transportation network used by emergency vehicles. The introduction of new users within PBSSP could result in new hazards requiring police and fire protection. However, emergency service providers

currently serve 189 campsites, one (1) cabin, and numerous day-use areas within the Park. The addition of nine (9) new cabins could be accommodated by existing service providers and would not significantly impact service ratios, response times, and other performance objectives, and would not substantially impair an adopted emergency response plan or emergency evacuation plan. See **Sections 4.12 Public Services** and **4.16 Wildfire** for additional discussion. This represents a less than significant impact.

g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

The Project could exacerbate fire risks and thereby expose people and/or structures to potential wildland fire hazards. Potential fire hazards during construction could occur in connection with the operation of equipment and other activities, which could cause sparks or other sources of ignition in dry areas. This is a temporary construction impact. Project operation could also result in potential fire hazards due to the use of campfires. Unregulated or unattended campfires could expose people and/or structures to wildland fire hazards. Fire hydrants would be installed within a 150-feet radius of all cabins and would be utilized in the event of a fire. In addition, the Project would comply with the applicable fire safety provisions of the California Building Code, thereby reducing the risk of damage from fire to the maximum extent practicable. See **Section 4.16 Wildfire** for additional discussion. This represents a less than significant impact.

4.9 HYDROLOGY AND WATER QUALITY

4.9.1 INTRODUCTION

This section describes the hydrology, water quality, and drainage setting for the Project and identifies potential Project impacts on these resources and mitigation to reduce such impacts.

4.9.2 ENVIRONMENTAL SETTING

4.9.2.1 Surface Water Resources

PBSSP is located within the Big Sur Watershed in the Lower Big Sur River Basin. The Big Sur River enters its lower basin through the Big Sur Gorge at the eastern boundary of the Park and thereafter flows in a northerly direction through the Big Sur Valley and to its mouth in Andrew Molera State Park. The area has a moderate, Mediterranean-type climate with an average annual precipitation of 43 inches, most of which falls between November and April (County, 1986b). The Big Sur River flows through PBSSP. Major tributaries to the river include Pfeiffer-Redwood Creek, Juan Higuera Creek, and Pheneger Creek.

4.9.2.2 Groundwater Resources

Water resources in the Lower Big Sur River Basin include individual and small community water systems at numerous points along the Big Sur River valley floor and tributary streams. These water systems serve residences and employee housing in the Big Sur Valley and restaurants,

motels, stores along SR 1, and campgrounds along the Big Sur River. The largest single water system serves PBSSP. Four (4) mutual water companies transport and supply water out of the Lower Big Sur River Basin to supply properties on the west slope of Pfeiffer Ridge. Most isolated homesites in the Big Sur Valley have their own wells or springs (County, 1986b).

4.9.2.3 Drainage

The project site is approximately 130 feet west of the Big Sur River. Approximately one-fourth of the site is paved and constitutes an impervious surface; the rest of the site is vegetated. The project site is relatively flat; elevations range from 228 feet to 235 feet above sea level. Stormwater generally drains east to west, with runoff flowing from paved areas into vegetated areas and eventually into the Big Sur River.

4.9.2.4 Flooding

As noted above, the Proposed Project is approximately 130 feet west of the Big Sur River. According to State Parks, PBSSP is subject to riverine flooding from the Big Sur River (State Parks, 2004). As a result, the Proposed Project could be exposed to potential flooding-related hazards during the Project's design lifetime. In 2004, State Parks prepared a floodplain analysis in connection with planned infrastructure improvements at PBSSP. The purpose of the 2004 analysis was to determine the severity of potential flood hazards at PBSSP and develop flood risk data for various locations within the Park to promote floodplain management. As part of that analysis, State Parks determined the extent of the 1%-annual-chance floodplain based on a combination of detailed methods using topographical data from 2001 and approximate methods relying on survey data collected by State Parks in 1955. Based on the results of the 2004 floodplain analysis, State Parks determined that the Proposed Project is outside of the 100-year floodplain.[14]

4.9.3 REGULATORY SETTING

4.9.3.1 Federal

Federal Clean Water Act

The Federal Clean Water Act (33 USC 1251-1376) regulates discharges into U.S. waters through an NPDES permit, administered through the SWRCB and the RWQCB. The State and Central Coast RWQCB oversee a statewide General Permit regarding management of stormwater runoff from construction sites over one (1) acre in size. The Central Coast RWQCB has authority to use

[14] While State Parks' 2004 floodplain analysis indicates that the Proposed Project site is outside of the 100-year floodplain, it is important to acknowledge that the site is within the 100-year flood hazard zone according to the Federal Emergency Management Agency ("FEMA"). Specifically, FEMA maps the site as "Zone A" on its flood insurance maps. Zone A areas are subject to inundation by the 1-percent-annual-chance flood event. FEMA's flood insurance maps are generally developed using approximate methodologies, which are less detailed and do not have the same level of accuracy as surveys relying on detailed methods. State Parks previously submitted the 2004 analysis to FEMA as part of a Conditional Letter of Map Revision ("CLOMR"), but it appears that FEMA did not act on the CLOMR request for unknown reasons. As a result, State Parks intends to submit a new CLOMR to change the flood zone designation through FEMA's Letter of Map Revision process.

planning, permitting, and enforcement to protect beneficial uses of water resources in the region. The Central Coast RWQCB uses its adopted Water Quality Control Plan for the Central Coast Region (2019), referred to as the Basin Plan, to implement policies and provisions for water quality management in the region. The Basin Plan identifies beneficial uses of major surface waters and their tributaries, in addition to water quality objectives and implementation plans to protect these beneficial uses.

The 1987 Amendments to the Federal Clean Water Act require that stormwater discharges to waters of the U.S. be regulated under the NPDES. The SWRCB issued a draft statewide General Permit in July 2010. The Central Coast RWQCB oversees the statewide General Permit regarding management of stormwater runoff from construction sites over one (1) acre in size. Provisions of the statewide General Permit indicate that discharges of material other than stormwater into waters of the U.S. are prohibited; stormwater discharges shall not cause or threaten to cause pollution, contamination, or nuisance; and that stormwater discharges not contain hazardous substances. The statewide General Permit also requires the implementation of BMPs to achieve compliance with water quality standards. A BMP is defined as any program, technology, process, siting criteria, operating method, measure, or device that controls, prevents, removes, or reduces discharge of pollutants into bodies of water. Any project that will disturb over one (1) acre (including the Project) is required to file a "Notice of Intent" with the RWQCB with submittal of a SWPPP prior to Project construction.

4.9.3.2 State

Porter-Cologne Water Quality Act

The basis for water quality regulation in California is the Porter-Cologne Water Quality Control Act (California Water Code, Section 13000 et seq.). This Act requires a “Report of Waste Discharge” for any discharge (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of the state’s surface or groundwater. The local Regional Water Quality Control Board, specifically the Central Coast, issues waste discharge requirements to minimize the effect of the discharges. The Regional Water Quality Control Board uses the Basin Plan (1994) to implement policies and provisions for water quality management in the region.

4.9.3.3 Local

Big Sur Coast LUP

The Big Sur Coast LUP provides policies regarding hydrology and drainage issues. The LUP prohibits new development, including filling, grading, and construction within 100-year floodplains except as needed for outdoor recreation, wildlife habitat, agriculture, and similar low-intensity open space uses, as well as bridges, water resource developments requiring a streamside location, restoration activities, and flood control projects where no other method for protecting existing structures in the floodplain is feasible and such protection is necessary for public safety or to protect existing development. New permanent structures are not permitted in the 100-year floodplain; however, the Big Sur Coast LUP recognizes campgrounds or other similar outdoor recreational uses as the most appropriate uses for these areas.

Big Sur River Protected Waterway Management Plan

The County prepared the Big Sur River Protected Waterway Management Plan ("Waterway Management Plan") in 1986 as a supplement to the Big Sur Coast LUP. The Waterway Management Plan contains numerous requirements for public and private entities with property adjacent to the river or within its watershed. Specifically, it identifies standards concerning water rights, optimization of water yields within the watershed, leach field locations, and distances of trails and campsites from the edge of the Big Sur River. It also mandates clearing debris from the river channel, which could impede water passage during high water periods and the restriction of incompatible development in the floodplain. The Waterway Management Plan calls for restoration of native vegetation along the riverbank for ecological and visual reasons and for the use of prescribed burns to reduce fuel loads.

Monterey County Code Chapter 16.16

Chapter 16.16 of the Monterey County Code identifies rules and regulations to control development within the floodplain. Chapter 16.16 is intended to promote public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. Chapter 16.16 consists of regulations to: 1) restrict and/or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; 2) require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; 3) control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters; 4) control filling, grading, dredging, and other development which may increase flood damage; and 5) prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

4.9.4 THRESHOLDS OF SIGNIFICANCE

HYDROLOGY AND WATER QUALITY Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? (Source: 1, 36, 39)	☐	☐	■	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (Source1, 36, 39)	☐	☐	■	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (Source: 1, 36, 39)	☐	☐	■	☐
i) Result in substantial erosion or siltation on- or off-site;	☐	☐	■	☐

HYDROLOGY AND WATER QUALITY Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	■	☐
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	■	☐
iv) Impede or redirect flood flows?	☐	☐	■	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (Source: 1, 36, 39)	☐	☐	■	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (Source: 1, 36, 39)	☐	☐	☐	■

4.9.5 IMPACT ANALYSIS

a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

The Proposed Project is approximately 130 feet east of the Big Sur River. As a result, construction of the Project could result in temporary water quality impacts due to ground-disturbing activities (e.g., grading) and the use of hazardous materials (e.g., diesel fuel, gasoline, lubricants, oils, hydraulic fluids, etc.). Operation of the proposed cabins and associated facilities could also result in potential impacts due to on-going maintenance and increased on-site vehicle use from Park patrons.

Project construction would consist of localized grading and vegetation removal to facilitate the construction of the proposed cabins and related improvements (e.g., comfort station, paths, etc.). These activities could impact water quality due to temporary increases in sedimentation, erosion, hazardous material leakages (see **Section 4.8 Hazards and Hazardous Materials**), and other temporary construction impacts (e.g., debris, construction waste, etc.). Ground-disturbing activities and vegetation removal could increase soil erosion and result in potential water quality effects. These activities would occur primarily during construction and would be temporary in nature. The implementation of construction phase BMPs and erosion control measures would minimize temporary construction phase water quality impacts; see **Section 4.6 Geology and Soils** for more information concerning potential erosion-related impacts.

Project operation could also result in water quality effects due to hazardous material leakages. Potential water quality effects could occur in connection with on-going maintenance activities and the operation of mechanized equipment, as well as increased vehicle access. Maintenance activities could affect water quality due to the handling and use of hazardous materials and use

in facility maintenance (e.g., fuels, oils, etc.). Potential impacts due to maintenance activities would be temporary in nature and would not substantially increase potential water quality impacts. In addition, increased vehicle access and the use of the parking lot could also affect water quality. The implementation of standard construction BMPs would minimize potential impacts. This represents a less than significant impact.

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

The Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin. Temporary water use would occur during project construction in connection with dust suppression activities. Construction water use would be minimal and would not interfere with groundwater recharge. Project operation would use approximately 2,700 GPD of water during peak season. According to State Parks, the existing water distribution system serving the Park has sufficient capacity to accommodate the increased demand associated with the Proposed Project. Moreover, State Parks previously considered potential water supply related effects at the time State Parks prepared the PBSSP General Plan and EIR, which determined that there would be no significant impacts to water supply since the PBSSP General Plan would not increase user capacity. As noted in this IS/MND, the Proposed Project would not increase the overall amount of available camping sites at PBSSP beyond existing levels contemplated in the PBSSP General Plan and associated EIR. As a result, the Proposed Project would not significantly increase groundwater demand such that the Project would substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that existing groundwater resources would be significantly affected. This represents a less than significant impact.

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

c*i*) *Result in substantial erosion or siltation on- or off-site;*

The Project would not substantially alter the site's existing drainage pattern in a manner that would result in substantial erosion or siltation on- or off-site. The Project could cause temporary increases in erosion during construction due to ground-disturbing activities (see Response 4.9.5(a); see also **Section 4.6 Geology and Soils**). Additionally, the Project could result in localized increases in erosion during operation due to the introduction of impervious surfaces on-site. The Project would not, however, alter the course of a stream or river.

The Project would result in temporary ground-disturbing activities. These activities could result in increases in erosion and/or siltation on- or off-site. Ground disturbing activities, including the removal of existing vegetation and grading activities, as well as on-going maintenance, could temporarily increase erosion or siltation. These impacts were previously evaluated above; please

refer to Response 4.9.5(b); please also refer to the analysis contained in **Section 4.6 Geology and Soils**. This represents a less than significant impact.

The Project would include the construction of new impervious surfaces (i.e., cabins and comfort station), which could cause localized increases in erosion on- or off-site in the absence of drainage improvements. The Project includes on-site drainage improvements (i.e., self-retaining areas) to address impacts due to increases in impervious surfaces (see Response 4.9.5(c)(ii)). These improvements would ensure that impacts would be less than significant. In addition, the final design of the Project would be required to comply with the recommendations of a design-level drainage report. This represents a less than significant impact.

c*ii*) *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;*

The Project would result in the construction of improvements that would alter the site's existing drainage pattern through the introduction of impervious surfaces. However, the Project also includes drainage improvements in the form of self-retaining areas, which would be three-inch deep depressions at least twice as large as the contributing impervious surfaces. Runoff from new impervious surfaces would flow to self-retaining areas, which would hold and percolate runoff. Any overflow from self-retaining areas would flow overland and eventually into the Big Sur River. Therefore, the Project would provide adequate drainage to mitigate increases in surface runoff. This represents a less than significant impact.

c*iii*) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*

There are no major stormwater drainage improvements or planned improvements located within the boundaries of the Project site. The Project would not create or contribute runoff that would exceed the capacity of existing or planned drainage system improvements. The Project would include the construction of on-site drainage improvements to accommodate stormwater runoff due to increases in impervious surfaces, as described above (see Response 4.9.5(c)(ii)). In addition, the final design of all drainage improvements would be based on the recommendations of a design-level drainage analysis. Therefore, the Project would provide adequate drainage improvements on-site; this represents a less than significant impact.

Construction and operation of the Project could result in an increase in additional sources of polluted runoff. The Project would result in temporary construction related water quality impacts due to ground-disturbing activities and the use of hazardous materials. These impacts were previously evaluated above; see Response 4.9.5(a) for more information. Please also refer to **Section 4.6 Geology and Soils** and **Section 4.8 Hazards and Hazardous Materials** for further discussion. This represents a less than significant impact, as more thoroughly described above. No mitigation is warranted.

c*iv*) *Impede or redirect flood flows?*

The Proposed Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows.

As noted above, the Big Sur River is approximately 130 feet west of the Proposed Project. While the Big Sur River is adjacent to the site, State Parks specifically designed the Project to ensure that all Project improvements were setback from the Big Sur River to avoid potential direct and indirect environmental effects due to the Project. As a result, the Proposed Project does not entail the alteration of the course of a stream or a river. Accordingly, the Proposed Project would not impede or redirect flood flows due to changes to the site's existing drainage pattern through the alteration of a course of a stream or a river.

While the Proposed Project would not alter the course of a stream or a river, the Proposed Project would introduce approximately 8,665 square feet of impervious surfaces. The introduction of approximately 8,665 square feet of impervious surfaces on an approximately 2.26-acre site would not substantially alter the existing drainage pattern of the site. In addition, State Parks designed the Project to minimize changes to the existing drainage pattern, including designing the Project to minimize vegetation removal to the maximum extent feasible. Similarly, the Proposed Project also includes on-site drainage features to capture stormwater runoff on-site. The Project includes shallow self-retaining areas throughout the site to capture stormwater runoff from impervious surfaces. The extent of changes to the existing drainage pattern of the site are limited given the scale of the Project. As a result, the Proposed Project would not substantially alter the existing drainage pattern of the site.

The introduction of nine (9) rustic cabins, a comfort station, and related improvements would not substantially alter the existing drainage pattern of the site such that the Project would impede or redirect flood flows. The physical extent of these improvements is limited, and proposed site improvements are consistent with other recreational facilities located in the Park. Moreover, if necessary, the proposed cabins can be relocated in anticipation of a major flood event to prevent potential impacts related to impeding or redirecting flood flows. This represents a less than significant impact. No mitigation is warranted.

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

The Project is not located in an area subject to significant seiche or tsunami effects. As a result, the Proposed Project would not result in the risk of release of pollutants due to project inundation from a tsunami or seiche. The Project could, however, risk the release of pollutants due to project inundation in a flood hazard zone.

PBSSP is subject to riverine flooding from the Big Sur River, which is 130 feet west of the Proposed Project (State Parks, 2004). As a result, the Proposed Project could be exposed to

potential flooding-related hazards. Also, the Project is located within the FEMA Flood Zone A. Zone A areas are subject to inundation by the 1-percent-annual-chance flood event. While the Proposed Project is within Flood Zone A according to FEMA's flood insurance maps, State Parks previously conducted a floodplain analysis in 2004 based on more refined topographical survey data. The 2004 floodplain analysis concluded that the Proposed Project site is outside of the 100-year floodplain. State Parks relied on the 2004 floodplain analysis to specifically design the Project to avoid locating new facilities within the 100-year floodplain and to minimize potential flooding-related effects. The more refined floodplain analysis indicated that the Proposed Project site is outside of the FEMA Flood Zone A and is outside of the 100-year floodplain. As noted above, State Parks intends to submit a CLOMR to FEMA to change the flood zone designation through FEMA's Letter of Map Revision process to reflect the results of the 2004 floodplain analysis. While the Proposed Project is currently within Flood Zone A according to current FEMA flood insurance maps, State Parks 2004 floodplain analysis shows that the site is outside of the 100-year floodplain. Therefore, the Proposed Project would not risk the release of pollutants due to project inundation.

State Parks specifically designed the Proposed Project to avoid locating facilities within the 100-year floodplain and thereby minimize potential flooding-related hazards. Additionally, as noted above, State Parks can temporarily relocate the cabins in anticipation of a major flood event, if necessary, as part of on-going Park operations. Moreover, it is also worth noting that while State Parks designed the Proposed Project to be outside of the 100-year floodplain, the Big Sur Coast LUP considers campgrounds and similar outdoor recreational uses to be the most appropriate uses in the 100-year floodplain. This represents a less than significant impact.

e) *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

As discussed above, the Project would not significantly impact surface or groundwater quality, nor would it affect groundwater recharge. Therefore, the Project would not result in significant water quality or groundwater quality impacts that would conflict or obstruct implementation of a water quality control plan or sustainable groundwater management plan. This represents a less than significant impact.

4.10 LAND USE AND PLANNING

4.10.1 INTRODUCTION

The following section analyzes the Project's land use effects, specifically its consistency with applicable plans, including the California Coastal Act, the Big Sur Coast LUP, the PBSSP General Plan, and other relevant planning documents.

4.10.2 ENVIRONMENTAL SETTING

The Project is within PBSSP in unincorporated Monterey County, California. PBSSP and the three-acre project site are within the Coastal Zone. Land uses within PBSSP are designated by

the Big Sur Coast LUP. The project site has historically been used for a variety of purposes, including utility, residential, and, mostly recently, recreational uses. The site is currently open space, although it was extensively developed in connection with prior use. A paved parking lot and paved road connect the site to SR 1 and other camping facilities within PBSSP. The site is generally surrounded by the Big Sur River and SR 1 to the west, campsites and other recreational amenities to the north and south, and open space to the east.

4.10.3 REGULATORY SETTING

4.10.3.1 State

California Coastal Act

As described in **Section 4.1 Aesthetics**, the Coastal Commission, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. Development activities within the coastal zone, which are broadly defined by the Coastal Act to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a CDP from either the Coastal Commission or the local government if a LCP has been certified. Here, a CDP is required from the County of Monterey. A brief description the Big Sur Coast Land Use Plan is provided below.

4.10.3.2 Local

Big Sur Coast LUP

The project site lies within the coastal zone and is regulated by the Big Sur Coast LUP, which is the certified LCP for the region. The Big Sur Coast LUP identifies the land use category of the project site as *Outdoor Recreation*. This land use category primarily supports low-intensity recreational and educational uses that are compatible with the natural resources of the area and require minimum development to serve basic user needs. Such uses include trails, picnic areas, walk-in camping, tent camping, and supporting facilities. Minimal necessary housing and maintenance facilities and moderate-intensity recreational uses (e.g., tent platforms, cabins, RV campgrounds, parks, stables, bicycle paths, improved restrooms, and interpretive centers) are allowed as secondary and conditional uses.

The overall philosophy of the Big Sur Coast LUP is to maintain the scenic beauty, rural character, and cultural traditions of the Big Sur Coast. Basic objectives of the LCP affecting PBSSP include:

- Ensuring preservation of resources,
- Prohibiting development visible from SR 1,
- Retaining SR 1 as a scenic, two-lane road primarily serving recreational traffic,
- Placing the preservation of natural scenery above the need for development, and
- Providing housing for employees of local private businesses and government agencies.

Big Sur River Protected Waterway Management Plan

As described in **Section 4.9 Hydrology and Water Quality**, the Waterway Management Plan contains numerous requirements for public and private entities with property adjacent to the river or within its watershed. Specifically, it identifies standards concerning water rights, optimization of water yields within the watershed, leach field locations, and distances of trails and campsites from the edge of the Big Sur River. It also mandates clearing debris from the river channel, which could impede water passage during high water periods and the restriction of incompatible development in the floodplain. The Waterway Management Plan calls for restoration of native vegetation along the riverbank for ecological and visual reasons and for the use of prescribed burns to reduce fuel loads.

PBSSP General Plan

State Parks prepared the PBSSP General Plan in 1999 to protect and preserve the quintessential essence of California 's Big Sur coast, including one of the most southerly and accessible groves of coast redwoods, its Big Sur River riparian corridor, and the Park's historic CCC-era facilities, while also providing opportunities for the visiting public to fully involve themselves in the recreational, interpretive and inspirational enlighten-ment and enjoyment of the Park's natural, cultural and scenic features. The General Plan identifies the following primary land uses within the Park: visitor day use, visitor overnight, concession operations, park operations, and open space.

4.10.4 THRESHOLDS OF SIGNIFICANCE

LAND USE AND PLANNING Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community? (Source: 1, 7, 11, 12)	☐	☐	☐	■
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? (Source: 1, 7, 11, 12)	☐	☐	■	☐

4.10.5 IMPACT ANALYSIS

a) *Physically divide an established community?*

The division or disruption of an established community would occur if a project creates a physical barrier that separates, isolates, or divides portions of a built community. The physical division of a community is traditionally associated with the construction of large-scale transportation improvements such as a highway or the creation of a large university campus. The Proposed Project is located entirely within PBSSP and would increase the overall scale of development within the Park compared to existing, pre-project, conditions, but would not create a barrier that would divide an established community. The Project would be consistent with adjacent uses within

the Park and with the uses identified in the Big Sur Coast LUP and the PBSSP General Plan. No impact would occur.

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

The Proposed Project would not conflict with any applicable land use plan, policy, or regulation adopted for the purposes of avoiding and/or mitigating an adverse environmental effect. The Project would result in the construction and operation of a new camping facilities and associated facilities within the PBSSP; however, the PBSSP General Plan anticipated future recreational development within the Park, including camping facilities. Consistent with the Big Sur Coast LUP's and the PBSSP General Plan's goal to restore and preserve riparian and redwood areas and to preserve appropriate uses of CCC-era structures, State Parks designed the project to avoid riparian habitat, redwood groves, and CCC-era resources to the greatest extent feasible (see **Sections 4.3 Biological Resources** and **4.4 Cultural and Tribal Resources** for additional discussion). In accordance with the Waterway Management Plan, which allows for campsites to be as close as 25 feet to a stream or river with implementation of sensitive habitat protection, the Project would also install resource protection fencing around the outer perimeter of the campsite to prevent pedestrian trespass into adjacent riparian habitat.

The Project would be consistent with the goals and objectives of the PBSSP General Plan and the Coastal Act by providing new low-cost coastal camping facilities within an area which was historically used for recreational purposes. As noted previously, State Parks considered alternative designs, including an alternative site location. State Parks selected that project site to avoid potential resource related effects (i.e., cultural) associated with an alternative site location. Additionally, State Parks also modified the Proposed Project to minimize the project footprint and avoid and/or minimize potential resource related effects. In addition, State Parks has also eliminated several existing campsites within PBSSP for resource protection purposes as part of on-going Park management and the Proposed Project would not increase the total number of available campsites at PBSSP beyond the levels considered in the PBSSP General Plan and associated EIR. As a result, the Proposed Project would not increase recreational capacity at PBSSP beyond previously planned levels.

As described in **Section 4.3 Biological Resources**, the undeveloped areas of the project site may be considered ESHA under the Coastal Act. To minimize impacts to ESHA, State Parks considered and developed multiple design alternatives, modified the site design to minimize and/or avoid potential resource impacts, minimize potential tree removal, prioritize the removal of non-native tree species, and, where feasible, avoid potential impacts to sensitive habitats. Implementation of the mitigation measures identified in **Section 4.3 Biological Resources** and throughout this IS/MND would minimize potential impacts and ensure that ESHA are protected against any significant impact to habitat values. As described throughout this IS/MND, the Project would not impact public access to the coast, degrade the scenic and visual qualities of coastal areas, impact the biological productivity and quality of coastal waters, streams, or wetlands,

adversely impact archaeological or paleontological resources or other land resources, or adversely impact other protected resources within the coastal zone.

The Project would not result in any conflicts with applicable policies intended to reduce or mitigate an adverse environmental effect. This represents a less than significant impact.

4.11 NOISE AND VIBRATION

4.11.1 INTRODUCTION

This section assesses the potential noise impacts of the Project on nearby sensitive receptors from construction activities (short-term) and operation (long-term).

4.11.2 ENVIRONMENTAL SETTING

Noise is commonly defined as unwanted sound. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (“dB”) with 0 decibels corresponding roughly to the threshold of hearing. **Table 9, Definitions of Acoustical Terms Used in this Report** contains definitions of key technical terms.

Most sounds consist of a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. The method commonly used to quantify environmental sounds consists of evaluating all the frequencies of a sound in accordance with a weighting that reflects the facts that human hearing is less sensitive at low frequencies and extreme high frequencies than in the frequency mid-range. This is called "A" weighting, and the decibel level measured is called the A-weighted sound level (“dBA”).

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources, which create a relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors, L01, L10, L50, and L90, are commonly used. They are the A-weighted noise levels equaled or exceeded during 1%, 10%, 50%, and 90% of a stated time period. A single number descriptor called the L_{eq} is also widely used and represents the average A-weighted noise level during a stated period of time.

Table 9 Definitions of Acoustical Terms Used in this Report	
Term	**Definitions**
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 micro Pascals (or 20 micro Newtons 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 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, 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 sound 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 A-weighted noise level during the measurement period. The hourly L_{eq} used for this report is denoted as dBA $L_{eq[h]}$.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels in the night between 10:00 pm and 7:00 am.
Day/Night Noise Level, Ldn or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Ln Values 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.
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 upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

In determining the daily level of environmental noise, it is important to account for the difference in response of sensitive receptors to daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. Most people sleep at night and are very sensitive to noise intrusion. To account for human sensitivity to nighttime noise levels, a descriptor, Ldn (day/night average sound level), was developed. The Ldn (or DNL) divides the 24-hour day into the daytime of 7:00 AM to 10:00 PM and the nighttime of 10:00 PM to 7:00 AM. The nighttime noise level is weighted 10 decibels higher than the daytime noise level.

Some land uses are more sensitive to noise than others. Noise sensitive land uses are generally defined as residences, transient lodging, schools, hospitals, nursing homes, churches, meeting

halls, and office buildings. The primary source of existing noise in the Project vicinity is vehicle traffic along SR 1.

4.11.3 REGULATORY SETTING

4.11.3.1 Local

Monterey County General Plan

The Monterey County General Plan includes guidance for noise and provides land use compatibility guidelines for exterior community noise levels. Based on these guidelines, sensitive noise receptors near the Project site are private residences, schools, childcare centers, and open spaces. The normally acceptable noise range for low-density residential areas is 50 to 60 dB. The conditionally acceptable noise range for low-density residential areas is 55 to 70 dB. Development in areas where noise levels are considered "conditionally acceptable" may be undertaken only after additional noise analysis is provided and appropriate mitigation features are included in the Project design.

4.11.4 THRESHOLDS OF SIGNIFICANCE

NOISE Would the project result in:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Source: 1, 13, 14)	☐	☐	■	☐
b)	Generation of excessive groundborne vibration or groundborne noise levels? (Source: 1, 13, 14)	☐	☐	■	☐
c)	For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (Source: 1, 13, 14)	☐	☐	☐	■

4.11.5 IMPACT ANALYSIS

a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

No noise-sensitive receptors (e.g., residences, hospitals, etc.) are near the Project or would be exposed to construction-related noise; however, the Project could expose PBSSP recreational

users to increased noise[15]. Project construction would result in temporary noise-related impacts due to the operation of construction equipment. Operational noise would occur in connection with cabin use.

Noise impacts resulting from construction would depend on the equipment used, timing and duration of activities, and the distance between construction noise sources and noise sensitive receptors. The Monterey County Noise Ordinance (Monterey County Code Chapter 10.60, Noise Control) limits noise generated to 85 dBA at a distance of 50 feet from the noise source. **Table 10, Construction Equipment Noise Emission Levels** contains a list of typical equipment that could be used during construction and the anticipated noise levels at 50, 100, 200, and 400 feet from the source. As demonstrated in **Table 10, Construction Equipment Noise Emission Levels**, most typical construction equipment would generate less than 85 dBA at a distance of 50 feet.

Table 10
Construction Equipment Noise Emission Levels

Equipment	Typical Noise Level (dBA) 50 ft from Source	Typical Noise Level (dBA) 100 ft from Source[1]	Typical Noise Level (dBA) 200 ft from Source[1]	Typical Noise Level (dBA) 400 ft from Source[1]
Air Compressor	81	75	69	63
Backhoe	80	74	68	62
Ballast Equalizer	82	76	70	64
Ballast Tamper	83	77	71	65
Compactor	82	76	70	64
Concrete Mixer	85	79	73	67
Concrete Pump	82	76	70	64
Concrete Vibrator	76	70	64	58
Dozer	85	79	73	67
Generator	81	75	69	63
Grader	85	79	73	67
Impact Wrench	85	79	73	67
Jack Hammer	88	82	76	70
Loader	85	79	73	67
Paver	89	83	77	71
Pneumatic Tool	85	79	73	67
Pump	76	70	64	58
Roller	74	68	62	56

Source: U.S. Department of Transportation, *Transit Noise and Vibration Impact Assessment,* 2006
1. Construction generated noise levels drop off at a rate of about 6 dBA per doubling of distance between the source and receptor.

Construction activities could expose Park users to temporary, short-term increases in noise and groundborne vibrations; however, construction noise and vibrations would be temporary and intermittent, and would be limited to weekdays between the hours of 8:00 a.m. and 5:00 p.m., or to hours which are agreed upon by State Parks and comply with all local ordinances and regulations. This represents a less than significant impact.

The introduction of new cabins and associated activities could potentially expose existing PBSSP users to new sources of operational noise; however, noise generated by the Project would be

[15] The Project could also expose wildlife to noise impacts. Potential noise impacts to wildlife are addressed separetly in **Section 4.3 Biological Resources**.

consistent with noise generated from adjacent campsites and day-use areas. The proposed cabins would only accommodate up to 22 new users per day. In the context of existing sources of noise within the Park, any additional noise generated by the project would be minor. All noise impacts would be internalized within the Park; no surrounding uses outside of the Park would be exposed to new sources of noise. This represents a less than significant impact.

b) *Generation of excessive groundborne vibration or groundborne noise levels?*

The Project would not generate groundborne vibration since construction would not require the use of heavy equipment or impact tools (e.g., jackhammers, hoe rams). Grading would be accomplished primarily by hand, and cabins would be prefabricated off-site. Operation of the proposed campsite would not create a new source of vibration. This represents a less than significant impact.

c) *For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

The Project is not located within the vicinity of a private airship of an airport land use plan, or within two miles of a public airport. No impact would occur.

4.12 PUBLIC SERVICES

4.12.1 INTRODUCTION

This section analyzes potential impacts to public services, including law enforcement services, fire protection services, emergency medical services, schools, and other public facilities. Potential impacts to park and recreational facilities are evaluated separately in **Section 4.13 Recreation**.

4.12.2 ENVIRONMENTAL SETTING

4.12.2.1 Police Protection

Law enforcement and emergency medical response services within the PBSSP are the responsibility of State Parks. Park Rangers are responsible for providing police protection services. Park Rangers have the primary public safety and law enforcement responsibility for the Park; the Monterey County Sheriff's Office has jurisdiction with other law enforcement agencies' support.

4.12.2.2 Fire Protection

The California Department of Forestry and Fire Protection ("Cal Fire") is responsible for providing fire protection services in the project vicinity, although the U.S. Forest Service is responsible for providing fire protection services within PBSSP. Emergency response is provided from Big Sur Fire, an all-volunteer non-profit organization authorized to provide fire protection, rescue, and

emergency medical services to the Big Sur community and surrounding area covering 60 miles of coastline along the central California coast. Big Sur Fire operates out of three fire stations; the main headquarters station is at the Post Ranch Resort, located approximately 2.5 miles south of PBSSP.

4.12.2.3 Schools

The project site lies within the Carmel Area Unified School District. Due to its location in a sparsely populated area of Big Sur, few schools are in the project site's vicinity. The nearest is Captain Cooper Elementary School, located 3.5 miles north of PBSSP.

4.12.2.4 Other Public Facilities

Other public facilities, such as solid waste providers, could also be affected by the Project. All solid waste generated by development of the Project would be disposed of at the Monterey Peninsula landfill, located north of the City of Marina. For more information concerning solid waste, please refer to **Section 4.14 Utilities and Service Systems**.

4.12.3 THRESHOLDS OF SIGNIFICANCE

PUBLIC SERVICES Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
a) Fire protection? (Source: 1, 7, 13, 14)	☐	☐	■	☐
b) Police protection? (Source: 1, 7, 13, 14)	☐	☐	■	☐
c) Schools? (Source: 1, 7, 13, 14)	☐	☐	☐	■
d) Parks? (Source: 1, 7, 13, 14)	☐	☐	■	☐
e) Other public facilities? (Source: 1, 7, 13, 14)	☐	☐	■	☐

4.12.4 IMPACT ANALYSIS

a) *Fire protection?*

The Proposed Project is not anticipated to substantially increase demands for fire protection services such that new or expanded facilities, the construction of which could cause an adverse environmental effect, would be warranted. However, the Proposed Project would increase demands for fire protection services due to the introduction of new development and associated uses. The Project could also cause fire-related hazards due to the operation of equipment during construction and operation and potential fire hazards associated with campsite use (e.g., campfires). PBSSP Rangers currently serve 189 campsites, one (1) cabin, and numerous day-

use areas within the Park. The addition of nine (9) new cabins would be accommodated by existing service providers and would not significantly impact service ratios, response times, and other performance objectives related to fire protection services. This represents a less than significant impact. Potential impacts due to wildland fire hazards are addressed separately; please refer to **Section 4.16 Wildfire** for further discussion.

b) *Police protection?*

Construction and operation of the Proposed Project would not substantially increase demands for police protection services such that new or expanded facilities, the construction of which could cause an adverse environmental effect, would be warranted. However, the Proposed Project would increase demands for police protection services due to the introduction of new development (i.e., cabins) and associated uses. The introduction of new personnel (e.g., campers/park patrons) on-site could result in an increased demand for police protection services (e.g., noise complaints, security, etc.). PBSSP Rangers currently serve 189 campsites, one (1) cabin, and numerous day-use areas within the Park. The addition of nine (9) new cabins could be accommodated by existing service providers and would not significantly impact service ratios, response times, and other performance objectives related to police protection services. This represents a less than significant impact.

c) *Schools?*

The Project would not cause an increase in residential population such that the Project would generate additional demands for school facilities where new or expanded facilities would be necessary to accommodate Project demands. There are no schools in the vicinity of the project site, and implementation of the project would not impact schools. No impact would occur.

d) *Parks?*

Construction and operation of the Project could impact the PBSSP by increasing the number of park visitors, thereby causing deterioration of park facilities. Potential impacts to recreational amenities are evaluated separately below in **Section 4.13 Recreation**. This represents a less than significant impact.

e) *Other public facilities?*

There would be no impact to other public facilities such that new or expanded facilities would be required. All necessary public facilities would be provided on-site. This represents a less than significant impact. For more information concerning potential impacts to park and recreational facilities; please refer to **Section 4.13 Recreation** for more information. In addition, please also refer to **Section 4.15 Utilities and Service Systems** for more information concerning potential impacts due to solid waste generation.

4.13 RECREATION

4.13.1 INTRODUCTION

This section describes relevant recreational services and potential impacts of the Project on recreational facilities.

4.13.2 ENVIRONMENTAL SETTING

PBSSP consists of approximately 1,000 acres of campgrounds and open space. The Park is open year-round and accommodates hikers, bikers, swimmers, car campers, and RVers. The Park offers more than 10 miles of scenic trails that meander through redwood groves and afford river, ocean, and mountain views. There are a number of day-use picnic areas in the Park, including three (3) group picnic sites with grills and tables that can accommodate up to 100 to 125 people per site. A Campfire Center offers evening programs on the weekends during peak season. Overnight lodging includes 189 tent and RV campsites and one cabin. Amenities include comfort stations with showers, a laundromat, an RV sanitation station, educational kiosks, and a supply store.

4.13.3 REGULATORY SETTING

4.13.3.1 State

California Coastal Act

As described in **Section 4.1 Aesthetics**, the Coastal Commission, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. Development activities within the coastal zone, which are broadly defined by the Coastal Act to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a CDP from either the Coastal Commission or the local government if a LCP has been certified. The Coastal Act prohibits development which would interfere with the public's right of access to the coast and encourages development of lower coast visitor and recreational facilities in the coastal zone.

4.13.3.2 Local

Big Sur Coast LUP

The Big Sur Coast LUP protects the rights of access to the shoreline, public lands, and opportunities for recreational hiking access along the coast. Within PBSSP, low-intensity recreational and educational uses that are compatible with the natural resources of the area and require a minimum level of development to serve basic user needs and necessitating minimal alteration of the natural environment are the principal allowed uses. Such uses are defined as trails, picnic areas, walk-in camping, tent camping where the campsites are separated from one another, and supporting facilities.

PBSSP General Plan

The PBSSP General Plan allows for the development of a range of visitor facilities and services and assumes increased use of the Park in connection with planned area development. The PBSSP General Plan considered several key areas of concern for the Park, including environmental degradation, park entrance traffic congestion, the Big Sur Lodge, overnight accommodations which neglect population segments, limited public appreciation of historic buildings, and limited day-use and pedestrian access. The General Plan provides management guidelines that address these issues.

4.13.4 THRESHOLDS OF SIGNIFICANCE

RECREATION Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (Source: 1, 7, 13, 14)	☐	☐	■	☐
b)	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (Source: 1, 7, 13, 14)	☐	☐	■	☐

4.13.5 IMPACT ANALYSIS

a) *Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

The Proposed Project would not result in the substantial increase in use of existing recreational facilities such that a substantial physical deterioration of the facility would occur or be accelerated. The Proposed Project would provide additional, low-cost visitor serving, recreational facilities within PBSSP, which would increase recreational use on the site. However, the Project is consistent with the Park's General Plan, whose management goals include adding higher level of the visitor comfort accommodations (i.e., cabins) for non-camping visitors who wish to stay in the Park. Moreover, the Proposed Project would not increase the amount of available camping facilities at PBSSP beyond existing levels contemplated in the PBSSP General Plan. In fact, as noted elsewhere in this IS/MND, State Parks has removed a number of existing campsites within PBSSP. The construction and operation of the Proposed Project would increase the amount of currently available recreational facilities within PBSSP but would not increase the number of available sites beyond levels identified in the PBSSP General Plan. Therefore, the Project would not increase the camping capacity identified in the General Plan. The PBSSP General Plan and

associated environmental review evaluated potential impacts associated with recreational use of the site and the Proposed Project would not increase recreational use within PBSSP beyond levels contemplated under the General Plan. In addition, the overall number of Park visitors would likely remain unchanged because access to the Park would be restricted by available parking, which would not be increased. As a result, the Proposed Project would not result in the substantial increase in use of existing recreational facilities such that there would be an adverse environmental effect. Moreover, State Parks also considered existing site constraints as part of the site design process to ensure that impacts would be minimized. Finally, mitigation measures identified in this IS/MND would further ensure that any potential Project impacts on the Park and the surrounding natural environment would be minimized. This represents a less than significant impact.

b) *Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Please refer to Response 4.13.5(a). The Proposed Project is a recreational use. The construction and operation of new campground facilities and associated support infrastructure would expand recreational amenities within PBSSP. This IS/MND evaluates the environmental impacts associated with construction and operation of the Project. The Project would not result in any new impacts beyond those previously evaluated within this IS/MND. All impacts would be mitigated to a less than significant level in accordance with the requirements of CEQA. This represents a less than significant impact.

4.14 TRANSPORTATION/TRAFFIC

4.14.1 INTRODUCTION

The traffic section evaluates the potential traffic and circulation impacts associated with the Project. Keith Higgins, Traffic Engineer, prepared a technical memorandum (March 2021) addressing the potential traffic effects associated with the Proposed Project. The following section is based on information contained in the technical memorandum (see **Appendix E**).

4.14.2 ENVIRONMENTAL SETTING

4.14.2.1 Existing Roadway Network

Regional access to the project site is via SR 1. Local access is via an existing PBSSP paved road. SR 1 is a major north-south roadway that connects the Monterey Peninsula with San Luis Obispo County to the south and with Santa Cruz County and the San Francisco Bay Area to the north. SR 1 is a four-lane freeway north of Carpenter Street, a four- to five-lane (the five-lane section has a two-way center left-turn lane) roadway between Carpenter Street and Ocean Avenue, a three-lane roadway (two (2) lanes northbound and one (1) lane southbound) between Ocean Avenue and Carmel Valley Road, and a two-lane roadway south of Carmel Valley Road. SR 1 is part of the Monterey County Congestion Management Program (“CMP”) highway network and is designated as a State Scenic Highway.

4.14.3 REGULATORY SETTING

4.14.3.1 State

Big Sur State Route 1 Sustainable Transportation Demand Management Plan

The Big Sur Sustainable Transportation Demand Management Plan ("TDM Plan") was prepared by Caltrans (February 2020). The TDM Plan builds upon previous planning efforts and provides a framework to address how transit, sustainability, and related enhancements can improve the Big Sur experience. These concepts include planning-level identification of shuttle opportunities, supporting strategies, and planning considerations for zero-emission vehicle charging stations. The TDM Plan also describes technology strategies that aid in visitor trip planning and provide real-time traveler information. TDM strategies are considered in the context of both desired user behavior and the potential for influencing different transportation choices.

4.14.3.2 Local

Transportation Agency for Monterey County

The Transportation Agency for Monterey County ("TAMC") and its member jurisdictions have adopted a county-wide, regional development impact fee ("TAMC Fee") to cover the costs for studies and construction of many roadway improvements throughout Monterey County. This impact fee, which went into effect on August 27, 2008, is applied to new development within Monterey County. The governing document for the fee is the *Regional Impact Fee Nexus Study Update* (March 26, 2008) prepared by Kimley-Horn Associates, Inc. *The Regional Impact Fee Nexus Study Update* was updated in October 2018 by Wood Rodgers.

TAMC, Monterey County, and Caltrans have agreed that the payment of the TAMC Fee satisfies the Project's fair share contribution to cumulative impact mitigation throughout the regional highway system. This includes highways that will operate deficiently, but no capital improvement project is programmed to correct the deficiency. Additional funding will be provided by Measure X, the Transportation Sales Tax measure. These local funding sources are anticipated to leverage State and federal funding sources to fully fund the improvements. The TAMC Fee would not be applicable to the Proposed Project (Zeller, 2021).

Monterey County Traffic Impact Fee

Monterey County recently adopted a traffic impact fee, which is being assessed on private development projects. Because it is a public project, the Proposed Project is not responsible for the payment of the fee.

PBSSP General Plan

A primary goal of the PBSSP General Plan is to improve pedestrian and vehicular traffic circulation throughout the Park by separating public contact areas and conflicting visitor activities. The General Plan anticipated the preparation of a trail management plan that would review pedestrian circulation in relation to existing trails and make recommendations that create better links for visitors wishing to access the Park's numerous public use areas. ADA accessibility would be addressed in the trail management plan to meet the needs of visitors with physical disabilities.

4.14.4 THRESHOLDS OF SIGNIFICANCE

TRANSPORTATION/TRAFFIC Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? (Source: 1, 7, 11, 12, 13, 14, 23, 40)	☐	☐	☐	■
b)	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? (Source: 1, 7, 11, 12, 13, 14, 23, 40)	☐	☐	■	☐
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (Source: 1, 7, 11, 12, 13, 14, 23, 40)	☐	☐	☐	■
d)	Result in inadequate emergency access? (Source: 1, 7, 11, 12, 13, 14, 23, 40)	☐	☐	☐	■

4.14.5 IMPACT ANALYSIS

Impact Analysis Approach

State Parks retained Keith Higgins, PE, TE to evaluate the potential traffic-related effects associated with the Proposed Project (see **Appendix E**). That analysis concluded that the Proposed Project would not result in any significant traffic-related effects. The traffic memorandum concluded that the potential traffic effects associated with the Proposed Project would be less than significant for the following reasons:

- The Proposed Project consists of the construction and operation of a relatively small project that would have a negligible effect on existing traffic operations. As identified in **Appendix E,** the Proposed Project would generate minimal peak hour traffic trips. Specifically, the Project is only expected to generate two (2) AM peak hour and four (4) PM peak hour trips. This constitutes an imperceptible amount of traffic based on existing traffic levels. These estimates do not account for the fact that the Proposed Project would partially replace existing campsites that State Parks removed for resource protection purposes. As a result, anticipated traffic trips would be less. Therefore, the Proposed Project would not substantially affect existing traffic levels in the project vicinity.
- Assuming the project trip distribution is roughly 50% to and from the north and 50% to and from the south, the Project's incremental increase on SR 1 would be immeasurable. The Project would not result in a measurable effect on SR 1 traffic operations. Moreover, as noted above, the Proposed Project would partially replace existing campsites that State Parks removed for resource protection purposes. The Project's potential incremental increase in traffic would not increase traffic levels beyond existing levels associated with existing Park operations.

- State Parks previously considered the environmental effects associated with the implementation of the PBSSP General Plan, which included the development of new overnight accommodations. The PBSSP General Plan contemplated the development of up to 218 campsites. Currently, there are 189 campsites at the Park. The Proposed Project would not increase the total number of available campsites beyond the levels evaluated under the General Plan and related EIR. As a result, the Proposed Project would not result in any additional traffic-related effects beyond those previously identified in the General Plan and related EIR.
- The Proposed Project would partially replace campsites that State Parks removed for resource protection purposes. According to the Institute of Transportation Engineers ("ITE"), Trip Generation Manual, 10th Edition, 2017 (Trip Generation Manual), campsites have a trip generation rate virtually the same as recreational vehicle spaces and cabins. Overall, trip generation associated with Park operations would, therefore, not increase because the Proposed Project partially offsets trips previously generated by campsites removed by State Parks.
- The Proposed Project would not result in a significant Vehicle Miles Traveled ("VMT") impact. As identified in **Appendix E,** the current metric for evaluating project-related circulation impacts under CEQA is VMT. Monterey County does not, however, have an adopted VMT threshold. In the absence of a locally adopted VMT threshold, most agencies are deferring to the State of California Governor's Office of Planning and Research ("OPR") technical guidance on evaluating VMT effects. According to OPR's screening threshold for small projects, a project is presumed to have a less than significant VMT impact if the project generates fewer than 110 daily trips. Here, the Proposed Project would generate an estimated 40 daily trips, which is below OPR's small project screening threshold. This estimate does not account for the fact that the Proposed Project would partially replace campsites that State Parks previously removed for resource protection purposes. As a result, the net increase in traffic trips would be less than projected.
- State Parks previously implemented a major reconstruction of the Park entrance to provide improved channelization and driveway geometrics to accommodate implementation of the General Plan. No additional improvements are warranted at the Park entrance.
- Finally, most Park employees live on-site. They, therefore, largely eliminate normal commute traffic. Many goods and services are available in or near the park.

For the reasons outlined above, the traffic analysis concluded that the Proposed Project would not result in a significant impact for the purposes of CEQA, and no mitigation would be warranted to minimize the Proposed Project's negligible increase in daily traffic. The following impact analysis reflects the findings of the technical memorandum prepared by Keith Higgins, PE, TE for the Proposed Project.

a) *Conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?*

The Proposed Project consists of the construction and operation of nine (9) rustic cabins and associated improvements. The Proposed Project would not affect existing circulation within PBSSP or within the project vicinity. As noted above, the Proposed Project would not increase the total amount of available overnight recreational facilities at PBSSP beyond levels contemplated under the PBSSP General Plan and associated EIR. State Parks previously evaluated the potential traffic-related effects associated with the implementation of the PBSSP General Plan, and the Proposed Project would not increase the amount of available on-site overnight recreational amenities beyond previously evaluated levels. The PBSSP General Plan contemplated 218 campsites, and there are currently 189 campsites at the park. The addition of nine (9) rustic cabins would not exceed the total amount allowed under the PBSSP General Plan. Additionally, State Parks has also removed several existing campsites for resource protection purposes. As a result, the Project's potential incremental increase in traffic would not increase traffic levels beyond those previously associated with existing Park operations. Finally, as noted above, The Proposed Project would not result in a measurable increase in traffic – traffic trips associated with the Project would not substantially affect existing traffic levels in the project vicinity. As a result, the Proposed Project would not conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. There would be no impact from the Proposed Project.

b) *Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

CEQA Guidelines Section 15064.3, subdivision (b)(1) calls for the evaluation of transportation impacts of projects based on VMT. CEQA uses the VMT metric to evaluate a project's transportation impacts. Monterey County does not currently have any adopted VMT standards.[16] In the absence of a County adopted threshold of significance, this IS/MND relies on OPR's recommended small project screening threshold to determine whether the Proposed Project's VMT effects would be significant. For the purposes of this IS/MND, the Proposed Project would result in a significant traffic-related effect if the Project would exceed 110 daily trips.

Based on OPR's recommended screening threshold, the Proposed Project would not result in a significant traffic-related effect. The Proposed Project would generate approximately 40 daily traffic trips assuming the Project would generate a typical 10% of its daily total in the evening peak hour (Higgins, 2021). This daily trip total is below the OPR recommended screening

[16] While Monterey County does not currently have adopted VMT thresholds, the State OPR issued guidance on how to evaluate potential VMT related effects in December 2018. OPR's guidance is entitled "Technical Advisory on Evaluating Transportation Impacts in CEQA," (OPR VMT Advisory). OPR's VMT Advisory includes several recommendations on how to approach evaluate a project's potential VMT-related effects under CEQA, including a screening threshold for small projects. OPR's screening threshold for small projects suggests that, absent substantial evidence indicating a project would create a significant level of VMT, there is a presumption that a project generating fewer than 110 daily trips would result in a less-than-significant environmental effect. "[P]rojects that generate fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact." (OPR, at pg. 12). OPR further states that "absent substantial evidence, it is reasonable to conclude that the addition of 110 or fewer daily trips could be considered not to lead to a significant impact." (ibid.).

threshold of 110 daily trips for small projects. Moreover, it is also worth noting that the Proposed Project would partially replace campsites that State Parks previously removed for resource protection purposes. As a result, the actual net increase in daily traffic trips as compared with existing traffic associated with PBSSP operations would be less than projected. In other words, the anticipated daily traffic trips generated by the Proposed Project would be partially offset by the reduction in traffic associated with existing operations due to the removal of existing campsites. Additionally, as noted above, the PBSSP General Plan and related EIR considered traffic-related effects associated with the implementation of the PBSSP General Plan, and the Proposed Project would not increase the total number of available campsites beyond existing levels contemplated under the General Plan. In fact, the total number of available campsites at PBSSP, including the addition of the nine (9) rustic cabins associated with the Proposed Project, would still be below levels anticipated under the PBSSP. Finally, site access is limited by the amount of available parking. The Project would not increase the amount of parking available on-site as compared to existing site conditions. Therefore, it is reasonable to conclude that future site occupants would likely carpool to the site given limited available parking.

Based on OPR's technical guidance, the Proposed Project would not result in a significant VMT related effect. This represents a less than significant impact for the purposes of this analysis. No mitigation is warranted.

(c) *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

No impact. The Proposed Project would not substantially increase hazards due to a geometric design feature or incompatible use. The Project consists of the construction and operation of nine (9) cabins and related infrastructure within PBSSP. The Proposed Project would also entail improvements to the existing parking area adjacent to the site to clearly delineate parking for the Proposed Project. The Project does not entail any roadway improvements or other design features that would affect existing circulation or create unsafe traffic conditions.

(d) *Result in inadequate emergency access?*

The Proposed Project would not result in inadequate emergency access. The Project would not affect existing access to PBSSP. PBSSP, including the project site, would be accessible via the existing internal access road. There would be no effect from the Proposed Project.

4.15 UTILITIES AND SERVICE SYSTEMS

4.15.1 INTRODUCTION

This section describes existing utilities, applicable service providers, and potential Project impacts on utilities and service systems.

4.15.2 ENVIRONMENTAL SETTING

4.15.2.1 Water Supply

The Project would be served by PBSSP's existing water distribution system. The water system consists of two (2) tanks and associated infrastructure which have a combined storage capacity of 300,000 gallons of water and pump over 200,000 GPD. The Project would include infrastructure improvements to the system which would entail the installation of a new 6-inch water distribution pipeline to connect into the existing water distribution system. This improvement would occur within the existing PBSSP internal access road and would extend utilities to the proposed comfort station and new fire hydrants. All work associated with infrastructure improvements would occur within the project site or within existing disturbed areas within the Park (i.e., paved roads). Once the Project is operational, approximately 2,700 GPD or 3.02 AFY of new water demand is anticipated.

4.15.2.2 Wastewater

PBSSP utilizes an existing state-permitted WWTP for wastewater disposal, which is permitted to receive up to 100,000 GPD of wastewater. Sanitary sewer infrastructure would be extended to the project site via existing PBSSP infrastructure. A new sewer lateral would be installed from the new comfort station to the sewer main in the existing parking lot. All work associated with infrastructure improvements would occur within the project site or within existing disturbed areas within the Park (i.e., paved roads). Wastewater would be generated in direct relation to the water demand. Therefore, the wastewater is estimated to peak at 2,700 GPD.

4.15.2.3 Solid Waste

Waste Management, Inc. provides waste and recycling services to PBSSP. Solid waste generated by the Project would be transported and disposed of at the Monterey Peninsula Landfill and Recycling Facility north of the City of Marina, which is operated by the Monterey Regional Waste Management District ("MRWMD"). The landfill has a permitted capacity of 3,500 tons per day of solid waste; currently, the landfill receives approximately 1,100 tons per day. The remaining landfill capacity is approximately 48 million tons or 72 million cubic yards. At current rates of disposal, the landfill will continue to serve the present service area for approximately 150 years.

4.15.3 REGULATORY SETTING

4.15.3.1 State

California Urban Water Management Planning Act

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan ("UWMP") and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon,

water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events.

Assembly Bill 939

AB 939 established the California Integrated Waste Management Board ("CalRecycle"), which required all California counties to prepare Integrated Waste Management Plans. In addition, AB 939 required all municipalities to divert 50 percent of their waste stream by the year 2000.

Assembly Bill 341

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program in the Public Resources Code. All businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that no less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

California Green Building Standards Code

In January 2017, California adopted the most recent version of the California Green Building Standards Code, which establishes mandatory green building standards for new and remodeled structures in California. These standards include a mandatory set of guidelines and more stringent voluntary measures for new construction projects to achieve specific green building performance levels.

4.15.3.2 Local

PBSSP General Plan

The PBSSP General Plan provides management guidelines to provide safe processing of sewage waste collected from the Park while reducing or eliminating all impacts such a facility may have on Park visitors and SR 1 passersby. Specific guidelines include ensuring that the wastewater treatment plant's operation does not impact the SR 1 viewshed, monitoring sewage leach field to ensure they do not impact the Park's vegetation or watershed resources, and utilizing proven and affordable new technologies to further increase the plant's efficiency.

4.15.4 THRESHOLDS OF SIGNIFICANCE

UTILITIES AND SERVICE SYSTEMS Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which would cause significant environmental effects? (Source: 1)	☐	☐	■	☐
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? (Source: 1)	☐	☐	■	☐
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? (Source: 1)	☐	☐	■	☐
d)	Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? (Source: 1)	☐	☐	■	☐
e)	Comply with federal, state, and local management and reduction statuses and regulations related to solid waste? (Source: 1)	☐	☐	■	☐

4.15.5 IMPACT ANALYSIS

a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which would cause significant environmental effects?*

The Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which would cause significant environmental effects. This represents a less than significant impact. The Proposed Project would require the extension of utilities to the site and would also include the installation of a new approximately 530 ft. 6-inch water distribution pipeline to serve the Project. The upgrading of existing water distribution system infrastructure would occur within existing developed areas (i.e., paved roadways) within PBSSP. As a result, the Proposed Project would not result in the expansion of utility services that would cause a significant environmental effect. This represents a less than significant impact.

b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

Existing water use within the PBSSP averages 66,000 GPD in the summer. Based on anticipated comfort station use (i.e., flush toilets and showers), the Project would increase the Park's water demand by an additional 2,700 GPD. PBSSP's existing water distribution system is capable of pumping over 200,000 GPD. According to State Parks, the existing water distribution has existing capacity to accommodate the incremental increase in demand associated with the Proposed Project. Moreover, as noted elsewhere in this IS/MND, it is also important to note that the Proposed Project would not increase the total number of available camping amenities at PBSSP beyond existing levels contemplated in the PBSSP General Plan. The PBSSP General Plan and associated EIR considered potential water supply impacts and concluded that the PBSSP General Plan would not result in any adverse effects related to water supply. For these reasons, the Park's existing water supply has adequate capacity to serve the incremental increase of demand associated with the Project. This represents a less than significant impact.

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

Sanitary sewer infrastructure would be extended to the project site via existing PBSSP infrastructure; wastewater generated by the Project would be treated at PBSSP's state-permitted wastewater treatment facility, which is permitted to receive up to 100,000 GPD of wastewater. The Park's current peak season wastewater flows average 55,000 GPD and peak at 75,000 GPD. The Project would increase the Park's wastewater flows by an additional 2,700 GPD, well below the Park's existing WWTP capacity. As a result, there is adequate capacity to accommodate the Project's increased demand for wastewater treatment. No new or expanded facilities would be needed to accommodate the Proposed Project. This represents a less than significant impact.

d) *Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

Solid waste generated by construction and operation of the Project would be disposed of at MRWMD's Monterey Peninsula Landfill and Recycling Facility in Marina. This landfill is permitted to receive 3,500 tons of waste per day but only receives 1,100 tons. It is expected to reach its permitted capacity in 2161. Solid waste generated by the Project would not have a substantial impact on the landfill's capacity. In addition, State Parks operates under a 50 percent waste disposal reduction mandate under AB 75; therefore, receptables and facilities would be provided to separate recyclable materials from non-recyclable waste during operation and special events. The Proposed Project would not generate solid waste in excess of State or local standards or in excess of the capacity of existing waste facilities. This represents a less than significant impact.

e) *Comply with federal, state, and local management and reduction statuses and regulations related to solid waste?*

The Project would comply with all federal, state, and local statutes and solid waste regulations. All waste generated in connection with the Project would be handled in accordance with all applicable federal, state, and local statutes and regulations to the extent they are applicable to the Project. This represents a less than significant impact.

4.16 WILDFIRE

4.16.1 INTRODUCTION

This section analyzes potential impacts to wildfire impacts of the Project based on their location within a Fire Hazard Severity Zone ("FHSZ") in State Responsibility Area ("SRA") or Very-High Fire Hazard Severity Zone ("VHFHSZ") of Local Responsibility Area ("LRA") for wildland fires, as designated by the Cal Fire.

4.16.2 ENVIRONMENTAL SETTING

In California, responsibility for wildlife prevention and suppression is shared by federal, state, and local agencies. Cal Fire prevents and suppresses wildfires in SRAs, which are non-federal lands in unincorporated areas with watershed value, are of statewide interest, defined by land ownership, population density, and land use. Wildfire prevention in LRAs is typically provided by city fire departments, fire protection districts, counties, and Cal Fire under contract with the local government.

The County of Monterey is characterized by moderate to very high fire hazard. Rugged topography, dry summers, and an abundance of fuel combine to make much of Monterey County susceptible to wildland fire hazards during the warmer seasons of the year. PBSSP is located within a SRA and is designated as a VHFHSZ. The project site is served by Big Sur Fire and the U.S. Forest Service for fire and emergency medical services. The closest station to the site is the Big Sur Fire headquarters at Post Ranch Resort, located approximately 2.5 miles south of PBSSP.

4.16.3 REGULATORY SETTING

4.16.3.1 State

Public Resources Code Section 4201-4204

Sections 4201 through 4204 of the California Public Resources Code direct Cal Fire to map FHSZs within SRAs, based on relevant factors such as fuels, terrain, and weather. Mitigation strategies and building code requirements to reduce wildland fire risks to buildings within SRAs are based on these zone designations.

Government Code Section 51175-51189

Sections 51175 through 51189 of the California Government Code directs Cal Fire to recommend FHSZs within LRAs. Local agencies are required to designate VHFHSZs in their jurisdiction within 120 days of receiving recommendations from Cal Fire, and may include additional areas not identified by Cal Fire as VHFHSZs.

California Fire Code

The 2016 California Fire Code Chapter 49 establishes the requirements for development within wildland-urban interface areas, including regulations for wildfire protection building construction, hazardous vegetation and fuel management, and defensible space maintained around buildings and structures.

4.16.3.2 Local

Big Sur Coast LUP

The Big Sur Coast LUP includes policies to minimize fire-related hazards. Specifically, the LUP requires that all development be sited and designed to minimize risk from geologic, flood, or fire hazards to a level generally acceptable to the community. A geotechnical report is required for development in high hazard areas. In locations determined to have significant hazards, development permits may include a special condition requiring the owner to record a deed restriction describing the nature of the hazard(s), geotechnical and/or fire suppression mitigations and long-term maintenance requirements.

PBSSP General Plan

PBSSP's 1988 Fire Management Plan guides the control of wildfires within the Park. The PBSSP General Plan requires that the Plan be reviewed periodically to ensure it reflects the most current scientifically based fire management practices to protect Park resources. The General Plan also anticipated the preparation of a prescribed fire plan for the Park.

4.16.4 THRESHOLDS OF SIGNIFICANCE

WILDFIRE If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan? (Source: 1, 6)	☐	☐	■	☐
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? (Source: 1, 6)	☐	☐	■	☐

WILDFIRE If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impact to the environment? (Source: 1, 6)	☐	☐	■	☐
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes? (Source: 1, 6)	☐	☐	■	☐

4.16.5 IMPACT ANALYSIS

a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

Construction and operation of the Project would not interfere with an adopted emergency response plan or emergency evacuation plan. The introduction of new personnel (e.g., campers/park patrons) within PBSSP could increase demand for emergency response services (e.g., medical emergencies), but the Project would not substantially impair and/or otherwise interfere with the implementation of an adopted emergency response plan or emergency evacuation plan. This represents a less than significant impact.

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

The Project could exacerbate fire risks and thereby expose people and/or structures to potential wildland fire hazards. During construction, potential fire hazards could occur in connection with the operation of equipment and other activities that could cause sparks or other sources of ignition in dry areas. This is a temporary construction impact. Project operation could also result in potential fire hazards due to the introduction of new facilities, increased site use, and additional campfires. Unregulated or unattended campfires could expose people and/or structures to wildland fire hazards.

Fire hydrants would be installed within a 150 feet radius of all cabins and would be utilized in the event of a fire. The Project would comply with the applicable fire safety provisions of the California Building Code. In addition, cabin reservations and Park amenities would be suspended in the event of a wildfire, thereby minimizing the risk of exposing Park patrons to fire-related hazards. This represents a less than significant impact.

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

The Project would connect to existing, underground PBSSP infrastructure and would not require the installation of infrastructure that may exacerbate wildfire risk. PBSSP currently operates 189 campsites, one (1) cabin, and numerous day-use areas within the Park. The addition of nine (9) new cabins would not substantially impact the Park and associated infrastructure such that it would significantly exacerbate fire risk. This represents a less than significant impact.

d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes?*

Although the Project is in a VHFHSZ, the proposed cabins would be in a relatively flat area. As a result, the Proposed Project is not anticipated to expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes. The Proposed Project consists of the construction and operation of nine (9) cabins and related infrastructure. In addition, the Proposed Project also includes the install of fire hydrants to ensure that on-site fire suppression is available in the event of an emergency. As noted above, State Parks would suspend cabin reservations in the event of downslope or downstream flooding or landslides within the Park. As a result, the project would not result in an impact due to exposure of people or structures to significant wildfire risks as a result of runoff, post-fire slope instability, or drainage changes. This represents a less than significant impact.

4.17 MANDATORY FINDINGS OF SIGNIFICANCE

Does the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? (Source: 1-36)	☐	☐	■	☐
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? (Source: 1-36)	☐	☐	■	☐
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (Source: 1-36)	☐	☐	■	☐

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

The Proposed Project would not 1) degrade the quality of environment, 2) substantially reduce the habitat of a fish or wildlife species, 3) cause a fish or wildlife population to drop below self-sustaining levels, 4) threaten to eliminate a plant or animal community, 5) reduce the number or restrict the range of a rare or endangered plant or animal, or 6) eliminate important examples of major periods of California history or prehistory. The Proposed Project would result in temporary construction-related impacts that would be mitigated to a less than significant level through the incorporation of mitigation measures identified in this Initial Study. All operational impacts associated with the Project would also be reduced to a less than significant level through the incorporation of mitigation. This represents a less than significant impact. No additional mitigation is necessary beyond mitigation identified in each of the respective topical CEQA sections contained in this IS/MND.

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

The Proposed Project would not result in a cumulatively considerable adverse environmental effect. To determine whether a cumulative effect requires an EIR, the lead agency shall consider whether the impact is significant and whether the effects of the project are cumulatively considerable (CEQA Guidelines §15064(h)(1). This IS/MND contains mitigation to ensure that all potential impacts would be minimized to a less than significant level. Temporarily disturbed areas would be restored following construction and additional areas would be restored off-site. In addition, the Project would not result in impacts beyond what was anticipated in the PBSSP General Plan, and the Project would comply with all applicable Big Sur Coast LUP policies.

CEQA allows a lead agency to determine that a project's contribution to a potential cumulative impact is not considerable and thus not significant when mitigation measures identified in the initial study will render those potential impacts less than considerable (CEQA Guidelines 15064(h)(2). State Parks also redesigned the Project to minimize potential impacts to biological and cultural resources and locate the Proposed Project in an area that was previously used for recreational purposes. The Project also includes restoration activities and other design features (e.g., fencing, signage, etc.) to avoid potential adverse effects. In addition, this IS/MND contains numerous mitigation measures to further minimize the Project's potential environmental effects (see **Mitigation Measures 4.1-1** through **4.4-3**). These mitigations include preparing and implementing a Lighting Plan, protecting biological resources during construction and restoring areas disturbed during construction, monitoring during construction to prevent potential impacts to biological, cultural, and tribal cultural resources, preparing and implementing a Spill Control Plan, and requiring that final design of all parking areas and cabins include methods to ensure that incidental release of contaminants do not adversely affect the environment. This represents a less than significant impact. No additional mitigation is necessary beyond mitigation identified in each of the respective topical CEQA sections contained in this IS/MND.

(c) *Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

The Proposed Project would not have a substantial adverse effect on human beings, either directly or indirectly. This IS/MND contains mitigation to ensure that all potential impacts would be minimized to a less than significant level. The Project would have a beneficial impact by providing additional recreational opportunities in the Big Sur Coast and within PBSSP. This represents a less than significant impact. No additional mitigation is necessary beyond mitigation identified in each of the respective topical CEQA sections contained in this IS/MND.

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Chapter 5: FISH AND WILDLIFE ENVIRONMENTAL DOCUMENT FEES

The State Legislature, through the enactment of SB 1535, revoked the authority of lead agencies to determine that a project subject to CEQA review had a “de minimis” (minimal) effect on fish and wildlife resources under the jurisdiction of the Department of Fish and Wildlife. Projects that were determined to have a “de minimis” effect were exempt from payment of the filing fees.

SB 1535 has eliminated the provision for a determination of “de minimis” effect by the lead agency; consequently, all land development projects that are subject to environmental review are now subject to the filing fees, unless the Department of Fish and Wildlife determines that the Project will have no effect on fish and wildlife resources.

To be considered for determination of “no effect” on fish and wildlife resources, development applicants must submit a form requesting such determination to the Department of Fish and Wildlife. Forms may be obtained by contacting the Department by telephone at (916) 631-0603 or though the Department’s website at www.dfg.ca.gov.

The Project would be required to pay this fee.

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Chapter 6: REFERENCES

6.1 LEAD AGENCY

6.1.1 CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

Brent Marshall, Monterey District Superintendent
Phil Tabor, P.E., Project Management Section
Callie Hurd, Strategic Planning and Recreation Services
Alex Stehl, Senior Park and Recreation Specialist
Stephen Bachman, Senior Park and Recreation Specialist
Matthew Allen, Senior Environmental Scientist Supervisor
John Hiles, Monterey District Maintenance Chief

6.2 RESPONSIBLE AGENCY

6.2.1 CALIFORNIA COASTAL CONSERVANCY

Tim Duff, Project Manager
Fanny Yang, Project Manager

6.3 PREPARATION

6.3.1 DENISE DUFFY & ASSOCIATES, INC.

Tyler Potter, J.D., AICP, Senior Planner/Project Manager
Jami Davis, Senior Environmental Scientist
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Oliviya Wyse, Environmental Planner
Conor O'Toole, Assistant Planner
Robyn Simpson, Editor

6.3.2 DESIGN WORKSHOP, INC.

Steve Noll, Principal,
Tyson Murray, Landscape Designer

6.4 PERSONS/AGENCIES CONTACTED

Joe Sidor, Associate Planner, Monterey County Housing & Community Development ("HCD")
Craig Spencer, Planning Manager, Monterey County HCD
Brandon Swanson, former Planning Manager, Monterey County HCD
Michael Zeller, Transportation Agency for Monterey County
Tom Beil, Noll & Tam Architects

Keith Palmer, BKF Engineers
Art Black, Principal, Carmel Fire Protection Associates
Keith Higgins, PE, TE

6.5 LITERATURE SOURCES

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Appendix A

CalEEMod Results

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Pfeiffer Big Sur Campground

Monterey County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Motel	9.00	Room	0.41	17,641.80	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction of the Proposed Project is anticipated to begin in August 2023 and end in August 2024. Grading and site preparation activities are anticipated to occur over an approximately two- to four-month period. Following initial site preparation and grading activities, construction of the cabins and associated improvements would be completed in approximately six to eight months

Grading - Per the grading plans, grading will occur on 0.25 acres of the total project site.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Prefabriacted cabins that have no appliances inside. Only electricity.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	160.00
tblConstructionPhase	NumDays	2.00	20.00
tblConstructionPhase	NumDays	1.00	20.00
tblConstructionPhase	PhaseEndDate	1/18/2024	6/3/2024
tblConstructionPhase	PhaseEndDate	1/4/2024	5/20/2024
tblConstructionPhase	PhaseEndDate	8/17/2023	10/9/2023
tblConstructionPhase	PhaseEndDate	1/11/2024	5/27/2024
tblConstructionPhase	PhaseEndDate	8/15/2023	9/11/2023
tblConstructionPhase	PhaseStartDate	1/12/2024	5/28/2024
tblConstructionPhase	PhaseStartDate	8/18/2023	10/10/2023
tblConstructionPhase	PhaseStartDate	8/16/2023	9/12/2023
tblConstructionPhase	PhaseStartDate	1/5/2024	5/21/2024
tblGrading	AcresOfGrading	0.00	0.25
tblGrading	AcresOfGrading	10.00	0.00
tblGrading	MaterialExported	0.00	120.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0325	0.3196	0.3391	6.2000e-004	0.0127	0.0146	0.0273	5.5100e-003	0.0135	0.0190	0.0000	54.9579	54.9579	0.0144	0.0000	55.3190
2024	0.1568	0.3320	0.3968	6.9000e-004	5.8600e-003	0.0151	0.0209	1.5800e-003	0.0139	0.0155	0.0000	61.2875	61.2875	0.0174	0.0000	61.7214
Maximum	**0.1568**	**0.3320**	**0.3968**	**6.9000e-004**	**0.0127**	**0.0151**	**0.0273**	**5.5100e-003**	**0.0139**	**0.0190**	**0.0000**	**61.2875**	**61.2875**	**0.0174**	**0.0000**	**61.7214**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0325	0.3196	0.3391	6.2000e-004	0.0127	0.0146	0.0273	5.5100e-003	0.0135	0.0190	0.0000	54.9578	54.9578	0.0144	0.0000	55.3189
2024	0.1568	0.3320	0.3968	6.9000e-004	5.8600e-003	0.0151	0.0209	1.5800e-003	0.0139	0.0155	0.0000	61.2875	61.2875	0.0174	0.0000	61.7213
Maximum	**0.1568**	**0.3320**	**0.3968**	**6.9000e-004**	**0.0127**	**0.0151**	**0.0273**	**5.5100e-003**	**0.0139**	**0.0190**	**0.0000**	**61.2875**	**61.2875**	**0.0174**	**0.0000**	**61.7213**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2023	10-31-2023	0.1923	0.1923
2	11-1-2023	1-31-2024	0.2372	0.2372
3	2-1-2024	4-30-2024	0.2214	0.2214
4	5-1-2024	7-31-2024	0.1902	0.1902
		Highest	0.2372	0.2372

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0812	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	0.0000	2.4000e-004
Energy	4.2200e-003	0.0383	0.0322	2.3000e-004		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	80.8223	80.8223	2.5700e-003	1.1300e-003	81.2234
Mobile	0.0151	0.0615	0.1570	4.7000e-004	0.0380	3.9000e-004	0.0384	0.0102	3.7000e-004	0.0106	0.0000	43.1197	43.1197	2.0700e-003	0.0000	43.1714
Waste						0.0000	0.0000		0.0000	0.0000	1.0008	0.0000	1.0008	0.0591	0.0000	2.4793
Water						0.0000	0.0000		0.0000	0.0000	0.0724	0.3852	0.4576	7.4600e-003	1.8000e-004	0.6975
Total	**0.1005**	**0.0998**	**0.1893**	**7.0000e-004**	**0.0380**	**3.3000e-003**	**0.0413**	**0.0102**	**3.2800e-003**	**0.0135**	**1.0732**	**124.3274**	**125.4006**	**0.0712**	**1.3100e-003**	**127.5718**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0812	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	0.0000	2.4000e-004
Energy	4.2200e-003	0.0383	0.0322	2.3000e-004		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	80.8223	80.8223	2.5700e-003	1.1300e-003	81.2234
Mobile	0.0151	0.0615	0.1570	4.7000e-004	0.0380	3.9000e-004	0.0384	0.0102	3.7000e-004	0.0106	0.0000	43.1197	43.1197	2.0700e-003	0.0000	43.1714
Waste						0.0000	0.0000		0.0000	0.0000	1.0008	0.0000	1.0008	0.0591	0.0000	2.4793
Water						0.0000	0.0000		0.0000	0.0000	0.0724	0.3852	0.4576	7.4600e-003	1.8000e-004	0.6975
Total	**0.1005**	**0.0998**	**0.1893**	**7.0000e-004**	**0.0380**	**3.3000e-003**	**0.0413**	**0.0102**	**3.2800e-003**	**0.0135**	**1.0732**	**124.3274**	**125.4006**	**0.0712**	**1.3100e-003**	**127.5718**

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

3.0 Construction Detail

Construction Phase

Pfeiffer Big Sur Campground - Monterey County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/15/2023	9/11/2023	5	20	
2	Grading	Grading	9/12/2023	10/9/2023	5	20	
3	Building Construction	Building Construction	10/10/2023	5/20/2024	5	160	
4	Paving	Paving	5/21/2024	5/27/2024	5	5	
5	Architectural Coating	Architectural Coating	5/28/2024	6/3/2024	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.25

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 26,463; Non-Residential Outdoor: 8,821; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	15.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	7.00	3.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3500e-003	0.0619	0.0392	1.0000e-004		2.2700e-003	2.2700e-003		2.0800e-003	2.0800e-003	0.0000	8.5496	8.5496	2.7700e-003	0.0000	8.6187
Total	**5.3500e-003**	**0.0619**	**0.0392**	**1.0000e-004**	**0.0000**	**2.2700e-003**	**2.2700e-003**	**0.0000**	**2.0800e-003**	**2.0800e-003**	**0.0000**	**8.5496**	**8.5496**	**2.7700e-003**	**0.0000**	**8.6187**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	2.2000e-004	1.9900e-003	1.0000e-005	6.2000e-004	0.0000	6.2000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.5225	0.5225	2.0000e-005	0.0000	0.5230
Total	**2.4000e-004**	**2.2000e-004**	**1.9900e-003**	**1.0000e-005**	**6.2000e-004**	**0.0000**	**6.2000e-004**	**1.6000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5225**	**0.5225**	**2.0000e-005**	**0.0000**	**0.5230**

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3500e-003	0.0619	0.0392	1.0000e-004		2.2700e-003	2.2700e-003		2.0800e-003	2.0800e-003	0.0000	8.5496	8.5496	2.7700e-003	0.0000	8.6187
Total	**5.3500e-003**	**0.0619**	**0.0392**	**1.0000e-004**	**0.0000**	**2.2700e-003**	**2.2700e-003**	**0.0000**	**2.0800e-003**	**2.0800e-003**	**0.0000**	**8.5496**	**8.5496**	**2.7700e-003**	**0.0000**	**8.6187**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	2.2000e-004	1.9900e-003	1.0000e-005	6.2000e-004	0.0000	6.2000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.5225	0.5225	2.0000e-005	0.0000	0.5230
Total	**2.4000e-004**	**2.2000e-004**	**1.9900e-003**	**1.0000e-005**	**6.2000e-004**	**0.0000**	**6.2000e-004**	**1.6000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5225**	**0.5225**	**2.0000e-005**	**0.0000**	**0.5230**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.6700e-003	0.0000	7.6700e-003	4.1500e-003	0.0000	4.1500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4600e-003	0.0578	0.0739	1.2000e-004		2.8200e-003	2.8200e-003		2.7000e-003	2.7000e-003	0.0000	10.4182	10.4182	1.9000e-003	0.0000	10.4656
Total	**6.4600e-003**	**0.0578**	**0.0739**	**1.2000e-004**	**7.6700e-003**	**2.8200e-003**	**0.0105**	**4.1500e-003**	**2.7000e-003**	**6.8500e-003**	**0.0000**	**10.4182**	**10.4182**	**1.9000e-003**	**0.0000**	**10.4656**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.4300e-003	3.7000e-004	1.0000e-005	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.5566	0.5566	2.0000e-005	0.0000	0.5570
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	4.3000e-004	3.9900e-003	1.0000e-005	1.2400e-003	1.0000e-005	1.2500e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0451	1.0451	3.0000e-005	0.0000	1.0459
Total	**5.3000e-004**	**1.8600e-003**	**4.3600e-003**	**2.0000e-005**	**1.3700e-003**	**1.0000e-005**	**1.3800e-003**	**3.6000e-004**	**1.0000e-005**	**3.8000e-004**	**0.0000**	**1.6016**	**1.6016**	**5.0000e-005**	**0.0000**	**1.6029**

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.6700e-003	0.0000	7.6700e-003	4.1500e-003	0.0000	4.1500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4600e-003	0.0578	0.0739	1.2000e-004		2.8200e-003	2.8200e-003		2.7000e-003	2.7000e-003	0.0000	10.4182	10.4182	1.9000e-003	0.0000	10.4655
Total	**6.4600e-003**	**0.0578**	**0.0739**	**1.2000e-004**	**7.6700e-003**	**2.8200e-003**	**0.0105**	**4.1500e-003**	**2.7000e-003**	**6.8500e-003**	**0.0000**	**10.4182**	**10.4182**	**1.9000e-003**	**0.0000**	**10.4655**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.4300e-003	3.7000e-004	1.0000e-005	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.5566	0.5566	2.0000e-005	0.0000	0.5570
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	4.3000e-004	3.9900e-003	1.0000e-005	1.2400e-003	1.0000e-005	1.2500e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0451	1.0451	3.0000e-005	0.0000	1.0459
Total	**5.3000e-004**	**1.8600e-003**	**4.3600e-003**	**2.0000e-005**	**1.3700e-003**	**1.0000e-005**	**1.3800e-003**	**3.6000e-004**	**1.0000e-005**	**3.8000e-004**	**0.0000**	**1.6016**	**1.6016**	**5.0000e-005**	**0.0000**	**1.6029**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0187	0.1894	0.2094	3.4000e-004		9.4500e-003	9.4500e-003		8.6900e-003	8.6900e-003	0.0000	29.5615	29.5615	9.5600e-003	0.0000	29.8005
Total	**0.0187**	**0.1894**	**0.2094**	**3.4000e-004**		**9.4500e-003**	**9.4500e-003**		**8.6900e-003**	**8.6900e-003**	**0.0000**	**29.5615**	**29.5615**	**9.5600e-003**	**0.0000**	**29.8005**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	7.5700e-003	1.9800e-003	2.0000e-005	5.3000e-004	1.0000e-005	5.4000e-004	1.5000e-004	1.0000e-005	1.6000e-004	0.0000	2.1464	2.1464	8.0000e-005	0.0000	2.1484
Worker	1.0100e-003	8.9000e-004	8.2300e-003	2.0000e-005	2.5500e-003	2.0000e-005	2.5700e-003	6.8000e-004	2.0000e-005	7.0000e-004	0.0000	2.1581	2.1581	7.0000e-005	0.0000	2.1599
Total	**1.2200e-003**	**8.4600e-003**	**0.0102**	**4.0000e-005**	**3.0800e-003**	**3.0000e-005**	**3.1100e-003**	**8.3000e-004**	**3.0000e-005**	**8.6000e-004**	**0.0000**	**4.3045**	**4.3045**	**1.5000e-004**	**0.0000**	**4.3083**

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0187	0.1894	0.2094	3.4000e-004		9.4500e-003	9.4500e-003		8.6900e-003	8.6900e-003	0.0000	29.5615	29.5615	9.5600e-003	0.0000	29.8005
Total	**0.0187**	**0.1894**	**0.2094**	**3.4000e-004**		**9.4500e-003**	**9.4500e-003**		**8.6900e-003**	**8.6900e-003**	**0.0000**	**29.5615**	**29.5615**	**9.5600e-003**	**0.0000**	**29.8005**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	7.5700e-003	1.9800e-003	2.0000e-005	5.3000e-004	1.0000e-005	5.4000e-004	1.5000e-004	1.0000e-005	1.6000e-004	0.0000	2.1464	2.1464	8.0000e-005	0.0000	2.1484
Worker	1.0100e-003	8.9000e-004	8.2300e-003	2.0000e-005	2.5500e-003	2.0000e-005	2.5700e-003	6.8000e-004	2.0000e-005	7.0000e-004	0.0000	2.1581	2.1581	7.0000e-005	0.0000	2.1599
Total	**1.2200e-003**	**8.4600e-003**	**0.0102**	**4.0000e-005**	**3.0800e-003**	**3.0000e-005**	**3.1100e-003**	**8.3000e-004**	**3.0000e-005**	**8.6000e-004**	**0.0000**	**4.3045**	**4.3045**	**1.5000e-004**	**0.0000**	**4.3083**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0301	0.3017	0.3569	5.8000e-004		0.0143	0.0143		0.0131	0.0131	0.0000	50.6224	50.6224	0.0164	0.0000	51.0317
Total	**0.0301**	**0.3017**	**0.3569**	**5.8000e-004**		**0.0143**	**0.0143**		**0.0131**	**0.0131**	**0.0000**	**50.6224**	**50.6224**	**0.0164**	**0.0000**	**51.0317**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5000e-004	0.0127	3.1500e-003	4.0000e-005	9.0000e-004	2.0000e-005	9.2000e-004	2.6000e-004	2.0000e-005	2.8000e-004	0.0000	3.6472	3.6472	1.4000e-004	0.0000	3.6507
Worker	1.6100e-003	1.3800e-003	0.0129	4.0000e-005	4.3700e-003	3.0000e-005	4.4000e-003	1.1600e-003	3.0000e-005	1.1900e-003	0.0000	3.5521	3.5521	1.1000e-004	0.0000	3.5548
Total	**1.9600e-003**	**0.0141**	**0.0161**	**8.0000e-005**	**5.2700e-003**	**5.0000e-005**	**5.3200e-003**	**1.4200e-003**	**5.0000e-005**	**1.4700e-003**	**0.0000**	**7.1993**	**7.1993**	**2.5000e-004**	**0.0000**	**7.2055**

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0301	0.3017	0.3569	5.8000e-004		0.0143	0.0143		0.0131	0.0131	0.0000	50.6224	50.6224	0.0164	0.0000	51.0317
Total	**0.0301**	**0.3017**	**0.3569**	**5.8000e-004**		**0.0143**	**0.0143**		**0.0131**	**0.0131**	**0.0000**	**50.6224**	**50.6224**	**0.0164**	**0.0000**	**51.0317**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5000e-004	0.0127	3.1500e-003	4.0000e-005	9.0000e-004	2.0000e-005	9.2000e-004	2.6000e-004	2.0000e-005	2.8000e-004	0.0000	3.6472	3.6472	1.4000e-004	0.0000	3.6507
Worker	1.6100e-003	1.3800e-003	0.0129	4.0000e-005	4.3700e-003	3.0000e-005	4.4000e-003	1.1600e-003	3.0000e-005	1.1900e-003	0.0000	3.5521	3.5521	1.1000e-004	0.0000	3.5548
Total	**1.9600e-003**	**0.0141**	**0.0161**	**8.0000e-005**	**5.2700e-003**	**5.0000e-005**	**5.3200e-003**	**1.4200e-003**	**5.0000e-005**	**1.4700e-003**	**0.0000**	**7.1993**	**7.1993**	**2.5000e-004**	**0.0000**	**7.2055**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4800e-003	0.0131	0.0176	3.0000e-005		6.1000e-004	6.1000e-004		5.7000e-004	5.7000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.4800e-003**	**0.0131**	**0.0176**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**5.7000e-004**	**5.7000e-004**	**0.0000**	**2.3502**	**2.3502**	**6.8000e-004**	**0.0000**	**2.3673**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.8000e-004	1.6500e-003	1.0000e-005	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4522	0.4522	1.0000e-005	0.0000	0.4525
Total	**2.1000e-004**	**1.8000e-004**	**1.6500e-003**	**1.0000e-005**	**5.6000e-004**	**0.0000**	**5.6000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4522**	**0.4522**	**1.0000e-005**	**0.0000**	**0.4525**

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4800e-003	0.0131	0.0176	3.0000e-005		6.1000e-004	6.1000e-004		5.7000e-004	5.7000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.4800e-003**	**0.0131**	**0.0176**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**5.7000e-004**	**5.7000e-004**	**0.0000**	**2.3502**	**2.3502**	**6.8000e-004**	**0.0000**	**2.3673**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.8000e-004	1.6500e-003	1.0000e-005	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4522	0.4522	1.0000e-005	0.0000	0.4525
Total	**2.1000e-004**	**1.8000e-004**	**1.6500e-003**	**1.0000e-005**	**5.6000e-004**	**0.0000**	**5.6000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4522**	**0.4522**	**1.0000e-005**	**0.0000**	**0.4525**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1227					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	3.0500e-003	4.5300e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6392
Total	**0.1231**	**3.0500e-003**	**4.5300e-003**	**1.0000e-005**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6392**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	9.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0251	0.0251	0.0000	0.0000	0.0251
Total	**1.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0251**	**0.0251**	**0.0000**	**0.0000**	**0.0251**

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1227					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	3.0500e-003	4.5300e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6392
Total	**0.1231**	**3.0500e-003**	**4.5300e-003**	**1.0000e-005**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6392**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	9.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0251	0.0251	0.0000	0.0000	0.0251
Total	**1.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0251**	**0.0251**	**0.0000**	**0.0000**	**0.0251**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0151	0.0615	0.1570	4.7000e-004	0.0380	3.9000e-004	0.0384	0.0102	3.7000e-004	0.0106	0.0000	43.1197	43.1197	2.0700e-003	0.0000	43.1714
Unmitigated	0.0151	0.0615	0.1570	4.7000e-004	0.0380	3.9000e-004	0.0384	0.0102	3.7000e-004	0.0106	0.0000	43.1197	43.1197	2.0700e-003	0.0000	43.1714

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Motel	50.67	50.67	50.67	101,401	101,401
Total	50.67	50.67	50.67	101,401	101,401

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Motel	14.70	6.60	6.60	19.00	62.00	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Motel	0.552883	0.027257	0.207401	0.123848	0.019119	0.005051	0.019954	0.028272	0.004145	0.002553	0.007563	0.001233	0.000721

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	39.1074	39.1074	1.7700e-003	3.7000e-004	39.2606
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	39.1074	39.1074	1.7700e-003	3.7000e-004	39.2606
NaturalGas Mitigated	4.2200e-003	0.0383	0.0322	2.3000e-004		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	41.7149	41.7149	8.0000e-004	7.6000e-004	41.9628
NaturalGas Unmitigated	4.2200e-003	0.0383	0.0322	2.3000e-004		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	41.7149	41.7149	8.0000e-004	7.6000e-004	41.9628

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Motel	781708	4.2200e-003	0.0383	0.0322	2.3000e-004		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	41.7149	41.7149	8.0000e-004	7.6000e-004	41.9628
Total		**4.2200e-003**	**0.0383**	**0.0322**	**2.3000e-004**		**2.9100e-003**	**2.9100e-003**		**2.9100e-003**	**2.9100e-003**	**0.0000**	**41.7149**	**41.7149**	**8.0000e-004**	**7.6000e-004**	**41.9628**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Motel	781708	4.2200e-003	0.0383	0.0322	2.3000e-004		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	41.7149	41.7149	8.0000e-004	7.6000e-004	41.9628
Total		**4.2200e-003**	**0.0383**	**0.0322**	**2.3000e-004**		**2.9100e-003**	**2.9100e-003**		**2.9100e-003**	**2.9100e-003**	**0.0000**	**41.7149**	**41.7149**	**8.0000e-004**	**7.6000e-004**	**41.9628**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Motel	134431	39.1074	1.7700e-003	3.7000e-004	39.2606
Total		**39.1074**	**1.7700e-003**	**3.7000e-004**	**39.2606**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Motel	134431	39.1074	1.7700e-003	3.7000e-004	39.2606
Total		**39.1074**	**1.7700e-003**	**3.7000e-004**	**39.2606**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0812	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	0.0000	2.4000e-004
Unmitigated	0.0812	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	0.0000	2.4000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0123					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0689					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	0.0000	2.4000e-004
Total	**0.0812**	**0.0000**	**1.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.4000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0123					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0689					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	0.0000	2.4000e-004
Total	**0.0812**	**0.0000**	**1.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.0000**	**2.4000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.4576	7.4600e-003	1.8000e-004	0.6975
Unmitigated	0.4576	7.4600e-003	1.8000e-004	0.6975

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Motel	0.228301 / 0.0253668	0.4576	7.4600e-003	1.8000e-004	0.6975
Total		**0.4576**	**7.4600e-003**	**1.8000e-004**	**0.6975**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Motel	0.228301 / 0.0253668	0.4576	7.4600e-003	1.8000e-004	0.6975
Total		**0.4576**	**7.4600e-003**	**1.8000e-004**	**0.6975**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.0008	0.0591	0.0000	2.4793
Unmitigated	1.0008	0.0591	0.0000	2.4793

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Motel	4.93	1.0008	0.0591	0.0000	2.4793
Total		**1.0008**	**0.0591**	**0.0000**	**2.4793**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Motel	4.93	1.0008	0.0591	0.0000	2.4793
Total		**1.0008**	**0.0591**	**0.0000**	**2.4793**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Pfeiffer Big Sur Campground

Monterey County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Motel	9.00	Room	0.41	17,641.80	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction of the Proposed Project is anticipated to begin in August 2023 and end in August 2024. Grading and site preparation activities are anticipated to occur over an approximately two- to four-month period. Following initial site preparation and grading activities, construction of the cabins and associated improvements would be completed in approximately six to eight months

Grading - Per the grading plans, grading will occur on 0.25 acres of the total project site.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Prefabriacted cabins that have no appliances inside. Only electricity.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	160.00
tblConstructionPhase	NumDays	2.00	20.00
tblConstructionPhase	NumDays	1.00	20.00
tblConstructionPhase	PhaseEndDate	1/18/2024	6/3/2024
tblConstructionPhase	PhaseEndDate	1/4/2024	5/20/2024
tblConstructionPhase	PhaseEndDate	8/17/2023	10/9/2023
tblConstructionPhase	PhaseEndDate	1/11/2024	5/27/2024
tblConstructionPhase	PhaseEndDate	8/15/2023	9/11/2023
tblConstructionPhase	PhaseStartDate	1/12/2024	5/28/2024
tblConstructionPhase	PhaseStartDate	8/18/2023	10/10/2023
tblConstructionPhase	PhaseStartDate	8/16/2023	9/12/2023
tblConstructionPhase	PhaseStartDate	1/5/2024	5/21/2024
tblGrading	AcresOfGrading	0.00	0.25
tblGrading	AcresOfGrading	10.00	0.00
tblGrading	MaterialExported	0.00	120.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.7051	6.7074	7.8392	0.0137	0.9081	0.3213	1.1915	0.4529	0.2956	0.7239	0.0000	1,323.5447	1,323.5447	0.3631	0.0000	1,328.9146
2024	49.2483	6.2537	7.7045	0.0133	0.2299	0.2834	0.4744	0.0610	0.2607	0.2897	0.0000	1,260.1784	1,260.1784	0.3629	0.0000	1,269.2509
Maximum	**49.2483**	**6.7074**	**7.8392**	**0.0137**	**0.9081**	**0.3213**	**1.1915**	**0.4529**	**0.2956**	**0.7239**	**0.0000**	**1,323.5447**	**1,323.5447**	**0.3631**	**0.0000**	**1,328.9146**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.7051	6.7074	7.8392	0.0137	0.9081	0.3213	1.1915	0.4529	0.2956	0.7239	0.0000	1,323.5447	1,323.5447	0.3631	0.0000	1,328.9146
2024	49.2483	6.2537	7.7045	0.0133	0.2299	0.2834	0.4744	0.0610	0.2607	0.2897	0.0000	1,260.1784	1,260.1784	0.3629	0.0000	1,269.2509
Maximum	**49.2483**	**6.7074**	**7.8392**	**0.0137**	**0.9081**	**0.3213**	**1.1915**	**0.4529**	**0.2956**	**0.7239**	**0.0000**	**1,323.5447**	**1,323.5447**	**0.3631**	**0.0000**	**1,328.9146**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4448	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.9700e-003	1.9700e-003	1.0000e-005		2.1000e-003
Energy	0.0231	0.2100	0.1764	1.2600e-003		0.0160	0.0160		0.0160	0.0160		251.9607	251.9607	4.8300e-003	4.6200e-003	253.4580
Mobile	0.0823	0.3451	0.9161	2.5600e-003	0.2158	2.1700e-003	0.2180	0.0578	2.0200e-003	0.0598		258.9916	258.9916	0.0129		259.3133
Total	**0.5502**	**0.5551**	**1.0934**	**3.8200e-003**	**0.2158**	**0.0181**	**0.2339**	**0.0578**	**0.0180**	**0.0758**		**510.9543**	**510.9543**	**0.0177**	**4.6200e-003**	**512.7734**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4448	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.9700e-003	1.9700e-003	1.0000e-005		2.1000e-003
Energy	0.0231	0.2100	0.1764	1.2600e-003		0.0160	0.0160		0.0160	0.0160		251.9607	251.9607	4.8300e-003	4.6200e-003	253.4580
Mobile	0.0823	0.3451	0.9161	2.5600e-003	0.2158	2.1700e-003	0.2180	0.0578	2.0200e-003	0.0598		258.9916	258.9916	0.0129		259.3133
Total	**0.5502**	**0.5551**	**1.0934**	**3.8200e-003**	**0.2158**	**0.0181**	**0.2339**	**0.0578**	**0.0180**	**0.0758**		**510.9543**	**510.9543**	**0.0177**	**4.6200e-003**	**512.7734**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/15/2023	9/11/2023	5	20	
2	Grading	Grading	9/12/2023	10/9/2023	5	20	
3	Building Construction	Building Construction	10/10/2023	5/20/2024	5	160	
4	Paving	Paving	5/21/2024	5/27/2024	5	5	
5	Architectural Coating	Architectural Coating	5/28/2024	6/3/2024	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.25

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 26,463; Non-Residential Outdoor: 8,821; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	15.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	7.00	3.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.0000**	**0.2266**	**0.2266**	**0.0000**	**0.2084**	**0.2084**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0273	0.0238	0.2040	5.7000e-004	0.0639	4.8000e-004	0.0644	0.0169	4.4000e-004	0.0174		57.2632	57.2632	1.8900e-003		57.3106
Total	**0.0273**	**0.0238**	**0.2040**	**5.7000e-004**	**0.0639**	**4.8000e-004**	**0.0644**	**0.0169**	**4.4000e-004**	**0.0174**		**57.2632**	**57.2632**	**1.8900e-003**		**57.3106**

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.0000**	**0.2266**	**0.2266**	**0.0000**	**0.2084**	**0.2084**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0273	0.0238	0.2040	5.7000e-004	0.0639	4.8000e-004	0.0644	0.0169	4.4000e-004	0.0174		57.2632	57.2632	1.8900e-003		57.3106
Total	**0.0273**	**0.0238**	**0.2040**	**5.7000e-004**	**0.0639**	**4.8000e-004**	**0.0644**	**0.0169**	**4.4000e-004**	**0.0174**		**57.2632**	**57.2632**	**1.8900e-003**		**57.3106**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7673	0.0000	0.7673	0.4154	0.0000	0.4154			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**	**0.7673**	**0.2821**	**1.0494**	**0.4154**	**0.2698**	**0.6852**		**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.1700e-003	0.1426	0.0386	5.7000e-004	0.0131	3.3000e-004	0.0134	3.5900e-003	3.1000e-004	3.9000e-003		60.6127	60.6127	2.0700e-003		60.6645
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0545	0.0476	0.4080	1.1500e-003	0.1277	9.6000e-004	0.1287	0.0339	8.9000e-004	0.0348		114.5265	114.5265	3.7900e-003		114.6211
Total	**0.0587**	**0.1902**	**0.4466**	**1.7200e-003**	**0.1408**	**1.2900e-003**	**0.1421**	**0.0375**	**1.2000e-003**	**0.0387**		**175.1392**	**175.1392**	**5.8600e-003**		**175.2856**

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7673	0.0000	0.7673	0.4154	0.0000	0.4154			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**	**0.7673**	**0.2821**	**1.0494**	**0.4154**	**0.2698**	**0.6852**	**0.0000**	**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.1700e-003	0.1426	0.0386	5.7000e-004	0.0131	3.3000e-004	0.0134	3.5900e-003	3.1000e-004	3.9000e-003		60.6127	60.6127	2.0700e-003		60.6645
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0545	0.0476	0.4080	1.1500e-003	0.1277	9.6000e-004	0.1287	0.0339	8.9000e-004	0.0348		114.5265	114.5265	3.7900e-003		114.6211
Total	**0.0587**	**0.1902**	**0.4466**	**1.7200e-003**	**0.1408**	**1.2900e-003**	**0.1421**	**0.0375**	**1.2000e-003**	**0.0387**		**175.1392**	**175.1392**	**5.8600e-003**		**175.2856**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**		**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.5600e-003	0.2554	0.0721	7.5000e-004	0.0184	3.7000e-004	0.0187	5.2800e-003	3.5000e-004	5.6400e-003		78.6856	78.6856	3.2000e-003		78.7655
Worker	0.0382	0.0333	0.2856	8.0000e-004	0.0894	6.7000e-004	0.0901	0.0237	6.2000e-004	0.0243		80.1685	80.1685	2.6500e-003		80.2348
Total	**0.0457**	**0.2888**	**0.3576**	**1.5500e-003**	**0.1078**	**1.0400e-003**	**0.1088**	**0.0290**	**9.7000e-004**	**0.0300**		**158.8541**	**158.8541**	**5.8500e-003**		**159.0003**

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**	**0.0000**	**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.5600e-003	0.2554	0.0721	7.5000e-004	0.0184	3.7000e-004	0.0187	5.2800e-003	3.5000e-004	5.6400e-003		78.6856	78.6856	3.2000e-003		78.7655
Worker	0.0382	0.0333	0.2856	8.0000e-004	0.0894	6.7000e-004	0.0901	0.0237	6.2000e-004	0.0243		80.1685	80.1685	2.6500e-003		80.2348
Total	**0.0457**	**0.2888**	**0.3576**	**1.5500e-003**	**0.1078**	**1.0400e-003**	**0.1088**	**0.0290**	**9.7000e-004**	**0.0300**		**158.8541**	**158.8541**	**5.8500e-003**		**159.0003**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598		1,104.9834	1,104.9834	0.3574		1,113.9177
Total	**0.5950**	**5.9739**	**7.0675**	**0.0114**		**0.2824**	**0.2824**		**0.2598**	**0.2598**		**1,104.9834**	**1,104.9834**	**0.3574**		**1,113.9177**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.1400e-003	0.2497	0.0672	7.4000e-004	0.0184	3.4000e-004	0.0187	5.2900e-003	3.3000e-004	5.6100e-003		78.1131	78.1131	3.1600e-003		78.1920
Worker	0.0357	0.0300	0.2618	7.7000e-004	0.0894	6.5000e-004	0.0901	0.0237	6.0000e-004	0.0243		77.0819	77.0819	2.3700e-003		77.1411
Total	**0.0428**	**0.2797**	**0.3289**	**1.5100e-003**	**0.1078**	**9.9000e-004**	**0.1088**	**0.0290**	**9.3000e-004**	**0.0299**		**155.1950**	**155.1950**	**5.5300e-003**		**155.3331**

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598	0.0000	1,104.9834	1,104.9834	0.3574		1,113.9177
Total	**0.5950**	**5.9739**	**7.0675**	**0.0114**		**0.2824**	**0.2824**		**0.2598**	**0.2598**	**0.0000**	**1,104.9834**	**1,104.9834**	**0.3574**		**1,113.9177**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.1400e-003	0.2497	0.0672	7.4000e-004	0.0184	3.4000e-004	0.0187	5.2900e-003	3.3000e-004	5.6100e-003		78.1131	78.1131	3.1600e-003		78.1920
Worker	0.0357	0.0300	0.2618	7.7000e-004	0.0894	6.5000e-004	0.0901	0.0237	6.0000e-004	0.0243		77.0819	77.0819	2.3700e-003		77.1411
Total	**0.0428**	**0.2797**	**0.3289**	**1.5100e-003**	**0.1078**	**9.9000e-004**	**0.1088**	**0.0290**	**9.3000e-004**	**0.0299**		**155.1950**	**155.1950**	**5.5300e-003**		**155.3331**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5904**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**		**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0918	0.0771	0.6731	1.9900e-003	0.2299	1.6800e-003	0.2316	0.0610	1.5400e-003	0.0625		198.2105	198.2105	6.0900e-003		198.3628
Total	**0.0918**	**0.0771**	**0.6731**	**1.9900e-003**	**0.2299**	**1.6800e-003**	**0.2316**	**0.0610**	**1.5400e-003**	**0.0625**		**198.2105**	**198.2105**	**6.0900e-003**		**198.3628**

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5904**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**	**0.0000**	**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0918	0.0771	0.6731	1.9900e-003	0.2299	1.6800e-003	0.2316	0.0610	1.5400e-003	0.0625		198.2105	198.2105	6.0900e-003		198.3628
Total	**0.0918**	**0.0771**	**0.6731**	**1.9900e-003**	**0.2299**	**1.6800e-003**	**0.2316**	**0.0610**	**1.5400e-003**	**0.0625**		**198.2105**	**198.2105**	**6.0900e-003**		**198.3628**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.0624					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**49.2432**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.1000e-003	4.2800e-003	0.0374	1.1000e-004	0.0128	9.0000e-005	0.0129	3.3900e-003	9.0000e-005	3.4700e-003		11.0117	11.0117	3.4000e-004		11.0202
Total	**5.1000e-003**	**4.2800e-003**	**0.0374**	**1.1000e-004**	**0.0128**	**9.0000e-005**	**0.0129**	**3.3900e-003**	**9.0000e-005**	**3.4700e-003**		**11.0117**	**11.0117**	**3.4000e-004**		**11.0202**

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.0624					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**49.2432**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.1000e-003	4.2800e-003	0.0374	1.1000e-004	0.0128	9.0000e-005	0.0129	3.3900e-003	9.0000e-005	3.4700e-003		11.0117	11.0117	3.4000e-004		11.0202
Total	**5.1000e-003**	**4.2800e-003**	**0.0374**	**1.1000e-004**	**0.0128**	**9.0000e-005**	**0.0129**	**3.3900e-003**	**9.0000e-005**	**3.4700e-003**		**11.0117**	**11.0117**	**3.4000e-004**		**11.0202**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0823	0.3451	0.9161	2.5600e-003	0.2158	2.1700e-003	0.2180	0.0578	2.0200e-003	0.0598		258.9916	258.9916	0.0129		259.3133
Unmitigated	0.0823	0.3451	0.9161	2.5600e-003	0.2158	2.1700e-003	0.2180	0.0578	2.0200e-003	0.0598		258.9916	258.9916	0.0129		259.3133

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Motel	50.67	50.67	50.67	101,401	101,401
Total	50.67	50.67	50.67	101,401	101,401

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Motel	14.70	6.60	6.60	19.00	62.00	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Motel	0.552883	0.027257	0.207401	0.123848	0.019119	0.005051	0.019954	0.028272	0.004145	0.002553	0.007563	0.001233	0.000721

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0231	0.2100	0.1764	1.2600e-003		0.0160	0.0160		0.0160	0.0160		251.9607	251.9607	4.8300e-003	4.6200e-003	253.4580
NaturalGas Unmitigated	0.0231	0.2100	0.1764	1.2600e-003		0.0160	0.0160		0.0160	0.0160		251.9607	251.9607	4.8300e-003	4.6200e-003	253.4580

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Motel	2141.67	0.0231	0.2100	0.1764	1.2600e-003		0.0160	0.0160		0.0160	0.0160		251.9607	251.9607	4.8300e-003	4.6200e-003	253.4580
Total		**0.0231**	**0.2100**	**0.1764**	**1.2600e-003**		**0.0160**	**0.0160**		**0.0160**	**0.0160**		**251.9607**	**251.9607**	**4.8300e-003**	**4.6200e-003**	**253.4580**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Motel	2.14167	0.0231	0.2100	0.1764	1.2600e-003		0.0160	0.0160		0.0160	0.0160		251.9607	251.9607	4.8300e-003	4.6200e-003	253.4580
Total		**0.0231**	**0.2100**	**0.1764**	**1.2600e-003**		**0.0160**	**0.0160**		**0.0160**	**0.0160**		**251.9607**	**251.9607**	**4.8300e-003**	**4.6200e-003**	**253.4580**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4448	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.9700e-003	1.9700e-003	1.0000e-005		2.1000e-003
Unmitigated	0.4448	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.9700e-003	1.9700e-003	1.0000e-005		2.1000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0672					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3775					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.0000e-005	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.9700e-003	1.9700e-003	1.0000e-005		2.1000e-003
Total	**0.4448**	**1.0000e-005**	**9.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.9700e-003**	**1.9700e-003**	**1.0000e-005**		**2.1000e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0672					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3775					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.0000e-005	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.9700e-003	1.9700e-003	1.0000e-005		2.1000e-003
Total	**0.4448**	**1.0000e-005**	**9.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.9700e-003**	**1.9700e-003**	**1.0000e-005**		**2.1000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Appendix B

Special-Status Species Table

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Special-Status Species Table

Big Sur, Partington Ridge, Pfeiffer Point, Point Sur, and Ventana Cones Quadrangles

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
MAMMALS			
Corynorhinus townsendii Townsend's big-eared bat	-- / CSC / --	Found primarily in rural settings from inland deserts to coastal redwoods, oak woodland of the inner Coast Ranges and Sierra foothills, and low to mid-elevation mixed coniferous-deciduous forests. Typically roost during the day in limestone caves, lava tubes, and mines, but can roost in buildings that offer suitable conditions. Night roosts are in more open settings and include bridges, rock crevices, and trees.	**Low** Suitable foraging and night roost habitat are present within the project site; however, no maternity habitat is present. The nearest CNDDB occurrence is reported approximately 6.5 miles northwest of the project site.
Neotoma macrotis luciana Monterey dusky-footed woodrat	-- / CSC / --	Forest and oak woodland habitats of moderate canopy with moderate to dense understory. Also occurs in chaparral habitats.	**Present** Suitable habitat is present within the project site. Woodrat nests were observed within the site during 2019 biological surveys. This species is therefore assumed present within the project site.
Taxidea taxus American badger	-- / CSC / --	Dry, open grasslands, fields, pastures savannas, and mountain meadows near timberline are preferred. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated grounds.	**Unlikely** No suitable habitat within the project site.
BIRDS			
Brachyramphus marmoratus Marbled murrelet (nesting)	FT / SE / --	Occur year-round in marine subtidal and pelagic habitats from the Oregon border to Point Sal. Partial to coastlines with stands of mature redwood and Douglas-fir. Requires dense mature forests of redwood and/or Douglas-fir for breeding and nesting.	**Unlikely** No suitable habitat within the project site. The project site is outside of the currently known breeding range for this species.
Charadrius alexandrinus nivosus Western snowy plover	FT / CSC / --	Sandy beaches on marine and estuarine shores, also salt pond levees and the shores of large alkali lakes. Requires sandy, gravelly or friable soil substrate for nesting.	**Unlikely** No suitable habitat within the project site.
Cypseloides niger Black swift	-- / CSC / --	Regularly nests in moist crevice or cave on sea cliffs above the surf, or on cliffs behind, or adjacent to, waterfalls in deep canyons. Forages widely over many habitats.	**Unlikely** No suitable habitat within the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Empidonax traillii extimus Southwestern willow flycatcher (nesting)	FE / SE / --	Breeds in riparian habitat in areas ranging in elevation from sea level to over 2,600 meters. Builds nest in trees in densely vegetated areas. This species establishes nesting territories and builds and forages in mosaics of relatively dense and expansive areas of trees and shrubs, near or adjacent to surface water or underlain by saturated soils. Not typically found nesting in areas without willows (*Salix sp*.), tamarisk (*Tamarix ramosissima)*, or both.	**Unlikely** Low quality nesting habitat is present within the project site; however, the project site is outside of the currently known breeding range for this species. The CNDDB does not report any occurrences of this species within the vicinity of the project site.
Fratercula cirrhata Tufted puffin (nesting colony)	-- / CSC / --	Nests on islands and, less commonly, on coastal cliffs. Most common at nesting colonies and on nearby marine pelagic and subtidal waters from late March to September. Requires islands free from human disturbance with soil suitable for digging burrows or with natural rock cavities.	**Unlikely** No suitable habitat within the project site.
Gymnogyps californianus California condor	FE / SE / --	Roosting sites in isolated rocky cliffs, rugged chaparral, and pine covered mountains 2000-6000 feet above sea level. Foraging area removed from nesting/roosting site (includes rangeland and coastal area - up to 19 mile commute one way). Nest sites in cliffs, crevices, potholes.	**Unlikely** No suitable habitat within the project site.
Oceanodroma homochroa Ashy storm-petrel	-- / CSC / --	Tied to land only to nest, otherwise remains over open sea. Nests in natural cavities, sea caves, or rock crevices on offshore islands and prominent peninsulas of the mainland.	**Unlikely** No suitable habitat within the project site.
Sterna antillarum browni California least tern (nesting colony)	FE / SE&CFP /--	Found in seacoasts, beaches, bays, estuaries, lagoons, lakes and rivers, breeding on sandy or gravelly beaches and banks of rivers or lakes, rarely on flat rooftops of buildings. Since 1970, most nesting has occurred from Santa Barbara to San Diego County.	**Unlikely** The project site is outside the current nesting range of this species.
Vireo bellii pusillus Least Bell's vireo (nesting)	FE / SE / --	Riparian areas and drainages. Breed in willow riparian forest supporting a dense, shrubby understory. Oak woodland with a willow riparian understory is also used in some areas, and individuals sometimes enter adjacent chaparral, coastal sage scrub, or desert scrub habitats to forage.	**Unlikely** Riparian habitat within the project site is likely not dense enough to support this species. The project site is likely outside the current range of this species.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
REPTILES AND AMPHIBIANS			
Emys marmorata Western pond turtle	-- / CSC / --	Associated with permanent or nearly permanent water in a wide variety of habitats including streams, lakes, ponds, irrigation ditches, etc. Require basking sites such as partially submerged logs, rocks, mats of vegetation, or open banks.	**Moderate** Suitable upland habitat is present within riparian areas of the project site and the adjacent Big Sur River. The CNDDB reports four occurrences of this species within the quadrangles reviewed, the nearest located approximately 4.3 miles downstream of the project site, within the Big Sur River riparian corridor.
Rana boylii Foothill yellow-legged frog	-- / SE / --	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats, including hardwood, pine, and riparian forests, scrub, chaparral, and wet meadows. Rarely encountered far from permanent water.	**Low** No suitable breeding or non-breeding aquatic habitat is present within the project site; however, the CNDDB reports a 1959 occurrence of this species within the Big Sur River that overlaps with the project site. Jennings and Hayes (1994) identified that this species still occurred within the Big Sur River in the 1990s; however, specific location information was not provided and the Center for Biological Diversity (2016) identified that the species is nearly extinct in Monterey County. The project site has a low potential to provide upland habitat as this species is not often found far from the water.
Rana draytonii California red-legged frog	FT / CSC / --	Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent riparian vegetation. During late summer or fall adults are known to utilize a variety of upland habitats with leaf litter or mammal burrows.	**Low** No suitable breeding or non-breeding aquatic habitat or upland habitat is present within or immediately adjacent to the project site. The CNDDB reports 10 occurrences of this species within the quadrangles reviewed, the nearest located approximately 1.2 miles from the project site; however, no occurrences are known from the adjacent Big Sur River. The project site is within dispersal range for this species, and suitable dispersal habitat is present; however, dispersal habitat is ubiquitous and migrating CRLF are widely distributed across the landscape in space and time.
Taricha torosa Coast range newt	-- / CSC / --	Occurs mainly in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub, and mixed chaparral but is known to occur in grasslands and mixed conifer types. Seek cover under rocks and logs, in mammal burrows, rock fissures, or man-made structures such as wells. Breed in intermittent ponds, streams, lakes, and reservoirs.	**Low** Suitable upland habitat is present within the project site; however, the CNDDB reports only one occurrence of this species within the quadrangles reviewed, located more than 10 miles from the project site. No suitable breeding habitat is present within or adjacent to the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
FISH			
Eucyclogobius newberryi Tidewater goby	FE / CSC / --	Brackish water habitats, found in shallow lagoons and lower stream reaches. Tidewater gobies appear to be naturally absent (now and historically) from three large stretches of coastline where lagoons or estuaries are absent and steep topography or swift currents may prevent tidewater gobies from dispersing between adjacent localities. The southernmost large, natural gap occurs between the Salinas River in Monterey County and Arroyo del Oso in San Luis Obispo County.	**Not Present** No suitable habitat within the project site.
Oncorhynchus mykiss irideus Steelhead (south-central California coast DPS)	FT / -- / --	Cold headwaters, creeks, and small to large rivers and lakes; anadromous in coastal streams.	**Present Adjacent** No suitable habitat for this species is present within the project site; however, the CNDDB reports an occurrence of this species directly adjacent to the project site within the Big Sur River, which is designated critical habitat for this species.
INVERTEBRATES			
Branchinecta lynchi Vernal pool fairy shrimp	FT / -- / --	Require ephemeral pools with no flow. Associated with vernal pool/grasslands from near Red Bluff (Shasta County), through the central valley, and into the South Coast Mountains Region. Require ephemeral pools with no flow.	**Unlikely** No suitable habitat within the project site.
Danaus plexippus Monarch butterfly (California overwintering population)	-- / -- / --	Overwinters in coastal California using colonial roosts generally found in Eucalyptus, pine and acacia trees. Overwintering habitat for this species within the Coastal Zone represents ESHA. Local ordinances often protect this species as well.	**Unlikely** No suitable habitat within the project site.
Euphilotes enoptes smithi Smith's blue butterfly	FE / -- / --	Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz Counties. Plant hosts are *Eriogonum latifolium* and *E. parvifolium*.	**Unlikely** No suitable habitat within the project site.
PLANTS			
Abies bracteata Bristlecone fir	-- / -- / 1B	Endemic to Santa Lucia Mountains. Broadleaved upland forest, chaparral, and lower montane coniferous forest on rocky soils at elevations of 183-1600 meters. Evergreen tree in the Pinaceae family.	**Not Present** No suitable habitat within the project site. Not observed during 2019 biological surveys.
Agrostis blasdalei Blasdale's bent grass	-- / -- / 1B	Coastal bluff scrub, coastal dunes, and coastal prairie at elevations from 0-150 meters. Perennial rhizomatous herb in the Poaceae family. Blooms May – July.	**Not Present** No suitable habitat within the project site. Not observed during 2019 biological surveys.
Arctostaphylos edmundsii Little sur manzanita	-- / -- / 1B	Coastal bluff scrub and chaparral on sandy soils at elevations of 30-105 meters. Evergreen shrub in the Ericaceae family; blooms November-April.	**Not Present** No suitable habitat within the project site. Not observed during 2019 biological surveys.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Arenaria paludicola Marsh sandwort	FE / SE / 1B	Known from only two natural occurrences in Black Lake Canyon and at Oso Flaco Lake. Sandy openings of freshwater of brackish marshes and swamps at elevations of 3-170 meters. Stoloniferous perennial herb in the Caryophyllaceae family; blooms May-August.	**Not Present** No suitable habitat within the project site. Project site is outside of the currently known range for this species. Not observed during 2019 biological surveys.
Carex obispoensis San Luis Obispo sedge	-- / -- / 1B	Closed-cone coniferous forests, chaparral, coastal prairie, coastal scrub, and valley foothill grasslands, often on serpentinite seeps and clay soils, but also sometimes on gabbro soils, at elevations of 10-820 meters. Perennial rhizomatous herb in the Cyperaceae family; blooms April-June.	**Not Present** No suitable habitat within the project site. Not observed during 2019 biological surveys.
Carlquistia muirii Muir's tarplant	-- / -- / 1B	Montane chaparral and lower and upper montane coniferous forest at elevations of 1100-2500 meters. Perennial rhizomatous herb in the Asteraceae family; blooms July-August	**Not Present** No suitable habitat within the project site. Not observed during 2019 biological surveys.
Cirsium occidentale var. *compactum* Compact cobwebby thistle	-- / -- / 1B	Chaparral, coastal dunes, coastal scrub, and coastal prairie at elevations of 5-150 meters. Perennial herb in the Asteraceae family blooms April-June.	**Not Present** No suitable habitat within the project site. Not observed during 2019 biological surveys.
Clarkia jolonensis Jolon clarkia	-- / -- / 1B	Cismontane woodland, chaparral, riparian woodland, and coastal scrub at elevations of 20-660 meters. Annual herb in the Onagraceae family; blooms April-June.	**Not Present** Not observed during 2019 biological surveys.
Dacryophyllum falcifolium Tear drop moss	-- / -- / 1B	North coast coniferous forests on carbonate soils at elevations of 50-275 meters. Moss. Known only in Monterey and Santa Cruz counties.	**Not Present** No suitable habitat within the project site. Not observed during 2019 biological surveys.
Delphinium hutchinsoniae Hutchinson's larkspur	-- / -- / 1B	Broadleaved upland forest, chaparral, coastal scrub, and coastal prairie at elevations of 0-427 meters. Perennial herb in the Ranunculaceae family; blooms March-June.	**Not Present** No suitable habitat within the project site. Not observed during 2019 biological surveys.
Delphinium umbraculorum Umbrella larkspur	-- / -- / 1B	Cismontane woodland at elevations of 400-1600 meters. Perennial herb in the Ranunculaceae family; blooms April-June.	**Not Present** Not observed during 2019 biological surveys.
Fritillaria falcata Talus fritillary	-- / -- / 1B	Chaparral, cismontane woodland, and lower montane coniferous forest on serpentine or often talus soils at elevations of 300-1525 meters. Bulbiferous, perennial herb in the Liliaceae family; blooms March-May.	**Not Present** Not observed during 2019 biological surveys.
Fritillaria liliacea Fragrant fritillary	-- / -- / 1B	Cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland, often serpentinite, at elevations of 3-410 meters. Bulbiferous perennial herb in the Liliaceae family; blooms February-April.	**Not Present** Not observed during 2019 biological surveys.
Galium californicum ssp. *luciense* Cone Peak bedstraw	-- / -- / 1B	Broadleaved upland forest, chaparral, cismontane woodland, and lower montane coniferous forest at elevations of 400-1525 meters. Perennial herb in the Rubicaceae family; blooms March-September.	**Not Present** Not observed during 2019 biological surveys.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Galium clementis Santa Lucia bedstraw	-- / -- / 1B	Lower and upper montane coniferous forest on granitic or serpentine rocky soils at elevations of 1130-1780 meters. Perennial herb in the Rubicaceae family; blooms May-July.	**Not Present** No suitable habitat within the project site. Not observed during 2019 biological surveys.
Grimmia torenii Toren's grimmia	-- / -- / 1B	Endemic to California. Occurrences are known from Lake, Mendocino, Contra Costa, and Santa Cruz Counties. Found in the Coast Range at elevations of 325-1160 meters. Occurs on pillow basalts and some sand stones. Often serpentine soil occurs in areas occupied by this species. A moss in the Gimmiaceae family.	**Not Present** No suitable habitat within the project site. Not observed during 2019 biological surveys.
Malacothamnus palmeri var. *lucianus* Arroyo Seco bush-mallow	-- / -- / 1B	Chaparral, cismontane woodland, meadows, and seeps at elevations of 10-915 meters. Perennial deciduous shrub in the Malvaceae family; blooms: April-August.	**Not Present** Not observed during 2019 biological surveys.
Pedicularis dudleyi Dudley's lousewort	-- / SR / 1B	Maritime chaparral, cismontane woodland, North Coast coniferous forest, and valley and foothill grassland at elevations of 60-900 meters. Perennial herb in the Orbanchaceae family; blooms April-June.	**Not Present** Not observed during 2019 biological surveys.
Sanicula maritima Adobe sanicle	-- / -- / 1B	Chaparral, coastal prairie, meadows, seeps, and valley and foothill grassland on clay or serpentine soils at elevations of 3-240 meters. Perennial herb in the Apiaceae family; blooms February-May.	**Not Present** No suitable habitat within the project site. Not observed during 2019 biological surveys.

STATUS DEFINITIONS

Federal

FE = listed as Endangered under the federal Endangered Species Act
FT = listed as Threatened under the federal Endangered Species Act
FC = Candidate for listing under the federal Endangered Species Act
-- = no listing

State

SE = listed as Endangered under the California Endangered Species Act
ST = listed as Threatened under the California Endangered Species Act
SC = Candidate for listing under California Endangered Species Act
SR = plants listed as Rare under the California Native Plant Protection Act
CFP = California Fully Protected Species
CSC = CDFW Species of Concern
-- = no listing

California Native Plant Society

1B = California Rare Plant Rank 1B species; plants rare, threatened, or endangered in California and elsewhere
-- = no listing

POTENTIAL TO OCCUR

Present = known occurrence of species within the site; presence of suitable habitat conditions; or observed during field surveys
High = known occurrence of species in the vicinity from the CNDDB or other documentation; presence of suitable habitat conditions
Moderate = known occurrence of species in the vicinity from the CNDDB or other documentation; presence of marginal habitat conditions within the site
Low = species known to occur in the vicinity from the CNDDB or other documentation; lack of suitable habitat or poor quality
Unlikely = species not known to occur in the vicinity from the CNDDB or other documentation, no suitable habitat is present within the site
Not Present = species was not observed during surveys

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Appendix C

Forest Management Plan

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Pfeiffer Big Sur State Park Campground Cabin Project

Forest Management Plan

March 2021

Prepared for

Design Workshop, Inc.
4825 J Street, Suite 200
Sacramento, California 95831

Prepared by

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Appendices

1. INTRODUCTION

Denise Duffy & Associates, Inc. (DD&A) was contracted by Design Workshop, Inc. (DWI) to prepare this Forest Management Plan for the Pfeiffer Big Sur Campground Project (project), located within Pfeiffer Big Sur State Park (PBSSP) in the Big Sur area of unincorporated Monterey County (County), California **Figure 1** and **Figure 2**). The project consists of the development of an approximately three-acre campsite within PBSSP and will result in the removal of 30 trees.

The Big Sur Coast Land Use Plan (Big Sur Coast LUP), and the County's Coastal Implementation Plan (CIP) regulate the removal of trees in the region, including within the project site. In accordance with the Big Sur Coast LUP and the CIP, a Forest Management Plan (FMP) is required to remove, damage, or relocate trees within the boundaries of the Big Sur Coast LUP and the CIP. To satisfy the requirements of the FMP, DD&A conducted a tree inventory of the project site in June 2019. This FMP includes the tree survey results, identification of which trees are proposed for removal, and recommended actions to reduce or mitigate impacts to trees and the forest in accordance with the Big Sur Coast LUP, and the CIP.

1.1 Regulatory Setting

1.1.1 State Regulations

California Coastal Act

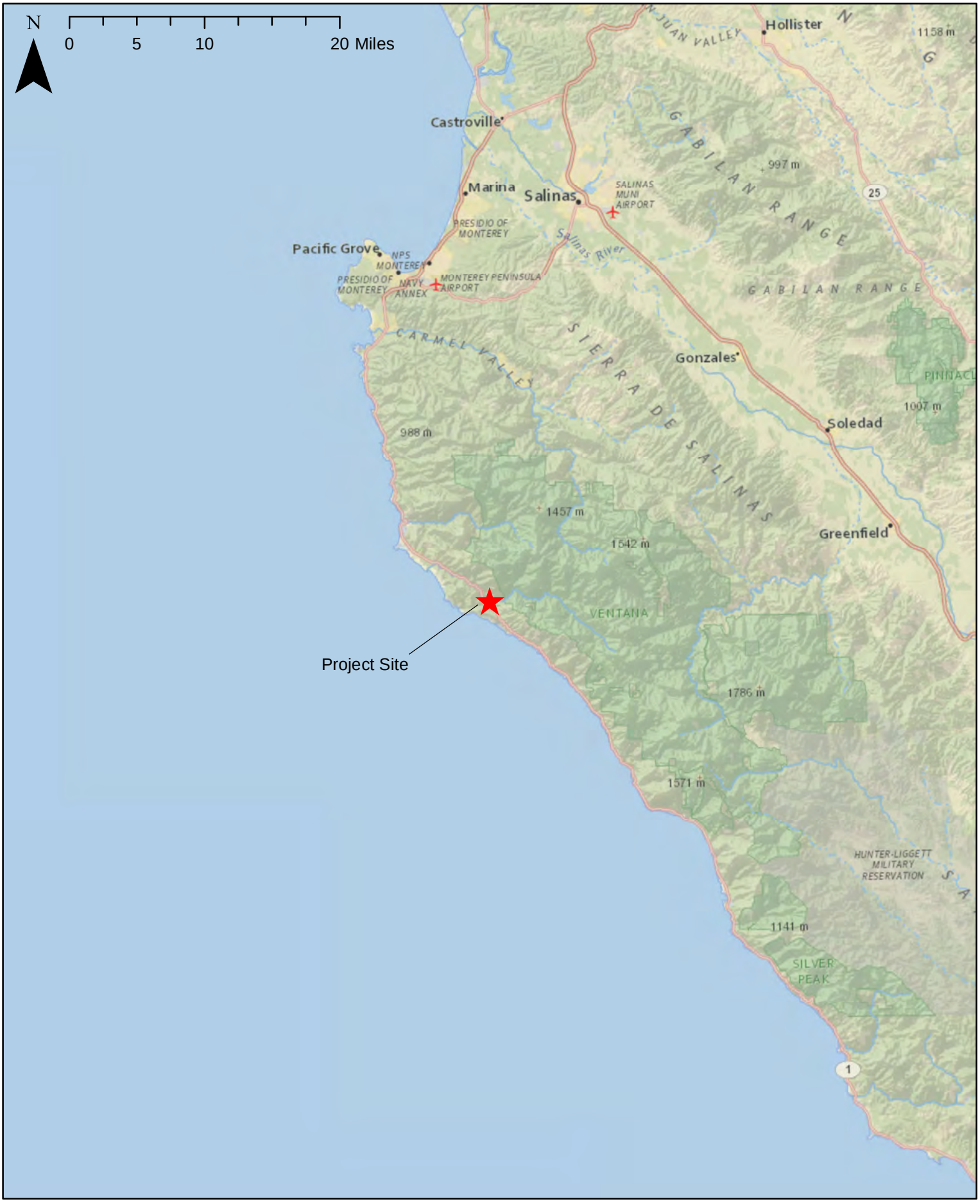
The California Coastal Act (CCA) prohibits development within the coastal zone unless a coastal development permit (CDP) has been issued by either the California Coastal Commission (CCC) or a local government that has a CCC-certified local coastal program. The CCC may designate areas of rare or unique biological value, such as wetland and riparian habitat and habitats for special-status species, as Environmentally Sensitive Habitat Areas (ESHA). Development is restricted within the coastal zone and prohibited within designated ESHA unless the development is coastal dependent and does not have a significant effect on the resources. After certification of an LCP, CDP authority is delegated to the appropriate local government, but the CCC retains original permit jurisdiction over certain specified lands (such as tidelands and public trust lands). The CCC also has appellate authority over development approved by local governments in specified geographic areas as well as certain other developments.

The project site is located within California Department of Parks and Recreation (State Parks) property and the issuance of a coastal development permit would ultimately depend on a ruling by the CCC.

1.1.2 Local Regulations

Monterey County Big Sur Coast Land Use Plan

In accordance with the Big Sur Coast LUP, landmark trees of all species shall be protected in perpetuity as significant features of Big Sur's natural heritage. Landmark Trees are those trees which are 24 inches or more in diameter when measured at breast height, or a tree which is visually significant, historically significant, exemplary of its species, or more than 1000 years old. The California Department of Forestry, scientists from research institutions, and landowners should cooperate in the protection and enhancement of these resources and their supporting habitat. Landmark trees shall be defined as visually significant, historically significant, exemplary of its species, or more than 1000 years old.



Regional Map

Date	Scale	Figure
2/16/2021	1 in = 50,000 ft	1

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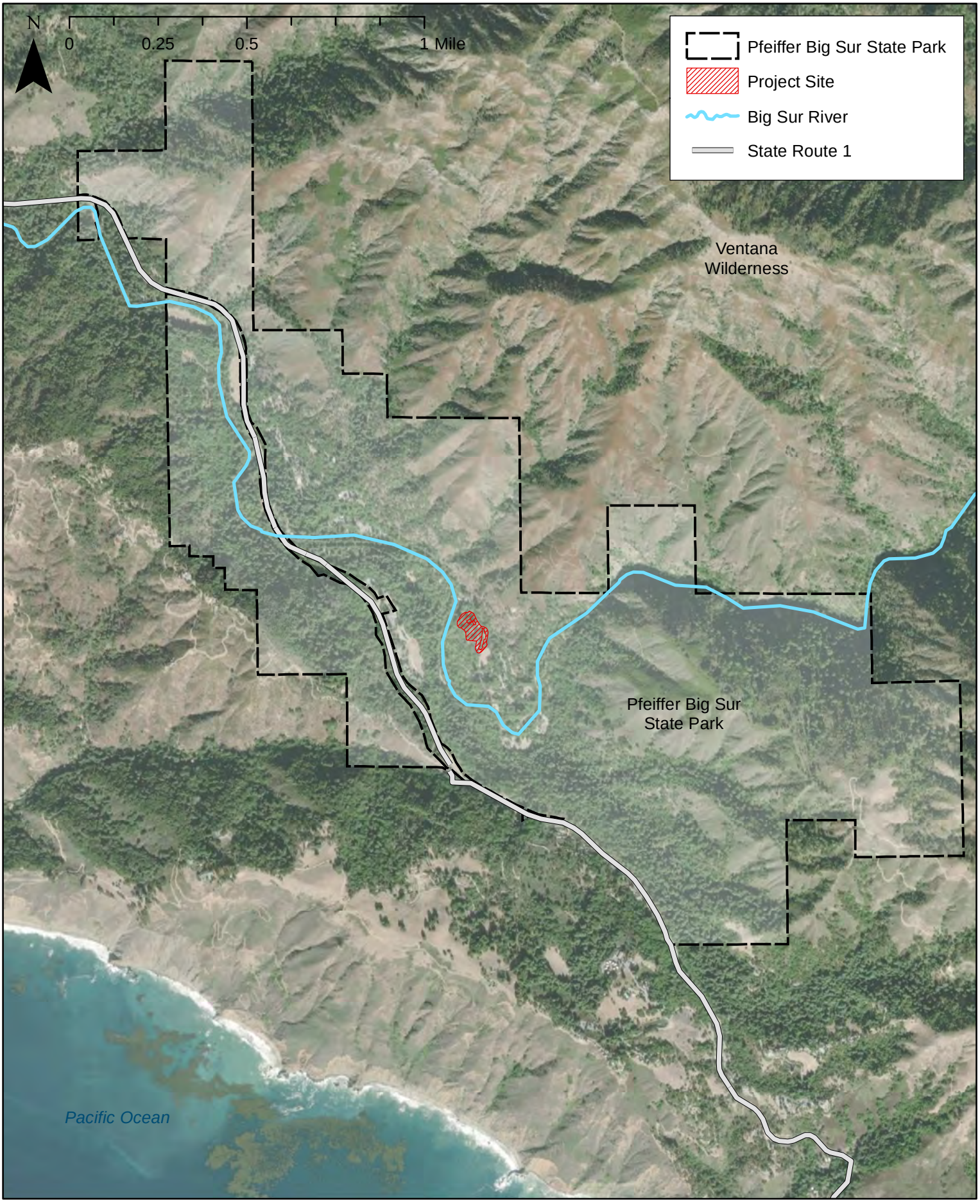

Location Map

Date
2/16/2021

Scale
1 in = 2,000 ft

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Figure
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Monterey County Big Sur Coast Land Use Plan (Continued)

In accordance with 5.4.2 General Policies of the LUP, a coastal development permit must be obtained for the removal of trees and other major vegetation. However, in the Big Sur Coast area the following will not be considered as removal of major vegetation:

1. Removal of non-native or planted trees, except where this would result the exposure of structures in the critical viewshed;
2. Removal of hazardous trees which pose an imminent danger to life or property, or threaten contagion of nearby forested areas, subject to verification by the County or California Department of Forestry;
3. Thinning of small (less than 12" diameter) or dead trees from density forested areas, especially as needed to reduce unsafe fuel accumulations adjacent to existing occupied buildings; and,
4. Prescribed burning, crushing, lopping or other methods of brush clearing which do not materially disturb underlying soils.

Selective removal of trees may be permitted where consistent with the Forest Resources policies of this Plan, provided that no impairment of the critical viewshed or degradation of environmentally sensitive habitat will result. Where the removal of trees is part of a stand improvement project or similar long-term management effort, the submission of a Forest Management Plan for the site will be encouraged by the County; approval of such plans pursuant to a coastal development permit will obviate the need for multiple permit requests on the same site.

Monterey County Coastal Implementation Plan 20.144.050 Forest Resources Development Standards

A Forester's Assessment and Recommendation shall be required per 20.144.050 of the CIP for removal of three or more trees requiring a Coastal Development Permit or proposed as part of a development where the tree removal would otherwise require a coastal development permit. For the purposes of the Forester's Assessment -and Recommendation, a clustered or multi-stemmed tree shall be considered one tree if sharing a common basal crown at ground level. The basal crown is the enlargement of the bottom of a tree trunk at the ground.

1.2 Limitations

It is not the intent of this report to provide a monetary valuation of the trees or provide risk assessment for any tree on this parcel, as any tree can fail at any time. No clinical diagnosis was performed on any pest or pathogen that may or may not be present within the site. In addition to an inspection of the property, DD&A relied on information provided by DWI and State Parks (such as survey data, property boundaries, and property ownership information) to prepare this report, and must reasonably rely on the accuracy of the information provided. DD&A shall not be responsible for another's means, methods, techniques, schedules, or procedures, or for contractor safety or any other related programs, or for another's failure to complete work in accordance with approved plans and specifications.

2. METHODS

2.1 Personnel and Survey Dates

DD&A biologists, led by ISA Certified Arborist Patric Krabacher, conducted tree surveys of an evaluation area which encompassed the project site (**Figure 2**) on June 19, 20, and 21, 2019. Survey methods included walking the evaluation area and collecting GPS location, diameter at breast height (DBH), and condition of the all trees in the evaluation area. Data collected during the surveys were used to inform design plans to preserve trees and habitat to the greatest extent feasible, and to maintain the general aesthetic quality of the area.

2.2 Survey Methods

Trees were inventoried in accordance with the requirements of CIP 2.144.050 (Forest Resources Development Standards) and with the following protocol:

- Tree diameter was recorded at breast height (two feet above ground) or (for multi-stemmed trees) at the most representable location.
- All trees greater than 6" DBH were tagged with a global positioning system (GPS) location and the existing physical marker was recorded.
- A clustered or multi-stemmed tree shall be considered one tree if sharing a common basal crown at ground level
- Species, size, and health class were recorded for each tree.

Tree health was recorded based on the following definitions:

- *Good.* Tree is healthy and vigorous, as indicated by foliage color and density, and has no apparent signs of insect, disease, structural defects, or mechanical injury. Tree has good form and structure.
- *Fair.* Tree is in average condition and vigor for the area, but may show minor insect, disease, or physiological problems. Trees in fair condition may be improved with correctional pruning.
- *Poor.* Tree is in a general state of decline. Tree may show severe structural or mechanical defects which may lead to failure, and may have insect or disease damage, but is not dead.

Tree health was evaluated by visually inspecting each tree from its root crown to its foliar canopy for signs of decay, disease, or insect infestations.

GPS data were collected using a Trimble® Geo 7 Series GPS and were then digitized using Trimble® GPS Pathfinder and ESRI® ArcGIS 10.4.

3. SITE DESCRIPTION

3.1 Site Location

The project site is located within PBSSP in the Big Sur area of unincorporated Monterey County, California (**Figure 2**). PBSSP is located on the western slope of the Santa Lucia Mountains, approximately one mile north of Pfeiffer Beach. The site is located within Monterey County parcel 419-031-002-000 (**Figure 2**). The site is approximately three (3) acres.

3.2 Existing Land Use

The project site is located within the Big Sur Coast LUP's Outdoor Recreation Zoning District. The site has historically been used for a variety of purposes, including utility, residential, and, mostly recently, recreational uses. The site was once the location of the Camp Big Sur swimming pool, which was established in 1938. Due to perceived public hazards, the pool and related infrastructure were destroyed in the late 1960s. The resulting debris was later capped with mudslide sediment from the 1972 Molera fire; however, some remnant debris is still visible within the project site. The site is currently open space. A paved parking lot and paved road connect the site to SR 1 and other campgrounds within PBSSP. The site is surrounded by the Big Sur River and SR 1 to the west, campgrounds and other recreational amenities to the north and south, and open space to the east.

3.3 Slopes

Slopes within the project site are approximately 0 to 15 percent.

3.4 Soils

Soils within the project site are *Fluvents, stony* (NRCS, 2020). These soils stony and cobbly, and are found in floodplains, drainageways, and on alluvial fans, mostly in relatively small, narrow areas adjacent to creeks and rivers. These areas are subject to flooding, deposition, and scouring during medium- or high-intensity storms. Drainage is somewhat excessive, and permeability ranges from moderately rapid to very rapid. Runoff ranges from medium to very low. The erosion hazard is moderate in some areas because of channeling and deposition (NRCS, 1978).

3.5 Vegetation

Two vegetation communities, coast live oak woodland and cottonwood-sycamore riparian forest, occur within the project site. Coast live oak woodlands within the site consist of a mostly closed canopy dominated by coast live oak (*Quercus agrifolia*); however, California bay laurel (*Umbellularia californica*) and coast redwood (*Sequoia sempervirens*) are also common. Cottonwood-sycamore riparian forest within the site is co-dominated by western sycamore (*Platanus racemosa*), Fremont's cottonwood (*Populus fremontii*), California bay laurel, and coast live oak. Within both vegetation communities, the understory is dense and is almost entirely poison oak (*Toxicodendron diversilobum*).

3.6 Forest Type, Condition, and Health

The oldest mature trees within the project site are those that surround the old swimming pool site. The trees in the old pool site consist of blocks of younger, small trees intermingled with occasional stands of mid-aged to mature trees. The blocks of younger trees are becoming overcrowded as they compete for light and nutrients.

During the June 2019 tree surveys, DD&A inventoried 207 trees within the project site (**Figure 3**). Most trees within the project site are in fair condition. Trees in fair condition are in average vigor for the area but are showing signs of decay, disease, and/or insect infestations, including Sequoia pitch moth (*Synanthedon sequoiae*), red turpentine beetle (*Dendroctonus valens*), pine pitch canker (*Fusarium circinatum*), western dwarf mistletoe (*Arceuthobium littorum*), western gall rust (*Peridermium harknessii*), California oakworm, oak branch canker, foamy bark canker, oak ambrosia beetles, oak bark beetles, and Phytophthora root and crown rot. Symptoms of sudden oak death, including leaf dieback and hypoxylyon cankers (*Annulohypoxylon thouarsianum*), were observed on one California bay laurel (Tree 2811). Individual tree data is available in **Appendix A**.

4. PROJECT DESCRIPTION

4.1 Structures

The project consists of the construction of nine (9) prefabricated hard wall camping cabins, a restroom and shower building, internal campground paths, renovation of the existing parking lot, split rail fence around the outer perimeter of the site to preclude access to adjacent riparian habitat, restoration and landscaping of temporarily disturbed areas, and other miscellaneous site improvements (e.g., signage, maintenance, lighting, fire hydrants, etc.).

4.2 Roads

Regional access to the project site would be provided exclusively from State Route 1 to the west. Local access would be provided via an existing access road which would be repaved as part of the project. Pedestrian access improvements would also be constructed as part of the project. The project's layout and internal circulation has been designed to maximize pedestrian connectivity while enhancing existing trail access.

4.3 Grading

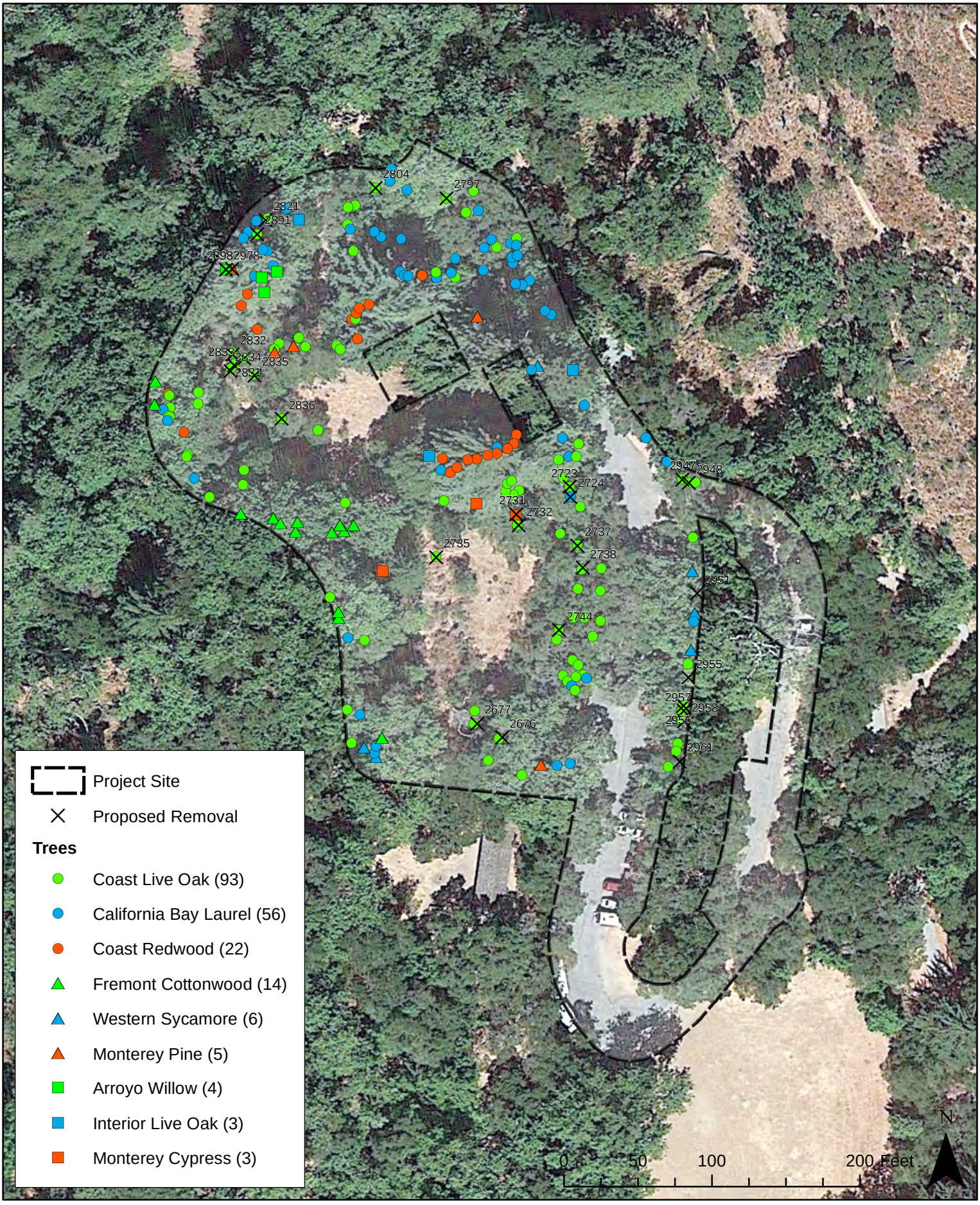
Grading would be required to facilitate construction of the project, including, but not limited to, proposed campground facilities (e.g. campsites, combination buildings, etc.), access improvements, and pedestrian trails. Grading would be accomplished by hand.

4.4 Tree Removal

To facilitate the construction of the campground and amenities, the project will result in the removal of 30 trees (**Figure 3; Appendix A**). Trees which are proposed for removal include:

- 25 coast live oaks, including one landmark tree,
- One (1) arroyo willow (*Salix lasiolepis*),
- One (1) California bay laurel,
- One (1) landmark Monterey cypress (*Cupressus macrocarpa*),
- One (1) Monterey pine, and
- One (1) landmark western sycamore.

Per the Big Sur Coast LUP and the CIP, a Coastal Development Permit (CDP) is required to remove all 30 trees proposed for removal.



Tree Map

Date
2/16/2021

Scale
1 in = 80 ft

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Figure
3

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5. IMPACT ASSESSMENT

5.1 Required Findings

This section describes the adverse environmental impacts potentially resulting from tree removal.

5.1.1 Soil Erosion

Erosion potential resulting from tree removal and implementation of the project is low; slopes are at a gentle grade and ground cover is high. In addition, appropriate erosion control measures will be implemented during construction of the project to avoid or minimize potential erosion impacts. For more information related to soil erosion impacts, refer to the Draft Initial Study/Mitigated Negative Declaration (IS/MND) for the project (DD&A, 2021).

5.1.2 Water Quality

Removal of 30 trees within the project site is unlikely to generate harmful substances that could be detrimental to the plant, animal, or human environment. Trees which are proposed for removal are spread apart within the landscape and their removal would not leave a large space in the forest. For more information related to water quality impacts, refer to the project's Draft IS/MND.

5.1.3 Ecological Impacts

Ecological impacts resulting from tree removal and implementation of the project are low. No significant change in land use is proposed. Remaining native trees within and adjacent to the project site create a dense canopy and will be retained. Further, as described in *Section 6, Minimization and Mitigation Measures* below, the project will replace all trees which are removed at a 1:1 ratio. For more information related to ecological impacts, refer to the project's Draft IS/MND.

5.1.4 Noise Pollution

The potential for increased noise pollution resulting from tree removal and implementation of the project is low. Removal of 30 trees would have a minor impact on the canopy and density of the forest. For more information related to noise impacts, refer to the project's Draft IS/MND.

5.1.5 Air Movement

Removal of 30 trees would not significantly impact the canopy or density of the forest such that air movement would be impacted.

5.1.6 Wildlife Habitat

The project site is located within a densely forested State Park. Removal of 30 trees and implementation of the project, which is consistent with adjacent uses, would have little to no impact on wildlife habitat. For more information related to wildlife habitat impacts, refer to the project's Draft IS/MND.

6. MINIMIZATION AND MITIGATION MEASURES

The following section describes the measures that will be implemented to avoid, minimize, or mitigate potential impacts resulting from tree removal.

6.1 Tree Replacement

Trees which are removed shall be replaced within PBSSP at a 1:1 ratio to removal. Trees shall be planted within or directly adjacent to the project site, if feasible, and in those areas with the greatest opening in the canopy to allow for a minimum competition and maximum sunlight. Replacement trees shall be five-gallon

stock or larger, if available. Spacing between trees shall be at least eight feet. Occasional deep watering (more than two weeks apart) during the late spring, summer, and fall is recommended during the first two years after establishment. Grinding of stumps onsite is permissible.

6.2 Tree Protection

All trees in the project site which are not scheduled for removal shall be temporarily fenced prior to all construction activities. Fencing shall be installed at the edge of the root zone (the area located within 15 times the trunk diameter in all directions, typically 10-12 feet away from the base of a tree), unless an alternate location is determined essential to the construction of the project. Fencing shall consist of chain link or plastic link fence which is maintained at a minimum height of four feet above grade during all phases of construction. In cases where access or space is limited for tree protection, it is permissible to protect the tree within the 10-12 foot distance after determination and approval by a qualified forester or arborist.

Fenced areas shall not be used for material stockpile, storage, or vehicle parking. Dumping of materials, chemicals, or garbage shall be prohibited within fenced areas. Fenced areas shall be maintained in natural condition at natural or existing grade and shall not be compacted.

All approved construction within the root zone shall include construction barricades. Barricades shall be upright and be constructed from two-inch by four-inch planks standing a minimum of eight feet vertically, conforming to the tree, and shall be tied with wire or rope forming a maximum of one-inch space between the planks. If the tree's configuration or site conditions do not lend themselves to the installation of this type barricade, a certified arborist or qualified forester shall designate alternate tree protection methods. Under certain conditions where soil compaction is probable, fences may also be required around a tree or grouping of trees. The use of recycled lumber, synthetic lumber, or similar materials approved by a certified arborist or qualified forester is encouraged.

A certified arborist should be on site during excavation activities to direct any minor field adjustments that may be needed.

6.3 Tree Pruning

Tree pruning shall be minimal but, when necessary, shall be performed in accordance with American National Safety Institute (ANSI) A300 Pruning Standards. Pruning may include the larger canopied trees that have deadwood or are exhibiting some minor structural defect or minor disease that must be compensated. Should the health and vigor of any tree decline, it shall be treated as appropriately recommended by a certified arborist or qualified forester. In general, trees shall be assessed then pruned first for safety (e.g., broken and cracked limbs shall be removed in high-traffic areas of concern), next for health, and finally for aesthetics. No more than 25% of the overall tree crown shall be pruned in one season.

Tree pruning may include crown thinning, crown raising, crown reduction, or crown restoration, as described below.

6.3.1 Crown Thinning

Crown thinning is the cleaning out of or removal of dead, diseased, weakly attached, or low vigor branches from a tree crown. Crown thinning shall be conducted as follows:

- All trees shall be pre-assessed on how the tree will be pruned from the top down.
- Tree trimmers shall favor branches with strong, U-shaped angles of attachment and, where possible, remove branches with weak, V-shaped angles of attachment and/or included bark.
- Lateral branches shall be evenly spaced on the main stem of young trees and areas of fine pruning.
- Branches that rub or cross another branch shall be removed where possible.

- Lateral branches shall be no more than one-half to three-quarters of the diameter of the stem to discourage the development of co-dominant stems where feasible.
- In most cases, trimmers shall not remove more than one-quarter of the living crown of a tree at one time. If it is necessary to remove more, it shall be done over successive years.

6.3.2 Crown Raising

Crown raising removes the lower branches of a tree to provide clearance for buildings, vehicles, pedestrians, and vistas. Crown raising shall be conducted as follows:

- Live branches on at least two-thirds of a tree's total height shall be maintained wherever possible. The removal of too many lower branches would hinder the development of a strong stem.
- All basal sprouts and vigorous epicormic sprouts shall be removed where feasible.

6.3.3 Crown Reduction

Crown reduction is used to reduce the height and/or spread of trees and is used for maintaining the structural integrity and natural form of a tree. Crown reduction shall be conducted only when absolutely necessary, as follows:

- Pruning cuts shall be at a lateral branch that is at least one-third the diameter of the stem to be removed wherever possible.
- When it is necessary to remove more than half of the foliage from a branch, it may be necessary remove the entire branch.

6.3.4 Crown Restoration

Crown restoration is used to improve the structure and appearance of trees that have been topped or severely pruned using heading cuts. One of three sprouts on main branch stubs should be selected to reform a natural appearing crown. Selected vigorous sprouts may need to be thinned to ensure adequate attachment for the size of the sprout. Restoration may require several years of pruning.

7. FOREST MANAGEMENT AGREEMENT

The following section is an agreement by State Parks for how the project parcels' forest resource will be managed. Per the CIP, it is a standard section to be included in every Forest Management Plan.

7.1 Management Objectives

1. Minimize erosion to prevent soil loss and siltation.
2. Preserve natural habitat, including native forest, understory vegetation, and associated wildlife.
3. Prevent forest fire.
4. Preserve scenic forest canopy, as located within the Critical Viewshed (i.e. visible from the Highway 1 or any other public viewing area).
5. Preserve landmark trees, as defined below.

7.2 Management Measures

1. *Tree Removal:* No tree will be removed without a Coastal Development Permit, unless the removal includes the following: a) removal of non-native or planted tree that is not a landmark tree; b) removal of tree posing an immediate danger to life or structures; c) thinning of dead native tree or live tree less than the allowable diameter; .d), prescribed burning, crushing, lopping, or other methods of brush clearing which do not materially disturb underlying soils; or, e) a Timber Harvest

Plan has been required for commercial logging in accordance with State requirements; or, if the Zoning Administrator of Monterey County determines that the removal includes removal of a diseased tree which threatens to spread the disease to nearby forested areas as verified in writing by a forester selected from the County's list of qualified foresters, or is removal in accordance with a previously approved Forest Management Plan.

2. *Application Requirements:* Where a Coastal Development Permit is required, trees proposed for removal will be conspicuously marked by flagging or by paint. Proposed removal of native trees will be the minimum necessary for the proposed development. Removal not necessary for the proposed development will be limited to that required for the overall health and long-term maintenance of the forest, as verified in this plan or in subsequent amendments to this plan.

3. *Landmark Trees:* All landmark trees will be protected from damage if not permitted to be removed as a diseased tree which threatens to spread the disease to nearby healthy trees or as a dangerous tree which presents an immediate danger to human life or structures, A landmark tree is a tree which is 24 inches or more in diameter when measured at breast height, or a tree which is visually significant, historically significant, exemplary of its species, or more than 1,000 years old.

4. *Dead Trees:* Because of their great value for wildlife habitat (particularly as nesting sites for insect-eating birds), large dead trees will normally be left in place. Smaller dead trees will normally be removed in order to reduce fire hazard. Because no Coastal Development Permit is needed for their removal, dead trees may be removed at the convenience of the owner, provided such removal is otherwise in conformance with the Big Sur Coast Land Use Plan and Implementing Ordinance and are designated by a qualified forester as being dead trees.

5. *Thinning:* Trees less than 12 inches in diameter when measured at breast height may be thinned to promote the growth of neighboring trees without first obtaining a Coastal Development Permit.

6. *Protection of Trees:* All trees other than those approved' for removal shall be retained and maintained in good condition. Trimming, where not injurious to the health of the tree(s), may be performed whenever necessary in the judgment of the owner, particularly to reduce personal safety. and fire hazards.

   Retained trees which are located close to the construction site shall be protected from inadvertent damage by construction equipment through wrapping of trunks with protective materials, bridging, or tunneling under major roots where exposed in foundation or utility trenches, and other measures appropriate and necessary to protect the well-being of the retained trees.

7. *Fire Prevention:* In addition to Thinning (Number 5 above), any measures required by local or California Department of Forestry fire authorities, the owner will:

   a) maintain a spark arrester screen atop each chimney.

   b) maintain spark arresters on gasoline powered equipment.

   c) Establish a “greenbelt” by keeping vegetation in a green, growing condition to a distance of at least 50 feet around the house.

   d) Break up and clear away any dense accumulations of dead or dry underbrush or plant litter, especially near landmark trees and around the greenbelt.

8. *Use of Fire (for clearing, etc.):* Open fires will be set or allowed on the parcel only as a forest management tool under the direction of Department of Forestry authorities, pursuant to local fire ordinances and directives.

9. *Clearing Methods:* Brush and other undergrowth, if removed, will be cleared through method (s) which will not materially disturb the ground surface. Hand grubbing, crushing, and mowing' will normally be the methods of choice. Use of fire and herbicides will be subject to limitations listed in the LUP and Implementing Ordinance.

Areas laid bare by 'clearing, other than firebreaks, will be sown with annual rye grass (if nothing else is to be planted in the area). Sowing of cleared areas will be completed prior to the onset of the winter rainy season.

10. *Irrigation:* In order to avoid further depletion of groundwater resources, prevent root disease, and otherwise maintain favorable conditions for the native forest, the parcel will not be irrigated except within the developed areas. Caution will be exercised to avoid overwatering around trees.
11. *Exotic Plants:* Care will be taken to eradicate and to avoid introduction of the following pest species:
    a) Pampas grass,
    b) *Genista* species (Scotch broom, French broom), and
    c) *Eucalyptus* species (large types).

7.3 Amendments

The Monterey County Director of Planning may approve amendments to this plan, provided that such amendments are consistent with the provisions of the discretionary permit or building submittal. Amendments to this Forest Management Plan will be required for proposed tree removal not shown as part of this Plan, when the proposed removal fans within the description of a Forest Management Plan or Amendment to an existing Forest Management Plan.

7.4 Compliance

It is further understood that failure to comply with this FMP, the LUP, and CIP will be considered as failure to comply with the conditions of the Coastal Development Permit.

7.5 Transfer of Responsibility

This plan is intended to create a permanent forest management program for the site. It is understood, therefore, that in the event of a change of ownership, this plan shall he as binding on the new owner as it is on the present owner. As a permanent management program, this FMP will be conveyed to the future owner upon sale of the property.

7.6 Certification

Forest Management Plan Prepared by:

Patric Krabacher

Forester's Name

5/26/2021

Forester's Signature Date

Owner's Agreement as to the Provisions of the Plan:

Owner's Name Matthew Allen

Owner's Signature Matthew Allen Date 5/27/2021

Forest Management Plan Approved by:

Director of Planning Date

8. REFERENCES

California Department of Parks and Recreation (State Parks). 2020. Pfeiffer Big Sur State Park CCC Features. Available online at https://www.parks.ca.gov/?page_id=24894

U.S. Department of Agriculture — Natural Resources Conservation Service (NRCS). 1978. Soil Survey of Monterey County. Available online at https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/CA053/0/monterey.pdf.

U.S. Department of Agriculture — Natural Resources Conservation Service (NRCS). 2020. Web Soil Survey. Available online at https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.

APPENDIX A

Tree Table

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Pfeiffer Big Sur State Park Campground Cabin Project
Tree Table

Tree ID	*Scientific Name*	*Common Name*	*Individual Stem DBH (in)*					*Total DBH (in)*	*Condition*	*Status*
2	*Quercus agrifolia*	Coast Live Oak	7					7	Fair	Retain
3	*Umbellularia californica*	California Bay Laurel	22					22	Good	Retain
2604	*Quercus agrifolia*	Coast Live Oak	9					9	Poor	Retain
2605	***Pinus radiata***	**Monterey Pine**	**76**					**76**	**Good**	**Retain**
2606	*Umbellularia californica*	California Bay Laurel	9					9	Good	Retain
2612	***Plantanus racemosa***	**Western Sycamore**	**20**	**21**	**21**	**13**	**29**	**48**	**Good**	**Retain**
2613	*Umbellularia californica*	California Bay Laurel	7					7	Good	Retain
2614	*Umbellularia californica*	California Bay Laurel	8					8	Good	Retain
2615	***Populus fremontii***	**Fremont Cottonwood**	**32**					**32**	**Good**	**Retain**
2616	***Plantanus racemosa***	**Western Sycamore**	**31**					**31**	**Good**	**Retain**
2617	*Quercus agrifolia*	Coast Live Oak	8					8	Fair	Retain
2622	***Quercus agrifolia***	**Coast Live Oak**	**30**					**30**	**Fair**	**Retain**
2623	*Umbellularia californica*	California Bay Laurel	9					9	Good	Retain
2675	*Quercus agrifolia*	Coast Live Oak	7					7	Poor	Retain
2676	*Quercus agrifolia*	Coast Live Oak	10					10	Poor	Remove
2677	*Quercus agrifolia*	Coast Live Oak	23					23	Fair	Remove
2678	*Quercus agrifolia*	Coast Live Oak	15					15	Good	Retain
2679	***Cupressus macrocarpa***	**Monterey Cypress**	**37**					**37**	**Fair**	**Retain**
2680	***Quercus agrifolia***	**Coast Live Oak**	**19**	**17**				**25**	**Fair**	**Retain**
2681	*Umbellularia californica*	California Bay Laurel	9	7	6			13	Fair	Retain
2682	*Populus fremontii*	Fremont Cottonwood	18					18	Good	Retain
2683	*Populus fremontii*	Fremont Cottonwood	8					8	Good	Retain
2697	*Quercus agrifolia*	Coast Live Oak	7					7	Fair	Retain
2699	*Populus fremontii*	Fremont Cottonwood	16					16	Good	Retain
2700	*Populus fremontii*	Fremont Cottonwood	17					17	Good	Retain
2701	*Populus fremontii*	Fremont Cottonwood	16					16	Good	Retain
2702	*Populus fremontii*	Fremont Cottonwood	16					16	Good	Retain
2703	*Quercus agrifolia*	Coast Live Oak	6					6	Good	Retain
2704	***Quercus wislizeni***	**Interior Live Oak**	**30**					**30**	**Good**	**Retain**
2705	***Sequoia sempervirens***	**Coast Redwood**	**58**					**58**	**Good**	**Retain**
2706	***Umbellularia californica***	**California Bay Laurel**	**17**	**19**				**25**	**Good**	**Retain**
2707	***Sequoia sempervirens***	**Coast Redwood**	**37**					**37**	**Good**	**Retain**
2708	***Sequoia sempervirens***	**Coast Redwood**	**50**					**50**	**Good**	**Retain**
2710	***Sequoia sempervirens***	**Coast Redwood**	**38**					**38**	**Good**	**Retain**
2711	***Sequoia sempervirens***	**Coast Redwood**	**51**					**51**	**Good**	**Retain**
2712	***Sequoia sempervirens***	**Coast Redwood**	**65**					**65**	**Good**	**Retain**

Bold = Landmark Tree

Tree ID	*Scientific Name*	*Common Name*	*Individual Stem DBH (in)*			*Total DBH (in)*	*Condition*	*Status*
2713	*Umbellularia californica*	California Bay Laurel	11			11	Fair	Retain
2714	***Sequoia sempervirens***	**Coast Redwood**	**20**	**27**		**34**	**Good**	**Retain**
2715	***Sequoia sempervirens***	**Coast Redwood**	**11**	**27**		**29**	**Good**	**Retain**
2716	***Sequoia sempervirens***	**Coast Redwood**	**36**	**17**	**15**	**43**	**Good**	**Retain**
2717	***Sequoia sempervirens***	**Coast Redwood**	**30**			**30**	**Good**	**Retain**
2718	*Quercus agrifolia*	Coast Live Oak	14			14	Fair	Retain
2719	*Umbellularia californica*	California Bay Laurel	6	7	9	13	Good	Retain
2720	*Quercus agrifolia*	Coast Live Oak	11			11	Fair	Retain
2721	*Quercus agrifolia*	Coast Live Oak	7			7	Poor	Retain
2722	*Umbellularia californica*	California Bay Laurel	6			6	Good	Retain
2723	*Quercus agrifolia*	Coast Live Oak	6			6	Fair	Remove
2724	*Umbellularia californica*	California Bay Laurel	21			21	Fair	Remove
2725	*Quercus agrifolia*	Coast Live Oak	12			12	Poor	Retain
2726	*Quercus agrifolia*	Coast Live Oak	10			10	Fair	Retain
2727	***Quercus agrifolia***	**Coast Live Oak**	**26**			**26**	**Poor**	**Retain**
2728	*Quercus agrifolia*	Coast Live Oak	11			11	Poor	Retain
2729	*Quercus agrifolia*	Coast Live Oak	9			9	Poor	Retain
2730	*Quercus agrifolia*	Coast Live Oak	8			8	Poor	Retain
2731	***Cupressus macrocarpa***	**Monterey Cypress**	**29**			**29**	**Good**	**Remove**
2732	*Quercus agrifolia*	Coast Live Oak	11			11	Fair	Remove
2733	*Cupressus macrocarpa*	Monterey Cypress	8	7	6	12	Poor	Retain
2734	***Quercus agrifolia***	**Coast Live Oak**	**24**			**24**	**Fair**	**Retain**
2735	*Quercus agrifolia*	Coast Live Oak	7			7	Good	Remove
2736	*Quercus agrifolia*	Coast Live Oak	10			10	Fair	Retain
2737	*Quercus agrifolia*	Coast Live Oak	6			6	Fair	Remove
2738	*Quercus agrifolia*	Coast Live Oak	17			17	Fair	Remove
2739	*Quercus agrifolia*	Coast Live Oak	23			23	Good	Retain
2740	***Quercus agrifolia***	**Coast Live Oak**	**38**			**38**	**Fair**	**Retain**
2741	*Quercus agrifolia*	Coast Live Oak	8			8	Poor	Retain
2742	*Quercus agrifolia*	Coast Live Oak	10			10	Fair	Retain
2743	*Quercus agrifolia*	Coast Live Oak	16			16	Fair	Retain
2744	*Quercus agrifolia*	Coast Live Oak	7			7	Fair	Remove
2745	*Quercus agrifolia*	Coast Live Oak	9			9	Fair	Retain
2746	***Quercus agrifolia***	**Coast Live Oak**	**20**	**18**		**27**	**Fair**	**Retain**
2747	*Quercus agrifolia*	Coast Live Oak	6			6	Fair	Retain
2748	*Quercus agrifolia*	Coast Live Oak	21			21	Fair	Retain
2749	*Quercus agrifolia*	Coast Live Oak	6			6	Fair	Retain
2750	*Umbellularia californica*	California Bay Laurel	6			6	Fair	Retain
2751	*Quercus agrifolia*	Coast Live Oak	18			18	Fair	Retain

Bold = Landmark Tree

Tree ID	*Scientific Name*	*Common Name*	*Individual Stem DBH (in)*			*Total DBH (in)*	*Condition*	*Status*
2752	*Quercus agrifolia*	Coast Live Oak	17			17	Fair	Retain
2753	*Quercus agrifolia*	Coast Live Oak	13			13	Fair	Retain
2754	*Quercus agrifolia*	Coast Live Oak	10			10	Fair	Retain
2755	*Umbellularia californica*	California Bay Laurel	8			8	Good	Retain
2756	*Quercus agrifolia*	Coast Live Oak	10			10	Good	Retain
2757	*Umbellularia californica*	California Bay Laurel	6			6	Good	Retain
2758	*Quercus wislizeni*	Interior Live Oak	6			6	Fair	Retain
2759	***Plantanus racemosa***	**Western Sycamore**	**76**			**76**	**Fair**	**Retain**
2760	*Umbellularia californica*	California Bay Laurel	9			9	Good	Retain
2766	***Sequoia sempervirens***	**Coast Redwood**	**32**	**31**	**33**	**55**	**Good**	**Retain**
2767	*Sequoia sempervirens*	Coast Redwood	20			20	Good	Retain
2768	*Quercus agrifolia*	Coast Live Oak	21			21	Dead	Retain
2769	***Sequoia sempervirens***	**Coast Redwood**	**26**			**26**	**Good**	**Retain**
2770	***Sequoia sempervirens***	**Coast Redwood**	**39**			**39**	**Good**	**Retain**
2771	***Sequoia sempervirens***	**Coast Redwood**	**52**	**42**		**67**	**Good**	**Retain**
2772	*Umbellularia californica*	California Bay Laurel	12			12	Good	Retain
2773	***Umbellularia californica***	**California Bay Laurel**	**28**			**28**	**Good**	**Retain**
2774	*Umbellularia californica*	California Bay Laurel	11			11	Good	Retain
2775	*Umbellularia californica*	California Bay Laurel	7			7	Good	Retain
2776	*Umbellularia californica*	California Bay Laurel	17			17	Good	Retain
2777	*Umbellularia californica*	California Bay Laurel	12	10		16	Good	Retain
2778	*Umbellularia californica*	California Bay Laurel	7			7	Good	Retain
2779	*Umbellularia californica*	California Bay Laurel	17			17	Good	Retain
2780	*Umbellularia californica*	California Bay Laurel	7			7	Good	Retain
2781	***Quercus agrifolia***	**Coast Live Oak**	**27**			**27**	**Good**	**Retain**
2782	*Umbellularia californica*	California Bay Laurel	9			9	Good	Retain
2783	*Umbellularia californica*	California Bay Laurel	7			7	Good	Retain
2784	*Umbellularia californica*	California Bay Laurel	10			10	Good	Retain
2785	*Pinus radiata*	Monterey Pine	13			13	Good	Retain
2786	*Quercus agrifolia*	Coast Live Oak	19			19	Poor	Retain
2787	*Umbellularia californica*	California Bay Laurel	9			9	Poor	Retain
2788	*Umbellularia californica*	California Bay Laurel	14			14	Good	Retain
2789	*Quercus agrifolia*	Coast Live Oak	14			14	Fair	Retain
2790	*Umbellularia californica*	California Bay Laurel	9			9	Good	Retain
2791	***Quercus agrifolia***	**Coast Live Oak**	**24**			**24**	**Good**	**Retain**
2792	*Umbellularia californica*	California Bay Laurel	11			11	Good	Retain
2794	*Umbellularia californica*	California Bay Laurel	8			8	Good	Retain
2795	*Quercus agrifolia*	Coast Live Oak	10			10	Fair	Retain
2796	*Quercus agrifolia*	Coast Live Oak	19			19	Poor	Retain

Bold = Landmark Tree

Tree ID	*Scientific Name*	*Common Name*	*Individual Stem DBH (in)*		*Total DBH (in)*	*Condition*	*Status*
2797	***Quercus agrifolia***	**Coast Live Oak**	**22**	**26**	**34**	**Fair**	**Remove**
2798	*Umbellularia californica*	California Bay Laurel	12		12	Fair	Retain
2802	*Umbellularia californica*	California Bay Laurel	10		10	Good	Retain
2803	*Umbellularia californica*	California Bay Laurel	12		12	Good	Retain
2804	*Quercus agrifolia*	Coast Live Oak	6		6	Poor	Remove
2805	*Quercus agrifolia*	Coast Live Oak	14		14	Fair	Retain
2806	*Quercus agrifolia*	Coast Live Oak	11		11	Fair	Retain
2807	*Quercus agrifolia*	Coast Live Oak	12		12	Poor	Retain
2808	*Umbellularia californica*	California Bay Laurel	8		8	Good	Retain
2809	*Umbellularia californica*	California Bay Laurel	7		7	Good	Retain
2810	*Umbellularia californica*	California Bay Laurel	11		11	Good	Retain
2811	*Umbellularia californica*	California Bay Laurel	7		7	Fair	Retain
2812	*Quercus agrifolia*	Coast Live Oak	8		8	Good	Retain
2813	*Umbellularia californica*	California Bay Laurel	7		7	Good	Retain
2814	*Umbellularia californica*	California Bay Laurel	17		17	Good	Retain
2815	*Umbellularia californica*	California Bay Laurel	14		14	Fair	Retain
2816	*Sequoia sempervirens*	Coast Redwood	10		10	Good	Retain
2819	*Quercus wislizeni*	Interior Live Oak	13		13	Good	Retain
2820	*Umbellularia californica*	California Bay Laurel	11		11	Good	Retain
2821	*Quercus agrifolia*	Coast Live Oak	13		13	Fair	Remove
2822	*Quercus agrifolia*	Coast Live Oak	11		11	Poor	Retain
2823	*Quercus agrifolia*	Coast Live Oak	8		8	Fair	Retain
2824	*Quercus agrifolia*	Coast Live Oak	9		9	Poor	Retain
2825	*Quercus agrifolia*	Coast Live Oak	7		7	Poor	Retain
2826	***Pinus radiata***	**Monterey Pine**	**31**		**31**	**Good**	**Retain**
2827	*Quercus agrifolia*	Coast Live Oak	15		15	Fair	Retain
2828	*Quercus agrifolia*	Coast Live Oak	9		9	Fair	Retain
2829	*Pinus radiata*	Monterey Pine	12		12	Dead	Retain
2830	*Sequoia sempervirens*	Coast Redwood	12		12	Good	Retain
2831	*Quercus agrifolia*	Coast Live Oak	7		7	Fair	Remove
2832	*Quercus agrifolia*	Coast Live Oak	13		13	Fair	Remove
2833	*Quercus agrifolia*	Coast Live Oak	13		13	Fair	Remove
2834	*Quercus agrifolia*	Coast Live Oak	17		17	Fair	Remove
2835	*Quercus agrifolia*	Coast Live Oak	9		9	Fair	Remove
2836	*Quercus agrifolia*	Coast Live Oak	11		11	Fair	Remove
2837	*Quercus agrifolia*	Coast Live Oak	12		12	Fair	Retain
2838	***Quercus agrifolia***	**Coast Live Oak**	**24**		**24**	**Fair**	**Retain**
2839	*Quercus agrifolia*	Coast Live Oak	11		11	Fair	Retain
2840	*Populus fremontii*	Fremont Cottonwood	15		15	Good	Retain
2846	*Populus fremontii*	Fremont Cottonwood	18		18	Good	Retain

Bold = Landmark Tree

Tree ID	*Scientific Name*	*Common Name*	*Individual Stem DBH (in)*			*Total DBH (in)*	*Condition*	*Status*
2847	*Populus fremontii*	Fremont Cottonwood	18			18	Good	Retain
2848	*Populus fremontii*	Fremont Cottonwood	16			16	Good	Retain
2849	*Populus fremontii*	Fremont Cottonwood	15			15	Good	Retain
2881	*Umbellularia californica*	California Bay Laurel	11			11	Fair	Retain
2882	*Umbellularia californica*	California Bay Laurel	11			11	Fair	Retain
2891	*Quercus agrifolia*	Coast Live Oak	6			6	Fair	Remove
2892	*Umbellularia californica*	California Bay Laurel	9			9	Good	Retain
2893	*Umbellularia californica*	California Bay Laurel	7	7		10	Good	Retain
2894	*Umbellularia californica*	California Bay Laurel	10			10	Good	Retain
2895	*Umbellularia californica*	California Bay Laurel	7			7	Good	Retain
2896	*Umbellularia californica*	California Bay Laurel	6			6	Good	Retain
2897	*Salix lasiolepis*	Arroyo Willow	7			7	Good	Retain
2898	*Pinus radiata*	Monterey Pine	7			7	Good	Remove
2906	*Sequoia sempervirens*	Coast Redwood	9			9	Good	Retain
2907	*Populus fremontii*	Fremont Cottonwood	14			14	Good	Retain
2908	*Sequoia sempervirens*	Coast Redwood	19			19	Good	Retain
2909	*Quercus agrifolia*	Coast Live Oak	9			9	Fair	Retain
2910	*Quercus agrifolia*	Coast Live Oak	7			7	Fair	Retain
2911	*Sequoia sempervirens*	Coast Redwood	11			11	Fair	Retain
2912	*Umbellularia californica*	California Bay Laurel	7			7	Fair	Retain
2913	*Populus fremontii*	Fremont Cottonwood	6			6	Good	Retain
2914	*Quercus agrifolia*	Coast Live Oak	18			18	Good	Retain
2915	*Quercus agrifolia*	Coast Live Oak	7			7	Good	Retain
2916	*Umbellularia californica*	California Bay Laurel	16			16	Good	Retain
2917	*Quercus agrifolia*	Coast Live Oak	14			14	Good	Retain
2918	*Quercus agrifolia*	Coast Live Oak	8			8	Good	Retain
2919	*Sequoia sempervirens*	Coast Redwood	10			10	Good	Retain
2920	*Quercus agrifolia*	Coast Live Oak	14			14	Fair	Retain
2921	*Quercus agrifolia*	Coast Live Oak	14			14	Fair	Retain
2922	*Umbellularia californica*	California Bay Laurel	10			10	Good	Retain
2923	*Quercus agrifolia*	Coast Live Oak	15			15	Fair	Retain
2945	*Umbellularia californica*	California Bay Laurel	8			8	Fair	Retain
2946	*Umbellularia californica*	California Bay Laurel	7	7	6	12	Good	Retain
2947	*Quercus agrifolia*	Coast Live Oak	10			10	Fair	Remove
2948	*Quercus agrifolia*	Coast Live Oak	13			13	Fair	Remove
2949	*Quercus agrifolia*	Coast Live Oak	8			8	Fair	Retain
2950	*Quercus agrifolia*	Coast Live Oak	11			11	Fair	Retain
2951	***Plantanus racemosa***	**Western Sycamore**	**35**			**35**	**Fair**	**Remove**
2952	*Plantanus racemosa*	Western Sycamore	10			10	Fair	Retain
2953	*Umbellularia californica*	California Bay Laurel	7			7	Fair	Retain

Bold = Landmark Tree

Tree ID	*Scientific Name*	*Common Name*	*Individual Stem DBH (in)*			*Total DBH (in)*	*Condition*	*Status*
2954	***Plantanus racemosa***	**Western Sycamore**	**12**	**21**		**24**	**Fair**	**Retain**
2955	*Quercus agrifolia*	Coast Live Oak	12			12	Fair	Remove
2956	*Quercus agrifolia*	Coast Live Oak	8			8	Fair	Remove
2957	*Quercus agrifolia*	Coast Live Oak	14			14	Fair	Remove
2958	*Quercus agrifolia*	Coast Live Oak	6			6	Fair	Remove
2959	*Quercus agrifolia*	Coast Live Oak	12			12	Fair	Retain
2960	*Quercus agrifolia*	Coast Live Oak	7			7	Fair	Retain
2961	*Quercus agrifolia*	Coast Live Oak	6			6	Poor	Remove
2978	*Salix lasiolepis*	Arroyo Willow	7			7	Good	Remove
2979	*Salix lasiolepis*	Arroyo Willow	7	8		11	Good	Retain
2980	*Salix lasiolepis*	Arroyo Willow	10	10	10	17	Good	Retain
2981	*Sequoia sempervirens*	Coast Redwood	11			11	Good	Retain

Bold = Landmark Tree

Appendix D

Geotechnical Report

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SIERRA GEOTECH

Preliminary Report of Geotechnical Investigation

TYPE OF SERVICES	Geotechnical Engineering Services
PROJECT NAME	Pfeiffer Big Sur State Park Cabins
LOCATION	Pfeiffer Big Sur State Park
CLIENT	Design Workshop, Inc. 128 Market Street, Suite 3E Stateline, NV 89449-5666
SIERRA GEOTECH PROJECT NO.	DV20005
DATE DOCUMENT ISSUED	July 10, 2020

Preliminary Report of Geotechnical Investigation

TYPE OF SERVICES	Geotechnical Engineering Services
PROJECT NAME	Pfeiffer Big Sur State Park Cabins
LOCATION	Pfeiffer Big Sur State Park
CLIENT	Design Workshop, Inc.
CLIENT PROJECT NO.	
SIERRA GEOTECH PROJECT NO.	DV20005
DATE DOCUMENT ISSUED	July 10, 2020

Prepared By

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Version History	
7-10-2020	First Issued

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APPENDICES

1. INTRODUCTION

1.1. PFEIFFER BIG SUR CAMPGROUND CABINS PROJECT

The Pfeiffer Big Sur Campground Cabin is one of several collaborative effort between the State Coastal Conservancy (Conservancy) and the California Department of Parks and Recreation (State Parks) to provide low-cost camping facilities and associated amenities along the California Coast. This project includes site planning, design, construction documentation, CEQA and building permitting for the construction of 12 pre-fabricated hard wall camping cabins, a restroom and shower building, and associated amenities in the existing Pfeiffer Big Sur State Park campground in northern Big Sur, Monterey County.

1.2. LOCATION

Project site is located in Pfeiffer Big Sur State Park. The approximate central coordinates of the property are 36.246093° (Latitude) and -121.776485°(Longitude). The location of the project site is shown in *Figure 1, Site Plan*.

1.3. CONCEPTUAL DESIGN DRAWINGS

For Sierra Geotech, Geotechnical Engineer of Record (GEOR) review, we received a schematic design drawing prepared by Design Workshop, Inc. (Architect of Record). Schematic design drawing (Drawing # L1.00) is shown in *Figure 1, Sie Plan* and *Appendix A, Preferred Site Plan*. Information obtained from the subject drawings and design team discussions formed the basis for the geotechnical exploration undertaken by Sierra Geotech.

1.4. EXISTING SITE CONDITIONS

The property has been developed into a day use campground with restroom and parking lots. The project site is heavily wooded and an old concrete pool existed at this site in the past. Figure 2, Historical Site Plan shows the approximate limits of the old concrete pool. Figure 3 shows the concrete pool overlayed with the site plan for the current project.

1.5. SIERRA GEOTECH SCOPE OF WORK

Sierra Geotech DVBE, Inc. (Sierra Geotech), scope of work for this report is based on our proposal dated February 10, 2020. Our scope of work has been completed in accordance with April 17, 2020, Sub-Consultant Agreement between Sierra Geotech and Sierra Geotech DVBE, Inc.

TASK 1 – Pre-Field Activities and Utility Clearance

- Review of existing information including readily available geologic maps, literature and geotechnical reports,

- Engaging a drilling contractor,
- Preparing a health and safety plan for the onsite activities,
- Conducting a site reconnaissance and staking the proposed soil boring locations in the field, and
- Notifying the Park personnel prior to commencing exploration activities to identify any utilities that may be in conflict with the proposed boring locations.

TASK 2 – Geotechnical Exploration and Laboratory Testing

- Performing a geotechnical exploration consisting of borings, and
- Performing laboratory testing on selected samples from the exploration to evaluate the engineering properties of the encountered subsurface soils.

TASK 3 – Report of Geotechnical Exploration

Preparing a Report of Geotechnical Exploration to provide the results of the geotechnical exploration covering the following components:

- Site description and local geology,
- Geologic maps,
- Exploration plan,
- Description of exploration activities and laboratory testing,
- Summary of observed subsurface conditions,
- Description of relevant site seismic conditions,
- Pavement recommendations,
- Foundation recommendations,
- Lateral earth pressure recommendations,
- Subgrade preparation recommendations,
- Seismic site class determination,
- Seismic design parameter recommendations,
- Liquefaction analysis (including estimations of settlement due to liquefaction), and
- Liquefaction mitigation recommendations.

We understand that environmental services for the project are being provided by others. If environmental concerns exist, the project environmental consultant should review this report for compatibility.

2. GENERAL GEOLOGY

Based on the Preliminary Geologic Map of The Point Sur 30' X 60' Quadrangle, California (Rosenberg and Wills, 2016), the local surficial geology is described as Quaternary alluvium of the Holocene era (less than 11,000 years old).

The Holocene era alluvial deposits (sand, gravel, and silt) were deposited by present-day river systems (mainly Big Sur River). The Holocene era deposits are, in general, 50 feet thick. Underlying these deposits are Pleistocene age alluvial deposits (11,000 years to 1.8 million years old). The Pleistocene age deposits generally consist of sand, gravel, and silt. The regional geology map is shown in *Figure 4, Regional Geologic Map*.

3. GEOTECHNICAL EXPLORATION

3.1. GENERAL

Our geotechnical exploration consisted of advancing five borings. Figure 1 shows the locations of borings. The geotechnical exploration was undertaken on May 15, 2020. Prior to undertaking borings, Sierra notified and sought permission from Design Workshop, Inc. and the project Owner to carry out the geotechnical exploration. Sierra utilized park personnel to identify potential underground utilities at the drill sites. No utilities were encountered at our drill sites. Drilling and soil sampling were performed under the field supervision of our geotechnical engineering staff, including a field technician and principal-in-charge with professional licensure in California. State park representatives (a biologist, an archaeologist and a Native Indian tribe liaison) witnessed our geotechnical exploration.

3.2. BORINGS

Borings were advanced in general accordance with ASTM D6151 (Standard Practice for Using Hollow-Stem Augers (HSA) for Geotechnical Exploration and Soil Sampling). Disturbed bulk samples and Standard Penetration Test (SPT) samples were obtained from soil borings. Bulk samples of near-surface soils were obtained from select locations for compaction testing. SPT samples were obtained at 5 feet intervals beginning with first sample at 0 feet (ground surface). Samples were collected in general accordance with ASTM D1586 (Standard Test Method for Penetration Test and Split-Barrel Sampling of Soils). Samples were classified in the field using the Unified Soil Classification System, in accordance with ASTM D2488 (Standard Practice for Description and Identification of Soils [Visual-Manual Method]). Soil samples were removed from the samplers, placed in appropriate containers, and transported in accordance with ASTM D4220 (Standard Practice for Preserving and Transporting Soil Samples). Field classifications were confirmed or modified based on results of laboratory testing for presentation on the boring logs in Appendix B. Following the completion of drilling and sampling; the borings were backfilled with cuttings. The list of borings is presented in Table 1.

Table 1: Summary of borings

Boring ID	Depth (in feet)
BSP-1	6.75
BSP-2	2.70
BSC-1	5.30
BSC-2	6.50
BSC-3	5.40

3.3. PAST EARTHWORK ACTIVITIES

As discussed in section 'Existing Site Conditions', the near-surface soils have been extensively disturbed in the past. Earthwork activities included grade adjustments through excavations and/or fill placement. The old concrete pool was filled with on-site soils. Imported fill, where placed, may or may not have been compacted. For this reason, our boring logs should not be considered as a true representation of near-surface ground conditions across the site (generally top 5 feet). Any future developments must consider the possibility of encountering differing ground conditions.

3.4. SUBSURFACE SOIL CONDITIONS SUMMARY

The materials encountered in our explorations consist of undocumented fill and Quaternary Age young alluvial fan deposits. A brief description of the subsurface conditions is provided in this section. Detailed descriptions of the subsurface conditions are provided on the boring logs included in Appendix C.

Fill - Fill associated with past grading activities was encountered in all borings completed at the site. The fill material generally consists of predominantly POORLY GRADED GRAVEL WITH SILT; GW-GM; very dark grayish brown (10 YR 3/2); dry to moist; loose to medium dense; and/or POORLY GRADED GRAVEL WITH SILT; GW-GM; very dark grayish brown (10 YR 3/2); dry to moist; loose to medium dense;

Young Alluvial Fan Deposits – Holocene and late Pleistocene age alluvial fan deposits underlie the Fill in all borings. The young alluvial fan deposits at this location consisted of interbedded layers of loose to medium dense sand and densely packed gravels and nested cobbles/boulders. Our borings were terminated at the top of alluvial fan deposits where cobbles as large as 14 inches were encountered making it difficult to penetrate the formation. See Figure 6 for a sample photo of the cobble.

3.5. GROUNDWATER

Groundwater was not encountered in our borings. It should be noted that groundwater levels are likely to change over time. Prolonged high-water levels in the Big Sur River will cause the groundwater table to rise. Rainfall and surface water runoff are also expected to change the depth to groundwater.

3.6. LABORATORY TESTING

As part of Sierra's scope of work, laboratory tests were undertaken on select soil samples, including natural moisture content, Atterberg limits, particle size distribution and moisture density compaction curves. The results of laboratory testing are presented in Appendix C.

3.7. CORROSION SCREENING

Our scope of work did not include corrosion screening of near-surface soils (upper 5 feet). All import soils and soils within the concrete pool must be evaluated for corrosion potential. Sierra Geotech does not practice corrosion engineering and we recommend consulting a corrosion engineer if based on site knowledge, past experience or other information, corrosion risk is suspected by the project Owner or their consultants.

4. GEOLOGIC HAZARDS

The project site is in a seismically active area. San Gregorio fault zone passes through the site. Moderate to severe earthquakes can cause strong ground shaking. A peak ground acceleration (PGA_M) of 0.665g was estimated following the California Building Code 2019 which refers to ASCE 7-16 (design level seismic event).

The site is not currently mapped by California Geologic Survey and is not located within the State-designated Alquist Priolo Earthquake Fault Zone. Therefore, information gathered from our geotechnical exploration has been used to assess liquefaction risk as described below.

During strong seismic shaking, cyclically induced stresses can cause increased pore pressures within the soil triggering liquefaction and sometimes soil softening due to shear stress loss. This phenomenon leads to potentially significant ground deformation due to settlement within sandy liquefiable layers as pore pressures dissipate. Liquefaction of underlying soils can also cause flow failures in sloping ground with open faces such as riverbanks. This phenomenon is called as lateral spreading (NCEER 1998). Soils most susceptible to liquefaction are loose, non-cohesive soils that are saturated and have poor drainage. For example, saturated loose sand layers bedded with cohesive soils are highly susceptible to liquefaction.

The site is prone to liquefaction and some level of liquefaction induced settlement and lateral spreading should be expected following a design level seismic event. The closest free face to the

site is the Big Sur River located only few hundred feet from the center of the site. The potential for lateral spreading at the site is considered high.

4.1. SEISMIC COMPRESSION OF UNSATURATED SANDS

Loose unsaturated sandy soils can settle during strong seismic shaking. Our geotechnical exploration did encounter loose to medium dense sands above the design groundwater depth. The likelihood of surface expression of seismic compression of unsaturated sands is considered high under design level seismic event.

5. CONCLUSIONS

Based on our field exploration, laboratory testing, and engineering analyses, it is our opinion that the subject property is suitable for the proposed development from a geotechnical engineering and engineering geology viewpoint; however, there are existing geotechnical conditions associated with the site that warrant mitigation and/or consideration during the design and construction stages. Description of each concern with brief outlines of our recommendations are given below.

- Presence of undocumented fills
- Presence of poorly compacted fills
- Presence of old concrete pool liner
- Presence of shallow nested cobbles and boulders

Geotechnical recommendations presented in this report are intended to reduce the seismic risk to an “acceptable level,” which means a level of mitigation that provides reasonable protection of the public safety, though it does not necessarily ensure continued structural integrity and functionality of the project (14 CCR 3721 (a)).

5.1. PRESENCE OF UNDOCUMENTED FILLS

Our geotechnical exploration has encountered undocumented fills. These are described in section “Undocumented Fills”. Undocumented fills are potentially reusable onsite for infilling, provided the recommendations contained in this report are adhered to. Presence of undocumented fills is not a hindrance to project development.

5.2. PRESENCE OF POTENTIALLY LIQUEFIABLE SOILS

The project site is prone to liquefaction under design level seismic event. Following a design-level seismic event, some non-life safety related damage should be expected. This includes, but not limited to, damage to exterior flatwork, underground utilities, ancillary structures bearing on shallow foundations such as landscaping retaining walls, staircases etc. Presence of liquefiable soils is not a hindrance to project development.

5.3. PRESENCE OF POORLY COMPACTED FILLS

Much of the project site is located on top of an old concrete pool that was supposedly removed and backfilled with onsite soils. One boring (BSC-3) advanced during our geotechnical exploration encountered the concrete pool liner at around 3.0 feet. We believe the pool fill material is poorly compacted and not suitable for supporting the project development as is. However, with appropriate geotechnical supervision during construction, the loose fills can be reworked and compacted to support the project development. Further geotechnical investigation, as discussed in section 'Additional Geotechnical Investigation', is required to confirm the suitability of poorly compacted fills.

5.4. PRESENCE OF POORLY COMPACTED FILLS

The near-surface shallow nested cobbles and boulders may pose excavation difficulties during construction. Through additional geotechnical investigation discussed below, we will be able to evaluate the risk and provide recommendations for mitigating the risk.

5.5. ADDITIONAL GEOTECHNICAL INVESTIGATION

Of the 5 boreholes, only 1 borehole (BSC-3) encountered the old concrete pool liner at about 3 feet below the ground surface. The old concrete pool in this area has been filled with soils present on-site, mixed with organics, and this poses a settlement problem for cabins if constructed on these soils. Vegetation prevented us from advancing more boreholes within the old concrete pool area. It is possible that the old pool is deeper than 3 feet and further exploration is highly recommended. We recommend test pits at select locations across the site, mainly the old historical pool area. Vegetation in select test pit areas in consultation with the Biologist, Archaeologist and Native-American Tribe representative (all 3 of whom were present during our May 15, 2020 Geotechnical investigation). Geotechnical exploration is also required to evaluate the maximum depth of the old pool and characterize the undocumented fill from a geotechnical standpoint.

6. EARTHWORK

6.1. GENERAL

The project site is a cut and fill site. General earthwork recommendations for preliminary purposes are presented below. Following the completion of additional geotechnical investigation, the recommendations here will be finalized.

6.2. SITE DEMOLITION, CLEARING AND PREPARATION

6.2.1 SITE STRIPPING

The site should be stripped of all surface vegetation prior to beginning any earthworks. Surface vegetation and topsoil should be stripped to a sufficient depth to remove all material greater than 3

percent organic content by weight. Boring logs in Appendix B present topsoil depths at specific locations. Topsoil thickness will vary across the site and it can be more or less than the thicknesses presented on boring logs. We recommend that the earthworks Contractor make their own determination of topsoil thickness.

6.2.2 TREE AND SHRUB REMOVAL

Trees and shrubs designated for removal should have the root balls and any roots greater than ½-inch diameter removed completely. Grade depressions resulting from root ball removal should be cleaned of loose material and backfilled in accordance with the recommendations in the "Compaction Requirements" section of this report.

6.2.3 EXISTING UTILITIES ABANDONMENT OR PROTECTION

If any existing utilities are found and need to be abandoned, GEOR should be consulted immediately. The risks associated with abandoning utilities in place include the potential for future differential settlement of existing trench fills, and/or partial collapse and potential ground loss into utility lines that are not completely filled with grout. In general, the risk is relatively low for single underground utility lines less than 3 inches in diameter, and the risk increases with pipe diameter.

6.3. UNDOCUMENTED FILLS

Subsurface information obtained from our geotechnical exploration indicates presence of undocumented fills within the site boundaries.

6.3.1 UNDOCUMENTED FILL

The undocumented fill occurs near the surface across the site and was noted in borings BSC-1, BSC-2 and BSC-3. The undocumented fill is generally occurring in the area of the old concrete pool and may be suitable for use onsite provided the deleterious materials are removed. However, further geotechnical investigation required before the suitability can be confirmed.

Undocumented fills are anticipated to vary in thickness across the site and it can be more or less than the thicknesses presented on boring logs. We recommend that the earthworks Contractor make their own determination of undocumented fill thickness and suitability of the fill for use as select fill on the project.

6.3.2 UNDOCUMENTED FILL REMEDIAL GRADING REQUIREMENTS

Table 5 presents remedial grading requirements for the undocumented fill.

Table 2: Undocumented Fill Remedial Grading Requirements

Fill Type	Minimum Overexcavation Depth	Lateral Extents	Material Re-usable on-site?	Sifting Debris Required
General Undocumented Fill	Must be removed completely[1]	Fill likely present across the site.	Possible	Possible

[1] Cannot be confirmed at this stage. Additional geotechnical investigation is required.

6.4. TEMPORARY CUT AND FILL SLOPES

The contractor is responsible for maintaining all temporary slopes and providing temporary shoring where required. Temporary shoring, bracing, and cuts/fills should be performed in accordance with the strictest government safety standards. On a preliminary basis, the upper 5 feet at the site may be classified as OSHA Soil Type C materials. During the earthworks, the soil classification may change based on conditions encountered. The final determination of the soil classification for temporary works purposes shall be made by the earthworks contractor.

GEOR must review the final plans for compliance with the geotechnical recommendations presented in this report. An addendum to this geotechnical report may be issued with additional recommendations if deemed necessary after review of final plans.

6.5. SUBGRADE PREPARATION

All final subgrades that will receive engineered fills, slabs-on-grade, pavements or any other proposed structures should be scarified to a depth of 12 inches, moisture conditioned and compacted in strict accordance with “Compaction Requirements” section. All final subgrades must be inspected and certified by qualified soils inspector working under direct supervision of the GEOR. If final subgrade cannot be prepared through scarification and moisture conditioning, stabilization measures may be required. These may include, but not limited to, over-excavation, geosynthetic (geogrid or fabric) placement and crushed rock placement. The most appropriate stabilization measure will be selected by the GEOR on a case-by-case basis during earthwork activities.

6.6. MATERIAL OR FILL

6.6.1 RE-USE OF ONSITE SOILS

Material generated from earthworks is possibly suitable for re-use provided the organic content is less than 3 percent by weight and no clods and lumps larger than 6 inches in diameter are present in the fill. This needs to be confirmed through additional geotechnical investigation.

6.6.2 POTENTIAL IMPORTED SOURCES

We are assuming that the project site is a cut and fill balanced site. However, final design by others is not complete and our assumption may not be applicable once final design is complete. If material has to be imported, it should meet the following criteria:

Gradation	**Percent Finer by Weight (ASTM C 136)**
3”	100
No. 4 Sieve	50-100
No. 200 Sieve	10-40
▪ Liquid Limit	30 (max)
▪ Plasticity Index	12 (max)
▪ Maximum expansion index*	20 (max)

*ASTM D 4829

In addition to geotechnical characterization, we also recommend environmental and soil corrosion characterization of all import sources.

6.7. COMPACTION REQUIREMENTS

All import soils and on-site soils should be compacted in loose lifts not exceeding 8 inches. Open grade materials can be placed in loose lifts of 18 inches. Subgrade should be non-yielding and all compacted lifts must be inspected and certified by a qualified soils inspector working under direct supervision of GEOR. Table below presents the minimum compaction criteria.

Table 3: Minimum Compaction Requirements

Location	Per the Modified Proctor Test (ASTM D 1557)		
	Minimum Compaction Requirement (%)	Range of Moisture Contents for Compaction above Optimum	
		Minimum	Maximum
GEOR Approved on-site soils and imported fills:			
All foundations	95%	-1%	+2%
Interior Slabs	95%	-1%	+2%
Fills (top 5 feet)	95%	-1%	+2%
Fills (below 5 feet)	90%	-1%	+2%
Retaining Wall Backfill (with surface improvements)	90%	-1%	+2%
Retaining Wall Backfill (no surface improvements)	90%	-1%	+2%
Pavement Subgrade	95%	0%	+2%
Utility Trenches (Top 2 feet)	95%	-1%	+2%
Utility Trenches (Below 2 feet)	90%	-1%	+2%
Subgrade (after over-ex and scarification) below 2 feet	90%	-1%	+3%
Subgrade (after over-ex and scarification) top 2 feet	90%	-1%	+3%
Landscaping Areas	90%	-2%	+2%
Exterior Flatwork	95%	-1%	+2%
GEOR approved pavement materials:			
Class 2 AB	95%	0%	+2%
Asphalt Concrete	95% (Marshall)		

- Relative compaction based on maximum density determined by ASTM D1557 (latest version)
- Moisture content based on optimum moisture content determined by ASTM D1557 (latest version)
- Class 2 aggregate base shall conform to Caltrans Standard Specifications, latest edition, except that the relative
- compaction should be determined by ASTM D1557 (latest version)

6.8. TRENCHES

6.8.1 EXCAVATIONS

The near-surface soils are predominantly granular with little to no stand-up time. Un-shored vertical excavations will not be feasible and temporary shoring will be required in open cut trenches. Where trench excavations are in proximity to existing structures, special shoring design supported by site-specific geotechnical analysis will be required to prevent undermining. Trenching in the nested cobbles/boulders is likely to be challenging. Following the completion of final design and additional geotechnical investigation, trench recommendations presented in this report will require modification.

6.8.2 BACKFILL MATERIAL COMPACTION

A minimum 5 inches of compacted pipe embedment material (Clean Crushed Rock or materials per the pipe manufacturer's specifications) is acceptable at the base of the pipe and above the trench subgrade. Once the pipe is placed on the bedding material, the embedment material surrounding the pipe must be carefully placed in maximum 6-inch lifts (loose thickness) and compacted to prevent pipe displacement. The embedment materials should be placed such that the material fully encapsulates the pipe. Controlled Low Strength Material (CLSM) is recommended in areas where embedment materials cannot be adequately compacted. For Clean Crushed Rock with moderate compaction (75% to 85% Modified Proctor, 50% - 75% Relative Density), we recommend a modulus of soil reaction (E') of 3,000 PSI (pounds per square inch) for preliminary design purposes.

Trench backfill materials shall be placed in layers not exceeding 6-inches and compacted in accordance with "Compaction Requirements" section of this report unless specified otherwise by the pipe manufacturer and/or sewer service provider.

Trench backfill shall consist of free-draining materials and comply with pipe manufacturer and/or service provider requirements. Trench backfill should consist of Caltrans Class 2 Aggregate Base or CLSM where future improvements are planned at ground surface. Trench backfill with clean native soils is generally not recommended because of future improvements in the area. Native granular soils that are free of organics, rubble, debris and large rocks may be used as trench backfill provided they have been inspected, tested and approved by GEOR.

For PVC pipe design purposes, we recommend a prism load soil pressure of 0.85 psi per feet of soil cover (factor of safety and traffic loading is not included). In general, a factor of safety of 4 to 6 is incorporated into PVC pipe design that is based on maximum diametric deflection under external loading. However, final determination of traffic loading and factor of safety shall be made by the sewer line design engineer. In designing and constructing the shoring system, all local, state and federal regulations related to excavation safety must be adhered to, including but not limited to Cal/OSHA.

6.8.3 UTILITY LINES

Utility lines should be trenched, bedded and shaded, and backfilled in accordance with the local or governing jurisdictional requirements. All utility lines should be bedded and shaded to at least 6 inches over the top of the lines with clean crushed rock (¾-inch-diameter or greater) or well-graded sand and gravel materials conforming to the pipe manufacturer's requirements. Open-graded shading materials should be consolidated in place with vibratory equipment and well-graded materials should be compacted to at least 90 percent relative compaction with vibratory equipment prior to placing subsequent backfill materials.

General backfill over shading materials may consist of GEOR approved onsite native materials, and are moisture conditioned and compacted in accordance with the "Compaction Requirements" section of this report.

6.9. SITE DRAINAGE

The following general best practices for site drainage must be considered by the design team.

- V-ditches and drain inlets should be sized by the Civil Engineer of Record to accommodate the design storm events.
- If concrete-lined v-ditches are planned, they should be reinforced as required and have adequate control and construction joints and should be constructed neat in excavations.
- Heavy compaction equipment should not be allowed around formed ditches.
- All slopes should be vegetated by hydroseeding or other landscape ground cover to mitigate the risk of erosion and sloughing. Vegetation will help with infiltration, transpiration, trapping sediment, reducing runoff velocities and protecting the soil from raindrop impact.
- For slopes with inclinations of 2:1 (horizontal:vertical) or steeper, aggressive erosion control consisting of straw matting, jute netting or erosion control blankets may be required.
- Storm Water Pollution Prevention Plans (SWPPPs) should be prepared for the project-specific requirements.
- Final grading plans should be reviewed by GEOR for compliance with recommendations contained in this report.

7. 2019 CBC SEISMIC DESIGN CRITERIA

Based on our literature review and interpretation of subsurface conditions, we recommend that the project site be classified as Site Class D in accordance with Table 20.3-1 of ASCE 7-16. Seismic design criteria is included in See Appendix D.

8. FOUNDATIONS

Provided the recommendations in the “Earthwork” section and the sections below are followed, The building can be supported on spread footings and strip footings bearing on compacted soils.

The following are the ‘minimum’ requirements from a geotechnical standpoint for cabins supported on continuous or isolated spread footings bearing in competent native soil. The recommendations are preliminary in nature and must be finalized after additional geotechnical investigation.

i. Footings must be at least 18 inches below finished grade,
ii. All walls must be bearing on continuous footings,
iii. Footings must be reinforced as designed by Structural Engineer of Record (SEOR), and
iv. On-grade concrete floor slabs must be on a 4-inch fill of coarse aggregate.

Design foundations recommended above are for a maximum allowable bearing pressure of 2,000 pounds per square foot (psf) for dead plus live loads. Increase this bearing capacity by one third for the short-term effects of wind or seismic loading. The maximum allowable bearing pressure is a net value; the weight of the footing may be neglected for design purposes.

9. VEHICULAR PAVEMENTS

9.1. ASPHALT CONCRETE

Table below presents asphalt concrete pavement recommendations based on the Procedure 608 of the Caltrans Highway Design Manual and on a design R-value of 30. The design R-value was chosen based on lab testing of near-surface soils using California Test 301. The actual R-value of the subgrade soils should be re-assessed during site grading activities, and modifications to the structural pavement section must be made if R-value differs.

Table 4. Asphalt Concrete Pavement Recommendations, Design R-Value = 30

Design Traffic Index (TI)[1]	Asphalt Concrete** (inches)	Class 2 Aggregate Base* (inches)	Total Pavement Section Thickness (inches)
5.0	2 ½	7	9 ½
5.5	3	7	10
6.0	3 ½	8	11 ½
6.5	3 ½	9	12 ½

**Asphalt Concrete conforming to the material, placement, and acceptance criterial of Type A ½ or ¾ inch gradation per Section 39 of the latest Caltrans Standard Specifications.

*Class 2 Aggregate Base shall conform to the material specifications of 26-1.02B Class 2 Aggregate Base of the latest Caltrans Standard Specifications.
[1] Traffic Index must be determined by the project Civil Engineer of Record.

To mitigate the risk of pavement distress from construction traffic, we recommend constructing final asphalt concrete section after construction traffic loading is no longer present. If it is not practical to do so, a higher traffic index may be required for the areas where construction traffic will be using the pavements.

These pavement sections assume the pavement sections will be constructed on site soil material which is granular and have a minimum R-value of 30. If import borrow is to be placed under the proposed pavement sections, index testing (gradation, expansive index, plasticity) and R-value testing should be performed on this import borrow material to verify it provides the same material properties as used for the design. If the material does not provide the required values, the GEOR should be contacted to revise the pavement sections prior to construction. We highly recommend testing the import soil for R-value prior to importing it to the site.

9.2. PORTLAND CEMENT CONCRETE

Table below provides minimum thicknesses for Portland Cement Concrete (PCC) pavement sections constructed on GEOR approved subgrade and aggregate base surfaces prepared in strict accordance with 'Compaction Requirements' section of this report.

Table 5. PCC Pavement Recommendations, Design R-Value = 30

Location	Light Vehicular Parking	Fire Lane / Truck Drive Way
Traffic Index[1]	5.0	7.0
PCC Thickness (in)	4.5	5.5
Aggregate Base Thickness (in)	6	8

[1] Traffic index was assumed by Sierra. It should be verified and confirmed by CEOR.

- Minimum recommended concrete flexural strength is 550 psi.
- Minimum recommended concrete compressive strength is 4,000 psi.
- Transverse contraction joints should not be spaced more than 10 feet and should be cut to a depth of ¼ the thickness of the slab.
- Longitudinal joints should not be spaced more than 12 feet apart.
- The contractor should provide a jointing layout plan to the GEOR for review prior to construction.
- If the import soil is medium expansive, we recommend construction and expansion joints be dowelled.
- Positive drainage should be provided away from all pavement areas to prevent seepage of surface and/or subsurface water into the pavement base and/or subgrade.

10. RETAINING WALLS

Currently, we do not have site specific dimensions of retaining walls. For preliminary design purposes, we recommend all retaining walls less than four (4) feet in height be supported on shallow spread footings designed in accordance with the recommendations presented in the “Foundations” section of this report. For shallow spread footings bearing on a minimum of 3 feet of removed and recompacted or placed engineered fill, we recommend using a geotechnical allowable bearing capacity of 2,000 pounds per square foot. Sierra should be contacted for site-specific foundation recommendations upon completion of final design.

11. PLAN REVIEW AND CONSTRUCTION MONITORING

GEOR should be retained to review civil, structural and landscaping plans. Any structures and project development features/elements that are not covered in this report will require geotechnical inputs upon complete of final design and GEOR must be contacted. GEOR representative should be on site during grading and foundation construction. Field modifications to the planned construction may be required based on encountered field conditions.

12. LIMITATIONS

This report has been prepared for the sole use of our client, Design Workshop, Inc., specifically to support the preliminary engineering design of the Pfeiffer Big Sur State Park Cabins Project in Pfeiffer Big Sur State Park, California. The opinions, conclusions, and recommendations presented in this report have been formulated in accordance with accepted geotechnical engineering practices that exist in California at the time this report was prepared. No warranty expressed or implied is made or should be inferred. The preliminary recommendations of this report pertain only to the site investigated and are based upon the assumption that the soil conditions do not deviate from those disclosed in the exploration. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that anticipated herein, Sierra Geotech should be notified so that supplemental recommendations can be provided. This report is issued with the understanding that it is the responsibility of the Owner, or of his representative, to ensure that the information and preliminary recommendations contained herein are brought to the attention of the architect, and structural engineer for the project and incorporated into the plans, and the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.

The findings of this report are valid as of the date of this report. However, changes in the conditions of a property can occur with the passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside Sierra Geotech's control. Therefore, this report is subject to review and should not be relied upon after a period of five years or when the California Building Code changes, which is typically every three years, whichever comes first.

Sierra Geotech should be retained to provide testing and observation services during construction to provide continuity of geotechnical interpretation and to check that the recommendations presented for geotechnical aspects of site development are incorporated during site grading and construction of improvements. If another geotechnical firm is selected to perform the testing and observation services during construction operations, that firm should prepare a letter indicating their intent to assume the responsibilities of project Geotechnical Engineer of Record (GEOR). In addition, that firm should provide revised recommendations concerning the geotechnical aspects of the proposed development, or a written acknowledgment of their concurrence with the recommendations presented in Sierra Geotech's report. That firm should also perform additional analyses deemed necessary to assume the role of GEOR. If we are not retained for inspection during construction, we cannot assume any responsibility for any potential claims that may arise during or after construction. All recommendations in this report are contingent upon GEOR providing observation and testing of earthworks and foundation construction.

13. REFERENCES

ASCE 7-16, Minimum Design Loads and Associated Criteria for Buildings and Other Structures.

California Building Code, 2019, Structural Engineering Design Provisions, Vol. 2.

California Department of Conservation Division of Mines and Geology, 1998, Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada, International Conference of Building Officials, February, 1998.

California Division of Mines and Geology (2008), “Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117A, September.

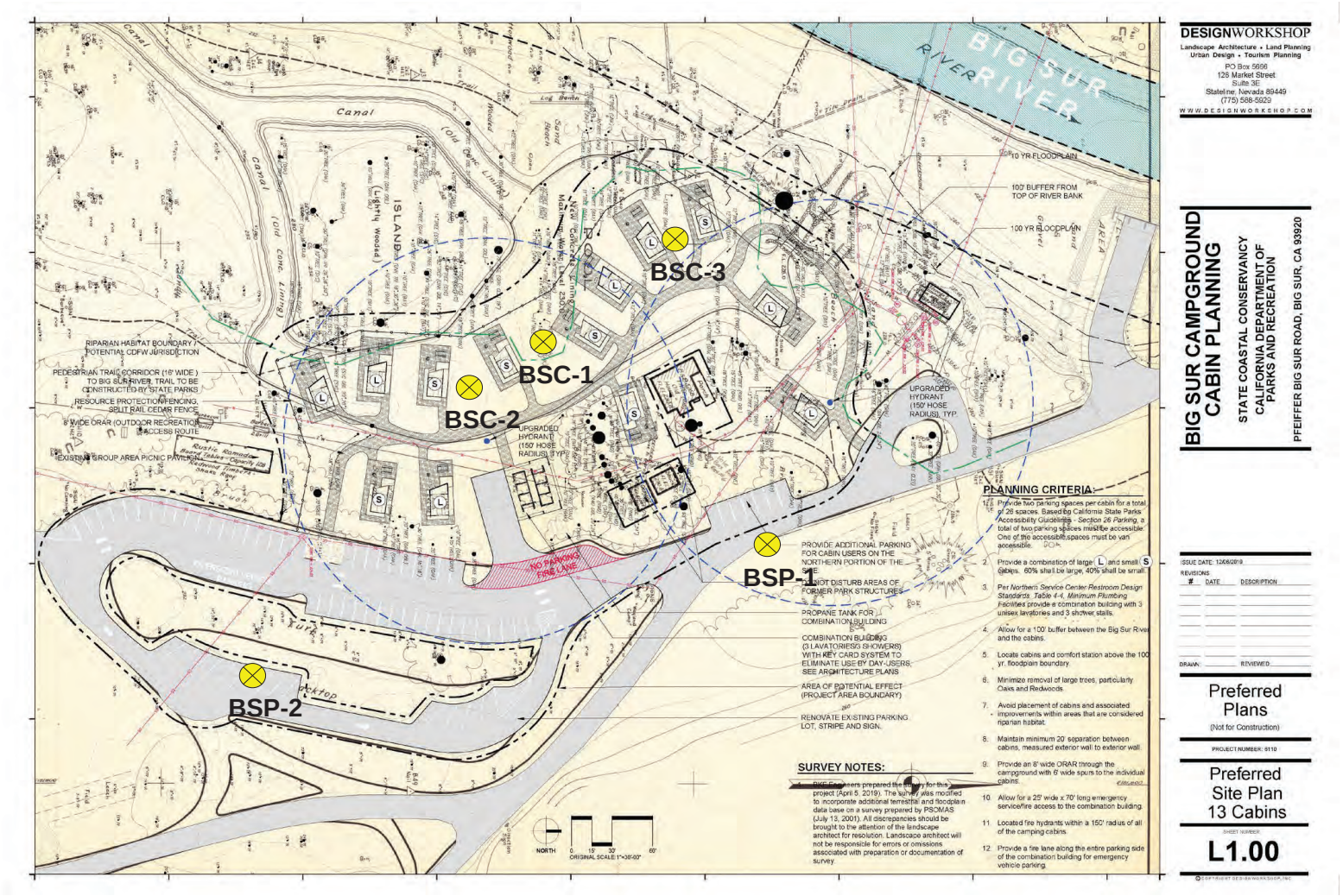
Portland Cement Association, 1984, Thickness Design for Concrete Highway and Street Pavements: report.

Robertson, P.K., Shao, Lisheng, 2010, Estimation of Seismic Compression in Dry Soils Using the CPT, 5th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, Paper No. 4.05a, May 24-29, 2010.

State of California Department of Transportation, 2015, Highway Design Manual, Fifth Edition, December 31, 2015.

USGS Unified Hazard Tool: https://earthquake.usgs.gov/hazards/interactive/.

FIGURES



SIERRA GEOTECH

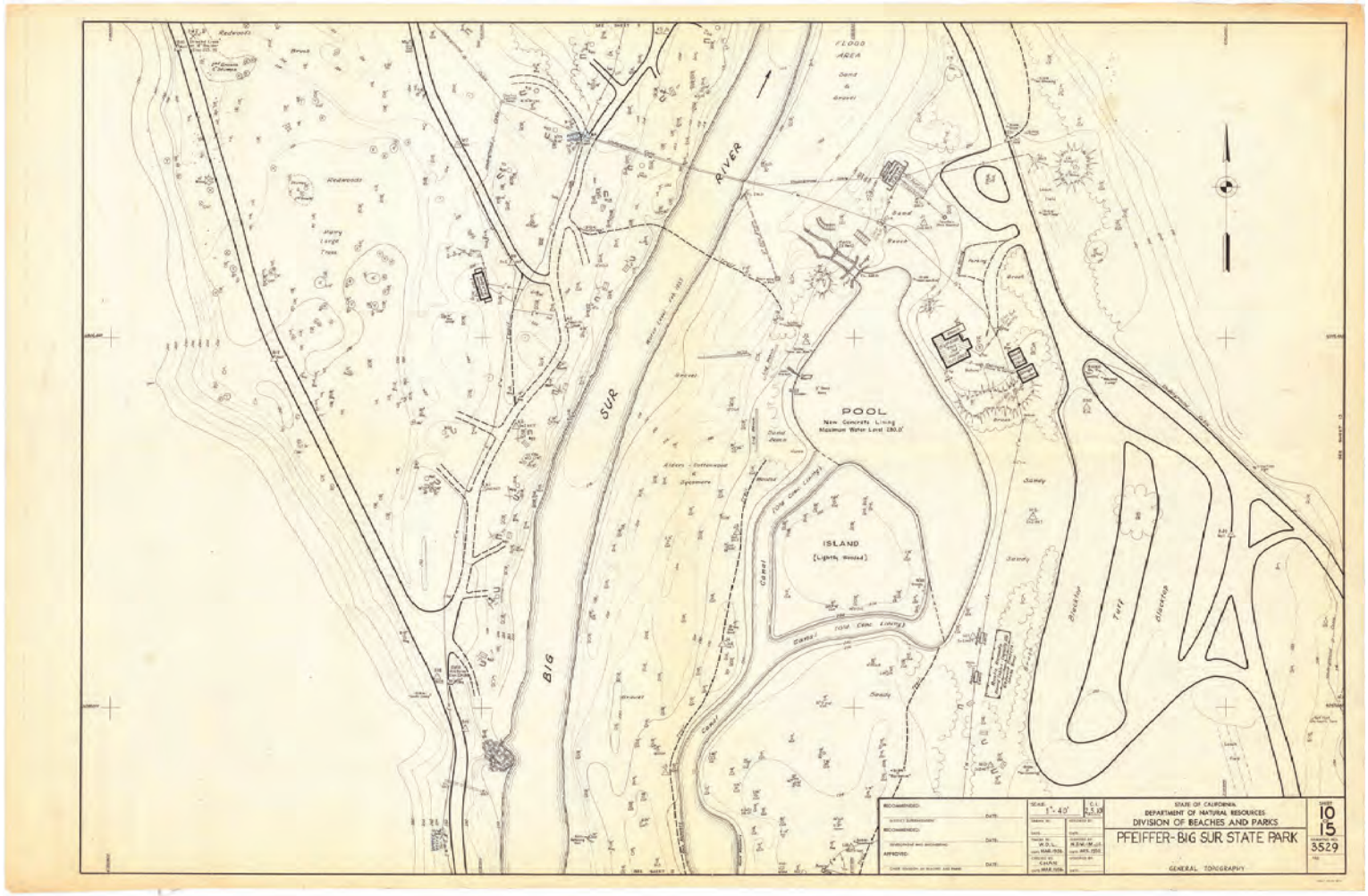
Site Plan and Borings Layout

Pfeiffer Big Sur State Park
Campground Development
Geotechnical Investigation

Project Number
DV20005

Figure Number
1

Date Prepared
7-9-2020



SIERRA GEOTECH

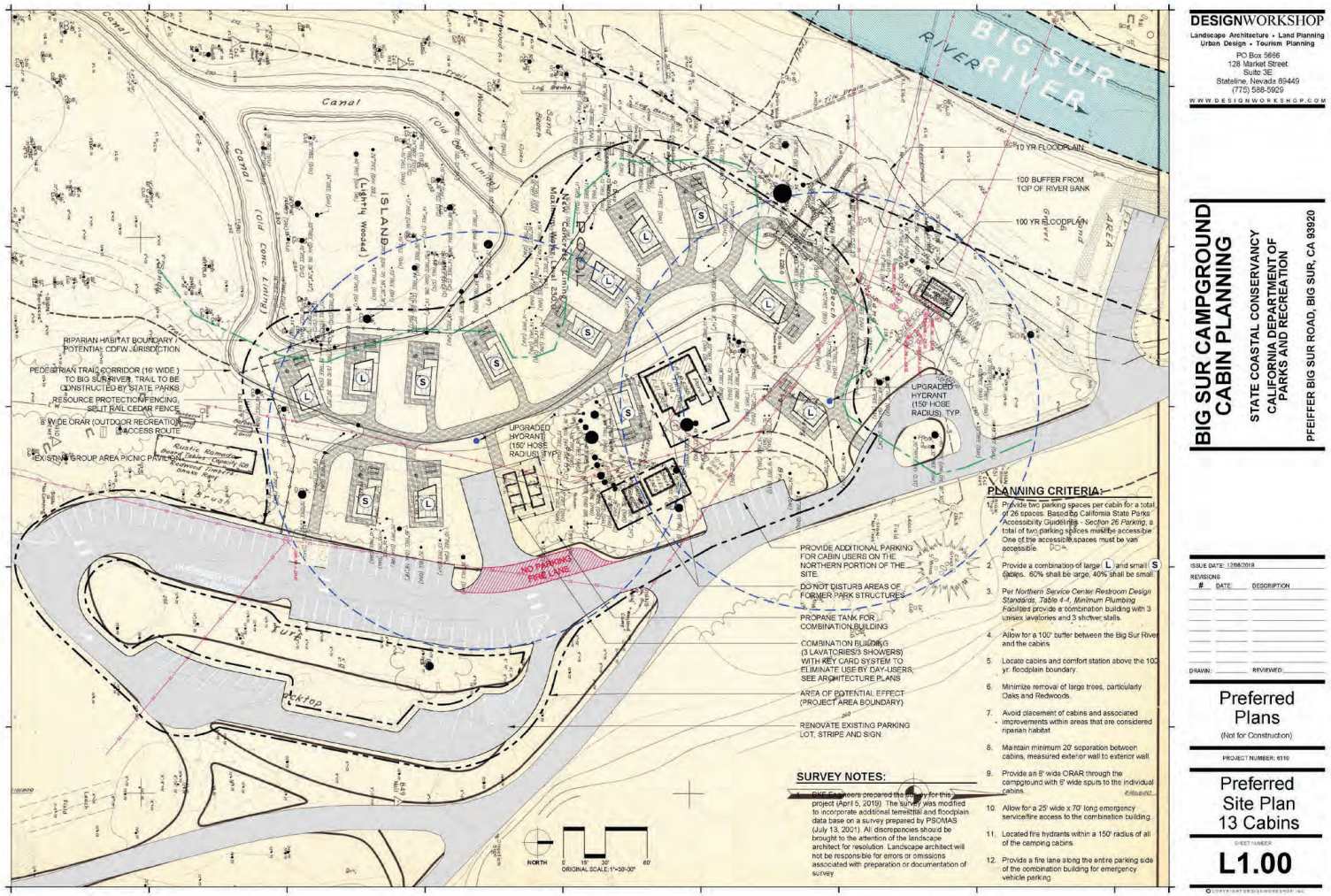
Historical Drawings of the Site

Pfeiffer Big Sur State Park
Campground Development
Geotechnical Investigation

Project Number
DV20005

Figure Number
2

Date Prepared
7-9-2020



PLANNING CRITERIA:

1. Provide two parking spaces per cabin for a total of 26 spaces. Based on California State Parks' Accessibility Guidelines - *Section 26 Parking*, a total of two parking spaces must be accessible. One of the accessible spaces must be van accessible.
2. Provide a combination of large (L) and small (S) cabins. 60% shall be large, 40% shall be small.
3. Per *Northern Service Center Restroom Design Standards, Table 4-1 Minimum Plumbing Facilities* provide a combination building with 3 unisex lavatories and 3 shower stalls.
4. Allow for a 100' buffer between the Big Sur River and the cabins.
5. Locate cabins and comfort station above the 100 yr. floodplain boundary.
6. Minimize removal of large trees, particularly Oaks and Redwoods.
7. Avoid placement of cabins and associated improvements within areas that are considered riparian habitat.
8. Maintain minimum 20' separation between cabins, measured exterior wall to exterior wall.
9. Provide an 8' wide CRAR through the campground with 8' wide spurs to the individual cabins.
10. Allow for a 25' wide x 70' long emergency service/fire access to the combination building.
11. Located fire hydrants within a 150' radius of all of the camping cabins.
12. Provide a fire lane along the entire parking side of the combination building for emergency vehicle parking.

SURVEY NOTES:

1. BKF Engineers prepared the survey for this project (April 5, 2019). The survey was modified to incorporate additional terrestrial and floodplain data base on a survey prepared by PSOMAS (July 13, 2001). All discrepancies should be brought to the attention of the landscape architect for resolution. Landscape architect will not be responsible for errors or omissions associated with preparation or documentation of survey.

DESIGNWORKSHOP
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Urban Design • Tourism Planning
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128 Market Street
Suite 3E
Stateline, Nevada 89449
(775) 588-5929
WWW.DESIGNWORKSHOP.COM

BIG SUR CAMPGROUND CABIN PLANNING

STATE COASTAL CONSERVANCY
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION
PFEIFFER BIG SUR ROAD, BIG SUR, CA 93920

ISSUE DATE: 12/06/2018
REVISIONS
DATE: DESCRIPTION

DRAWN: REVIEWED:

Preferred Plans
(Not for Construction)

PROJECT NUMBER: 6110

Preferred Site Plan 13 Cabins

SHEET NUMBER
L1.00

SIERRA GEOTECH

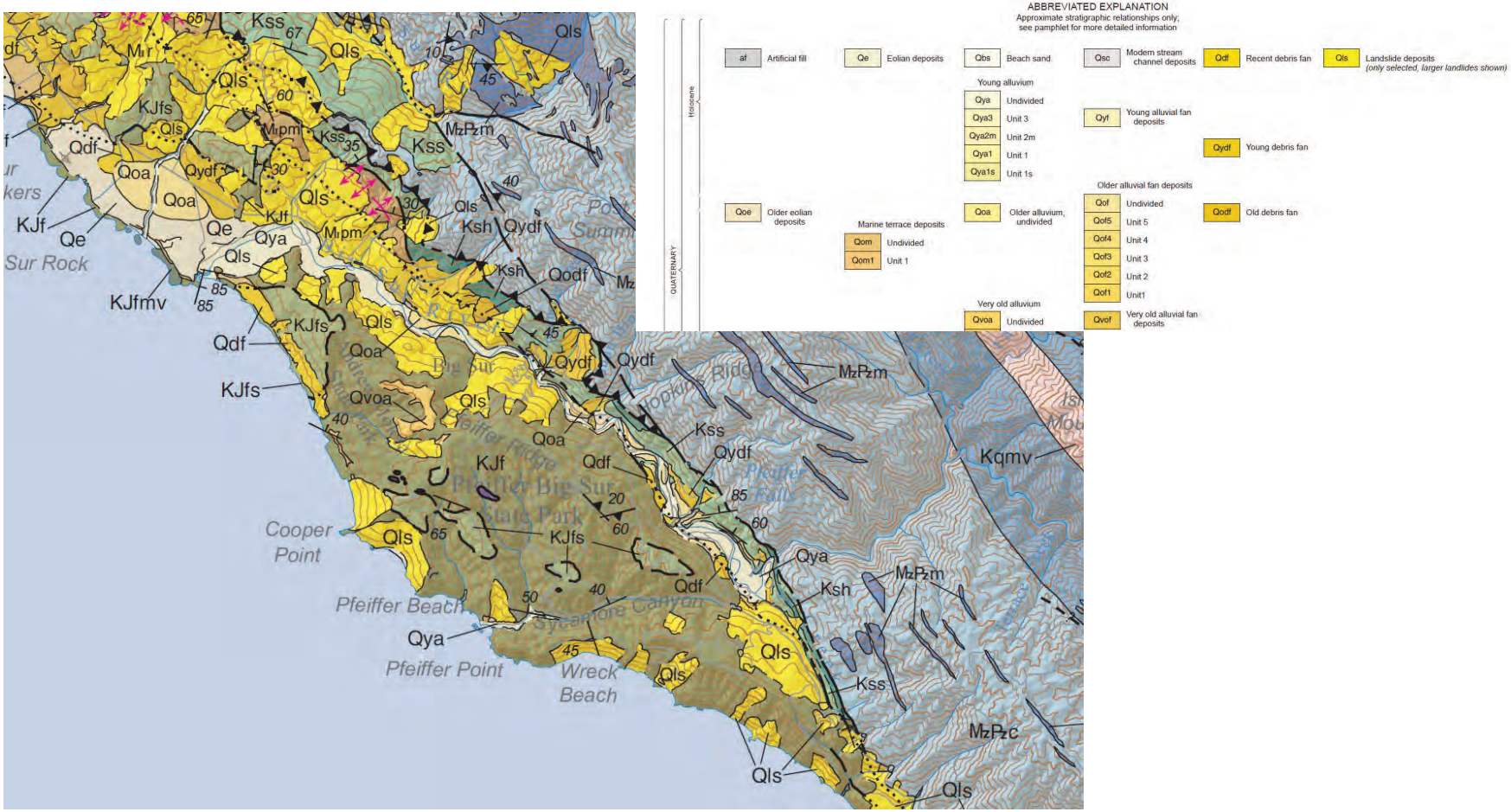
Site Plan and Historical Drawing Overlay

Pfeiffer Big Sur State Park
Campground Development
Geotechnical Investigation

Project Number
DV20005

Figure Number
3

Date Prepared
7-9-2020



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SIERRA GEOTECH

Regional Geologic Map

Pfeiffer Big Sur State Park
Campground Development
Geotechnical Investigation

Project Number
DV20005

Figure Number
4

Date Prepared
7-9-2020

SIERRA GEOTECH

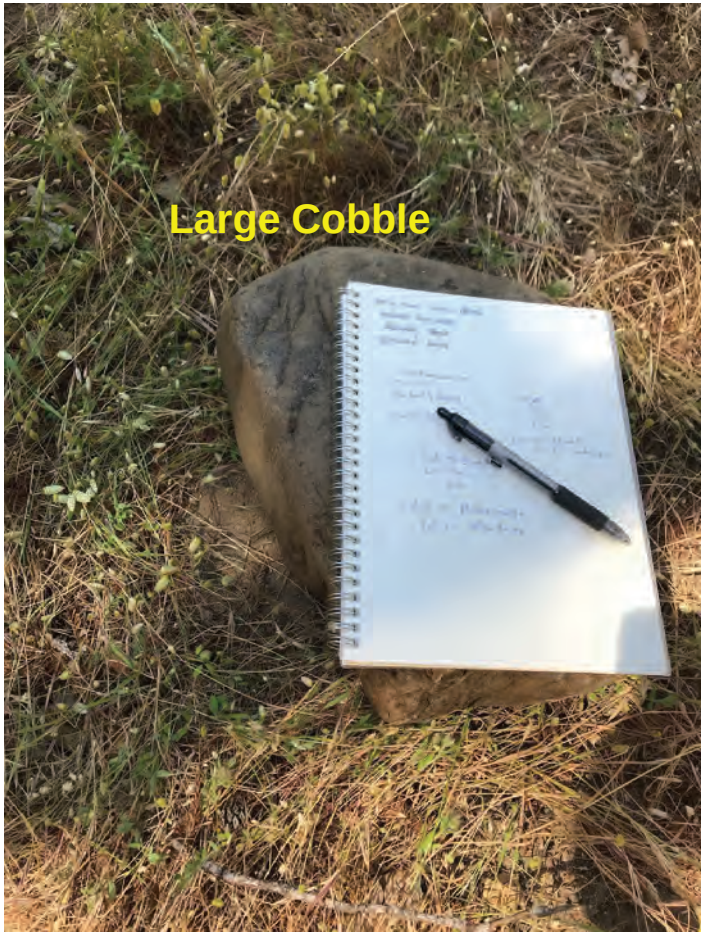
Site Photos

Pfeiffer Big Sur State Park
Campground Development
Geotechnical Investigation

Project Number
DV20005

Figure Number
5

Date Prepared
7-9-2020



SIERRA GEOTECH

Site Photos

Pfeiffer Big Sur State Park
Campground Development
Geotechnical Investigation

Project Number
DV20005

Figure Number
6

Date Prepared
7-9-2020

APPENDICES

Appendix A: Conceptual design drawings (by others)

Appendix B: Geotechnical Logs of Borings

Appendix C: Results of Laboratory Testing

Appendix D: Seismic Design Criteria

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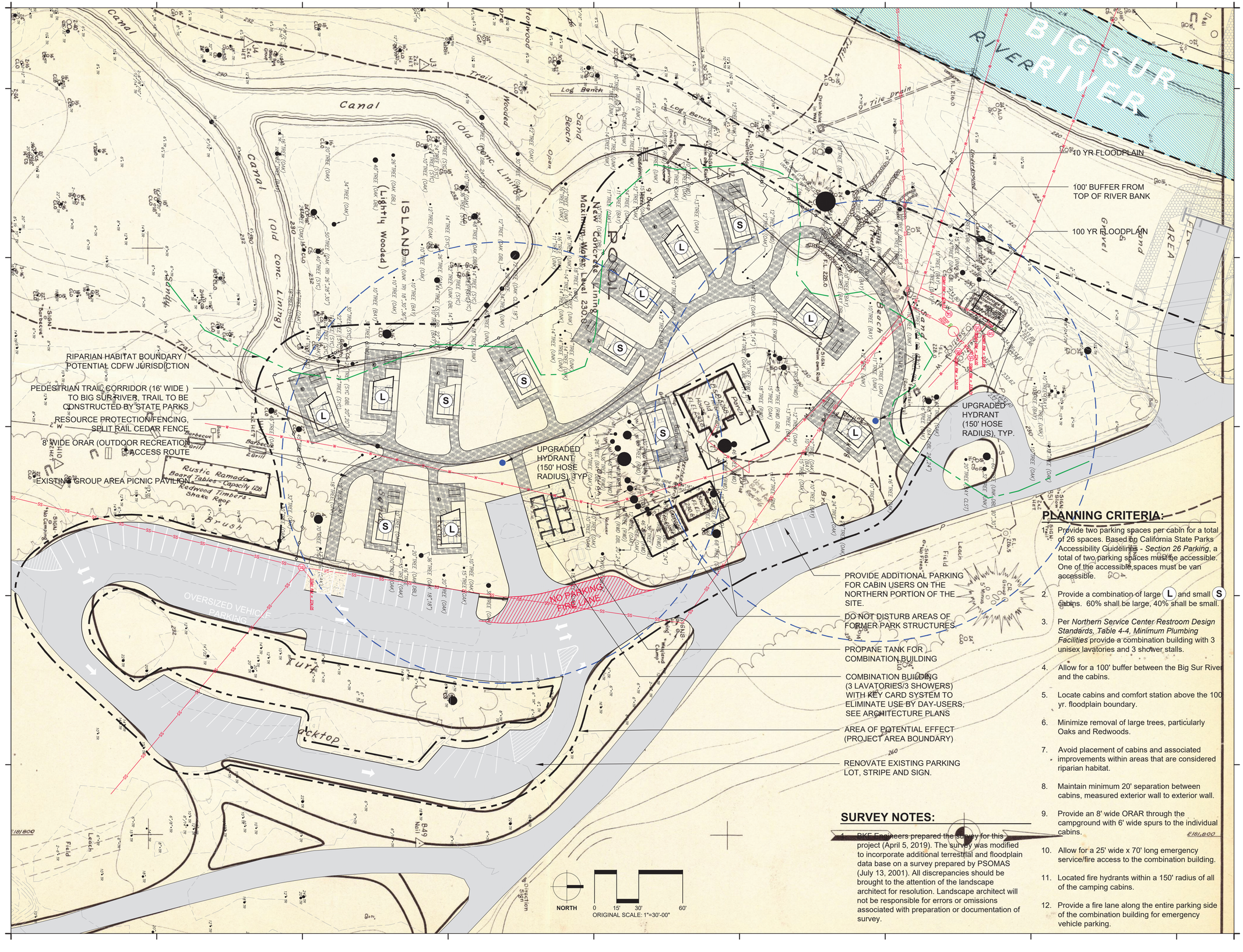

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2. Provide a combination of large (L) and small (S) cabins. 60% shall be large, 40% shall be small.
3. Per *Northern Service Center Restroom Design Standards, Table 4-4, Minimum Plumbing Facilities* provide a combination building with 3 unisex lavatories and 3 shower stalls.
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5. Locate cabins and comfort station above the 100 yr. floodplain boundary.
6. Minimize removal of large trees, particularly Oaks and Redwoods.
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SURVEY NOTES:

1. BKF Engineers prepared the survey for this project (April 5, 2019). The survey was modified to incorporate additional terrestrial and floodplain data base on a survey prepared by PSOMAS (July 13, 2001). All discrepancies should be brought to the attention of the landscape architect for resolution. Landscape architect will not be responsible for errors or omissions associated with preparation or documentation of survey.

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BIG SUR CAMPGROUND CABIN PLANNING

STATE COASTAL CONSERVANCY
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

PFEIFFER BIG SUR ROAD, BIG SUR, CA 93920

ISSUE DATE: 12/06/2019

REVISIONS

#	DATE	DESCRIPTION

DRAWN: REVIEWED:

Preferred Plans

(Not for Construction)

PROJECT NUMBER: 6110

Preferred Site Plan 13 Cabins

SHEET NUMBER

L1.00

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SIERRA GEOTECH

LOG OF BORING No. BSP-1

PROJECT: Pfeiffer Big Sur Cabins Development
PROJECT NO.: DV20005
CLIENT: Design Workshop, Inc.
DATE: 05/15/2020
PROJECT LOCATION: Pfeiffer Big Sur State Park Campgroun
DEPTH 6.75
LOCATION: See Plot Plan See Plot Plan
ELEVATION NA
DRILLER: Central Coast Drilling
DATUM: NA
DRILLING METHOD: Solid Stem Augers
LOGGED BY: CC\SV
DEPTH TO GWT: NE **(APPROX.)**
HAMMER EFFICIENCY: 66%

ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	SAMPLE NO.	SAMPLE SYMBOL	BLOW COUNTS (uncorrected)	N-VALUE (uncorrected)	N-VALUE PLOT (10 20 30 40 50)	NATURAL MOISTURE CONTENT
	0		Topsoil						
			POORLY GRADED SAND WITH SILT; SP-SM; very dark grayish brown (10 YR 3/2); dry to moist; loose to medium dense;	SPT-1		3 3 4	7	▲	11 11
	1.25		trace organics such as roots, grass noted; occasional gravel fragments noted; gravel predominantly medium to coarse, angular to sub-rounded, Large Cobbles noted with depth; Drilling terminated due to large cobbles.						
	2.5								
	3.75								
	5			SPT-2		6 33 15	48	▲	14
	6.25		Boring terminated at 6.75 ft.						
	7.5								
	8.75								
	10								
	11.25								
	12.5								
	13.75								
	15								

SIERRA GEOTECH

LOG OF BORING No. BSP-2

PROJECT: Pfeiffer Big Sur Cabins Development
PROJECT NO.: DV20005
CLIENT: Design Workshop, Inc.
DATE: 05/15/2020
PROJECT LOCATION: Pfeiffer Big Sur State Park Campgroun
DEPTH 2.7
LOCATION: See Plot Plan See Plot Plan
ELEVATION NA
DRILLER: Central Coast Drilling
DATUM: NA
DRILLING METHOD: Solid Stem Augers
LOGGED BY: CC\SV
DEPTH TO GWT: NE **(APPROX.)**
HAMMER EFFICIENCY: 66%

ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	SAMPLE NO.	SAMPLE SYMBOL	BLOW COUNTS (uncorrected)	N-VALUE (uncorrected)	N-VALUE PLOT (10 20 30 40 50)	NATURAL MOISTURE CONTENT
	0		Asphalt Concrete Pavement						
			POORLY GRADED GRAVEL WITH SILT; GW-GM; very dark grayish brown (10 YR 3/2); dry to moist; loose to medium dense;	SPT-1		2 4 4	8	▲	12
	1.25		trace organics such as roots, grass noted; occasional gravel fragments noted; gravel predominantly medium to coarse, angular to sub-rounded, Large Cobbles noted with depth; Drilling terminated due to large cobbles.						
	2.5		Boring terminated at 2.7 ft.	SPT-2		48 50+	50+	▲	16
	3.75								
	5								
	6.25								
	7.5								
	8.75								
	10								
	11.25								
	12.5								
	13.75								
	15								

This log is a part of a report by Sierra Geotech and should not be used as a stand-alone document. Descriptions on this log apply only to the location of the exploration at the time of drilling. Subsurface conditions will differ at other locations and may change at this location with time. The descriptions presented here are generalized simplifications of actual conditions encountered. Transitions between soil horizons is gradual and sometimes inferred.

SIERRA GEOTECH

LOG OF BORING No. BSC-1

PROJECT: Pfeiffer Big Sur Cabins Development
PROJECT NO.: DV20005
CLIENT: Design Workshop, Inc.
DATE: 05/15/2020
PROJECT LOCATION: Pfeiffer Big Sur State Park Campgroun
DEPTH 5.3
LOCATION: See Plot Plan See Plot Plan
ELEVATION NA
DRILLER: Central Coast Drilling
DATUM: NA
DRILLING METHOD: Solid Stem Augers
LOGGED BY: CC\SV
DEPTH TO GWT: NE **(APPROX.)**
HAMMER EFFICIENCY: 66%

ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	SAMPLE NO.	SAMPLE SYMBOL	BLOW COUNTS (uncorrected)	N-VALUE (uncorrected)	N-VALUE PLOT (10 20 30 40 50)	NATURAL MOISTURE CONTENT
	0		TOPSOIL						
			POORLY GRADED GRAVEL WITH SILT; GW-GM; very dark grayish brown (10 YR 3/2); dry to moist; loose to medium dense;	SPT-1		3 3 4	7	▲	10
	1.25		trace organics such as roots, grass noted; occasional gravel fragments noted; gravel predominantly medium to coarse, angular to sub-rounded, Large Cobbles noted with depth; Drilling terminated due to large cobbles.						
	2.5								
	3.75								
	5			SPT-2		50+			11
			Boring terminated at 5.3 ft.						
	6.25								
	7.5								
	8.75								
	10								
	11.25								
	12.5								
	13.75								
	15								

SIERRA GEOTECH

LOG OF BORING No. BSC-2

PROJECT: Pfeiffer Big Sur Cabins Development
PROJECT NO.: DV20005
CLIENT: Design Workshop, Inc.
DATE: 05/15/2020
PROJECT LOCATION: Pfeiffer Big Sur State Park Campgroun
DEPTH 6.5
LOCATION: See Plot Plan See Plot Plan
ELEVATION NA
DRILLER: Central Coast Drilling
DATUM: NA
DRILLING METHOD: Solid Stem Augers
LOGGED BY: CC\SV
DEPTH TO GWT: NE **(APPROX.)**
HAMMER EFFICIENCY: 66%

ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	SAMPLE NO.	SAMPLE SYMBOL	BLOW COUNTS (uncorrected)	N-VALUE (uncorrected)	N-VALUE PLOT (10 20 30 40 50)	NATURAL MOISTURE CONTENT
	0		TOPSOIL						
			POORLY GRADED GRAVEL WITH SILT; GW-GM; very dark grayish brown (10 YR 3/2); dry to moist; loose to medium dense;	SPT-1		1 1 1	2	▲	8
	1.25		trace organics such as roots, grass noted; occasional gravel fragments noted; gravel predominantly medium to coarse, angular to sub-rounded, Large Cobbles noted with depth; Drilling terminated due to large cobbles.						
	2.5								
	3.75								
	5			SPT-2		6 12 50+	50+	▲	12
	6.25		Boring terminated at 6.5 ft.						
	7.5								
	8.75								
	10								
	11.25								
	12.5								
	13.75								
	15								

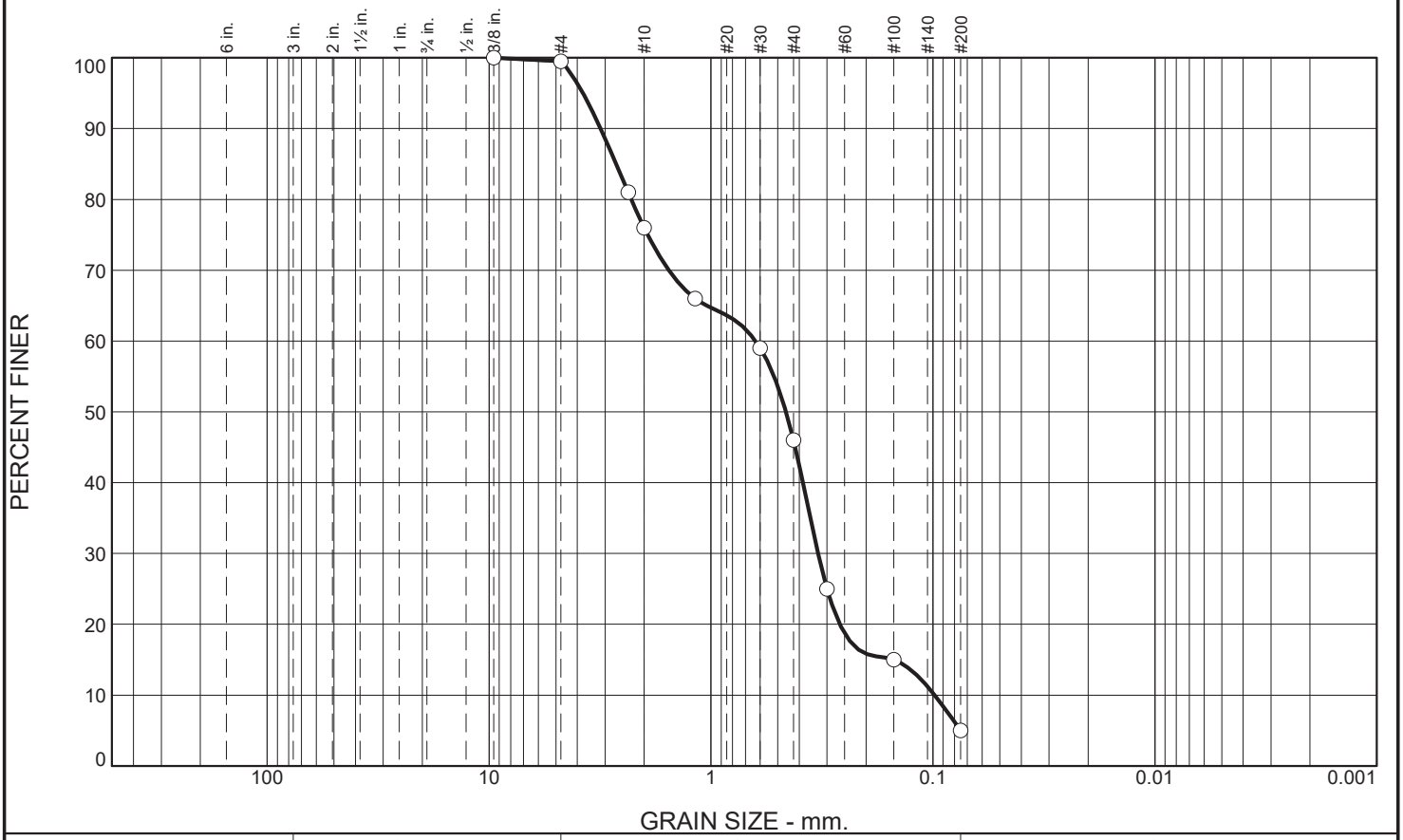
SIERRA GEOTECH

LOG OF BORING No. BSC-3

PROJECT: Pfeiffer Big Sur Cabins Development
PROJECT NO.: DV20005
CLIENT: Design Workshop, Inc.
DATE: 05/15/2020
PROJECT LOCATION: Pfeiffer Big Sur State Park Campgroun
DEPTH 5.4
LOCATION: See Plot Plan See Plot Plan
ELEVATION NA
DRILLER: Central Coast Drilling
DATUM: NA
DRILLING METHOD: Solid Stem Augers
LOGGED BY: CC\SV
DEPTH TO GWT: NE **(APPROX.)**
HAMMER EFFICIENCY: 66%

ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	SAMPLE NO.	SAMPLE SYMBOL	BLOW COUNTS (uncorrected)	N-VALUE (uncorrected)	N-VALUE PLOT (10 20 30 40 50)	NATURAL MOISTURE CONTENT
	0		TOPSOIL						
			POORLY GRADED GRAVEL WITH SILT; GW-GM; very dark grayish brown (10 YR 3/2); dry to moist; loose to medium dense;	SPT-1		6 10 11	21	▲	14
	1.25		OLD CONCRETE POOL LINER NOTED AT 3.0' DEPTH						
	2.5		POORLY GRADED GRAVEL WITH SILT; GW-GM; very dark grayish brown (10 YR 3/2); dry to moist; loose to medium dense;						
	3.75		trace organics such as roots, grass noted; occasional gravel fragments noted; gravel predominantly medium to POORLY GRADED GRAVEL WITH SILT; GW-GM; very dark grayish brown (10 YR 3/2); dry to moist; loose to medium dense;	SPT-2		50+	50+	▲	11
	5		gravel predominantly medium to coarse, angular to sub-rounded, Large Cobbles noted with depth; Drilling terminated due to large cobbles.						
	6.25		Boring terminated at 5.4 ft.						
	7.5								
	8.75								
	10								
	11.25								
	12.5								
	13.75								
	15								

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.5	23.5	30.0	41.0	5.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.375	100.0		
#4	99.5		
#8	81.0		
#10	76.0		
#16	66.0		
#30	59.0		
#40	46.0		
#50	25.0		
#100	15.0		
#200	5.0		

* (no specification provided)

Soil Description

POORLY GRADED SAND WITH SILT; SP-SM; very dark grayish brown (10 YR 3/2); dry to moist;

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 3.1479 D_{85}= 2.6772 D_{60}= 0.6294
D_{50}= 0.4596 D_{30}= 0.3288 D_{15}= 0.1500
D_{10}= 0.0983 C_u= 6.40 C_c= 1.75

Classification

USCS= SP-SM AASHTO=

Remarks

Source of Sample: BSP-1 **Depth:** 0.1

Date: 5/26/2020

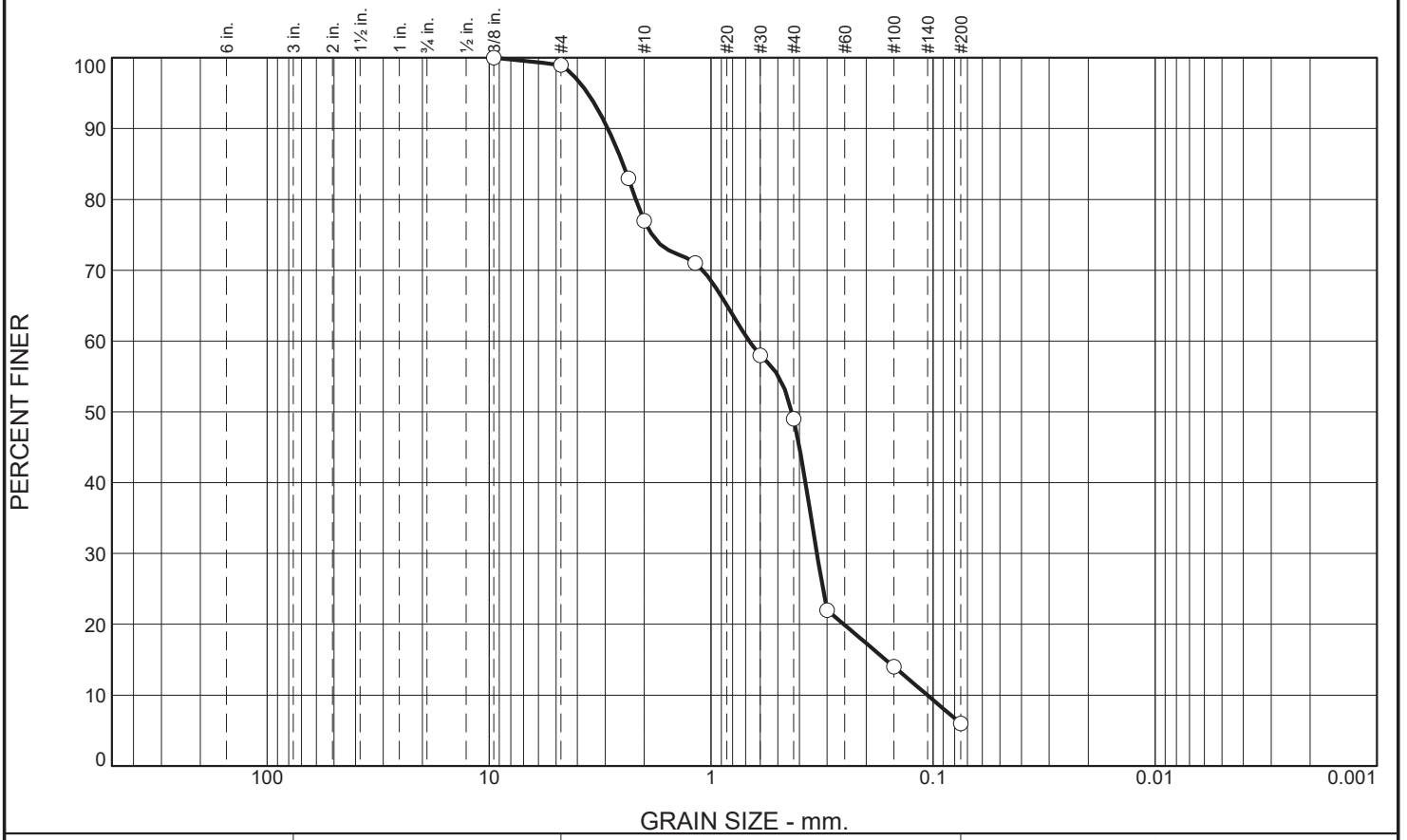
SIERRA GEOTECH

Client: Design Workshop, Inc.
Project: Pfeiffer Big Sur Cabins Development

Project No: DV20005 **Figure**

Tested By: CC **Checked By:** SV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.0	22.0	28.0	43.0	6.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.375	100.0		
#4	99.0		
#8	83.0		
#10	77.0		
#16	71.0		
#30	58.0		
#40	49.0		
#50	22.0		
#100	14.0		
#200	6.0		

* (no specification provided)

Soil Description

POORLY GRADED SAND WITH SILT; SP-SM; very dark grayish brown (10 YR 3/2);

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 2.9216 D_{85}= 2.4937 D_{60}= 0.6732
D_{50}= 0.4328 D_{30}= 0.3336 D_{15}= 0.1636
D_{10}= 0.1061 C_u= 6.35 C_c= 1.56

Classification

USCS= SP-SM AASHTO=

Remarks

Source of Sample: BSP-2 **Depth:** 0.2

Date: 5/28/2020

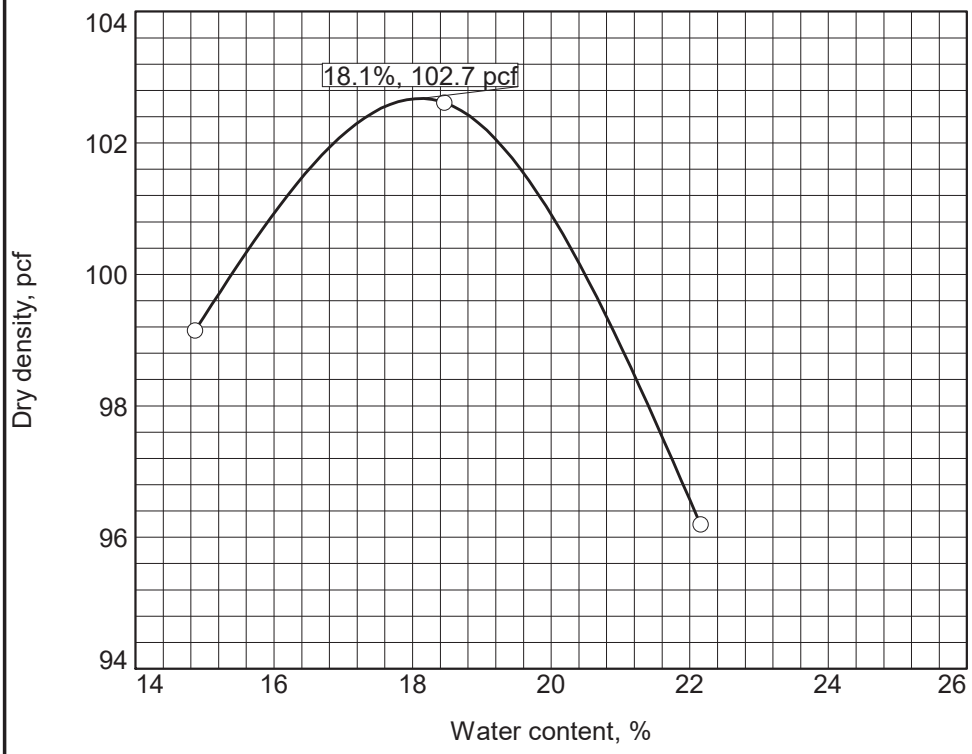
SIERRA GEOTECH

Client: Design Workshop, Inc.
Project: Pfeiffer Big Sur Cabins Development

Project No: DV20005 **Figure**

Tested By: CC **Checked By:** SV

COMPACTION TEST REPORT



Curve No.

Test Specification:
ASTM D 1557-91 Procedure B Modified

Hammer Wt.: 10 lb.
Hammer Drop: 18 in.
Number of Layers: five
Blows per Layer: 25
Mold Size: 0.03333 cu. ft.

Test Performed on Material Passing 3/8 in. **Sieve**

Soil Data

NM 11 **Sp.G.**
LL **PI**
%>3/8 in. 0.0 **%<#200** 5.0
USCS SP-SM **AASHTO**

TESTING DATA

	1	2	3	4	5	6
WM + WS	3725.7	3841.7	3780.5			
WM	2004.0	2004.0	2004.0			
WW + T #1	841.2	828.7	828.4			
WD + T #1	737.7	704.0	683.3			
TARE #1	41.2	28.4	28.4			
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	14.9	18.5	22.2			
DRY DENSITY	99.1	102.6	96.2			

TEST RESULTS

Maximum dry density = 102.7 pcf

Optimum moisture = 18.1 %

Material Description

POORLY GRADED SAND WITH SILT; SP-SM; very dark grayish brown (10 YR 3/2); dry to moist;

Project No. DV20005 **Client:** Design Workshop, Inc.
Project: Pfeiffer Big Sur Cabins Development

○ **Source of Sample:** BSP-1 **Depth:** 0.1

Remarks:

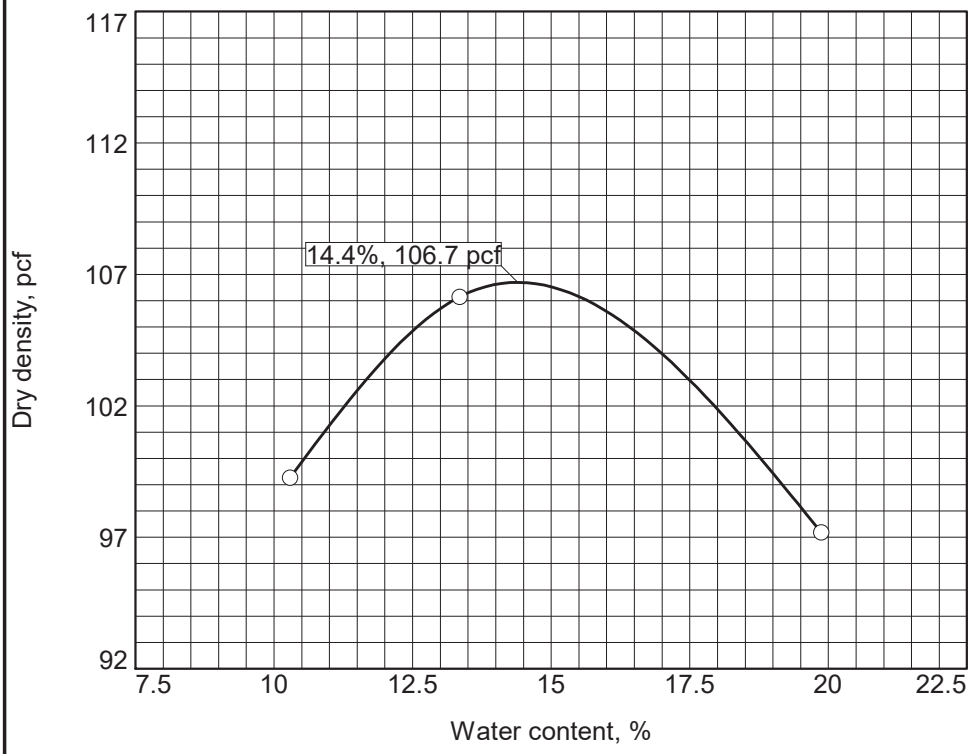
COMPACTON CURVE CANNOT BE USED FOR CONSTRUCTION PURPOSES. COMPACTION TESTING REQUIRED DURING EARTHWORKS TO CONFIRM CRITERIA.

SIERRA GEOTECH

Figure

Tested By: CC **Checked By:** SV

COMPACTION TEST REPORT



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Hammer Drop: 18 in.
Number of Layers: five
Blows per Layer: 25
Mold Size: 0.03333 cu. ft.

Test Performed on Material Passing 3/8 in. **Sieve**

Soil Data

NM _____ **Sp.G.** _____
LL _____ **PI** _____
%>3/8 in. 0.0 **%<#200** 6.0
USCS SP-SM **AASHTO** _____

TESTING DATA

	1	2	3	4	5	6
WM + WS	3659.2	3822.9	3765.2			
WM	2004.0	2004.0	2004.0			
WW + T #1	837.7	821.6	820.5			
WD + T #1	762.2	728.2	689.2			
TARE #1	28.4	28.4	28.4			
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	10.3	13.3	19.9			
DRY DENSITY	99.3	106.1	97.2			

TEST RESULTS

Maximum dry density = 106.7 pcf

Optimum moisture = 14.4 %

Material Description

POORLY GRADED SAND WITH SILT; SP-SM; very dark grayish brown (10 YR 3/2);

Project No. DV20005 **Client:** Design Workshop, Inc.
Project: Pfeiffer Big Sur Cabins Development

○ **Source of Sample:** BSP-2 **Depth:** 0.2

Remarks:

COMPACTON CURVE CANNOT BE USED FOR CONSTRUCTION PURPOSES. COMPACTION TESTING REQUIRED DURING EARTHWORKS TO CONFIRM CRITERIA.

SIERRA GEOTECH

Figure

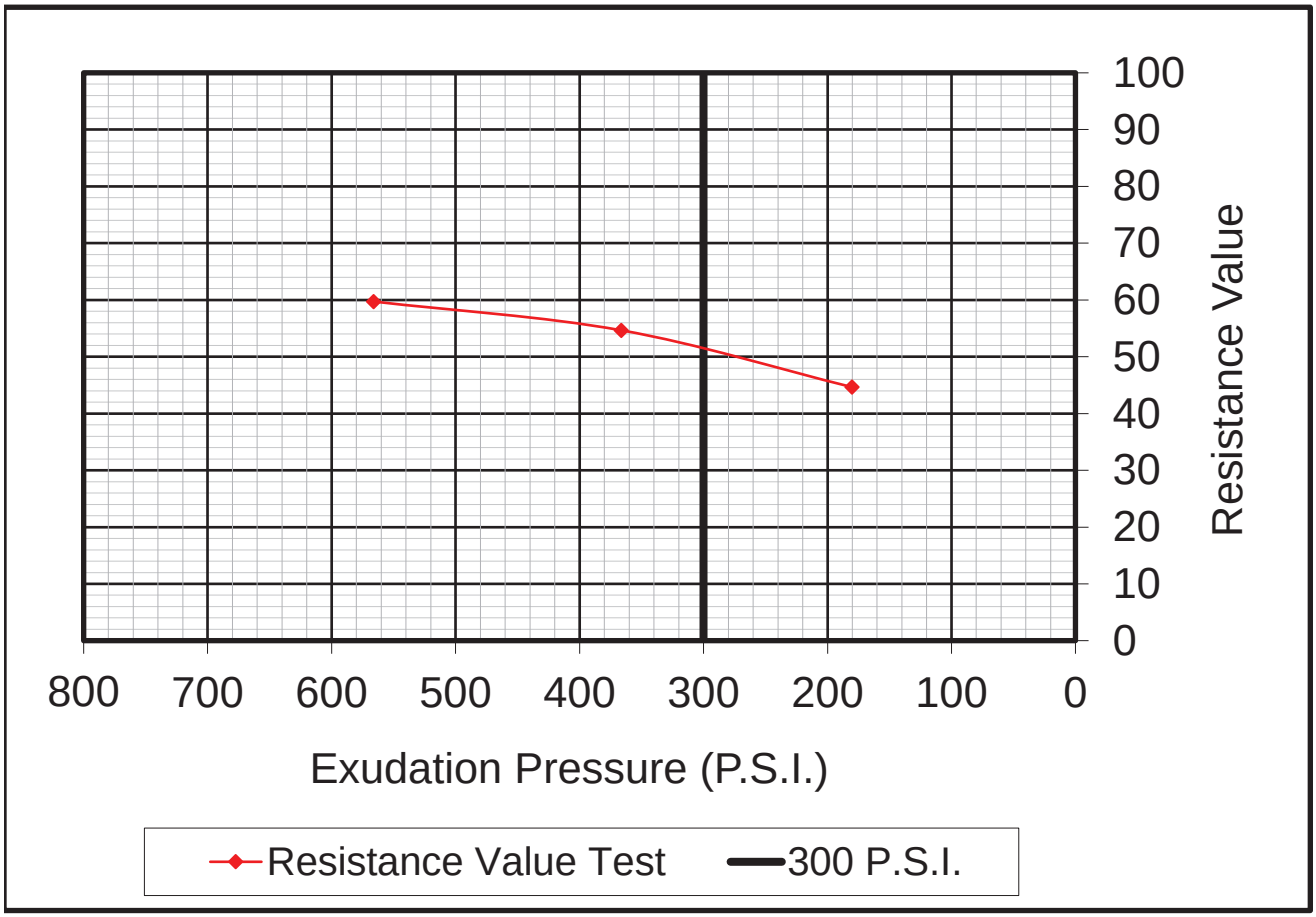
Tested By: CC **Checked By:** SV

Pavement Engineering Inc.
Redding • Sacramento • San Luis Obispo
Concord • Santa Clarita

RESISTANCE (R) VALUE TEST

California Test 301

Laboratory No.: L200988
Project No.: 200122
Sample Date: May 15, 2020
Report Date: May 26, 2020
Client: Sierra Geotech
Project Name: Pfeiffeer State Park
Sample Description: BSP-1
Sample Location: Drill Cuttings (0 - 2.5')



Specimen No.	4	5	6
Moisture Content (%)	11.9	13.9	13.1
Dry Density (PCF)	116.4	115.6	115.8
Resistance Value (R)	60	45	55
Exudation Pressure (PSI)	566	180	366
Expansion Pressure	74	17	26
As Received Moisture Content (%)	11.9		

RESISTANCE VALUE AT 300 P.S.I. 51

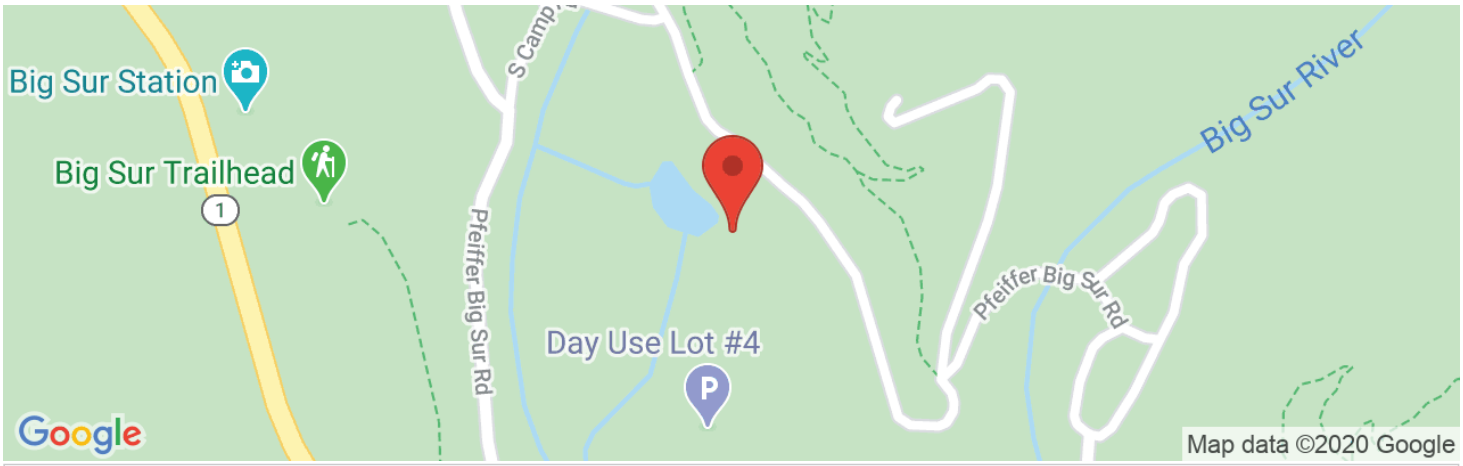
AAP® AASHTO R18

Reviewed By: _____

Brandon Rodebaugh
Materials Engineer

OSHPD

Latitude, Longitude: 36.246093, -121.776485



Date	7/9/2020, 11:02:01 PM
Design Code Reference Document	ASCE7-16
Risk Category	II
Site Class	D - Default (See Section 11.4.3)

Type	Value	Description
S_S	1.221	MCE_R ground motion. (for 0.2 second period)
S_1	0.463	MCE_R ground motion. (for 1.0s period)
S_{MS}	1.465	Site-modified spectral acceleration value
S_{M1}	null -See Section 11.4.8	Site-modified spectral acceleration value
S_{DS}	0.977	Numeric seismic design value at 0.2 second SA
S_{D1}	null -See Section 11.4.8	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	null -See Section 11.4.8	Seismic design category
F_a	1.2	Site amplification factor at 0.2 second
F_v	null -See Section 11.4.8	Site amplification factor at 1.0 second
PGA	0.554	MCE_G peak ground acceleration
F_{PGA}	1.2	Site amplification factor at PGA
PGA_M	0.665	Site modified peak ground acceleration
T_L	8	Long-period transition period in seconds
SsRT	1.221	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	1.359	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	2.299	Factored deterministic acceleration value. (0.2 second)
S1RT	0.463	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.503	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.844	Factored deterministic acceleration value. (1.0 second)
PGAd	0.958	Factored deterministic acceleration value. (Peak Ground Acceleration)
C_{RS}	0.898	Mapped value of the risk coefficient at short periods
C_{R1}	0.921	Mapped value of the risk coefficient at a period of 1 s

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Appendix E

Traffic Memorandum

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Keith Higgins

Traffic Engineer

March 10, 2021

Steve Noll
Design Workshop
4825 J Street, Suite 200
Sacramento, CA 95819

Re: Pfeiffer Big Sur Campground Cabin Project Traffic Evaluation, Monterey County, CA

Dear Steve,

Per your request, this an evaluation of traffic impacts from the proposed Pfeiffer Big Sur Campground Cabin, Monterey County, CA. The Project would be located within the existing boundaries of Pfeiffer Big Sur State Park (Park) in Big Sur, California. The Project consists of 9 prefabricated cabins and renovation of the existing nearby parking lot and driveway. No new Park access or internal roadways are proposed. The Project would not increase the number of parking spaces currently serving Pfeiffer Big Sur State Park. The number of vehicles being allowed to enter the Park would continue to be limited by available parking.

The following are considerations regarding traffic impacts from this project.

1. A 9-unit cabin project such as this would normally not require any type of traffic study. **Exhibit 1** indicates that the project is only expected to generate about 2 morning peak hour and 4 evening peak hour trips which is an imperceptible amount of traffic. These are based on trip generation rates published by Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition, 2017 (Trip Generation Manual).

2. Current policies of the California Environmental Quality Act (CEQA) no longer consider level of service as an environmental effect. Although not a part of CEQA review, Monterey County still considers the effect of proposed projects on level of service policies of the Monterey County General Plan as well as Caltrans level of service policies. Assuming the project trip distribution is roughly 50% to and from the north and 50% to and from the south, the project increase on Highway One would be immeasurable. The Project in and of itself would not result in a qualitative effect on Highway 1 traffic operations.

3. It is my understanding that the proposed cabins are replacing previously removed campsites, per the Pfeiffer Big Sur State Park General Plan, October 1999. According to the Trip Generation Manual, campsites have a trip generation rate virtually the same as recreational vehicle spaces and cabins. Overall, Pfeiffer Big Sur State Park trip generation will therefore not increase because the project is simply offsetting trips previously generated by campsites. In other words, considering

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the cabins as implementation of a component of a Park General Plan, the project's traffic is offset by previously implemented campsite removal.

4. The current metric for project circulation impacts is Vehicle Miles Traveled (VMT). Monterey County has not adopted VMT policies. However, many agencies are deferring to the "Technical Advisory on Evaluating Transportation Impacts in CEQA," State of California Governor's Office of Planning and Research, December 2018 (OPR VMT Advisory). The recommended default threshold in the OPR VMT Advisory is 110 daily trips over which a VMT analysis is recommended. No daily trip rate is available in industry trip generation publications for cabins, campgrounds, or recreational vehicle parks. Assuming the project generates a typical 10% of its daily total in the evening peak hour, the project would only generate about 40 daily trips, which is less than 40% of this threshold. A VMT analysis is therefore not required.

5. The State Park has already implemented a major reconstruction of the Park entrance to provide improved channelization and driveway geometrics considering the effect of the cabin project in conjunction with other components of the Park General Plan. No additional improvements are warranted at the Park entrance.

6. Finally, most Park employees live on-site. They therefore largely eliminate normal commute traffic. Many goods and services are available in or near the park.

Based on the above considerations, there is no need for further transportation impact analysis.

If you have any questions or need additional information, please contact me at your convenience. Thank you for the opportunity to assist you with this project.

Respectfully submitted,

Keith Higgins

Keith B. Higgins, PE, TE
Enclosure

Pfieffer Big Sur Cabins Trip Generation

A. Project Trip Rates

TRIP GENERATION RATES	ITE LAND USE CODE	DAILY TRIP RATE	AM PEAK HOUR PEAK HOUR RATE	AM PEAK HOUR % IN	AM PEAK HOUR % OUT	PM PEAK HOUR PEAK HOUR RATE	PM PEAK HOUR % IN	PM PEAK HOUR % OUT
Campground / Recreational Vehicle Park	416	N.A.	0.25	36%	64%	0.41	62%	38%

B. Project Trip Generation

PROPOSED USE	PROJECT SIZE	DAILY TRIPS	AM PEAK HOUR PEAK HOUR TRIPS	AM PEAK HOUR TRIPS IN	AM PEAK HOUR TRIPS OUT	PM PEAK HOUR PEAK HOUR TRIPS	PM PEAK HOUR TRIPS IN	PM PEAK HOUR TRIPS OUT
Campground / Recreational Vehicle Park	9 units	N.A.	2	1	1	4	2	2

Notes:
1. Trip generation rates published by Institute of Transportation Engineers (ITE), *Trip Generation Manual,* 10th Edition, 2017.

Keith Higgins
Traffic Engineer

Exhibit 1
Project Trip Generation

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