County of Santa Cruz

PLANNING DEPARTMENT
701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131
KATHLEEN MOLLOY, PLANNING DIRECTOR
www.sccoplanning.com

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

NOTICE OF PUBLIC REVIEW AND COMMENT PERIOD

Pursuant to the California Environmental Quality Act, the following project has been reviewed by the County Environmental Coordinator to determine if it has a potential to create significant impacts to the environment and, if so, how such impacts could be solved. A Negative Declaration is prepared in cases where the project is determined not to have any significant environmental impacts. Either a Mitigated Negative Declaration or Environmental Impact Report (EIR) is prepared for projects that may result in a significant impact to the environment.

Public review periods are provided for these Environmental Determinations according to the requirements of the County Environmental Review Guidelines. The environmental document is available for review at the County Planning Department located at 701 Ocean Street, in Santa Cruz. You may also view the environmental document on the web at www.sccoplanning.com under the Planning Department menu. If you have questions or comments about this Notice of Intent, please contact Matt Johnston of the Environmental Review staff at (831) 454-5357.

The County of Santa Cruz does not discriminate on the basis of disability, and no person shall, by reason of a disability, be denied the benefits of its services, programs or activities. If you require special assistance in order to review this information, please contact Bernice Shawver at (831) 454-3137 to make arrangements.

PROJECT: Master Plan for Mission Springs Camp and Conference Center
APP #: 151255

APN: 070-151-21; 070-121-11, -14 & -29; 070-081-67; 070-161-14; 070-162-16, -20, -23, -34 & -35; 070-141-06; 070-172-25

PROJECT DESCRIPTION: The proposed project is a multi-phased Master Plan for the Mission Springs Camp and Conference Center. The proposed Master Plan includes: adding three parcels totaling approximately 60 acres to the property, the associated expansion of the permitted number of overnight guests from 500 to 704 guests; conceptual design for new buildings and upgrades to existing buildings at Mission Springs Camp and Conference Center including demolition of existing buildings, construction of three new lodges with capacity for 148 overnight guests, a new dining hall, recognition/permitting of 10 cabins built without permits including the relocation/reconstruction of two cabins and remodeling/repair of other cabins in Frontier Village, a new pool house and related improvements and remodeling/repurposing of several buildings and associated grading, tree removal and infrastructure improvements.

PROJECT LOCATION: The project is located in the southeast direction off of Lockhart Gulch Road, within the community of Scotts Valley in the unincorporated Santa Cruz County. Santa Cruz County is bounded on the north by San Mateo County, on the south by Monterey and San Benito counties, on the east by Santa Clara County, and on the south and west by the Monterey Bay and the Pacific Ocean. Santa Cruz County is bounded on the north by San Mateo County, on the south by Monterey and San Benito counties, on the east by Santa Clara County, and on the south and west by the Monterey Bay and the Pacific Ocean.

APPLICANT/OWNER: Mission Springs Camps and Conference Center, Inc.
PROJECT PLANNER: Lezanne Jeffs, (831) 454-2480
EMAIL: Lezanne.Jeffs@santacruzcounty.us
ACTION: Negative Declaration with Mitigations
REVIEW PERIOD: October 22, 2019 through November 20, 2019

This project will be considered at a public hearing before the Planning Commission. The time, date and location have not been set. When scheduling does occur, these items will be included in all public hearing notices for the project.

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MITIGATED NEGATIVE DECLARATION

Project: Master Plan for Mission Springs Camp and Conference Center APPLICATION #: 151255

APN: 070-151-21; 070-121-11, -14 & -29; 070-081-67; 070-161-14; 070-162-16, -20, -23, -34 & -35; 070-141-06; 070-172-25

Project Description: The proposed project is a multi-phased Master Plan for the Mission Springs Camp and Conference Center. The proposed Master Plan includes: adding three parcels totaling approximately 60 acres to the property, the associated expansion of the permitted number of overnight guests from 500 to 704 guests; conceptual design for new buildings and upgrades to existing buildings at Mission Springs Camp and Conference Center including demolition of existing buildings, construction of three new lodges with capacity for 148 overnight guests, a new dining hall, recognition/permitting of 10 cabins built without permits including the relocation/reconstruction of two cabins and remodeling/repair of other cabins in Frontier Village, a new pool house and related improvements and remodeling/repurposing of several buildings and associated grading, tree removal and infrastructure improvements.

Project Location: The project is located in the southeast direction off of Lockhart Gulch Road, within the community of Scotts Valley in the unincorporated Santa Cruz County. Santa Cruz County is bounded on the north by San Mateo County, on the south by Monterey and San Benito counties, on the east by Santa Clara County, and on the south and west by the Monterey Bay and the Pacific Ocean.

Owner: Mission Springs Camps and Conference Center, Inc.

Applicant: Mission Springs Camps and Conference Center, Inc.

Staff Planner: Lezanne Jeffs, (831) 454-2480

Email: Lezanne.Jeffs@santacruzcounty.us

This project will be considered at a public hearing before the Planning Commission. The time, date and location have not been set. When scheduling does occur, these items will be included in all public hearing notices for the project

California Environmental Quality Act Negative Declaration Findings:

Find, that this Mitigated Negative Declaration reflects the decision-making body's independent judgment and analysis, and; that the decision-making body has reviewed and considered the information contained in this Mitigated Negative Declaration and the comments received during the public review period, and; on the basis of the whole record before the decision-making body (including this Mitigated Negative Declaration) that there is no substantial evidence that the project will have a significant effect on the environment. The expected environmental impacts of the project are documented in the attached Initial Study on file with the County of Santa Cruz Clerk of the Board located at 701 Ocean Street, 5th Floor, Santa Cruz, California.

Review Period Ends: November 20, 2019

Date: _____

_____
MATT JOHNSTON, Environmental Coordinator
(831) 454-5357

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CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
INITIAL STUDY/ENVIRONMENTAL CHECKLIST

Date: October 9, 2019 **Application Number:** 151255

Project Name: Master plan for Mission Springs Camp and Conference Center **Staff Planner:** Lezanne Jeffs

I. OVERVIEW AND ENVIRONMENTAL DETERMINATION

APPLICANT: Mission Springs Camps and Conference Center, Inc **APN(s):** 070-151-21; 070-121-11, 14 & 29; 070-081-67; 070-161-14; 070-162-16; 070-011-16, 20, 23, 34 & 35; 070-141-06; 070-172-25

OWNER: Mission Springs Camps and Conference Center, Inc **SUPERVISORAL DISTRICT:** District 5

PROJECT LOCATION: The proposed project is located in the Southeast direction off of Lockhart Gulch Road, within the community of Scotts Valley in the unincorporated Santa Cruz County. Santa Cruz County is bounded on the north by San Mateo County, on the south by Monterey and San Benito counties, on the east by Santa Clara County, and on the south and west by the Monterey Bay and the Pacific Ocean. See Figure 1 for project location map.

SUMMARY PROJECT DESCRIPTION:

The proposed project is a multi-phased Master Plan for the Mission Springs Camp and Conference Center. The proposed Master Plan includes: adding three parcels totaling approximately 60 acres to the property, the associated expansion of the permitted number of overnight guests from 500 to 704 guests; conceptual design for new buildings and upgrades to existing buildings at Mission Springs Camp and Conference Center including demolition of existing buildings, construction of three new lodges with capacity for 148 overnight guests, a new dining hall, recognition/permitting of 10 cabins built without permits including the relocation/reconstruction of two cabins and remodeling/repair of other cabins in Frontier Village, a new pool house and related improvements and remodeling/repurposing of several buildings and associated grading, tree removal and infrastructure improvements. See figure 2 for project site plan.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: *All of the following potential environmental impacts are evaluated in this Initial Study. Categories that are marked have been analyzed in greater detail based on project specific information.*

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

DISCRETIONARY APPROVAL(S) BEING CONSIDERED:

- ☐ General Plan Amendment
- ☐ Land Division
- ☐ Rezoning
- ☑ Development Permit
- ☐ Sewer Connection Permit
- ☐ Coastal Development Permit
- ☐ Grading Permit
- ☐ Riparian Exception
- ☐ LAFCO Annexation
- ☑ Other: Master Plan Update

OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED (e.g., permits, financing approval, or participation agreement):

Permit Type/Action	Agency
None required	N/A

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 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.

Matt Johnston, Environmental Coordinator

10/16/19
Date

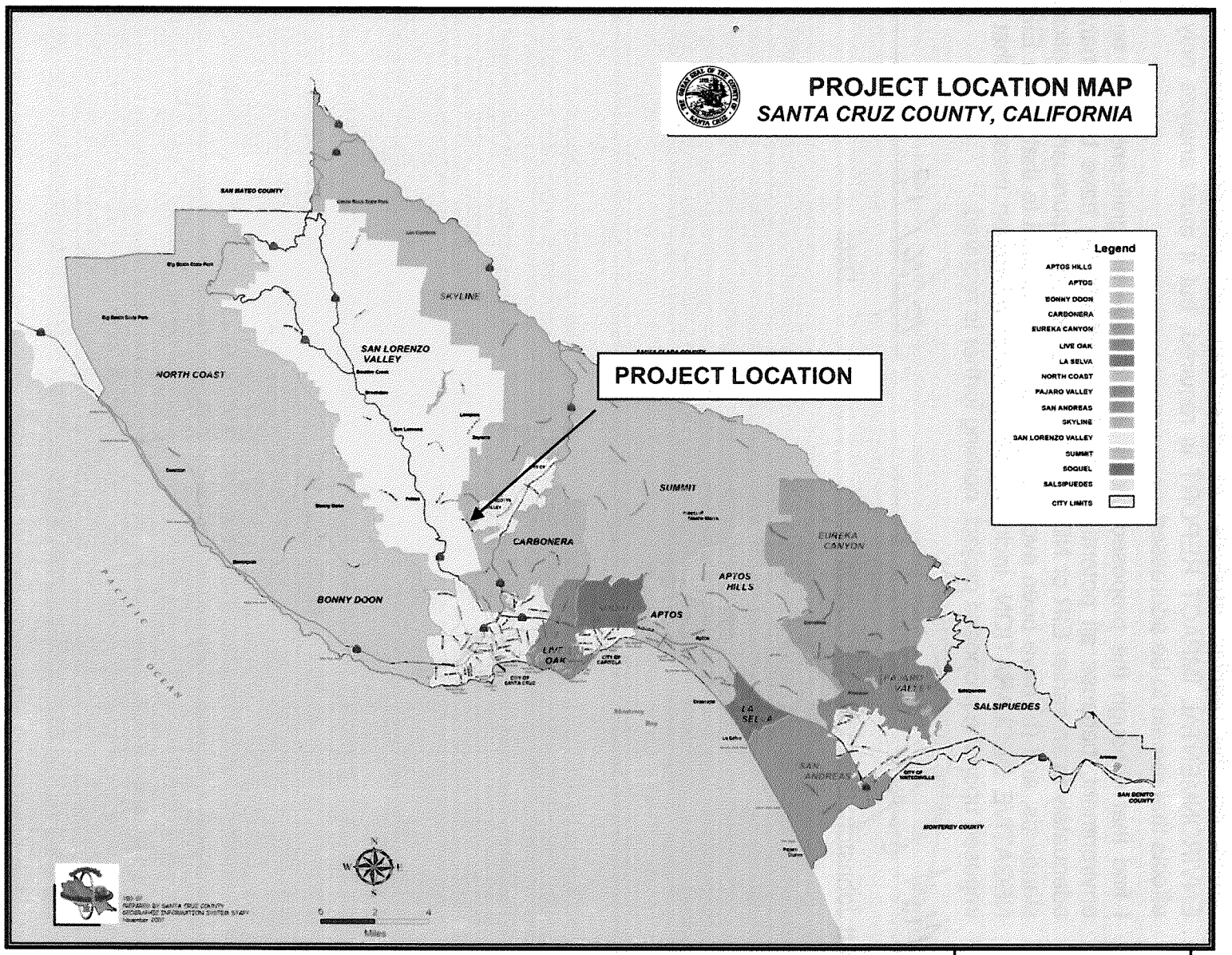
PROJECT LOCATION MAP
SANTA CRUZ COUNTY, CALIFORNIA
PROJECT LOCATION
Legend
APTOS HILLS
APTOS
BONNY DOON
CARBONERA
EUREKA CANYON
LIVE OAK
LA SELVA
NORTH COAST
PAJARO VALLEY
SAN ANDREAS
SKYLINE
SAN LORENZO VALLEY
SUMMIT
SOQUEL
SALSIPUEDES
CITY LIMITS
SAN MATEO COUNTY
SKYLINE
SAN LORENZO VALLEY
NORTH COAST
SUMMIT
CARBONERA
EUREKA CANYON
APTOS HILLS
BONNY DOON
APTOS
LIVE OAK
SALSIPUEDES
LA SELVA
SAN ANDREAS
SAN BENITO COUNTY
MONTEREY COUNTY
PACIFIC OCEAN
Miles

Figure 1

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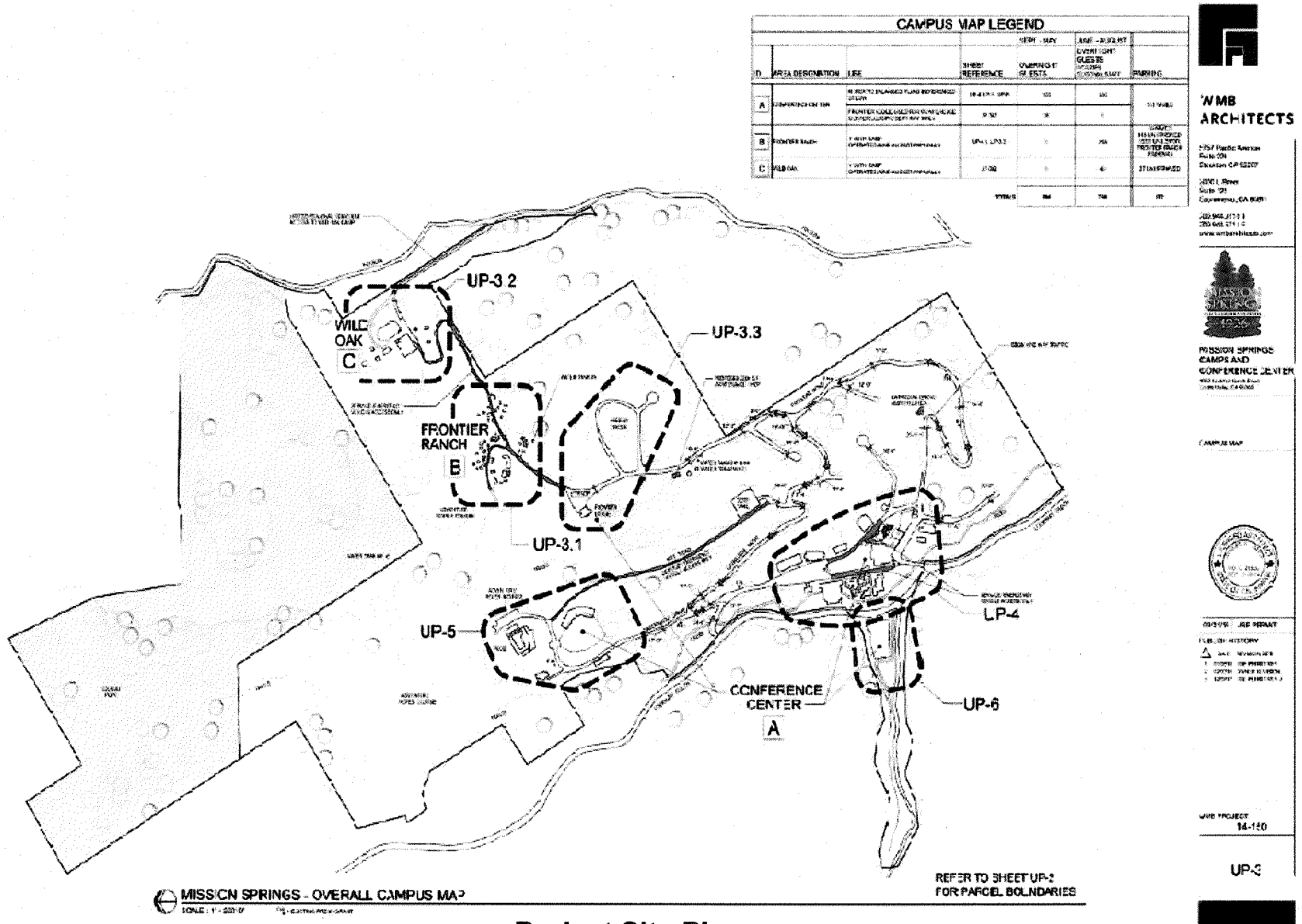

Project Site Plan **Figure 2**

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II. BACKGROUND INFORMATION

EXISTING SITE CONDITIONS:

Parcel Size (acres):	Approximately 300 acres (14 parcels)
Existing Land Use:	Special Use (SU)
Vegetation:	Landscaping, Redwood Forest, Mixed Evergreens, Grasslands, Riparian Woodland

Slope in area affected by project: ☑ 0 - 30% ☐ 31 – 100% ☐ N/A

Nearby Watercourse:	Lockhart Gulch, Bean Creek, Ruins Creek, Stream 351/352
Distance To:	Between 20 – 200 feet (Distances vary depending on site location)

ENVIRONMENTAL RESOURCES AND CONSTRAINTS:

Water Supply Watershed:	Yes	Fault Zone:	No
Groundwater Recharge:	Yes	Scenic Corridor:	No
Timber or Mineral:	Yes	Historic:	No
Agricultural Resource:	No	Archaeology:	No
Biologically Sensitive Habitat:	Yes	Noise Constraint:	No
Fire Hazard:	Yes	Electric Power Lines:	Yes
Floodplain:	No	Solar Access:	Yes
Erosion:	Yes	Solar Orientation:	Various
Landslide:	Yes	Hazardous Materials:	No
Liquefaction:	Yes	Other:	

SERVICES:

Fire Protection:	Scotts Valley Fire	Drainage District:	CSA 12
School District:	Scotts Valley Unified	Project Access:	Directly off the right-hand side of Lockhart Gulch Road
Sewage Disposal:	Septic and Leech fields	Water Supply:	Private Water System

PLANNING POLICIES:

Zone District:	SU	Special Designation:
General Plan:	R-R, O-R	
Urban Services Line:	☐ Inside	☑ Outside
Coastal Zone:	☐ Inside	☑ Outside

ENVIRONMENTAL SETTING AND SURROUNDING LAND USES:

Natural Environment

Santa Cruz County is uniquely situated along the northern end of Monterey Bay approximately 55 miles south of the City of San Francisco along the Central Coast. The Pacific Ocean and Monterey Bay to the west and south, the mountains inland, and the prime agricultural lands along both the northern and southern coast of the county create limitations on the style and amount of building that can take place. Simultaneously, these natural features create an environment that attracts both visitors and new residents every year. The natural landscape provides the basic features that set Santa Cruz apart from the surrounding counties and require specific accommodations to ensure building is done in a safe, responsible and environmentally respectful manner.

The property is in a heavily wooded area and largely surrounded in the immediate area by small parcels with single family dwellings and low density residential parcels along Lockhart Gulch and greater surrounding area. The urbanized area of the City of Scotts is located approximately 1 mile from the site. Mt. Herman Rd is a major arterial providing access between Hwy 17, Scotts Valley and the communities in the San Lorenzo Valley. Mt. Herman Rd is approximately 1/2 mile from the project site.

PROJECT BACKGROUND:

History of Mission Springs

In the mid-1870s Samuel and Matilda Lockhart acquired various plots of land in the Scotts Valley region which today compasses the Mission Springs Camps and Conference Center area. In the early 1920's decedents of the Lockhart's sold approximately 50 acres of land to a Swedish religious group known as the California Mission Sunday School and Young People's League (The League). Their goal was to create a summer camp where conferences could be held and where other meetings could be arranged. The League divided the property into over 200 parcels in order to establish lots less than an acre a piece in order to be leased out as private properties. During the first few years of the Mission Springs establishment, numerous developments occurred, including the construction of a bridge, dormitories, comfort stations, and spaces for worship. In the 1940's Mission Springs continued development, constructing a memorial hall, cafeteria, gift shop, three dormitories, several comfort stations, seven single cabins and two double cabins. In the mid 1950's through the mid 1960's development progressed adding the Fireside Hall, Laurel Lodge, various cabins, Redwood Chapel, and a worship center. In 1967 Mission Springs expanded further with the development of the Frontier Ranch youth camp located Northeast of the original property boundaries.

Use Permit 75-1060-U was approved March of 1976. This permit set the maximum number of overnight guests at 500 and maximum number of guests at any one time at 1,000. In

recent years Building Permits have been obtained and construction completed on buildings and support facilities that did not increase the intensity or capacity of the Conference Center and Camp. These include but are limited to two new bridges in 2008 and 2011; a new Frontier Lodge; remodeled Old Tabernacle meeting hall. A new waste water treatment facility was installed in 2014. More recently, in December 2017, a Building Permit was issued for the construction of a roof cover and amphitheater at an existing sports court. Applications have also been submitted for improvements to the existing campus pool complex to include a new pool house with accessible restrooms, showers, lifeguard office and snack shop, to replace the existing wading pool with "splash zone" water features and for the construction of a new meeting hall.

Mission Springs Area Description

Mission Springs Camps and Conference Center is located in the Santa Cruz Mountains and occupies approximately 300 acres of unincorporated land in central Santa Cruz County and is situated approximately ten miles North of the City of Santa Cruz and just West of Scotts Valley. Portions of the mountainous and heavily wooded property are still largely undeveloped. The land is located primarily between Lockhart Gulch Road to the West and Nelson Road to the East, with a narrow section containing an Recreational Vehicle (RV) Camp extending West beyond Lockhart Gulch Road along the creek. Access to the main conference center is from Lockhart Gulch Road. A bridge crosses over the creek from Lockhart Gulch Road to the main conference center area, which features numerous facilities that surround a central lawn area. These include a Dining Hall, Fireside Hall, Worship Center, the Tabernacle, several cabins, a nursery, administrative offices, Laurel and Wellander Lodges and Creek-side Lounge. See Attachment 2 for WMB Architects Preliminary Architectural plans and Fall Creek Engineering Inc. Civil Plans. Immediately adjacent and intermingled amongst the Conference Center and Camp are small single-family homes and cabins developed along narrow winding roads. These are privately leased and not part of the Camp and Conference Center. The privately leased residential lots are identified on sheet UP-2 of the project plans (Attachment 2). Directly North and uphill of the main conference center grounds is the area known as Mission Woods, which contains a pool, pool house, a small chapel, and four cabins. Northeast of the main conference center grounds are the Frontier Ranch and Wild Oak youth camp areas. These areas are identified on the site plan at the beginning of this report and sheet UP-3 of the project plans (Attachment 2).

Mission Springs Operations

The Frontier Ranch area of Mission Springs hosts a summer program from June 1st through August 15th and accommodates approximately 300 students and staff per week. Students are dropped off during a two-hour window between 3-5pm on Sundays at the associated Frontier Ranch parking lot and are picked up during a two-hour period from 8-10am the

following Saturday. The drivers, mostly parents, do not leave their cars on the site during this time, which keeps the parking lot open for other users during the week. It also limits the times when there is traffic coming to and from Mission Springs.

The Wild Oak area is rented out to the Young Life Christian organization from June 1st to August 15th, accommodating a total of 40 campers and staff. Many of the activities include off-site outdoor adventures such as surfing, mountain biking and hiking. Campers and staff are transported to and from the campus in 10-person vans via Nelson Road. Guests arrive on Sundays at around 3:00pm and leave the Wild Oak area on Fridays at around 10:30am. During their stay, Monday through Thursday, participants typically arrive and depart once per day, departing at around 11:00am and returning at 3:00pm.

In addition, Mission Springs provides outdoor education opportunities to children, including a science camp for 5th-8th graders, taking place between September 1st and May 31st. The science camp hosts approximately 250 students and teachers each week throughout the school year. Most students and teachers arrive in charters buses although some teachers arrive by personal car. The buses drop students and teachers off at the beginning of the week between 10-12pm on Mondays or Tuesdays, depending on the program, and return to pick everybody up at the end of the week on Fridays between 9-12, depending on the school. This leaves the available parking lots open throughout the week.

The conference center's portion of the Mission Springs site also provides accommodations and services for many church organizations and youth groups throughout the year. The facilities are available for both weekend and weekday conferences and participants arrive at different times and days depending on the program. Wherever possible these arrivals and departures are scheduled so they do not coincide with the main drop-off and pick-up times as described in the foregoing sections. To serve the church organizations and youth groups, there are seasonal staff members, who arrive at Mission Springs at the beginning of June and leave around mid-August. These 28 seasonal staff stay at the Frontier Lodge. During the off-season months (September-May) the Frontier Lodge is occupied by a combination of guests and staff members.

DETAILED PROJECT DESCRIPTION:

The scope of the Master Plan includes increasing the permitted number of overnight guests from the current maximum of 500 to 704 guests. See Attachment 3 for a detailed description of guest occupancy capacity increase and how it is allocated to each area of the Master Plan. This will be accomplished by adding APN's 070-011-16, 070-011-20, and 070-011-35, approximately 61.5 acres, into the Mission Springs Conference Center and Camp site area. See Attachment 4 for a list of which parcels will be included in the master plan and which are excluded. The allowed density/number of overnight guests allowed is determined by the Rural Density Matrix, as set out in the County Zoning Code. The Rural Density Matrix

determines the potential number of users allowed for camp and conference facilities situated on rural land parcels, and is based upon the availability of services, environmental and site-specific constraints and resource protection factors. The addition of 61.5 acres to the conference center holdings therefore translates into an increase in the allowed number of overnight guests.

Conceptual designs have been prepared, both for new facilities that are proposed to be constructed and for potential remodels to existing structures at the Mission Springs Camps and Conference Center. Additional detailed design work and in many cases further geotechnical and other technical environmental evaluations will be done at the time that the decision is made to proceed with this work.

The Conference Center Core improvements include relocation of uses, remodels of existing facilities, separation of guest and delivery traffic, creation of a pedestrian oriented core, as well as the construction of new facilities including a new dining hall, replacement of the existing Fireside Lounge and a new lodge for 40 guests.

The Spring Creek area will include construction of a proposed seasonal staff lodge for 24 staff members and allocation of 5 RV parking spots.

The Mission Woods area improvements will include a new guest lodge that will house 88 people, various pool area improvements, changing the use at the Oak-Hemlock from lodging to a meeting area, and a minor addition to the Redwood Chapel.

At the Frontier Ranch area proposed work includes recognizing and permitting 10 tent cabins and a climbing structure with a zip-line platform, that have been built without permits since the original 1975 Master Plan, structural retrofitting of select existing cabins, accessibility improvements to the restrooms. The project also includes demolition and rebuilding of two existing cabins that presently encroach on neighboring property.

The Wild Oak area proposal includes structural retrofitting and remodeling of existing structures and cabins.

The proposed Mission Springs Camps and Conference Center improvement project will be broken down into three phases; Phase 1) Sports court/theater improvements (completed 2018), closure of Tabernacle Drive to through traffic (the road will remain available for emergency vehicles), improvements to cabins in the Frontier Ranch camp area, improvements to the pool area, and construction of a meeting room (Fireside Lounge) and a new dining hall; Phase 2) Construction of a new lodging cabin to host up to 40 guests in the Conference Center area and the construction of seasonal staff cabin for 24 staff members in the Spring Creek Area; Phase 3) Improvements to the chapel, construction of the Mission Woods lodge to host up to 88 guests and remodeling of the Oak-Hemlock cabins from dormitories to meeting rooms. See Attachment 5 for a break-down of the proposed phasing included in the Mission Springs Master Plan. Each of the three phases of the proposed project are anticipated to take between 6 to 10 years to complete.

There will also be a limited amount of grading and tree removal taking place during the life of this proposed project. Total grading volumes associated with all proposed construction are estimated to be 2,784 cubic yards of cut and 1,364 cubic yards of fill, a net cut of 1,420 cubic yards. In addition, approximately 47 trees will be removed over the course of the entire project.

Prior to the construction of any of the new facilities or other improvements approved by the Master Plan, additional County approvals will be required, each necessitating the preparation of site and building/project specific improvement plans. All new facilities and remodels of existing facilities will require, at a minimum, the issuance of a building permit and, for larger projects, further discretionary review will also be required. In support of each building or discretionary permit application for an individual structure or improvement, additional geologic/geotechnical, biotic and arborist work and landscape/revegetation plans may also be required to be submitted to address construction and site-specific design requirements.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

III. ENVIRONMENTAL REVIEW CHECKLIST

A. AESTHETICS AND VISUAL RESOURCES

Except as provided in Public Resources Code section 21099, would the project:

1. *Have a substantial adverse effect on a scenic vista?* ☐ ☐ ☐ ☑

Discussion: The proposed project would not directly impact any public scenic resources, as designated in the County's General Plan (1994) or obstruct any public views of these visual resources. Although Mount Hermon Road is a designated scenic road, the project area is over 3,000 feet away and not visible from that road. County visual resource protection regulations only apply to public view sheds.

New construction and building improvements will take place on currently developed land within an area that is, for the most part, surrounded by dense woodland and will not alter the character of the site. Proposed buildings and improvements will be designed in to be consistent with the existing architectural style of the Mission Springs facilities and will be properly integrated with the surrounding camp and conference center in terms of color, design, and use. No impact is anticipated.

2. *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?* ☐ ☐ ☑ ☐

Discussion: The project site is not located along a County designated scenic road, public view shed area, scenic corridor, within a designated scenic resource area, or within a state scenic highway. Over the three proposed phases of the project, that are projected to span a period of 18-30 years, the scope of the project would include low to moderate levels of grading as well as tree and vegetation removal. To ensure only required vegetation removal and grading takes place, construction will only take place after an assessment of trees has been done by a qualified arborist and the proposed grading plan has been reviewed and accepted by the County. Landscape/restoration plans will also be required to be prepared for those projects where grading and tree removal is proposed. However, because the Mission Springs camp site is not a designated view shed or directly adjacent to any scenic road, and because of the heavily wooded nature of the site and surrounding area, the impacts of these projects would be less-than-significant.

3. *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* ☐ ☐ ☐ ☑

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Discussion: The existing visual appearance of the project site is of a rustic forest camp and conference facility, with buildings, recreation fields and other features, set within an area characterized by Redwood forest with other large trees, understory vegetation and creeks. The proposed project has been designed and landscaped to fit into this setting. Furthermore, because of the woodland setting and size of the property, most of land that constitutes the Mission Springs Camp and Conference Center is not visible from any public street. The proposed project will enhance the existing visual character and quality of the site by remodeling and modernizing various buildings with structural and facade improvements, new paint, landscaping and other improvements. No impact is anticipated.

4.	*Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*	☐	☑	☐	☐

Discussion: The project would create an incremental increase in night lighting due to new lighting placed on the outside of newly constructed buildings as well as in conjunction with improvements made to existing buildings. However, this increase would be small and similar in character to the lighting associated with the surrounding existing uses. In order to prevent impacts associated with new light sources on surrounding properties and riparian habitat, individual light sources would be required to be directed downwards and shielded by landscaping, structure, fixture design or other physical means. Further, the new sources of light would be consistent with the current lighting and would, in all cases, be directed onto the site and away from neighboring properties and, where applicable, riparian habitat. Therefore, with the incorporation of mitigations, the potential impact from light or glare is not considered to be substantial and the impact will be, therefore a less than significant.

Mitigation Measures

AVR-1: Lighting shall be directed downwards and shielded to prevent dispersal of light. No light shall spill onto neighboring properties resulting from backlight, up-light or glare.

AVR-2: All lights shall comply with International Dark Sky Association standards for Zones 0 and 1.

B. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

1. *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*	☐	☐	☐	☑

Discussion: The project site does not contain any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency as well as the Santa Cruz County GIS. In addition, the project does not contain Farmland of Local Importance. Therefore, no Prime Farmland, Unique Farmland, Farmland of Statewide or Farmland of Local Importance would be converted to a non-agricultural use. No impact would occur from project implementation.

2. *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*	☐	☐	☐	☑

Discussion: The project site is zoned Special Use (SU), which is not considered to be an agricultural zone. Additionally, the project site's land is not under a Williamson Act Contract. Therefore, the project does not conflict with existing zoning for agricultural use, or a Williamson Act Contract. No impact is anticipated.

3. *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*	☐	☐	☐	☑

Discussion: Although the project is adjacent to land designated as Timber Resource, the proposed project does not contain any land that is mapped as having Timber Resources and would not conflict with any existing zoning for forest land. The project would not affect adjacent Timber Resource areas and would not restrict access to those areas. Therefore, proposed project would not conflict with any existing zoning, cause any type of rezoning, or

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

hinder the harvesting of neighboring timber production resources. No impact is anticipated.

4. *Result in the loss of forest land or conversion of forest land to non-forest use?*	☐	☐	☐	☑

Discussion: Although forest land does occur on the Mission Springs property and in the immediate vicinity, the sites of the proposed improvement projects, which are within the existing camp ground, contain only fragmented forestland that is broken up by existing buildings, roads and other development. Therefore, the proposed project will not result in the loss of forest lands or the conversion of forest lands and no impact is anticipated.

5. *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*	☐	☐	☐	☑

Discussion: The project site and surrounding areas does not contain any lands designated as Prime Farmland, Unique Farmland, Farmland of Statewide Importance or Farmland of Local Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Therefore, no Prime Farmland, Unique Farmland, Farmland of Statewide, or Farmland of Local Importance would be converted to a non-agricultural use. Therefore, no impacts are anticipated.

C. AIR QUALITY

The significance criteria established by the Monterey Bay Air Resources District (MBARD)[1] has been relied upon to make the following determinations. Would the project:

1. *Conflict with or obstruct implementation of the applicable air quality plan?*	☐	☐	☑	☐

Discussion: The project would not conflict with or obstruct any long-range air quality plans of the MBARD.

Because general construction activity related emissions (i.e., temporary sources) are accounted for in the emission inventories included in the air quality plans, impacts to air quality plan objectives are less than significant.

General estimated basin-wide construction-related emissions are included in the MBARD emission inventory (which, in part, form the basis for the air quality plans cited below) and are not expected to prevent long-term attainment or maintenance of the ozone and particulate matter standards within the North Central Coast Air Basin (NCCAB). Therefore,

[1] Formerly known as the Monterey Bay Unified Air Pollution Control District (MBUAPCD).

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

temporary construction impacts related to air quality plans for these pollutants from the project would be less than significant, and no mitigation would be required, since they are presently estimated and accounted for in the District's emission inventory, as described below. No stationary sources would be constructed that would be long-term permanent sources of emissions.

Santa Cruz County is located within the NCCAB. The NCCAB does not meet state standards for ozone (reactive organic gases [ROGs] and nitrogen oxides [NOx]) and fine particulate matter (PM_{10}). Therefore, the regional pollutants of concern that would be emitted by the project are ozone precursors and PM_{10}.

The primary sources of ROG within the air basin are on- and off-road motor vehicles, petroleum production and marketing, solvent evaporation, and prescribed burning. The primary sources of NOx are on- and off-road motor vehicles, stationary source fuel combustion, and industrial processes. In 2010, daily emissions of ROGs were estimated at 63 tons per day. Of this, area-wide sources represented 49%, mobile sources represented 36%, and stationary sources represented 15%. Daily emissions of NOx were estimated at 54 tons per day with 69% from mobile sources, 22% from stationary sources, and 9% from area-wide sources. In addition, the region is "NOx sensitive," meaning that ozone formation due to local emissions is more limited by the availability of NOx as opposed to the availability of ROGs (MBUAPCD, 2013b).

PM_{10} is the other major pollutant of concern for the NCCAB. In the NCCAB, highest particulate levels and most frequent violations occur in the coastal corridor. In this area, fugitive dust from various geological and man-made sources combines to exceed the standard. The majority of NCCAB exceedances occur at coastal sites, where sea salt is often the main factor causing exceedance. In 2005 daily emissions of PM_{10} were estimated at 102 tons per day. Of this, entrained road dust represented 35% of all PM_{10} emission, windblown dust 20%, agricultural tilling operations 15%, waste burning 17%, construction 4%, and mobile sources, industrial processes, and other sources made up 9% (MBUAPCD, 2008).

Mobile source emissions constitute most operational emissions from this type of land use development project and therefore the proposed increase in the number of guests would result in new long-term operational emissions from vehicle trips (mobile emissions). However, many of the visitors to the facility travel by bus or car pool and therefore the projected increase in traffic volumes from project implementation would be minimal. Based on the traffic estimated in the Traffic Memorandum prepared by Kimley-Horn dated July 31, 2018 the increase in guests is anticipated to generate up to 39 net additional trips at the project site during the Friday evening peak hour and 58 net additional trips during the Sunday afternoon peak hour. See Attachment 6 for a detailed traffic analysis. This small increase in traffic is not expected to significantly impact air quality.

Other long-term operational emissions would result from the use of natural gas (energy source emissions), and consumer products, architectural coatings, and landscape maintenance equipment (area source emissions). However, emissions associated with buildout of this type of project is not expected to exceed any applicable MBARD thresholds. No stationary sources would be constructed that would be long-term permanent sources of emissions. Therefore, impacts to regional air quality as a result of long-term operation of the project would be less than significant.

Given the modest amount of new traffic that would be generated by the project there is no indication that new emissions of ROGs or NOx would exceed MBARD thresholds for these pollutants; and therefore, there would not be a significant contribution to an existing air quality violation.

In addition to long-term emissions, project construction may result in a short term, localized decrease in air quality due to generation of PM_{10}. Emissions from construction activities represent temporary impacts that are typically short in duration, depending on the size, phasing, and type of project. Air quality impacts can nevertheless be acute during construction periods, resulting in significant localized impacts to air quality. Table 1 summarizes the threshold of significance for construction activities.

Table 1: Construction Activity with Potentially Significant Impacts from Pollutant PM_{10}

Activity	Potential Threshold*
Construction site with minimal earthmoving	8.1 acres per day
Construction site with earthmoving (grading, excavation)	2.2 acres per day

*Based on Midwest Research Institute, Improvement of Specific Emission Factors (1995). Assumes 21.75 working weekdays per month and daily watering of site.

Note: Construction projects below the screening level thresholds shown above are assumed to be below the 82 lb/day threshold of significance, while projects with activity levels higher than those above may have a significant impact on air quality. Additional mitigation and analysis of the project impact may be necessary for those construction activities.

Source: Monterey Bay Unified Air Pollution Control District, 2008.

For the proposed implementation of the Mission Springs Master Plan, Fall Creek Engineering prepared a preliminary grading volume analysis for the proposed building improvements at Mission Springs Camp. See Attachment 7 for a detailed description of proposed preliminary grading volumes. It was estimated that the grading volume cut will be 2,784 cubic yards, grading volume fill will be 1,364 cubic yards, and the total net grading volume will be 1,420 cubic yards. This is a cumulative estimate of the individual construction projects which are anticipated to be spread out over a 4-6yr period. This cumulative amount of grading is considered a moderate amount of grading and will result in some pollutants being released into the air during construction. However, because the proposed project will be constructed over the space of 4 to 6 years, it is anticipated that at no point will any construction individually or cumulatively exceed 2.2 acres of grading per day.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Potential Impacts

As required by the MBARD, construction activities (e.g., excavation, grading, on-site vehicles) which directly generate 82 pounds per day or more of PM_{10} would have a significant impact on local air quality when they are located nearby and upwind of sensitive receptors. Construction projects below the screening level thresholds shown in Table 1 are assumed to be below the 82 lb/day threshold of significance, while projects with activity levels higher than those thresholds may have a significant impact on air quality. As set out above, the grading associated with the individual construction projects anticipated in the Master Plan would produce PM_{10}, at levels that would be far below the 82 pounds per day threshold. This would result in less than significant impacts on air quality from the generation of PM_{10}.

Construction projects using typical construction equipment such as dump trucks, scrapers, bulldozers, compactors, and front-end loaders that temporarily emit precursors of ozone (i.e., volatile organic compounds [VOC] or oxides of nitrogen [NOx]), are accommodated in the emission inventories of state- and federally-required air plans and would not have a significant impact on the attainment and maintenance of ozone ambient air quality standard (AAQS) (MBUAPCD 2008).

Although not a mitigation measure per se (i.e., required by law), California ultralow sulfur diesel fuel with a maximum sulfur content of 15 ppm by weight will be used in all diesel-powered equipment, which minimizes sulfur dioxide and particulate matter.

The following BMPs would be implemented during all site excavation and grading.

Recommended Measures

- No mitigation is required. However, MBARD recommends the use of the following BMPs for the control of short-term construction generated emissions: Water all active construction areas at least twice daily as necessary and indicated by soil and air conditions.
- Prohibit all grading during periods of high wind (over 15 mph).
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days)
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed areas.
- Haul trucks shall maintain at least 2' 0" freeboard.
- Cover all trucks hauling soil, sand, and other loose materials.
- Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.
- Plant vegetative ground cover in disturbed areas as quickly as possible.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all existing trucks.
- Pave all roads on construction sites.
- Sweep streets, if visible soil material is carried out from the construction site.
- Post a publicly visible sigh which specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and corrective action within 48 hours. The phone number of the Monterey Bay Air Resources District shall be visible to ensure compliance with Rule 402 (Nuisance),
- Limit the area under construction at any one time.

Implementation of the above recommended BMPs for the control of construction-related emissions would further reduce construction-related particulate emissions. These measures are not required by MBARD or as mitigation measures, as the impact would be less than significant without mitigation. These types of measures are commonly included as conditions of approval associated with development permits approved by the County.

Short-term and long-term impacts from project implementation would therefore be less than significant.

2. *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?*	☐	☐	☑	☐

Discussion: The primary pollutants of concern for the NCCAB are ozone and PM_{10}, as those are the pollutants for which the district is in nonattainment. Project construction would have a limited and temporary potential to contribute to existing violations of California air quality standards for ozone and PM_{10} primarily through diesel engine exhaust and fugitive dust. The criteria for assessing cumulative impacts on localized air quality are the same as those for assessing individual project impacts. Projects that do not exceed MBARD's construction or operational thresholds and are consistent with the AQMP would not have cumulatively considerable impacts on regional air quality (MBARD, 2008). Because the project would not exceed MBARD's thresholds and is consistent with the AQMP, there would not be cumulative impacts on regional air quality.

The demolition of the existing residential buildings would be subject to all applicable rules and a notification to the MBARD. Prior to the commencement of work, a survey for asbestos would be required and written notification for asbestos removal and/or demolition would be provided 10 working days prior to commencing any regulated activities. Therefore, impacts from project implementation would be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
3. *Expose sensitive receptors to substantial pollutant concentrations?*	☐	☐	☑	☐

Discussion: The proposed project is located in the community of Scotts Valley and the nearest areas considered to be sensitive receptors (schools and worship centers) would be approximately .75 miles from the project area. However, the Mission Springs campsite itself can be considered a sensitive receptor due to its frequent use by students, teachers and staff.

Diesel exhaust, such as from construction activities, contains substances (diesel particulate matter [DPM], toxic air contaminants [TACs], mobile source air toxics [MSATs]) that are suspected carcinogens, along with pulmonary irritants and hazardous compounds, which may affect sensitive receptors such as young children, senior citizens, or those susceptible to respiratory disease. Where construction activity occurs in proximity to long-term sensitive receptors, a potential could exist for unhealthful exposure of those receptors to diesel exhaust, including residential receptors.

Since construction is anticipated to occur over a period of 4 to 6 years, with extended periods between construction events, these sensitive receptors would only be affected for a short number of weeks in a row, due to the phasing and spread out construction times associated with this proposed project. Anticipated construction times is expected to be less than the threshold percentage of the 70-year maximum exposed individual (MEI) criteria used for assessing public health risk due to emissions of certain air pollutants (MBUAPCD 2008).

Due to the intermittent and short-term temporary nature of construction activities (i.e., 2-4 weeks), emissions of DPM, TACs, or MSATs would not be sufficient to pose a significant risk to sensitive receptors from construction equipment operations during the course of the project.

The proposed project is for a Master Plan to guide future changes to the Mission Springs Camp and Conference Center and to allow for an increase from 500 to 704 to the number of allowed guests. Mission Springs is located in a rural setting that is within the Carbonera planning area. As discussed in Section Q – Transportation, no intersections or road segments would operate below LOS D with the project's traffic according to the traffic analysis by Kimley Horn. Operation of the proposed project would not be expected to generate substantial vehicular traffic or substantial heavy-duty truck traffic along nearby roads or near major stationary sources of CO according to the traffic analysis.

According to the traffic analysis by Kimley Horn, the addition of vehicle trips to the intersection(s) of Scotts Valley Drive / Whispering Pines Drive and Mount Hermon Road and Scotts Valley Drive and Madrona Drive / Highway 17 ramps, would not increase the volume to capacity ratio of either intersection by five percent or more during either the AM or PM peak hours. The number of trips from traffic travelling east and thereby affecting

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

these intersections (97% of the total trips), is estimated to be just 37 Friday PM peak hour trips and 56 Sunday PM peak hour trips, and such an increase is not anticipated to substantially degrade the existing conditions or cause an increase in delay of 10 seconds or more at either intersection. The reserve capacity is not expected decrease by 50 or more with the project traffic. Therefore, no significant impact would occur from CO "hot spots."

The project would not be expected to expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant.

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

Discussion: Land uses typically producing objectionable odors include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses that would be associated with objectionable odors. Odor emissions from the proposed project would be limited to odors associated with vehicle and engine exhaust and idling from cars entering, parking, and exiting the facility. The project does not include any known sources of objectionable odors associated with the long-term operations phase.

During construction activities, only short-term, temporary odors from vehicle exhaust and construction equipment engines would occur. California ultralow sulfur diesel fuel with a maximum sulfur content of 15 ppm by weight would be used in all diesel-powered equipment, which minimizes emissions of sulfurous gases (sulfur dioxide, hydrogen sulfide, carbon disulfide, and carbonyl sulfide). As the project site is in a coastal area that contains coastal breezes off of the Monterey Bay, construction-related odors would disperse and dissipate and would not cause substantial odors at the closest off-site sensitive receptors (located approximately 0.75 miles east of the project site. Construction-related odors would be short-term and would cease upon completion. Therefore, no objectionable odors are anticipated from construction activities associated with the project.

The project would not create objectionable odors affecting a substantial number of people; therefore, the project is not expected to result in significant impacts related to objectionable odors during construction or operation.

D. BIOLOGICAL RESOURCES

Would the project:

1. *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*	☐	☑	☐	☐

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

and Wildlife, or U.S. Fish and Wildlife Service?

Discussion: A Biotic Report was prepared for this project by Kathleen Lyons of the Biotic Resources Group, dated July 22, 2019 (Attachment 8). The report was prepared with the intent of documenting the baseline condition within the proposed Master Plan improvements areas, identifying the location of sensitive habitats, analyzing at a programmatic level potential impacts to biological resources that may result from future development, and recommending avoidance and minimization measures to reduce those impacts. The Biotic Report has been reviewed by the County's Resource Planner/Biologist and was accepted on September 12, 2019. See Attachment 8. for a copy of the acceptance letter.

All new development is proposed inside five designated planning areas on the property that are located where existing recreation activities are being conducted. These five areas are identified by the following names: Conference Center Core Area, Spring Creek, Frontier Ranch, Wild Oak, and Mission Woods. The biological study area includes the five planning areas together with two undeveloped parcels identified as APN 070-011-35 and APN 070-011-16 that will be added into the Mission Springs property holding. Figures 2 through 10 of the biotic report show the entire master plan map area, and the location and general habitat conditions of each individual planning area and the two added parcels.

Much of the study area supports mixed evergreen forest and coast redwood forest fragmented by existing development. The study area also supports riparian woodland along Lockhart Gulch Creek, Spring Creek, and Ruins Creek. Oak woodland occurs along the northern edge of the Frontier Ranch planning area and on APNs 070-011-16 and 35. Other habitat types documented include grassland, annual grassland, chamise chaparral, orchard, and bare or landscaped areas. Some native grasses were identified within the grasslands on APNs 070-011-16 and 35. Further investigation into the density of these native grasses would be necessary to determine if this grassland could be classified as native needlegrass grassland.

Although redwood forest is ranked sensitive by CDFW, this ranking typically pertains to large, un-fragmented forests. The redwood forest within the project site area is fragmented by existing development. There are three habitats within the subject property area that are considered sensitive under Santa Cruz County Code: Riparian woodlands, oak woodlands, and native needlegrass grasslands. Potential impacts to these habitats and mitigation measures are discussed in section D-2, below.

Lockhart Gulch and Ruins Creek within the project site provide potential habitat for Federal threatened Central California Coast steelhead (*Oncorhynchus mykiss*), and Federal/State endangered Central California Coast coho salmon (*O. kisutch*), and provide essential fish habitat for coho salmon. Lockhart Gulch and Ruins Creek are tributary to

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Bean Creek which is Designated Critical Habitat for Federal listed salmonids. The project site also provides potential habitat for Federal Threatened California red-legged frog (*Rana draytonii*), and the following state species of special concern: California Giant Salamander (*Dicamptodon ensatus*), Western pond turtle (*Emys marmorata*), San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), Santa Cruz black salamander (*Aneides niger*), and Foothill yellow-legged frog (*Rana boylii;* FYLF); as well as nesting birds. Birds of prey and migratory birds are protected under the California Fish and Game Code, and the Federal Migratory Bird Treaty Act

Migratory Bird Treaty Act

Migratory birds are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10 including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). All migratory bird species are protected by the MBTA. Any disturbance that causes direct injury, death, nest abandonment, or forced fledging of migratory birds, is restricted under the MBTA. Any removal of active nests during the breeding season or any disturbance that results in the abandonment of nestlings is considered a 'take' of the species under federal law.

No special status plant or animal species are expected to occur within the proposed improvement areas due to a lack of specialized microhabitats required for regionally rare species. However, the proposed project is considered to have the potential to affect nesting birds, dusky-footed woodrats, and native trees. All potential impacts are considered to be less than significant with mitigation incorporated.

Impacts

The Dusky-Footed Woodrat is a California species of special concern. No woodrat dens/nests were detected at the proposed improvement sites and the current developed uses suggest the area is unsuitable for them. However, Dusky Footed Woodrat have been known to colonize debris piles, structures or other suitable habitat and, prior to the project construction, such areas can be found at the project sites. If present within the project site, ground disturbance associated with the project could adversely impact wood-rat houses by crushing or complete removal.

Development activities associated with the Mission Springs Conference Center are not currently proposed within the Riparian Corridors of Ruins Creek, Lockhart Gulch Creek, or Spring Creek. Preliminary plans indicate a minimum of 29 native trees (coast live oak, coast redwood, and Douglas fir) will be removed within the Conference Center Core and Mission Woods study areas. There may be additional tree removal when detailed plans are developed for this area and other improvement sites. Tree removal is not currently

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

proposed in oak woodland habitat or other sensitive habitats. No actions are currently proposed on the two parcels where potential native needlegrass grassland may occur.

The project area provides potential nesting habitat for birds of prey and birds listed by the Migratory Bird Treaty Act (MBTA). No nests or evidence of past nests were observed in the project area during the general biological survey conducted on April 22nd, 2016. However, nests could become established in the vegetation to be removed before construction begins.

Due to the sensitive habitat constraints on the project site associated with protected wildlife species, riparian and streambed habitat and oak woodland habitat, as well as the existence of potential habitat for nesting birds that must be considered prior to and during project implementation, the following requirements will be incorporated as conditions of approval of all future development permits:

- The location of all sensitive habitats including the Riparian Corridors of Ruins Creek, Lockhart Gulch Creek, and Spring Creek shall be included in the final plans submitted for development.
- To minimize impacts to riparian woodland and other sensitive habitats the project shall:
    - Prior to construction, a qualified Biologist will identify the limits of construction to avoid impacts to sensitive habitats. High visibility construction fencing or flagging shall be installed around the limits of work to prevent inadvertent grading or other disturbance within sensitive habitats. No work-related activity including equipment staging, vehicular access, grading, and/or vegetation removal shall be allowed outside of the limits of work.
    - Prior to construction, an arborist shall evaluate tree removal and identify measures to protect trees that are adjacent to construction. Removal of native trees shall be avoided to the maximum extent practicable. Trees to be retained that are adjacent to construction shall be protected at, or outside of, the dripline during construction with high visibility fencing and/or other methods recommended by the arborist.
    - Erosion control measures must be in place, and best management practices adhered to, at all times during construction.
    - All native trees removed that are 4" DBH or greater shall be replaced in-kind at a 3:1 ratio on site. disturbed areas at the project site shall be restored through onsite re-vegetation with native shrubs and trees. Local plant stock shall be used whenever possible. The plant pallet shall include native species

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

common to the surrounding woodlands. Restoration activities shall be field-checked and approved by Environmental Planning staff prior to final inspection of the project site.

- If future work is proposed within the Riparian Corridors of Ruins Creek, Lockhart Gulch Creek, or Spring Creek, the following conditions shall be adhered to:

    - Prior to initiation of project construction, the project proponent must obtain all necessary approvals and permits from the appropriate regulatory agencies including County of Santa Cruz Planning, the United States Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), National Marine Fisheries Service (NMFS), California Department of Fish and Wildlife (CDFW), and the United States Fish and Wildlife Service (USFWS). The project proponent is responsible for complying with all measures and conditions included in those permit approvals.

    - To protect special-status amphibian species, including California red-legged frog (*Rana draytonii*), California Giant Salamander (*Dicamptodon ensatus*), Santa Cruz black salamander (*Aneides niger*), and Foothill yellow-legged frog (*Rana boylii;* FYLF); measures shall be developed through consultation with USFWS and/or CDFW and included as Conditions of Approval in the County Riparian Exception.

    - Every individual working on the Project must attend a biological awareness training session delivered by a qualified biologist. This training program shall include information regarding sensitive habitats and special-status species with potential to occur, and the importance of avoiding impacts to these species and their habitat. The training shall include species identification characteristics, best management practices to be implemented, project-specific avoidance measures that must be followed, and the steps necessary if any special status species is encountered at any time.

- If future development is proposed on APN 070-011-16 or APN 070-011-35, additional botanical surveys shall occur to determine if these parcels contain native needlegrass grassland. A memo documenting these botanical surveys must be submitted to County Environmental Planning for review and approval. If native needlegrass grassland is present, the Project Applicant shall work with County Environmental Planning Staff and the Project Biologist to identify the limits of construction to avoid impacts to this habitat. If native needlegrass grassland cannot be avoided, the project proponent must submit a proposal for compensatory mitigation to County Environmental Planning. Approval must be granted prior to

project approval.

To further minimize potential impacts form project construction activities, implementation of the following mitigations would reduce impacts to below a level of significance.

Mitigation Measures

BIO-1. Dusky-footed Woodrat. Within 30 days prior to project construction, a qualified biologist shall inspect the action area and adjacent areas within 50 feet for wood-rat houses. An exclusion zone shall be erected around any wood-rat houses occurring within 50 feet of the project site area, using flagging or a temporary fence that does not inhibit the natural movements of wildlife. Efforts will be made to avoid impacting wood-rat houses, even, if avoidance is by only a few feet. If wood-rat houses cannot be avoided, CDFW shall be contacted for approval to relocate individuals by live trapping and building a nearby artificial structure as a release site. Approval to relocate must be acquired from CDFW. If woodrats are found in a structure to be removed, an alternative approach to live-trapping may be recommended due to safety concerns regarding rodents occupying enclosed spaces.

BIO-2. Nesting Birds. Nesting migratory birds, including raptors, are protected under the Migratory Bird Treaty Act. Under the MBTA, nests that contain eggs or unfledged young are not to be disturbed during the breeding season. The nesting season for migratory birds and birds of prey is generally 1 February through 31 August. Implementation of the following measures will avoid potential impacts.

- If construction begins outside the 1 February to 31 August breeding season, there will be no need to conduct a preconstruction survey for active nests.
- If construction is scheduled to begin between February 1 and August 31, then a qualified biologist shall conduct a preconstruction survey for active nests. The survey will include a 250-foot radius from the work area for nesting birds of prey and a 50-foot radius from the work area for other nesting MBTA protected birds. The survey will be conducted from publicly accessible areas within one two weeks prior to construction. If no active nest of a bird of prey or MBTA bird is found, then no further mitigation measures are necessary.
- If an active nest of a bird of prey or MBTA bird is found, then the biologist shall determine a buffer suitable to protect the nest until fledging. The size of suitable buffers would depend on the species of bird, the location of the nest relative to the Project, Project activities during the time the nest is active, and other Project specific

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

conditions.

- No construction activity shall be allowed in the buffer until the biologist determines that the nest is no longer active, or unless monitoring determines that a smaller buffer will protect the active nest. The buffer may be reduced if the biologist monitors the construction activities and determines that no disturbance to the active nest is occurring.
- If an active nest is identified in or adjacent to the construction zone after construction has started, the above measures will be implemented to ensure construction is not causing disturbance to the nest.

2. *Have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations (e.g., wetland, native grassland, special forests, intertidal zone, etc.) or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*	☐	☑	☐	☐

Discussion: The perennial and intermittent creeks in the study area may be regulated under the Clean Water Act Section 404 by the U. S. Army Corps of Engineers (USACE), and Section 401 by the Regional Water Quality Control Board (RWQCB). The associated banks of the drainages may be subject to regulation under the Porter-Cologne Water Quality Act as "Waters of the State", and under California Fish and Game Code Section 1602. Riparian corridors (as defined by Santa Cruz County Code Section 16.30.030) are granted special protections under the County's Sensitive Habitat Protection and Riparian Corridor and Wetlands Protection ordinances. Development activities are prohibited within lands extending 30 feet from an intermittent stream, and 50 feet from a perennial stream, or within a riparian woodland, unless a riparian exception is granted. Any proposed development activity within areas identified as Riparian Corridor in the Biotic Report would require a Riparian Exception from County Environmental Planning. Additional discussion regarding riparian habitat and sensitive natural habitat are also included in D-1 above.

There are three habitats within the subject property area that are considered sensitive under Santa Cruz County Code: Riparian woodlands, oak woodlands, and native needlegrass grasslands. Potential impacts to these habitats and mitigation measures are detailed below. but are considered to be less than significant with mitigation incorporated.

Riparian Woodland

Riparian Woodlands occur along Lockhart Gulch adjacent to the Conference Center core

and Mission Woods area, as well as along the Spring Creek area. The woodland is dominated by Redwoods, Willows, Big Leak Maples, Dogwood and Ivy. Riparian woodland is considered a sensitive natural community by the California Department of Fish and Wildlife (CDFW) and is regulated under the California Fish and Game Code Section 1600 regarding lake and streambed alteration agreements. The riparian woodland in the project area falls within the CDFW stream zone, which extends laterally to the outer edge of riparian vegetation. The scope of the work within the riparian area is construction of a new deck in the Oak-Hemlock area of the project site as well as minor grading that would take place to build a 24-unit seasonal staff cabin within the Spring Creek area of the project site. See Attachment 2 for conceptual architectural and civil engineering plans. This is considered to be non-high impact area in relation to the life of the proposed project and considering other areas where higher levels of construction will take place.

Oak Woodland and Native Needlegrass Grasslands

Oak woodland occurs along the northern edge of the Frontier Ranch planning area and on APNs 070-011-16 and 35. In addition, some native grasses were identified within the grasslands on APN 070-011-16 and 35; however, further investigation into the density of these native grasses would be necessary to determine if this grassland could be classified as native needlegrass grassland.

Tree removal is not currently proposed in any area of oak woodland habitat or other sensitive habitats and no actions are currently proposed on the two parcels where potential native needlegrass grassland may occur.

Impacts

Although the proposed project is not currently expected to impact the riparian woodland along Lockhart Gulch, or in the Mission Woods and Spring Creek areas, some tree removal may occur. According to preliminary reports no trees are anticipated to be removed within a riparian area; however, if tree removal is required, the number would be very limited. It is also possible that construction disturbance could temporarily impact riparian woodland areas and that if this occurs temporary impact areas would be re-vegetated with native species.

Preliminary plans indicate a minimum of 29 trees (Coast Live Oak, Coast Redwood, and Douglas Fir) will be removed within the Conference Center Core and Mission Woods study areas; there may be additional tree removal when detailed plans are developed for this area and other improvement sites.

At this time no improvements are anticipated on APNs 070-011-16 and 35; however, because the grassland documented on these parcels may support dense stands of native grasses and therefore potentially meet the definition of a native grassland, additional biotic

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

review would be required prior to any potential future development in this area.

Mitigation Measures

BIO-3: Riparian Woodland. Riparian woodland can be avoided during construction. The removal of riparian woodland and native trees will be minimized with the following environmental commitments:

- Prior to construction, the Project Applicant and the Project Biologist will identify the limits of construction in order to maximize native tree and shrub retention. Temporary fencing will be placed along the limits of construction to avoid unnecessary disturbance to riparian woodland.
- Where possible, native vegetation that cannot be avoided will be cut at ground level rather than removed by the roots to allow for regeneration.

BIO-4: Riparian Woodland. The Project shall restore disturbed riparian woodland with native riparian vegetation. Re-vegetation shall follow the professional and local requirements. In addition, native species contained in the re-vegetation planting and erosion control specifications shall be used in erosion control efforts.

BIO-5: Native Trees. An arborist shall evaluate tree removal and identify mitigation measures to protect trees that are adjacent to construction but are to be retained. Measures to protect trees to be retained shall be implemented prior to and during construction. These measures may include protective fencing, limbing techniques, root pruning techniques, or other actions as directed or implemented by the arborist.

BIO-6: Potential Native Grasslands: If improvements of structures or new activities are proposed within areas mapped as grassland on APNs 070-011-16 and 35, prior to any site disturbance additional spring-season surveys shall be carried out to validate the location and species composition of these grasslands. If this survey documents areas meeting the definition of native grassland under County Code, the impacts to this resource shall be avoided or minimized. If impacts are incurred, compensatory mitigation shall be implemented, such as restoration. If the areas are deemed to be annual grassland, no additional actions are recommended.

In addition to the above mitigations, removal of vegetation, or the construction of structures within any riparian habitat area, would require a Riparian Exception, processed in accordance with the County Riparian Corridor and Wetlands Protection ordinance.

3. *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, vernal*	☐	☐	☐	☑

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Discussion: There are no mapped or designated federally protected wetlands on or adjacent to the project site (National Wetlands Inventory, U.S. Fish & Wildlife Service. 2019). Therefore, no impacts would occur from project implementation.

4	*Interfere substantially with the movement of any native resident or migratory fish or wildlife species or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*	☐	☐	☐	☑

Discussion: The scope of the project is to improve existing structures and construct several buildings in areas already developed on the Mission Springs Camp and Conference Center site. The proposed project does not involve any activities that would interfere with the movements or migrations of fish or wildlife or impede use of a known wildlife nursery site. No impact is anticipated.

5.	*Conflict with any local policies or ordinances protecting biological resources (such as the Sensitive Habitat Ordinance, Riparian and Wetland Protection Ordinance, and the Significant Tree Protection Ordinance)?*	☐	☑	☐	☐

Discussion: The proposed project would not conflict with any local policies or ordinances. See discussions and mitigation measures specified under D-1 and D-2 above. No wetlands would be impacted by the proposed project.

Where projects would be located within a riparian habitat area, the design and location of improvements would require the approval of a Riparian Exception, consistent with the County of Santa Cruz Riparian Corridor and Wetlands Protection ordinance (Section 16.30.060 of the County Code).

As set out in Santa Cruz County General Plan Policy 5.1.12, as a condition of development permit approval, any area of the property that has been identified to contain degraded sensitive habitat shall be required to be restored, with the magnitude of such required restoration to be commensurate with the scope of the project. The object of habitat restoration activities shall be to enhance the functional capacity and biological productivity of the habitat(s) and wherever feasible, to restore them to a condition which can be sustained by natural occurrences.

Mitigation Measures

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

BIO-7: Degraded Sensitive habitat. Degraded sensitive habitat areas shall be enhanced through the removal/control of invasive, invasive plants. The occurrences documented during the baseline study are depicted on Figure 19 of the Biotic Report (Attachment 8). These occurrences are considered a significant threat to the sensitive resource and shall be removed/controlled. Priorities for action are:

- In oak woodland:
  - Hand pull French broom prior to plants setting seed; for shrubs too large to hand pull cut stems of plants flush with ground (March through May).
  - Monitor French broom seedlings/re-growth in winter/spring; hand pull seedlings or re-cut larger shrubs (January – April). Will require repeated sessions to eradicate.
- In riparian woodland:
  - Hand pull French broom prior to plants setting seed; for shrubs too large to hand pull cut stems of plants flush to the ground (March through May).
  - Monitor French broom seedlings/re-growth in winter/spring; hand pull seedlings or re-cut larger shrubs (January – April). Will require repeated sessions to eradicate.
  - Cut and remove acacia (January – December). Hand pull seedlings; may require repeated sessions to eradicate.
  - Remove English ivy from trunks of trees. Cut stems and leave minimum of 12-inch gap in stem growth; pull ivy away from trunk of tree. Allow ivy in treetops to die. (January – December). Monitor stem re-growth on trunk and repeat as needed.
  - Remove English ivy from ground surface. Hand-pull and use hand tool to remove roots (May to July). Will require repeated sessions to eradicate.
  - Remove periwinkle from ground surface. Hand-pull and use hand tool to remove roots (March to July). Will require repeated sessions to eradicate.

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

Discussion: The proposed project would not conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

7. *Produce nighttime lighting that would substantially illuminate wildlife habitats?*	☐	☑	☐	☐

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Discussion: See additional discussion of lighting associated with the proposed project under section A-4. The scope of the project may include installation of nighttime lighting in the form of lights on the outside of proposed improved buildings as well as proposed new buildings. However, all improvements and new construction will take place within areas of the campsite which already have a form of nighttime illumination. Also, all new and improved lighting fixtures will be shielded, pointing in the downward position and will not be visible beyond the property border. Moreover, the new nighttime lighting that may be produced as a result of this project will be consistent with current nighttime lighting on the mission Springs Camp and Conference Center.

All construction would be completed during daylight hours. No nighttime lighting impacts from project implementation would occur. Therefore, with the inclusion of mitigation measures incorporated under section A.4, the project impacts would be less than significant.

E. CULTURAL RESOURCES

Would the project:

1. *Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?*	☐	☑	☐	☐

Discussion: In the September of 2016, a historic resource evaluation was completed by Interactive Resources Group, INC. on fourteen buildings at Mission Springs. See Attachment 9 for a detailed historical resource evolution within the Mission Springs Camp Site. An addendum to the archeological/historic resource evaluation focusing on impacts and mitigations was completed by TreanorHL in December 2018. See Attachment 11 for an addendum to the archeological/historic resource evaluation with detailed impacts and mitigations. These buildings included those which are proposed to be improved or demolished as a result of this proposed project. The evaluation concluded that none of the individual structures were eligible for listing in federal, state or local registers. However, a potential historic district was identified that encompassed an area larger than the immediate Mission Springs Camps and Conference Center. Both reports identified a potential historic district eligible under criterion A and C under the National Register of Historic Places (NRHP) and 1 and 3 under the California Register of Historical Resources (CRHR). Although the reports concluded that the project would not cause a substantial adverse change in the significance of a historical resource, because of the potential historic district the proposed project lies within, potential impacts and mitigation measures are described in further detail below.

Impacts

The proposed project would alter or demolish some of the existing structures on the project

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

site. However, none of the affected structures possess historic significance and the proposed alterations and demolition would not cause substantial adverse changes to individual historic resources. The historical evaluations also concluded that nine of the buildings were non-contributing to a potential historic district and that three had lost their integrity and therefore did not qualify as historic resource. Since none of these individual buildings were identified as a historic resource, the proposed project could not have a substantial adverse impact on any potential historic resources nor districts.

The new proposed buildings, particularly in the Conference Center, Mission Woods and Spring Creek areas, could cause a substantial adverse change to a potential historic district by indirectly affecting the character defining features and distinctive location, setting, design, materials, workmanship, feeling, and association of the potential historic district.

However by following the Secretary of the Interiors' standards for the treatment of historic properties, as well as ensuring that all new construction is consistent with distinctive location, setting, design, materials, workmanship, feeling, and association of the surrounding structures, the proposed project would be considered as mitigated to a level of less than significant impact on any potential historical resource or district.

The TreanorHL addendum found that the preliminary design of new lodge in the Conference Center as well as the Mission Woods Lodge to be compatible with the Vernacular design features of the potential historic district and its contributing resources. This aspect of design together with the physical separation of the seasonal residential cabins from new construction would allow the historic district's aesthetic and historic sense to be maintained. Prior to the issuance of Building Permits, final designs for the new lodge in the Conference Center as well as the Mission Woods Lodge will be reviewed by Historic Resources Planner at the County of Santa Cruz to ensure consistency with the approved preliminary designs and with the character of the potential historic district. No Impact is anticipated from construction of these buildings.

The proposed project envisions one new building that has not yet been designed, a proposed Seasonal Staff Housing at Spring Creek. The design of this building could have a significant adverse impact on the historic resource.

CULT-1: Prior to issuance of a Building Permit for the Seasonal Staff Housing at Spring Creek, a professional qualified in Architectural History or Historic Architecture shall review the design for compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. The evaluation of the designs shall be submitted to the Historic Resources Planner at the County of Santa Cruz for

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

review and approval.

2.	*Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?*	☐	☐	☑	☐

Discussion: Within the scope of the Historic Resource Evaluation, prepared by the Interactive Resources Group in September of 2016, an archeological resources evaluation was also prepared. See Attachment 10. This evaluation was assisted in part by Holman & Associates, whom in July of 2016 surveyed the areas proposed for construction on previously undisturbed soil which would be graded, dug up or removed.

There are no mapped archeological areas within the project area. See attachment 12. Based on Santa Cruz County resource maps and geographic information systems.

The soil in the area is fine medium gray silt with heavy organic content. Other than the flat areas that have been graded to accommodate the present conference center and related facilities, the general area of Mission Springs has moderate to steep slopes adjacent to Lockhart Gulch Creek. These slopes are considered to not be associated with prehistoric habitation areas. The surveyor found no indication of archeological materials or features on the surface and no evidence that suggests the presence of underground cultural material. No chert or other material commonly used as raw material for prehistoric tool manufacturing was found. Similarly, no other material associated with use of the property during prehistoric times, such as concentrations of burned faunal remains or charcoal were observed. Notwithstanding modern debris, no historical period material was found within the survey area.

No archeological resources have been identified in the project area. Pursuant to County Code Section 16.40.040, if at any time in the preparation for or process of excavating or otherwise disturbing the ground, any human remains of any age, or any artifact or other evidence of a Native American cultural site which reasonably appears to exceed 100 years of age are discovered, the responsible persons shall immediately cease and desist from all further site excavation and comply with the notification procedures given in County Code Chapter 16.40.040. Impacts are expected to be less than significant.

3.	*Disturb any human remains, including those interred outside of dedicated cemeteries?*	☐	☐	☑	☐

Discussion: Impacts are expected to be less than significant. However, pursuant to

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Section 16.40.040 of the Santa Cruz County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this project, human remains are discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the sheriff-coroner and the Planning Director.

If the coroner determines that the remains are not of recent origin, a full archeological report shall be prepared, and representatives of the local Native California Indian group shall be contacted. Disturbance shall not resume until the significance of the archeological resource is determined and appropriate mitigations to preserve the resource on the site are established.

4. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?*	☐	☐	☑	☐

Discussion: The area of the project is not within an area designated as an Archeological Sensitive Area according to the County of Santa Cruz Resource and Constraints maps or according to detailed historical and cultural reports detailed in prior sections.

Section 21080.3.1(b) of the California Public Resources Code (AB 52) requires a lead agency to formally notify a California Native American tribe that is traditionally and culturally affiliated within the geographic area of the discretionary project when formally requested. As of this writing, no California Native American tribes traditionally and culturally affiliated with the Santa Cruz County region have formally requested a consultation with the County of Santa Cruz (as Lead Agency under CEQA) regarding Tribal Cultural Resources. No Tribal Cultural Resources are known to occur in or near the project area.

John Schlagheck, Archaeologist, contacted the Native American Heritage Commission (NAHC) in January of 2019 which conducted a Sacred File Search for the possibility of tribal cultural resources occurring within the Mission Springs area. The NAHC stated that the results were negative, no known tribal cultural resources are present within the mission springs area.

Based on cultural, historical, and archaeological reports and studies conducted for this proposed project, no evidence of tribal cultural resources has been identified. Impacts would be less than significant.

5. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*	☐	☐	☐	☑

Discussion: No unique paleontological resources or unique geologic features are known to occur in the vicinity of the proposed project. No impacts are anticipated.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

F. ENERGY

Would the project:

5.	*Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*	☐	☐	☑	☐

Discussion: The project, like all development, would be responsible for an incremental increase in the consumption of energy resources during site grading and construction due to onsite construction equipment, materials and processing during the construction phases. All project construction equipment would be required to comply with the California Air Resources Board (CARB) emissions requirements for construction equipment, which includes measures to reduce fuel-consumption, such as imposing limits on idling and requiring older engines and equipment to be retired, replaced, or repowered. In addition, the project would comply with General Plan policy 8.2.2, which requires all new development to be sited and designed to minimize site disturbance and grading. As a result, impacts associated with the small temporary increase in consumption of fuel during construction are expected to be less than significant.

The project's permanent operational energy use is also expected to be minimal. The project involves a multi-phased Master Plan for the Mission Springs Camp and Conference Center that includes demolition of existing buildings, construction of new buildings, including three new lodges, a new dining hall, a new pool house, a meeting room and two cabins, and upgrades to existing structures. All new construction will comply with prevailing building technology, the California Building Code, and the County Building ordinance to ensure the conservation of energy and resources. Improvements to existing buildings will also include upgrading all systems to the highest level of energy efficiency standards. Energy impacts from vehicle movements associated with the increased number of guests have not been analyzed. However, based upon the traffic report prepared for this project by Kimley Horn, dated July 31, 2018 (Attachment 6) and because many of the visitors to the facility travel by bus or car pool, the projected increase in traffic volumes from project implementation would be minimal.

In addition, the County has strategies to help reduce energy consumption and greenhouse gas (GHG) emissions. These strategies included in the *County of Santa Cruz Climate Action Strategy* (County of Santa Cruz, 2013) are outlined below.

Strategies for the Reduction of Energy Use and GHG Emissions

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

- Develop a Community Choice Aggregation (CCA) Program, if feasible.[2]
- Increase energy efficiency in new and existing buildings and facilities.
- Enhance and expand the Green Business Program.
- Increase local renewable energy generation.
- Public education about climate change and impacts of individual actions.
- Continue to improve the Green Building Program by exceeding the minimum standards of the state green building code (Cal Green).
- Form partnerships and cooperative agreements among local governments, educational institutions, nongovernmental organizations, and private businesses as a cost-effective way to facilitate mitigation and adaptation.
- Reduce energy use for water supply through water conservation strategies.

Strategies for the Reduction of Energy Consumption and GHG Emissions from Transportation

- Reduce vehicle miles traveled (VMT) through County and regional long-range planning efforts.
- Increase bicycle ridership and walking through incentive programs and investment in bicycle and pedestrian infrastructure and safety programs.
- Provide infrastructure to support zero and low emissions vehicles (plug in, hybrid plug-in vehicles).
- Increase employee use of alternative commute modes: bus transit, walking, bicycling, carpooling, etc.
- Increase the number of electric and alternative fuels vehicles in the County fleet.

Therefore, the project will not result in wasteful, inefficient, or unnecessary consumption of energy resources. Impacts are expected to be less than significant.

2.	*Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*	☐	☐	☑	☐

Discussion: AMBAG's 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) recommends policies that achieve statewide goals established by CARB, the California Transportation Plan 2040, and other transportation-related policies and state senate bills. The SCS element of the MTP targets, in particular, transportation-related

[2] Monterey Bay Community Power (MBCP) was formed in 2017 to provide carbon-free electricity. All Pacific Gas & Electric Company (PG&E) customers in unincorporated Santa Cruz County were automatically enrolled in the MBCP in 2018.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

greenhouse gas (GHG) emissions, which can also serve to address energy use by coordinating land use and transportation planning decisions to create a more energy efficient transportation system.

The Santa Cruz County Regional Transportation Commission (SCCRTC) prepares a County-specific regional transportation plan (RTP) in conformance with the latest AMBAG MTP/SCS. The 2040 RTP establishes targets to implement statewide policies at the local level, such as reducing vehicle miles traveled and improving speed consistency to reduce fuel consumption.

In 2013, Santa Cruz County adopted a Climate Action Strategy (CAS) focused on reducing the emission of greenhouse gases, which is dependent on increasing energy efficiency and the use of renewable energy. The strategy intends to reduce energy consumption and greenhouse gas emissions by implementing a number of measures such as reducing vehicle miles traveled through County and regional long-range planning efforts, increasing energy efficiency in new and existing buildings and facilities, increasing local renewable energy generation, improving the Green Building Program by exceeding minimum state standards, reducing energy use for water supply through water conservation strategies, and providing infrastructure to support zero and low emission vehicles that reduce gasoline and diesel consumption, such as plug in electric and hybrid plug in vehicles that reduce.

Because many of the visitors to the facility travel by bus or car pool, the proposed project is consistent with these policies in that the use of car pols or busses would significantly reduce the vehicle miles travelled. As detailed in the submitted Traffic Impact Analysis prepared by Kimley Horn (Attachment 6), the estimated additional AM and PM peak hour trips will not be significant and therefore the project will not reduce the speed and efficiency for traffic in the vicinity of the project site.

Energy efficiency is also a major priority throughout the County's General Plan. Measure C was adopted by the voters of Santa Cruz County in 1990 and explicitly established energy conservation as one of the County's objectives. The initiative was implemented by Objective 5.17 and includes policies that support energy efficiency, conservation, and encourage the development of renewable energy resources. Also, Goal 6 of the Housing Element promotes energy efficient building code standards for residential structures constructed in the County.

The project will be consistent with the AMBAG 2040 MTP/SCS and the SCCRTC 2040 RTP. The project would also be required to comply with the Santa Cruz County General Plan and any implemented policies and programs established through the CAS. In addition, the project design would be required to comply with CALGreen, the state of California's green

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

building code, to meet all mandatory energy efficiency standards. Therefore, the project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

G. GEOLOGY AND SOILS

Would the project:

1.	*Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*				
	A. *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.*	☐	☑	☐	☐
	B. *Strong seismic ground shaking?*	☐	☑	☐	☐
	C. *Seismic-related ground failure, including liquefaction?*	☐	☑	☐	☐
	D. *Landslides?*	☐	☑	☐	☐

Discussion (A through D): The project site is located outside of the limits of the State Alquist-Priolo Special Studies Zone (County of Santa Cruz GIS Mapping, California Division of Mines and Geology, 2001). However, the project site is located approximately three mile(s) South of the San Andreas fault zone, approximately 2 mile(s) Northeast of the Ben Lomond fault zone and approximately 2.75 mile(s) South of the Zayante fault zone. While the San Andreas fault is larger and considered more active, each fault is capable of generating moderate to severe ground shaking from a major earthquake. Consequently, large earthquakes can be expected in the future. The October 17, 1989 Loma Prieta earthquake (magnitude 7.1) was the second largest earthquake in central California history and was the last large earthquake to occur within the area.

All of Santa Cruz County is subject to some hazard from earthquakes. However, the project site is not located within or adjacent to a County or State mapped fault zones, therefore the

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

potential for ground surface rupture is low. The project site is likely to be subject to strong seismic shaking during the life of the improvements. The improvements would be designed in accordance with the Uniform Building Code, which would reduce the hazards of seismic shaking, liquefaction, and land sliding to a less than significant level.

A geological assessment report for the proposed project was performed by Zinn Geology, which was last updated in December 2016. See Attachment 13 for a preliminary geological assessment. The work completed by Zinn Geology in 2016 was not intended to completely fulfill the type of geotechnical investigations needed to satisfy the County of Santa Cruz Planning department's regulations for performing design-level work. The geological assessment report is intended to be a general review of the master plan concepts, and more specific site and building assessments will be conducted at the future time of building specific applications. All proposed building sites were considered to be feasible; however, it is recognized that additional geological, geotechnical and associated mitigation assessments will be required to be prepared in association with future planning applications for each of the structures. Further geotechnical/soils reports and complete design-level geological work under a separate scope of service would likely also be conducted by Zinn Geology.

The 2016 geological assessment report concluded that all of the geological hazards identified for all the structures considered within the proposed project to be adequately mitigated through future geological investigations, adequate soil engineering and by ensuring improvements and construction is done according to the Uniform Building Code. These studies shall be conducted prior to commencement of the design work. The following potential impacts and mitigation measures are considered in the 2016 geological feasibility investigation report in order to deem the potential impacts as less-than-significant.

Impacts

The potential for ground surface rupture due to faulting is considered to be low and no significant impacts are anticipated. No mitigation measures would be required.

Seismic ground shaking may occur at all of the sites during the next major earthquake. Shaking can cause severe damage to or collapse buildings as well as other project facilities, exposing people to injury or death or may result in significant economic loss to the entire site. Seismic shaking at all of the project areas presents a potentially significant impact.

The liquefaction potential is low to moderate for Buildings W1, W4, C6, C10, C12 and S3. See Attachment 2 for preliminary architectural and civil engineering plans. Liquefaction at these sites presents a potentially significant impact.

The potential is low to moderate for shallow land sliding in the form of debris flows to strike Buildings W3, W5, C10, C12 and S3, which may damage the buildings. See Attachment 2 for preliminary architectural and civil engineering plans. This is a potentially

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

significant impact.

The potential is low to moderate for shallow land sliding and rock fall land sliding to undermine and damage the cabins associated with improvements or demolition. This impact is considered to be less-than-significant. No mitigation measure is needed because no impact is anticipated.

Soil erosion and soil creep caused by disturbance of the landscape during and following constriction of any of the planned facilities could be a significant environmental impact. Potential erosion and soil creep related impacts due to the proposed project shall be addressed by the project's geotechnical and civil engineers during the design phase of the structures.

Mitigation Measures

GEO-1: During design-level studies, the project geotechnical engineer and project structural engineer shall provide seismic design for the project consistent with the most current version of the California Building code. If other conservative design guidelines are determined to be applicable to the project, those guidelines shall be followed. This mitigation measure would reduce the impact due to seismic ground shaking at all of the project sites to a less than significant level.

GEO-2: During the design study process, the project soils engineer shall adequately characterize the risks related to liquefaction and provide appropriate mitigation recommendations were warranted in conjunction with the project structural engineer. Implementation of adequate engineering characterization and design shall mitigate the risk to a less-than-significant impact.

GEO-3: During the design process for Buildings W3, W5, C10, C12 and S3, the risks related to shallow land sliding shall be adequately characterized and mitigation recommendations issued via joint investigations by a geotechnical engineer and qualified geologist. See Attachment 2 for preliminary architectural and civil engineering plans. The joint investigations shall consider the following: The thickness of colluviums on the slopes above the site, drainage patterns on the slope above the site that might trigger debris flows, the size and terminal velocity of debris flows that might strike the buildings. They shall also consider mitigation schemes such as relocating structures, constructing impact structures that will stop and capture the debris flow deposits, or constructing deflection structures that will guide the debris flow deposits away from structures. Implementation of adequate geology and engineering characterization and design shall mitigate the risk to a less-than-significant impact.

2. Be located on a geologic unit or soil that is	☐	☑	☐	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

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?

Discussion: The geological assessment report cited above concluded that there is a potential risk regarding ground shaking, liquefaction, landslides, soil creep, and flooding, however none of these potential impacts are considered severe. The recommendations and mitigations contained in the geological assessment report, mentioned above, will be implemented to reduce this potential hazard to a less than significant level with mitigation incorporated (see discussions and mitigations GEO-1-3 under G-1 above). Further geological, geotechnical, hydrologic, engineering and other assessments will be conducted to understand all potential risk prior to the commencement of design-level work.

3. *Develop land with a slope exceeding 30%?* ☐ ☐ ☑ ☐

Discussion: A number of the proposed building sites are immediately adjacent to or contain slopes that exceed 30%. The preliminary geological assessment report cited above (see discussion under G-1) concluded that there are some potential risks associated with steep slopes at a number of the proposed future building sites. The recommendations contained in the preliminary geological assessment report state that for those sites, as part of the design process, a full and detailed geologic investigation will be required to be completed for those future projects identified in the preliminary study where potential instability may exist. A Geotechnical (soils) Report will also be required to be prepared for all future building sites. All recommendations of both the Geological and Geotechnical reports will be required to be implemented to reduce potential hazards associated with steep slopes to a less than significant level.

4. *Result in substantial soil erosion or the loss of topsoil?* ☐ ☐ ☑ ☐

Discussion: Some potential for erosion exists during the construction phase of the project, however, this potential is minimal because grading and digging will only take place in a relatively small amount of the project's scope and area. Standard erosion controls are a required condition of the project and will be followed. Prior to approval of a grading or building permit, the project must have an approved Erosion Control Plan (*Section 16.22.060 of the County Code*), which would specify detailed erosion and sedimentation control measures. The plan would include provisions for disturbed areas to be planted with ground cover and to be maintained to minimize surface erosion. Impacts from soil erosion or loss of topsoil would be considered less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
5. *Be located on expansive soil, as defined in ection 1803.5.3 of the California Building Code (2016), creating substantial direct or indirect risks to life or property?*	☐	☐	☑	☐

Discussion: There is no indication that the development site is subject to substantial risk caused by expansive soils. The 2016 geological assessment report did not identify any elevated risk associated with expansive soils. See Attachment 13. However, the report did recommend that a soils investigation report shall be prepared for the design of new construction areas and the hazard of differential settlement derived both from the bedrock and the side cast fill which shall be adequately characterized and mitigated. Therefore, impacts are considered to be less-than-significant with mitigation incorporated.

6. *Have soils incapable of adequately supporting the use of septic tanks, leach fields, or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*	☐	☐	☑	☐

Discussion: The proposed project would use an existing onsite sewage disposal system. The existing wastewater system collects wastewater from the main conference center, Frontier Ranch and Wild Oak areas. The wastewater is treated in an onsite treatment system and discharged to pressure-dosed leach fields on the Eastern side of the property.

Fall Creek Engineering conducted a capacity analysis for the current water and wastewater systems at Mission Springs Conference Center and Campsite in September 2017. See Attachment 14 for a capacity analysis of the current water and wastewater systems at Mission Springs. The capacity of the existing onsite wastewater treatment system is 36,300 gpd during the peak months and 25,000 gpd in the off-season. The projected maximum daily flow during the peak months based on 704 guests is estimated to be 23,265 gpd, which is within the existing system's capacity. The disposal system is regulated by the RWQCB and is limited to 25,400 gpd based on a 30-day average. The projected 30-day average flow from the increased number of guests is estimated to be 14,080 gpd during the peak season which is within the existing system's discharge limits.

The existing waste systems have the capacity to provide the service needed for the increase in number of guests from 500 to 704. As a result, no new septic tanks, leach fields, or waste water disposal systems will need to be installed. Current soils are capable of supporting the current system, and therefore impacts are considered to be less-than-significant.

7. *Result in coastal cliff erosion?*	☐	☐	☐	☑

Discussion: The proposed project is not located in the vicinity of a coastal cliff or bluff, therefore, would not contribute to coastal cliff erosion. The closest coastal cliff is

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

approximately 8.5 miles away from the project site. No impact is anticipated.

H. GREENHOUSE GAS EMISSIONS

Would the project:

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

Discussion: The scope of the proposed project includes making improvements to existing buildings which will also include updating all energy related aspects of existing buildings with the highest new energy efficient methods and standards. All new proposed buildings will meet or exceed current energy efficient standards. Ensuring all buildings, both new and existing, are utilizing the most up-to-date clean energy standards will lower greenhouse gas emissions.

The proposed project would be responsible for a temporary incremental increase in greenhouse gas emissions by usage of fossil fuels during the site grading and construction. Santa Cruz County has recently adopted a Climate Action Strategy (CAS) intended to establish specific emission reduction goals and necessary actions to reduce greenhouse gas levels to pre-1990 levels as required under AB 32 legislation. The strategy intends to reduce greenhouse gas emissions and energy consumption by implementing measures such as reducing vehicle miles traveled through the County and regional long-range planning efforts and increasing energy efficiency in new and existing buildings and facilities. All project construction equipment would be required to comply with the Regional Air Quality Control Board emissions requirements for construction equipment. As a result, impacts associated with the temporary increase in greenhouse gas emissions during construction, are expected to be less than significant.

Permanent operational project emissions regarding the operation of the camp and conference facility, are expected to be minimal, based on the type of use, and are primarily related to travel to and from the camp. Many of the visitors to the facility travel by bus or carpool. Based on the traffic estimated in the Traffic Memorandum prepared by Kimley Horn dated July 31, 2018 the increase in guests is anticipated to generate up to 39 net additional trips during the Friday PM peak hour and 58 net additional trips during the Sunday afternoon peak hour. See Attachment 6 for a detailed traffic analysis. The increase in greenhouse gas emissions from this increase in traffic is expected to be less than significant.

In the absence of further regulatory or scientific information related to greenhouse gas emissions and California Environmental Quality Act significance, it is too speculative to make a determination on the project's direct impact and its contribution on the cumulative scale to climate change. Nonetheless, the County has strategies to help reduce greenhouse

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

gas emissions and energy consumption. These measures included in the *County of Santa Cruz Climate Action Strategy* (County of Santa Cruz, 2013) are outlined below.

Strategies for the Reduction of Greenhouse Gases from Energy Use

- Develop a Community Choice Aggregation (CCA) Program, if feasible.
- Increase energy efficiency in new and existing buildings and facilities.
- Enhance and expand the Green Business Program.
- Increase local renewable energy generation.
- Public education about climate change and impacts of individual actions.
- Continue to improve the Green Building Program by exceeding the minimum standards of the state green building code (Cal Green).
- Form partnerships and cooperative agreements among local governments, educational institutions, nongovernmental organizations, and private businesses as a cost-effective way to facilitate mitigation and adaptation.
- Reduce energy use for water supply through water conservation strategies.

Impacts are expected to be less than significant.

2.	*Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*	☐	☐	☑	☐

Discussion: See the discussion under H-1 above. No significant impacts are anticipated.

I. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

1.	*Create a significant hazard to the public or the environment as a result of the routine transport, use or disposal of hazardous materials?*	☐	☐	☑	☐

Discussion: The proposed project would not create a significant hazard to the public or the environment as a result of routine transport or disposal of hazardous materials. The scope of the project is to make improvements to existing buildings, demolition of existing buildings and construction of buildings, none of which include routine transportation use or disposal of hazardous materials. However, during construction, fuel would be used at the project site. In addition, fueling may occur within the limits of the staging area. Best management practices would be used to ensure that no impacts would occur. Impacts are expected to be less than significant.

2.	*Create a significant hazard to the public or*	☐	☐	☑	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				

Discussion: Please see discussion under I-1 above. Project impacts would be considered less than significant.

3. *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*	☐	☐	☐	☑

Discussion: The scope of the project is to make improvements and demolition of existing buildings and construction of buildings, none of which include routine transport use or disposal of hazardous materials, other than during the construction phase. There are a number of schools including but not limited to Scotts Valley High School and Baymonte School, approximately between 1-2 miles to the east of the project site. In addition, the project site is located on educational facilities campground sites. Although fueling of equipment is likely to occur within the certain areas of the, best management practices would be implemented. No impacts are anticipated.

4. *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?*	☐	☐	☐	☑

Discussion: The project site is not included on the 2018 list of hazardous sites in Santa Cruz County compiled pursuant to Government Code Section 65962.5. No impacts are anticipated from project implementation.

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

Discussion: The proposed project is not located within two miles of a public airport or public use airport. No impact is anticipated.

6. *For a project within the vicinity of a private airstrip, would the project result in a safety*	☐	☐	☐	☑

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

hazard for people residing or working in the project area?

Discussion: The proposed project is not located in the vicinity of a private airstrip. The nearest private airstrip is located in Bonny Doon, approximately 5 miles away. The scope of the proposed project does not include any aspects that will affect people residing or working in the project area. No impact is anticipated.

7. *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*	☐	☐	☐	☑

Discussion: The proposed project would not conflict with implementation of the County of Santa Cruz Local Hazard Mitigation Plan 2015-2020 (County of Santa Cruz, 2020). Mission Springs provides emergency access roads, helicopter landing locations, and water storage for fire and other emergencies both on site and in the surrounding area. The proposed improvements will not hinder or physically interfere with any of these emergency response provisions. Therefore, no impacts to an adopted emergency response plan or evacuation plan would occur from project implementation.

Mission Springs Conference Center and Camps has its own area emergency plans which are routinely updated.

8. *Expose people or structures to a significant risk of loss, injury or death involving wild-land fires, including where wild-lands are adjacent to urbanized areas or where residences are intermixed with wild-lands?*	☐	☐	☑	☐

Discussion: A small piece of the Northern section of proposed project site is located within a mapped fire hazard area according to mapped resources provide by the Santa Cruz County. See Attachment 15 for a mapped fire hazard area surrounding Mission Springs Campsite. The future specific building designs will incorporate all applicable fire safety code requirements provided at the state level as well as by the National Fire Protection Association. All proposed new construction will be consistent with current Building and Fire Codes. Furthermore, Mission Springs provides emergency access roads, helicopter landing locations, and water storage for fire and other emergencies both on site and in the surrounding area. These resources have been crucial resources in past emergencies such as the 1989 earthquake.

Current water systems that are in place on the camp site have the capacity to take on the increased demand in fire emergency needs associated with this proposed project. New construction would take place within areas already developed and would not increase

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

exposure to potential wild land fires. Impacts would be less than significant.

J. HYDROLOGY, WATER SUPPLY, AND WATER QUALITY

Would the project:

1.	*Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*	☐	☐	☑	☐

Discussion: No commercial or industrial activities are proposed that would generate a substantial amount of contaminants. New parking and driveway areas associated with the project would incrementally contribute urban pollutants to the environment; however, the contribution would be minimal given the very limited size of the proposed additional paved areas. Potential siltation from the proposed project would be addressed through implementation of erosion control best management practices (BMPs). No water quality standards or waste discharge requirements would be violated. Impacts would be less than significant.

2.	*Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*	☐	☐	☐	☑

Discussion: In the fall of 2017, Fall Creek Engineering conducted a groundwater basin review for the entire Mission Springs area. See Attachment 16 for a groundwater basin review of the Mission Springs area. The Mission Springs water system is a private water system that serves the camp, conference center and the leasehold residential community of Mission Springs. The water system supplies the domestic, fire and irrigation demand on the property. The water system consists of two deep water well sources with four water storage tanks with a branched distribution system. The water system (No. 4400723) is regulated by the County of Santa Cruz under permit 3534. An analysis of the water and wastewater systems at Mission Springs was conducted by Fall Creek Engineering (FCE), in the Fall of 2016 and estimated the projected flows for the water system based on the estimated increase in maximum number of guests (from 500 to 704). See Attachment 14. They concluded that existing water supply wells at Mission Springs provide 80 gpm and will satisfy the projected domestic water demand for the proposed project.

The Mission Springs site currently has two wells that draw from a groundwater basin within the Santa Margarita aquifer. Fall Creek Engineering anticipates that the proposed increased use at Mission Springs will have little-to-no impact on the underlying aquifer. See Attachment 16.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Although portions of the proposed project would be located in a mapped groundwater recharge area, the proposal would be consistent with General Plan policies 5.8.2 (*Land Division and Density Requirements in Primary Groundwater Recharge Areas*), 5.8.3 (*Uses in Primary Groundwater Recharge Areas*), and 5.8.4 (*Drainage Design in Primary Groundwater Recharge Areas*). The project would also be consistent with Section 7.79.110 of the County Code (*New Development and Redevelopment*). The code states, "All responsible parties shall mitigate impacts due to development and implement Best Management Practices (BMPs) per the County Design Criteria adopted by the County of Santa Cruz and Chapters 16.20 and 16.22 SCCC to control the volume, runoff rate, and potential pollutant load of storm water runoff from new development and redevelopment projects to minimize the generation, transport, and discharge of pollutants, prevent runoff in excess of predevelopment conditions, and maintain predevelopment groundwater recharge." No adverse impact would occur to groundwater recharge with project implementation.

3.	*Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?*	☐	☐	☑	☐
	A. result in substantial erosion or siltation on- or off-site;	☐	☐	☑	☐
	B. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☑	☐
	C. create or contribute runoff water which would exceed the capacity of existing or planned storm-water drainage systems or provide substantial additional sources of polluted runoff; or;	☐	☐	☑	☐
	D. impede or redirect flood flows?	☐	☐	☐	☑

Discussion: The proposed project is located adjacent to Lockhart Gulch and Ruins Creek streams and has the potential to generate minor water quality impacts during construction. However, the proposed project would be consistent with County Code Section 7.79.070, which states, "No person shall make any unpermitted alterations to drainage patterns or modifications to the storm drain system or any channel that is part of receiving waters of

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

the county. No person shall deposit fill, debris, or other material in the storm drain system, a drainage channel, or on the banks of a drainage channel where it might enter the storm drain system or receiving waters and divert or impede flow." An erosion control plan would also be required per Section 16.22.060 of the County Code. The Department of Public Works Drainage Section staff has reviewed and approved a preliminary conceptual storm drainage plan. See Attachment 17 for a preliminary storm water drainage feasibility assessment prepared by Pacific Crest Engineering Inc in May of 2015. New detailed drainage plans will be prepared by in the future to fully understand drainage issues within various areas of the project site. Impacts would be less than significant.

The following water quality protection and erosion and sediment control best management practices (BMPs) would be implemented, based on standard County requirements, to minimize construction-related contaminants and mobilization of sediment.

The BMPs will be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable and are subject to review and approval by the County. The County will perform routine inspections of the construction area to verify the BMPs are properly implemented and maintained. The County will notify contractors immediately if there is a noncompliance issue and will require compliance.

The BMPs will include, but are not limited to, the following.

- All earthwork or foundation activities involving rivers, ephemeral drainages, and culverts, will occur in the dry season (generally between June 1 and October 15).
- Equipment used in and around drainages will be in good working order and free of dripping or leaking engine fluids. All vehicle maintenance will be performed at least 300 feet from all drainages and wetlands. Any necessary equipment washing will be carried out where the water cannot flow into drainages or wetlands.
- Develop a hazardous material spill prevention control and countermeasure plan before construction begins that will minimize the potential for and the effects of hazardous or toxic substances spills during construction. The plan will include storage and containment procedures to prevent and respond to spills and will identify the parties responsible for monitoring the spill response. During construction, any spills will be cleaned up immediately according to the spill prevention and countermeasure plan. The County will review and approve the contractors' toxic materials spill prevention control and countermeasure plan before allowing construction to begin. Prohibit the following types of materials from being rinsed or washed into the streets, shoulder areas, or gutters: concrete; solvents and adhesives; thinners; paints; fuels; sawdust; dirt; gasoline; asphalt and concrete saw slurry; heavily chlorinated water.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

- Measure baseline turbidity, pH, specific conductance, and temperatures in the Lockhart Gulch or Ruins Creek streams when flow is present. As required by the Regional Water Quality Control Board (RWQCB), avoid exceeding water quality standards specified in the Basin Plan standards over the natural in-situ conditions. If dewatering activities are required, water samples would be taken periodically during construction.
- Any surplus concrete rubble, asphalt, or other rubble from construction will be taken to a local landfill.
- An erosion and sediment control plan will be prepared and implemented for the proposed project. It will include the following provisions and protocols. The Storm Water Pollution Prevention Plan (SWPPP) for the project will detail the applications and type of measures and the allowable exposure of unprotected soils.
    - Discharge from dewatering operations, if needed, and runoff from disturbed areas will be made to conform to the water quality requirements of the waste discharge permit issued by the RWQCB.
    - Temporary erosion control measures, such as sandbagged silt fences, will be applied throughout construction of the proposed project and will be removed after the working area is stabilized or as directed by the engineer. Soil exposure will be minimized through use of temporary BMPs, groundcover, and stabilization measures. Exposed dust-producing surfaces will be sprinkled daily, if necessary, until wet; this measure will be controlled to avoid producing runoff. Paved streets will be swept daily following construction activities.
    - The contractor will conduct periodic maintenance of erosion and sediment control measures.
    - An appropriate seed mix of native species will be planted on disturbed areas upon completion of construction.
    - Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways.
    - Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways. Material stockpiles will be located in non-traffic areas only. Side slopes will not be steeper than 2:1. All stockpile areas will be surrounded by a filter fabric fence and interceptor dike.
    - Contain soil and filter runoff from disturbed areas by berms, vegetated filters, silt fencing, straw wattle, plastic sheeting, catch basins, or other means necessary to

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

prevent the escape of sediment from the disturbed area.

- Use other temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary re-vegetation or other ground cover) to control erosion from disturbed areas as necessary.
- Avoid earth or organic material from being deposited or placed where it may be directly carried into the channel.

Implementation of the above BMPs would ensure that water quality impacts to the Lockhart Gulch and Ruins Creek Streams and its tributaries are less than significant.

4. *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding, on- or off-site?*	☐	☐	☑	☐

Discussion: The proposed project is located near Lockhart Gulch and Ruins Creek watercourses. However, all proposed project improvements and new construction would be consistent with current drainage patterns and would not alter the existing overall drainage pattern of the site. The scope of the project will not substantially increase the rate or amount of surface runoff that would result in any form of flooding. Department of Public Works Drainage Section staff has reviewed and approved the preliminary conceptual drainage plan. See Attachment 17 for a preliminary storm water drainage feasibility assessment. Impacts from project construction would be less than significant.

5. *Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems, or provide substantial additional sources of polluted runoff?*	☐	☐	☑	☐

Discussion: Department of Public Works Drainage Section staff has reviewed and approved the preliminary conceptual drainage plan. See Attachment 17 for a preliminary storm water drainage feasibility assessment. They have determined that existing storm water facilities are adequate to handle the increase in drainage associated with the project. Refer to response J-1, 2, and 3 for discussion of urban contaminants and/or other polluting runoff. Impacts would be considered less than significant with implementation of the BMPs listed above.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
6. *Otherwise substantially degrade water quality?*	☐	☐	☑	☐

Discussion: Please see discussion under J-1, 2, and 3 above. Impacts would be considered less than significant with the implementation of BMPs.

7. *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*	☐	☐	☐	☑

Discussion: According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated May 16, 2012, no housing or any other proposed development within the project area, lies within a 100-year flood hazard area. No impacts from project implementation are anticipated.

8. *Place within a 100-year flood hazard area structures which would impede or redirect flood flows?*	☐	☐	☐	☑

Discussion: According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated May 16, 2012, no portion of the project site lies within a 100-year flood hazard area. Also, any new construction is strategically placed in locations where impediment nor redirection of any type of water flows. Therefore, the proposed project would not impede or redirect flood flows. No impact would occur.

9. *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*	☐	☑	☐	☐

Discussion: According to the Geologic Feasibility Investigation prepared by Eric Zinn see Attachment 13, although the proposed building S3 (Staff Housing) is not located within a flood hazard area, floodway or other flood area, it may be subject to flooding in the future if Spring Creek jumps its channel at the upstream bend. If this occurs the Staff Housing building may be damaged, resulting in a potentially significant impact. During the design phase, the flooding hazard risk will need to be fully analyzed. If flooding risks are shown to exist, these will then need to be addressed through relocation or raising of the structure. A hydraulic analysis and appropriate engineering recommendations, if necessary, shall be developed prior to the design phase. If this mitigation measure is implemented in the design of the structure, it will result in a less-than-significant impact.

The potential is low to moderate for a standard or alternative septic system to be impacted by the presence high groundwater at the S3 building site. This potential impact may impair system functionality. This is considered to be a potentially significant impact with

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

mitigation incorporated. If this impact cannot be mitigated, relocation of the septic system or S3 building will be required to reduce the impact to less than significant.

HWQ-1: A hydraulic analysis and appropriate engineering recommendations, if necessary, shall be developed prior to the design phase. Relocate the building or elevate the habitable floor of Building S3 as established by a hydrologic study. This would lower the potential impact to less than significant.

HWQ-2: During the design phase for Building S3, the septic system shall be evaluated with respect to the hydrology conditions at the site. If warranted, the system shall be upgraded to lower the likelihood of impairment, as well as to bring it into conformance with applicable current codes and ordinances.

HWQ-3: During the design phase for Building S3, the septic system may need to be rerouted and redesigned to allow for tie-in to the existing septic system for the conference center area on the other side of Lockhart Gulch. Implementation of this mitigation measure will lower the impact to less than significant.

However, this could prove to be environmentally problematic or financially unfeasible which could result in Building S3 needing to be relocated to a location elsewhere on the conference center grounds that is not constrained by related high ground water issue. If this is the only feasible mitigation, additional supplemental environmental review may be required.

10. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☑

Discussion: There are two primary types of tsunami vulnerability in Santa Cruz County. The first is a tele-tsunami or distant source tsunami from elsewhere in the Pacific Ocean. This type of tsunami is capable of causing significant destruction in Santa Cruz County.

The project site is located approximately 8 miles inland, and away from the effects of a potential tsunami. In addition, no impact from a seiche or mudflow is anticipated. No impact would occur.

K. LAND USE AND PLANNING

Would the project:

1. Physically divide an established community?	☐	☐	☐	☑

Discussion: The proposed project does not include any element that would physically divide an established community. The scope of the proposed project is to further connect the Mission Springs community by developing new buildings and making improvements to existing structures. No impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. *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?*	☐	☐	☑	☐

Discussion: The proposed project does not conflict with any regulations or policies adopted for the purpose of avoiding or mitigating an environmental effect. General Plan policy 5.2.3 (Activities Within Riparian Corridors and Wetlands) states: "Development activities, land alterations and vegetation disturbance within riparian corridors and wetlands and required buffers shall be prohibited unless an exception is granted per the Riparian Corridor and Wetlands Protection ordinance". Due to the conceptual and preliminary nature of the specific building improvements it is unknown at this time whether a Riparian Exception will be required. In the event that construction, grading or vegetation removal is proposed within a Riparian Corridor, a Riparian Exception will be required to be obtained prior to any site disturbance and the issuance of a Building or Grading Permit. If findings for a Riparian Exception cannot be made the project will need to be redesigned to avoid new encroachments into the riparian area. See complete discussion under Section D-5. Impacts would be considered less than significant.

3. *Conflict with any applicable habitat conservation plan or natural community conservation plan?*	☐	☐	☐	☑

Discussion: The proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan. No impact would occur.

L. MINERAL RESOURCES

Would the project:

1. *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*	☐	☐	☐	☑

Discussion: The site does not contain any known mineral resources that would be of value to the region and the residents of the state according to resource maps and geographic information systems provided by the Santa Cruz County. Also no known mineral resources have been mentioned in the geologic, cultural or historic assessment reports. Therefore, no impact is anticipated from project implementation.

2. *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*	☐	☐	☐	☑

Discussion: The project site is zoned Special Use (SU) which is not considered to be an

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Extractive Use Zone (M-3) nor does it have a Land Use Designation with a Quarry Designation Overlay (Q) (County of Santa Cruz, 1994). Therefore, no potentially significant loss of availability of a known mineral resource of locally important mineral resource recovery (extraction) site delineated on a local general plan, specific plan or other land use plan would occur as a result of this project. Therefore, no impact is anticipated.

M. NOISE

Would the project result in:

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

Discussion: County General Plan policy states that average hourly noise levels shall not exceed the threshold of 50 Leq, 70 max dB during the day and 45 Leq, 65 dB during the nighttime. Impulsive noise levels shall not exceed 65 db during the day or 60 db at night.

County of Santa Cruz General Plan

The Santa Cruz County General Plan (County of Santa Cruz 1994) contains the following table, which specifies the maximum allowable noise exposure for stationary noise sources (Table 2). The County of Santa Cruz has not adopted noise thresholds for construction noise.

The following applicable noise related policy is found in the Public Safety and Noise Element of the Santa Cruz County General Plan (Santa Cruz County 1994).

- Policy 6.9.7 Construction Noise. Require mitigation of construction noise as a condition of future project approvals.

Table 2: Maximum Allowable Noise Exposure for Stationary Noise Sources[1]

	Daytime[5] (7:00 am to 10:00 pm)	Nighttime[2, 5] (10:00 pm to 7:00 am)
Hourly Leq average hourly noise level, dB[3]	50	45
Maximum Level, dB[3]	70	65
Maximum Level, dB – Impulsive Noise[4]	65	60

Notes:
1 As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied to the receptor side of noise barriers or other property line noise mitigation measures.
2 Applies only where the receiving land use operates or is occupied during nighttime hours
3 Sound level measurements shall be made with "slow" meter response.
4 Sound level measurements shall be made with "fast" meter response
5 Allowable levels shall be raised to the ambient noise levels where the ambient levels exceed the allowable levels. Allowable levels shall be reduced to 5 dB if the ambient hourly Leq is at least 10 dB lower than the allowable level.
Source: County of Santa Cruz 1994

County of Santa Cruz Code

There are no County of Santa Cruz ordinances that specifically regulate construction or other noise levels. However, Section 8.30.010 (Curfew—Offensive noise) of the Santa Cruz County Code contains the following language regarding noise impacts:

(A) No person shall make, cause, suffer, or permit to be made any offensive noise.

(B) "Offensive noise" means any noise which is loud, boisterous, irritating, penetrating, or unusual, or that is unreasonably distracting in any other manner such that it is likely to disturb people of ordinary sensitivities in the vicinity of such noise, and includes, but is not limited to, noise made by an individual alone or by a group of people engaged in any business, activity, meeting, gathering, game, dance, or amusement, or by any appliance, contrivance, device, tool, structure, construction, vehicle, ride, machine, implement, or instrument.

(C) The following factors shall be considered when determining whether a violation of the provisions of this section exists:

(1) Loudness (Intensity) of the Sound.

(a) Day and Evening Hours. For purposes of this factor, a noise shall be automatically considered offensive if it occurs between the hours of 8:00 a.m. and 10:00 p.m. and it is:

(i) Clearly discernible at a distance of 150 feet from the property line of the property from which it is broadcast; or

(ii) In excess of 75 decibels at the edge of the property line of the property from which the sound is broadcast, as registered on a sound measuring instrument meeting the American National Standard Institute's Standard S1.4-1971 (or more recent revision thereof) for Type 1 or Type 2 sound level meters, or an instrument which provides equivalent data.

A noise not reaching this intensity of volume may still be found to be offensive depending on consideration of the other factors outlined below.

(b) Night Hours. For purposes of this factor, a noise shall be automatically considered offensive if it occurs between the hours of 10:00 p.m. and 8:00 a.m. and it is:

(i) Clearly discernible at a distance of 100 feet from the property line of the property from which it is broadcast; or

(ii) In excess of 60 decibels at the edge of the property line of the property

from which the sound is broadcast, as registered on a sound measuring instrument meeting the American National Standard Institute's Standard S1.4-1971 (or more recent revision thereof) for Type 1 or Type 2 sound level meters, or an instrument which provides equivalent data.

A noise not reaching this intensity of volume may still be found to be offensive depending on consideration of the other factors outlined below.

(2) Pitch (frequency) of the sound, e.g., very low bass or high screech;

(3) Duration of the sound;

(4) Time of day or night;

(5) Necessity of the noise, e.g., garbage collecting, street repair, permitted construction activities;

(6) The level of customary background noise, e.g., residential neighborhood, commercial zoning district, etc.; and

(7) The proximity to any building regularly used for sleeping purposes.

(D) Prior to issuing a citation for this section, the responsible person or persons will be warned by a law enforcement officer or other designated official that the noise at issue is offensive and constitutes a violation of this chapter. A citation may be issued if, after receiving the warning, the responsible person(s) continues to make or resumes making the same or similar offensive noise(s) within three months of the warning. Notwithstanding the provisions of subsection (C)(1) of this section, enforcement of violations under this chapter shall not require the use of a sound level meter.

(1) For purposes of this section "responsible person or persons" means a person or persons with a right of possession in the property from which the offensive noise is emanating, including, but not limited to, an owner or a tenant of the property if the offensive noise is coming from private property, or a permittee if the offensive noise is coming from a permitted gathering on public property, or any person accepting responsibility for such offensive noise. "Responsible person or persons" shall additionally include the landlord of another responsible party and the parents and/or legal guardians of a responsible person under the age of 18 years. [Ord. 5205 § 1, 2015; Ord. 4001 § 1, 1989].

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Some land uses are generally regarded as being more sensitive to noise than others due to the type of population groups or activities involved. Sensitive population groups generally include children and the elderly. Noise sensitive land uses typically include all residential uses (single- and multi-family, mobile homes, dormitories, and similar uses), hospitals, nursing homes, schools, and parks.

Table 3: Typical Noise Levels for Common Construction Equipment (at 50 feet)

Equipment	L_{max} (dBA)
Air Compressor	81
Backhoe	80
Cement Mixer Truck	85
Cement Pump Truck	82
Chain Saw	85
Compactor	82
Crane	83
Concrete Saw	90
Dozer	85
Excavator	85
Dump Truck	84
Flat Bed Truck	84
Front End Loader	80
Fork Lift	75
Generator	81
Grader	85
Hoe-rams	90
jackhammers	88
Paver	85
Pick-up Truck	55
Pneumatic Tools	85
Rollers	74
Tree Chipper	87

Source: Federal Transit Authority, 2006.

The use of construction equipment to accomplish the proposed project would result in noise in the project area, i.e., construction zone. Table 3 shows typical noise levels for common construction equipment. The sources of noise that are normally measured at 50 feet, are used to determine the noise levels at nearby sensitive receptors by attenuating 6 dB for each doubling of distance for point sources of noise such as operating construction equipment.

Potential Temporary Construction Noise Impacts

Although construction activities would likely occur during daytime hours, noise may be audible to nearby residents. However, periods of noise exposure would be temporary. Noise from construction activity may vary substantially on a day-to-day basis.

Construction activity would be expected to use equipment listed in Table 3.

The County of Santa Cruz has not adopted significance thresholds for construction noise. However, ·Policy 6.9.7 of the General Plan requires mitigation of construction noise as a condition of future project approvals.

The following mitigation measures will be required to assist in the reduction of temporary construction noise impacts. With the implementation of those measures, no adverse noise impacts are expected occur during construction activities.

Mitigation Measures

NOI-1 Limit construction activity to between the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, 9:00 a.m. to 5:00 p.m. Saturday in order to avoid noise during more sensitive nighttime hours. Prohibit construction activity on Sundays.

NOI-2 Require that all construction and maintenance equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

maintained to minimize noise generation.

NOI-3 Prohibit gasoline or diesel engines from having un-muffled exhaust.

NOI-4 Use noise-reducing enclosures around stationary noise-generating equipment capable of 6 dB attenuation.

Other Potential Noise Impacts

Noise from recreational and other camp related activities, such as amplified entertainment and broadcast announcements to guests may have potential impacts on nearby sensitive residential receptors.

The following mitigation measures will be required to reduce potential disturbance from camp activities. With the implementation of those measures, no adverse noise impacts are expected occur during construction activities.

NOI-5 Prohibit all amplified entertainment and broadcast announcements to guests outside the hours of 7:00 a.m. to 10:00 p.m. daily to avoid disruptive noise during sensitive nighttime hours.

For mitigations regarding general potential noise impacts from the implementation of the Master Plan, see discussions under section M-3 below

2. *Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?*	☐	☐	☑	☐

Discussion: The use of construction equipment would potentially generate minor vibrations in the project area. However, foundation designs requiring pilings or other unusually loud construction methods is not anticipated. Due to the distance from construction sites, surrounding residences are not expected to experience significant ground borne vibration or ground borne noise levels during construction activities associated with the proposed project. Therefore, Impacts would be considered less than significant

3. *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*	☐	☑	☐	☐

Discussion: The current Use Permit for the Mission Springs Camp and Conference Center established weeklong and weekend events for adult and youth group since 1975. The project proposes to expand the existing permitted number of overnight guests from 500 to 704 guests. The scope of physical improvements within the master plan (improvements to existing buildings and development of new structures) does not include any noise generating features that will permanently increase ambient noise levels in the project vicinity. The increase in overnight guests from 500 to 704 will be spread between

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

conference center activities that will be largely indoors in the existing Conference Center Area and outside within the Frontier existing Frontier Ranch area. New activity areas are not proposed nor are existing activity area proposed to be expanded. The existing outdoor amplification speaker system used for program related announcements in the Frontier Ranch area will not be modified or expanded, nor will the frequency of announcements be increased as a result of this project. The nearest sensitive receptors to the Frontier Ranch area are located approximately 580' to the southeast of the Frontier Ranch area. See Attachment 18 for GIS mapped distances from Frontier Ranch too closest residences. These are residences leased from and are located along Freemy Circle. The closest other private residences are located 1955' to the northeast and 1400' to the north west.

This impact is considered to be less-than-significant given the existing baseline level of permitted camp and conference activities and the relatively marginal increase in intensity of these activities attributable to the increase in overnight visitors. Proposed mitigations that require monitoring of noise levels at the property boundaries and maintenance of noise levels consistent with County standards will ensure that operational related noise is less than significant.

Mitigation Measures

NOI-6 Prior to the Final of Building Permits for structures requiring authorization by the Master Plan a noise monitoring plan utilizing sound measuring instruments meeting the American National Standard Institute's Standard S1.4-1971 (or more recent revision thereof) for Type 1 or Type 2 sound level meters, or an instrument which provides equivalent data will be submitted to and approved by the County of Santa Cruz. This plan shall provide a means of monitoring the sound levels generated by camp activities at the property boundaries and to determine compliance with the General Plan Noise standards as indicated above.

NOI-7 A Neighborhood Liaison Team will be formed of designated Mission Springs staff members and will be available for receipt of and response to noise complaints during all hours of operation. If it is determined that noise exceeds the General Plan Standards, the source of the disturbance will be identified by the Noise Liaison Team, who shall ensure that the noise levels are reduced by such methods as turning down volumes, moving noise-generating activities indoors, informing crowds of the noise sensitivity or shutting down events; so that the noise levels or the specific noise generating activity will be terminated.

4. *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*	☐	☑	☐	☐

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Discussion: See discussion under M-1 and M-3 above. Implementation of the Master Plan may result in potential ongoing noise impacts from the increased number of guests; however, the impact would be less than significant impact with the proposed mitigations. In addition, noise generated during project construction would temporarily increase the ambient noise levels in adjacent areas. Construction would be temporary, however, and given the limited duration of the individual construction projects anticipated by this Master Plan, this impact is considered to be less than significant with the proposed mitigations.

Mitigation Measures

See Mitigations NOI 1- 7

5. *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 expose people residing or working in the project area to excessive noise levels?*	☐	☐	☐	☑

Discussion: The proposed project is not within two miles of a public airport. Therefore, the proposed project would not expose people residing or working in the project area. No impact is anticipated.

6. *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*	☐	☐	☐	☑

Discussion: The proposed project is not within two miles of a private airstrip. Therefore, the proposed project would not expose people residing or working in the project area. No impact is anticipated.

N. POPULATION AND HOUSING

Would the project:

1. *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*	☐	☐	☑	☐

Discussion: The proposed project would not induce substantial population growth because the project does not propose any physical or regulatory change that would remove a restriction to or encourage population growth in an area including, but not limited to the following: new or extended infrastructure or public facilities; new commercial or industrial

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

facilities; large-scale residential development; accelerated conversion of homes to commercial or multi-family use; or regulatory changes including General Plan amendments, specific plan amendments, zone reclassifications, sewer or water annexations; or LAFCO annexation actions. No impact would occur.

Additionally, the project does not involve extensions of utilities (e.g., water, sewer, or new road systems) into areas previously not served. Consequently, it is not expected to have a significant growth-inducing effect. Impacts would be less than significant.

2.	*Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*	☐	☐	☐	☑

Discussion: The proposed project would not displace any existing housing. No impact would occur.

3.	*Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*	☐	☐	☐	☑

Discussion: The proposed project would not displace a substantial number of people since the project scope is only intended to make improvements to current buildings and the construction of new buildings on the Mission Springs Camp site. Although some improvements and construction include overnight cabins, the use of Mission Springs is for week to weekend long stays, which will not displace any housing units. No impact would occur.

O. PUBLIC SERVICES

Would the project:

1.	*Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*				
	a. *Fire protection?*	☐	☐	☑	☐
	b. *Police protection?*	☐	☐	☐	☑
	c. *Schools?*	☐	☐	☐	☑

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d. Parks?	☐	☐	☐	☑
e. Other public facilities; including the maintenance of roads?	☐	☐	☑	☐

Discussion (a through e): While the project represents an incremental contribution to the need for services, the increase would be minimal. The improvements and new construction to the Mission Springs camp site will increase the permitted use from 500 to 704 maximum people allowed to stay overnight. This increase will add an incremental contribution to the need for certain services, however it is not considered to be substantial. Moreover, the future individual construction projects will meet all standards and requirements identified by the local fire agency or California Department of Forestry, as applicable. No increase in permanent housing is proposed so no impact on schools, parks are anticipated. In fact, significant educational activities directly associated with schools in the region are a major component of the Mission Springs program. Impacts would be considered less than significant.

P. RECREATION

Would the project:

1. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☑

Discussion: The proposed project will not increase the use of neighborhood or regional parks. The scope of the proposed project includes improvements that will enhance and positively alter the existing private recreational facilities in a way that will expand their life. Moreover, the improvements and new construction associated with this project will provide more recreational opportunities to more camp users. This project will not substantially increase the use of existing neighborhood and regional parks or other recreational facilities outside of the Mission Springs Camp site. No Impact is anticipated.

2. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☑	☐

Discussion: The proposed project includes improvements to existing recreational facilities and the construction of limited new facilities. These upgrades include, but are not limited to, improvements at an existing sports court, pool complex and amphitheater, and the construction of a small recreational building (fireside lounge), as well as the recognition of

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

an existing climbing tower. However, all expansions, improvements, and construction will be consistent with all applicable environmental regulations and will not have an adverse physical effect on the environment. The technical reports, including Biotic and Geologic, submitted herewith and updated reports that are required to be submitted in support of applications for Building Permits, will ensure that impacts associated with these recreational facilities will be less than significant with proposed mitigations.

Q. TRANSPORTATION/TRAFFIC

Would the project:

1. *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?*	☐	☐	☑	☐

Discussion: The project would create a small incremental increase in traffic on primarily Scotts Valley Drive, Mount Hermon Road, and Lockhart Gulch Road. A traffic study was conducted by Kimley-Horn in May of 2018 in order to estimate the increase in trip generation and distribution associated with the increase in permitted number of guests on the Mission Springs site from 500 to 704 guests. The traffic study report has been reviewed and approved by both the County of Sana Cruz and City of Scotts Valley Road Engineering sections. See Attachment 6 for a detailed traffic impact analysis. The proposed increase in permitted guests (204 additional guests) is anticipated to generate up to 39 net additional Friday PM peak hour trips and 58 net additional Sunday afternoon peak hour trips. These trips are equivalent to roughly 2 new vehicles every three minutes during the Friday PM peak hours and 1 new vehicle every minute Sunday afternoon peak hours. All other Mondays through Thursdays and Saturdays are anticipated to be significantly lower given the nature of operations and visitor arrivals and departures. It is not anticipated that the additional project traffic would degrade the existing conditions substantially and the additional project traffic will not result in significant impacts.

Traffic management strategies including carpooling, buses, minimal driving during peak hours, the nature of the use of the camp (students, teachers and staff staying on the site for multiple days) have in the past and will continue to provide reductions in traffic.

Further, the increase would not cause the Level of Service at any nearby intersection to drop below Level of Service D, consistent with General Plan Policy 3.12.1. Impacts are

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

considered to be less-than-significant.

2.	*Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?*	☐	☐	☐	☑

Discussion: In 2000, at the request of the Santa Cruz County Regional Transportation Commission (SCCRTC), the County of Santa Cruz and other local jurisdictions exercised the option to be exempt from preparation and implementation of a Congestion Management Plan (CMP) per Assembly Bill 2419. As a result, the County of Santa Cruz no longer has a Congestion Management Agency or CMP. The CMP statutes were initially established to create a tool for managing and reducing congestion; however, revisions to those statutes progressively eroded the effectiveness of the CMP. There is also duplication between the CMP and other transportation documents such as the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP). In addition, the goals of the CMP may be carried out through the Regional Transportation Improvement Program and the Regional Transportation Plan. Any functions of the CMP which are useful, desirable and do not already exist in other documents may be incorporated into those documents.

The proposed project would not conflict with either the goals and/or policies of the RTP or with monitoring the delivery of state and federally-funded projects outlined in the RTIP. No impact would occur.

3.	*Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*	☐	☐	☐	☑

Discussion: No change in air traffic patterns would result from project implementation. Therefore, no impact is anticipated.

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

Discussion: The project is served by Lockhart Gulch Road, a rural, County maintained road. Near to the first entrance bridge, identified as #4 on UP-4 (Attachment 2), there is a sharp curve on Lockhart Gulch road. The existing traffic occasionally crosses the median line on Lockhart Gulch Road where the said sharp curve is located. At times traffic appears to exceed the posted speed limit. Lockhart Gulch is a County maintained road. This is not a

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

design feature of the project but rather of the existing County Road. These are existing issues related to the design of the existing road and lack of enforcement of maximum travel speeds. These issues are not untypical of rural roads. There does not appear to be a history of recorded accidents on this section of the road, although local residents have indicated during neighborhood meetings that there have been "close calls".

The County Public Works Dept has been contacted by Mission Springs staff regarding this existing issue. Possible solutions include installing signs warning of a dangerous curve ahead and/or the need to reduce speed or the incorporation of armadillo ceramic street markers on the center line of the roadway to keep traffic within their designated lane. These or other appropriate measures shall be evaluated by County Public Works staff.

Due to the nature of the camp and conference center operations additional increases in vehicle traffic is not expected to be significant. Buses and carpooling are used extensively to reduce the number of vehicle trips. Given the extended weeklong stays associated with the science camp during winter months and summer activities at Frontier Ranch the number of vehicle trips is also limited to primarily two days per week on Friday and Sunday. The traffic memorandum prepared by Kimley-Horn dated July 31, 2018 indicates the proposed increase in guests will generate up to 39 net additional Friday PM peak hour trips and 58 net additional Sunday afternoon peak hour trips. See Attachment 6. These trips are equivalent to roughly 2 new vehicles every three minutes during the Friday PM peak hours and 1 new vehicle every minute Sunday afternoon peak hours. On Mondays through Thursdays and Saturday's traffic is anticipated to be significantly lower.

This relatively minor increase in traffic is not considered to substantially increase the hazard associated with this existing curve in Lockhart Gulch Rd and is considered a less than significant impact.

5. Result in inadequate emergency access?	☐	☐	☑	☐

Discussion: The project's road access meets County standards and has been approved by the local fire agency or California Department of Forestry, as appropriate. A temporary lane closure may be required for short periods of time during project construction. A traffic control plan would be prepared. However, the proposed project would not restrict emergency access for police, fire, or other emergency vehicles. The scope of the proposed project includes converting Tabernacle Drive into a pedestrian oriented area which would only be accessible to emergency vehicles. This will increase the adequacy of emergency access for Mission Springs as well as neighboring residential areas.

Mission Springs maintains a gated emergency access road that provides a connection between Nelson Road and Lockhart Gulch Road. This road has been used in past community wide emergency situations to provide access for both occupants of Mission

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Springs Camp and Conference Center and also surrounding area residents. Implementation of the Master Plan will not in any way decrease the level of emergency access.

There will be no impacts to emergency access from project implementation.

6. *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*	☐	☐	☐	☑

Discussion: The proposed project does not conflict with adopted policies, plans or programs regarding public transit, bicycle or pedestrian facilities or decrease the performance of such facilities. The project is located in the rural area and is not served by public transit. No impact would occur.

6. *Would the proposed project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1) (Vehicle Miles Traveled)?*	☐	☐	☑	☐

Discussion:

See discussion Q-1 though Q-5. A traffic study was conducted by Kimley-Horn on the weekend of May 4th, 2018, based on existing usage to estimate the future increase in travel demand to and from the site (Attachment 6). Due to the nature of the usage of the campsite, most of the trips to and from the site occur in carpools or buses, which result in lower traffic volumes on local roads. This traffic study found that the proposed increase in 204 additional guests is anticipated to generate up to 39 net additional Friday PM peak hour trips and 58 net additional Sunday afternoon peak hour trips. Due to the nature of the camp site, vehicle trips are not projected to increase drastically during week days because the camp site is mostly utilized during weekends and for week long stays during which cars are not used.

Traffic management strategies including carpooling, minimal driving during peak hours, the nature of the use of the camp (students, teachers and staff staying on the site for multiple days) will minimize the potential traffic from additional guests.

In response to the passage of Senate Bill 743 in 2013 and other climate change strategies, the Governor's Office of Planning and Research amended the CEQA Guidelines to replace LOS with VMT as the measurement for traffic impacts. New Section 15064.3 – Determining the Significance of Transportation Impacts was added to the Guidelines. Subsection (c) Applicability allows jurisdictions until July 1, 2020 to implement the VMT provisions. Santa Cruz County is currently evaluating methodologies for implementing a VMT methodology prior to that date. See discussion under question Q-1 for an evaluation of traffic impacts.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Impacts are considered to be less-than-significant.

R. TRIBAL CULTURAL RESOURCES

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

Discussion: The project proposes to make improvements to existing buildings, development of new structures and increasing the permitted use from 500 to 704 guests on the Mission Springs Conference Center and Campsite grounds. The area of the project is not within an area designated as an Archeological Sensitive Area according to the County of Santa Cruz Resource and Constraints maps or according to detailed historical and cultural reports detailed in prior sections. See Attachments 9, 10 and 11.

Furthermore Section 21080.3.1(b) of the California Public Resources Code (AB 52) requires a lead agency to formally notify a California Native American tribe that is traditionally and culturally affiliated within the geographic area of the discretionary project when formally requested. As of this writing, no California Native American tribes traditionally and culturally affiliated with the Santa Cruz County region have formally requested a consultation with the County of Santa Cruz (as Lead Agency under CEQA) regarding Tribal

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Cultural Resources. No Tribal Cultural Resources are known to occur in or near the project area. Therefore, no impact to the significance of a Tribal Cultural Resource is anticipated from project implementation.

John Schlagheck with Holman Assoc. contacted the Native American Heritage Commission (NAHC) in January of 2019. The NAHC conducted a Sacred File Search for the possibility of tribal cultural resources occurring within the Mission Springs area. The NAHC stated that the results were negative, no known tribal cultural resources are present within the mission springs area. See Attachment 10.

S. UTILITIES AND SERVICE SYSTEMS

Would the project:

1.	*Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*	☐	☐	☐	☑

Discussion: According to Fall Creek Engineering's analysis, the proposed project's wastewater flows would not violate any wastewater treatment standards. See Attachment 14. The current wastewater treatment system capacity is 36,300 gpd during peak months and 25,000 gpd in the off-season. The project maximum daily flow during peak months based on 704 guests is estimated to be 23,265 gpd, which is within the existing systems capacity. The disposal system is regulated by the RWQCB and is limited to 25,400 gpd. The projected average 30-day average flow from the increased number of guests is estimated to be 14,080 gpd during the peak season which is within the existing system's discharge limits. No impact would occur from project implementation.

2.	*Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*	☐	☐	☑	☐

Discussion:

The project would rely on an individual well for water supply which currently exists on the project site. Fall Creek Engineering conducted a capacity analysis for the current water and wastewater systems at Mission Springs Conference Center and Campsite in September 2017. See Attachment 14. This report concluded that the production rate of the existing water well exceeds the current and projected demand. Therefore, the water system will have the capacity to meet the increased demand from the increased number of guests.

The project would be served by an on-site sewage disposal system, which would be adequate to accommodate the increase demands as a result of the proposed project. The capacity of the existing onsite wastewater treatment system is 36,300 gpd during the peak

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

months and 25,00 pd in the off-season. The projected maximum daily flow during the peak months based on 704 guests is estimated to be 23,265 gpd, which is within the existing system's capacity. The disposal system is regulated by the RWQCB and is limited to 25,400 gpd based on a 30-day average. The projected 30-day average flow from the increased number of guests is estimated to be 14,080 gpd during the peak season which is within the existing system's discharge limits.

The existing water and waste systems have the capacity to provide the service needed for the increase in number of guests from 500 to 704. As a result, no new wells, septic tanks, leach fields, or waste-water disposal systems will need to be installed or current systems expanded. Impacts would be considered less than significant.

3. *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*	☐	☐	☑	☐

Discussion: Department of Public Works Drainage staff have reviewed the drainage information provided by Fall Creek Engineering with this Master Plan and have determined that downstream storm facilities are adequate to handle the anticipated increase in drainage associated with implementation of the Master Plan. See Attachment 17 for a preliminary storm water drainage feasibility assessment. Detailed drainage & erosion control plans will be submitted to, reviewed and approved by the County Planning/Building Department prior to the issuance of subsequent Design or Building Permits required for new buildings and improvements authorized by this Master Plan. These plans will incorporate Best Management Practices including bioswales, storm water detention, retention as appropriate to mitigate increases in runoff due to increases in impervious surfaces. Impacts will be less than significant.

4. *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*	☐	☐	☐	☑

Discussion: Based on the Fall Creek Engineering analysis, the Mission Springs site has sufficient water supplies available to serve the project during the construction phase as well as during the operational phase of the project. See Attachment 14. The Mission Springs water system is a private water system that serves the camp, conference center and the leasehold residential community of Mission Springs. The water system supplies the domestic, fire and irrigation demand on the property. The water system consists of two deep water well sources with four water storage tanks with a branched distribution system. The water system (No. 4400723) is regulated by the County of Santa Cruz under permit 3534.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

An analysis of the water and wastewater systems at Mission Springs was conducted by Fall Creek Engineering (FCE), in the Fall of 2016 and estimated the projected flows for the water system based on the estimated increase in maximum number of guests (from 500 to 704). They concluded that existing water supply wells at Mission Springs provide 80 gpm, or 115,200 gallons per day which is more than is required to meet current and future domestic and irrigation water demand for the proposed project.

The Mission Springs site currently has two wells that draw from a groundwater basin within the Santa Margarita aquifer. Fall Creek Engineering anticipates that the proposed increased use at Mission Springs will have little-to-no impact on the underlying aquifer.

The total water storage on site is 380,000 gallons in 6 water tanks located throughout the site. The water storage capacity in the existing system exceeds the requirements for fire suppression.

The development would also be subject to the water conservation requirements required at time of Building Permits. Therefore, existing water supplies would be sufficient to serve the proposed project, and no new entitlements or expanded entitlements would be required. No impact is anticipated.

5.	*Result in 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?*	☐	☐	☐	☑

Discussion: The onsite wastewater treatment is an enhanced, recirculating Acqualogic biological filtration system designed by Fall Creek Engineering and installed in 2014. Permits from the County Environmental Health Dept were issued. The current and projected daily flows are within the system's design capacity according to Fall Creek Engineering. See Attachment 14. The treated water is disposed in leachfields permitted by the RWQCB under Waste Discharge Requirements Order No. R3-2014-0023. The projected flow rate is significantly less than the limit set by the RWQCB Waste Discharge Order. See Attachment 14. No impact is anticipated

6.	*Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*	☐	☐	☐	☑

Discussion: Due to the small incremental increase in solid waste generation by the proposed project during construction and operations, potential impacts would not be significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
7. *Comply with federal, state, and local statutes and regulations related to solid waste?*	☐	☐	☐	☑

Discussion: The project would comply with all federal, state, and local statutes and regulations related to solid waste disposal. No impact would occur.

T. WILDFIRE

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

1 *Substantially impair an adopted emergency response plan or emergency evacuation plan?*	☐	☐	☑	☐

Discussion: See additional discussion is section I-7. The Northern section of proposed project site is located in a mapped fire hazard area based on resource maps and geographic information systems provided by the Santa Cruz County. See Attachment 15 for mapped fire hazard areas near Mission Springs Camp site. The *San Mateo – Santa Cruz Unit Strategic Fire Plan and the Community Wildfire Protection Plan* address areas with inadequate access and evacuation routes and identify risk to life and property from wildland fire and provide information on firefighter safety, community evacuation and recommended actions by first responders. The plans also address post-fire responsibilities for natural resource recovery, including watershed protection reforestation, and ecosystem restoration. In addition, the adopted a Local Hazard Mitigation Plan 2015-2020 (County of Santa Cruz, 2020), as required by State law. The project will be developed consistent with County development standards and will not conflict with any of these plans.

Furthermore, Mission Springs provides emergency access roads, helicopter landing locations, and water storage for fire and other emergencies both on site and in the surrounding area. The proposed improvements will not hinder or physically interfere with any of these emergency response provisions. Therefore, no impacts to an adopted emergency response plan or evacuation plan would occur from project implementation.

Mission Springs Conference Center and Camps has its own area emergency plans which are routinely updated.

Therefore, impacts will be less than significant.

2. *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?*	☐	☐	☑	☐

Discussion: See discussion in section I-8. Although the northern section of proposed

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

project site is located in a mapped Critical Fire Hazard area based on resource maps and geographic information systems provided by the Santa Cruz County (see Attachment 15), the future improvements proposed under the Mission Springs Master Plan are mostly located outside of this area. Nonetheless, the project design incorporates all applicable fire safety code requirements and includes fire protection devices as required by the local fire agency. Slope and prevailing winds are not considered to have a high level of risk or potential impact within the project are.

In addition, the project will be required to meet the General Plan policies related to fire resilience and access in the Santa Cruz County General Plan, and standards for defensible spaces in the PRC and SCCC. Direct or indirect impacts would be less than significant.

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

Discussion: See discussion in section I-8. Although the northern section of proposed project site is located in a mapped Critical Fire Hazard area based on resource maps and geographic information systems provided by the Santa Cruz County (see Attachment 15), the future improvements proposed under the Mission Springs Master Plan are mostly located outside of this area. Nonetheless, the project design incorporates all applicable fire safety code requirements and includes fire protection devices as required by the local fire agency. The future specific building designs will incorporate all applicable fire safety code requirements provided at the state level as well as by the National Fire Protection Association. All proposed new construction will be consistent with current Building and Fire Codes. Furthermore, Mission Springs provides emergency access roads, helicopter landing locations, and water storage for fire and other emergencies both on site and in the surrounding area. In addition, the project will be required to meet the General Plan policies related to fire resilience and access in the Santa Cruz County General Plan, and standards for defensible spaces in the PRC and SCCC. Direct or indirect impacts would be less than significant.

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

Discussion: Although the northern section of proposed project site is located in a mapped

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Critical Fire Hazard area the project design incorporates all applicable fire safety code requirements and includes fire protection devices as required by the local fire agency. See discussion in section I-7, 8 and the above sections throughout this report. No significant impacts are anticipated to occur.

U. MANDATORY FINDINGS OF SIGNIFICANCE

1. *Does the project 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, reduce the number or restrict the range of a rare or endangered plant or animal community, 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?*	☐	☑	☐	☐

Discussion: 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, 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 were considered in the response to each question in Section III (A through T) of this Initial Study. Resources that have could potentially be impacted by the project include nesting birds, dusky-footed woodrat, riparian woodlands and other native trees, as well as from potential slope instability, erosion and storm-water runoff. However, mitigations have been included that clearly reduces these impacts to a less than significant level. This mitigation includes pre, during and post construction measures as well as mitigations during the operational phase of the project. As a result of this evaluation, there is no substantial evidence that, after mitigation, significant effects associated with this project would result. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

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

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Discussion: In addition to project specific impacts, this evaluation considered the projects potential for incremental effects that are cumulatively considerable. As a result of this evaluation, there were determined to be potentially significant cumulative effects related to earthquake, landslides, liquefaction and other geological hazards. However, mitigation has been included that clearly reduces these cumulative effects to a level below significance. This mitigation includes measures to conduct further geotechnical studies to enhance understanding of these potential hazards as well as to reduce these impacts to a less than significant level. As a result of this evaluation, there is no substantial evidence that there are cumulative effects associated with this project. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

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

Discussion: In the evaluation of environmental impacts in this Initial Study, the potential for adverse direct or indirect impacts to human beings were considered in the response to specific questions in Section III (A through T). As a result of this evaluation, there were determined to be potentially significant effects to human beings related to the following: air quality, seismic round shaking, potential slope instability, erosion, storm-water runoff, flooding, noise and traffic. However, mitigation has been included that clearly reduces these effects to a level below significance. As a result of this evaluation, there is no substantial evidence that, after mitigation, there are adverse effects to human beings associated with this project. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

IV. REFERENCES USED IN THE COMPLETION OF THIS INITIAL STUDY

California Department of Conservation. 1980

Farmland Mapping and Monitoring Program Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance Santa Cruz County U.S. Department of Agriculture, Natural Resources Conservation Service, soil surveys for Santa Cruz County, California, August 1980.

County of Santa Cruz, 2013

County of Santa Cruz Climate Action Strategy. Approved by the Board of Supervisors on February 26, 2013.

County of Santa Cruz, 2015

County of Santa Cruz Local Hazard Mitigation Plan 2015-2020. Prepared by the County of Santa Cruz Office of Emergency Services.

County of Santa Cruz, 1994

1994 General Plan and Local Coastal Program for the County of Santa Cruz, California. Adopted by the Board of Supervisors on May 24, 1994 and certified by the California Coastal Commission on December 15, 1994.

MBUAPCD, 2008

Monterey Bay Unified Air Pollution Control District (MBUAPCD), CEQA Air Quality Guidelines. Prepared by the MBUAPCD, Adopted October 1995, Revised: February 1997, August 1998, December 1999, September 2000, September 2002, June 2004 and February 2008.

MBUAPCD, 2013a

Monterey Bay Unified Air Pollution Control District, NCCAB (NCCAB) Area Designations and Attainment Status – January 2013. Available online at http://www.mbuapcd.org/mbuapcd/pdf/Planning/Attainment_Status_January_2013_2.pdf

MBUAPCD, 2013b

Triennial Plan Revision 2009-2011. Monterey Bay Air Pollution Control District. Adopted April 17, 2013.

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Attachment List

1. Mitigation Monitoring and Reporting Program
2. WMB Architects, Preliminary Architectural Plans & Fall Creek Engineering Civil Plans, December 2017
3. Mission Springs, Guest Occupancy Capacity Increase, November 2017
4. Mission Springs, Proposed Parcels to Include in Amended Use Permit, January 2018
5. Mission Springs, Master Plan Proposed Phasing, November 2017
6. Kimley-Horn, Traffic Memorandum, July 2018
7. Fall Creek Engineering, Preliminary Grading Volumes, November 2017
8. Biotic Resources Group, Biotic Report, July 2019, and Conditioned Biotic Approval letter, September 2019.
9. Interactive Resources Group, Historic Resource Evaluation, September 2016
10. Holman & Associates, Archeological Evaluation, July 2016
11. TreanorHL, Historic Resources Evaluation, December 2018
12. Santa Cruz County GIS, Mapped Archeological Resources, January 2019
13. Zinn Geology, Preliminary Geological Feasibility Report, December 2016
14. Fall Creek Engineering, Revised Capacity Analysis for the Water and Waste Water Systems for 704 Use Permit Amendment, September 2017
15. Santa Cruz County GIS, Mapped Fire Hazard Areas, January 2019
16. Fall Creek Engineering, Groundwater Basin Review, September 2017
17. Pacific Crest Engineering Inc, Preliminary Storm-Water Drainage Feasibility Assessment, May 2015
18. Santa Cruz County GIS, Distance From Frontier Ranch to Surrounding Residences, February 2019

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Attachment 1

Mitigation Monitoring and Reporting Program

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County of Santa Cruz

PLANNING DEPARTMENT
701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123
KATHLEEN MOLLOY PREVISICH, PLANNING DIRECTOR

MITIGATION MONITORING AND REPORTING PROGRAM for Mission Springs Camp and Conference Center, Master Plan Amendment Application No. 151255

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
AESTHETICS AND VISUAL RESOURCES					
AVR-1	*Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*	Lighting shall be directed downwards and shielded to prevent dispersal of light. No light shall spill onto neighboring properties resulting from backlight, up-light or glare.	Applicant	Compliance monitored by the County Planning Department and Applicant	To be implemented during project construction
AVR-2	*Produce nighttime lighting that would substantially illuminate wildlife habitats?*	All lights shall comply with International Dark Sky Association standards for Zones 0 and 1.	Applicant	Compliance monitored by the County Planning Department and Applicant	To be implemented during project construction
BIOLOGICAL RESOURCES					
BIO-1	*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?*	Dusky-footed Woodrat. Within 30 days prior to project construction, a qualified biologist shall inspect the action area and adjacent areas within 50 feet for wood-rat houses. An exclusion zone shall be erected around any wood-rat houses occurring within 50 feet of the project site area, using flagging or a temporary fence that does not inhibit the natural movements of wildlife. Efforts will be made to avoid impacting wood-rat houses, even, if avoidance is by only a few feet. If woodrat houses cannot be avoided, CDFW shall be contacted for approval to relocate individuals by live trapping and building a nearby artificial structure as a release site. Approval to relocate must be acquired from CDFW. If woodrats are found in a structure to be removed, an alternative approach to live-trapping may be recommended due to safety concerns regarding rodents occupying enclosed spaces.	Applicant	Compliance monitored by the County Planning Department and Applicant	To be implemented within 30-days prior to start of construction with continued ongoing monitoring during construction
BIO-2		Nesting Birds. Nesting migratory birds, including raptors, are protected under the Migratory Bird Treaty Act. Under the MBTA, nests that contain eggs or unfledged young are not to be disturbed during the breeding season. The nesting season for migratory birds and birds of prey is generally 1 February through 31 August. Implementation of the following measures will avoid potential impacts. • If construction begins outside the 1 February to 31 August breeding season, there will be no need to conduct a preconstruction survey for active nests.	Applicant	Compliance monitored by the County Planning Department and Applicant	To be implemented prior to and during project construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		• If construction is scheduled to begin between February 1 and August 31, then a qualified biologist shall conduct a preconstruction survey for active nests. The survey will include a 250-foot radius from the work area for nesting birds of prey and a 50-foot radius from the work area for other nesting MBTA protected birds. The survey will be conducted from publicly accessible areas within one two weeks prior to construction. If no active nest of a bird of prey or MBTA bird is found, then no further mitigation measures are necessary. • If an active nest of a bird of prey or MBTA bird is found, then the biologist shall determine a buffer suitable to protect the nest until fledging. The size of suitable buffers would depend on the species of bird, the location of the nest relative to the Project, Project activities during the time the nest is active, and other Project specific conditions. • No construction activity shall be allowed in the buffer until the biologist determines that the nest is no longer active, or unless monitoring determines that a smaller buffer will protect the active nest. The buffer may be reduced if the biologist monitors the construction activities and determines that no disturbance to the active nest is occurring. • If an active nest is identified in or adjacent to the construction zone after construction has started, the above measures will be implemented to ensure construction is not causing disturbance to the nest.			
BIO-3	*Have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations (e.g., wetland, native grassland, special forests, intertidal zone, etc.) or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*	Riparian Woodland. Riparian woodland can be avoided during construction. The removal of riparian woodland and native trees will be minimized with the following environmental commitments: • Prior to construction, the Project Applicant and the Project Biologist will identify the limits of construction in order to maximize native tree and shrub retention. Temporary fencing will be placed along the limits of construction to avoid unnecessary disturbance to riparian woodland. • Where possible, native vegetation that cannot be avoided will be cut at ground level rather than removed by the roots to allow for regeneration.	Applicant and Project Biologist	Compliance monitored by the County Planning Department, Applicant and Project Biologist	To be implemented prior to and during project construction
BIO-4		Riparian Woodland. The Project shall restore disturbed riparian woodland with native riparian vegetation. Re-vegetation shall follow the professional and local requirements. In addition, native species contained in the re-vegetation planting and erosion control specifications shall be used in erosion control efforts.	Applicant and Project Biologist	Compliance monitored by the County Planning Department, Applicant and Project Biologist	To be implemented after project construction
BIO-5		Native Trees. An arborist shall evaluate tree removal and identify mitigation	Applicant and	Compliance	To be implemented

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		measures to protect trees that are adjacent to construction but are to be retained. Measures to protect trees to be retained shall be implemented prior to and during construction. These measures may include protective fencing, limbing techniques, root pruning techniques, or other actions as directed or implemented by the arborist.	Project Arborist	monitored by the County Planning Department, Applicant and Project Arborist	prior to and during project construction
BIO-6		Potential Native Grasslands: If improvements of structures or new activities are proposed within areas mapped as grassland on APNs 070-011-16 and 35, prior to any site disturbance additional spring-season surveys shall be carried out to validate the location and species composition of these grasslands. If this survey documents areas meeting the definition of native grassland under County Code, the impacts to this resource shall be avoided or minimized. If impacts are incurred, compensatory mitigation shall be implemented, such as restoration. If the areas are deemed to be annual grassland, no additional actions are recommended.	Applicant and Project Biologist	Compliance monitored by the County Planning Department, Applicant and Project Biologist	To be implemented prior to any proposed site disturbance
BIO-7	*Conflict with any local policies or ordinances protecting biological resources (such as the Sensitive Habitat Ordinance, Riparian and Wetland Protection Ordinance, and the Significant Tree Protection Ordinance)?*	Degraded Sensitive habitat. Degraded sensitive habitat areas shall be enhanced through the removal/control of invasive, invasive plants. The occurrences documented during the baseline study are depicted on Figure 19 of the Biotic Report (Attachment 8). These occurrences are considered a significant threat to the sensitive resource and shall be removed/controlled. Priorities for action are: • In oak woodland: o Hand pull French broom prior to plants setting seed; for shrubs too large to hand pull cut stems of plants flush with ground (March through May). o Monitor French broom seedlings/re-growth in winter/spring; hand pull seedlings or re-cut larger shrubs (January – April). Will require repeated sessions to eradicate. • In riparian woodland: o Hand pull French broom prior to plants setting seed; for shrubs too large to hand pull cut stems of plants flush to the ground (March through May). o Monitor French broom seedlings/re-growth in winter/spring; hand pull seedlings or re-cut larger shrubs (January – April). Will require repeated sessions to eradicate. o Cut and remove acacia (January – December). Hand pull seedlings; may require repeated sessions to eradicate. o Remove English ivy from trunks of trees. Cut stems and leave minimum of 12-inch gap in stem growth; pull ivy away from trunk of tree. Allow ivy in tree top to die. (January – December). Monitor stem re-growth on trunk and repeat as needed. o Remove English ivy from ground surface. Hand-pull and use hand tool to remove roots (May to July). Will require repeated sessions to eradicate.	Applicant and Project Biologist	Compliance monitored by the County Planning Department, Applicant and Project Biologist	To be implemented on an ongoing basis during and after project construction.

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
		○ Remove periwinkle from ground surface. Hand-pull and use hand tool to remove roots (March to July). Will require repeated sessions to eradicate.			
CULTURAL RESOURCES					
CULT-1	*Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?*	Prior to issuance of a Building Permit for the Seasonal Staff Housing at Spring Creek, a professional qualified in Architectural History or Historic Architecture shall review the design for compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. The evaluation of the designs shall be submitted to the Historic Resources Planner at the County of Santa Cruz for review and approval.	Applicant	Compliance monitored by the County Planning Department and Applicant	To be implemented prior to issuance of Building Permit(s)
GEOLOGY AND SOILS					
GEO-1	*Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:* • *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.* • *Strong seismic ground shaking?* • *Seismic-related ground failure, including liquefaction?* • *Landslides?* *Be located on a geologic unit or soil that is unstable, or that would become*	During design-level studies, the project geotechnical engineer and project structural engineer shall provide seismic design for the project consistent with the most current version of the California Building code. If other conservative design guidelines are determined to be applicable to the project, those guidelines shall be followed. This mitigation measure would reduce the impact due to seismic ground shaking at all of the project sites to a less than significant level.	Applicant	Compliance monitored by the County Planning Department	To be implemented during review of subsequent application(s) for Development Permit approval/ prior to issuance of Building Permits
GEO-2		During the design study process, the project geotechnical engineer shall adequately characterize the risks related to liquefaction and provide appropriate mitigation recommendations were warranted in conjunction with the project structural engineer. Implementation of adequate engineering characterization and design shall mitigate the risk to a less-than-significant impact.	Applicant	Compliance monitored by the County Planning Department	To be implemented during review of subsequent application(s) for Development Permit approval/ prior to issuance of Building Permits
GEO-3		During the design process for Buildings W3, W5, C10, C12 and S3, the risks related to shallow land sliding shall be adequately characterized and mitigation recommendations issued via joint investigations by a geotechnical engineer and qualified geologist. See Attachment 2 for preliminary architectural and civil engineering plans. The joint investigations shall consider the following: The thickness of colluviums on the slopes above the site, drainage patterns on the slope above the site that might trigger debris flows, the size and terminal velocity of debris flows that might strike the buildings. They shall also consider mitigation schemes such as relocating structures, constructing impact structures that will stop and capture the debris flow deposits, or constructing deflection structures that will guide the debris flow deposits away from	Applicant	Compliance monitored by the County Planning Department	To be implemented during review of subsequent application(s) for Development Permit approval/ prior to issuance of Building Permits

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
	unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	structures. Implementation of adequate geology and engineering characterization and design shall mitigate the risk to a less-than-significant impact.			
HYDROLOGY, WATER SUPPLY AND WATER QUALITY					
HWQ-1	*Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*	A hydraulic analysis and appropriate engineering recommendations, if necessary, shall be developed prior to the design phase. Relocate the building or elevate the habitable floor of Building S3 as established by a hydrologic study. This would lower the potential impact to less than significant.	Applicant	Compliance monitored by the County Planning Department	To be implemented during review of subsequent s application(s) for Development Permit approval/ prior to issuance of Building Permits
HWQ-2		During the design phase for Building S3, the septic system shall be evaluated with respect to the hydrology conditions at the site. If warranted, the system shall be upgraded to lower the likelihood of impairment, as well as to bring it into conformance with applicable current codes and ordinances.	Applicant	Compliance monitored by the County Planning Department	To be implemented during review subsequent application(s) for Development Permit approval/ prior to issuance of Building Permits
HWQ-3		During the design phase for Building S3, the septic system may need to be rerouted and redesigned to allow for tie-in to the existing septic system for the conference center area on the other side of Lockhart Gulch. Implementation of this mitigation measure will lower the impact to less than significant.	Applicant	Compliance monitored by the County Planning Department	To be implemented during review of subsequent application(s) for Development Permit approval/ prior to issuance of Building Permits
NOISE					
NOI-3	*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*	Limit construction activity to between the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, 9:00 a.m. to 5:00 p.m. Saturday in order to avoid noise during more sensitive nighttime hours. Prohibit construction activity on Sundays.	Applicant	Compliance monitored by the County Planning Department and Applicant	To be implemented during construction
NOI-2		Require that all construction and maintenance equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be	Applicant	Compliance monitored by the County Planning	To be implemented during construction

No.	Environmental Impact	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
	ordinance, or applicable standards of other agencies?	operated and maintained to minimize noise generation.		Department and Applicant	
NOI-3		Prohibit gasoline or diesel engines from having un-muffled exhaust.	Applicant	Compliance monitored by the County Planning Department and Applicant	To be implemented during construction
NOI-4		Use noise-reducing enclosures around stationary noise-generating equipment capable of 6 dB attenuation.	Applicant	Compliance monitored by the County Planning Department and Applicant	To be implemented during construction
NOI-5		Prohibit all amplified entertainment and broadcast announcements to guests outside the hours of 7:00 a.m. to 10:00 p.m. daily to avoid disruptive noise during sensitive nighttime hours.	Applicant	Compliance monitored by the County Planning Department and Applicant	To be implemented on an ongoing basis
NOI-6	*A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?* *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*	Prior to the Final of Building Permits for structures requiring authorization by the Master Plan a noise monitoring plan utilizing sound measuring instruments meeting the American National Standard Institute's Standard S1.4-1971 (or more recent revision thereof) for Type 1 or Type 2 sound level meters, or an instrument which provides equivalent data will be submitted to and approved by the County of Santa Cruz. This plan shall provide a means of monitoring the sound levels generated by camp activities at the property boundaries and to determine compliance with the General Plan Noise standards as indicated above.	Applicant	Compliance monitored by the County Planning Department	To be implemented prior to the Final of Building Permits for structures requiring authorization by the Master Plan
NOI-7		A Neighborhood Liaison Team will be formed of designated Mission Springs staff members and will be available for receipt of and response to noise complaints during all hours of operation. If it is determined that noise exceeds the General Plan Standards, the source of the disturbance will be identified by the Noise Liaison Team, who shall ensure that the noise levels are reduced by such methods as turning down volumes, moving noise-generating activities indoors, informing crowds of the noise sensitivity or shutting down events; so that the noise levels or the specific noise generating activity will be terminated.	Applicant	Compliance monitored by the County Planning Department and Applicant	To be implemented on an ongoing basis

Attachment 2

WMB Architects, Preliminary Architectural Plans & Fall Creek Engineering Civil Plans, December 2017

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Mission Springs Camps & Conference Center Use Permit Amendment

LIST OF SHEETS

LIST OF CONSULTANTS

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JOHN SWIFT

OWNER INFORMATION

OWNER

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1050 LOCKHART GULCH ROAD
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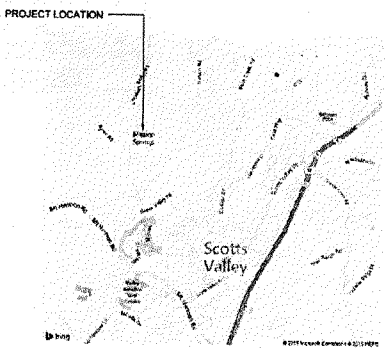
(831) 335-9133
CHUCK WYSONG, EXECUTIVE DIRECTOR

VICINITY MAP



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TITLE SHEET

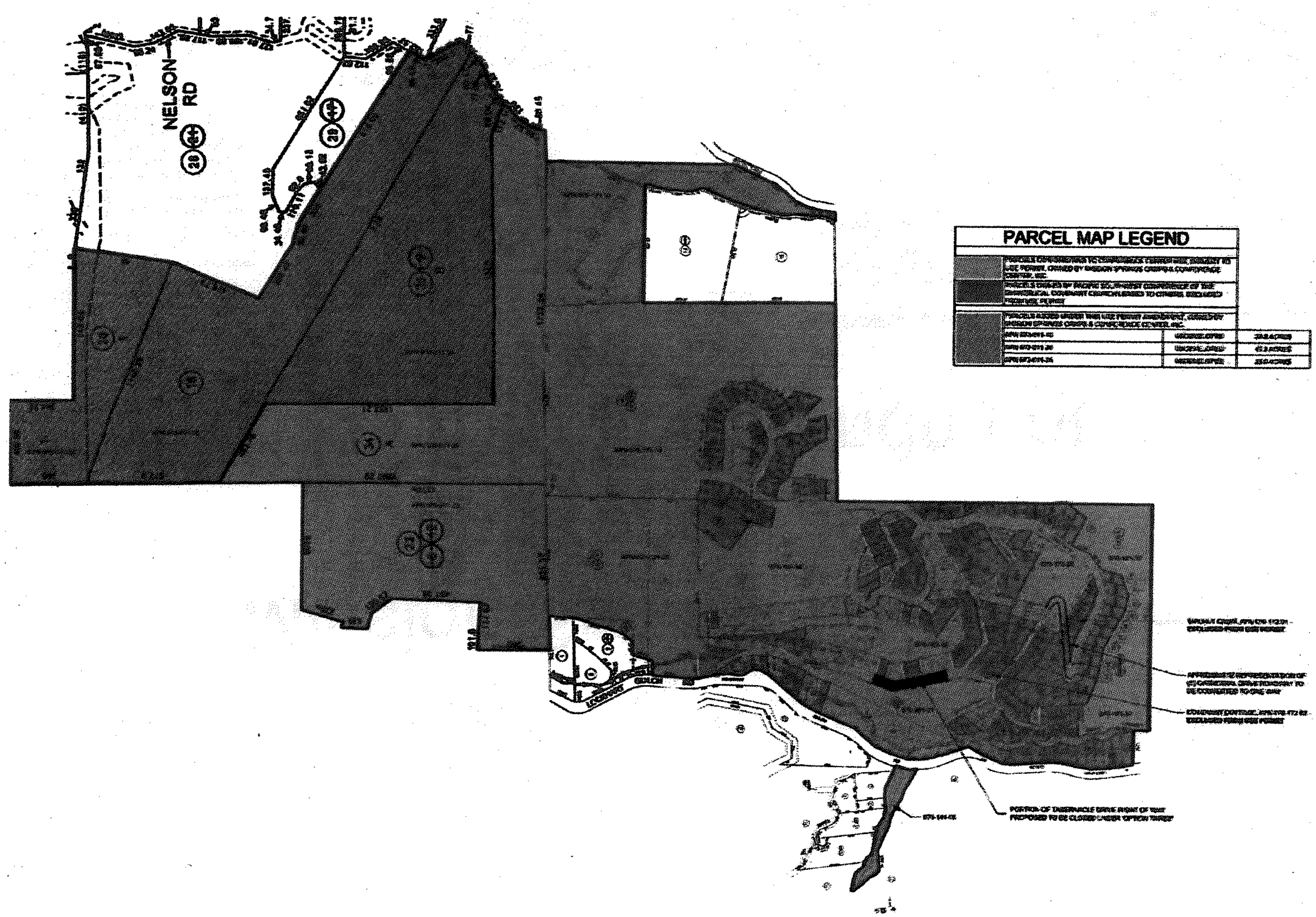
09/01/15 | USE PERMIT

PUBLISH HISTORY

△	DATE	REVISION/ SET
1	01/05/16	USE PERMIT REV
2	02/03/16	OWNER REVISION
3	12/04/17	USE PERMIT REV 2

WMB PROJECT: 14-150

UP-1



PARCEL MAP

SCALE: N.T.S.

WMB ARCHITECTS

5757 Pacific Avenue
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Stockton, CA 95207

2090 L Street
Suite 125
Sacramento, CA 95811

209.944.9110 T
209.944.5711 F

MISSION SPRINGS CAMPS AND CONFERENCE CENTER

PARCEL MAP

09/01/15 | USE PERMIT

PUBLISH HISTORY

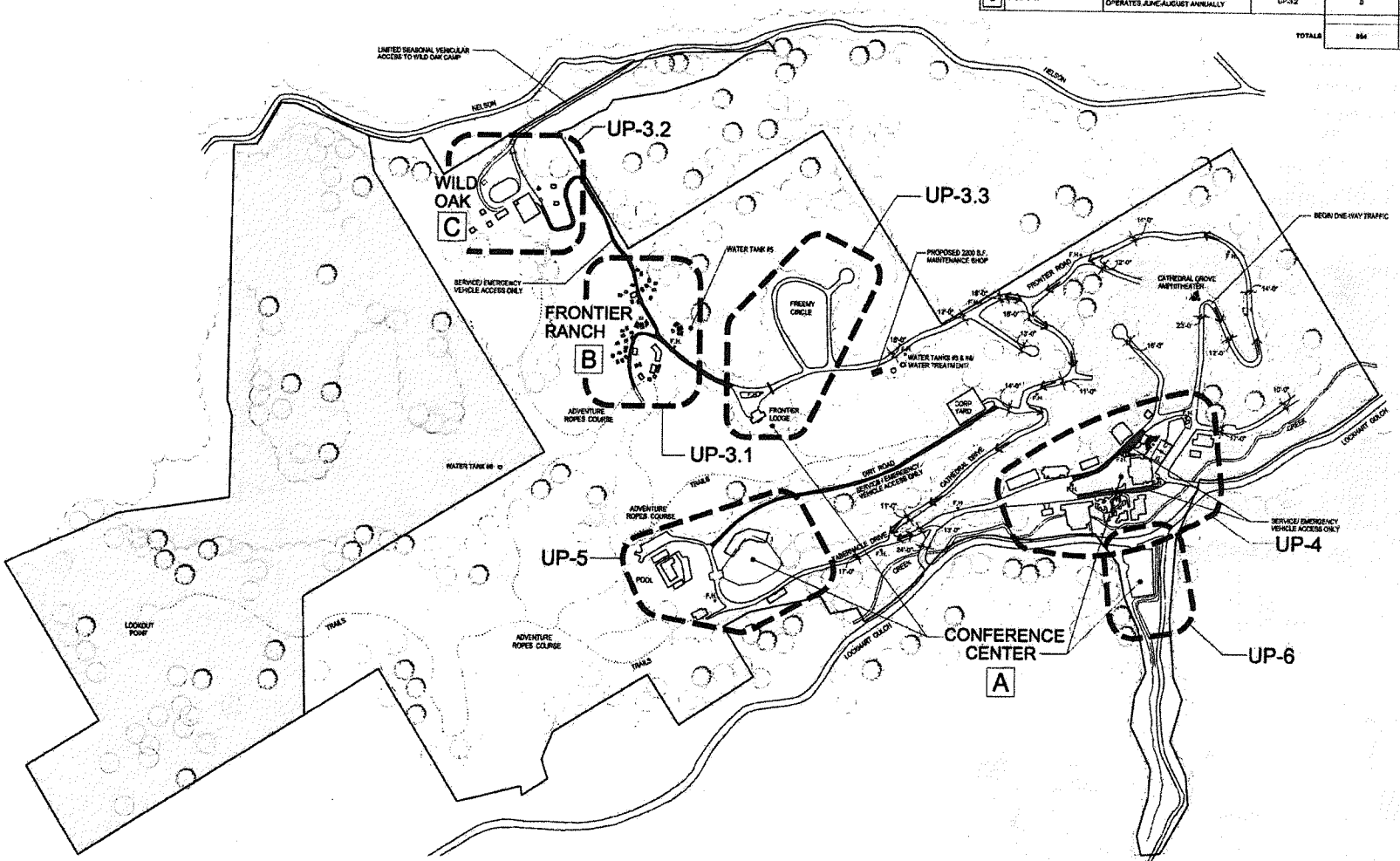
△	DATE	REVISION SET
1	[illegible]	USE PERMIT [illegible]
2	[illegible]	OWNER REVISION
3	[illegible]	USE PERMIT REV 2

WMB PROJECT:
14-150

UP-2

CAMPUS MAP LEGEND

ID	AREA DESIGNATION	USE	SHEET REFERENCE	SEPT - MAY OVERNIGHT GUESTS	JUNE - AUGUST OVERNIGHT GUESTS INCLUDES SEASONAL STAFF	PARKING
A	CONFERENCE CENTER	REFER TO ENLARGED PLANS REFERENCED BELOW	UP-4, UP-5, UP-6	366	366	151 PAVED
		FRONTIER LODGE USED FOR CONFERENCE CENTER LODGING SEPT-MAY ONLY	UP-3.3	28	0	
B	FRONTIER RANCH	YOUTH CAMP OPERATES JUNE-AUGUST ANNUALLY	UP-3.1, UP-3.3	0	208	38 PAVED 149 UNIMPROVED (SEE UP-3.3 FOR FRONTIER RANCH PARKING)
C	WILD OAK	YOUTH CAMP OPERATES JUNE-AUGUST ANNUALLY	UP-3.2	0	40	27 UNIMPROVED
			TOTALS	394	794	372



MISSION SPRINGS - OVERALL CAMPUS MAP

SCALE : 1" = 200'-0" FH = EXISTING FIRE HYDRANT

REFER TO SHEET UP-2 FOR PARCEL BOUNDARIES

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CAMPUS MAP

LICENSED ARCHITECT DOUGLAS K. SMITH NO. C 28534 REN. 7-31-19 STATE OF CALIFORNIA

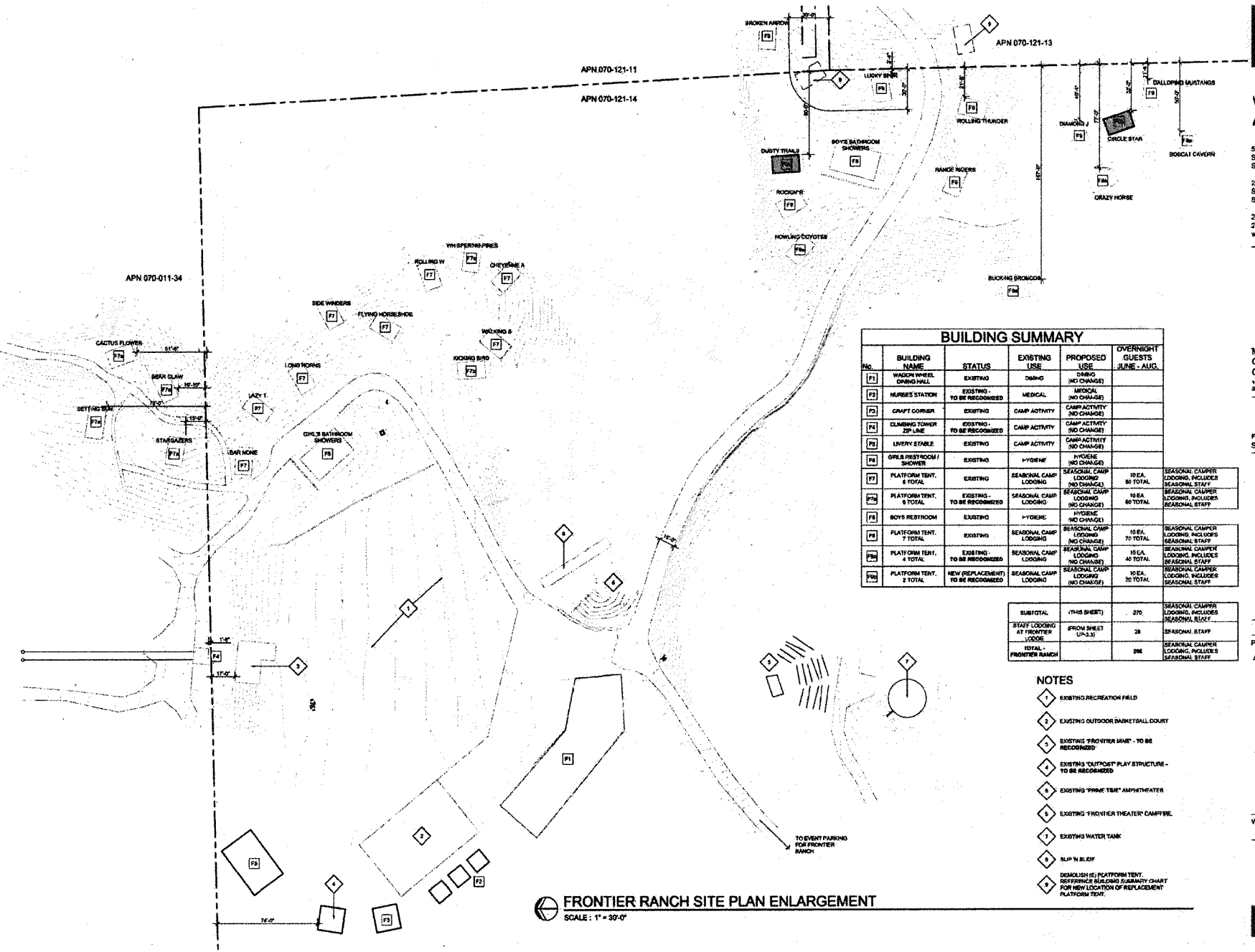
09/01/15	USE PERMIT

PUBLISH HISTORY

△	DATE	REVISION/ SET
1	01/05/16	USE PERMIT REV
2	02/03/16	OWNER REVISION
3	12/04/17	USE PERMIT REV 2

WMB PROJECT: 14-150

UP-3



FRONTIER RANCH SITE PLAN ENLARGEMENT

SCALE : 1" = 30'-0"

BUILDING SUMMARY

No.	BUILDING NAME	STATUS	EXISTING USE	PROPOSED USE	OVERNIGHT GUESTS JUNE - AUG.	
F1	WAGON WHEEL DINING HALL	EXISTING	DINING	DINING (NO CHANGE)		
F2	NURSES STATION	EXISTING - TO BE RECOGNIZED	MEDICAL	MEDICAL (NO CHANGE)		
F3	CRAFT CORNER	EXISTING	CAMP ACTIVITY	CAMP ACTIVITY (NO CHANGE)		
F4	CLIMBING TOWER ZIP LINE	EXISTING - TO BE RECOGNIZED	CAMP ACTIVITY	CAMP ACTIVITY (NO CHANGE)		
F5	LIVERY STABLE	EXISTING	CAMP ACTIVITY	CAMP ACTIVITY (NO CHANGE)		
F6	GIRLS RESTROOM / SHOWER	EXISTING	HYGIENE	HYGIENE (NO CHANGE)		
F7	PLATFORM TENT, 6 TOTAL	EXISTING	SEABONAL CAMP LODGING	SEASONAL CAMP LODGING (NO CHANGE)	10 EA. 60 TOTAL	SEASONAL CAMPER LODGING, INCLUDES SEASONAL STAFF
F7a	PLATFORM TENT, 6 TOTAL	EXISTING - TO BE RECOGNIZED	SEASONAL CAMP LODGING	SEASONAL CAMP LODGING (NO CHANGE)	10 EA. 60 TOTAL	SEASONAL CAMPER LODGING, INCLUDES SEASONAL STAFF
F8	BOYS RESTROOM	EXISTING	HYGIENE	HYGIENE (NO CHANGE)		
F9	PLATFORM TENT, 7 TOTAL	EXISTING	SEASONAL CAMP LODGING	SEASONAL CAMP LODGING (NO CHANGE)	10 EA. 70 TOTAL	SEASONAL CAMPER LODGING, INCLUDES SEASONAL STAFF
F9a	PLATFORM TENT, 4 TOTAL	EXISTING - TO BE RECOGNIZED	SEASONAL CAMP LODGING	SEASONAL CAMP LODGING (NO CHANGE)	10 EA. 40 TOTAL	SEASONAL CAMPER LODGING, INCLUDES SEASONAL STAFF
F9b	PLATFORM TENT, 2 TOTAL	NEW (REPLACEMENT) TO BE RECOGNIZED	SEASONAL CAMP LODGING	SEASONAL CAMP LODGING (NO CHANGE)	10 EA. 20 TOTAL	SEASONAL CAMPER LODGING, INCLUDES SEASONAL STAFF
	SUBTOTAL			(THIS SHEET)	270	SEASONAL CAMPER LODGING, INCLUDES SEASONAL STAFF
	STAFF LODGING AT FRONTIER LODGE			(FROM SHEET UP-3.3)	28	SEASONAL STAFF
	TOTAL - FRONTIER RANCH				298	SEASONAL CAMPER LODGING, INCLUDES SEASONAL STAFF

NOTES

1. EXISTING RECREATION FIELD
2. EXISTING OUTDOOR BASKETBALL COURT
3. EXISTING "FRONTIER MINE" - TO BE RECOGNIZED
4. EXISTING "OUTPOST" PLAY STRUCTURE - TO BE RECOGNIZED
5. EXISTING "PRIME TIME" AMPHITHEATER
6. EXISTING "FRONTIER THEATER" CAMPFIRE
7. EXISTING WATER TANK
8. SLIP 'N SLIDE
9. DEMOLISH (E) PLATFORM TENT. REFERENCE BUILDING SUMMARY CHART FOR NEW LOCATION OF REPLACEMENT PLATFORM TENT.

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FRONTIER RANCH
SITE PLAN ENLARGEMENT

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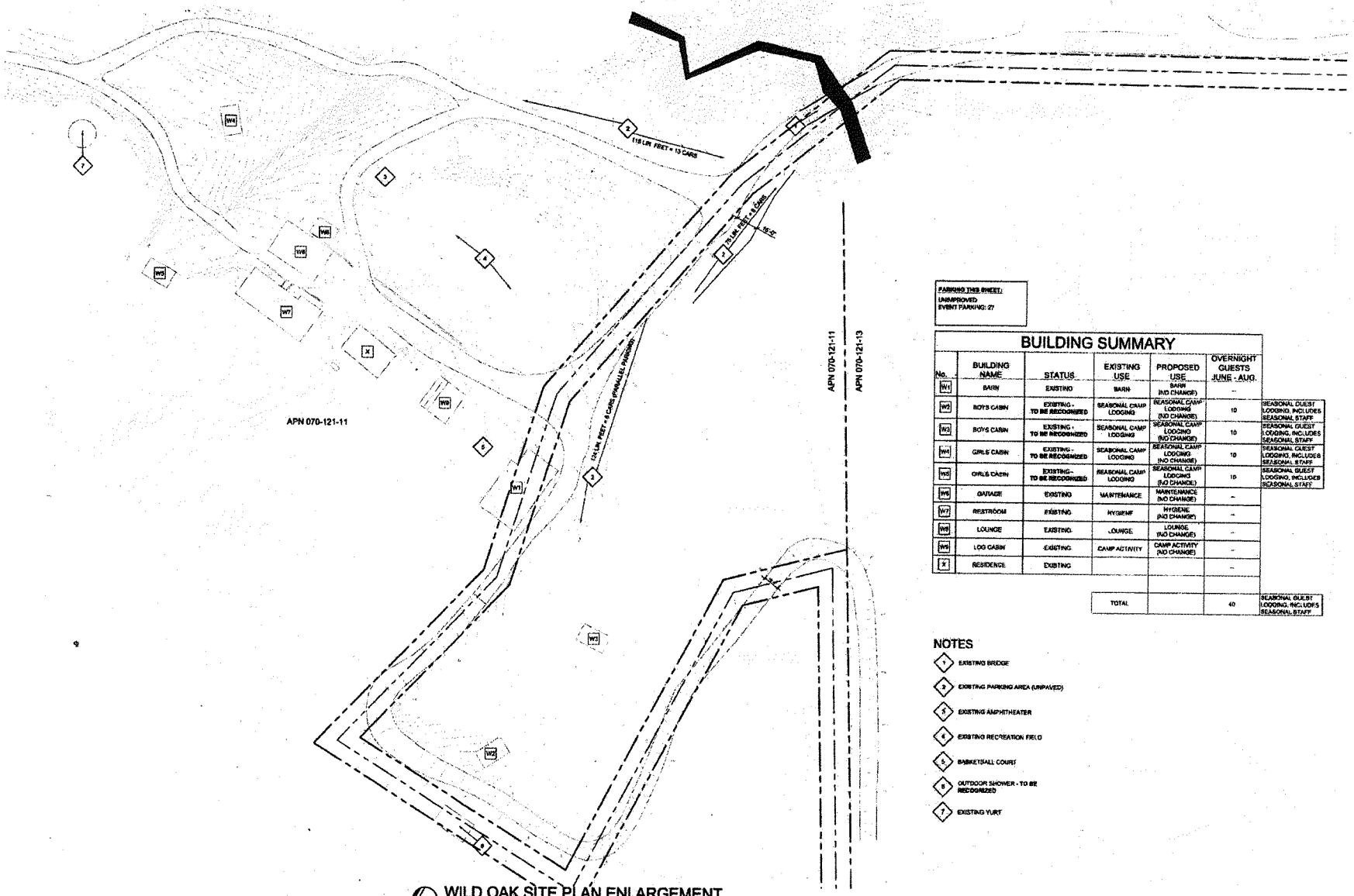
UP-3.1



PARKING THIS SHEET:
UNIMPROVED
EVENT PARKING: 27

BUILDING SUMMARY

No.	BUILDING NAME	STATUS	EXISTING USE	PROPOSED USE	OVERNIGHT GUESTS JUNE - AUG.	
W1	BARN	EXISTING	BARN	BARN (NO CHANGE)	–	
W2	BOYS CABIN	EXISTING - TO BE RECOGNIZED	SEASONAL CAMP LODGING	SEASONAL CAMP LODGING (NO CHANGE)	10	SEASONAL GUEST LODGING, INCLUDES SEASONAL STAFF
W3	BOYS CABIN	EXISTING - TO BE RECOGNIZED	SEASONAL CAMP LODGING	SEASONAL CAMP LODGING (NO CHANGE)	10	SEASONAL GUEST LODGING, INCLUDES SEASONAL STAFF
W4	GIRLS CABIN	EXISTING - TO BE RECOGNIZED	SEASONAL CAMP LODGING	SEASONAL CAMP LODGING (NO CHANGE)	10	SEASONAL GUEST LODGING, INCLUDES SEASONAL STAFF
W5	GIRLS CABIN	EXISTING - TO BE RECOGNIZED	SEASONAL CAMP LODGING	SEASONAL CAMP LODGING (NO CHANGE)	10	SEASONAL GUEST LODGING, INCLUDES SEASONAL STAFF
W6	GARAGE	EXISTING	MAINTENANCE	MAINTENANCE (NO CHANGE)	–	
W7	RESTROOM	EXISTING	HYGIENE	HYGIENE (NO CHANGE)	–	
W8	LOUNGE	EXISTING	LOUNGE	LOUNGE (NO CHANGE)	–	
W9	LOG CABIN	EXISTING	CAMP ACTIVITY	CAMP ACTIVITY (NO CHANGE)	–	
X	RESIDENCE	EXISTING			–	
			TOTAL		40	SEASONAL GUEST LODGING, INCLUDES SEASONAL STAFF

NOTES

1. EXISTING BRIDGE
2. EXISTING PARKING AREA (UNPAVED)
3. EXISTING AMPHITHEATER
4. EXISTING RECREATION FIELD
5. BASKETBALL COURT
6. OUTDOOR SHOWER - TO BE RECOGNIZED
7. EXISTING YURT

WILD OAK SITE PLAN ENLARGEMENT

SCALE : 1" = 30'-0"

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WILD OAK SITE PLAN ENLARGEMENT

09/01/15	USE PERMIT

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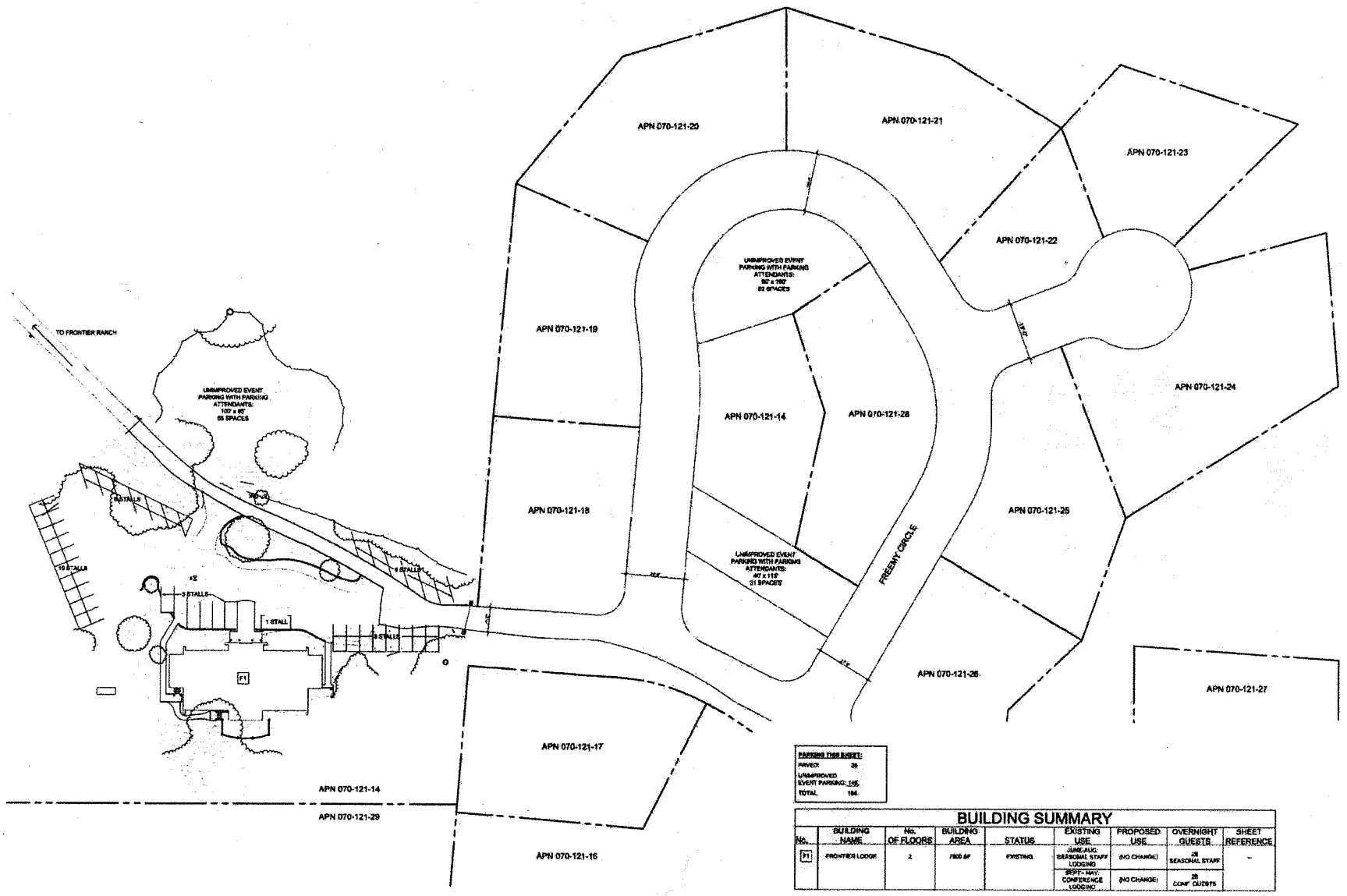
WMB PROJECT: 14-150

UP-3.2



PARKING THIS SHEET:	
PAVED:	39
UNIMPROVED EVENT PARKING:	145
TOTAL:	184

BUILDING SUMMARY

No.	BUILDING NAME	No. OF FLOORS	BUILDING AREA	STATUS	EXISTING USE	PROPOSED USE	OVERNIGHT GUESTS	SHEET REFERENCE
P1	FRONTIER LODGE	2	7800 SF	EXISTING	JUNE-AUG: SEASONAL STAFF LODGING	(NO CHANGE)	28 SEASONAL STAFF	-
					SEPT- MAY: CONFERENCE LODGING	(NO CHANGE)	28 CONF. GUESTS	

FRONTIER LODGE/ FREEMY CIRCLE SITE PLAN ENLARGEMENT

SCALE : 1" = 20'-0"

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FRONTIER LODGE/
FREEMY CIRCLE
SITE ENLARGEMENT

09/01/15	USE PERMIT

PUBLISH HISTORY

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3	12/04/17	USE PERMIT REV 3

WMB PROJECT:
14-150

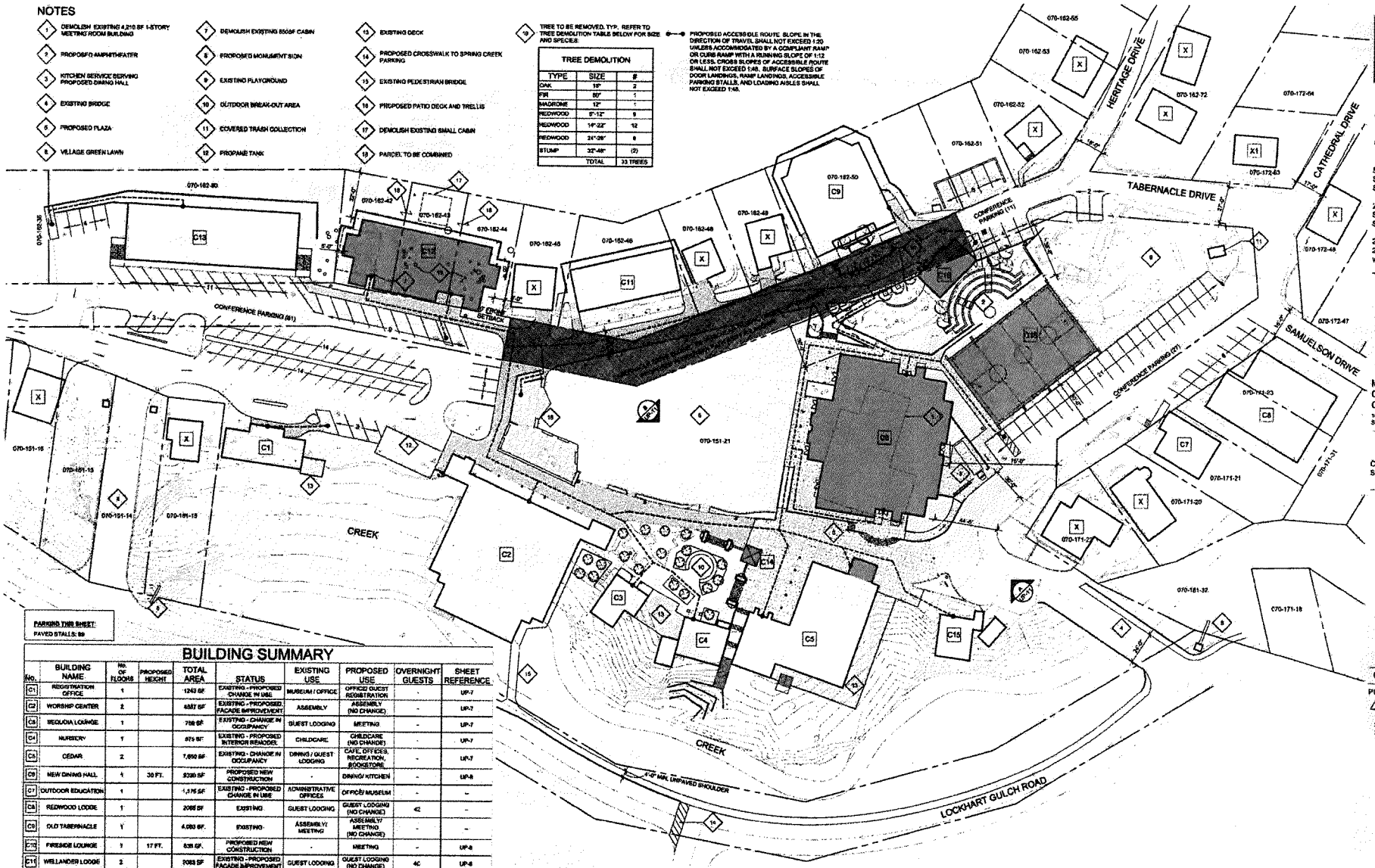
UP-3.3

NOTES

1. DEMOLISH EXISTING 4,210 SF 1-STORY MEETING ROOM BUILDING
2. PROPOSED AMPHITHEATER
3. KITCHEN SERVICE SERVING PROPOSED DINING HALL
4. EXISTING BRIDGE
5. PROPOSED PLAZA
6. VILLAGE GREEN LAWN
7. DEMOLISH EXISTING 850SF CABIN
8. PROPOSED MONUMENT SIGN
9. EXISTING PLAYGROUND
10. OUTDOOR BREAK-OUT AREA
11. COVERED TRASH COLLECTION
12. PROPANE TANK
13. EXISTING DECK
14. PROPOSED CROSSWALK TO SPRING CREEK PARKING
15. EXISTING PEDESTRIAN BRIDGE
16. PROPOSED PATIO DECK AND TRELLIS
17. DEMOLISH EXISTING SMALL CABIN
18. PARCEL TO BE COMBINED
19. TREE TO BE REMOVED. TYP. REFER TO TREE DEMOLITION TABLE BELOW FOR SIZE AND SPECIES.
- PROPOSED ACCESSIBLE ROUTE. SLOPE IN THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:20 UNLESS ACCOMMODATED BY A COMPLIANT RAMP OR CURB RAMP WITH A RUNNING SLOPE OF 1:12 OR LESS. CROSS SLOPES OF ACCESSIBLE ROUTE SHALL NOT EXCEED 1:48. SURFACE SLOPES OF DOOR LANDINGS, RAMP LANDINGS, ACCESSIBLE PARKING STALLS, AND LOADING AISLES SHALL NOT EXCEED 1:48.

TREE DEMOLITION

TYPE	SIZE	#
OAK	18"	2
FIR	60"	1
MADRONE	12"	1
REDWOOD	6"-12"	9
REDWOOD	14"-22"	12
REDWOOD	24"-36"	6
STUMP	32"-48"	(2)
	TOTAL	33 TREES



PARKING THIS SHEET:
PAVED STALLS: 89

BUILDING SUMMARY

No.	BUILDING NAME	No. OF FLOORS	PROPOSED HEIGHT	TOTAL AREA	STATUS	EXISTING USE	PROPOSED USE	OVERNIGHT GUESTS	SHEET REFERENCE
C1	REGISTRATION OFFICE	1		1243 SF	EXISTING - PROPOSED CHANGE IN USE	MUSEUM / OFFICE	OFFICE/ GUEST REGISTRATION	-	UP-7
C2	WORSHIP CENTER	2		4887 SF	EXISTING - PROPOSED FACADE IMPROVEMENT	ASSEMBLY	ASSEMBLY (NO CHANGE)	-	UP-7
C3	SEQUOIA LOUNGE	1		756 SF	EXISTING - CHANGE IN OCCUPANCY	GUEST LODGING	MEETING	-	UP-7
C4	NURSERY	1		975 SF	EXISTING - PROPOSED INTERIOR REMODEL	CHILDCARE	CHILDCARE (NO CHANGE)	-	UP-7
C5	CEDAR	2		7,650 SF	EXISTING - CHANGE IN OCCUPANCY	DINING / GUEST LODGING	CAFE, OFFICES, RECREATION, BOOKSTORE	-	UP-7
C6	NEW DINING HALL	1	30 FT.	5230 SF	PROPOSED NEW CONSTRUCTION	-	DINING/ KITCHEN	-	UP-8
C7	OUTDOOR EDUCATION	1		1,175 SF	EXISTING - PROPOSED CHANGE IN USE	ADMINISTRATIVE OFFICES	OFFICE/ MUSEUM	-	-
C8	REDWOOD LODGE	1		2085 SF	EXISTING	GUEST LODGING	GUEST LODGING (NO CHANGE)	42	-
C9	OLD TABERNACLE	1		4,080 SF.	EXISTING	ASSEMBLY/ MEETING	ASSEMBLY/ MEETING (NO CHANGE)	-	-
C10	FIRESIDE LOUNGE	1	17 FT.	838 SF.	PROPOSED NEW CONSTRUCTION	-	MEETING	-	UP-8
C11	WILLANDER LODGE	2		7083 SF	EXISTING - PROPOSED FACADE IMPROVEMENT	GUEST LODGING	GUEST LODGING (NO CHANGE)	40	UP-8
C12	NEW LODGE	3	38 FT.	9000 SF	PROPOSED NEW CONSTRUCTION	-	GUEST LODGING	40	UP-8
C13	LAUREL LODGE	3		7216 SF	EXISTING - PROPOSED FACADE IMPROVEMENT	GUEST LODGING	GUEST LODGING (NO CHANGE)	120	UP-9
C14	BELL TOWER	-	45 FT.	-	PROPOSED NEW CONSTRUCTION	-	N.A.	-	UP-9
C15	OFFICE	1		775 SF.	EXISTING	ADMINISTRATION OFFICE	ADMIN. OFFICE/ (NO CHANGE)	-	-
C16	COVERED RECREATION	1	28 FT.	5,130 SF.	PROPOSED NEW CONSTRUCTION	-	COVERED OPEN-AIR REC	-	-
X	PRIVATE RESIDENCE	APNs 070-151-15, 070-161-18, 070-182-36, 070-182-45, 070-182-48, 070-162-49, 070-162-52, 070-162-53, 070-162-55, 070-162-72, 070-171-20, 070-171-22, 070-171-31, 070-172-47, 070-172-48, 070-172-64 - EXCLUDED FROM USE PERMIT							
X1	COVENANT COTTAGE PRIVATE RESIDENCE	APN 070-172-63 - EXCLUDED FROM USE PERMIT							
							TOTAL	242	

CONFERENCE CENTER CORE SITE PLAN ENLARGEMENT
SCALE : 1" = 30'-0"

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CONFERENCE CENTER SITE PLAN ENLARGEMENT

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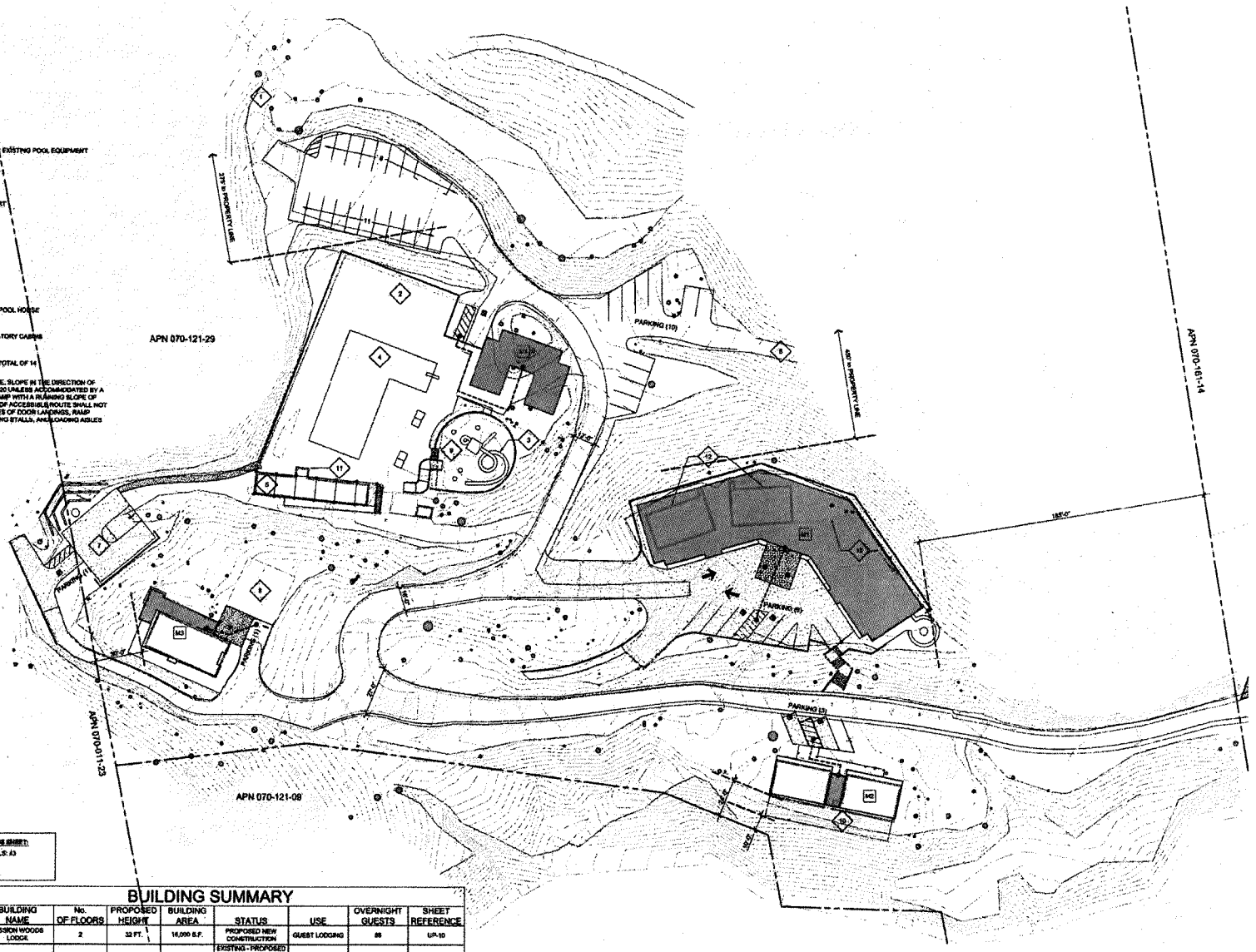
WMB PROJECT: 14-150

UP-4

NOTES

1. TRAIL TO FRONTIER RANCH.
2. NEW PICNIC AREA
3. NEW WATERSLIDE
4. EXISTING SWIMMING POOL
5. NEW TRELLIS AND DECK OVER EXISTING POOL EQUIPMENT
6. EXISTING FIRE ROAD
7. PROPOSED BASKETBALL COURT
8. LAWN
9. NEW SPRAY PARK.
10. NEW DECK
11. DEMOLISH EXISTING 1,000 SF. POOL HOUSE
12. DEMOLISH (2) 880 SF. SINGLE STORY CABINS
13. TREE TO BE REMOVED, TYP. - TOTAL OF 14
- PROPOSED ACCESSIBLE ROUTE. SLOPE IN THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:20 UNLESS ACCOMMODATED BY A COMPLIANT RAMP OR CURB RAMP WITH A RUNNING SLOPE OF 1:12 OR LESS. CROSS SLOPES OF ACCESSIBLE ROUTE SHALL NOT EXCEED 1:48. SURFACE SLOPES OF DOOR LANDINGS, RAMP LANDINGS, ACCESSIBLE PARKING STALLS, AND LOADING AISLES SHALL NOT EXCEED 1:48.



PARKING THIS SHEET:
PAVED STALLS: 43

BUILDING SUMMARY

No.	BUILDING NAME	No. OF FLOORS	PROPOSED HEIGHT	BUILDING AREA	STATUS	USE	OVERNIGHT GUESTS	SHEET REFERENCE
M1	MISSION WOODS LODGE	2	32 FT.	16,000 S.F.	PROPOSED NEW CONSTRUCTION	GUEST LODGING	88	UP-10
M2	OAK - HEMLOCK	1	24 FT.	1950 S.F.	EXISTING - PROPOSED INTERIOR REMODEL + 200 S.F. ADDITION	MEETING	-	UP-10
M3	REDWOOD CHAPEL	1	24 FT.	1780 S.F.	EXISTING + 520 S.F. ADDITION	ASSEMBLY	-	UP-10
M4	POOL BUILDING	1	18 FT.	1800 S.F.	PROPOSED NEW CONSTRUCTION	CONCESSION/ CHANGING	-	-
						TOTAL	88	

CONFERENCE CENTER - MISSION WOODS SITE PLAN ENLARGEMENT

SCALE : 1" = 30'-0"

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CONFERENCE CENTER
MISSION WOODS
SITE PLAN ENLARGEMENT

09/01/15	USE PERMIT

PUBLISH HISTORY

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1	01/05/16	USE PERMIT REV
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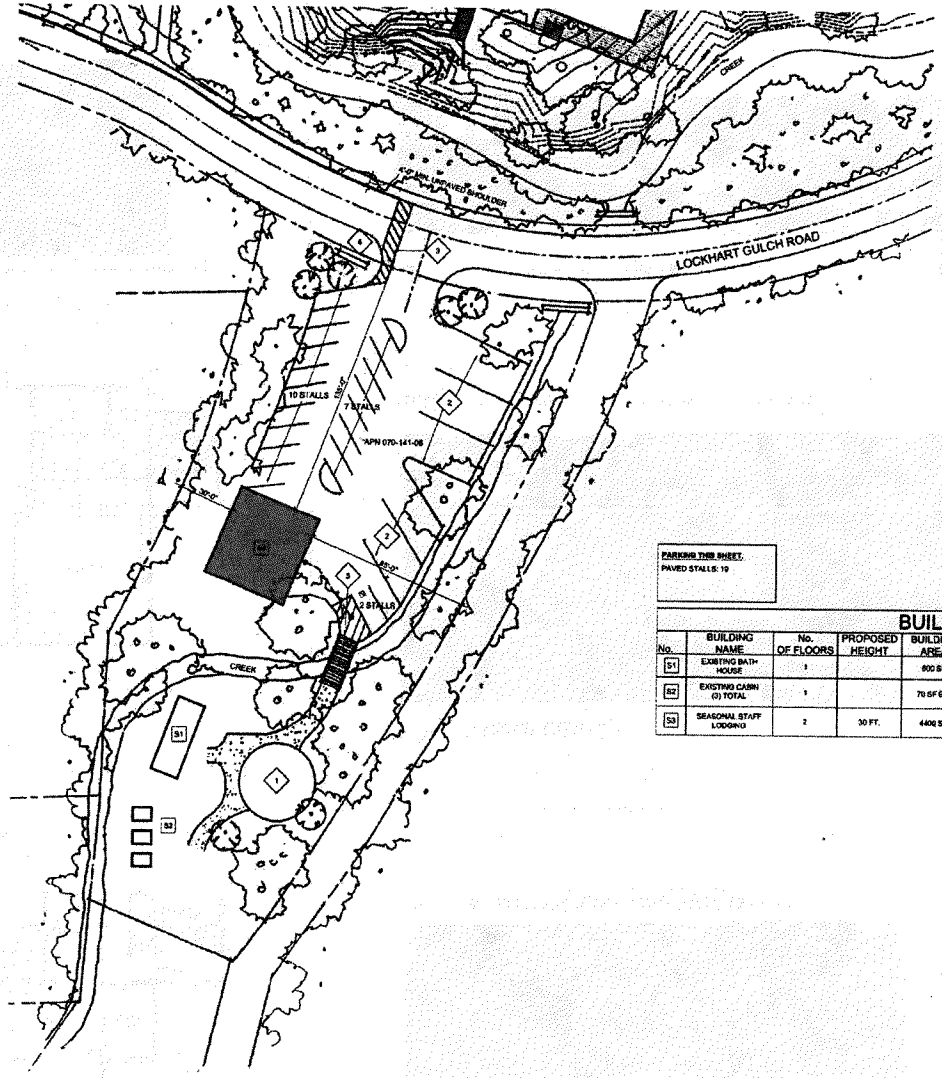
WMB PROJECT: 14-150

UP-5



NOTES

1. LANDSCAPING
2. TRAILER / R.V. PADS (5)
3. PROPOSED CROSSWALK TO CONFERENCE CENTER
4. PROPOSED MONUMENT SIGN
5. EXISTING PEDESTRIAN BRIDGE

PROPOSED ACCESSIBLE ROUTE: SLOPE IN THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:20 UNLESS ACCOMMODATED BY A COMPLIANT RAMP OR CURB RAMP WITH A RUNNING SLOPE OF 1:12 OR LESS. CROSS SLOPES OF ACCESSIBLE ROUTE SHALL NOT EXCEED 1:48. SURFACE SLOPES OF DOOR LANDINGS, RAMP LANDINGS, ACCESSIBLE PARKING STALLS, AND LOADING AISLES SHALL NOT EXCEED 1:48.

PARKING THIS SHEET:
PAVED STALLS: 19

BUILDING SUMMARY

No.	BUILDING NAME	No. OF FLOORS	PROPOSED HEIGHT	BUILDING AREA	STATUS	EXISTING USE	PROPOSED USE	OVERNIGHT GUESTS	SHEET REFERENCE
S1	EXISTING BATH HOUSE	1		600 SF	EXISTING	HYGIENE	HYGIENE (NO CHANGE)	–	–
S2	EXISTING CABIN (5) TOTAL	1		70 SF EA.	EXISTING	SEASONAL STAFF LODGING	SEASONAL STAFF LODGING (NO CHANGE)	2 PER CABIN 6 TOTAL	–
S3	SEASONAL STAFF LODGING	2	30 FT.	4400 SF	PROPOSED NEW CONSTRUCTION	–	SEASONAL STAFF LODGING	20	–

SUBTOTAL		26
R.V. GUESTS		10
TOTAL		36

CONFERENCE CENTER - SPRING CREEK SITE PLAN ENLARGEMENT

SCALE : 1" = 30'-0"

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SRING CREEK
SITE PLAN ENLARGEMENT

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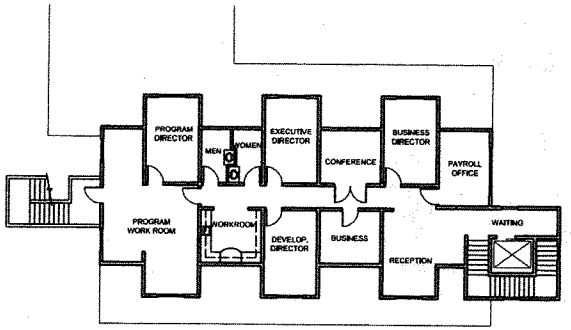
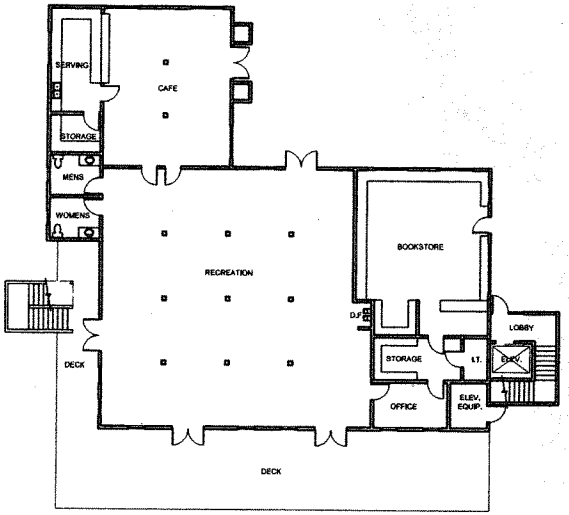
WMB PROJECT:
14-150

UP-6

C5 REGISTRATION OFFICE



SECOND FLOOR (REMODELED)

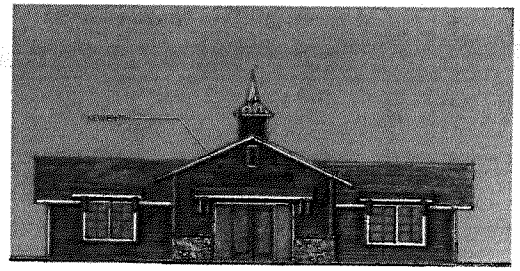


FIRST FLOOR (REMODELED)

SOUTHEAST EXTERIOR ELEVATION

SCALE : N.T.S.

C1 REGISTRATION OFFICE

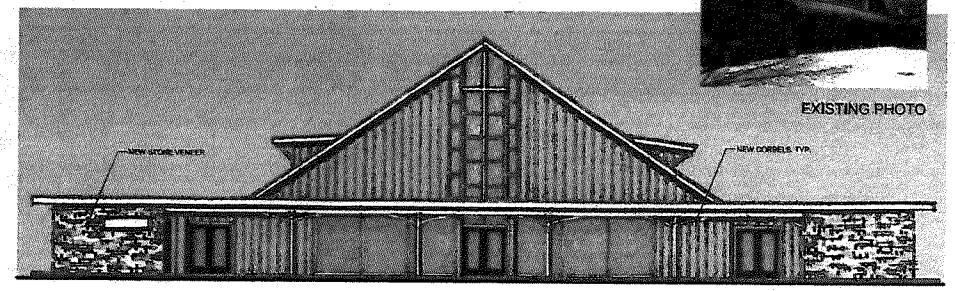


SOUTHEAST EXTERIOR ELEVATION (FACADE IMPROVEMENT)

SCALE : N.T.S.

EXISTING PHOTO

C2 WORSHIP CENTER

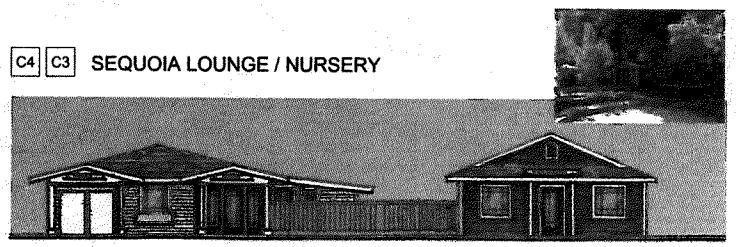


EXISTING PHOTO

SOUTHEAST EXTERIOR ELEVATION (FACADE IMPROVEMENT)

SCALE : N.T.S.

C4 C3 SEQUOIA LOUNGE / NURSERY



EXISTING PHOTOS

SOUTHEAST EXTERIOR ELEVATION

SCALE : N.T.S.

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CONFERENCE CENTER BUILDING DETAILS

DATE	USE PERMIT

PUBLISH HISTORY

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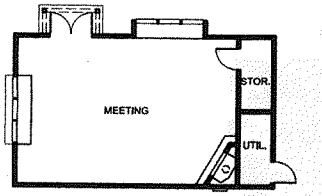
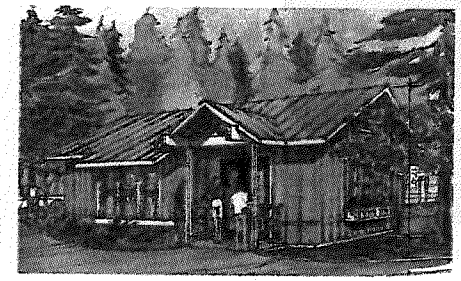
WMB PROJECT: 14-150

UP-7

C10 NEW FIRESIDE LOUNGE



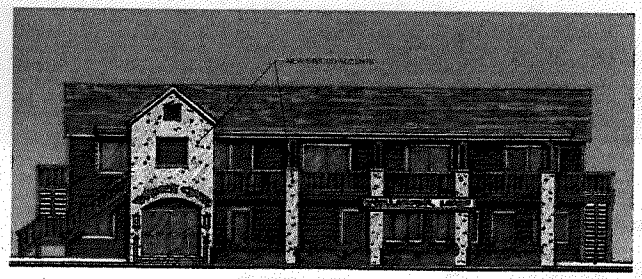
FIRST FLOOR
SCALE : 1/8" = 1'-0"



EXTERIOR ELEVATION
SCALE : N.T.S.

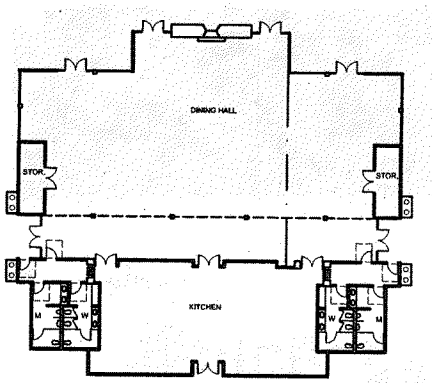
EXISTING PHOTO

C11 WELLANDER LODGE



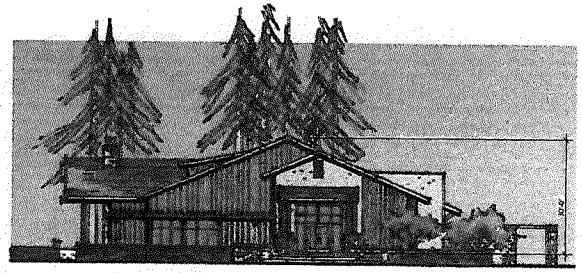
WEST ELEVATION (FACADE IMPROVEMENT)
SCALE : 1/8" = 1'-0"

C6 NEW DINING HALL



FIRST FLOOR
SCALE : 1/16" = 1'-0"

EAST EXTERIOR ELEVATION
SCALE : 1/16" = 1'-0"



NORTH EXTERIOR ELEVATION
SCALE : 1/16" = 1'-0"

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CONFERENCE CENTER BUILDING DETAILS

09/01/15	USE PERMIT

PUBLISH HISTORY

△	DATE	REVISION/ SET
1	01/05/16	USE PERMIT REV
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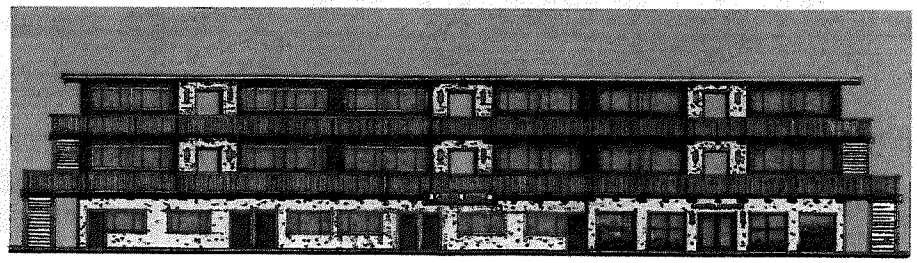
UP-8

EXISTING PHOTOS

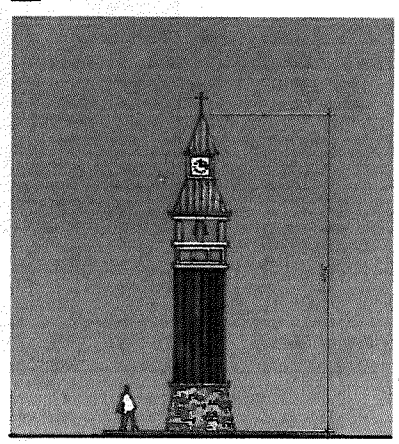
C13 LAUREL LODGE



WEST ELEVATION (FACADE IMPROVEMENT)

SCALE : 1/8" = 1'-0"

C14 NEW BELL TOWER

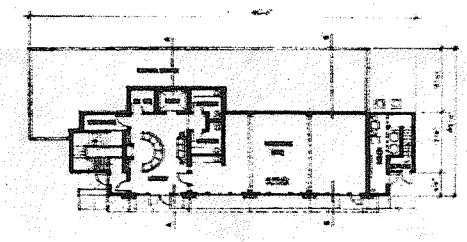


Bell Tower

ELEVATION

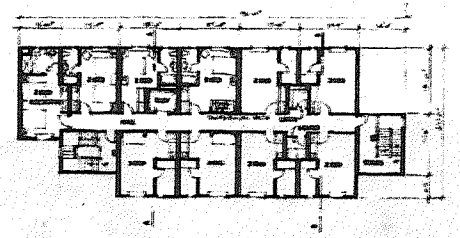
SCALE : N.T.S.

C12 NEW LODGE



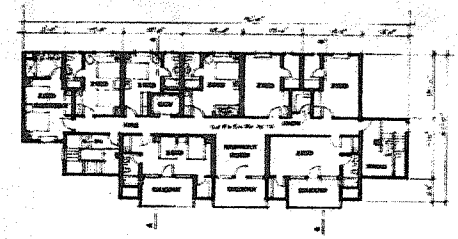
FIRST FLOOR

SCALE : 1/16" = 1'-0"



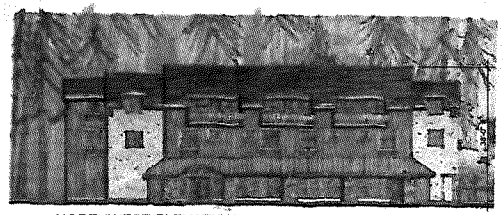
SECOND FLOOR

SCALE : 1/16" = 1'-0"



THIRD FLOOR

SCALE : 1/16" = 1'-0"



NORTHWEST ELEVATION

SCALE : 1/16" = 1'-0"

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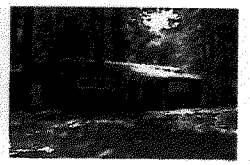
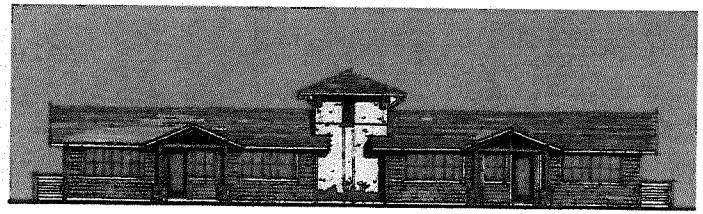
UP-9



EXISTING PHOTOS

M2 OAK - HEMLOCK LODGE

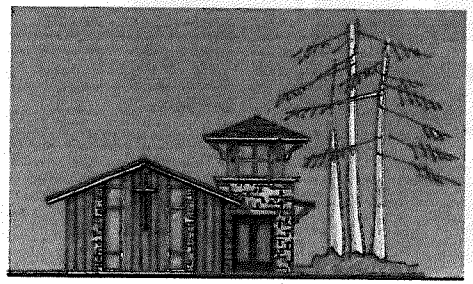


SOUTHEAST ELEVATION

SCALE : 1/8" = 1'-0"

EXISTING PHOTO

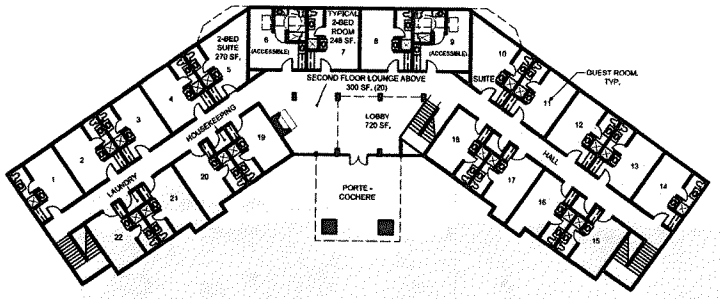
M3 REDWOOD CHAPEL



WEST ELEVATION

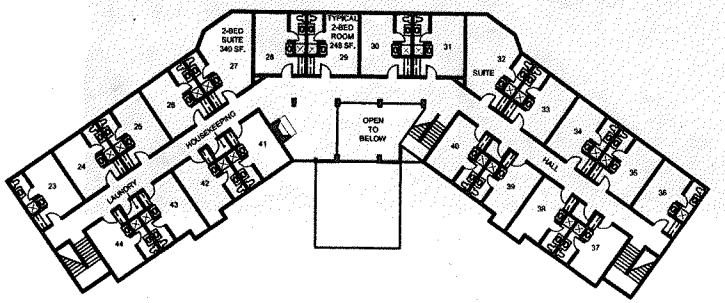
SCALE : 1/8" = 1'-0"

M1 NEW MISSION WOODS LODGE



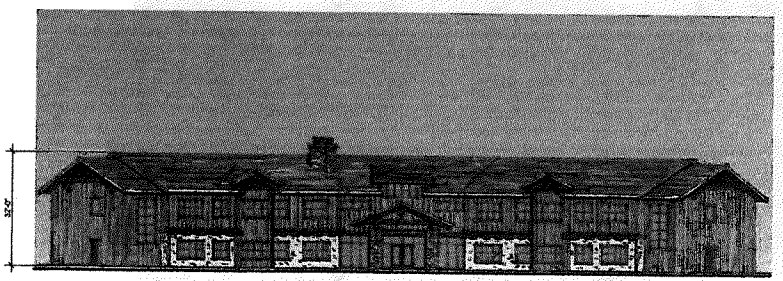
FIRST FLOOR

SCALE : 1/16" = 1'-0"



SECOND FLOOR

SCALE : 1/16" = 1'-0"



NORTHWEST ELEVATION

SCALE : 1/16" = 1'-0"

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MISSION WOODS BUILDING DETAILS

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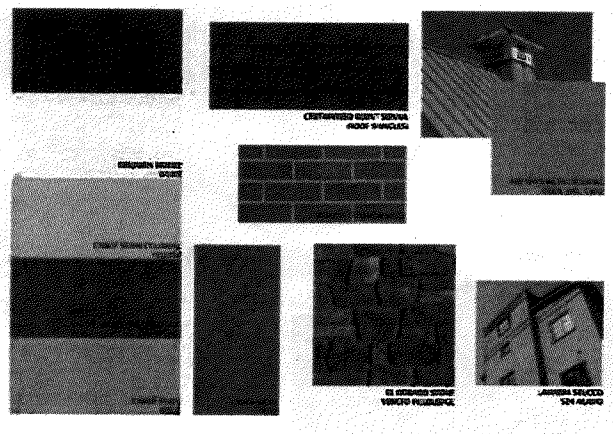
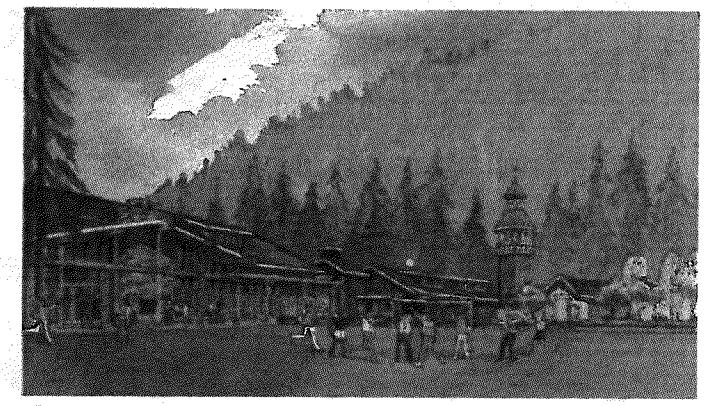
UP-10



EXTERIOR FINISHES

A VIEW FROM BRIDGE
SCALE : N.T.S.



B VIEW FROM VILLAGE GREEN
SCALE : N.T.S.

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ARCHITECTURAL RENDERINGS AND EXTERIOR MATERIALS

05/01/15 | USE PERMIT

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Δ	DATE	REVISION SET
1	07/01/15	USE PERMIT SET
2	10/02/15	OWNER REVISION
3	12/01/17	USE PERMIT SET 2

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14-150

UP-11

MATERIALS LEGEND

BUILDING (N)
PAVING STONES (N)
CONCRETE (N)
STORMWATER MITIGATION AREA
WATER VALVE
CATCH BASIN

CIVIL LINE TYPES

CONTOURS
PROJECT LIMIT
SS SANITARY SEWER PIPE (E)
SS SANITARY SEWER PIPE (N)
FM FORCE MAIN
W WATER PIPE
SD STORMDRAIN PIPE (E)
STORMDRAIN PIPE (N)
OH UNDERGROUND ELECTRICAL

CIVIL SHEET INDEX

SHEET LIST INDEX

NO.	SHEET	SHEET TITLE
1	C1.0	CIVIL INFORMATION SHEET
2	C2.0	CONFERENCE CENTER PRELIMINARY IMPROVEMENT PLAN
3	C3.0	MISSION WOODS PRELIMINARY IMPROVEMENT PLAN

ABBREVIATIONS

AC	ACRE
ADA	AMERICAN DISABILITIES ACT
BLDG	BUILDING
BOW	BOTTOM OF WALL
BSM	BIORETENTION SOIL MEDIA
CONC	CONCRETE
CY	CUBIC YARD
CPP	CORRUGATED PLASTIC PIPE
DG	DECOMPOSED GRANITE
DW	DOMESTIC WATER
(E)	EXISTING
EG	EXISTING GRADE
EL	ELEVATION
FCE	FALL CREEK ENGINEERING
FF	FINISHED FLOOR
FG	FINISHED GRADE
FM	FORCE MAIN
FW	FIRE WATER
GAL	GALLON
GPD	GALLONS PER DAY
HDPE	HIGH-DENSITY POLYETHYLENE
INV	INVERT
LF	LINEAR FEET
L	LEVEL
MAX	MAXIMUM
MIN	MINIMUM
(N)	NEW
NTS	NOT TO SCALE
OD	OUTER DIAMETER
PE	POLYETHYLENE
PERF.	PERFORATED
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RWD	REDWOOD
SF	SQUARE FOOT
SD	STORM DRAIN
TBD	TO BE DETERMINED
TOW	TOP OF WALL
TYP	TYPICAL
W	WATER

TECHNICAL REFERENCES

TECHNICAL REFERENCES

1. CAPACITY ANALYSIS FOR THE WATER AND WASTEWATER SYSTEMS, USE PERMIT AMENDMENT, PREPARED BY FALL CREEK ENGINEERING, UPDATED SEPTEMBER 11, 2017.
2. PRELIMINARY STORMWATER DRAINAGE FEASIBILITY ASSESSMENT, PROJ. NO. 1412-5241-#22, PREPARED BY PACIFIC CREST ENGINEERING INC., DATED MAY 2015.
3. GEOLOGIC FEASIBILITY INVESTIGATION OF THE PROPOSED MISSION WOODS LODGE, JOB #2015003-G-SC, PREPARED BY ZINN GEOLOGY, REVISED DECEMBER 8, 2016.
4. COUNTY OF SANTA CRUZ DESIGN CRITERIA, STORMWATER MANAGEMENT FIG. SWM-24 RUNOFF RETENTION BY THE STORAGE PERCOLATION METHOD
5. WEB SOIL SURVEY - NATURAL RESOURCES CONSERVATION SERVICE

GENERAL NOTES

GENERAL NOTES

1. THE BASIS OF THE DESIGN PRESENTED IN THESE PLANS IS BASED ON THE FOLLOWING INFORMATION:
   1.1. SITE VISITS BY FCE'S DESIGN TEAM;
   1.2. MEETINGS, CORRESPONDENCE, AND RECOMMENDATIONS FROM MISSION SPRINGS;
   1.3. A REVIEW OF SANTA CRUZ COUNTY DESIGN CRITERIA;
   1.4. A TOPOGRAPHIC SURVEY PREPARED BY MANAGAN LAND SURVEYING.
2. ALL FEATURES ARE EXISTING UNLESS NOTED OTHERWISE

SURVEY NOTES

1. SURVEY PREPARED BY MANAGAN LAND SURVEYING, INC.
2. THE BASIS OF BEARING FOR THIS MAP IS FROM MONUMENTS FOUND PER THAT CERTAIN MAP "SUBDIVISION NO. 1 OF MISSION SPRINGS CONFERENCE GROUNDS," VOLUME 24 OF MAPS, PAGE 1, SANTA CRUZ COUNTY RECORDS.
3. THE BENCHMARK FOR THIS SURVEY IS SCOTTS VALLEY BENCHMARK NO. 2, WHICH IS A BRASS DISK STAMPED W-215 LOCATED AT THE SOUTHWEST CORNER OF LOCKWOOD LANE AND MOUNT HERMON ROAD. ELEVATION = 497.296 FEET, NGVD '29. THE CONTOUR INTERVAL IS 1 FOOT.
4. THE UTILITIES SHOWN ON THE SURVEY MAP ARE FROM SURFACE EVIDENCE ONLY. UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE ONLY AND NEED TO BE VERIFIED WITH POTHOLING BY THE OWNER OR CONTRACTOR.

CIRCULATION NOTES

1. CIRCULATION ON THE PROPERTY WILL REMAIN UNCHANGED. MISSION SPRINGS HAS TWO BRIDGES THAT SERVE AS MAIN INGRESS AND EGRESS TO THE PROPERTY.

GRADING NOTES

1. GRADING VOLUMES ARE ESTIMATED TO BE GREATER THAN 100 CUBIC YARDS AND LESS THAN 1,000 CUBIC YARDS.
2. CUT AND FILL SLOPES SHALL NOT EXCEED 2H:1V.

STORMWATER MITIGATION NOTES:

1. EXISTING DRAINAGE EXISTING STORMWATER DRAINAGE FROM EXISTING ROOFS, HARDSCAPE, LANDSCAPE, AND ROADWAYS ARE COLLECTED IN CATCH BASINS AND STORM DRAIN PIPES THAT DISCHARGE RUNOFF TO LOCKHART GULCH.
2. PROPOSED DRAINAGE PROPOSED STORMWATER DRAINAGE FROM THE NEW ROOFS, HARDSCAPE AND DRIVE WAYS WILL BE DIRECTED TO SURFACE AND SUBSURFACE RETENTION FACILITIES. OVERFLOW WILL DISCHARGE TO LOCKHART GULCH.
3. STORMWATER BEST MANAGEMENT PRACTICES (BMPs) SUCH AS INFILTRATOR CHAMBERS, SEEPAGE PITS, GRASS AND ROCK LINED SWALES, AND BIORETENTION SWALES WILL BE INSTALLED AT VARIOUS LOCATIONS WITHIN THE AREAS OF SITE IMPROVEMENTS (SEE ENCLOSED PLANS FOR GENERAL LOCATIONS). FINAL LOCATIONS WILL BE DETERMINED BASE ON RECOMMENDATIONS PRESENTED IN THE PRELIMINARY STORMWATER DRAINAGE FEASIBILITY ASSESSMENT, PREPARED BY PACIFIC CREST ENGINEERING INC AS WELL AS CONSULTATION WITH FALL CREEK ENGINEERING.
4. THE NEW RETENTION FACILITIES WILL BE DESIGNED TO MEET COUNTY OF SANTA CRUZ DESIGN CRITERIA, STORMWATER MANAGEMENT FIG. SWM-24 RUNOFF RETENTION BY THE STORAGE PERCOLATION METHOD.
5. OVERFLOW FROM THE 25-YEAR STORM WILL BE DIVERTED TO THE EXISTING DRAINAGE SYSTEM.

EROSION CONTROL AND REVEGETATION NOTES:

NO PERSON SHALL CAUSE OR ALLOW THE CONTINUED EXISTENCE OF A CONDITION ON ANY SITE THAT IS CAUSING OR IS LIKELY TO CAUSE ACCELERATED EROSION AS DETERMINED BY THE PROJECT ENGINEER. SUCH A CONDITION SHALL BE CONTROLLED AND/OR PREVENTED BY THE RESPONSIBLE PERSON BY USING APPROPRIATE MEASURES OUTLINED IN SUBSEQUENT SECTIONS OF THESE NOTES. ADDITIONAL MEASURES SHALL BE APPLIED IF NECESSARY BY THE RESPONSIBLE PERSON.

1. THE CONTRACTOR SHALL INSTALL, MAINTAIN AND INSPECT EROSION CONTROL AND TEMPORARY STORMWATER CONTROL MEASURES TO CONTROL SEDIMENT AND RUNOFF IN ACCORDANCE WITH THESE PLANS.
2. IF THE PROJECT DISTURBANCE EXCEEDS 1 ACRE, A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) WILL BE DEVELOPED AND IMPLEMENTED.
3. EROSION IS TO BE CONTROLLED AT ALL TIMES ALTHOUGH SPECIFIC MEASURES SHOWN ARE TO BE IMPLEMENTED AT A MINIMUM BETWEEN OCTOBER 15TH AND APRIL 15TH, AND WHEN A STORM EVENT IS PREDICTED.
4. ALL EROSION CONTROL AND SOIL CONSERVATION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE EROSION CONTROL REQUIREMENTS ESTABLISHED BY SANTA CRUZ COUNTY
5. EXPOSED EARTH SHALL BE STABILIZED BY EROSION CONTROL MEASURES PRIOR TO THE RAINY SEASON (OCTOBER 15TH TO APRIL 15TH). EXPOSED EARTH CAN BE HYDROSEEDED WITH THE FOLLOWING SLURRY (OR EQUIVALENT) THOROUGHLY MIXED:
   A. 150 LBS "M-BINDER" TACKIFIER
   B. 1500 LBS "AGRIMO-MULCH" FIBER
   C. 175 LBS PRE-PLANT FERTILIZER
   D. 300 LBS TURF SEED MIX
6. DISTURBED TURF AREAS SHALL BE REPLANTED AT THE COMPLETION OF THE PROJECT.
7. THE TURF SEED MIX/SOD BLEND USED FOR REVEGETATION SHALL BE:
   A. TALL FESCUE PERENNIAL: 100% "ENDURO" TURF TYPE TALL FESCUE
   B. FROM CURRENT OR LATEST SEASONS CROP
   C. FREE OF ALL WEED SEED AND HAVE PRODUCERS "STATEMENT OF ANALYSIS GUARANTEE"
   D. 93% PURE BY WEIGHT WITH A 90% GERMINATION RATE
   E. LABELED IN CONFORMANCE TO STATE AND USDA LAWS AND REGULATIONS
8. DURING CONSTRUCTION IN THE RAINY SEASON, ALL DISTURBED TURF AREAS SHALL BE MULCHED ACCORDING TO THE FOLLOWING GUIDELINES:
   A. ALL SLOPES LESS THAN 20% (1V:5H) SHALL BE COVERED WITH 4 TO 6 INCHES OF STRAW MULCH AFTER TEMPORARY EROSION CONTROL SEEDING.
   B. OBTAIN STERILE, WEED-FREE WHEAT, BARLEY, OAT OR RICE STRAW IN ORDER TO PREVENT THE SPREAD OF NOXIOUS WEEDS. AVOID MOLDY, COMPACTED STRAW BECAUSE IT TENDS TO CLUMP AND IS NOT EVENLY DISTRIBUTED.
   C. THE STRAW SHALL BE EVENLY DISTRIBUTED BY HAND OR MACHINE TO THE DESIRED DEPTH AND SHOULD COVER THE EXPOSED AREA TO A UNIFORM DEPTH.
   D. APPROXIMATELY ONE BALE (80 LB (35 KG)) OF STRAW COVERS 1000 SF ADEQUATELY.
   E. THERE SHOULD BE A MINIMUM OF 3-4" OF STRAW OVER THE SOIL.
   F. ON STEEP OR HIGH WIND SITES, STRAW MUST BE ANCHORED TO KEEP IT FROM BLOWING AWAY.
   G. "TRACKING" WITH MACHINERY ON SANDY SOIL PROVIDES ROUGHENING WITHOUT UNDUE COMPACTION.
9. STRAW ROLLS/FIBER ROLLS SHALL BE INSTALLED ACCORDING TO THE FOLLOWING GUIDELINES:
   A. STRAW ROLLS (WATTLES) OR FIBER ROLLS SHALL BE INSTALLED AS SHOWN IN PLANS TO SLOW RUNOFF VELOCITY AND TRAP SEDIMENT.
   B. HAND DIG A SHALLOW TRENCH ACROSS THE SLOPE ON CONTOUR TO PLACE ROLL IN. TRENCH SHALL BE DEEP ENOUGH TO ACCOMMODATE ONE-THIRD TO ONE-HALF THE THICKNESS OF THE ROLL.
   C. INSTALL THE ROLLS PARALLEL TO THE SLOPE CONTOUR.
   D. USE A STRAIGHT BAR TO DRIVE HOLES THROUGH THE WATTLE. INSTALL 18" STAKES EVERY FOUR FEET APART THROUGH THE WATTLE. LEAVE APPROXIMATELY 1 TO 2 INCHES OF STAKE EXPOSED ABOVE THE ROLL.
   E. TURN END OF STRAW ROLL UP HILL TO PREVENT RUNOFF FROM GOING AROUND THE ROLL.
   F. INSPECT THE STRAW ROLLS AND THE SLOPES AFTER SIGNIFICANT STORMS. MAKE SURE THE ROLLS ARE IN CONTACT WITH THE SOIL. REPAIR ANY RILLS OR GULLIES PROMPTLY. RESEED OR REPLANT VEGETATION IF NECESSARY UNTIL SLOPE IS STABILIZED.
   G. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.
10. STORM DRAIN INLET PROTECTION GUIDELINES:
   A. ALL STORM WATER CATCH BASIN BLANKETS SHALL BE PROTECTED FROM SEDIMENT DURING CONSTRUCTION ACTIVITIES, AS SHOWN IN THE PLANS.
   B. DROP INLET SEDIMENT BARRIER SHALL BE INSPECTED AFTER EACH RAIN AND PROMPTLY REPAIRED AS NEEDED.
   C. SEDIMENT SHALL BE REMOVED AFTER EACH SIGNIFICANT STORM (3/4 INCH IN 24 HOURS).
   D. THE REMOVED SEDIMENT SHALL BE STOCKPILED OR RE-DEPOSITED IN AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
11. NO STEEP SLOPES OR NEED FOR EROSION CONTROL BLANKET IS ANTICIPATED.

UTILITY NOTES:

1. THE EXISTING WATER AND WASTEWATER SYSTEMS HAVE SUFFICIENT CAPACITY TO HANDLE THE INCREASE IN USE. PLEASE SEE CAPACITY ANALYSIS FOR THE WATER AND WASTEWATER SYSTEMS, USE PERMIT AMENDMENT, PREPARED BY FALL CREEK ENGINEERING, DATED SEPTEMBER 2015, FOR MORE INFORMATION.
2. THE IMPROVEMENTS TO THE EXISTING DRAINAGE SYSTEM PRESENTED IN THE ENCLOSED PLANS WILL PROVIDE SUFFICIENT CAPACITY FOR THE PROPOSED IMPROVEMENTS.

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CIVIL INFORMATION SHEET

FALL CREEK ENGINEERING, INC.
Consulting Engineers
Civil Environmental Water Resources
1535 SEABRIGHT AVE.
SANTA CRUZ, CA 95062
TEL. (831) 426-9564

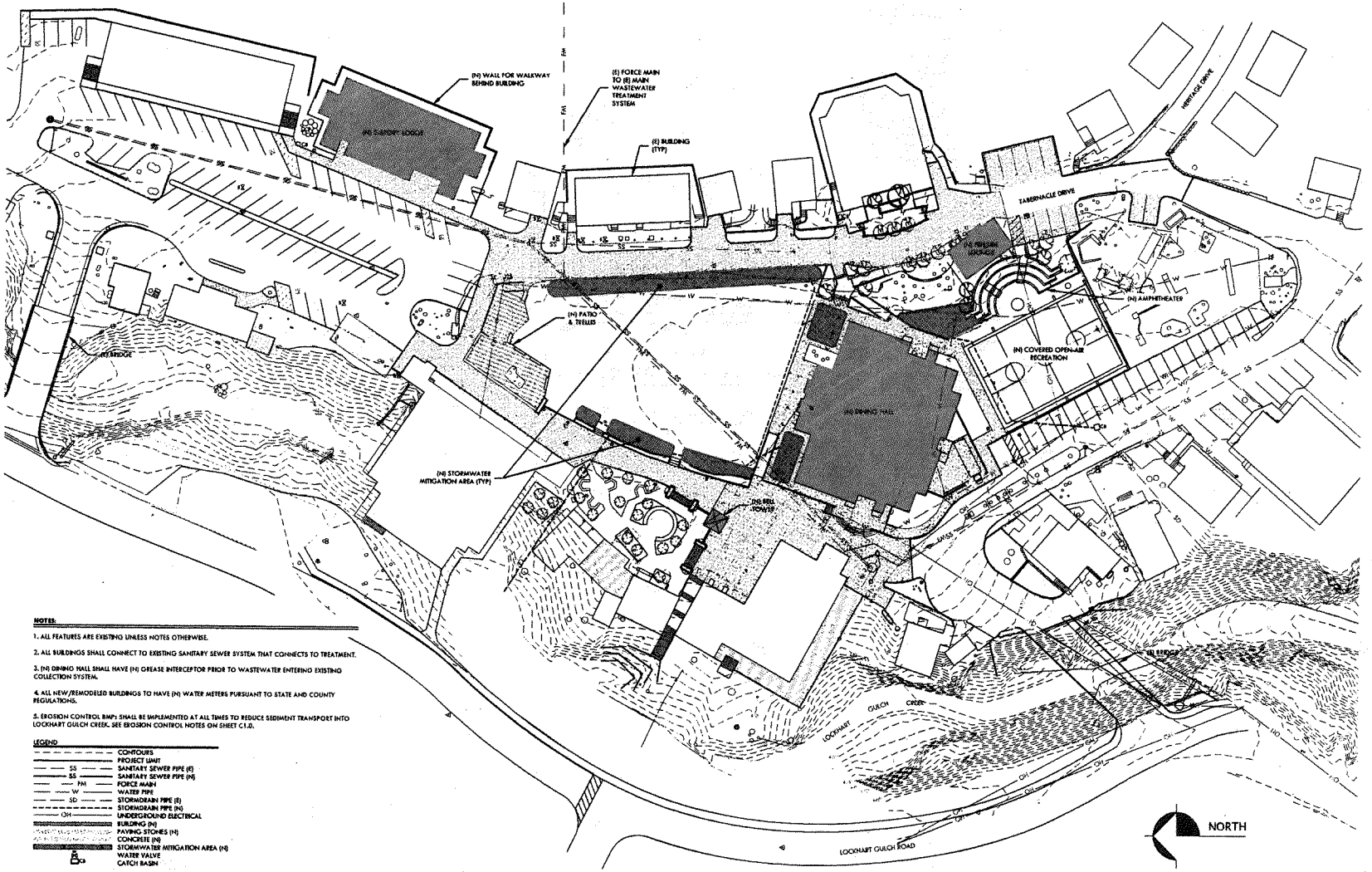
REGISTERED PROFESSIONAL ENGINEER PETER N. HEPLY NO. 055603 EXP. 12/31/18 CIVIL STATE OF CALIFORNIA

09/01/15	USE PERMIT

PUBLISH HISTORY
△ 12/21/2017 REVISION/ SET

WMB PROJECT: 14-150

C1.0



NOTES:

1. ALL FEATURES ARE EXISTING UNLESS NOTED OTHERWISE.
2. ALL BUILDINGS SHALL CONNECT TO EXISTING SANITARY SEWER SYSTEM THAT CONNECTS TO TREATMENT.
3. (N) DINING HALL SHALL HAVE (N) GREASE INTERCEPTOR PRIOR TO WASTEWATER ENTERING EXISTING COLLECTION SYSTEM.
4. ALL NEW/REMODELED BUILDINGS TO HAVE (N) WATER METERS PURSUANT TO STATE AND COUNTY REGULATIONS.
5. EROSION CONTROL BMPs SHALL BE IMPLEMENTED AT ALL TIMES TO REDUCE SEDIMENT TRANSPORT INTO LOCKHART GULCH CREEK. SEE EROSION CONTROL NOTES ON SHEET C1.0.

LEGEND

- CONTOURS
- PROJECT LIMIT
- SS — SANITARY SEWER PIPE (E)
- SS — SANITARY SEWER PIPE (N)
- FM — FORCE MAIN
- W — WATER PIPE
- SD — STORMDRAIN PIPE (E)
- STORMDRAIN PIPE (N)
- OH — UNDERGROUND ELECTRICAL
- BUILDING (N)
- PAVING STONES (N)
- CONCRETE (N)
- STORMWATER MITIGATION AREA (N)
- WATER VALVE
- CATCH BASIN

1 MISSION SPRINGS - CONFERENCE CENTER PRELIMINARY IMPROVEMENT PLAN
SCALE: 1" = 30' @ 24" X 36"

WMB ARCHITECTS

5757 Pacific Avenue
Suite 226
Stockton, CA 95207

2000 L Street
Suite 125
Sacramento, CA 95811

209.944.9110 T
209.944.5711 F
www.wmbarchitects.com

MISSION SPRINGS CAMPS AND CONFERENCE CENTER
1050 Lockhart Gulch Road
Scotts Valley, CA 95066

CONFERENCE CENTER PRELIMINARY IMPROVEMENT PLAN

FALL CREEK ENGINEERING, INC.
Consulting Engineers
Civil Environmental Water Resources
1535 SEABRIGHT AVE.
SANTA CRUZ, CA 95062
TEL. (831) 426-9034

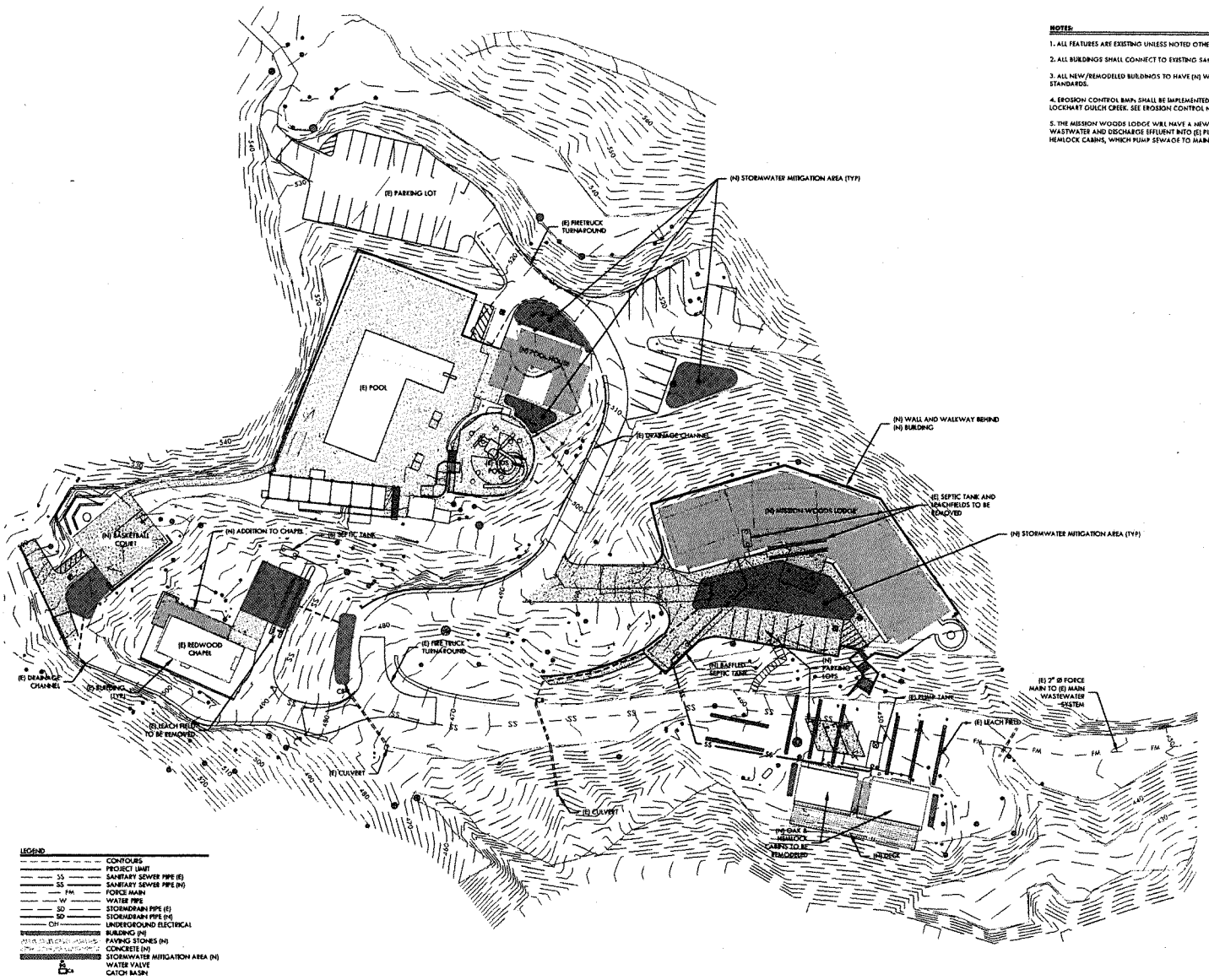
REGISTERED PROFESSIONAL ENGINEER PETER H. KASS NO. 055605 EXP. 12/31/16 CIVIL STATE OF CALIFORNIA

09/01/15	USE PERMIT

PUBLISH HISTORY
△ 12/21/2017 REVISION SET

WMB PROJECT: 14-150

C2.0



1 MISSION SPRINGS - MISSION WOODS PRELIMINARY IMPROVEMENT PLAN
SCALE: 1" = 30' @ 24" X 36"

NOTES:

1. ALL FEATURES ARE EXISTING UNLESS NOTED OTHERWISE.
2. ALL BUILDINGS SHALL CONNECT TO EXISTING SANITARY SEWER SYSTEM THAT CONNECTS TO TREATMENT.
3. ALL NEW/REMODELED BUILDINGS TO HAVE (N) WATER METERS PURSUANT TO STATE AND COUNTY STANDARDS.
4. EROSION CONTROL BMPs SHALL BE IMPLEMENTED AT ALL TIMES TO REDUCE SEDIMENT TRANSPORT INTO LOCKHART GULCH CREEK. SEE EROSION CONTROL NOTES ON SHEET C1.0.
5. THE MISSION WOODS LODGE WILL HAVE A NEW SEPTIC TANK TO CAPTURE THE SOLIDS IN THE WASTWATER AND DISCHARGE EFFLUENT INTO (E) PUMP TANK LOCATION ADJACENT TO THE OAK & HEMLOCK CABINS, WHICH PUMP SEWAGE TO MAIN TREATMENT SYSTEM.

WMB ARCHITECTS

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MISSION WOODS PRELIMINARY IMPROVEMENT PLAN

FALL CREEK ENGINEERING, INC.
Consulting Engineers
Civil Environmental Water Resources
1535 SEABRIGHT AVE.
SANTA CRUZ, CA 95062
TEL. (831) 426-9034

REGISTERED PROFESSIONAL ENGINEER PETER H. KRAUS NO. 055605 EXP. 12/31/16 CIVIL STATE OF CALIFORNIA

09/01/15	USE PERMIT

PUBLISH HISTORY
△ 12/21/2017 REVISION SET

WMB PROJECT: 14-150

C3.0

Attachment 3

Mission Springs, Guest Occupancy Capacity Increase,

November 2017

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Mission Springs Camps and Conference Center, Inc.

Guest Occupancy Capacities - Based on 100% occupancy

Revised: Nov. 2017 by Mission Springs

CONFERENCE CENTER

	USE PERMIT 75-1060-U		**2014/15 ACTUAL AVERAGE OCCUPANCY**		**PROPOSED CAPACITY**	
	Sept - May	June - Aug	Sept - May	June - Aug	Sept - May	June - Aug
Laurel Lodge (C13)	108	108			120	120
Wellander Lodge (C11)	40	40			40	40
Redwood Lodge (C8)	45	45			42	42
Oak/Hemlock/Fir/Pine (M2 and 12)	60	60			0	0
Walnut (Private Residence)	8	8			0	0
Covenant Cottage (Private Residence)	6	6			0	0
RV Park (UP-6)	7	7			36	36
New Mission Wood Lodge (M1)	0	0			88	88
Frontier Lodge (F1)	28	28			28	0
Cedar (C5)	27	27			0	0
Sequoia (C3)	12	12			0	0
New Lodge (C12)	0	0			40	40
Total Overnight Guests	341	341	173	241	394	366
FRONTIER RANCH (Seasonal Camp Jun - Aug) Total Overnight Guests + 28 staff in Frontier Lodge	0	150	0	210	0	298
WILD OAK (Seasonal Camp Jun - Aug) Total Overnight Guests	0	0	0	35	0	40
TOTAL ALL OVERNIGHT GUESTS (Includes Season Staff)	**341**	**491**	**173**	**486**	**394**	**704**
TOTAL GUESTS ALLOWED IN USE PERMIT	500	500				

Attachment 4

Mission Springs, Proposed Parcels to Include in Amended Use Permit, January 2018

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Mission Springs Christian Camps and Conference Center, Inc.

Proposed Parcels to include in Amended Use Permit: MSCC, Inc. ONLY

Rev. 1/17/18

TO Include

Owner: *Mission Springs Camps and Conference Center, Inc.

APN
070-011-16
070-011-20
070-011-23
070-011-34
070-011-35
070-121-11
070-121-14
070-121-29
070-141-06
070-151-10
070-151-13
070-151-14
070-151-20
070-151-21
070-161-07
070-161-08
070-161-10
070-161-11
070-161-12
070-161-13
070-161-14
070-162-03
070-162-08
070-162-16
070-162-17
070-162-20
070-162-26
070-162-42
070-162-43
070-162-44
070-162-46
070-162-50
070-162-51

NOT to Include

Owner: Pacific Southwest Conference of the Evangelical Covenant Church

APN
070-121-15
070-121-16
070-121-17
070-121-18
070-121-19
070-121-20
070-121-21
070-121-22
070-121-23
070-121-24
070-121-25
070-121-26
070-121-27
070-121-28
070-151-04
070-151-09
070-151-11
070-151-12
070-151-15
070-151-18
070-161-05
070-161-06
070-161-09
070-162-01
070-162-02
070-162-04
070-162-05
070-162-06
070-162-07
070-162-19
070-162-21
070-162-25
070-162-36

Owner: *Mission Springs Camps and Conference Center, Inc.

070-162-61
070-162-64
070-162-65
070-162-75
070-162-80
070-171-18
070-171-21
070-171-23
070-172-09
070-172-10
070-172-20
070-172-23
070-172-25
070-172-43
070-172-57
070-181-08
070-181-13
070-181-21
070-181-32

Owner: Pacific Southwest Conference of the Evangelical Covenant Church

070-162-45
070-162-48
070-162-49
070-162-52
070-162-53
070-162-55
070-162-57 070-162-79 165 Heritage
070-162-59
070-162-60
070-162-62
070-162-68 070-162-69 150 Heritage
070-162-70
070-162-71
070-162-72
070-162-73
070-162-76 070-162-77 621 Cathedral
070-162-78
070-171-04
070-171-05
070-171-07
070-171-09
070-171-10
070-171-11
070-171-12
070-171-14
070-171-15
070-171-20
070-171-22
070-171-27
070-171-28
070-171-29
070-171-30
070-171-31
070-171-32
070-172-05
070-172-06
070-172-07 070-172-53 237 Cathedral
070-172-08
070-172-11
070-172-12
070-172-18

Owner: *Mission Springs Camps and Conference Center, Inc.

Owner: Pacific Southwest Conference of the Evangelical Covenant Church

070-172-19
070-172-21
070-172-26
070-172-28
070-172-29
070-172-36
070-172-37
070-172-38
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070-172-41
070-172-44
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070-172-65
070-181-06
070-181-07
070-181-09
070-181-10
070-181-11 070-181-19 120 Train Court
070-181-12
070-181-15
070-181-20
070-181-30
070-181-31
070-181-33
070-181-34
070-181-35
070-181-36
070-191-37
070-181-38
070-181-39

Owner: *Mission Springs Camps and Conference Center, Inc.

Owner: Pacific Southwest Conference of the Evangelical Covenant Church

070-181-42
070-181-43
070-181-45
070-181-46
070-181-58
070-181-59
070-181-60
070-181-63
070-181-64

There are a total of 119 parcels for 114 cabins

5 cabins are set on 2 parcels	=	10
109 cabins are set on 1 parcel	=	109
114 cabins	parcels =	119

TOTAL: 52

Exclude MS: Glenwood Dr. Undeveloped Parcel 093-171-26

Attachment 5

Mission Springs, Master Plan Proposed Phasing, November 2017

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MISSION SPRINGS MASTER PLAN PHASING

PHASE I

Spring of 2018- Fall 2019

- Sports Court and Amphitheater
- Closure of Tabernacle Drive except for emergency vehicles
- Improvements to cabins in Frontier Ranch Camp area
- Fireside Lounge
- Dining Hall
- New pool building and related improvements

PHASE II

Fall 2019- Summer 2020

- New Lodge 40 guests
- Seasonal Staff lodging at Spring Creek 24 staff

PHASE III

Fall 2020- Summer 2022

- Improvements to Chapel
- Mission Woods Lodge 88 guests
- Remodel of Oak-Hemlock cabins from dormitories to meeting rooms

Attachment 6

Kimley-Horn, Traffic Memorandum, July 2018

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Kimley»Horn

MEMORANDUM

From: Frederik Venter, P.E. and Jacob Mirabella
Kimley-Horn and Associates
100 West San Fernando Street
San Jose, CA 95113

To: John Swift
Swift Consulting Services, Inc.
500 Chestnut Street, Ste. 100
Santa Cruz, CA 95060

Date: July 31, 2018

Re: **Mission Springs – Trip Generation and Distribution**

This memorandum presents the trip generation and distribution results for the proposed expansion of Mission Springs Camp (the "Project"), located at 1050 Lockhart Gulch Road in Santa Cruz County, California.

1. Summary of Findings

The existing site provides weeklong and weekend events for adult and youth groups, focusing on self-development and outdoor activities. The project proposes to expand the existing services from the permitted 500 guests to up to 704 guests. Trip generation for the site is unique, and subsequently, data on existing usage was collected at the site and was utilized to estimate the future increase in travel demand to and from the site. Most of the trips to and from the site occur in carpools, which benefits lower traffic volumes on the local roads. Additionally, the site typically staggers group arrival and departure times.

The existing project site typically generates peak trips during Friday late afternoon/early evening and Sunday afternoon. Outside of Friday late afternoon/early evening and Sunday afternoon peaks, which is when guests are typically scheduled to arrive and depart the site for weekend stays, respectively, traffic to/from the site is minimal and primarily consists of staff and delivery trips (which will not significantly change with the increase in permitted guests).

The proposed increase in permitted guests (204 additional guests) is anticipated to generate up to 39 net additional Friday PM peak hour trips and 58 net additional Sunday afternoon peak hour trips. These trips are equivalent to roughly 2 new vehicles every three minutes (on the transportation network) during the Friday PM peak hour and 1 new vehicle every minute (on the transportation network) Sunday afternoon peak hour. All other Mondays through Thursdays and Saturdays (non-project peaks) are anticipated to be significantly lower. It is not anticipated that the additional Project traffic would degrade the existing conditions substantially and the existing conditions with the Project traffic would be acceptable.

2. Introduction

The project site is located in Santa Cruz County, California and is accessed via Lockhart Gulch Road. Lockhart Gulch Road connects to Mount Hermon Road in the City of Scotts Valley, which connects to Highway 17 in the east and Highway 9 in the west. The existing site's land use is primarily campgrounds and event/conference center, separated into the following areas:

A. Conference Center
B. Frontier Ranch
C. Wild Oak

The existing land use is permitted to host up to 500 overnight guests (use permit 75-1060-U). Typical site peak operations include weekend guests that arrive Friday late afternoons and depart Sunday late afternoons, with an average 3.4 persons per vehicle occupancy based on survey data collected by Mission Springs Camp staff. Off-peak days Monday through Thursday typically has students arriving at the site in up to four buses and up to 10 passenger cars.

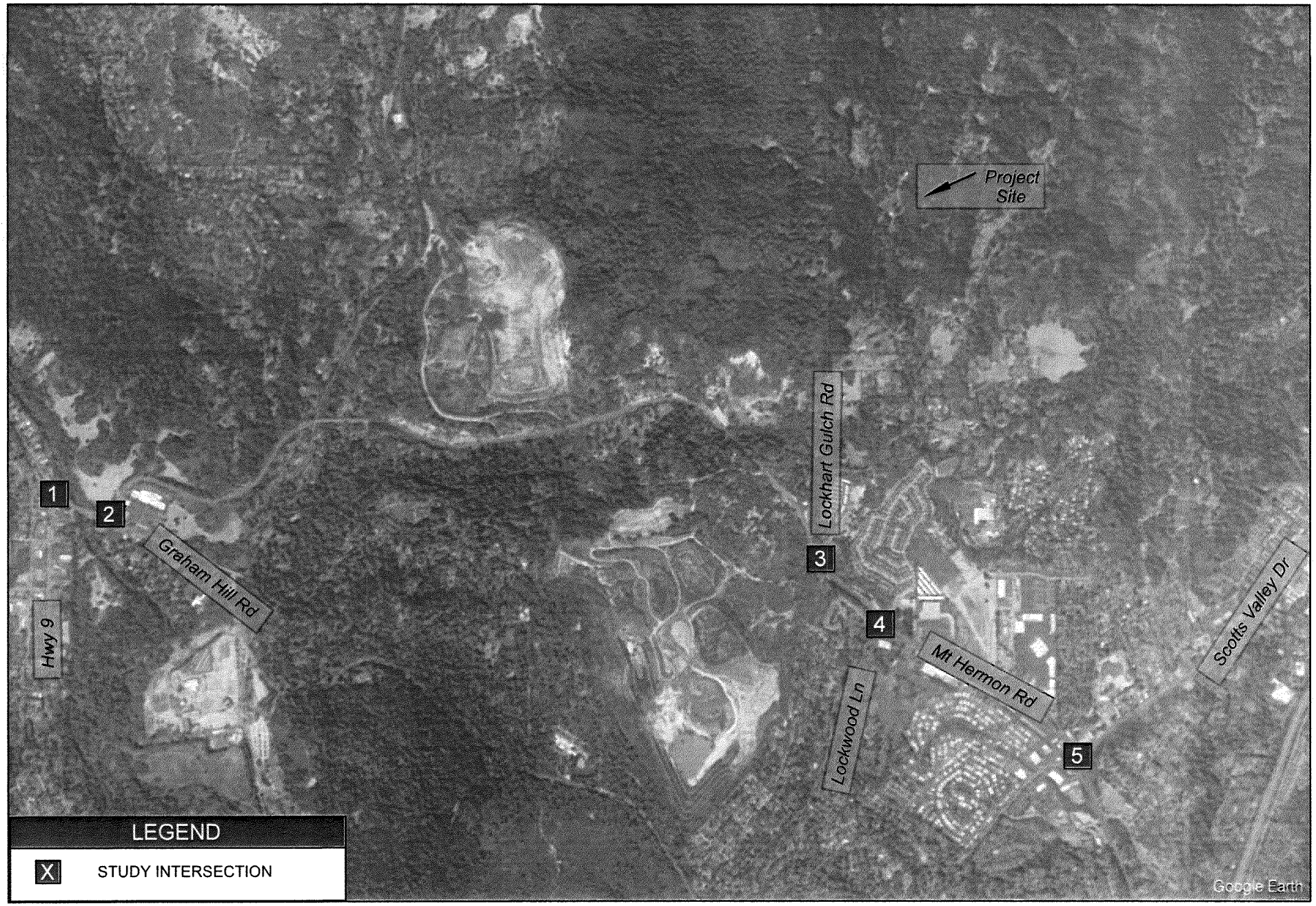
The project proposes to increase the maximum permitted overnight guests to 704. The change in guest capacity by site area is as follows:

- Conference Center: +16 guests
- Frontier Ranch: +148 guests
- Wild Oak: +40 guests

The project location map is shown in **Figure 1** and the existing conditions campus map, prepared by WMB Architects and dated 12/04/2017, is shown in **Figure 2**.

The objective of this study is to evaluate the change in trip generation due to the proposed expansion and to distribute the net new trips onto the local roadway network. The memorandum is organized as follows:

1. Data Collection
2. Trip Generation Analysis
3. Trip Distribution and Assignment



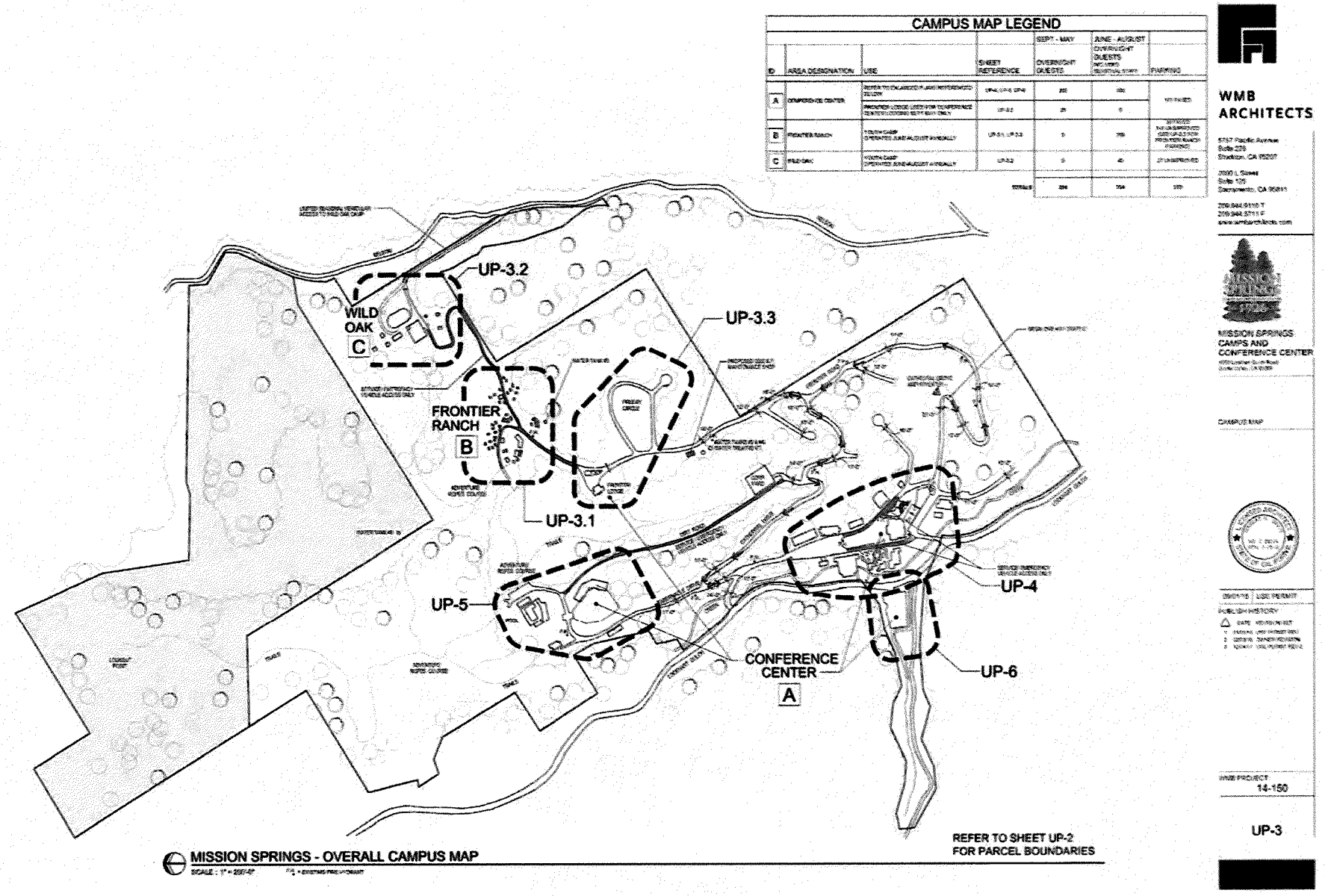
Kimley»Horn
Expect More. Experience Better.

N

Mission Springs

Figure 2

Project Location Map



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Mission Springs

Figure 2

Existing Campus Map

3. Data Collection

3-day, 24-hour traffic counts were collected at the two project driveways located on Lockhart Gulch Road Friday May 4th, 2018 through Sunday May 6th, 2018. The site hosts groups of adults and youths from churches and organizations. Travel to and from the site is typically by carpool, vans, or buses. A limited number of guest trips are typically made via single occupancy vehicles.

In addition to site guests, Mission Springs Camp has roughly 60 administrative staff. Approximately 50% of administrative staff live near the site and walk/bike to work, the rest typically travel to/from work in their own vehicles. Staff trips are conservatively assumed as single occupancy vehicles for this analysis.

During the data collection period in May 2018, the following activities occurred at the camp site (existing conditions):

Conference Center Activities:
Avid 4 Adventure group arrived at 7:30am Friday 5/4 group of 18 adults

Friday arrivals between 2-6pm:
Christ Community Church; 50 men in cars
Santa Clara University; 50 students in cars
Central Christian Church; 75 women in cars

Frontier Lodge:
Individual stays-4 reservations
No activity at Frontier Ranch this weekend

Wild Oak:
2 interns live here and there's no guest activity for the camp

All groups left after lunch on Sunday 5/6 between 1-3pm.

**Note that the above data was provided by the Project Applicant.*

Based on the above description of site activities, it is estimated that approximately 199 individuals stayed onsite during the data collection period. Roughly 30 Mission Springs Camp administrative staff travel to and from the project site by vehicle (another 30 staff live near/on the site and walk or bike work). Additionally, approximately 98 homes exist near the project site, which use the two surveyed project driveways. It is estimated that 30% of the homes are generally occupied year-round and 35% of the homes are typically occupied as recreational/timeshare homes. This activity, staff, and residential data was provided by the Project Applicant.

The count data is summarized by day (Friday, Saturday, and Sunday) and shows the number of trips entering and exiting the two project driveways. The collected data is graphically illustrated in **Figures 3 and 4**.

As shown in the figures, Friday evening peak hour occurred at 3:00pm-4:00pm and was 71 (23 IN / 48 OUT), which coincides with typical weekday roadway network peak hours. The Sunday peak hour occurred at 11:45am-12:45pm and was 62 (39 IN / 23 OUT) and coincides with typical Sunday roadway network peak hours.

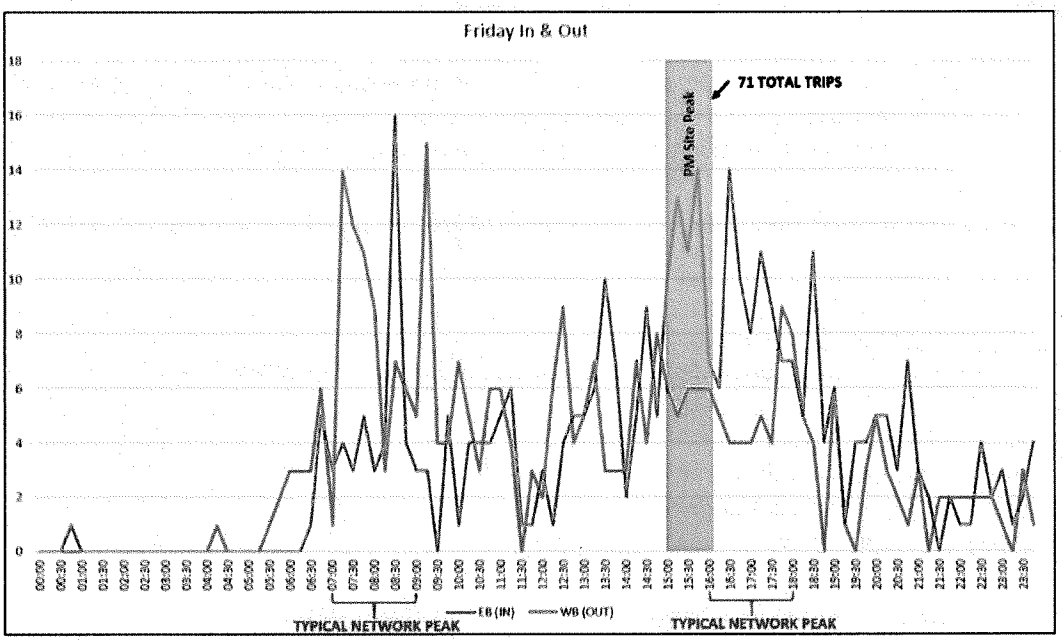


Figure 3: Friday In and Out Driveway Count Data

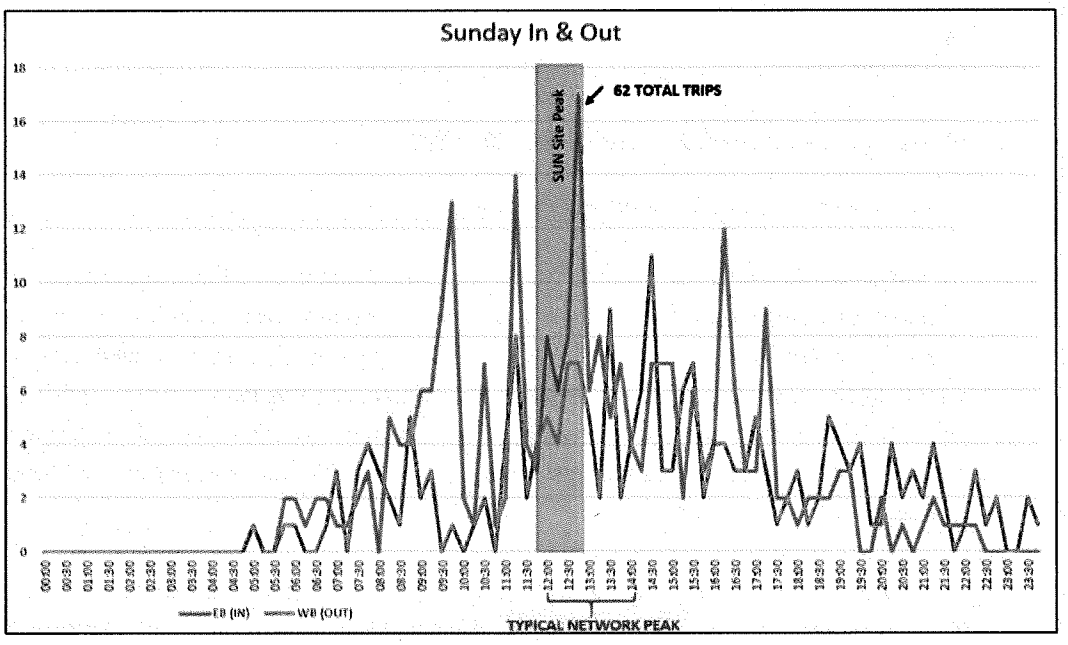


Figure 4: Sunday In and Out Driveway Count Data

18 guests arrived Friday morning when data was collected, which is atypical operations for the camp. The 18 Friday AM guest arrivals are also significantly below the Friday guest arrivals and Sunday guest departures; therefore, the Friday PM and Sunday afternoon peaks are analyzed in the following sections.

4. Trip Generation Analysis

The data that was presented above was used to estimate the trips generated by guests and administrative staff. Institute of Transportation Engineers, *Trip Generation 10th Edition (2017)* land use 210 (Single Family Residential) and land use 265 (Timeshare) was used to estimate the trips generated by the existing homes that utilize project driveways. **Table 1** below shows the peak trip generation estimates for existing conditions (175 Friday PM guest arrivals and 197 Sunday afternoon guest departures), maximum existing permitted occupancy (500 guests), and maximum proposed occupancy (704 guests).

Note: The project applicant estimates that vehicle occupancy has historically been approximately 3.4 passengers per vehicle.

Kimley»Horn

Table 1: Peak Trip Generation Estimates

Land Use	Unit	Friday PM Peak Hour			Sunday Afternoon Peak Hour		
		In	Out	Total	In	Out	Total
Existing Count Data (175 Fri PM Arrivals, 197 Sun MD Departures)							
Driveway Count Data (3 hours)	Trips	64	120	184	86	65	151
Driveway Count Data (2 hours)	Trips	42	85	127	66	42	108
Driveway Count Data (hour)	Trips	23	48	71	39	23	62
Existing Estimates (175 Fri PM Arrivals, 197 Sun MD Departures)							
Guests (3.4 vehicle occupancy)	Trips	20	13	33	22	33	55
Administrative Staff (arrive over two hours)	Trips	0	15	15	0	0	0
Food Services	Trips	0	0	0	0	0	0
Veritive Soap and Cleaning	Trips	0	0	0	0	0	0
Regularly Occupied Homes (30 homes)	Trips	19	11	30	6	5	11
Recreational Homes (0.5*68 homes)	Trips	9	12	21	2	11	13
Gross Trips	***Trips***	***48***	***51***	***99***	***30***	***49***	***79***
Existing Permitted Max (500 Guests)							
Guests (3.4 vehicle occupancy)	Trips	57	37	94	56	85	140
Administrative Staff (arrive over two hours)	Trips	0	15	15	0	0	0
Food Services	Trips	0	0	0	0	0	0
Veritive Soap and Cleaning	Trips	0	0	0	0	0	0
Regularly Occupied Homes (30 homes)	Trips	19	11	30	6	5	11
Recreational Homes (0.5*68 homes)	Trips	9	12	21	2	11	13
Gross Trips	***Trips***	***85***	***75***	***160***	***64***	***101***	***164***
Proposed Permitted Max (704 Guests)							
Guests (3.4 vehicle occupancy)	Trips	80	52	133	79	119	198
Administrative Staff (arrive over two hours)	Trips	0	15	15	0	0	0
Food Services	Trips	0	0	0	0	0	0
Veritive Soap and Cleaning	Trips	0	0	0	0	0	0
Regularly Occupied Homes (30 homes)	Trips	19	11	30	6	5	11
Recreational Homes (0.5*68 homes)	Trips	9	12	21	2	11	13
Gross Trips	***Trips***	***108***	***90***	***199***	***87***	***135***	***222***
Proposed Net New Project Trips							
Existing Permitted Trips (500 Guests)		*85*	*75*	*160*	*64*	*101*	*164*
Proposed Permitted Trips (704 Guests)		*108*	*90*	*199*	*87*	*135*	*222*
Net New Project Trips		***23***	***15***	***39***	***23***	***34***	***58***

Kimley-Horn & Associates, 2018

Existing Conditions (175 PM Guests):

As shown in the table above, driveway existing count data was collected when 175 guests traveled to the project site on Friday evening. Up to 197 guests left the project site on Sunday afternoon. The 18 Friday morning guest arrivals were atypical and do not represent peak operations; therefore, Friday AM data is not analyzed.

The table above shows May 2018 data collection results for the peak one-hour, peak two-hours, and peak three-hours, which are as follows:

- 71 Friday PM peak one-hour vehicles (23 IN / 48 OUT) and 62 Sunday afternoon peak one-hour vehicles (39 IN / 23 OUT)
- 127 Friday PM peak two-hour vehicles (42 IN / 85 OUT) and 108 Sunday afternoon peak two-hour vehicles (66 IN / 42 OUT)
- 184 Friday PM peak three-hour vehicles (64 IN / 120 OUT) and 151 Sunday afternoon peak three-hour vehicles (86 IN / 65 OUT)

The data above was used to verify the trip generation estimates and to distribute maximum permitted and proposed project trips over multiple hours.

Existing Estimates (175 PM Guests):

The following summarizes the calculations used to estimate the existing conditions trip generation breakdown:

- **Guests (3.4 vehicle occupancy):** 33 peak hour trips (20 in / 13 out) Friday PM and 55 peak hour trips (22 in / 33 out) Sunday afternoon.
    - 175 guests assumed at 3.4 guest per vehicle occupancy (175/3.4=51). 197 guests assumed at 3.4 guest per vehicle occupancy (197/3.4=58).
    - It is estimated that vehicles arrived on Friday during a three-hour window and guests departed on Sunday afternoon during a two-hour window.
    - It is assumed that up to 33% of guests the guests parked on-site.
- **Administrative Staff:** 15 peak hour trips (0 in / 15 out) Friday PM.
    - 50% of staff (30 staggered over 2 hours) assumed to arrive during the AM peak hour.
- **Food Services:** 0 peak hour trips.
    - Arrives and departs outside of evening and afternoon peak hours.
- **Veritive Soap and Cleaning:** 0 peak hour trips.
    - Arrives and departs outside of evening and afternoon peak hours.
- **Regularly Occupied Homes (30 homes):** 30 peak hour trips (19 in / 11 out) Friday PM and 11 peak hour trips (6 in / 5 out) Sunday afternoon.
    - Assumes that 30% of the 98 existing homes that use project driveways (not affiliated with Mission Springs) year-round occupied homes (ITE land use 210).
    - Sunday guest departures occur during network off-peak periods.
- **Recreational Homes (50%*68 homes):** 21 peak hour trips (9 in / 12 out) Friday PM and 13 peak hour trips (2 in / 11 out) Sunday afternoon.
    - Assumes that 35% of the 98 existing homes that use project driveways (not affiliated with Mission Springs) recreational homes (ITE land use 265).

The gross trip estimate on the project driveways, based on existing data collection and Project Applicant provided data is therefore: **99 Friday PM peak hour trips (48 in / 51 out) and 79 Sunday afternoon peak hour trips (30 in / 49 out).**

Existing Permitted Max (500 Guests):

The following summarizes the calculations used to estimate the existing permitted maximum trip generation breakdown:

- **Guests (3.4 vehicle occupancy):** 94 peak hour trips (57 in / 37 out) Friday PM and 140 peak hour trips (56 in / 85 out) Sunday afternoon.
  - 500 guests assumed at 3.4 guest per vehicle occupancy (500/3.4=147).
  - This estimate was scaled up using the existing trip generation estimates for 175 Friday PM peak hour arrivals and 197 Sunday afternoon peak hour departures.
- **Administrative Staff:** 15 peak hour trips (0 in / 15 out) Friday PM.
  - 50% of staff (30 staggered over 2 hours) assumed to arrive during the AM peak hour.
- **Food Services:** 0 peak hour trips.
  - Arrives and departs outside of evening and afternoon peak hours.
- **Veritive Soap and Cleaning:** 0 peak hour trips.
  - Arrives and departs outside of evening and afternoon peak hours.
- **Regularly Occupied Homes (30 homes):** 30 peak hour trips (19 in / 11 out) Friday PM and 11 peak hour trips (6 in / 5 out) Sunday afternoon.
  - Assumes that 30% of the 98 existing homes that use project driveways (not affiliated with Mission Springs) year-round occupied homes (ITE land use 210).
  - Sunday guest departures occur during network off-peak periods.
  - Same as existing conditions
- **Recreational Homes (50%*68 homes):** 21 peak hour trips (9 in / 12 out) Friday PM and 13 peak hour trips (2 in / 11 out) Sunday afternoon.
  - Assumes that 35% of the 98 existing homes that use project driveways (not affiliated with Mission Springs) recreational homes (ITE land use 265).

The gross trip estimate on the project driveways, based on existing data collection, Project Applicant provided data, and maximum permitted number of guests (500 guests) is therefore: **160 Friday PM peak hour trips (85 in / 75 out) and 164 Sunday afternoon peak hour trips (64 in / 101 out).**

Proposed Permitted Max (704 Guests):

The following summarizes the calculations used to estimate the proposed permitted maximum trip generation breakdown:

- **Guests (3.4 vehicle occupancy):** 133 peak hour trips (80 in / 52 out) Friday PM and 198 peak hour trips (79 in / 119 out) Sunday afternoon.

  - 704 guests assumed at 3.4 guest per vehicle occupancy (704/3.4=207).
  - This estimate was scaled up using the existing trip generation estimates for 175 Friday PM peak hour arrivals and 197 Sunday afternoon peak hour departures.
- **Administrative Staff:** 15 peak hour trips (0 in / 15 out) Friday PM.
  - 50% of staff (30 staggered over 2 hours) assumed to arrive during the AM peak hour.
- **Food Services:** 0 peak hour trips.
  - Arrives and departs outside of evening and afternoon peak hours.
- **Veritive Soap and Cleaning:** 0 peak hour trips.
  - Arrives and departs outside of evening and afternoon peak hours.
- **Regularly Occupied Homes (30 homes):** 30 peak hour trips (19 in / 11 out) Friday PM and 11 peak hour trips (6 in / 5 out) Sunday afternoon.
  - Assumes that 30% of the 98 existing homes that use project driveways (not affiliated with Mission Springs) year-round occupied homes (ITE land use 210).
  - Sunday guest departures occur during network off-peak periods.
  - Same as existing conditions
- **Recreational Homes (50%*68 homes):** 21 peak hour trips (9 in / 12 out) Friday PM and 13 peak hour trips (2 in / 11 out) Sunday afternoon.
  - Assumes that 35% of the 98 existing homes that use project driveways (not affiliated with Mission Springs) recreational homes (ITE land use 265).

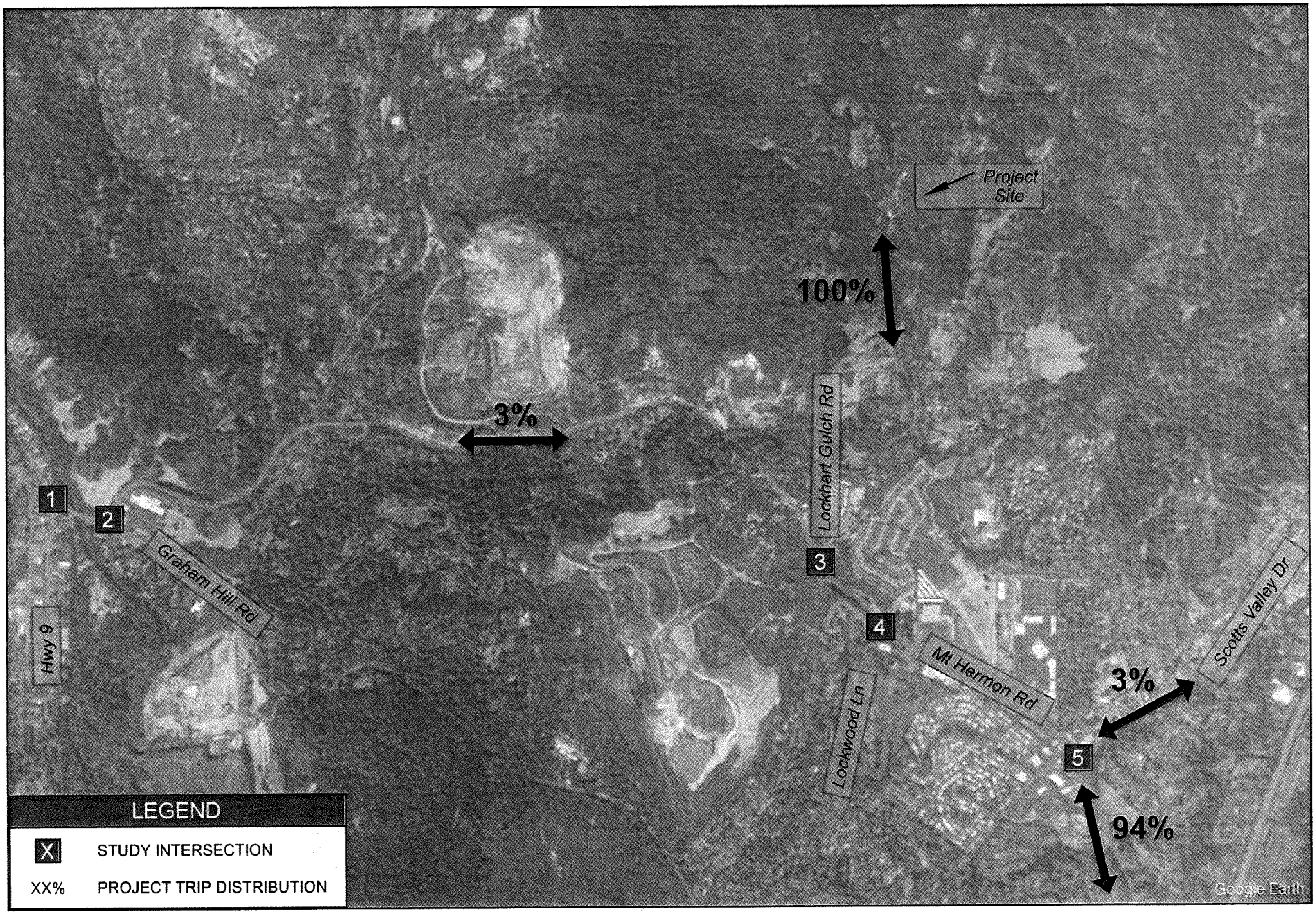
The gross trip estimate on the project driveways, based on existing data collection, Project Applicant provided data, and maximum proposed number of guests (704 guests) is therefore: **199 Friday PM peak hour trips (108 in / 90 out) and 222 Sunday afternoon peak hour trips (87 in / 135 out)**.

Proposed Net New Project Trips:

The Mission Springs Camp site is already permitted to have up to 500 guests on-site at a time. Therefore, to measure the effect that the proposed 204 additional guests will have on the network, it is necessary to evaluate the trip generation difference between 500 guests and 704 guests. As shown in the table above, the net new project trips (i.e. Proposed Permitted Trips minus Existing Permitted Trips) would be 39 Friday PM peak hour trips (23 IN / 15 OUT), and 58 Sunday afternoon peak hour trips (23 IN / 34 OUT).

5. Trip Distribution and Assignment

Both project driveways are located on Lockhart Gulch Road, therefore, 100% of the project trips are anticipated to use Lockhart Gulch to travel to/from the site. Beyond Lockhart Gulch Road, 97% of the project trips are anticipated to travel east on Mount Hermon Road to access Scotts Valley Drive and Highway 17. The remaining 3% of project trips are anticipate to travel west on Mount Hermon Road towards Graham Hill Road and Highway 9. Which results in approximately 2 Friday PM peak hour trips and 2 Sunday afternoon peak hour trips travelling on west Mount Hermon Road. Approximately, 37 Friday peak hour trips and 56 Sunday afternoon peak hour trips east on Mount Hermon Road. **Figure 5** shows the net new project trip distribution.



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N

Mission Springs

Figure 5

Project Trip Distribution

6. Key Intersection Data

Historical traffic count data and new data were evaluated at key intersections that the Project is anticipated to send new trips through. Those intersections include:

1. **Scotts Valley Drive / Whispering Pines Drive & Mount Hermon Road**
   i. Data collected on: Thursday September 17, 2015
   ii. Data collected on: Sunday July 22, 2018
2. **Scotts Valley Drive & La Madrona Drive / Highway 17 Ramps**
   i. Data collected on: Tuesday June 6, 2017
   ii. Data collected on: Sunday July 22, 2018

The afternoon peak hour vehicular traffic volume data is summarized in **Figure 6** below:

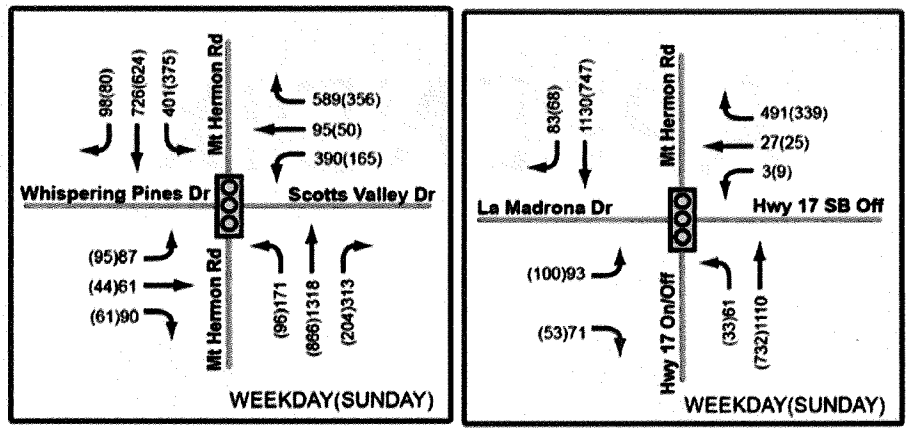

Figure 6: Weekday and Sunday Afternoon Peak Hour Vehicular Traffic Volumes

It is anticipated that under existing weekday PM peak hour conditions, these two key intersections operate acceptably. On Sundays, the volumes are lower compared to the weekday PM peak hour and the operations would thus improve. The Project will add approximately 37 Friday peak hour trips and 56 Sunday afternoon peak hour trips that will travel east on Mount Hermon Road through the two intersections. It is not anticipated that the additional Project traffic would degrade the existing conditions substantially and the existing conditions with the Project traffic would be acceptable.

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APPENDIX

ALL TRAFFIC DATA

City of Scotts Valley
All Vehicles on Unshifted
Peds & Bikes on Bank 1
Heavy Trucks on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 15-7698-007 Scotts Valley Drive-Mt Hermon Road.ppd
Date : 9/17/2015

Unshifted Count = All Vehicles

	Scotts Valley Drive Southbound					Mt Hermon Road Westbound					Whispering Pines Drive Northbound					Mt Hermon Road Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturn Total
16:00	84	19	132	1	236	33	283	96	4	416	23	26	34	0	83	78	173	18	8	277	1012	13
16:15	60	13	150	4	227	46	313	94	3	456	28	13	24	0	65	100	188	16	7	311	1059	14
16:30	85	23	157	3	268	37	325	76	1	439	22	20	19	0	61	90	177	26	7	300	1068	11
16:45	93	14	124	3	234	46	324	78	2	450	20	14	22	0	56	91	189	22	8	310	1050	13
Total	322	69	563	11	965	162	1245	344	10	1761	93	73	99	0	265	359	727	82	30	1198	4189	51
17:00	96	31	151	0	278	38	332	82	6	458	22	15	26	1	64	90	181	21	6	298	1098	13
17:15	110	27	157	0	294	39	337	77	2	455	21	12	23	1	57	104	179	29	5	317	1123	8
17:30	77	30	135	0	242	27	330	75	4	436	23	24	18	2	67	97	174	15	8	294	1039	14
17:45	74	28	109	0	211	30	342	71	4	447	18	21	14	0	53	93	161	18	6	278	989	10
Total	357	116	552	0	1025	134	1341	305	16	1796	84	72	81	4	241	384	695	83	25	1187	4249	45
Grand Total	1335	292	1549	39	3215	447	3910	1452	47	5856	264	332	462	4	1062	1485	3138	236	92	4951	15084	182
Apprch %	41.5%	9.1%	48.2%	1.2%		7.6%	66.8%	24.8%	0.8%		24.9%	31.3%	43.5%	0.4%		30.0%	63.4%	4.8%	1.9%			
Total %	8.9%	1.9%	10.3%	0.3%	21.3%	3.0%	25.9%	9.6%	0.3%	38.8%	1.8%	2.2%	3.1%	0.0%	7.0%	9.8%	20.8%	1.6%	0.6%	32.8%	100.0%	

PM PEAK HOUR	Scotts Valley Drive Southbound					Mt Hermon Road Westbound					Whispering Pines Drive Northbound					Mt Hermon Road Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	85	23	157	3	268	37	325	76	1	439	22	20	19	0	61	90	177	26	7	300	1068
16:45	93	14	124	3	234	46	324	78	2	450	20	14	22	0	56	91	189	22	8	310	1050
17:00	96	31	151	0	278	38	332	82	6	458	22	15	26	1	64	90	181	21	6	298	1098
17:15	110	27	157	0	294	39	337	77	2	455	21	12	23	1	57	104	179	29	5	317	1123
Total Volume	**384**	**95**	**589**	**6**	**1074**	**160**	**1318**	**313**	**11**	**1802**	**85**	**61**	**90**	**2**	**238**	**375**	**726**	**98**	**26**	**1225**	**4339**
% App Total	35.8%	8.8%	54.8%	0.6%		8.9%	73.1%	17.4%	0.6%		35.7%	25.6%	37.8%	0.8%		30.6%	59.3%	8.0%	2.1%		
PHF	.873	.766	.938	.500	.913	.870	.978	.954	.458	.984	.966	.763	.865	.500	.930	.901	.960	.845	.813	.966	**.966**
HV	6	0	11	0	17	1	26	3	0	30	0	0	4	0	4	8	12	0	0	20	71
HV%	2%	0%	2%	0%	2%	1%	2%	1%	0%	2%	0%	0%	4%	0%	2%	2%	2%	0%	0%	2%	2%

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Mt Hermon Rd -- Whispering Pines Dr/Scotts Valley Dr

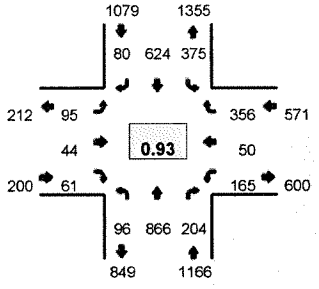
CITY/STATE: Scotts Valley, CA

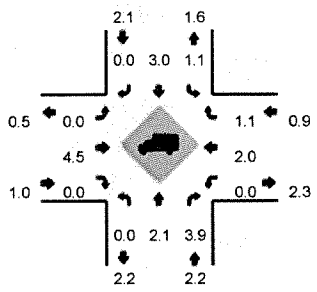
QC JOB #: 14748101

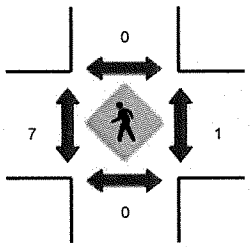
DATE: Sun, Jul 22 2018

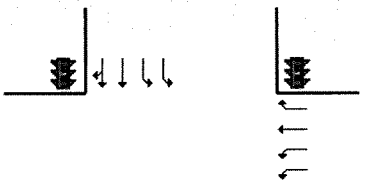
Peak-Hour: 1:00 PM -- 2:00 PM

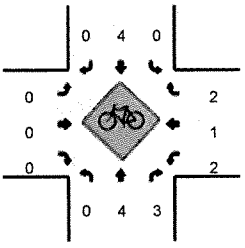
Peak 15-Min: 1:20 PM -- 1:35 PM

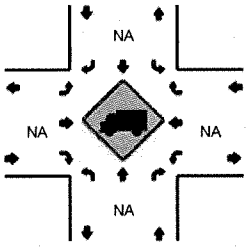


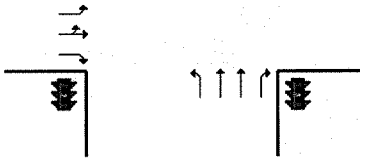


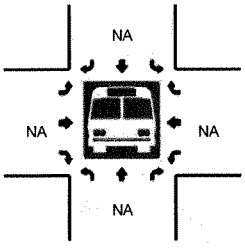












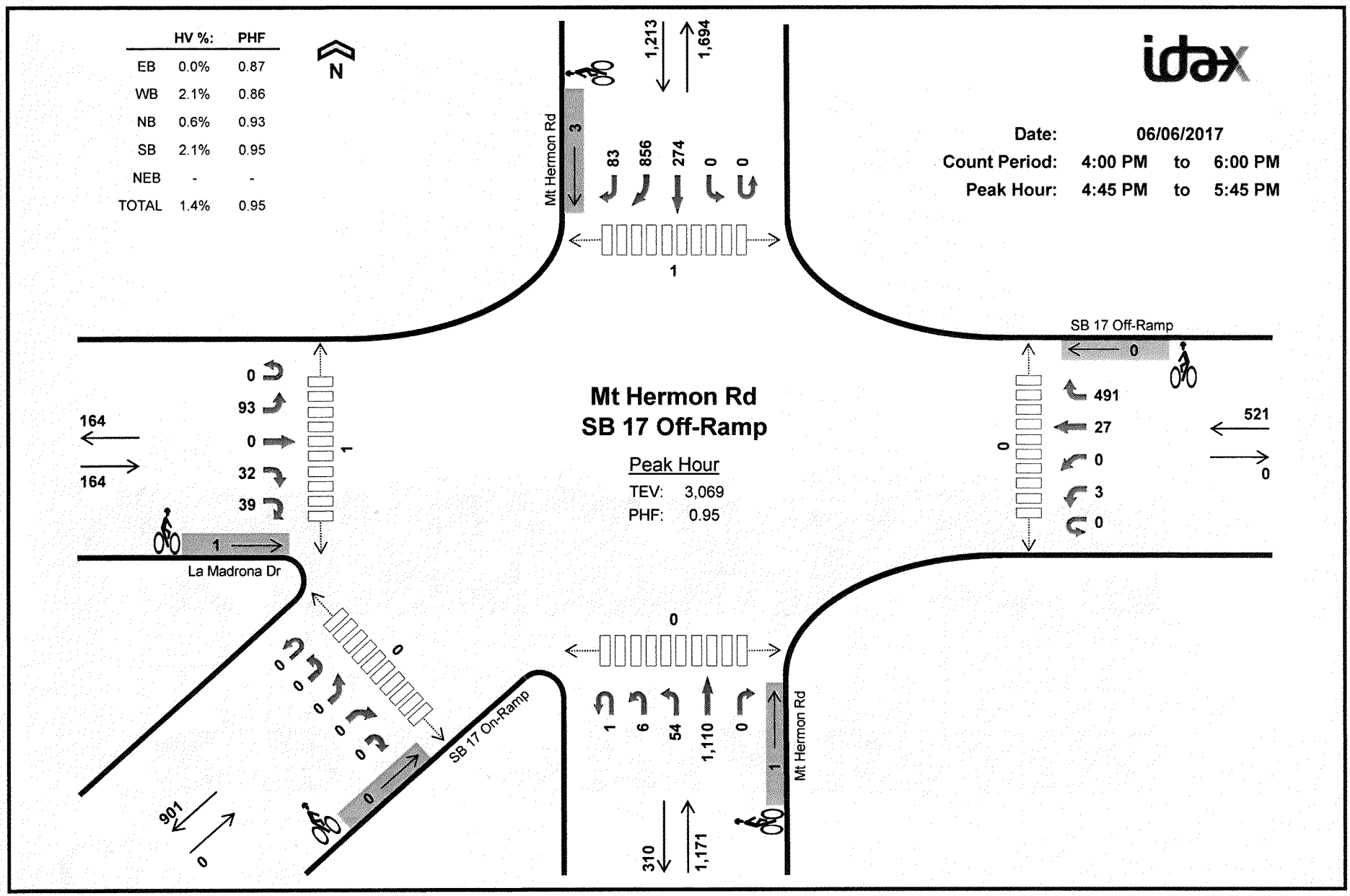
5-Min Count Period Beginning At	Mt Hermon Rd (Northbound)				Mt Hermon Rd (Southbound)				Whispering Pines Dr/Scotts Valley Dr (Eastbound)				Whispering Pines Dr/Scotts Valley Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
1:00 PM	2	69	20	2	32	46	8	5	3	4	4	0	13	1	29	2	240	
1:05 PM	10	84	20	4	25	34	5	2	8	1	5	0	11	2	47	1	259	
1:10 PM	9	85	18	1	27	71	9	2	10	2	10	0	17	5	29	2	297	
1:15 PM	9	51	18	1	26	55	4	4	12	0	5	0	11	3	26	1	226	
1:20 PM	7	83	17	1	25	52	2	2	7	4	4	0	12	3	30	0	249	
1:25 PM	6	91	16	0	39	48	8	7	12	7	2	0	19	14	25	0	294	
1:30 PM	5	60	14	1	33	66	11	2	9	6	10	0	10	1	38	0	266	
1:35 PM	8	54	14	1	25	53	5	2	6	6	2	0	17	11	29	3	236	
1:40 PM	4	84	20	1	32	58	2	6	5	3	2	0	7	2	24	1	251	
1:45 PM	6	54	14	1	34	45	7	1	11	2	6	0	12	4	29	1	227	
1:50 PM	4	88	19	0	23	47	11	3	6	5	5	0	8	2	30	0	251	
1:55 PM	12	63	14	1	16	49	8	2	6	4	6	0	13	2	20	4	220	3016
2:00 PM	5	67	24	1	34	49	5	5	9	6	5	0	6	2	19	2	239	3015
2:05 PM	8	47	18	1	20	62	5	4	3	5	5	0	21	3	33	2	237	2993
2:10 PM	5	88	24	1	27	41	4	6	5	4	4	0	8	0	21	0	238	2934
2:15 PM	8	76	12	1	22	50	4	1	7	2	10	0	19	3	32	0	247	2955
2:20 PM	14	77	7	3	23	56	2	7	8	3	7	0	10	4	18	1	240	2946
2:25 PM	11	84	18	0	22	66	6	5	2	6	6	0	13	2	32	1	274	2926
2:30 PM	8	71	14	0	21	52	5	4	5	5	5	0	10	5	24	0	229	2889
2:35 PM	5	87	21	3	26	42	5	4	8	1	5	0	8	0	35	1	251	2904
2:40 PM	5	67	14	1	31	45	5	4	7	5	3	0	22	5	30	2	246	2899
2:45 PM	7	71	14	0	24	41	5	4	7	8	4	0	33	7	33	0	258	2930
2:50 PM	5	69	13	1	17	46	8	3	11	1	8	0	36	5	35	4	262	2941
2:55 PM	5	55	13	0	10	52	6	2	10	3	9	0	23	2	32	4	226	2947

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	72	936	188	8	388	664	84	44	112	68	64	0	164	72	372	0	3236
Heavy Trucks	0	12	0		8	12	0		0	4	0		0	0	4		40
Pedestrians		0				0				12				4			16
Bicycles	0	1	1		0	1	0		0	0	0		2	1	2		8
Railroad Stopped Buses																	

Comments:

Report generated on 7/25/2018 9:36 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212



Deon Fouche: 415 - 757 - 7714

deon.fouche@idaxdata.com

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

Location: Mt Hermon Rd – La Madrona Dr/Hwy 17 Ramps
Date: 7/22/2018
Site Code: 14784102

	Mt Hermon Rd Southbound					Hwy 17 SB Off-Ramp Westbound					Hwy 17 Ramps Northbound					Hwy 17 SB On-Ramp From Southwest					La Madrona Dr Eastbound				
Start Time	Right	Thru to Hwy 17 On-Ramp	Thru	Left	U-Turns	Right	Thru	Left to Hwy 17 On-Ramp	Left	U-Turns	Right	Thru	Left	Left to Hwy 17 On-Ramp	U-Turns	Right to Hwy 17 Ramps	Right to Hwy 17 Off-Ramp	Thru to Mt Hermon Rd	Left to La Madrona Dr	U-Turns	Right to Hwy 17 On-Ramp	Right	Thru	Left	U-Turns
01:00 PM	5	32	19	0	0	24	4	0	1	0	0	54	2	0	0	0	0	0	0	0	4	3	0	10	0
01:05 PM	7	42	23	0	0	23	0	0	1	0	0	81	3	0	0	0	0	0	0	0	2	1	0	8	0
01:10 PM	1	38	22	0	0	26	2	0	1	0	0	75	5	0	0	0	0	0	0	0	6	2	0	5	0
01:15 PM	5	38	31	0	0	13	3	0	0	0	0	56	1	0	0	0	0	0	0	0	2	3	0	7	0
01:20 PM	5	39	32	0	0	40	1	0	1	0	0	62	3	0	0	0	0	0	0	0	1	5	0	11	0
01:25 PM	2	34	20	0	0	21	1	1	0	0	0	61	4	0	0	0	0	0	0	0	2	6	0	11	0
01:30 PM	9	47	25	0	0	21	2	1	0	0	0	51	4	0	0	0	0	0	0	0	2	2	0	6	0
01:35 PM	6	40	20	0	0	24	2	0	1	0	0	44	4	1	0	0	0	0	0	0	1	2	0	8	0
01:40 PM	4	45	26	0	0	20	0	0	0	0	0	69	3	0	0	0	0	0	0	0	1	8	0	2	0
01:45 PM	8	34	20	0	0	17	0	0	0	0	0	60	6	0	0	0	0	0	0	0	0	2	0	6	0
01:50 PM	4	29	23	0	0	28	0	0	1	0	0	55	0	1	0	0	0	0	0	0	1	2	0	5	0
01:55 PM	5	43	34	0	0	19	4	0	0	0	0	31	3	0	0	0	0	0	0	0	1	1	0	3	0
02:00 PM	2	40	16	0	0	19	3	0	0	0	0	56	0	0	0	0	0	0	0	0	1	2	0	13	0
02:05 PM	8	36	13	0	0	19	1	0	1	0	0	61	4	0	0	0	0	0	0	0	5	0	0	7	0
02:10 PM	5	45	11	0	0	32	2	0	0	0	0	62	1	1	0	0	0	0	0	0	2	2	0	9	0
02:15 PM	3	46	14	0	0	28	2	0	0	0	0	65	1	0	0	0	0	0	0	0	1	5	0	7	0
02:20 PM	4	48	23	0	0	42	3	0	1	0	0	57	2	2	0	0	0	0	0	0	3	1	0	6	0
02:25 PM	12	48	16	0	0	37	3	0	1	2	0	75	2	0	0	0	0	0	0	0	2	3	0	6	0
02:30 PM	8	44	17	0	0	34	4	0	2	0	0	47	5	0	0	0	0	0	0	0	1	3	0	9	0
02:35 PM	3	41	14	0	0	37	2	0	0	0	0	58	2	0	0	0	0	0	0	0	2	2	0	15	0
02:40 PM	4	41	14	0	0	23	1	0	1	0	0	70	1	0	0	0	0	0	0	0	9	1	0	8	0
02:45 PM	3	45	12	0	0	25	0	0	1	0	0	51	5	0	0	0	0	0	0	0	1	0	0	8	0
02:50 PM	10	60	26	0	0	24	0	0	0	0	0	49	4	0	0	0	0	0	0	0	3	2	0	7	0
02:55 PM	12	37	22	0	0	26	4	0	1	0	0	47	1	1	0	0	0	0	0	0	1	1	0	8	0
Total	**136**	**992**	**493**	**0**	**0**	**622**	**44**	**2**	**14**	**2**	**0**	**1447**	**66**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**54**	**59**	**0**	**187**	**0**

Peak Hour: 1:55 PM - 2:55 PM
Peak 15: 2:20 PM - 2:35 PM
PHF: 0.917247

Attachment 7

Fall Creek Engineering, Preliminary Grading Volumes,

November 2017

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FALL CREEK ENGINEERING, INC.
Civil • Environmental • Water Resource Engineering and Sciences
Tel. (831) 426-9054 1525 Seabright Avenue, Santa Cruz, CA 95062 www.fallcreekengineering.com

November 14, 2017

John Swift
Swift Consulting Services
500 Chestnut Street, Suite 100
Santa Cruz, CA 95060

Subject: **Mission Springs Camp and Conference Center: Preliminary Grading Volume Estimates**

Dear Mr. Swift,

Per your request, Fall Creek Engineering (FCE) has prepared the following preliminary grading volumes for the proposed building improvements at Mission Springs Camp and Conference Center (Mission Springs) located in Scotts Valley, California. These grading volumes are preliminary and were estimated using proposed building areas and locations provided to us as part of the Master Planning for Mission Springs.

Building/Improvement Area	Area (SF)	Approx Grading Volume CUT (Cy)	Approx Grading Volume FILL (Cy)	Total NET Grading Volume (cy)	Total NET Grading Volume Description (CUT or FILL)
2-story Lodge	9,000	417	250	167	CUT
Dining Hall	9,320	173	259	-86	FILL
Sports Court/Amphitheater	n/a	80	10	70	CUT
Pool Area	6,330	586	234	352	CUT
Mission Woods Lodge + Site	16,500	1,528	611	917	CUT

The grading volumes presented in the above table are subject to change if the building layout or location changes. Additionally, these grading volumes may change once more detailed information is available for the individual site improvements and existing site topography.

If you have any questions or require any additional information, please do not hesitate to contact me.

Sincerely,

ROBYN COOPER, MS, PE
Engineering Director

Attachment 8

Biotic Resources Group, Biological Review, April 2016

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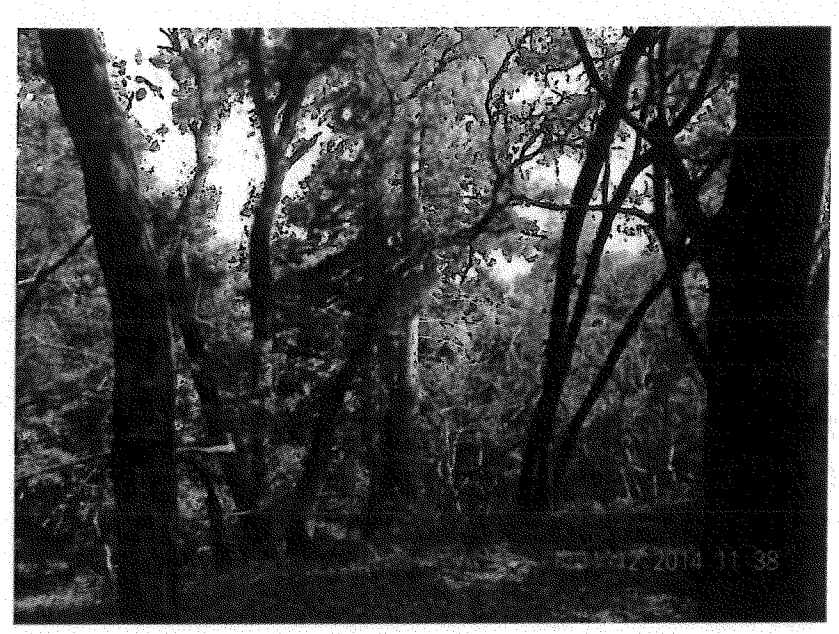
MISSION SPRINGS CAMPS AND CONFERENCE CENTER MASTER PLAN

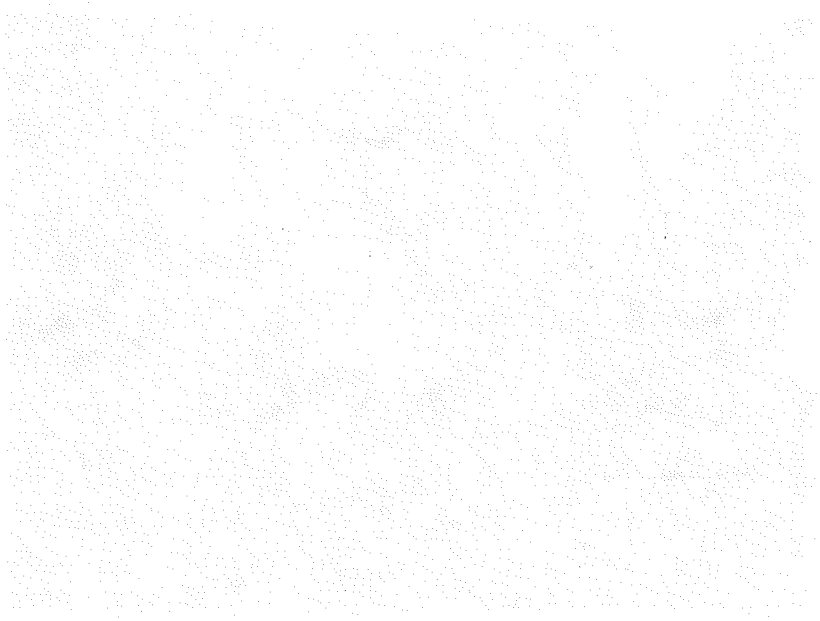
BIOTIC REPORT

August 5, 2019



Biotic Resources Group

Biotic Assessments • Resource Management • Permitting



Biotic Resources Group
Biotic Assessments • Resource Management • Permitting

MISSION SPRINGS CAMPS AND CONFERENCE CENTER MASTER PLAN

BIOTIC REPORT

Prepared for:

Mission Springs Camps and Conference Center

Prepared by:

Biotic Resources Group
Kathleen Lyons
with
Dana Bland, Wildlife Biologist
Dana Bland & Associates

August 5, 2019

2551 S. Rodeo Gulch Road, #12 Soquel California • (831) 476-4803 • brg@cruzio.com

MISSION SPRINGS CAMPS AND CONFERENCE CENTER MASTER PLAN

BIOTIC REPORT

SUMMARY OF BIOTIC REPORT FINDINGS

The Master Plan study area supports common forest trees and understory vegetation. Much of the study area supports mixed evergreen forest and coast redwood forest. These two forest types are fragmented by the existing development; yet the area still provides high value to native wildlife as it is surrounded by large forested tracts with little to no development, thus creating a relatively large unfragmented adjacent forest area that enhances wildlife movement, foraging opportunities, and breeding potential. The Master Plan study area also supports riparian woodland, a sensitive habitat, along Lockhart Gulch Creek, Spring Creek, and Ruins Creek. Oak woodland, another sensitive habitat, occurs along the northern edge of the Frontier Ranch area and on APN 070-011-16 and 35. Other habitat types documented include grassland, annual grassland, chamise chaparral, orchard, and bare or landscaped areas.

No special status plant species were observed or are expected to occur within the Master Plan improvement areas due to a lack of specialized microhabitats required for regionally rare species. The improvement areas do not support Zayante sandhill vegetation or Zayante sandhill soils. Master Plan improvements are not expected to impact the creek environments along Lockhart Gulch Creek, Spring Creek, or Ruins Creek, as proposed master plan improvements are setback from the creeks. No impacts to steelhead or California red-legged frog are expected as no master plan improvements will occur in waterways. Project improvements have the potential to affect nesting birds, if present during construction, dens of dusky-footed woodrat (if present), and native trees; however, significant impacts can be avoided, minimized, or compensated with successful implementation of pre-construction actions. These measures are presented as Bio-1 through Bio-6 (see Section 7.0). Grassland was documented on APN 070-011-16 and 35 and some native grasses were observed. Depending on the density of native grasses, these areas could be classified as needlegrass grassland, a sensitive habitat. No actions are currently proposed on these two parcels; however, additional study of these grassland areas is recommended if improvements are proposed in these areas in the future (see Bio-6 in Section 7.0).

Degraded sensitive habitat areas can be enhanced through the removal and control of invasive, non-native plant species. Bio-5 identifies actions to enhance these degraded areas. A summary of master plan actions and recommended avoidance, minimization, and mitigation measures is presented in the table below.

Summary of Proposed Improvements and Recommendations, Mission Springs Master Plan

Facility	Map Code/Action	Existing Vegetation	Sensitive Resource?	Recommendations (see Section 6.0)
Frontier Ranch (see Figure 3 and Master Plan Sheet UP 3.1)				
Platform Tents	Existing structures	Mixed Evergreen Forest	No	Bio-1, Bio-2
Trail Uses/Zip Line	Existing trails	Oak Woodland	Yes	Bio-5
Recreational Areas	Existing play fields and facilities	Bare/Landscaping	No	None
Wild Oak (see Figure 4 and Master Plan Sheet UP 3.2)				
Cabins and Restrooms	Existing structures	Mixed Evergreen Forest	No	Bio-1, Bio-2

Summary of Proposed Improvements and Recommendations, Mission Springs Master Plan

Facility	Map Code/Action	Existing Vegetation	Sensitive Resource?	Recommendations (see Section 6.0)
Access Road/Bridge over Ruins Creek	Existing	Willow Riparian Woodland	Yes	Bio-1, Bio-2, Bio-3, Bio-4, Bio-5
Recreational Areas	Existing play field	Bare/Landscaping	No	None
Frontier Lodge/Freemy Circle (see Figure 4 and Master Plan Sheet UP 3.3)				
Frontier Lodge	Existing structures	Mixed Evergreen Forest	No	Bio-1, Bio-2
Unimproved Parking Areas	Existing	Annual Grassland	No	None
Conference Center Core (see Figure 6 and Plan Sheet UP-4)				
Lodge, Lounge, Registration	Existing structures	Landscaping and Redwood Forest	No	None
Dining Hall	C6- New structure	Landscaping and Redwood Forest	No	Bio-1, Bio-4
2-story Lodge	C12- New structure	Redwood Forest	No	Bio-1, Bio-4
Recreation Court	C16- New structure	Landscaping	No	None
Fireside Lounge	C-10 New structure	Redwood Forest	No	Bio-1, Bio-4
Stormwater Facilities	New structure	Landscaping/Turf	No	None
Walkways/Pavers	New structure	Bare/Landscaping	No	None
Conference Center Mission Woods (see Figure 7 and Master Plan Sheet UP-5)				
Lodge	M1- Demo two structures; new structure	Mixed Evergreen Forest	No	Bio-1, Bio-2, Bio-4
Pool Building	M4- New structure	Landscaping	No	None
Picnic Area	2 -New structure	Landscaping	No	None
Water Slide Area	3- New structure	Landscaping	No	None
Spray Park	9 -New structure	Landscaping	No	None
Basketball Court	7 - New structure	Landscaping	No	None
Redwood Chapel	M3- Addition	Landscaping	No	None
Oak-Hemlock Lodge	10- New Decks	Redwood Riparian Woodland	Yes	Bio-1, Bio-2, Bio-3, Bio-4, Bio-5
Stormwater Facilities	New structure	Bare/Landscaping	No	None
Walkways/Pavers	New structure	Bare/Landscaping	No	None
Spring Creek (see Figure 8 and Plan Sheet UP-6)				
Parking Lot, Bath House, Cabin	Existing structures	Redwood Riparian Woodland	Yes	Bio-1, Bio-2, Bio-3, Bio-4, Bio-5
Seasonal Staff Lodging	S3- New structure	Bare	No	None
APN 070-011-16 and 35 (see Figures 9 and 10)				
None proposed	None	Redwood Forest	No	Bio-1, Bio-2
None proposed	None	Mixed Evergreen Forest	No	Bio-1, Bio-2
None proposed	None	Oak Woodland	Yes	Bio-1, Bio-2, Bio-5
None proposed	None	Chamise Chaparral	No	Bio-1, Bio-2
None proposed	None	Grassland	No	Bio-1, Bio-2, Bio-6

Summary of Proposed Improvements and Recommendations, Mission Springs Master Plan

Facility	Map Code/Action	Existing Vegetation	Sensitive Resource?	Recommendations (see Section 6.0)
None proposed	None	Willow Riparian Woodland	Yes	Bio-1, Bio-2, Bio-3, Bio-4, Bio-5
None proposed	None	Orchard	No	None

1.0 INTRODUCTION

Mission Springs Christian Camps and Conference Center (Mission Springs) proposes to amend the Master Plan for their facility located near Scotts Valley in Santa Cruz County (Figure 1). The amendment includes adding new parcels to the center (APN 070-011-35 and 070-011-16), upgrades to several existing facilities and construction of new facilities within existing recreation-serving areas (i.e., Conference Center, Spring Creek, Frontier Ranch, Wild Oak, and Mission Woods). The general location of these master plan areas is presented on Figure 2, yet please refer to the full-size (24"x36") project plans prepared by WMB Architects (Use Permit Plans, revision date 1-5-16)

The purpose of this report is to document the baseline condition within the proposed Master Plan improvements areas, identify the location of sensitive habitats, identify potential impacts to biological resources from such improvements, and at a programmatic level, recommend actions to avoid, minimize, or compensate for such impacts.

2.0 PROJECT HISTORY

Mission Springs currently operates under a use permit (75-1060-U), which permits 500 overnight guests and 1,000 day-use guests. Since the use permit was issued, Mission Springs has made improvements to the property and camp with county permits. Some of these include construction of Frontier Lodge, two new bridges with a third emergency and service access road, camp-wide wastewater treatment facility, and domestic water treatment plan with expanded storage capacity for future development. There are year-round church guest retreats, non-summer midweek outdoor education programs for schools, weeklong summer youth camps, and Mission Springs sponsored retreat and events throughout the year. The center services approximately 19,000 guests annually. Mission Springs consists of three primary geographic areas: 1) conference center facility, offering midweek (non-summer) outdoor education experiences for schools, weekend retreats for church groups, and Mission Spring sponsored events and retreats; facility operates year-round; 2) Frontier Ranch facility, offering summer week-long residential camps for 4^{th} – 9^{th} grade youth; facility operated June to August only; and 3) Wild Oak facility, offering summer residential camps for high school youth; seasonal facility operated June to August only.

3.0 METHODOLOGY

Kathleen Lyons, plant ecologist with Biotic Resources Group, and Dana Bland, wildlife biologist with Dana Bland & Associates, conducted a series of reconnaissance surveys of the master plan improvement areas, as well as APN 070-011-35 and 070-011-16. Areas along Lockhart Gulch Creek were visited in 2009 for bridge replacement projects. Parcels APN 070-011-35 and 070-011-16 were visited by Kathleen Lyons, plant ecologist, and Dana Bland, wildlife biologist, on November 12, 2014. Additional reconnaissance surveys of the master plan improvement areas were conducted on April 4, 2016. On April 24, 2019, Kathleen Lyons re-checked the master plan areas to record the baseline condition, identify and map sensitive habitat areas, and document degraded sensitive habitat areas. Degraded sensitive habitat areas are those areas supporting invasive, non-native plant species.

During the site visits for APN 070-011-35 and 070-011-16, principal vegetation types were documented and

wildlife utilization evaluated. Resources on these parcels were accessed via hiking trails from the Frontier Ranch portion of the Mission Springs Conference Center property (e.g., Wagon, Chaparral, Vineyard, Lookout, and Backdoor trails) and through a gated entrance from Nelson Road. In 2016 and 2019, conference and camp areas proposed for upgrades, such as the Conference Center, Spring Creek, Frontier Ranch, Wild Oak, and Mission Woods, were walked.

Plant community types within areas subject to the master plan review (biotic study area) were identified in the field. The major plant community types are based on the classification system developed by CNDDB's *California Terrestrial Natural Communities (*CDFG 2010) and *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995) and as amended to reflect site conditions. Plant community types as recognized by CDFW were used to the greatest extent feasible, however, modifications to the classification system's nomenclature were made, as necessary, to accurately describe the sites resources, particularly for areas that the CDFG system provides no suitable classification. Plant community maps were prepared for each of the Master Plan study areas (Figures 3-8). The distribution of plant community types on APN 070-011-16 and 070-011-35 is presented as Figures 9 and 10, respectively.

Prior to conducting the initial field surveys, a potential list of special status or sensitive plant species was prepared for the project area, utilizing species recognized by California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), and California Native Plant Society (CNPS). These searches were updated in 2019 using the California Natural Diversity Data Base (CNDDB) "Rare Find" (2019) and California Native Plant Society (CNPS) Rare Plant Electronic Inventory (2019) for the USGS Felton quadrangle and surrounding quadrangles. Mapped data on vegetation types and special status species as maintained by the County of Santa Cruz GIS was also reviewed and utilized to document resources within the project area. The *Jepson Manual* (2012) was the principal taxonomic reference used for the botanical work.

Intended Use of this Report

The findings presented in this biological report are intended for the sole use of the property owner (Mission Springs), their representatives, and Santa Cruz County in reviewing the proposed master plan. The findings presented in this report are for information purposes only; they are not intended to represent the interpretation of any State, Federal or County law or ordinance pertaining to permitting actions within sensitive habitat or endangered species. The interpretation of such laws and/or ordinances is the responsibility of the applicable governing body.

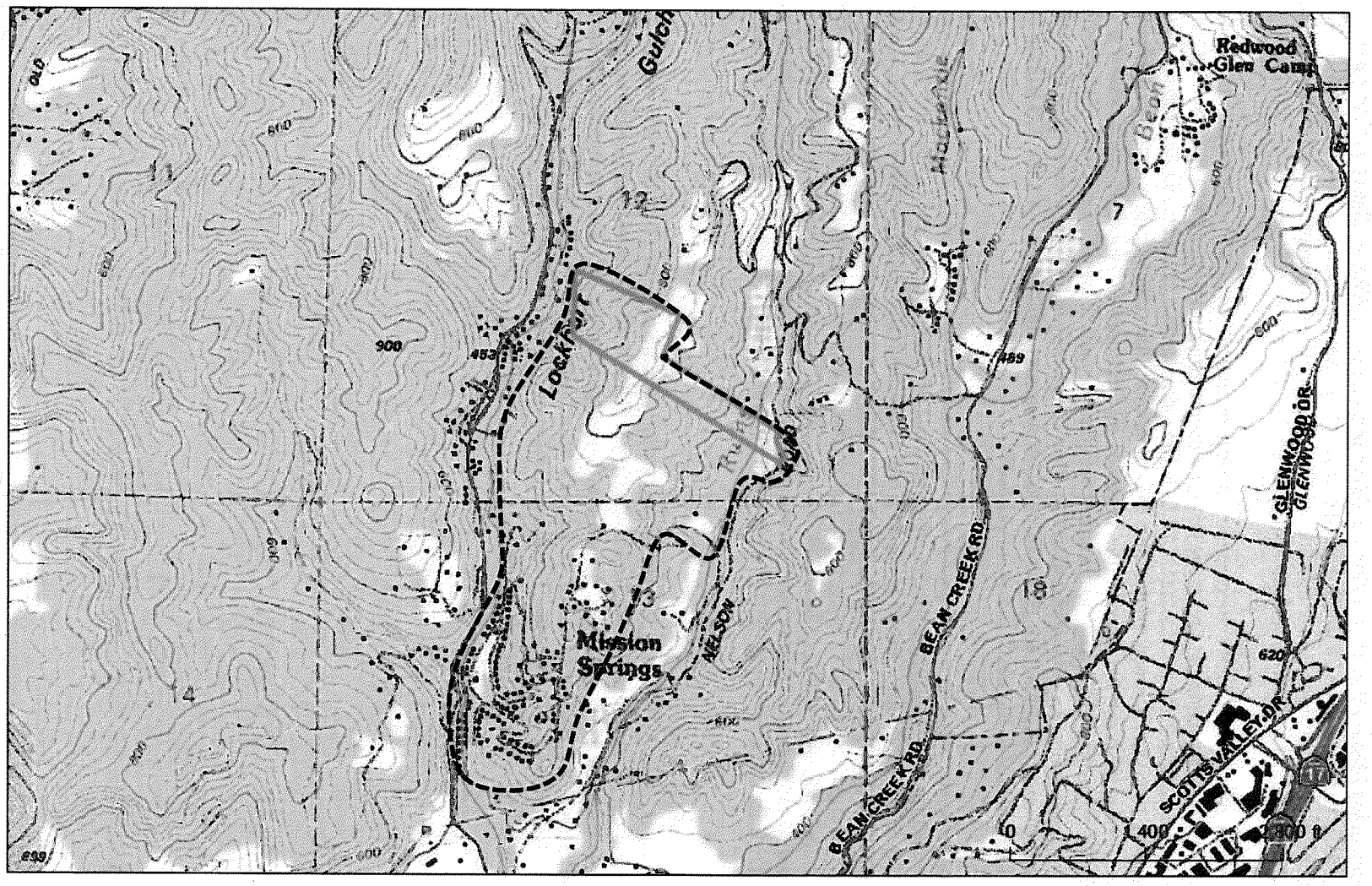


Figure 1. Approximate Location of Mission Spring Camp and Conference Center on USGS Felton Topographic Map

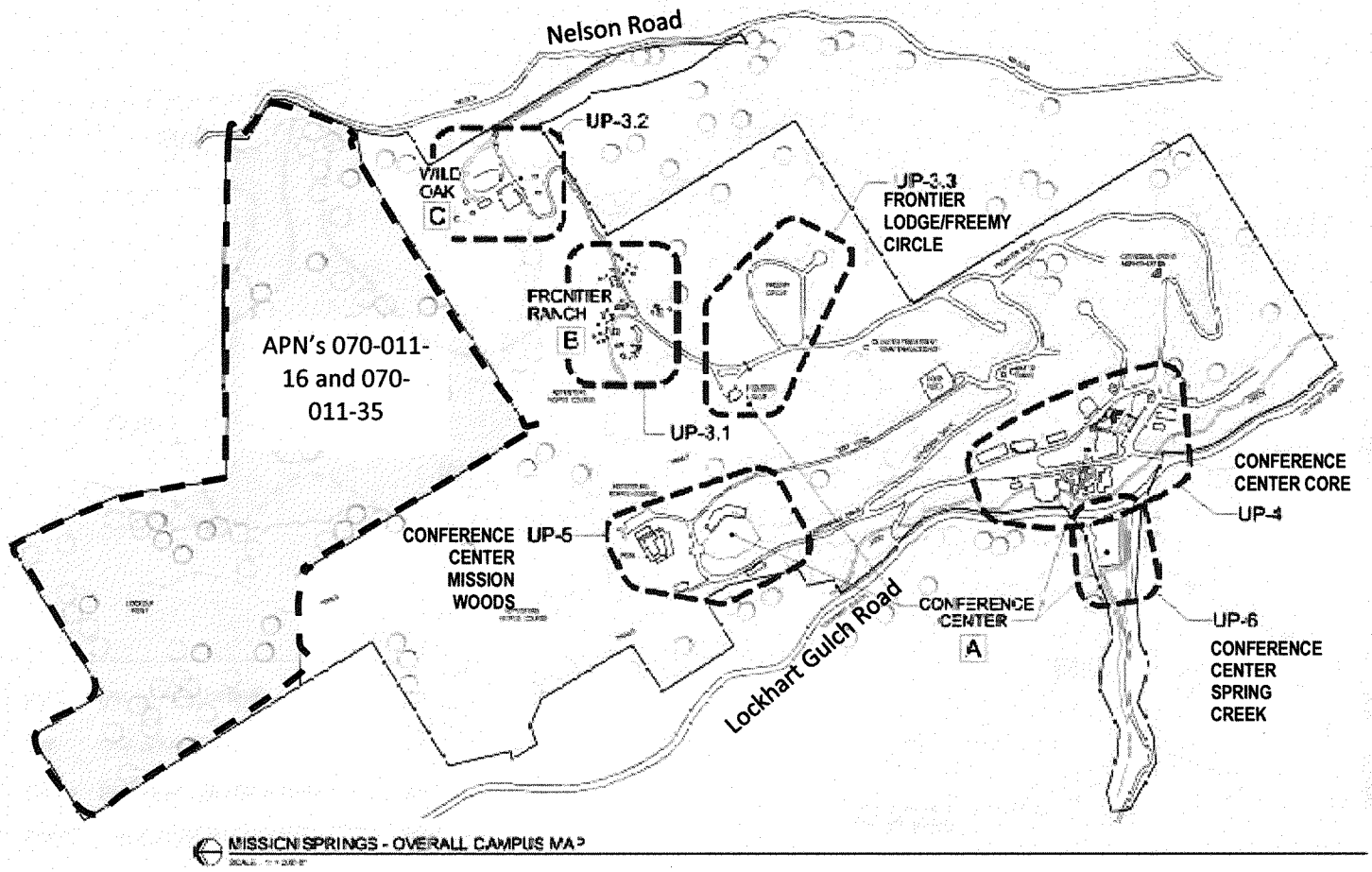


Figure 2. Mission Springs Camp and Conference Center Master Plan Map (encircled areas are the subject of this preliminary biotic review)

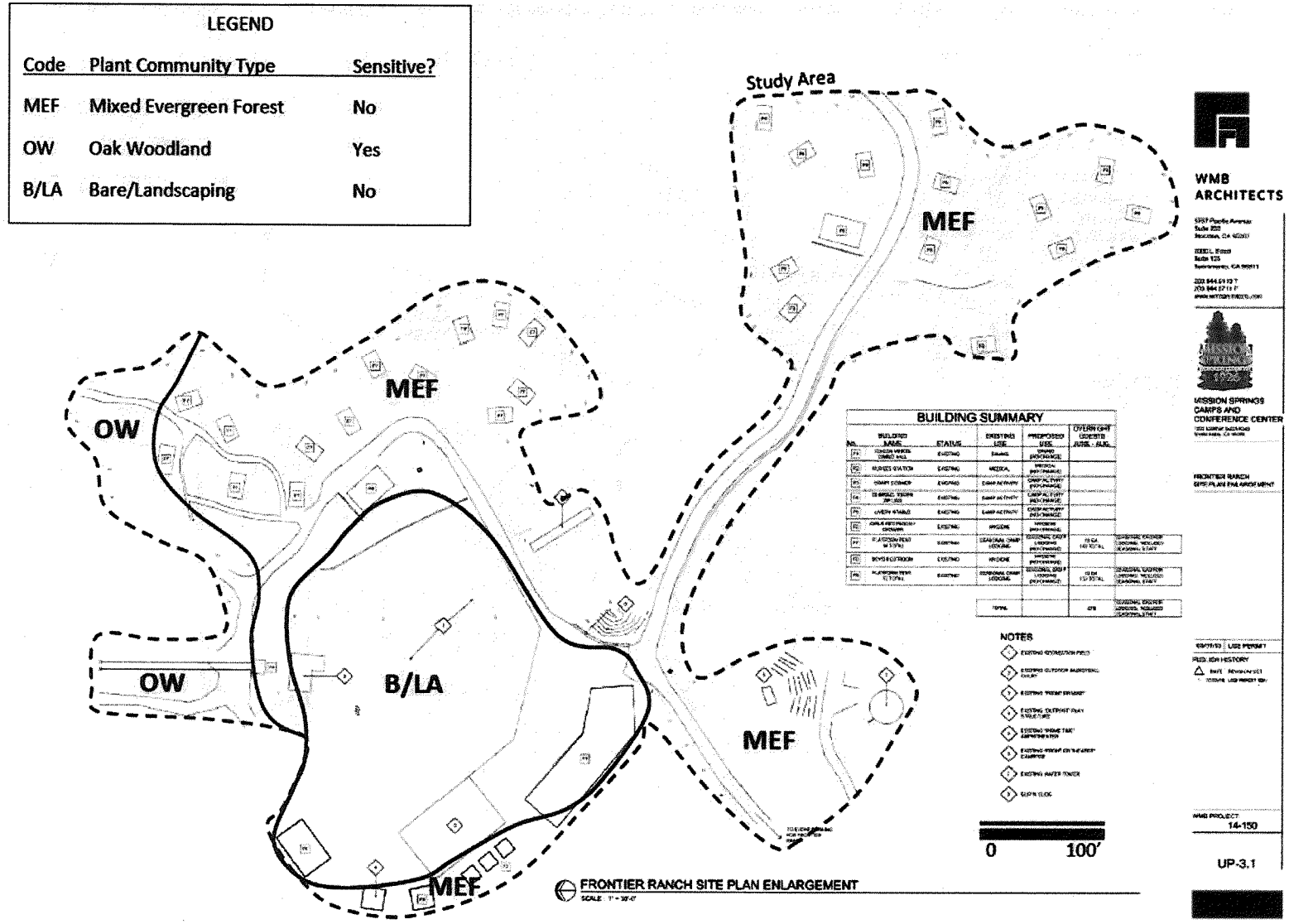
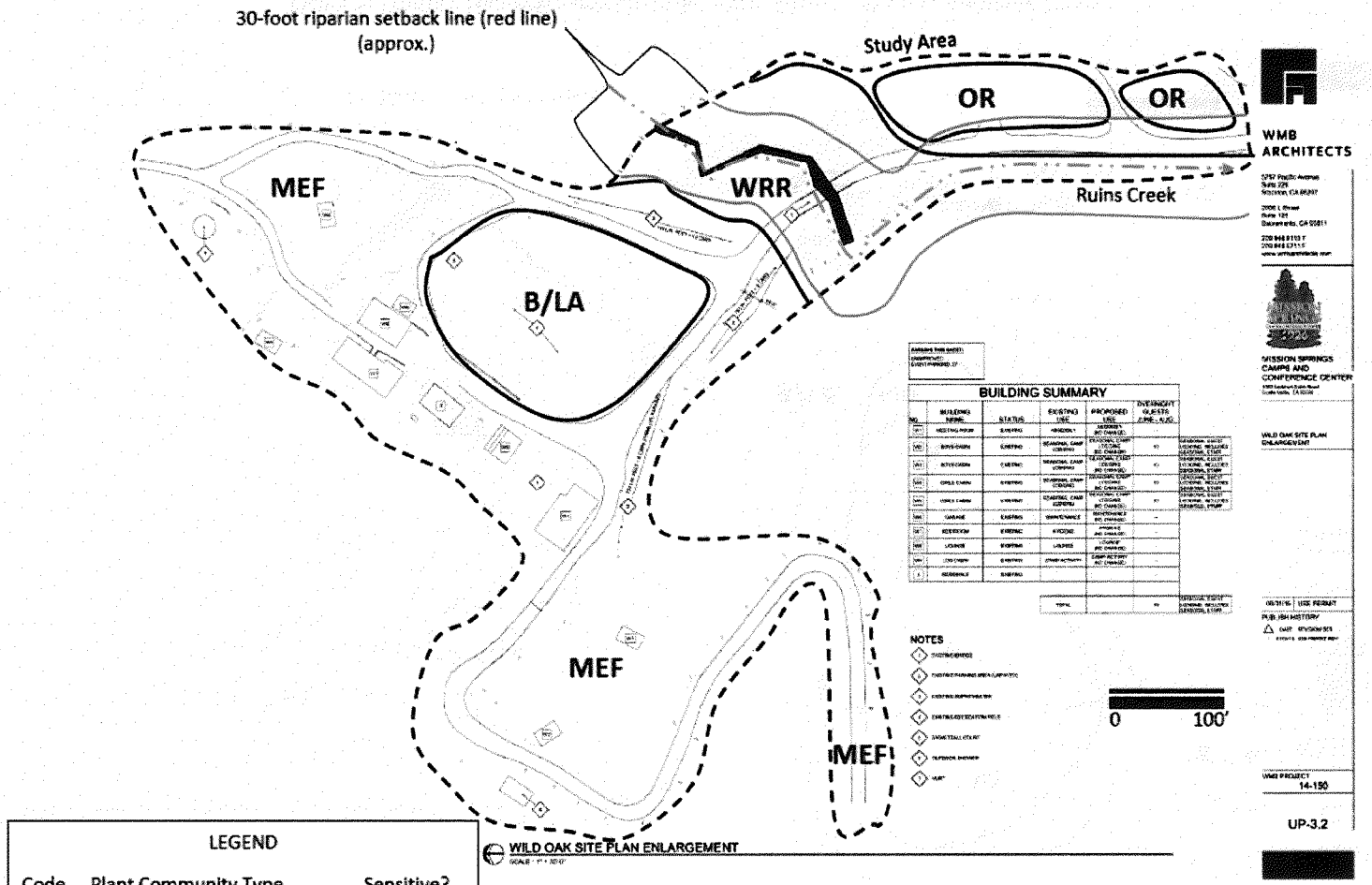


Figure 3. Frontier Ranch Site Plan, Baseline Plant Community Types



LEGEND		
Code	Plant Community Type	Sensitive?
MEF	Mixed Evergreen Forest	No
WRR	Willow Riparian Woodland	Yes
B/LA	Bare/Landscaping	No
OR	Orchard	No

Figure 4. Wild Oak Site Plan, Baseline Plant Community Types

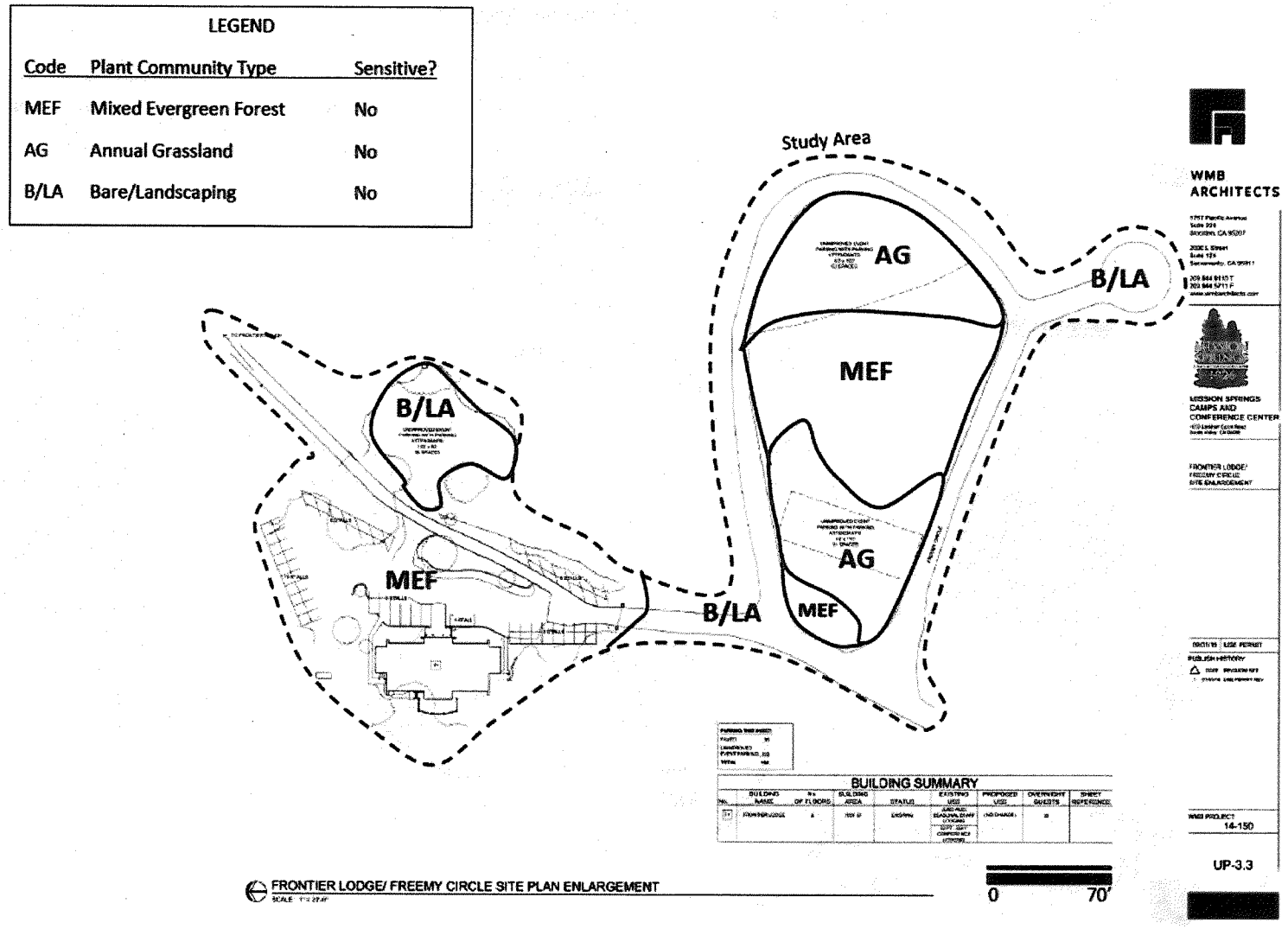


Figure 5. Frontier Lodge/Freemy Circle Site Plan, Baseline Plant Community Types

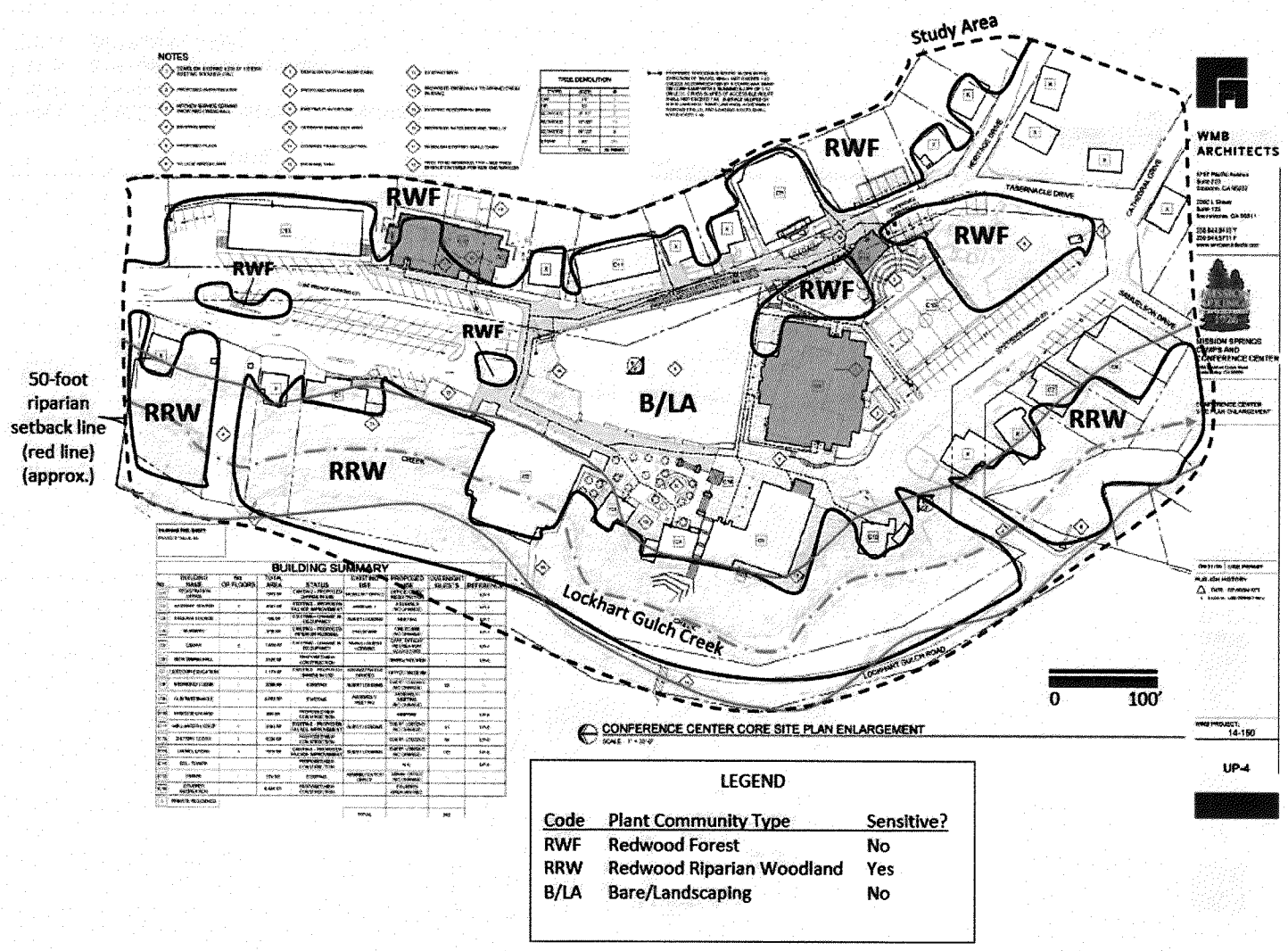


Figure 6. Conference Center Core Site Plan, Baseline Plant Community Types

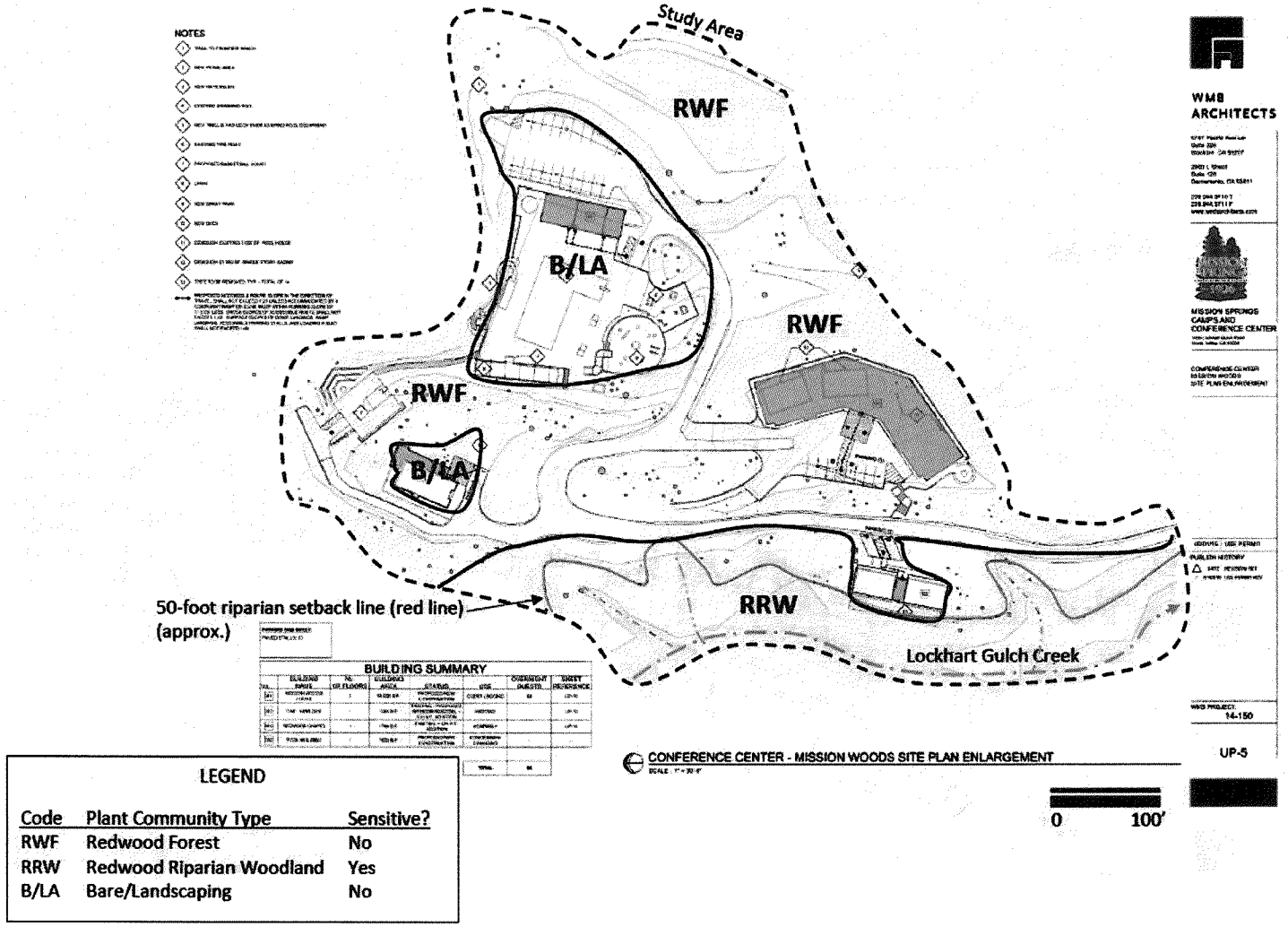


Figure 7. Conference Center – Mission Woods Site Plan, Baseline Plant Community Types

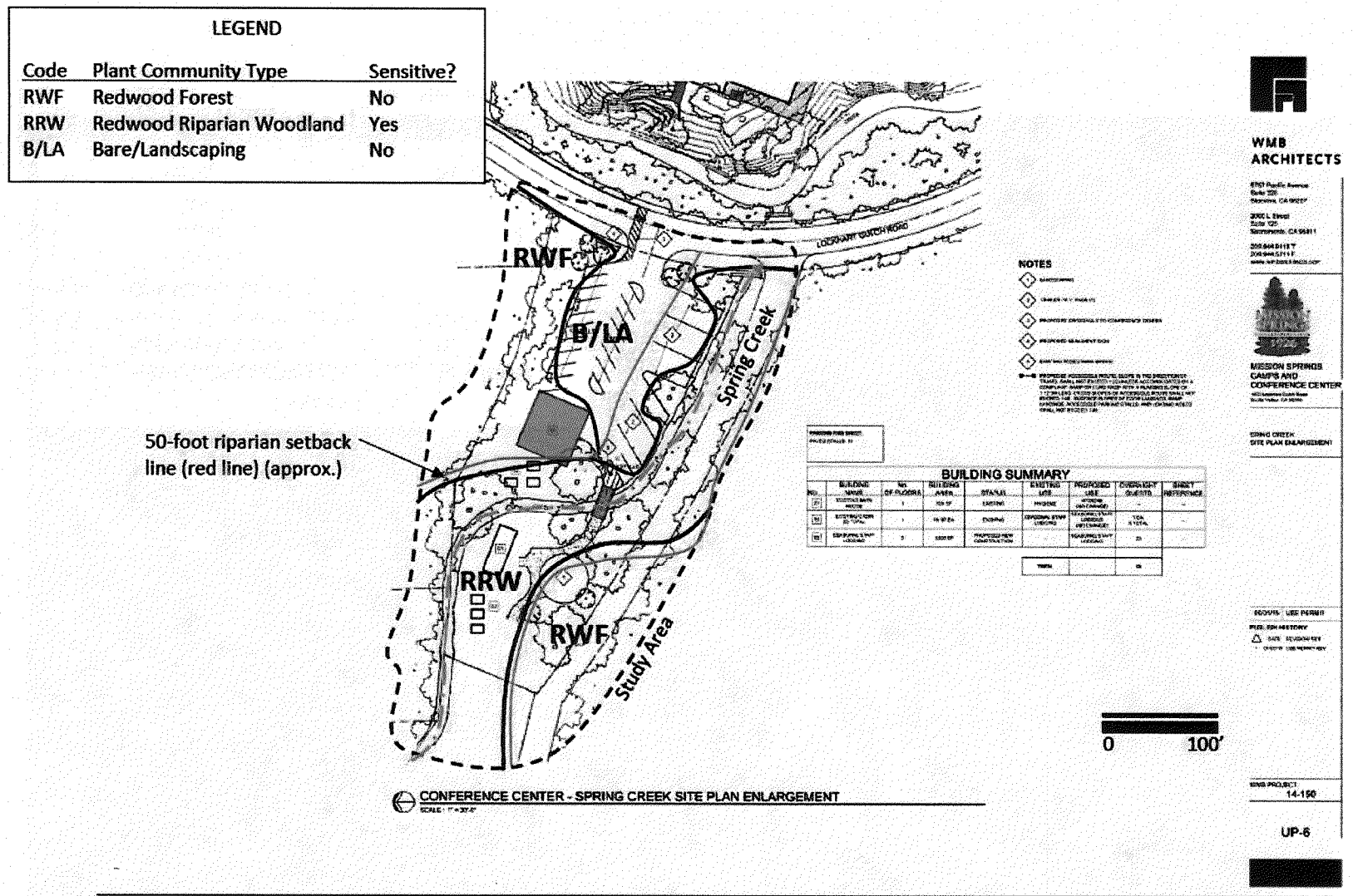


Figure 8. Conference Center Spring Creek Site Plan, Baseline Plant Community Types

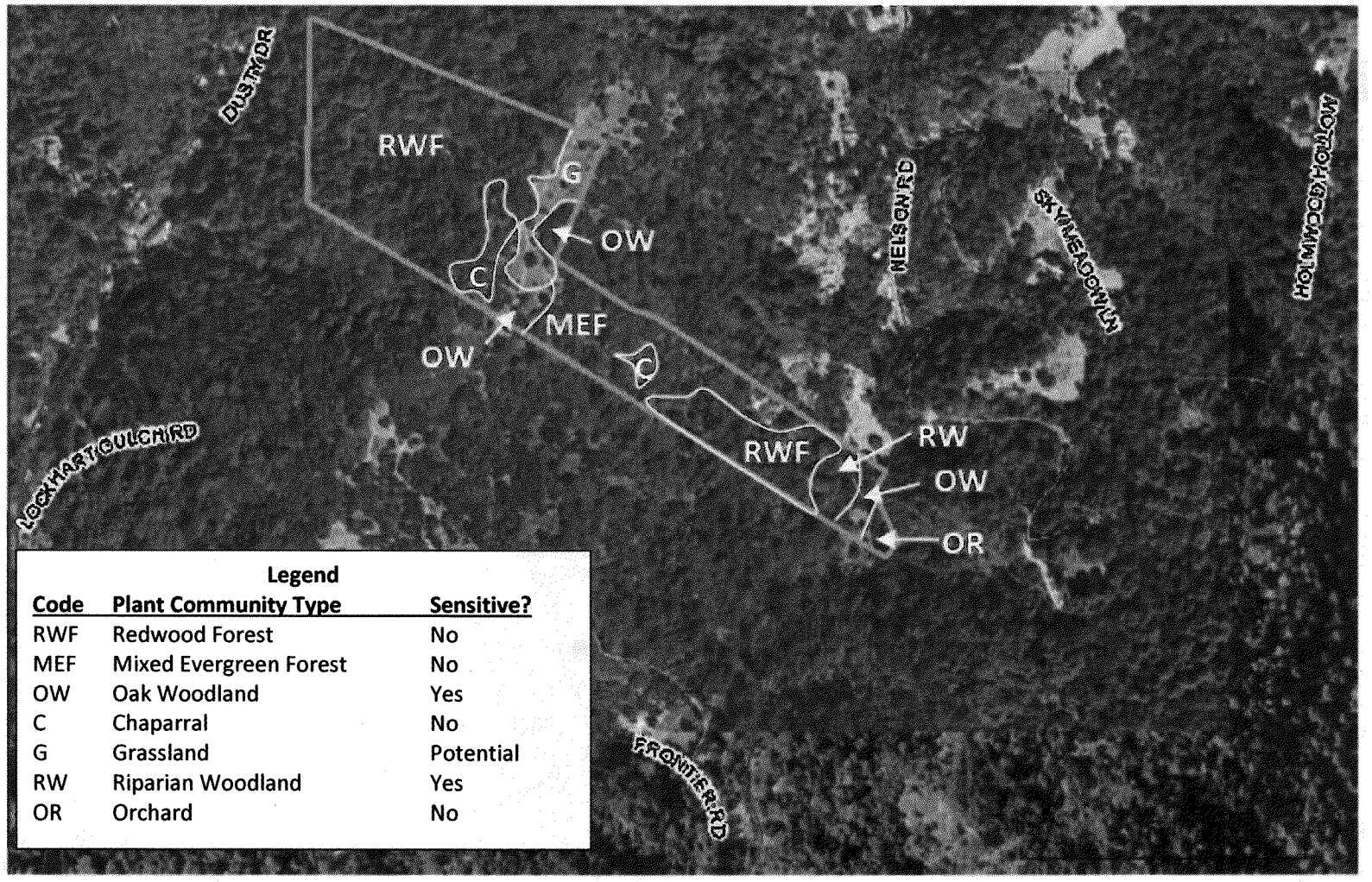


Figure 9. APN 070-011-16, Baseline Plant Community Types

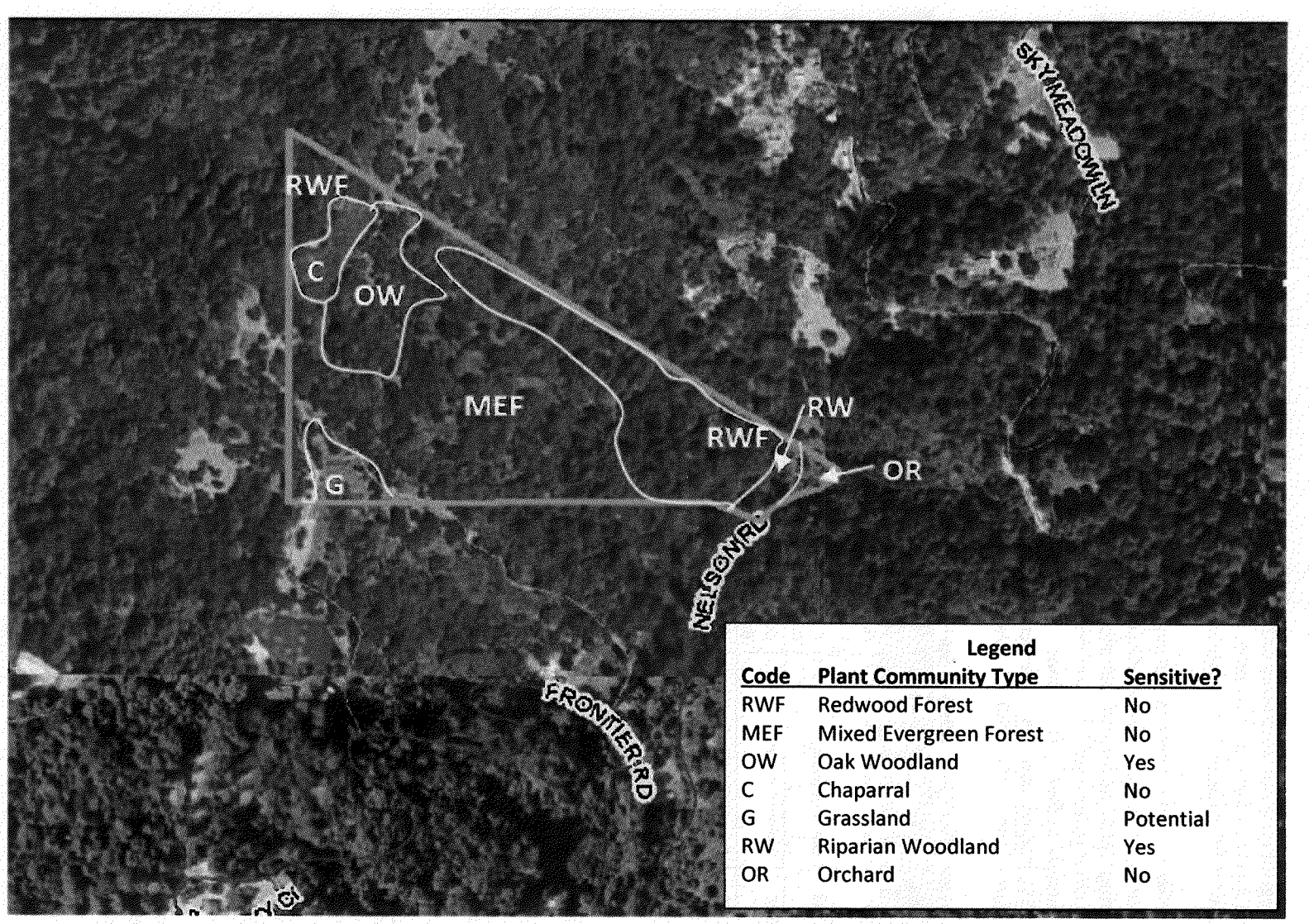


Figure 10. APN 070-011-35, Baseline Plant Community Types

4.0 EXISTING BIOLOGICAL RESOURCES

Several vegetation types were observed in the biotic study area; however, redwood forest and mixed evergreen forest are the most common. These vegetation types, their California Department of Fish and Wildlife (CDFW) code, and sensitive habitat status under County Code are listed in Table 1.

The biotic study area supports a portion of Ruins Creek that is located near Nelson Road. The study area also supports a section of Lockhart Gulch Creek, a perennial waterway that parallels Lockhart Gulch Road. Spring Creek, an intermittent tributary to Lockhart Gulch Creek is located west of Lockhart Gulch Road. No other ponded/wetland features were observed in the study area. The soils in the biotic study area are mapped as Bonny Doon loam, 5-30 percent slopes (116), Nisene-Aptos complex, 50-75 percent slopes (158), Soquel loam, 2 to 9 percent slopes (171), and Zayante – Rock outcrop complex, 15-75 percent slopes (184) (USDA/NRCS Web Soil Survey, 2019).

Table 1. Vegetation Types, Mission Springs Camp and Conference Center Master Plan Study Area

CaCode[1]	Vegetation Type	Plant Association	State Ranking[2]	Sensitive under County Code?
82-200.70	Mixed Evergreen Forest	Douglas Fir/ California Bay/ Madrone/Oak – Hazel/Oceanspray	S4	No
71.060.48	Oak Woodland	Coast Live Oak/California Bay/Canyon Live Oak – California Blackberry	S4	Yes
86.100.20	Redwood Forest	Coast Redwood/Douglas Fir/California Bay/Tanoak/Sword fern	S3[3]	No[3]
44.150.00	Annual Grassland	Wild Oat/Soft Chess/ Ripgut Brome/Lupine/Purple Needlegrass/Blue Wild Rye	S4	No (within improvement areas) Potential[4] (within APN 070-011-16 and 35)
37.101.10	Chamise Chaparral	Chamise/ Buckbrush/ Brittle-leaved Manzanita	S5	No
61.201.00	Redwood Riparian Woodland	Redwood/Willow/Big Leaf Maple/ Dogwood/Ivy	S4	Yes
61.201.00	Willow Riparian Woodland	Willow/Dogwood	S4	Yes
-None	Landscaping/Previously Modified Area	Periwinkle/Ivy/ Landscape Trees and Shrubs	-None	No
-None	Orchard	Apple/Walnut/Acacia	-None	No

[1] – California vegetation code as per CDFW (September, 2010);

[2]- Vegetation types are ranked between S1 and S5. For vegetation types with ranks of S1-S3, all associations within the type are considered to be highly imperiled.

[3] – S3 ranking applies to high-quality mature redwood forests with no evidence of human-caused disturbance such as roads or other adverse conditions. The redwood forest on site is 2nd growth and fragmented by development.

[4] – Grasslands within APN 070-011-16 and 35 may support areas of native grasses; if future study documents native grass stands with a high enough density to constitute a native grassland, then these areas would be considered sensitive under County Code.

4.1 Mixed Evergreen Forest

Mixed evergreen occupies the upper, primarily east-facing slopes of the study area. The forest is characterized by the presence of Douglas fir (*Pseudostuga menziesii)*, madrone (*Arbutus menziesii)*, California bay (*Umbellularia californica)* and coast live oak (*Quercus agrifolia)*. The understory is diverse with common shrubs and herbaceous plants; species observed include coyote brush (*Baccharis pilularis)*, oceanspray (*Holodiscus discolor)*, California rose (*Rosa californica*), wood fern (*Dryopteris arguta)*, hazel (*Corylus cornuta)*, coffee berry (*Frangula californica)*, and hairy honeysuckle (*Lonicera*

hispidula). No special status plant species were observed, or are expected to occur, in this forest type within the study area. The character of the vegetation is depicted in Figure 11.

Acorns from oaks in the mixed evergreen forest habitat provide an important food resource for many wildlife species, and natural cavities in the oaks provide nesting opportunities for some birds and mammals. Downed decaying logs and limbs add to the structural complexity of the habitat, and are important cover, nesting, roosting, and foraging substrate for species such as newts (*Taricha torosa*) which are attracted to the moist microclimate and invertebrate food supply. The denser portions of the forest may also provide escape cover during the day for species such as deer *(Odocoileus hemionus)*. Common wildlife species expected to occur in this mixed evergreen forest include California slender salamander (*Batrachoseps attenuatus*), western fence lizard (*Sceloporus occidentalis*), red-tailed hawk (*Buteo lineatus*), wild turkey (*Meleagris gallopavo*), downy woodpecker (*Picoides pubescens*), scrub jay (*Aphelocoma coerulescens*), oak titmouse (*Baeolophus inornatus*), California quail (*Callipepla californica*), spotted towhee *(Pipilo maculatus)*, several species of bats, western gray squirrel (*Sciurus griseus*), and deer. Mountain lion (*Felis concolor*) are also expected to occur in the forested habitats.

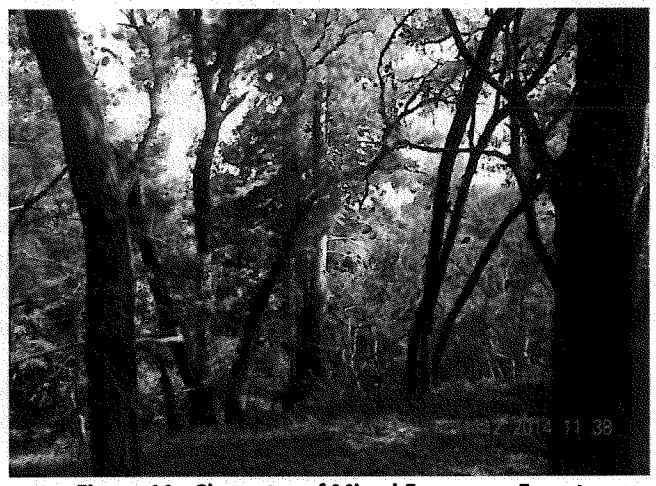


Figure 11. Character of Mixed Evergreen Forest

Special status wildlife species that were observed in the mixed evergreen forest include the stick houses of the San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), a California Species of Special Concern (Figure 12). This forest lacked any noticeable snags or large diameter oak trees with large cavities, thus special status bats such as pallid bat are not expected to occur at this site. No other special status species are expected to occur in this habitat.

Figure 12. Stick house of San Francisco dusky-footed woodrat

4.2 Oak Woodland

Oak woodland grows along the upper slopes of the study area abutting annual grassland and mixed evergreen forest and in a small area near Nelson Road. The woodland is characterized by a dense growth of coast live oak (*Quercus agrifolia)*, with lesser amounts of California bay, canyon live oak (*Quercus wislizeni)*, and California buckeye (*Aesculus californica)*. The understory is relatively sparse; yet California blackberry *(Rubus ursinus*), dogtail grass (*Cynosurus echinatus)*, poison oak (*Toxicodendron diversilobum)*, spreading rush (*Juncus patens)*, and young Douglas fir were observed. Non-native French broom (*Genista monspessulana)* was observed in some areas. No special status plant species were observed, or are expected to occur, in this woodland within the study area. The character of the oak woodland vegetation along the upper ridge, north of Frontier Ranch, is depicted in Figure 13.

Because of the relatively small extent of oak woodland and its location surrounded by mixed evergreen forest, the value and use by wildlife is expected to be similar to that described above for mixed evergreen forest habitat.

Figure 13. Oak woodland

4.3 Redwood Forest

The steep east and west-facing slopes in the Conference Center Core and Mission Woods study areas, as well as portions of the Conference Center Spring Creek study area support second-growth redwood forest. Coast redwoods (*Sequoia sempervirens*) dominate the forest; associated tree species include California bay and occasional Douglas fir. Common understory plant species include toyon (*Heteromeles arbutifolia)*, wood rose (*Rosa gymnocarpa)*, California blackberry, sword fern (*Polystichum munitum)*, and young redwoods. No special status plant species were observed, or are expected to occur, in this forest within the study area. The character of the redwood forest is depicted in Figure 14.

The redwood forest has native understory plants with abundant fruit and seeds, such as toyon and California hazelnut that provide forage for wildlife. The natural cavities in redwood trees provide opportunities for nesting by birds, cover for small mammals such as raccoons, and roosting by bats. The cool, damp microclimate of the redwoods attracts more amphibians than the drier climates of mixed evergreen forest. Common wildlife that may inhabit this forest include yellow-eyed salamander (*Ensatina eschscholtzi*), great horned owl (*Bubo virginianus*), northern pygmy-owl (*Glaucidium gnoma*), acorn woodpecker (*Melanerpes formicivorus*), Steller's jay (*Cyanocitta stelleri*), chestnut-backed chickadee (*Poecile rufescens*), white-breasted nuthatch (*Sitta carolinensis*), ruby-crowned kinglet (*Regulus calendula*), Swainson's thrush (*Caatharus ustulatus*), hermit warbler (*Dendroica occidentalis*), spotted skunk (*Spilogale putorius*), mountain lion, and several species of bats. Within the study area the redwoods lacked any noticeable snags or large diameter oak trees with large cavities, thus special status bats such as pallid bat are not expected to occur in the study area. The redwood forest may support San Francisco dusky-footed woodrat (State Species of Special Concern).

Figure 14. Redwood Forest

4.4 Annual Grassland

Annual grassland occurs in the Frontier Lodge/Freemy Circle area (see Figure 5) in areas used as overflow parking spaces. The vegetation is co-dominated by annual non-native grasses of wild oat wild oat (*Avena sp.)*, rattlesnake grass (*Briza maxima)*, and soft chess (*Bromus hordeaceus)*. Other herbaceous species include subterranean clover (*Trifolium subterranean)*, shamrock clover (*T. dubium),* and narrow-leaved clover *(T. angustifolium*).

The upper slope of APN 070-011-16 and 35 support pockets of grassland (see Figures 9 and 10). The grassland abuts chaparral to the west and oak woodland to the south and east. The character of the grassland and the adjacent vegetation types is depicted in Figure 15. Scattered patches of perennial native

species were observed amid the annual grasses; these natives were blue wild rye (*Elymus glaucus)* and purple needlegrass (*Stipa pulchra)*. Other herbaceous species include non-native clovers similar to the annual grassland in the Frontier Lodge/Freemy Circle area, as well as small tarweed (*Madia exigua)*, blue-eyed grass (*Sisyrinchium bellum)*, soap plant (*Chlorogalum pomeridianum)*, cat's ear (*Hypochaeris spp.)*, and dandelion (*Taraxacum officinale)*. No improvements are proposed on these two parcels; however, if development is proposed in the future, the cover provided by native grasses should be further investigated to determine if any areas meet the criteria of native grassland (sensitive under County Code).

Figure 15. Annual Grassland

The value of the grasslands in the study area to wildlife is moderated by the modest extent of this habitat type. Nonetheless, grasslands provide an important foraging resource for a variety of wildlife species. The grasses and forbs produce an abundance of seeds and attract numerous insects, providing food for granivorous and insectivorous wildlife. Sparrows, rabbits and rodents are commonly found in this habitat. Consequently, grasslands are valuable foraging sites for raptors such as hawks and owls, and other predators including coyote, fox, skunk and snakes. Aerial foraging species that occur over grasslands include bats and swallows. Common wildlife species that are expected to occur in the grasslands on this site include gopher snake (*Pituophis melanoleucus*), red-tailed hawk, American robin (*Turdus migratorius*), American goldfinch (*Carduelis tristis*), California meadow vole (*Microtus californicus*), Botta's pocket gopher (*Thomomys bottae*), bobcat (*Lynx rufus*), mountain lion, and coyote.

The grasslands were not observed to contain suitable habitat for any special status wildlife species. It lacks the sandy soils that the Zayante band-winged grasshopper needs, as well as the bare mudstone outcrops or loam soils required by the Ohlone tiger beetle, a special status species.

4.5 Chamise Chaparral

Small patches of chamise chaparral occur along the upper ridge on APN 070-011-16 and 35. Typified by a dense growth of evergreen shrubs, the chaparral was observed to support chamise (*Adenostoma fasciculatum)*, toyon (*Heteromeles arbutifolia)*, buckbrush (*Ceanothus cuneatus)*, sticky monkey flower (*Diplacus aurantiacus)*, brittle-leaved manzanita (*Arctostaphylos crustacea)*, yerba santa (*Eriodictylon californicum)*, and coyote brush (*Baccharis pilularis*). Some non-native olives (*Olea europaea)* were also on the parcel north of Frontier Ranch. No special status plant species were observed, or are expected to occur, in this vegetation type in the study area. The character of the chaparral is depicted in Figure 16.

Figure 16. Chamise Chaparral

The chaparral habitat is more arid than the forested habitats and wildlife that can tolerate a drier climate are more common here. The berries of shrubs and the seeds of herbaceous plants in the chaparral habitat provide abundant forage for wildlife. California quail, California towhee *(Pipilo crissalis)*, savannah sparrow (*Passerculus sandwichensis*), white-crowned sparrow (*Zonotrichia leucophrys*), and brush mouse (*Peromyscus boylii*) are common seed-eating wildlife species found in this habitat. The abundance of invertebrates makes chaparral habitats suitable for species such as western fence lizard (*Sceloporus occidentalis*), southern alligator lizard (*Gerrhonotus multicarinatus*), and California thrasher (*Toxostoma redivivum*). Audubon's cottontail (*Sylvilagus audubonii*) commonly forages on the herbaceous parts of chaparral plants. The abundance of prey in the shrubs attracts larger predators such as coachwhip (*Masticophis flagellum*), western rattlesnake (*Crotalus viridis*), and coyote (*Canis latrans*).

The ecotone (edge) between chaparral habitats and adjacent open grassland areas is valuable to a number of wildlife species, as it allows them to use the shrubs as lookout posts while hunting prey in the adjacent openings or to use cover in the dense shrubs for camouflage. Western fence lizard, loggerhead shrike (*Lanius ludovicianus*), and mountain lion utilize chaparral habitat ecotones for hunting. No special status wildlife species are associated with this chaparral habitat.

4.6 Riparian Woodland

Riparian woodland grows along Lockhart Gulch Creek, Spring Creek, and Ruins Creek, three creeks that traverse the Master Plan area.

4.6.1 Redwood Riparian Woodland. A redwood-dominated riparian woodland grows along Lockhart Gulch Creek and Spring Creek. Lockhart Gulch Creek has perennial flow and is adjacent to Lockhart Gulch Road and the western side of the conference center facility. Lockhart Gulch Creek is a perennial tributary to Bean Creek, which is a tributary to Zayante Creek. Zayante Creek enters the San Lorenzo River in Felton. The study area is approximately 300 feet upstream of the confluence of Bean and Lockhart Gulch creeks. Spring Creek is a perennial tributary to Lockhart Gulch. It flows within the Spring Creek study area. The redwood riparian woodland occurs within the Conference Center Core, Conference Center Mission Woods, and Conference Center Spring Creek study areas.

Coast redwoods dominate the tree canopy; however, other tree species include big leaf maple (*Acer macrophyllum)*, California bay (*Umbellularia californica)*, and hazelnut (*Corylus cornuta)*, The

understory is a mosaic of native and non-native species. Native species include California blackberry, redwood sorrel (*Oxalis oregona)*, sword fern (*Polystichum munitum)*, spreading rush, bog rush (*Juncus effusus)*, and chain fern (*Woodwardia fimbriata)*. Invasive non-native species were also observed, including French broom, English ivy (*Hedera helix)*, periwinkle (*Vina major)*, and acacia (*Acacia sp.)*. No special status plant species were observed, or are expected to occur, in this plant community within the study area.

Lockhart Gulch and Spring Creek provide year-round water to wildlife. Riparian habitats in general provide valuable resources for wildlife, including nesting and roosting sites, abundant food, drinking water, and movement corridors. The value of this site to wildlife is moderated in some areas by the sparse vegetative cover and high human use of the adjacent camp. Common wildlife species that are expected to utilize this riparian corridor include Pacific chorus frog (*Pseudacris regilla*), black phoebe *(Sayornis nigricans*), chestnut-backed chickadee (*Poecile rufescens*), western scrub jay (*Aphelocoma californica*), mallard *(Anas platyrhynchos*), western gray squirrel (*Sciurus griseus*), and raccoon (*Procyon lotor*).

Steelhead (*Oncorhynchus mykiss*), a species federally listed as threatened, occur in the San Lorenzo River and its tributaries and may occur in this portion of Lockhart Gulch. California red-legged frog (*Rana aurora draytonii*), a species federally listed as threatened and a California species of special concern, may occur in Lockhart Gulch, although the portion of this creek within the project area does not contain potential breeding habitat for this frog. Red-legged frogs may occasionally use this portion of the creek for foraging or movement corridors.

Other special status wildlife species that may occur within the project site include nesting migratory birds and San Francisco dusky-footed woodrat.

4.6.2 Willow Riparian Woodland. A willow-dominated riparian woodland grows along Ruins Creek in the Live Oak study area. Ruins Creek is depicted as a perennial creek on the Felton USGS quadrangle; however, within the study area the creek is intermittent. The creek flows southward into Bean Creek, and then into the San Lorenzo River, over 2 miles downstream from the study area. This intermittent creek is adjacent to Nelson Road and in the northeastern portion of the study area. Willows (*Salix spp.)* intermix with dogwood (*Cornus sericea)* and scattered coast redwood and Douglas fir. The understory supports young willows as well as patches of spreading rush (*Juncus patens)* and Santa Barbara sedge (*Carex barbarae)*. No special status plant species were observed, or are expected to occur, in this plant community within the study area. The character of this riparian woodland is depicted in Figure 17.

Because this portion of Ruins Creek is intermittent, flowing only after significant rain events, the creek does not support any fish. Due to the ephemeral nature of the creek at this site, it is also not expected to support amphibian breeding habitat. The willow riparian attracts abundant insects during the spring and summer, and thus provides nutritious forage for Neotropical migrant birds. The lush foliage provides escape cover, shade, nesting and perching substrate for a variety of species. Common wildlife species expected to occur in this habitat include Cooper's hawk (*Accipiter cooperii*), Anna's hummingbird (*Calypte anna*), Pacific-slope flycatcher (*Empidonax difficilis*), Bewick's wren (*Thryomanes bewickii*), Wilson's warbler (*Wilsonia pusilla*), black-headed grosbeak *(Pheucticus melanocephalus*), hoary bat (*Lasiurus cinereus*), Virginia opossum (*Didelphis virginiana*), and raccoon (*Procyon lotor*).

Figure 17. Willow Riparian Woodland Along Ruins Creek

The willow riparian habitat at this site is not expected to provide suitable habitat for any special status wildlife species because of the ephemeral nature of the creek flows preclude fish and amphibian breeding; however, the woodland may provide habitat for the San Francisco dusky-footed woodrat. There are no special status bird species known from this portion of the County.

4.7 Landscaping/Previously Modified Areas

Some portions of the Master Plan study areas support landscaping plants and turf, associated with conference center buildings.

4.8 Orchard

An abandoned apple orchard occurs near Nelson Road in the Live Oak study area. Dominated by old apple trees (*Malus sp.)*, the area also supports scattered acacia (*Acacia sp.)* and walnut (*Juglans regia)*, as well as an understory typical of previously disturbed areas. California blackberry and coyote brush are establishing in previously open areas, as well as stands of velvet grass (*Holcus lanatus*). No special status plant species were observed, or are expected to occur, in this plant community. The character of the orchard is depicted in Figure 18.

Some wildlife, such as raccoons, may forage on the fallen apples in the old orchard. However, the area is for the most part expected to be utilized by the same wildlife found in surrounding forests, e.g. scrub jays and deer.


Figure 18. Old Apple Orchard

5.0 REGULATED AND SENSITIVE HABITATS

5.1 Regulated Habitats

California Department of Fish and Wildlife (CDFW) is a trustee agency that has jurisdiction under Section 1600 et seq. of the CDFG Code. Under Sections 1600-1603 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake which supports fish or wildlife. Along watercourses, CDFW's jurisdictional limit typically extends to the top of bank or to the edge of riparian habitat if such habitat extends beyond top of bank (outer drip line), whichever is greater. Lockhart Gulch Creek, Spring Creek, and Ruins Creek (up to top-of-bank) would be within the regulatory jurisdiction of CDFW.

Water quality in California is governed by the Porter-Cologne Water Quality Control Act and certification authority under Section 401 of the Clean Water Act, as administered by the Regional Water Quality Control Board (RWQCB). The Section 401 water quality certification program allows the State to ensure that activities requiring a Federal permit or license comply with State water quality standards. Water quality certification must be based on a finding that the proposed discharge will comply with water quality standards which are in the regional board's basin plans. The Porter-Cologne Act requires any person discharging waste or proposing to discharge waste in any region that could affect the quality of the waters of the state to file a report of waste discharge. The RWQCB issues a permit or waiver that includes implementing water quality control plans that take into account the beneficial uses to be protected. Waters of the State subject to RWQCB regulation extend to the top of bank, as well as isolated water/wetland features and saline waters. Should there be no Section 404 nexus (i.e., isolated feature not subject to USACE jurisdiction), a report of waste discharge (ROWD) should be filed with the RWQCB. The RWQCB interprets waste to include fill placed into water bodies. Lockhart Gulch Creek, Spring Creek, and Ruins Creek (up to top-of-bank) would be within the regulatory jurisdiction of RWQCB.

The US Army Corps of Engineers (USACE) regulates activities within waters of the United States pursuant to congressional acts: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (1977, as amended). Section 10 of the Rivers and Harbors Act requires a permit for any work in, over, or under navigable waters of the United States. Navigable waters are defined as those waters subject to the ebb and flow of the tide to the Mean High Water Mark (tidal areas) or below the Ordinary High Water mark (freshwater areas). Lockhart Gulch Creek, Spring Creek, and Ruins Creek, below the Ordinary High Water Mark, would be within the regulatory jurisdiction of USACE.

5.2 Sensitive Habitats

Sensitive habitats are defined by local, State, or Federal agencies as those habitats that support special status species, provide important habitat values for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity (Santa Cruz County Code and CDFW).

Two plant community types/habitats within the study area are considered sensitive under County Code: oak woodland and riparian woodland (willow and redwood). The distribution of these sensitive habitats within the study area is presented in Figures 3-10 and Figure 19.

In addition, portions of the areas mapped as grassland on APN 070-011-16 and 35 may meet the definition of native grassland if, pending more detailed site surveys, areas are found to be dominated by native grasses, such as purple needlegrass. If such areas are found in the future, these areas may be considered sensitive. The annual grassland within the Frontier Ranch/Freemy Circle study area was not found to support a high cover by native grasses and is not considered to meet the requirements of a native grassland and to be sensitive habitat under County Code.

The County GIS identifies a portion of the northern ridge are of the study area as supporting "potential sandhills" and the western edge of the study area supporting "biotic resource", as depicted in tan and green, respectively, on Figure 18. The "potential sandhills" area is located on the upper ridge area which was found to support a mosaic of oak woodland, chamise chaparral, and grassland. This portion of the parcel is mapped as Bonny Doon loam, 5-30 percent slopes (116). According to the Soil Survey, this soil type is shallow, somewhat excessively drained on south-facing side hills. It is formed in residuum derived from sandstone, mudstone and shale. Included in this mapping are small areas of Elkhorn sandy loam, Aptos loam, Los Osos loam, Tierra sandy loam, and Watsonville loam. The Soil Survey also shows a small area of Zayante-Rock outcrop complex, 15-75 percent slopes (184) on the ridge south of this parcel. Field observations in November 2014 found the presence of sandstone/mudstone outcroppings. No coarse sands, typical of the Zayante soils were observed. Additionally, no plant species indicative of sandhill vegetation (i.e., ponderosa pine forest or sandhill chaparral) were observed.

The "biotic resource" area on the map pertains to a record in the CNDDB as occurrences of species known from sandhills chaparral within the Weston Road area and on slopes/ridges between Bean Creek/McKenzie Creek (i.e., sandhills chaparral northwest of Camp Redwood Glen supporting ponderosa pine, Bonny Doon [silver-leaved] manzanita, and robust spineflower). The large circle reflects in lack of precision in the CNDDB data. No sensitive biotic resource was found in the western portion of the study area other than riparian woodland along Ruins Creek.

Figure 18. County GIS Data, Showing Potential Sandhills (tan) and Biotic Resource (green) within Study Area

CDFW classifies and ranks the State's natural communities to assist in the determining the level of rarity and imperilment. Vegetation types are ranked between S1 and S5. For vegetation types with ranks of S1-S3, all associations within the type are considered to be highly imperiled. If a vegetation alliance is ranked as S4 or S5, these alliances are generally considered common enough to not be of concern; however, it does not mean that certain associations contained within them are not rare (CDFW, 2007 and 2010). The redwood forest alliance (CaCode 86.100.00) is considered highly imperiled and is ranked S3 (sensitive); however, the project-affected area is not of high quality due to the human-caused disturbances

(presence of roadways, houses, camp structures) and the second-growth quality of the redwood stand. As per CDFW CaCode guidelines, projects affecting a small acreage of second growth forest where there is an absence of special status plants or animals, would be unlikely to constitute a significant impact and modification of the stand would not be a serious threat to the existence of high-quality stands of this type (CDFW, 2010).

5.3 Degraded Sensitive Habitats

In April 2019 the sensitive habitats within the master plan improvement sites were field checked for evidence of habitat degradation. Based on these field surveys, habitat degradation was documented as the presence of invasive non-native plant species. No other habitat degradation features were noted. The following invasive, non-native species were observed: English ivy, periwinkle, French broom, and acacia. Figure 19a displays the distribution of degraded sensitive habitat area, and a listing of the invasive plant species found within each area.

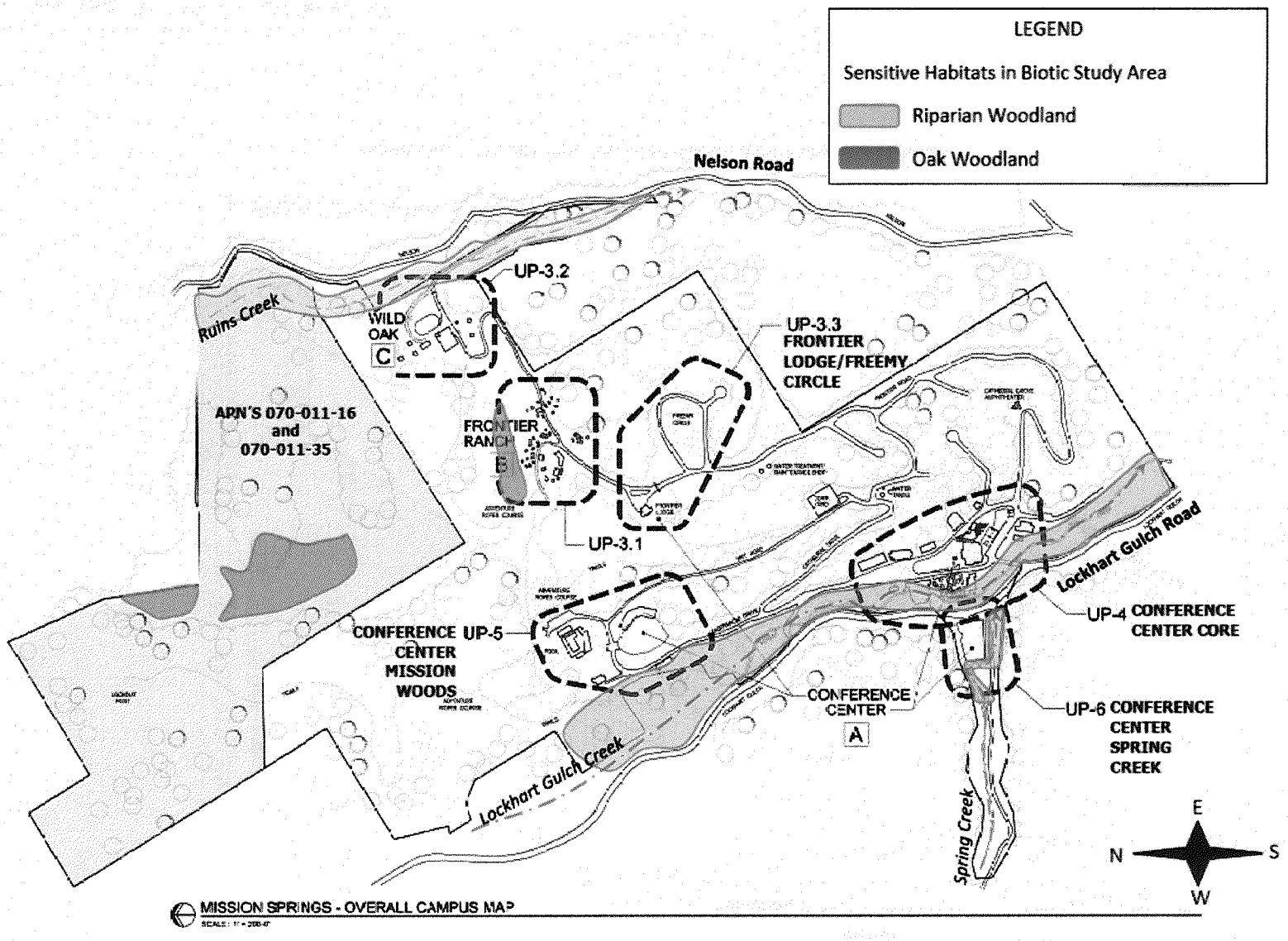


Figure 19. Distribution of Sensitive Habitats within Study Area

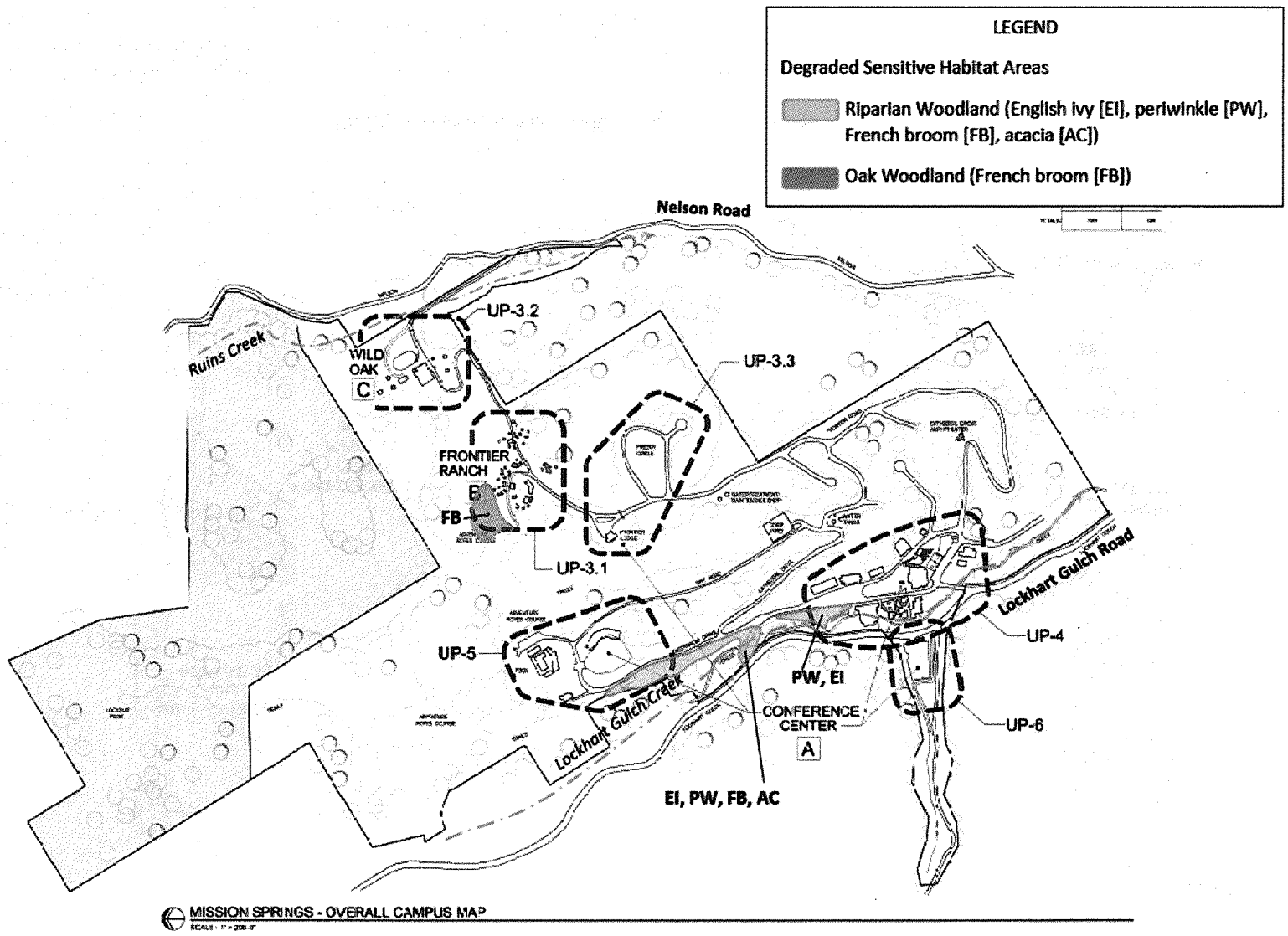


Figure 19a. Distribution of Degraded Habitat within Sensitive Habitats

6.0 SPECIAL STATUS SPECIES

6.1 Special Status Plant Species

The search of the CNPS and CNDDB inventories resulted in several special status plant species with potential to occur in the vicinity of the study area Appendix A, Table A1 lists species recorded from the project vicinity; however, none have been recorded on the subject property as per CNDDB records. No special status plant species were observed during the field visits and due to the lack of ponderosa pine forest, silver-leaved manzanita chaparral, other sandhill habitat, or coastal prairie in the study area; it is very unlikely that special status plant species occur in the study area.

6.2 Special Status Wildlife Species

Several special status wildlife species were evaluated for potential presence in the study area (see Appendix A, Table A2); however, most are unlikely to occur at this site due to lack of suitable habitat: Smith's blue butterfly (*Euphilotes enoptes smithi*) [requires coastal scrub], Mt. Hermon June beetle (*Polyphylla barbata*) and Zayante band-winged grasshopper (*Trimerotropis infantilis*) [require Zayante soils and Ponderosa pine forest], Ohlone tiger beetle (*Cicindela ohlone*) [requires coastal terrace prairie], western pond turtle (*Actinemys marmorata*) [require deep water pools and cover vegetation], osprey (*Pandion haliaetus*) [require large rivers and lakes with abundant fish], white-tailed kite (*Elanus leucurus*) [require trees adjacent to large open spaces with abundant rodents], Cooper's hawk (*Accipiter cooperii*) [require dense canopy trees for nest camouflage], Santa Cruz kangaroo rat (*Dipodomys venustus venustus*) [require loose sandy soils and chaparral], and American badger (*Taxidea taxus*) [require grasslands with friable soils]. Coho salmon (*Oncorhynchus kisutch*) historically occurred in the San Lorenzo River watershed, but are currently unknown from its upper tributaries.

Steelhead (*Oncorhynchus mykiss*), a species federally listed as threatened, occur in the San Lorenzo River and its tributaries and may occur in this portion of Lockhart Gulch. California red-legged frog (*Rana aurora draytonii*), a species federally listed as threatened and a California species of special concern, have been observed in Mt. Charlie Creek (approx. 3 mi north), Bean Creek (approx. 4 mi north), and Bull Creek (approx. 3 mi southwest) in the general vicinity of the project site. This frog may occur in Lockhart Gulch, although the portion of this creek within the project area does not contain potential breeding habitat for this frog. Red-legged frogs may occasionally use this portion of the creek for foraging or movement corridors.

Other special status wildlife species that may occur within the project site include nest migratory birds, protected by the Migratory Bird Treaty Act, nesting raptors and San Francisco dusky-footed woodrat, as protected by CDFW Code.

7.0 RECOMMENDED MEASURES

Project improvements have the potential to affect nesting birds, if present during construction, dens of dusky-footed woodrat (if present), and native trees; however, significant impacts can be avoided, minimized, or compensated with successful implementation of pre-construction actions. These measures are presented as Bio-1 through Bio-6 below.

Grassland was documented on APN 070-011-16 and 35 and some native grasses were observed. Depending on the density of native grasses, these areas could be classified as needlegrass grassland, a sensitive habitat. No actions are currently proposed on these two parcels; however, additional study of these grassland areas is recommended if improvements are proposed in these areas in the future (see Bio-6 below.

Degraded sensitive habitat areas can be enhanced through the removal and control of invasive, non-native plant species. Bio-5 identifies actions to enhance these degraded areas.

7.1 Programatic Review Recommendations

Bio-1. Nesting Birds. Nesting migratory birds, including raptors, are protected under the Migratory Bird Treaty Act. Schedule tree removal or trimming to occur between August 1 and March 1 of any given year. If that is not practical, then a qualified biologist shall conduct surveys for nesting birds no more than 14 days prior to tree removal or trimming. If nesting birds are observed in the trees scheduled for removal or trimming, then the removal or trimming shall be postponed until the biologist determines that all chicks have fledged the nest.

Bio-2. Dusky-footed Woodrat. The dusky-footed woodrat is a California Species of Special Concern. Although no woodrat dens/nests were detected at the improvement sites during the baseline study; a nest/den could develop on site prior to construction. If a woodrat den/nest is found within the construction area, modify site design to avoid the feature. If avoidance is not feasible, confer with CDFW to relocate nest/den prior to construction.

Bio-3. Riparian Woodland. The riparian corridor along Ruin Creek, Spring Creek, and Lockhart Gulch Creek is a sensitive habitat under County Code and building setbacks are mandated for perennial and intermittent streams. If improvements of structures or new structures are proposed within the riparian corridor, removal of native riparian woodland vegetation should be avoided or minimized. If impacts are incurred, compensatory mitigation should be implemented, such as restoration or enhancement of adjacent riparian woodland. Actions could include removal of invasive, non-native plant species (i.e., ivy) (see Bio-5) and/or planting of native trees and shrubs to increase native plant cover and diversity.

Bio-4. Native Trees. Preliminary plans indicate a minimum of 29 trees (coast live oak, coast redwood, and Douglas fir) will be removed within the Conference Center Core and Mission Woods study areas; there may be additional tree removal when detailed plans are developed for this area and other improvement sites. An arborist should evaluate tree removal and identify measures to protect trees that are adjacent to construction, yet are to be retained. Measures to protect trees to be retained should be implemented prior to and during construction. Measures may include protective fencing, limbing techniques, root pruning techniques, or other actions as directed by the arborist.

Bio-5. Degraded Sensitive Habitat. Degraded sensitive habitat areas should be enhanced through the removal/control of invasive, invasive plants. The occurrences documented during the baseline study are depicted on Figure 19. These occurrences are considered a significant threat to the sensitive resource and should be removed/controlled. Priorities for action are:

1. In oak woodland:
    a. Hand pull French broom prior to plants setting seed; for shrubs too large to hand pull cut stems of plants flush with ground (March through May).
    b. Monitor French broom seedlings/re-growth in winter/spring; hand pull seedlings or re-cut larger shrubs (January – April). Will require repeated sessions to eradicate
2. In riparian woodland:
    a. Hand pull French broom prior to plants setting seed; for shrubs too large to hand pull cut stems of plants flush to the ground (March through May).
    b. Monitor French broom seedlings/re-growth in winter/spring; hand pull seedlings or re-cut larger shrubs (January – April). Will require repeated sessions to eradicate
    c. Cut and remove acacia (January – December). Hand pull seedlings; may require repeated

sessions to eradicate.

d. Remove English ivy from trunks of trees. Cut stems and leave minimum of 12-inch gap in stem growth; pull ivy away from trunk of tree. Allow ivy in tree top to die. (January – December). Monitor stem re-growth on trunk and repeat as needed.
e. Remove English ivy from ground surface. Hand-pull and use hand tool to remove roots (May to July). Will require repeated sessions to eradicate.
f. Remove periwinkle from ground surface. Hand-pull and use hand tool to remove roots (March to July). Will require repeated sessions to eradicate.

Management actions should be updated and refined in response to weather patterns, plant responses, and as new information on weed control/treatment is gathered. All management actions should be monitored as to their effectiveness.

Bio-6. Native Grassland. The grassland documented on APN 070-011-16 and 35 may support dense stands of native grasses and these areas could meet the definition of a native grassland. Native grasslands are a sensitive habitat under County Code. If improvements of structures or new activities are proposed within areas mapped as grassland on these two parcels, additional surveys are recommended to validate the location and species composition of these grasslands. If a spring season survey document the areas meeting the definition of native grassland under County Code, the impacts to this resource should be avoided or minimized. If impacts are incurred, compensatory mitigation should be implemented, such as restoration. If the areas are deemed to be annual grassland, no additional actions are recommended.

Appendix A – Special Status Species Lists

Table A1-2. List of Special Status Plant Species Evaluated to Occur within Mission Spring Study Area

Species	CNPS	State Status	Federal Status	Habitat Type Potential Occurrence on Site?
Santa Cruz manzanita *(Arctostaphylos andersonii)*	List 1B.2	None	None	Maritime chaparral and intermixes with woodlands and redwood forest Unlikely to occur due to lack of suitable habitat; not observed during surveys
Bonny Doon manzanita *(Arctostaphylos silvicola)*	List 1B.2	None	None	Maritime chaparral, closed cone pine forest within Zayante sandhills Unlikely to occur due to unsuitable habitat; not observed during surveys
Marsh sandwort *(Arenaria paludicola)*	List 1B.1	None	None	Marshes and swamps Unlikely to occur due to unsuitable habitat
Swamp harebell *(Campanula californica)*	List 1B.2	None	None	Mesic areas, marshes Unlikely to occur due to unsuitable habitat
Deceiving sedge *(Carex saliniformis)*	List 1B.2	None	None	Coastal prairie, scrub, meadows, seeps Unlikely to occur due to unsuitable habitat
Robust spineflower *(Chorizanthe robusta var. robusta)*	List 1B.1	None	Endangered	Sandy terraces and bluffs, often intermixed with oak woodland/maritime chaparral, coastal scrub Unlikely to occur due to lack of suitable habitat
Ben Lomond spineflower *(Chorizanthe pungens var. hartwegiana)*	List 1B.1	None	Endangered	Chaparral and pine forest on Zayante soils Unlikely to occur due to lack of suitable habitat
Tear drop moss *(Dacryophyllum falcifolium)*	List 1B.3	None	None	Coast redwood forest, limestone substrate and outcrops Unlikely to occur due to lack of suitable habitat; not observed during surveys
Ben Lomond buckwheat *(Eriogonum nudum var. decurrens)*	List 1B.1	None	None	Maritime chaparral within Zayante sandhills Unlikely to occur due to unsuitable habitat
Santa Cruz wallflower *(Erysimum teretifolium)*	List 1B.1	Endangered	Endangered	Maritime chaparral within Zayante sandhills No suitable habitat in project area
Santa Cruz cypress *(Hesperocyparis abramsiana)*	List 1B.2	Endangered	Endangered	Chaparral, closed-cone pine forests No suitable habitat in project area; not observed during surveys
Santa Cruz tarplant *(Holocarpha macradenia)*	List 1B.1	Endangered	Threatened	Grasslands, prairie Unlikely to occur due to lack of suitable habitat
Kellogg's horkelia *(Horkelia cuneata ssp. sericea)*	List 1B.1	None	None	Closed cone pine forest, coastal scrub, chaparral; old dunes, sandy openings No suitable habitat in project area; not observed during surveys
Pt. Reyes horkelia *(Horkelia marinensis)*	List 1B.2	None	None	Coastal dunes, coastal prairie, coastal scrub; sandy flats No suitable habitat in project area; not observed during surveys
Woodland woollythreads *(Monolopia gracilens)*	List 1B.2	None	None	Chaparral, grasslands, broadleaf forests, coniferous forests; grassy sites, sandy to rocky areas Unlikely to occur due to lack of suitable habitat

Table A1-2. List of Special Status Plant Species Evaluated to Occur within Mission Spring Study Area

Species	CNPS	State Status	Federal Status	Habitat Type Potential Occurrence on Site?
White-rayed pentachaeta *(Pentachaeta bellidiflora)*	List 1B.1	Endangered	Endangered	Grassland; dry open slopes; often on serpentine Unlikely to occur due to lack of suitable habitat
San Francisco popcorn flower *(Plagiobothrys diffusus)*	List 1B.1	Endangered	None	Seasonally moist grasslands/prairie Unlikely to occur due to lack of suitable habitat
Santa Cruz Clover *(Trifolium buckwestiorum)*	List 1B.1	None	None	Seasonally moist grasslands/prairie Unlikely to occur due to lack of suitable habitat
Marsh microseris *(Microseris paludosa)*	List 1B.2	None	None	Pine forest, coastal scrub, grassland No suitable habitat in project area
Santa Cruz Mountains beardtongue *(Penstemon rattanii var. kleei)*	List 1B.2	None	None	Sandy, shale soil in chaparral or burned chaparral, coniferous forest No suitable habitat in project area; not observed during surveys
White-flowered rein orchid *(Piperia candida)*	List 1B.2	None	None	Rock outcrops in scrub, chaparral and pine woodlands No suitable habitat in project area; not observed during surveys
Choris' popcorn flower *(Plagiobothrys chorisianus var. chorisianus)*	List 1B.2	None	None	Seasonally moist grasslands/prairie, coastal scrub No suitable habitat in project area
Scotts Valley polygonum *(Polygonum hickmanii)*	List 1B.1	Endangered	Endangered	Grassland, on Purisima outcrops No suitable habitat in project area
Pine rose *(Rosa pinetorum)*	List 1B.2	None	None	Chaparral and pine woodlands No suitable habitat in project area; not observed during surveys

Table A2. Special status wildlife species and their predicted occurrence within Mission Springs Study area

SPECIES	STATUS[1]	HABITAT	POTENTIAL OCCURRENCE ON SITE
Invertebrates			
Ohlone tiger beetle *Cicindela ohlone*	FE	Coastal terrace prairie with sparse vegetation and openings, Watsonville loam soils	None, no suitable habitat on site.
Mt. Hermon June beetle *Polyphylla barbata*	FE	Chaparral and ponderosa pine with Zayante sandy soils	No suitable habitat on site.
Zayante band-winged grasshopper *Trimerotropis infantilis*	FE	Openings in sand hills parkland habitat with Zayante sandy soils	No suitable habitat on site.
Smith's blue butterfly *Euphilotes enoptes smithi*	FE	Coastal dunes and coastal sage scrub with buckwheat plants	No suitable habitat on site.
Fish			
Coho salmon *Oncorhynchus kisutch*	FE, SE	Perennial creeks and rivers with gravels for spawning	Believed to be extirpated from the San Lorenzo River watershed. Lockhart Gulch Creek provides suitable habitat.
Steelhead *Oncorhynchus mykiss*	FT	Perennial creeks and rivers with gravels for spawning	Lockhart Gulch Creek provides suitable habitat; known to occur in this creek
Amphibians			
California red-legged frog *Rana aurora draytonii*	FT, CSC	Riparian, marshes, estuaries and ponds with still water at least into	Closest known observation is 2.5 miles to northeast in Mtn.

Table A2. Special status wildlife species and their predicted occurrence within Mission Springs Study area

SPECIES	STATUS[1]	HABITAT	POTENTIAL OCCURRENCE ON SITE
		June.	Charlie Gulch. Unlikely to occur on site due to lack of breeding areas within 1-mile, high human presence/activity in area.
Reptiles			
Western pond turtle *Actinemys marmorata*	CSC	Creeks and ponds with water of sufficient depth for escape cover, and structure for basking; grasslands or bare areas for nesting.	No suitable habitat; not known from Lockhart Gulch creek and Ruins creek is too ephemeral.
Birds			
White-tailed kite *Elanus leucurus*	FP	Nests in tall riparian trees adjacent to open lands for foraging	None, no suitable habitat on site.
Mammals			
Pallid bat *Antrozous pallidus*	CSC	Roosts in caves, hollow trees, mines, buildings, bridges, rock outcroppings	Possibly in largest redwood tree, if cavities are present
Santa Cruz kangaroo rat *Dipodomys venustus venustus*	None	Manzanita chaparral with sandy soils	None. No suitable habitat on site.
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	CSC	Woodlands including oaks, willow riparian, Eucalyptus	Likely in wooded areas; however, no nests observed in areas proposed for improvements.
American badger *Taxidea taxus*	CSC	Grasslands with friable soils	None, no suitable habitat on site.

COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT
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KATHLEEN MOLLOY, PLANNING DIRECTOR

John Swift
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Santa Cruz, CA 95060

September 12, 2019

Subject: Mission Springs Master Plan Biotic Report Review and Conditioned Biotic Approval
APNs: 070-151-21, 070-011-35, 070-011-16
Application #s: REV191061; 151255

Attachment 1. Biotic Report

Dear Mr. Swift,

The Planning Department received and reviewed a Biotic Report dated July 22, 2019, prepared for the Mission Springs Camps and Conference Center Master Plan by *Biotic Resources Group*. A copy of the Biotic Report is included in Attachment 1. The Biotic Report was prepared because of the potential for sensitive habitats and protected species on this parcel where preparation of a Master Plan and associated future development activities are proposed. The report was prepared with the intent of documenting the baseline condition within the proposed Master Plan improvements areas, identifying the location of sensitive habitats, analyzing at a programmatic level potential impacts to biological resources that may result from future development, and recommending avoidance and minimization measures to reduce those impacts.

The Mission Springs Christian Camps and Conference Center (Mission Springs) proposes to amend the Master Plan for their facility located near Scotts Valley. The amendment includes adding two new parcels (APN 070-011-35 and 070-011-16) to the existing Master Plan Area, upgrades to several existing facilities, and construction of new facilities within designated planning areas on the property where existing recreation activities are being conducted. These five designated planning areas are within the overall master plan map area and are identified by the following names: Conference Center Core Area, Spring Creek, Frontier Ranch, Wild Oak, and Mission Woods. The biological study area includes these five planning areas and the entirety of APN 070-011-35 and APN 070-011-16. Figures 2 through 10 of the biotic report show the entire master plan map area, and the location and general habitat conditions of each individual planning area and the two added parcels.

Proposed development would occur in the Conference Center Core Area, the Mission Woods Area, and the Spring Creek Area and include various development activities such as construction of new structures, demolition and replacement of existing structures, removal of trees, and installation of new recreational facilities. No new development is proposed outside of these designated planning areas. All activities analyzed as part of this biotic review are included in the table that begins on Page 1 of the Biotic Report labeled '*Summary of Proposed Improvements and Recommendations*', are represented in Figures 3-8 of the Biotic Report, and depicted in detail in the project plans prepared by WMB Architects (Use Permit 151255 Plans, revision date 1-5-16).

The study area includes two perennial waterways and one intermittent tributary. Ruins Creek which is located near Nelson Road runs through the eastern part of the Wild Oak planning area. Lockhart Gulch Creek which parallels Lockhart Gulch Road runs through the western portion of the Conference Center Core Area and the Mission Woods Area. Spring Creek, an intermittent tributary to Lockhart Gulch Creek, is located west of Lockhart Gulch Road and runs through the center of the Spring Creek planning area. There are no other water features in the study area.

Much of the study area supports mixed evergreen forest and coast redwood forest fragmented by existing development. The study area also supports riparian woodland along Lockhart Gulch Creek, Spring Creek, and Ruins Creek. Oak woodland occurs along the northern edge of the Frontier Ranch planning area and on APNs 070-011-16 and 35. Other habitat types documented include grassland, annual grassland, chamise chaparral, orchard, and bare or landscaped areas. Some native grasses were identified within the grasslands on APN 070-011-16 and 35. Further investigation into the density of these native grasses would be necessary to determine if this grassland could be classified as native needlegrass grassland. Riparian woodlands, oak woodlands, and native needlegrass grasslands are considered sensitive habitats under the County's Sensitive Habitat Protection Ordinance.

The perennial and intermittent creeks in the study area may be regulated under the Clean Water Act Section 404 by the U. S. Army Corps of Engineers (USACE), and Section 401 by the Regional Water Quality Control Board (RWQCB). The associated banks of the drainages may be subject to regulation under the Porter-Cologne Water Quality Act as "Waters of the State", and under California Fish and Game Code Section 1602. Riparian corridors (as defined by Santa Cruz County Code Section 16.30.030) are granted special protections under the County's Sensitive Habitat Protection and Riparian Corridor and Wetlands Protection ordinances. Development activities are prohibited within lands extending 30 feet from an intermittent stream, and 50 feet from a perennial stream, or within a riparian woodland, unless a riparian exception is granted. Any proposed development activity within areas identified as Riparian Corridor in the Biotic Report would require a Riparian Exception from County Environmental Planning.

Lockhart Gulch and Ruins Creek within the project site provide potential habitat for Federal threatened Central California Coast steelhead (*Oncorhynchus mykiss*), and Federal/State endangered Central California Coast coho salmon (*O. kisutch*), and provide essential fish habitat for coho salmon. Lockhart Gulch and Ruins Creek are tributary to Bean Creek which is Designated Critical Habitat for Federal listed salmonids. The project site also provides potential habitat for Federal Threatened California red-legged frog (*Rana draytonii*), and the following state species of special concern: California Giant Salamander (*Dicamptodon ensatus*), Western pond turtle (*Emys marmorata*), San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), Santa Cruz black salamander (*Aneides niger*), and Foothill yellow-legged frog (*Rana boylii;* FYLF); as well as nesting birds. Birds of prey and migratory birds are protected under the California Fish and Game Code, and the Federal Migratory Bird Treaty Act (MBTA). Under the MBTA, it is "unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill" a migratory bird unless and except as permitted by regulations.

Development activities associated with the Mission Springs Conference Center are not currently proposed within the Riparian Corridors of Ruins Creek, Lockhart Gulch Creek, or Spring Creek. Preliminary plans indicate a minimum of 29 native trees (coast live oak, coast redwood, and Douglas fir) will be removed within the Conference Center Core and Mission Woods study areas. There may be additional tree removal when detailed plans are developed for this area and other improvement sites. Tree removal is not currently proposed in oak woodland habitat or other sensitive habitats. No actions are currently proposed on the two parcels where potential native needlegrass grassland may occur.

There are sensitive habitat constraints on the project site associated with protected wildlife species, riparian and streambed habitat, oak woodland habitat, and habitat for nesting birds that must be considered prior to and during project implementation. The Conditions of Approval below shall be incorporated into any development permits issued for parcels 070-151-21, 070-011-35, 070-011-16.

Adherence to these conditions will insure that impacts to sensitive habitats and protected wildlife species will be less than significant. If future development activities are proposed within sensitive habitats, more detailed discretionary analysis may be necessary to determine if impacts are less than significant.

Conditions of Approval

In order to conduct development activities in the Mission Springs Master Plan Area the following conditions shall be adhered to:

1) The location of all sensitive habitats including the Riparian Corridors of Ruins Creek, Lockhart Gulch Creek, and Spring Creek shall be included in the final plans submitted for development.

2) To minimize impacts to riparian woodland and other sensitive habitats the project shall:

A. Prior to construction, a qualified Biologist will identify the limits of construction to avoid impacts to sensitive habitats. High visibility construction fencing or flagging shall be installed around the limits of work to prevent inadvertent grading or other disturbance within sensitive habitats. No work-related activity including equipment staging, vehicular access, grading, and/or vegetation removal shall be allowed outside of the limits of work.

B. Prior to construction, an arborist shall evaluate tree removal and identify measures to protect trees that are adjacent to construction. Removal of native trees should be avoided to the maximum extent practicable. Trees to be retained that are adjacent to construction shall be protected at, or outside of, the dripline during construction with high visibility fencing and/or other methods recommended by the arborist.

C. Erosion control measures must be in place, and best management practices adhered to, at all times during construction.

D. All native trees removed that are 4" DBH or greater shall be replaced in-kind at a 3:1 ratio on site. disturbed areas at the project site shall be restored through onsite re-vegetation with native shrubs and trees. Local plant stock shall be used whenever possible. The plant pallet should include native species common to the surrounding woodlands. Restoration activities shall be field-checked and approved by Environmental Planning staff prior to final inspection of the project site.

3) If future work is proposed within the Riparian Corridors of Ruins Creek, Lockhart Gulch Creek, or Spring Creek, the following conditions shall be adhered:

A. Prior to initiation of project construction, the project proponent must obtain all necessary approvals and permits from the appropriate regulatory agencies including County of Santa Cruz Planning, the United States Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), National Marine Fisheries Service (NMFS), California Department of Fish and Wildlife (CDFW), and the United States Fish and Wildlife Service (USFWS). The project proponent is responsible for complying with all measures and conditions included in those permit approvals.

B. To protect special-status amphibian species, including California red-legged frog (*Rana draytonii*), California Giant Salamander (*Dicamptodon ensatus*), Santa Cruz black salamander (*Aneides*

niger), and Foothill yellow-legged frog (*Rana boylii;* FYLF); measures shall be developed through consultation with USFWS and/or CDFW and included as Conditions of Approval in the County Riparian Exception.

C. Every individual working on the Project must attend a biological awareness training session delivered by a qualified biologist. This training program shall include information regarding sensitive habitats and special-status species with potential to occur, and the importance of avoiding impacts to these species and their habitat. The training shall include species identification characteristics, best management practices to be implemented, project-specific avoidance measures that must be followed, and the steps necessary if any special status species is encountered at any time.

4) If future development is proposed on APN 070-011-16 or APN 070-011-35, additional botanical surveys shall occur to determine if these parcels contain native needlegrass grassland. A memo documenting these botanical surveys must be submitted to County Environmental Planning for review and approval. If native needlegrass grassland is present, the Project Applicant shall work with County Environmental Planning Staff and the Project Biologist to identify the limits of construction to avoid impacts to this habitat. If native needlegrass grassland cannot be avoided, the project proponent must submit a proposal for compensatory mitigation to County Environmental Planning. Approval must be granted prior to project approval.

5) The project shall comply with the following Recommendations included in Section 7.1 of the Attached July 22, 2019 Biotic Report.

Bio-1. Nesting Birds. Nesting migratory birds, including raptors, are protected under the Migratory Bird Treaty Act. Schedule tree removal or trimming to occur between August 1 and March 1 of any given year. If that is not practical, then a qualified biologist shall conduct surveys for nesting birds no more than 14 days prior to tree removal or trimming. If nesting birds are observed in the trees scheduled for removal or trimming, then the removal or trimming shall be postponed until the biologist determines that all chicks have fledged the nest.

Bio-2. Dusky-footed Woodrat. The dusky-footed woodrat is a California Species of Special Concern. Although no woodrat dens/nests were detected at the improvement sites during the baseline study; a nest/den could develop on site prior to construction. If a woodrat den/nest is found within the construction area, modify site design to avoid the feature. If avoidance is not feasible, confer with CDFW to relocate nest/den prior to construction.

Bio-3. Riparian Woodland. The riparian corridor along Ruin Creek, Spring Creek, and Lockhart Gulch Creek is a sensitive habitat under County Code and building setbacks are mandated for perennial and intermittent streams. If improvements of structures or new structures are proposed within the riparian corridor, removal of native riparian woodland vegetation should be avoided or minimized. If impacts are incurred, compensatory mitigation should be implemented, such as restoration or enhancement of adjacent riparian woodland. Actions could include removal of invasive, non-native plant species (i.e., ivy) (see Bio-5) and/or planting of native trees and shrubs to increase native plant cover and diversity.

Bio-4. Native Trees. Preliminary plans indicate a minimum of 29 trees (coast live oak, coast redwood, and Douglas fir) will be removed within the Conference Center Core and Mission Woods study areas; there may be additional tree removal when detailed plans are developed for this area and other improvement sites. An arborist should evaluate tree removal and identify measures to protect trees that are adjacent to construction yet are to be retained. Measures to protect trees to be retained should be implemented prior to and during construction. Measures may include protective fencing, limbing techniques, root pruning techniques, or other actions as directed by the arborist.

Bio-5. Degraded Sensitive Habitat. Degraded sensitive habitat areas should be enhanced through the removal/control of invasive, invasive plants. The occurrences documented during the baseline study are depicted on Figure 19. These occurrences are considered a significant threat to the sensitive resource and should be removed/controlled. Priorities for action are:

1. In oak woodland:
    a. Hand pull French broom prior to plants setting seed; for shrubs too large to hand pull cut stems of plants flush with ground (March through May).
    b. Monitor French broom seedlings/re-growth in winter/spring; hand pull seedlings or re-cut larger shrubs (January – April). Will require repeated sessions to eradicate.
2. In riparian woodland:
    a. Hand pull French broom prior to plants setting seed; for shrubs too large to hand pull cut stems of plants flush to the ground (March through May).
    b. Monitor French broom seedlings/re-growth in winter/spring; hand pull seedlings or re-cut larger shrubs (January – April). Will require repeated sessions to eradicate.
    c. Cut and remove acacia (January – December). Hand pull seedlings; may require repeated sessions to eradicate.
    d. Remove English ivy from trunks of trees. Cut stems and leave minimum of 12-inch gap in stem growth; pull ivy away from trunk of tree. Allow ivy in tree top to die. (January – December). Monitor stem re-growth on trunk and repeat as needed.
    e. Remove English ivy from ground surface. Hand-pull and use hand tool to remove roots (May to July). Will require repeated sessions to eradicate.
    f. Remove periwinkle from ground surface. Hand-pull and use hand tool to remove roots (March to July). Will require repeated sessions to eradicate.

Bio-6. Native Grassland. The grassland documented on APN 070-011-16 and 35 may support dense stands of native grasses and these areas could meet the definition of a native grassland. Native grasslands are a sensitive habitat under County Code. If improvements of structures or new activities are proposed within areas mapped as grassland on these two parcels, additional surveys are recommended to validate the location and species composition of these grasslands. If a spring season survey document the areas meeting the definition of native grassland under County Code, the impacts to this resource should be avoided or minimized. If impacts are incurred, compensatory mitigation should be implemented, such as restoration. If the areas are deemed to be annual grassland, no additional actions are recommended.

A copy of this biotic approval, including attachments, should be submitted with any future permit applications.

If you have any questions regarding this letter, please feel free to contact me by email or telephone at Juliette.Robinson@santacruzcounty.us or 831-454-3156.

Sincerely,

Juliette Robinson
Resource Planner IV, Biologist

CC: Lezanne Jeffs, Project Planner
Kathy Lyons, Biotic Resources Group