COUNTY OF HUMBOLDT
PLANNING AND BUILDING DEPARTMENT
CURRENT PLANNING DIVISION

3015 H Street Eureka CA 95501
Phone: (707)445-7541 Fax: (707) 268-3792

Hearing Date: October 2, 2014

To: Humboldt County Planning Commission

From: Kevin Hamblin, Director

Subject: **Redwood Parks Lodge Co., Inc.** Coastal Development Permit, Conditional Use Permit and Special Permit
Application Number 8926
Case Number CDP-14-016, CUP-14-008, SP-14-022
Assessor's Parcel Number 520-142-009-000
Orick Area

The attached staff report has been prepared for your consideration of the Redwood Parks Lodge Co. Inc. application at the public hearing on October 2, 2014. The staff report includes the following:

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Please contact Michael Wheeler, Senior Planner, at 268-3730 if you have any questions about the scheduled public hearing item.

AGENDA ITEM TRANSMITTAL

To: Humboldt County Planning Commission

From: Kevin Hamblin, Director, Planning and Building Department

Hearing Date:	Subject:	Contact:
October 2, 2014	Coastal Development Permit, Conditional Use Permit, and Special Permit	Michael Wheeler

Project: A Coastal Development Permit, Conditional Use Permit and Special Permit for a 152 unit transient habitation facility (special occupancy park), to include: a campground, RV Park, Lodge (commercial center), and gas station. The special occupancy park will include 82 RV sites, 48 tent camping sites, 12 park model cabins, 10 cottages, 3 bathhouses, internal trails connecting to the existing Redwood Creek Levee Trail, an open playing field, and a commercial center constructed in a traditional lodge building style. The commercial center will include the resort activity center, administrative offices, a deli and convenience store/gift shop, a touring center, and gas station. An existing residence will remain and be used as a caretaker's residence and office space. A 2,076 square foot maintenance barn will be constructed to the north of the residence and will house the wastewater treatment system operations and maintenance area. The on-site sewage disposal system proposed is an Orenco Advantex Wastewater Treatment system suitable for processing approximately 19,500 gallons of waste per day. The primary leach field will be located near the existing house. Water will be provided by the Orick Community Services District. All utility lines will be underground. The resort will host up to 12 special events per year such as weddings, celebrations, family reunions, school/youth field trips, and small musical productions. Events will generate a maximum of 100 attendees who are not staying on site and may be held between the hours of 12 PM and 9 PM. A Special Permit is included to establish parking for a non-enumerated use. A maximum of 100 additional guests (those not staying overnight at the Resort) will be attending special events. To meet this demand 50 parking spaces are proposed in addition to those required by the other facilities (277 parking spaces). Wetland 1 located at the base of the Redwood Creek Levee is partially located within the Coastal Zone. This wetland will not be altered as a result of the project. Other non-coastal wetlands (2 through 5) on site are NWI wetlands and will be filled to facilitate the project. Wetland fill will be mitigated by wetland creation and enhancement, to be implemented at a 2:1 ratio on the coastal portion of the site adjacent to the existing wetland within the 100-foot wetland setback area. Proposed on-site signage will include up to three monument signs that will be backlit or illuminated with down-shielding lighting.

Project Location: The project site is located in Humboldt County, in the Orick area, on the northwest side of State Highway 101, approximately 500 feet west from the intersection of State Highway 101 with Lundblade Street, on the property known as 120465 State Highway 101.

Present Plan Designations: Commercial Recreation (CR), North Coast Area Plan (NCAP); Commercial Recreation (CR), Orick Community Plan (OCP); Density: N/A; Slope Stability: Low Instability (1)

Present Zoning: Inland: (CH-Q-D) Highway Service Commercial (CH), Qualified (Q), Design Control (D); **Coastal:** (CR/D) Commercial Recreation (CR), Design Review (D)

Assessor Parcel Number: 520-142-009-000

Applicant
Donna Hufford
Redwood Parks Lodge Company
PO Box 66
Orick, CA 95555

Owner
Redwood Parks Lodge Company
Po Box 66
Orick, CA 95555

Agent
Beth Burks
LACO Associates
PO Box 1023
Eureka, CA 95502

Environmental Review: Yes.

Major Issues: wetlands

State Appeal Status: Project is appealable to the California Coastal Commission

REDWOOD PARKS LODGE CO. INC. COASTAL DEVELOPMENT PERMIT, CONDITIONAL USE PERMIT AND SPECIAL PERMIT

Case Numbers CDP 14-016, CUP 14-008, SP 14-022
Assessor's Parcel Number 520-142-009-000

Recommended Commission Action

1. Describe the application as a Public Hearing;
2. Allow the staff to present the project;
3. Open the public hearing and receive testimony; and,
4. Close the hearing and take the following action:

Adopt the mitigated negative declaration, make all of the required findings, based on evidence in the staff report, and approve the application(s) subject to the recommended conditions.

Executive Summary: The applicant is requesting a Coastal Development Permit, Conditional Use Permit and Special Permit for a 152 unit transient habitation facility (special occupancy park), to include: a campground, RV Park, Lodge (commercial center), and gas station. The special occupancy park will include 82 RV sites, 48 tent camping sites, 12 park model cabins, 10 cottages, 3 bathhouses, internal trails connecting to the existing Redwood Creek Levee Trail, an open playing field, and a commercial center constructed in a traditional lodge building style. The commercial center will include the resort activity center, administrative offices, a deli and convenience store/gift shop, a touring center, and gas station. An existing residence will remain and be used as a caretaker's residence and office space. A 2,076 square foot maintenance barn will be constructed to the north of the residence and will house the wastewater treatment system operations and maintenance area.

The parcel is located in the Orick area, on the northwest side of State Highway 101, approximately 500 feet west from the intersection of State Highway 101 with Lundblade Street, on the property known as 120465 State Highway 101. The site is bound by U.S. Highway 101 to the south, Redwood Creek levee to the north, a residential neighborhood to the east, and commercial properties to the west.

The property lies within the Orick Community Services District but this agency does not provide wastewater services. The applicant proposes to use an on-site sewage disposal system (Orenco Advantex Wastewater Treatment System) suitable for processing approximately 19,500 gallons of wastewater per day. The primary leach field will be located near the existing house. Water will be provided by the Orick Community Services District. All utility lines will be underground.

The resort will host up to 12 special events per year such as weddings, celebrations, family reunions, school/youth field trips, and small musical productions. Events will generate a maximum of 100 attendees who are not staying on site and may be held between the hours of 12 PM and 9 PM. A Special Permit is included to establish parking for a non-enumerated use. A maximum of 100 additional guests (those not staying overnight at the Resort) will be attending special events. To meet this demand 50 parking spaces are proposed in addition to those required by the other facilities (277 parking spaces).

The project is designed to off-set impacts to wetlands that exist on the site. A Biological Survey and Wetland Confirmation were prepared for the project by Gary Lester, Senior Biologist for LACO Associates. Wetland 1 located at the base of the Redwood Creek Levee is partially located within the Coastal Zone. This wetland will not be altered as a result of the project. Other non-coastal wetlands (2 through 5) on site are mapped National Wetland Inventory (NWI) wetlands but are, and will be, filled to facilitate the project. Wetland fill will be mitigated on site by wetland creation and enhancement to be implemented at a 2:1 ratio on the coastal portion of the site adjacent to the existing wetland. A wetland buffer of variable width has been

proposed along the boundary between the recreational facility and Wetland 1 and the created wetland mitigation area.

The design of the Lodge, and overall facility improvements, have received the approval of the Orick Design Review Committee. Proposed on-site signage will include up to three monument signs that will be backlit or illuminated with down-shielding lighting.

A preliminary Transportation and Circulation Analysis has been prepared for the project and the applicant is in consultation with CalTrans regarding the necessary encroachment permits. The primary access to the facility will occur at a point on Highway 101 with a center turn lane. An acceleration lane on Southbound Highway 101 is proposed.

The proposed development complies with all applicable development standards. The parcel is planned and zoned for commercial recreation; the proposed use represents a commercial recreation use.

The project is consistent with the Humboldt County Framework Plan, the Orick Community Plan, and the Humboldt County Zoning Code (H.C.C.) for the following reasons: 1) the project is a conditionally permitted use; 2) the proposed facilities will conform with all development standards of the zone, and 3) the proposed facilities will not have any adverse impacts on the neighborhood or the environment. The project is subject to environmental review pursuant to the California Environmental Quality Act (CEQA). The attached mitigated negative declaration, along with the proposed mitigation measures, indicates that the project will not have a significant impact on the environment.

Based on the on-site inspection, a review of Planning Division reference sources, and comments from all involved referral agencies, Planning staff believes that the applicant has submitted evidence in support of making all of the required findings for approving the Coastal Development Permit.

Alternatives: The following alternatives to the staff recommendation may be considered: 1) The Planning Commission could elect to add or delete conditions of approval; 2) The Planning Commission could deny approval of the requested permit if you are unable to make all of the required findings. Planning Division staff is confident that the required findings can be made based on the submitted evidence and subject to the recommended conditions of approval. Consequently, planning staff does not recommend further consideration of these alternatives.

RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF HUMBOLDT
Resolution Number 14-

Case Numbers CDP 14-016, CUP 14-008, SP 14-022
Assessor Parcel Number 520-142-009-000

Makes the required findings for certifying compliance with the California Environmental Quality Act and conditionally approves the Redwood Parks Lodge Company Coastal Development Permit, Conditional Use Permit and Special Application.

WHEREAS, LACO Associates, acting on behalf Redwood Parks Lodge Company, submitted an application and evidence in support of approving a Coastal Development Permit, Conditional Use Permit and Special Permit for commercial facilities on the subject property; and

WHEREAS, the County Planning Division has reviewed the submitted application and evidence and has referred the application and evidence to involved reviewing agencies for site inspections, comments and recommendations; and

WHEREAS, the County Planning and Building Department, Planning Division, has reviewed the submitted application and evidence for conformance with general and coastal plan policy, goals and regulations and applicable zoning; and

WHEREAS, the project is subject to environmental review pursuant to the California Environmental Quality Act (CEQA); and

WHEREAS, the County Planning Division prepared a draft Mitigated Negative Declaration included in Attachment 4; and

WHEREAS, Attachment 2 in the Planning Division staff report includes evidence in support of making all of the required findings for approving the proposed Coastal Development Permit, Conditional Use Permit and Special Permit (Case Numbers CDP 14-016, CUP 14-008, SP 14-022);

NOW, THEREFORE, be it resolved, determined, and ordered by the Planning commission that:

1. The Planning Commission adopts the proposed Mitigated Negative Declaration in Attachment 4 as required by Section 15074(b) of the CEQA Guidelines and finds that there is no substantial evidence that the proposed project will have a significant effect on the environment.
2. The Planning Commission makes the findings in Attachment 2 of the Planning Division staff report for Case Numbers CDP 14-016, CUP 14-008, SP 14-022 based on the submitted evidence; and

3. The Planning Commission conditionally approves the proposed Coastal Development Permit as recommended in the Planning Division staff report for Case Numbers CDP 14-016, CUP 14-008, SP 14-022.

Adopted after review and consideration of all the evidence on October 2, 2014.

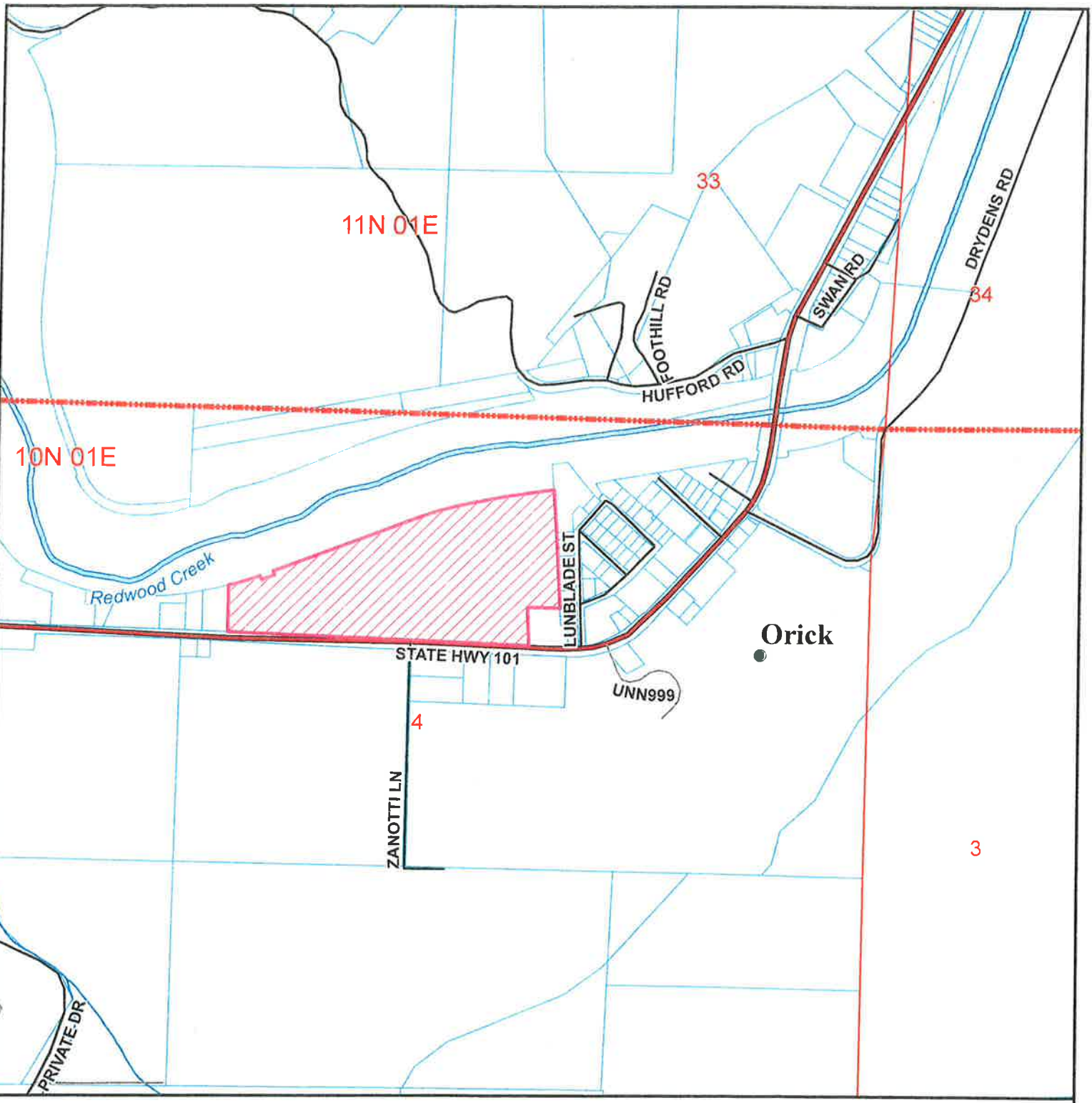
The motion was made by Commissioner ____ and seconded by Commissioner ___.

AYES: Commissioners:
NOES: Commissioners:
ABSTAIN: Commissioners:
ABSENT: Commissioners:
DECISION:

Robert Morris, Chair

I, Catherine Munsee, Clerk to the Planning Commission of the County of Humboldt, do hereby certify the foregoing to be a true and correct record of the action taken on the above entitled matter by said Commission at a meeting held on the date noted above.

Catherine Munsee, Clerk



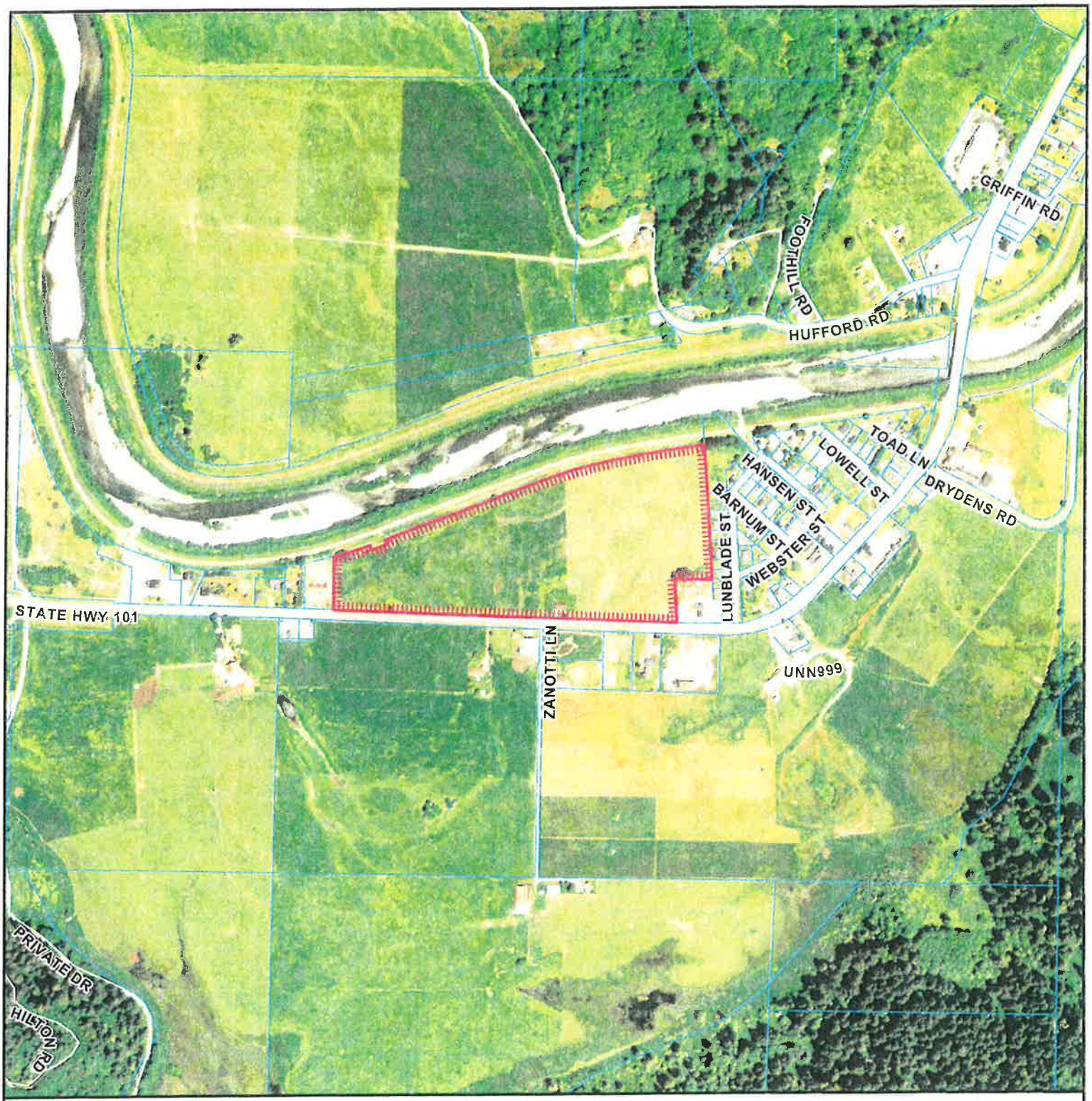
LOCATION MAP

PROPOSED REDWOOD PARKS LODGE CO, INC
COASTAL DEVELOPMENT PERMIT,
CONDITIONAL USE PERMIT & SPECIAL PERMIT
ORICK AREA
CDP-14-016/CUP-14-008/SP-14-022
APN: 520-142-009
T10N R01E S04 HB&M (Orick)

Project Area =

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

0 250 500 750 1,000 Feet



AERIAL MAP

PROPOSED REDWOOD PARKS LODGE CO, INC
COASTAL DEVELOPMENT PERMIT,
CONDITIONAL USE PERMIT & SPECIAL PERMIT
ORICK AREA
CDP-14-016/CUP-14-008/SP-14-022
APN: 520-142-009
T10N R01E S04 HB&M (Orick)

Project Area =

N

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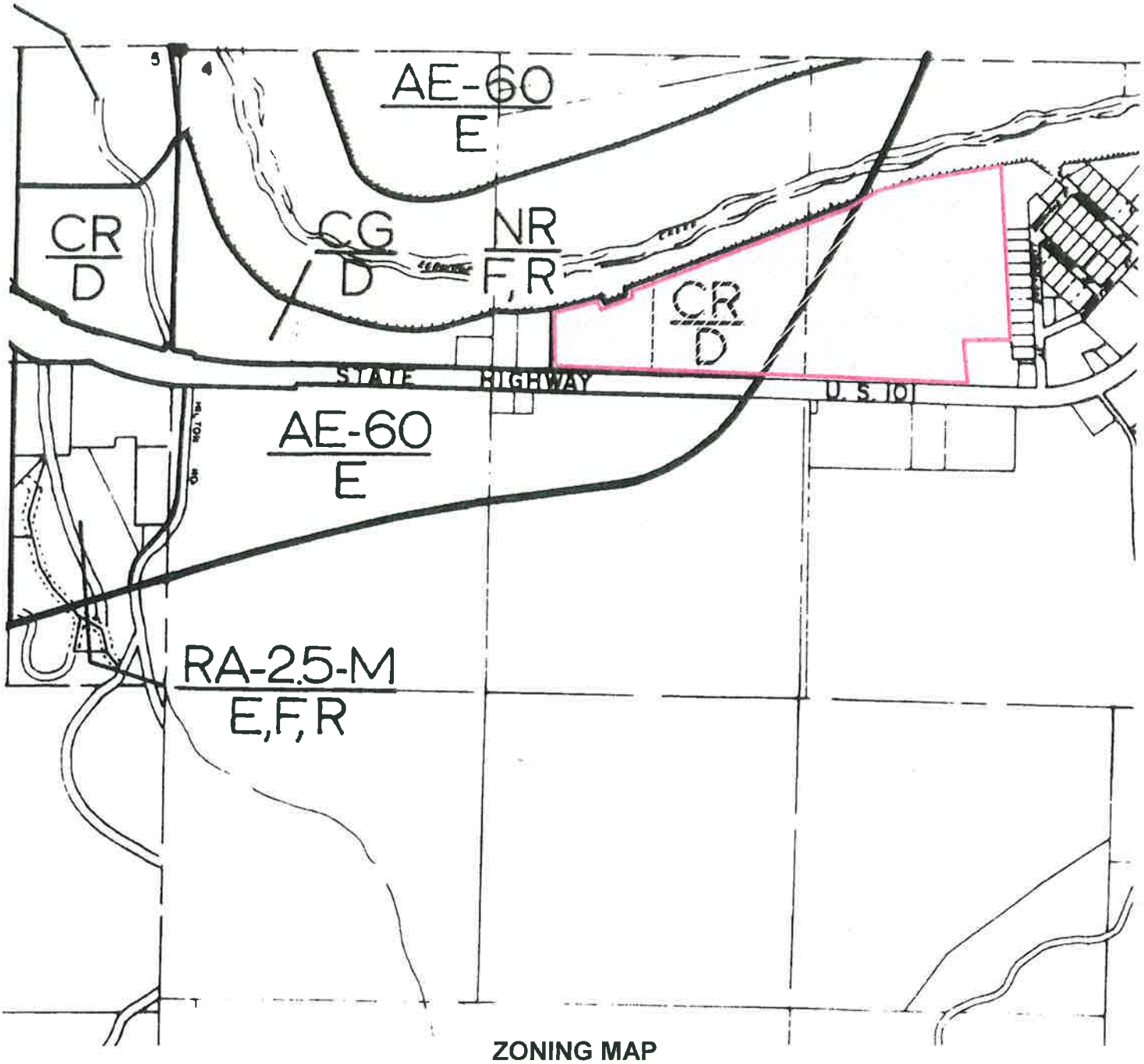
0 250 500 750 1,000 Feet



ZONING MAP
(COASTAL)
1 of 2

PROJECT AREA =

PROPOSED REDWOOD PARKS LODGE CO, INC
COASTAL DEVELOPMENT PERMIT,
CONDITIONAL USE PERMIT & SPECIAL PERMIT
ORICK AREA
CDP-14-016/CUP-14-008/SP-14-022
APN: 520-142-009
T10N R01E S04 HB&M (Orick)

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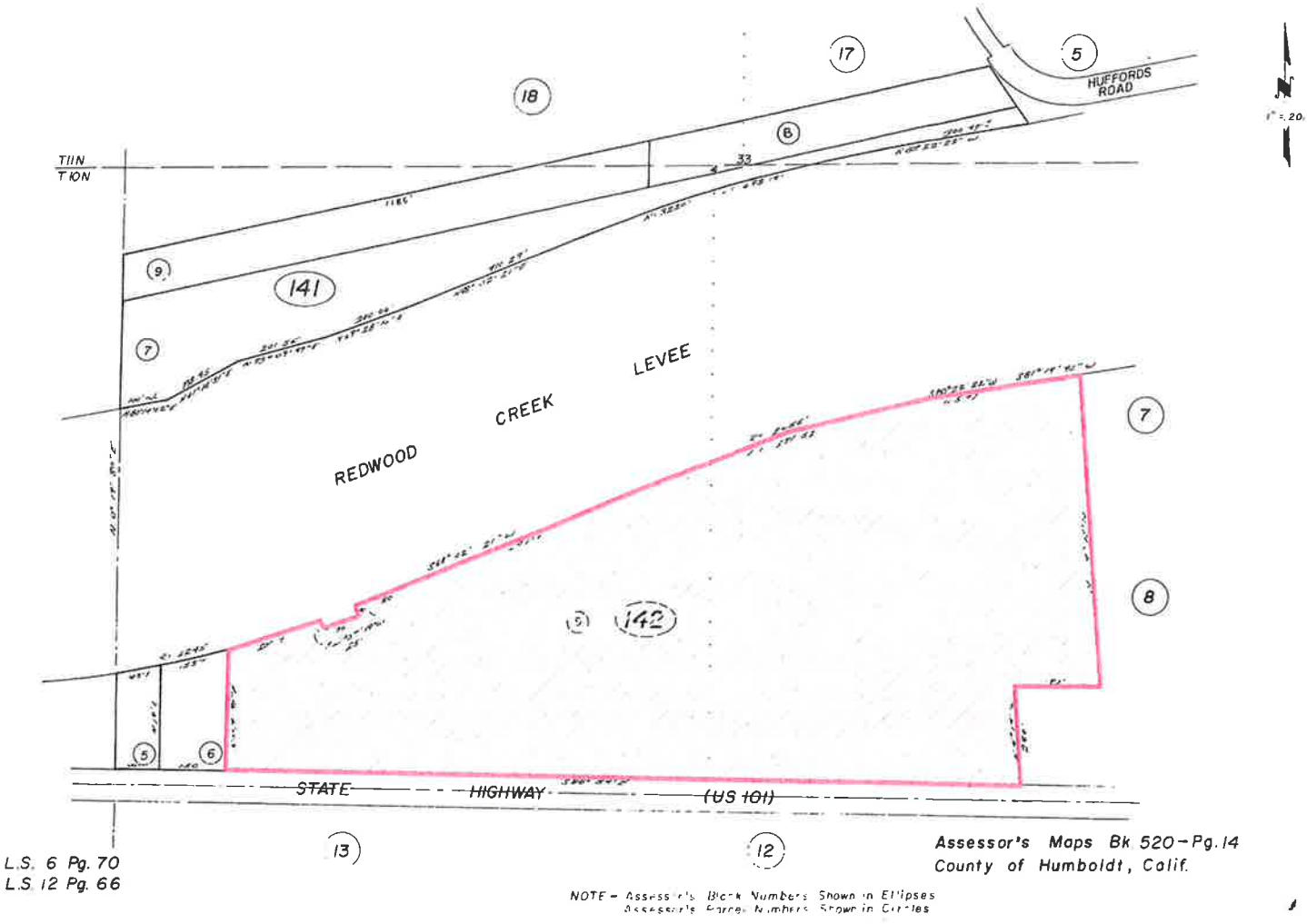
MAP NOT TO SCALE



PROJECT SITE =

ASSESSOR PARCEL MAP

PROPOSED REDWOOD PARKS LODGE CO, INC
COASTAL DEVELOPMENT PERMIT,
CONDITIONAL USE PERMIT & SPECIAL PERMIT
ORICK AREA
CDP-14-016/CUP-14-008/SP-14-022
APN: 520-142-009
T10N R01E S04 HB&M (Orick)

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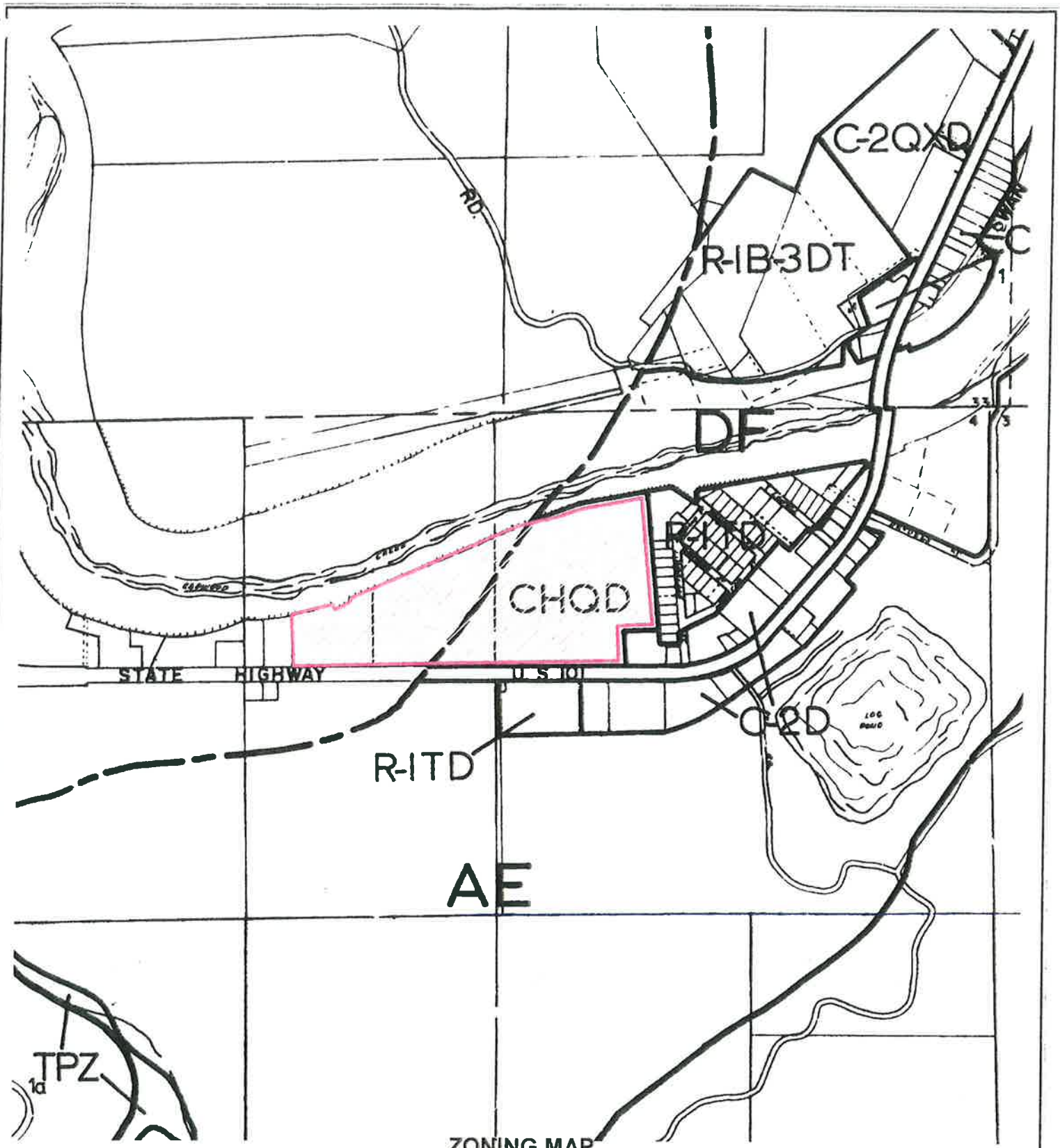

ZONING MAP
(INLAND)
2 of 2

PROJECT AREA =

PROPOSED REDWOOD PARKS LODGE CO, INC
COASTAL DEVELOPMENT PERMIT,
CONDITIONAL USE PERMIT & SPECIAL PERMIT
ORICK AREA
CDP-14-016/CUP-14-008/SP-14-022
APN: 520-142-009
T10N R01E S04 HB&M (Orick)

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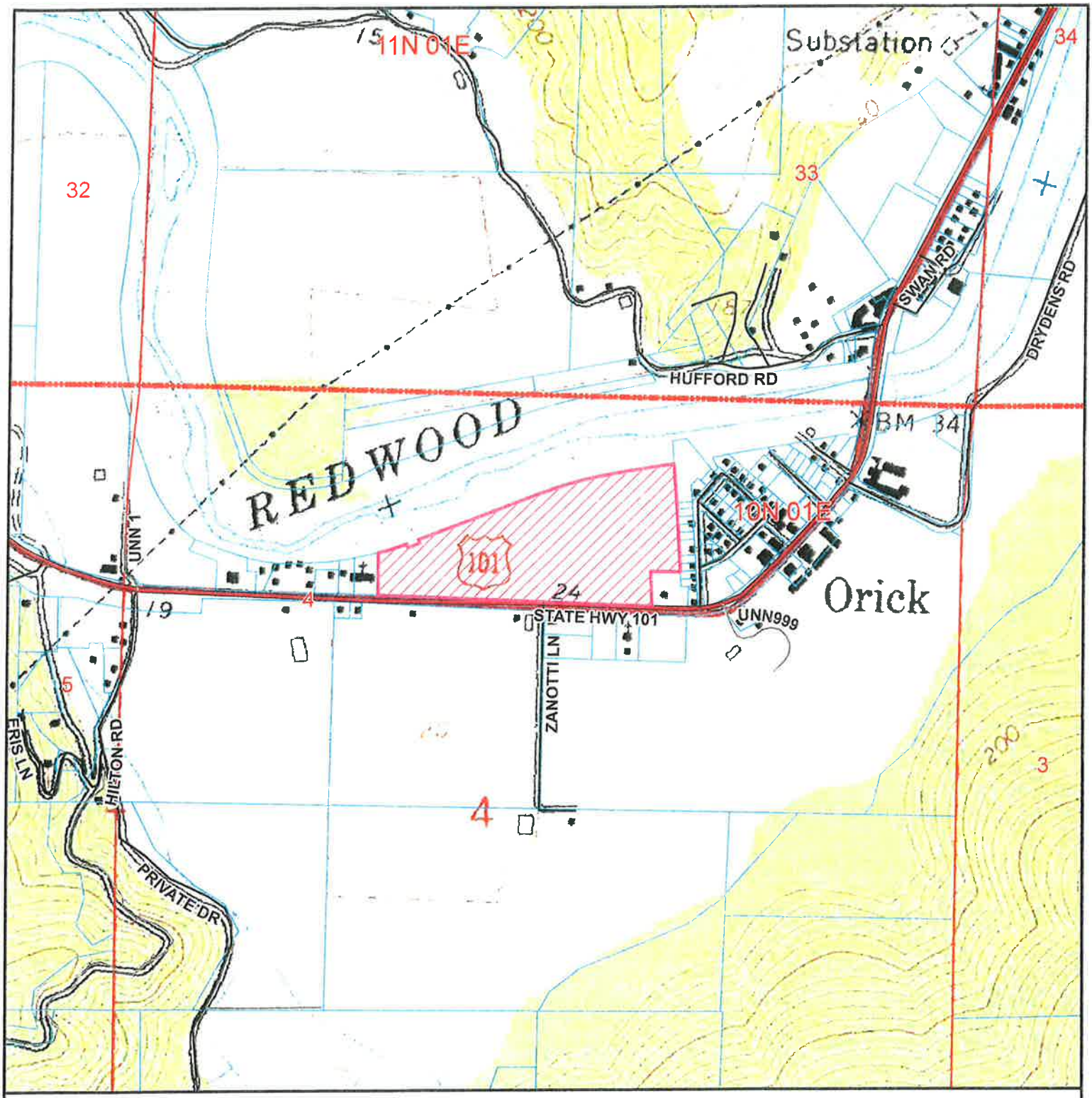
MAP NOT TO SCALE



TOPO MAP

PROPOSED REDWOOD PARKS LODGE CO, INC
COASTAL DEVELOPMENT PERMIT,
CONDITIONAL USE PERMIT & SPECIAL PERMIT
ORICK AREA
CDP-14-016/CUP-14-008/SP-14-022
APN: 520-142-009
T10N R01E S04 HB&M (Orick)

Project Area =

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

0 250 500 750 1,0001,250 Feet

UNIT SUMMARY

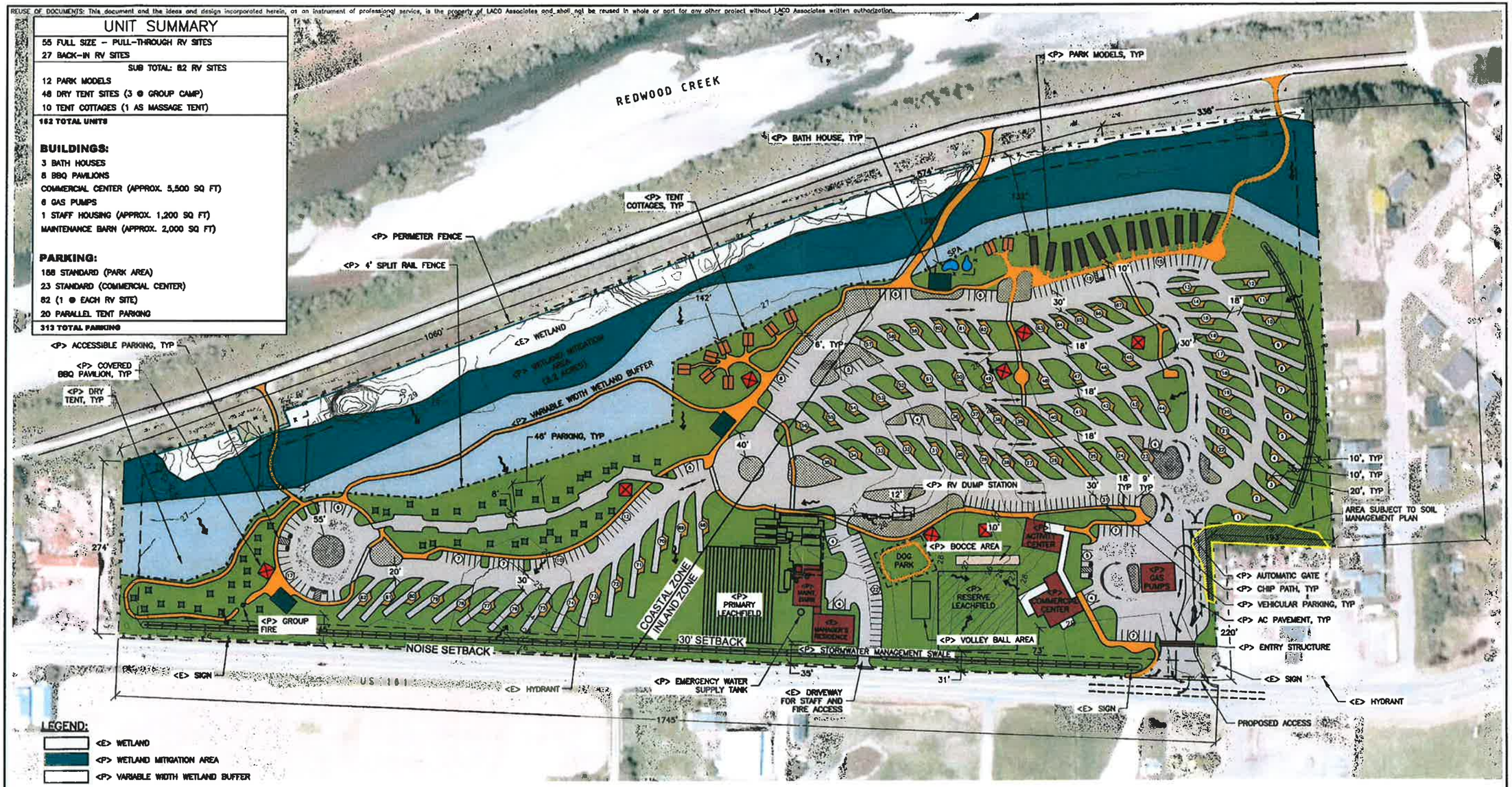
55 FULL SIZE – PULL-THROUGH RV SITES
27 BACK-IN RV SITES
SUB TOTAL: 82 RV SITES
12 PARK MODELS
48 DRY TENT SITES (3 @ GROUP CAMP)
10 TENT COTTAGES (1 AS MASSAGE TENT)
152 TOTAL UNITS

BUILDINGS:

- 3 BATH HOUSES
- 6 BBQ PAVILIONS
- COMMERCIAL CENTER (APPROX. 5,500 SQ FT)
- 6 GAS PUMPS
- 1 STAFF HOUSING (APPROX. 1,200 SQ FT)
- MAINTENANCE BARN (APPROX. 2,000 SQ FT)

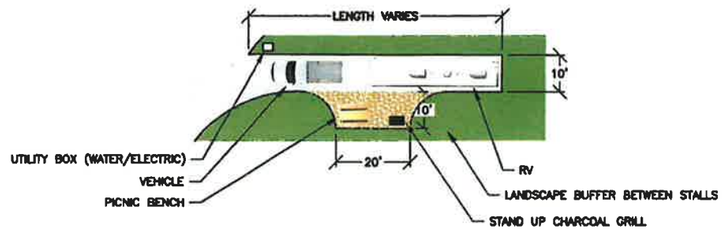
PARKING:

188 STANDARD (PARK AREA)
23 STANDARD (COMMERCIAL CENTER)
82 (1 @ EACH RV SITE)
20 PARALLEL TENT PARKING
313 TOTAL PARKING



LEGEND:

- <E> WETLAND
- <P> WETLAND MITIGATION AREA
- <P> VARIABLE WIDTH WETLAND BUFFER

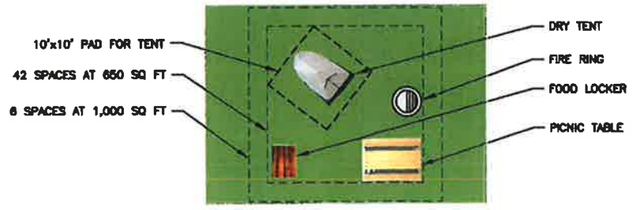


TYPICAL RV STALL DETAIL

SCALE: 1"=20'

0 40' 80'

SCALE: 1"=80'



TYPICAL DRY TENT SITE DETAIL

SCALE: 1"=10'

DRAFT

LACO
EUREKA • UKIAH • SANTA ROSA
1-800-313-5054 www.lacoassociates.com

NO.	HISTORY / REVISION	BY	CHK.	DATE

REDWOOD NATIONAL PARK RESORT
SITE PLAN
APN: 520-142-009

REDWOOD PARKS LODGE COMPANY
ORICK TOWNSITE

DRAWN	JDB
CHECK	MDN
APPROVED	MDN
DATE	7/30/14
JOB NUMBER	6782.06
SHEET	1 OF 1

Sep 18,2014-2:20pm
T:\Cadfiles\JOB\6782.06 ORICK TOWN SITE\DWG\ 6782.06 CV SITE.dwg

ATTACHMENT 1
RECOMMENDED CONDITIONS OF APPROVAL

Approval of the Coastal Development Permit, Conditional Use Permit and Special Permit is conditioned upon the following terms and requirements which must be fulfilled before a grading permit may be issued or use initiated.

1. Prior to hearing, the applicant shall submit a check to the Planning Division payable to the Humboldt County Recorder in the amount of $2,231.25. [Note: In order to comply with the time limits for filing the Notice of Determination per CEQA, this payment will be requested from the applicant prior to hearing and will be held by the Planning Division pending a decision on the permit.] Pursuant to Section 711.4 of the Fish and Wildlife Code, the amount includes the Department of Fish and Wildlife (DFW) fee plus a $50 document handling fee. This fee is effective through December 31, 2014 at such time the fee will be adjusted pursuant to Section 713 of the Fish and Wildlife Code. Alternatively, the applicant may contact DFW by phone at (916) 651-0603 or through the DFW website at www.dfg.ca.gov for a determination stating the project will have *no effect* on fish and wildlife. If DFW concurs, a form will be provided exempting the project from the $2,181.25 fee payment requirement. In this instance, only a copy of the DFW form and the $50.00 handling fee is required.

   Note: If a required filing fee is not paid for the project, the project will not be operative, vested or final and any local permits issued for the project will be invalid (Section 711.4(c)(3) of the State Fish and Wildlife Code).

2. Grading plans submitted for approval shall conform to the approved site plan and Plan of Operations on file with the Planning Division. Grading plans shall also show the use of Best Management Practices to reduce the potential from soil erosion from the site.
3. The applicant shall submit a letter from the Regional Water Quality Control Board that the proposed project meets their concerns and permit requirements.
4. The applicant shall submit a letter from U. S. Army Corps of Engineers that the proposed project meets their concerns and permit requirements.
5. The applicant shall comply with the requirements of the Department of Public Works Memorandum dated May 14, 2014, including the requirement to secure the necessary Encroachment Permit and coordinate with Caltrans regarding overflow from the bioswale.
6. During project development the applicant shall abide by the mitigation measures contained in the cultural resource investigation prepared by Nick Angeloff for the Site.
7. The applicant shall prepare a Trash Management Plan as it relates to corvids (e.g. jays, crows, and ravens) and submit evidence to the County Planning Division that the plan has been reviewed and approved by the California Department of Fish and Wildlife.
8. All lighting on the project site shall be fully shielded so that it does not extend beyond the project boundaries.
9. The applicant shall incorporate LID stormwater management in the design of stormwater facilities and shall use native plants in landscaping.
10. Any work done within the State right-of-way will require an encroachment permit from the Caltrans District 1 Permits Office. The applicant shall provide evidence to the Planning Division that such work has been approved by Caltrans.

11. A landscaping plan shall be provided to the satisfaction of the Planning Division. At a minimum, the landscaping plan shall include native tree and shrub species, which drought resistant and are non-pyrophitic, and identify the location, type (by species and common name), size, method for irrigation, and maintenance program, including replacement of plantings over time. Landscaping shall not affect visibility and shall conform to the visibility ordinance as required by the Department of Public Works and CalTrans.

12. The project shall demonstrate conformance with the approved Mitigated Negative Declaration and the Mitigation and Monitoring Program. In addition, the applicant shall submit to the Planning Director annual follow-up reports prepared by a qualified biologist that verifies whether or not: a) the mitigations BIO-7, BIO-8 and BIO-9 in the Mitigated Negative Declaration (page 17) were adhered to, and b) the success of the Wetland Mitigation Plan in BIO-9. A minimum of three (3) years of monitoring report shall be provided to address the success of wetland construction. Verification that necessary measures were completed shall be submitted for the Planning Director's review. A written contract for services and cost estimate for this monitoring work shall be provided to the Department prior to initiation of work. A performance bond may be required by the Planning Director.

On-going Requirements/Development Restrictions Which Must be Satisfied for the Life of the Project:

1. The site shall be developed and used in conformance with the approved Project Description, Plan of Operations, Site Plan and the Mitigated Negative Declaration. Changes to the approved project, except for Minor Deviations as allowed pursuant to Section 312-11 of the Zoning Regulations, shall require prior approval by the Planning Division and may necessitate a modification to this permit.

Informational Notes:

1. If buried archaeological or historical resources are encountered during construction activities, the contractor on-site shall call all work in the immediate area to halt temporarily, and a qualified archaeologist is to be contacted to evaluate the materials. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, dietary bone, and human burials. If human burial is found during construction, state law requires that the County Coroner be contacted immediately. If the remains are found to be those of a Native American, the California Native American Heritage Commission will then be contacted by the Coroner to determine appropriate treatment of the remains.

   The applicant is ultimately responsible for ensuring compliance with this condition.

2. The applicant is responsible for receiving all necessary permits and/or approvals from other state and local agencies.

3. This permit shall expire and become null and void at the expiration of one (1) year after all appeal periods have lapsed (see "Effective Date"); except where construction under a valid building permit or use in reliance on the permit has commenced prior to such anniversary date. The period within which construction or use must be commenced may be extended as provided by Section 312-11.3 of the Humboldt County Code.

4. NEW DEVELOPMENT TO REQUIRE PERMIT. Any new development as defined by Section 313-139 of the Humboldt County Code (H.C.C.), shall require a coastal development permit or permit modification, except for Minor Deviations from the Plot Plan as provided under Section 312-11.1 of the Zoning Regulations.

5. The applicant will need to apply for an "encroachment" permit from the Humboldt County Department of Public Works for the proposed trail connections within the levee right-of-way. Issuance of an "encroachment" permit will require concurrence from the U.S. Army Corps of Engineers.

ATTACHMENT 2
Staff Analysis of the Evidence Supporting the Required Findings

Required Findings: To approve this project, the Hearing Officer must determine that the applicant has submitted evidence in support of making **all** of the following required findings.

The Coastal Zoning Ordinance, Section 312-17.1 of the Humboldt County Code (Required Findings for All Discretionary Permits) specifies the findings that are required to grant a Coastal Development Permit:

1. The proposed development is in conformance with the County General Plan;

2. The proposed development is consistent with the purposes of the existing zone in which the site is located;

3. The proposed development conforms with all applicable standards and requirements of these regulations; and

4. The proposed development and conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare, or materially injurious to properties or improvements in the vicinity,

5. The proposed development does not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law (the mid-point of the density range specified in the plan designation), unless the following written findings are made supported by substantial evidence: 1) the reduction is consistent with the adopted general plan including the housing element; and 2) the remaining sites identified in the housing element are adequate to accommodate the County share of the regional housing need; and 3) the property contains insurmountable physical or environmental limitations and clustering of residential units on the developable portions of the site has been maximized.

6. In addition, the California Environmental Quality Act (CEQA) states that one of the following findings must be made prior to approval of any development which is subject to the regulations of CEQA. The project either:

   a) is categorically or statutorily exempt; or

   b) has no substantial evidence that the project will have a significant effect on the environment and a negative declaration has been prepared; or

   c) has had an environmental impact report (EIR) prepared and all significant environmental effects have been eliminated or substantially lessened, or the required findings in Section 15091 of the CEQA Guidelines have been made.

Staff Analysis of the Evidence Supporting the Required Findings

To approve this project, the Hearing Officer must determine that the applicant has submitted evidence in support of making **all** of the following required findings.

1. **The proposed development must be consistent with the General Plan.** The following table identifies the evidence which supports finding that the proposed development is in conformance with all applicable policies and standards of the Humboldt Bay Area Plan (HBAP).

Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
Land Use Commercial Recreation (CR), North Coast Area Plan (NCAP) §5.20; Commercial Recreation (CR), Orick Community Plan (OCP) §2342	Commercial Recreation (CRG): To protect sites suitable for the development of commercial recreational facilities. Principal uses include recreation vehicle parks and visitor serving facilities.	The project is for development of a recreational vehicle park and visitor serving facilities.
Housing §3.24 (NCAP); §2400 (OCP)	Housing shall be developed in conformity the Housing Element.	Not applicable since the proposal will not add or remove any housing. An existing residence will remain and be used as a caretaker's residence and office space.
Hazards §3.26 (NCAP) §3000 (OCP)	New development shall minimize risks to life and property in areas of high geologic, flood and fire hazard.	Based on the Humboldt County General Plan hazard mapping the Site is in an area of low geologic instability and it is not prone to liquefaction. The Project will not result in increased potential for on- or off-site landslides. The Site is relatively flat. The soils at the Site are not expansive in nature, as described Table 18-1-B of the Uniform Building Code (1994). The site is completely outside the 100-year flood zone. However, a recent capacity assessment for the Redwood Creek levee suggests that aggradation in the lower Redwood Creek system has reduced the flood capacity of the levee (Northern Hydrology and Engineering, 2010). To support recertification of the levee by the Federal Emergency Management Agency (FEMA), the Humboldt County Department of Public Works is currently managing an effort to characterize the geotechnical stability of the levee system. Although the Project currently is outside the 100-year flood zone, given the unknown ability of the levee to contain flood waters, the Project will include a requirement to develop a flood management plan to limit the loss of life and property should a flood event occur. Peak occupancy is expected to occur during summer months when flood hazards are at their lowest. With mitigation incorporated, no

Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
		impact would occur. See Mitigation Measure HYDRO-1. The entire community of Orick is within the tsunami run-up zone. Within the run-up zone flooding associated with a tsunami is anticipated and may be triggered by a near source (Cascadia Subduction Zone) or distant source (Pacific Rim) earthquake. The community of Orick participates in the "TusnamiReady" Program administered by the National Weather Service; Orick received the TsunamiReady designation in 2007. To be designated TsunamiReady, communities must establish a 24-hour Warning Point and Emergency Operations Center, establish multiple ways to alert the public to tsunami hazards, demonstrate community preparedness by designating a tsunami shelter in the safe zone, install evacuation route signage, and conduct educational programs related to tsunami hazards (National Weather Service, 2012). The nearest established evacuation point in relation to the Site is the Orick School Route identified in the Redwood National And State Parks Tsunami Ready and Tsunami Contingency Plan. Fire protection will be provided by CalFire, operating out of the Trinidad Fire Station, approximately 20 miles south of the site. Supplemental fire service is available under the terms of mutual aid agreements between CalFire, the Orick Volunteer Fire Department (which is operated under the authority of the Orick Community Services District), and Redwood National and State Parks. The Project, once operational, will increase the number of people within the service area on any given day. Fire hydrants will be installed to the specifications of California Housing and Community Development (HCD) and in accordance with directions from Orick Community Services District regarding the location of hydrants.

Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
Biological Resource §3.40 (NCAP) §3400 (OCP)	Protect designated sensitive and critical resource habitats.	A senior biologist from LACO Associates (LACO) visited the Site on July 26, 2013, to conduct a biological survey (Appendix A: Biological Survey Report). According to the biological survey, habitats in the Project area include remnant Redwood Creek riparian, very widely scattered non-native trees (Monterey Pine [*Pinus radicata*], false cypress [*Chamaecyparis* sp.]), and agricultural (hay and cattle production) and ruderal (weedy) vegetation. Outside regularly mowed areas there are scattered individual shrubs and herbaceous cover. A small remnant riparian habitat occurs at the furthest downstream edge of the Site. Portions of the Redwood Creek levee frontage contain seasonal wetland vegetation. The biological survey did not record any plant species identified as candidate, sensitive, or special status species on the Site. Due to long-established agricultural use, the Site, has experienced continual impacts from cattle grazing and lacks natural habitat diversity. Because of the presence of the Redwood Creek levee, the Site is isolated from periodic high creek flows. As a result of these conditions, few sensitive plant species would be expected at the site. Roosevelt elk (*Cervus canadensis roosevelti)* is a regionally significant species; its natural range includes the Site. Appropriate operational, educational, and management techniques will be employed to protect the elk, employees, and guests of the resort. These techniques are specified in mitigation measures BIO-3 through BIO-5. Redwood Creek is adjacent to the Site, but physically separated by a (10-20 foot high) levee. A small remnant riparian habitat occurs at the furthest downstream edge of the Site. The remnant riparian vegetation will not be altered as a result of the project. The riparian vegetation will be buffered by 100 feet of wetland creation. The existing vegetation and the newly created wetland area will be protected from foot traffic and other park operations by the placement of a split rail fence to protect the habitat area.

Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
		The U.S. Fish and Wildlife Service National Wetland Inventory (NWI) identifies three distinct pocket wetlands at the Site. Additionally, wetland delineation conducted by SHN Consulting Engineers and Geologists (SHN) at the Site in January 2010 delineated two distinct pocket wetlands that did not appear in the NWI. On July 15, 2013, LACO staff visited the Site to confirm the presence of NWI wetlands and the wetlands identified by SHN in 2010 (Appendix B: Redwood National Park Resort Wetland Confirmation). The overall characteristics of the Site are not indicative of wetland habitat; upland habitats are pervasive. Low-lying features, possibly resulting from past Redwood Creek drainage meanderings before the construction of the levee, appear to acquire adjacent run-off and support scattered seasonal wetlands. Wetland vegetation is the predominant wetland indicator at the Site and is present in small pockets. This vegetation is composed chiefly of native perennials and non-native grasses and herbaceous species. The Project involves direct filling of approximately 1.39 acres of wetlands on the inland portion of the Site. This includes Wetlands 2, 3, 4, and 5 as they appear on Figure 5: Confirmed Wetlands Map. Wetland 1 is predominately in the coastal portion of the Site and will not be filled. Wetland fill on the inland portion of the Site will be offset by wetland creation on the coastal portion of the Site and wetland enhancement on the inland portion of the Site. A formal wetland creation and enhancement plan will be developed by a qualified biologist and approved by the County of Humboldt prior to project implementation. Wetland creation will occur at a 2:1 ratio and be located immediately adjacent to Wetland 1, creating contiguous wetland habitat. The only development that will occur within the 100-foot setback of Wetland 1 will be wetland creation. No other development will be allowed. Wetland creation will involve 2.78 acres of new wetland planting. In addition to wetland creation, enhancement will be provided by removing invasive species such as Himalayan blackberry from the existing wetland. Wetland creation and enhancement will significantly enrich the quality of wetland habitat at the Site.

Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
Environmentally Sensitive Habitats §3.41 (NCAP)	Environmentally sensitive habitat areas (ESHAs) shall be protected against any significant disruption of habitat values.	The project will avoid any grading or development in mapped ESHA habitat or within 25 feet of ESHA buffers. In addition to the preliminary drainage analysis, LACO submitted a wetland buffer area criteria evaluation prepared by LACO's senior biologist. Together these documents show that on-site stormwater retention is feasible and the development setbacks are sufficient to protect the wetland resources from significant disruption of habitat values. There will be no concentrated flows of stormwater or dry weather discharges.
	Only uses dependent on ESHA's shall be allowed within such areas.	The project will avoid any grading or development in mapped ESHA habitat.
Water Quality Protection §3.41 and 3.40 (NCAP)	Potential adverse impacts from stormwater and dry weather runoff to coastal water quality and hydrology shall be minimized.	As part of the project application, LACO submitted a preliminary drainage analysis prepared by a registered professional engineer which analyzes anticipated stormwater infiltration measures, runoff flow calculations, storage volume calculations, and stormwater retention measures. The site has been designed to incorporate LID strategies. All stormwater will be retained on site in rain gardens and swales. All landscaping, with the exception of lawn areas which are at least 320 feet from coastal wetlands, will be native vegetation with no permanent irrigation.
Conversion of Agricultural Lands – effect on agricultural productivity and resources in the area	Conversion of agricultural lands on the site was addressed when the NCAP was certified by the Coastal Commission in the 1980, however, the site currently is being used for agricultural purposes.	The zoning at this site does not allow for agricultural uses. The site history provided by the applicant indicates that the property has intermittently been used to pasture cows, horses and produce hay. However, over the last 15 years the main income from the property comes from renting the existing residence. There is no economically viable agricultural operation at the site. There will be no conversion of agricultural lands.

Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
Wetland Buffers §3.41 (NCAP)	Specifies a minimum setback distance of 100 feet between development areas and coastal wetlands.	The North Coast Area Plan section 3.41E.b allows for less than a 100 foot buffer setback when it can be demonstrated that there will be no significant adverse impacts to the wetland habitat and will be compatible with the continuance of such habitats. The development of the site will maintain at least a 100 foot buffer from the natural wetland at the base of the levee. From the created wetland area the variable width of the buffer will be between 20 feet to 120 feet with an average buffer of approximately 58 feet. The consultants biologist has determined that the proposed buffer to the created wetlands will be adequate to protect the natural and created wetland and the project will have no significant adverse impacts to the wetland habitat for the following reasons: 1) a split rail fence will be constructed at the edge of the variable width buffer areas providing a physical and visual barrier between the wetland habitat areas (and buffer)and the recreational uses of the site; 2) Low impact development strategies will be implemented throughout the facilities; 3)Identified small remnant riparian habitat areas will not be altered and there is a greater than 100 foot setback from the natural wetland at this location; 4) No special status plant or animal species were identified on the site; and 5) The created wetland will be monitored for 5 years and must achieve at least an 80% survival rate of plantings. The proposed mitigation plan will protect the wetland habitat at the base of the levee, maximizes the area of created wetland, and provides a sufficient buffer to protect wetland habitat.
Lower-cost visitor serving and recreation facilities §3.23 (NCAP)	Call for protection of lower-cost visitor serving and recreation facilities. Ensure that adequate measures are in place to prevent the visitor serving facility from supporting residential uses (e.g. limits on length of stay for RVs).	RV parks provide accommodations at a lower cost than other accommodations. For example, PKF Consulting, an international consulting firm with expertise in travel and tourism, found that typical RV family vacations are on average 27 to 61 percent less expensive than other types of vacations studies. Additionally, the project will provide a range of accommodations: cabins, tent cottages, RV sites and tent camping sites. The most affordable will be the tent camping sites and these are the predominant accommodation on the Coastal portion of the property. Other than the Manager's residence, the park in not intended for permanent residential use. This is memorialized in the plan of operations which limits length of stay to no more than 4 months in any 12 month period.

Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
Archaeological and Paleontological Resources §3.27 (HBAP)	Protect cultural, archaeological and paleontological resources	On July 25, 2013, the Lead Agency's consultant prepared and delivered a Record Search Request to the Northwest Information Center (NWIC) to evaluate the potential to encounter archaeological or historic resources while developing the Site. The consultant received the Records Search Results letter from NWIC on July 31, 2013; the results indicated approximately100 percent of the Site was previously surveyed in 1982. Although cultural resources were not identified at that time, NWIC recommended additional archeological study due to the passage of time and change in archeological research methods since the 1982 survey. The NWIC letter also recommended contacting local Native American tribes. The Yurok Tribal Historic Preservation Officer (THPO) was contacted as the property is within Yurok Tribe ancestral territory. The Yurok Tribe THPO indicated known local significance at the Site and requested an investigation by a qualified archeologist. Nick Angeloff, M.A. was retained to perform a cultural resource investigation at the Site. Appendix D: Confidential Phase I Archaeological Survey is available to agencies upon request. The cultural resource investigation included evaluation of the site for the presence of archeological and historic resources. The Site is not currently listed on any register of historic places (national, state, or local). No paleontological resources are known to be on the Site nor were any discovered during fieldwork. No human remains are known to be on the Site nor were any discovered during fieldwork. During the cultural resource investigation no significant archeological resources were found at the Site. The Site does have local significance in that the Cultural Resource Investigation found that it is identified as a place where people significant to the Yurok Tribe and north coast history were born, lived, and passed. The old cabin location is the most significant portion of the Site that has the potential to be impacted by the project. The archaeologist's report includes avoidance and mitigation measures, developed in consultation with the Yurok Tribe, which will prevent significant adverse effects to this resource.
Visual Resource §3.42 (NCAP)	Protect and conserve scenic and visual qualities of coastal areas.	The parcel is not located in a designated coastal view/scenic area. The proposed project will not impact any views of the ocean. The buildings are of the size and height permitted under the commercial zoning.

2. **The proposed development is consistent with the purposes of the existing zone in which the site is located; and 3. The proposed development conforms with all applicable standards and requirements of these regulations.** The following table identifies the evidence which supports finding that the proposed development is in conformance with all applicable policies and standards in the Humboldt County Coastal Zoning Regulations.

Zoning Section - Summary of Applicable Requirement	**Evidence That Supports the Zoning Finding**	
§313-5.2 Commercial Recreation (Coastal) with Design Review (CR/D) §314-2.4 Highway Commercial (Inland) with a "Q" combining zone and Design Review (CH-Q/D)	Recreational Vehicle Parks (Coastal) and Special Occupancy Parks (Inland) are both conditionally permitted. Furthermore, the "Q" combining zone for the Inland portion specifies recreational uses as described in the OCP.	
Development Standards – Inland and Coastal		
Minimum Parcel Size and Lot Width	5,000 square feet 50 feet	The entire parcel is ± 27 acres in size; the project work areas will be interspersed throughout the park - the parcel is > 1600' wide
Maximum Density	None specified	There are no residences proposed.
Maximum Lot Depth	3 x lot width = 150'	Average depth = 350' (No max. depth specified in Inland code)
Minimum Yard Setbacks per Zoning (most restrictive):	Front: 15' Rear: 15' Int. Side: none	No structures will be developed within the front or rear setbacks. Additionally, no parking will be allowed in the front setback.
Max. Ground Coverage	None specified	< 1%
Max. Structure Height	45 feet	No development will exceed 45' in height.
Combining Zones		

§313-19.1 Design Review (D) and §3.40 NCAP Coastal Scenic Areas	New development shall conform to the policies and standards of the General Plan and shall preserve or enhance the area's historical, cultural or scenic values. The Park is <u>not</u> designated in the NCAP as either a Coastal Scenic or a Coastal View area.	The proposed development is: a) consistent and compatible with the NCAP, b) alteration of natural landforms will occur only to an exceptionally minor extent, c) setbacks from roads and property lines will be adhered to, d) all exterior lighting will be down-shielded and of low wattage, e) the park will be landscaped according to the approved landscape plan, f) new utilities will be placed underground, g) signage will be appropriately sized and lighted so as to meet the development standards of the zone, h) no timber harvesting is proposed, I) as much of the existing view as possible will be retained, j) views from the beach and recreation areas will not be affected, and k) no solar collectors are proposed at this time.
Special Occupancy Parks		
§314-113.1 Special Occupancy Park Standards and §313-112.1 Recreational Vehicle Parks Standards	New Special Occupancy Parks, including RV Parks and Tent Campgrounds shall comply with the development standards set forth in the regulations which regulate: location, minimum site area, density of occupation, fences and walls, setbacks, minimum campground dimensions, campground space setbacks, landscaping, interior roadway dimensions, turnarounds, off-street parking, location map, trash collection, lighting, sanitary facilities, storage facilities, accessory buildings, and duration of stay.	The proposed development: 1) is located in an area planned for RV parks as a primary and compatible use, 2) contains more than 1 acre of land, 3) will be conducted consistent with density standard of one RV or two tents per space, 4) will be screened and landscaped along the perimeter, 5) will adhere to required setbacks of the zone, 6) will maintain spaces that are 1,000 sq. ft. in area or larger, or 650 sq. ft. for tent camping spaces, 7) will maintain minimum setbacks from buildings, property lines and roads, 8) will be landscaped, 9) maintains minimum roadway dimensions , 10) provides sufficient area for turnarounds, 11) provides adequate off-street parking, 12) will include a physical space demarcation, 13) will provide for trash collection area, 14) will provide lighting, 15) contains sanitary facilities, 16) proposes ancillary facilities for guests, and 17) limits stay of occupants based on facilities available. Based on the submitted evidence including the site plan and plan of operations, staff finds the proposed facility to be in substantial compliance with the standards for Special Occupancy Parks. Conditions of approval require that final Improvement Plans be reviewed for conformance with these development standards.

§314-61.1 Streamside Management Area	Placement of soil within Streamside Management Areas or Other Wet Areas shall be prohibited, except where specifically authorized by the SMA/OWA ordinance. Development within Streamside Management Areas and Other Wet Areas may include wildlife enhancement and restoration projects. For development allowed within a SMA or OWA where habitat has been converted to other uses, the project shall be conditioned to require the development of new riparian or wetland habitat of an equal area or larger	The Project involves direct filling of approximately 1.39 acres of wetlands on the inland portion of the Site. This includes Wetlands 2, 3, 4, and 5 as they appear on Figure 5: Confirmed Wetlands Map. Wetland 1 is predominately in the coastal portion of the Site and will not be filled. Wetland fill on the inland portion of the Site will be offset by wetland creation on the coastal portion of the Site and wetland enhancement on the inland portion of the Site. A formal wetland creation and enhancement plan will be developed by a qualified biologist and approved by the County of Humboldt prior to project implementation. Wetland creation will occur at a 2:1 ratio and be located immediately adjacent to Wetland 1, creating contiguous wetland habitat. The only development that will occur within the 100-foot setback of Wetland 1 will be wetland creation. No other development will be allowed. Wetland creation will involve 2.78 acres of new wetland planting. In addition to wetland creation, enhancement will be provided by removing invasive species such as Himalayan blackberry from the existing wetland. Wetland creation and enhancement will significantly enrich the quality of wetland habitat at the Site. With this mitigation incorporated, the proposed project may be found consistent with the requirements of the Streamside Management Area Ordinance.

4. Public Health, Safety and Welfare, and 6. Environmental Impact: The following table identifies the evidence which supports finding that the proposed development will not be detrimental to the public health, safety and welfare, or materially injurious to properties or improvements in the vicinity and will not adversely impact the environment.

Code Section	Summary of Applicable Requirement	Evidence that Supports the Required Finding
§312-17.1.4	Proposed development will not be detrimental to the public health, safety and welfare or materially injurious to properties or improvements in the vicinity and will not adversely impact the environment.	All reviewing referral agencies have approved or conditionally approved the proposed development. The use is principally permitted in the zone and the applicant has demonstrated compliance with all development standards.
Environmental Impact	California Environmental Quality Act Requirements	As required by the California Environmental Quality Act, the initial study conducted by the Planning and Building Department, Planning Division, (Attachment 4) evaluated the project for any adverse effects on the environment. Based on a site inspection, information in the application, and a review of relevant references in the Department, staff has determined that there is no evidence before the Department that the project will have any potential adverse effect, either individually or cumulatively, on the environment. The environmental document on file in the Department includes a detailed discussion of all relevant environmental issues. **Because the project was found subject to CEQA and a Mitigated Negative Declaration was prepared, the provisions of Section 711.4 of the California Fish and Wildlife Code apply to this project.** The applicant shall submit a check to the Planning Division payable to the Humboldt County Recorder in the amount of $2,231.25. [Note: In order to comply with the time limits for filing the Notice of Determination per CEQA, this payment will be requested from the applicant prior to hearing and will be held by the Planning Division pending a decision on the permit.] Pursuant to Section 711.4 of the Fish and Wildlife Code, the amount includes the Department of Fish and Wildlife (DFW) fee plus the $50 document handling fee. This fee is effective through December 31, 2014 at such time the fee will be adjusted pursuant to Section 713 of the Fish and Wildlife Code. Alternatively, the applicant may contact DFW by phone at (916) 651-0603 or through the DFW website at www.dfg.ca.gov for a determination stating the project will have *no effect* on fish and wildlife. If DFW concurs, a form will be provided exempting the project from the $2,181.25 fee payment requirement. In this instance, only a copy of the DFW form and the $50.00 handling fee is required. This requirement appears as Condition #1 of Attachment 1.

5. Housing Element Densities

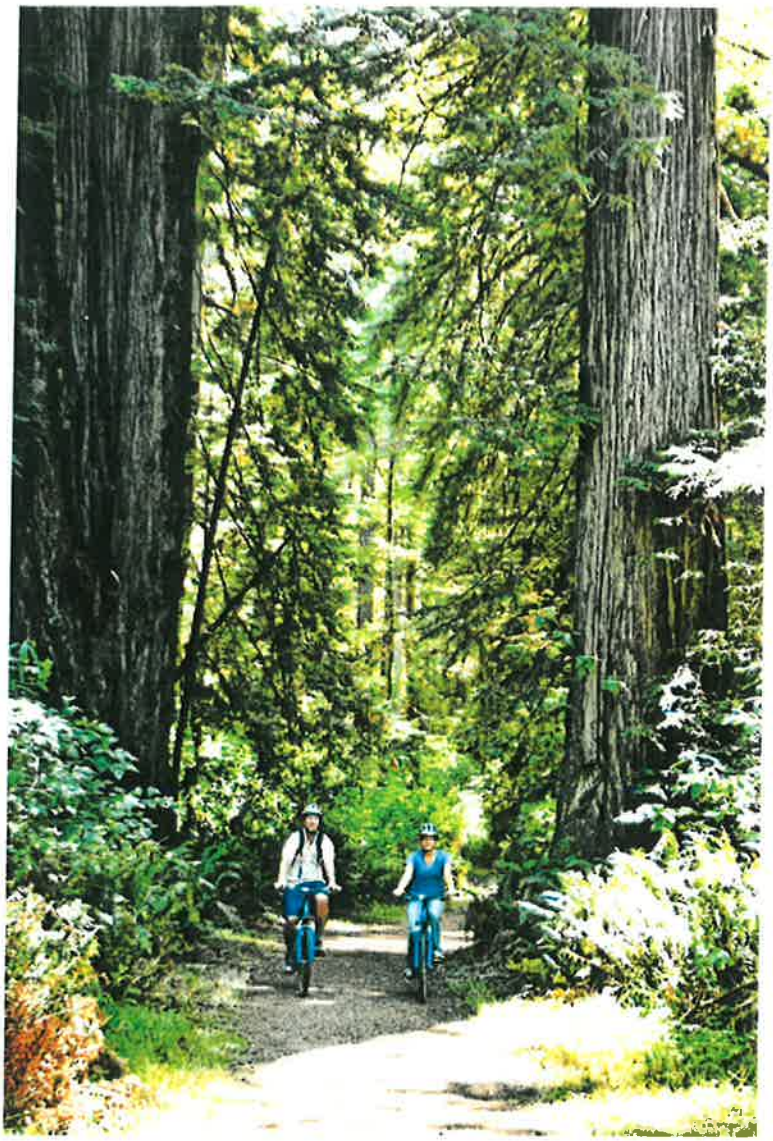
314-17.1.5 and 322-3.1 Housing Element Densities The proposed development does not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law (the mid-point of the density range specified in the plan designation), except where: 1) the reduction is consistent with the adopted general plan including the housing element; and 2) the remaining sites identified in the housing element are adequate to accommodate the County share of the regional housing need; and 3) the property contains insurmountable physical or environmental limitations and clustering of residential units on the developable portions of the site has been maximized.	The property is planned and zoned for commercial recreation. An existing residence on the property will be utilized as a caretaker's residence and there will be no loss of residential units. As such the parcel was not utilized by the Department of Housing and Community Development in determining the County's compliance with housing element law.

ATTACHMENT 3
Applicant's Evidence In Support of the Required Findings

Attachment 2 includes a listing of all written evidence which has been submitted by the applicant in support of making the required findings. The following materials are on file with the Planning Division or attached to this staff report as indicated:

- Application Form [in file]
- Plot Plan/Tentative Map Checklist [in file]
- Plot Plan [attached earlier in the staff report]
- Project Description
- LACO Responses to Referral Agency Comments
- Excerpts from LACO Preliminary Studies
  - Waste Water Treatment and Disposal (Complete Report on File)
  - Drainage Analysis (Complete Report on File)
  - Preliminary Transportation and Circulation Analysis (Complete Report on File)
  - Biological Survey, Wetland Confirmation and Wetland Buffer Criterion Evaluation (Complete Reports on File)
- Lodge Elevation Drawings

REDWOOD NATIONAL PARK RESORT



Plan of Operations / Principals and Guidelines for Development

Table of Contents

1.0 INTRODUCTION

The materials provided herein constitute the both the Plan of Operations and the Principles and Guidelines for development of the Redwood National Park Resort (Resort). The ownership of the Resort is vested with the Board of Directors of the Redwood Parks Lodge Company, a California corporation. The Chairman of the Board of Directors and the CEO is John Koeberer. Mr. Koeberer is also the co-owner, President, and CEO of The California Parks Company. Mr. Koeberer is retained by the Board of Directors for the Redwood Parks Lodge Company to bring the Resort into being, and to lead the Board in the fulfillment of its mission to benefit the public and its investors.

The purpose of this document is to describe the policies, practices, and the guiding principles that are at the core of our vision of a sustainable, educational, and amenity-rich experience. The project ownership, our agency partners, commercial associates, and neighbors are all key stakeholders, and the visiting public is the key beneficiary of the plan as presented. Our efforts will stand the test of time if we can look back and see the project carry on as a premier example of a modern mobile-park visitor amenity, sustaining both its human and natural environment in balance and integrated within the surrounding public lands.

1.1 Vision/Mission Statement

The vision of the Resort is to provide for the enjoyment, health, inspiration, and education of visitors to the Resort and the surrounding Redwood National and State Parks. The Resort will foster appreciation of the historic and living legacy of this diverse ecosystem, including its old growth redwood forest and wildlife.

- Our mission will be enhanced by our extraordinary level of service, commitment to the betterment of our communities, and open acknowledgment of the value our employees bring to this company.
- Our commitment is to support the common mission of the Redwood National and State Parks which is to:

  > ...preserve, protect, and make available to all people, for their inspiration, enjoyment and education, the ancient forests, scenic coastlines, prairies and streams, and their associated natural and cultural values, which define this World Heritage Site; and to help people forge emotional, intellectual and recreational ties to these parks.

- Our commitment to exceed the expectations of visitors, guests, neighbors, and patrons is the basis of our service standards, quality of offering, and the character of our relationships. The critical interaction between our staff and our guests will always focus on the lasting satisfaction of our guests.
- Our commitment to the environment we share and the environment we create will be guided by the concepts of stewardship and the application of environmentally appropriate standards and practices that reduce waste through reuse, recycling, and sustainable design. The results of this effort will create measurable and noteworthy accomplishments.

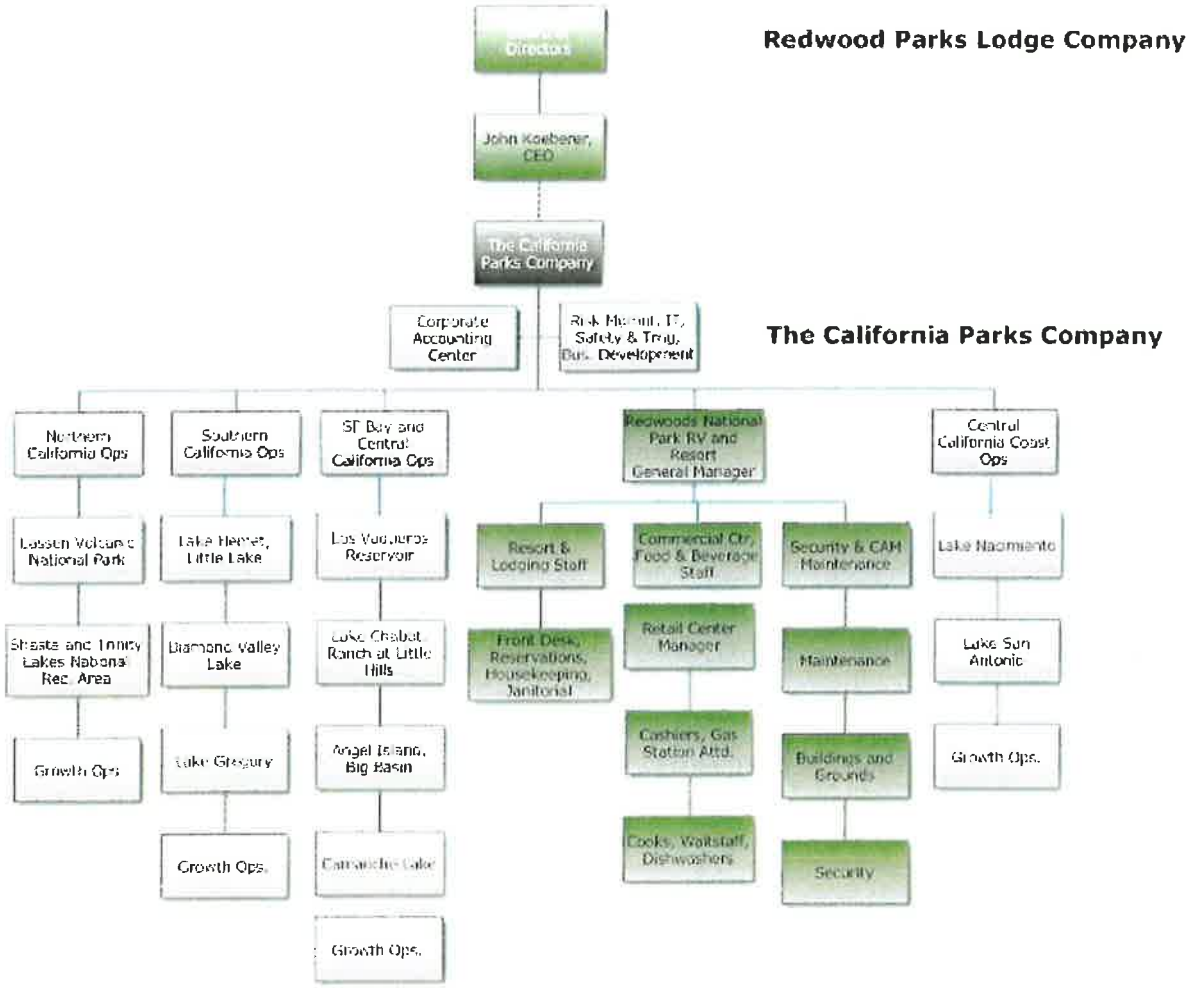
1.2 Organizational Structure

The Resort staff and management will report to the General Manager who will report to the Board of Directors of the Redwood Parks Lodge Company. The Chairman of the Board and CEO is John Koeberer.

Mr. Koeberer is also the Chairman of the Board and CEO of The California Parks Company. Along with equity share owner, Pamela Pitts, The California Parks Company (TCPC) has been in business providing unique management solutions to public and private agencies since 1978. TCPC is a concessioner to the National Park Service at Lassen Volcanic National Park and Death Valley National Park. TCPC is also a concessioner to the California State Parks at Big Basin Redwoods State Park and Angel Island State Park in the San Francisco Bay Area.

The Board of Directors has selected TCPC to be its project management company to help plan, construct, and operate the Redwoods National Park RV and Resort.

Organization Chart



1.3 The California Parks Company

The web domains and agency contacts for the corporate divisions of TCPC are provided in the table below.

Domain	Name	Agency
www.calparksco.com	Home page, The California Parks Company	
www.drakesbad.com www.lassenrecreation.com	Lassen Volcanic National Park – Drakesbad Guest Ranch, Manzanita Lake Store and Cabins, Lassen Visitor Center Café and Gifts	National Park Service
www.shastalakecamping.com	Camping, Day Use and Boating Facilities at Shasta Lake, Trinity Lake and Lewiston Lake	USDA Forest Service
www.bigbasintentcabins.com	Big Basin Redwoods State Park	California State Parks
www.angelisland.com	Angel Island State Park – Cove Café, Segway/Scooter tours, tram tours, group picnics	California State Parks
www.norcalfishing.com www.ranchatlittlehills.com	Lake Chabot Regional Park – Day use, rentals, fishing Little Hills Ranch – corporate group events and weddings	East Bay Regional Park District
www.camancherecreation.com	Camanche Lake – Full Service Marina, Long and Short term RV space, campgrounds, lodging, retail, group use, café.	East Bay Municipal Utilities District
www.losvaqueros.com	Los Vaqueros Marina – Fishing access and boat rentals	Contra Costa Water District
www.dvmarina.com	Diamond Valley Marina - Fishing access and boat rentals	Metropolitan Water District of Southern California
www.upcgate.com	Automated Fee Collections	Santa Clara County Parks Death Valley National Park
www.lakehemetrecreation.com	Lake Hemet Campground and Marina, Little Lake Community Fishing Access	Lake Hemet Municipal Water District
www.nacimientoresort.com www.lakesanantonioresort.com	Lake Nacimiento and Lake San Antonio Camping, Marina, Retail, Fuel, Rentals, Lodging	Monterey County Parks and Lakes
www.quaggainspections.com	Inspection for Aquatic Invasive Species at various lakes throughout California	Multiple jurisdictions

1.4 Redwoods National Park RV and Resort

The Resort will be a public place, intended to provide a high-quality RV and overnight lodging opportunity to travelers in the greater Orick community in Humboldt County, California. The key destination attraction is Redwoods National and State Parks, an International Heritage Designated Site that is within walking distance as well as easily accessible by bicycle and automobile. The lodging amenities will include quality RV park spaces, sites for tent camping, and more amenity-rich lodging including cottages (park models) and upscale tent cabins (glamping tents). To facilitate access and an enjoyable experience, the Resort will adopt Hours of Operation; Retail Offerings; Programs; and amenities including a deli, gasoline/diesel service station, a convenience store, and a retail presence to sell supplies, souvenirs, and necessities.

1.4.1 Hours of Operation

Commercial Services Center - open to the general public

- High Season (April through October) 6 a.m. to 9 p.m.
- Low Season (November through March) 7 a.m. to 7 p.m.

Resort

- 24 hours per day for security and access for overnighters.

1.4.2 Description of Offerings

Commercial Services Center

Convenience Store

- Food (snacks and basic staples such as canned goods, bread, milk, cheese, and fruit)
- Beer and wine
- A small inventory of fishing and camping gear (fishing poles, bait, tackle, firewood, camp chairs, hats, ponchos, towels, flashlights, and batteries)

Food Service in Deli

- Food service will feature a grab-and-go deli component (pre-made sandwiches, salads, hot and cold snacks)
- Grill with limited service (Breakfast items, hot sandwiches, dinner items)

Gas Station

- Service station will feature six pumps and will offer several grades of unleaded and diesel fuel
- Fuel will be available 24 hours a day

Front Desk

- A service desk will be available for check-in and registration for Resort guests
- Concierge services for visitors to book tours and to get information about Redwood National and State Parks and the general north coast area
- Redwood Adventures staff will be on site daily for scheduled and impromptu interpretive opportunities

Resort

RV Sites

- There will be 82 RV sites: 56 will be pull-through sites and 26 will back-in sites.
- Each site will feature full hookups and a picnic table.

Cottage Unit Cabins/ Park Models

- There will be 12 Cottage Cabin Units.
- The units will be one-bedroom, 400-square-foot, manufactured cabins that will fit into a standard RV space and will be compatible with standard RV infrastructure.
- Each cabin site will feature a picnic table and one vehicle parking space.

Glamping Tents

Glamping has been described as glamorous camping that integrates the best of both worlds: luxury and nature.

- There will be 10 safari-like glamping tents that will allow guests to connect with the great outdoors.
- The glamping tents will feature king-sized beds, lodge-pole furniture, electrical power, and baseboard heating.
- Amenities at each glamping site include a fire ring, picnic table, and one vehicle parking space.

Tent Camping Sites

- There will be 48 dry tent camp sites.
- Each site will feature a fire ring, picnic table, food storage box, and one vehicle parking space. Access to water and bathrooms will be at shared facilities.
- Approximately 12 of these sites will feature pre-pitched tents with full camper services (lantern, utensils, firewood, and sleeping bag) available for rent.

1.4.3 *Resort Guest Use Policies and Rules*

1. **Check In/Check Out**: Check-in time is 11:00 AM. Check out or re-register by 10:00 a.m.
2. **Resort fees**: All fees will be collected at time of check-in. Only funds drawn in U.S. funds are accepted.
3. **Site Assignment**: Generally, once a site has been assigned to you it is yours for the length of your stay.
4. **Sewer requirements**: All sewer connections must seal and lock air tight. California law prohibits the use of formaldehyde products in your RV tanks. **ALL RVs must dump tanks upon arrival.**
5. **Unattended Sites**: Please notify the office if you will be leaving your RV unattended overnight. Unattended RVs may be removed from the site at the owner's expense.
6. **Grass sites**: Do not place mats, carpets, or room additions on the grass.
7. **Ground Stakes - Grass sites**: Please do not put stakes in the ground - this may damage our underground irrigation system.
8. **Watering**: Watering occurs in evenings.
9. **Mowing**: Mowing occurs 2 to 3 times a week.
10. **Resort Courtesy**: Please respect your neighbors - DO NOT walk through their site. Quiet time is between 10:00 p.m. and 8:00 a.m.
11. **Speed Limits**: Speed limit is 5 mph while in the resort.
12. **Fires**: Only wood purchased from the Resort is permitted. Wood fires are permitted within fire rings.
13. **Site Vehicle Limits**: Maximum of one RV and one vehicle per site. Please inform the Resort staff at time of check-in if you need storage for additional vehicles. All vehicles must be parked on designated areas only.
14. **Guests Responsibility**: All guests are responsible for their conduct and that of their visitors, children, and pets, and for any damages resulting from their actions. Unruly or obnoxious behavior will not be tolerated. Violators will be required to vacate the premises, and law enforcement may be contacted.
15. **Children**: Children under 14 must be under direct adult supervision at all times and follow appropriate safety rules while biking, swimming, or participating in any other activities.
16. **Vehicles**: All vehicles driven within the resort must be reasonably quiet and can only be driven on roadways. Only licensed drivers may operate a motorized vehicle within the Resort.
17. **Pets**: We welcome well-behaved pets. Pets must be on a short leash and not left unattended. Pets are not allowed in any Resort buildings, spa, or deck areas. Owners must clean up after pets. Aggressive behavior toward guests or other pets will not be tolerated and guest may be asked to leave the Resort.
18. **Soliciting**: No soliciting of Resort staff or guests is allowed on the property. This behavior is considered disruptive and you will be asked to leave the Resort. This does not include Resort events planned in advance.
19. **Sprinklers**: All sprinkler adjustments are done by Resort staff, please contact the office if adjustments are needed at your site.
20. **Clotheslines**: Temporary clotheslines are allowed at your site to dry bathing suits and towels. Clotheslines may not be attached to trees, fences, or buildings. Guests may be asked to remove a clothesline if deemed inappropriate or intrusive.

21. **Facilities Closures**: Facilities may be temporarily closed for private parties, activities, maintenance, or other health and safety related issues. Please observe all closed signs as posted.
22. **Firearms**: Firearms must be kept in a safe and secure place in accordance with State and Federal laws. No loaded firearms are allowed within the Resort.
23. **Trees/Bushes**: All trimming is done by Resort staff, please contact the office if there is an issue at your site.
24. **Satellite Dishes**: Please place satellite dishes as close to your RV as possible and use weights not stakes to secure them.
25. **Smoking**: California law prohibits smoking in all buildings. The patio and spa areas are non-smoking areas. Please observe no smoking areas and dispose of your cigarettes properly, DO NOT toss them on the ground.
26. **Spa Use**: Hours of use are posted. Children under age of 14 years must be accompanied by adult and restricted hours apply. Swimming suits must be worn at all times.
27. **Duration of Stay:** Guests may stay a maximum of 4 months in any 12 month period.

Redwood National Park Resort reserves the right to refuse service to anyone and may ask them to leave the Resort if necessary. No refunds will be issued if the Resort staff feels that there have been disturbances to the community.

Upon arrival Resort guests will receive a Resort map detailing site locations, a tsunami hazard and evacuation informational brochure and a copy of the above park rules. Guests staying in RV's will also receive a separate handout on the need to immediately dump their septic tank prior to occupying their assigned site.

2.0 STAFF AND TRAINING PLAN

2.1 Overview of Staffing Plan

Operation of the Resort and grounds will be a full-time, year-round endeavor. The duties of on-site staff will vary from day to day, if not from hour to hour, in a small-business model. The total payroll for the Resort is projected to include up to 21 full-time equivalent (FTE) positions. The key to efficient lodging operations includes a plan to reduce staff to core operations groups in the off-season.

Involvement of all staff members will be essential to the success of the Resort environmental goals and performance. Involvement of senior management is essential to the success of any company's sustainability goals, but it is not sufficient on its own. When attempting to enhance environmental performance, the Resort will involve employees at all levels of the organization. The Resort will promote the participation of employees by forming an eco-committee composed of key staff from each department, e.g. Resort, Commercial Center, Food and Beverage, Maintenance and Security, and Administration. The eco-committee will be a valuable component of the Resort business effort to enhance its environmental performance as a source for new ideas and motivation, and will serve as a link between upper management and individual departments.

Since all operations engender some type of environmental impact, the eco-committee will consist of staff from all departments at various levels to ensure comprehensive and diverse input, i.e. involving Resort and Lodging operations staff will be critical to ensure the maximum use of nontoxic cleaning

products; involving Front Desk and Administrative employees will be essential to ensure that procurement policies, office recycling, and paper reduction efforts are carried out; and the participation of upper management will be necessary to ensure that sustainability is a priority throughout the organization. The eco-committee will meet regularly to discuss goals, strategies, and progress. In addition, it will periodically provide updates to upper management and guidance to departmental teams as individual actions and strategies are refined.

Staff Policies

Personal Policy

The Resort will adopt a complete **Personnel Policy** that describes, in full, the provisions and policies that affect its employees and their rights and responsibilities. The policy will be reviewed annually for legal or regulatory compliance and will conform in every way to a progressive business model.

Health and Safety Policies

The health and safety of employees is a broad topic that relates to the nature of the employment agreement, as well as to conditions on the job. Our practices and policies will be commensurate with other recreation and hospitality businesses. Our focus on creating and maintaining a safe work environment will be developed, and we will create an **Injury and Illness Prevention Plan** and a **Hazardous Materials Communication Plan.**

Uniform Policies and Requirements

The Resort will operate in a casual environment intended to make the visitors and customers feel comfortable, as well as served, in an efficient and friendly manner. The Resort will seek vendors that can provide stylish uniforms with wash and wear qualities. Our preference will be for vendors that can certify their products are not made with participation by underage workers. The Resort or Redwood Adventures logo will be embroidered on the left chest.

2.1.1 Employment Projections, Job Descriptions, and Duties

Refer to the table below for ongoing employment projections.

PROJECTED ONGOING EMPLOYMENT: RESORT AND COMMERCIAL / GAS STATION OPERATIONS – EXCLUDING SPA & OUTFITTER NEW FULL-TIME-EQUIVALENT ONSITE JOBS

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Inflation Factor @ 3.0%	1.00	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30
Resort and Lodging Staff										
General Manager	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Front Desk / Reservations	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Valets / General	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Housekeeping / Maintenance / Janitorial	0.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Subtotal:	0.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
Commercial Center / Gas Station Staff										
Cashiers	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Janitorial	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Maintenance	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Subtotal:	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Food and Beverage Staff										
Cooks	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Wait Staff	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Dishwashers	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Subtotal:	0.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Ongoing Security and Common Area Maintenance										
Security	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Landscaping	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Subtotal:	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
TOTAL FTE JOBS:	**0.5**	**21.0**	**21.0**	**21.0**	**21.0**	**21.0**	**21.0**	**21.0**	**21.0**	**21.0**

Source: Peterson Economics.

2.1.2 Job Classifications and General Function Responsibilities

There are seven basic job classifications required to satisfy the needs of the guests and our commitments.

1. General Manager
2. Commercial Center Staff: convenience store, gas station cashier, reservations, and front desk
3. Resort and Lodging Staff: housekeeping, hospitality, custodial personnel, spa operator
4. Common Area Maintenance and Security Staff: facilities and grounds staff, night desk.
5. Food and Beverage (F&B) Staff: food preparation and cleanup
6. Administration and Clerical Support
7. Program and Interpretive Staff – Redwood Adventures

Retail Services, Reservations, and Front Desk

Performance of day and night desk duties during the primary lodging season:

1. Handle of sales and service transactions with visitors to the Convenience Store and Gift Shop.
2. Use of credit card machine and compliance with security procedures associated with use of credit cards.
3. Placing of purchases in bags.
4. Maintaining display inventory and general store displays in a condition of order and accessibility.
5. Observance of all safety rules.

Front desk personnel will field all phone inquiries. Reservations will be recorded on a menu-driven computer program. Reports, confirmations, and arrival-list preparation will be a primary communication function. Confirming the operation and accuracy of the online reservation system will be performed daily.

Housekeeping, Hospitality, and Custodial

- Performance of daily housekeeping to turn over rooms
- General restroom cleaning, stocking, and daily shower-house cleaning
- Performance of laundry and linen services

This position is expected to be knowledgeable about visitor attractions and services in the immediate area, and will provide information to visitors.

Food Prep Staff

The primary F&B at the Resort is the Deli and grab-and-go products in the Convenience Store. The lead of the F&B staff will train and prepare work schedules for any assistant food prep staff to accomplish the following requirements:

- Must be California ServeSafe certified;
- Prepare fresh food orders according to menu and standard presentation design
- Maintain food inventory; order from vendors; review organic and locally grown certifications
- Maintain kitchen sanitation requirements to California ServeSafe standards and at highest levels at all times;

Be an example to the staff in the implementation of the customer service goals of the operation; and make certain that staff is properly trained to cover food preparation needs on off days.

Administration and Clerical

- Provide the General Manager with administrative support including payroll submittals, record keeping, processing requests from corporate office, and assisting gift shop floor staff when needed.

2.1.3 *Staff Organization*

The Resort staffing plan for 21 FTEs will be deployed utilizing the following organization chart.

Staff Organization

2.2 Overview of Service Plan – Goals and Objectives

The essence of the Resort service delivery plan will be to create a team and working environment where the front line employees have the characteristics, personality, training, encouragement, and authority to create positive experiences for our guests.

Components of the Service Plan will include:

- Establish clear standards for customer service and hospitality
- Hire, train, and support the best individuals for our front line positions
- Empower each to exceed the expectations of every visitor
- Reward excellent customer service with tangible benefits and intangible recognition
- Involve all staff in the communication of the sustainability goals of the facility to make them active proponents to the guests
- Measure the delivery of customer service and the impressions of visitors in an ongoing program of surveys and feedback
- Respond quickly to customer concerns with actions intended to recover from mistakes and convert the customer into a fan, if possible
- Treat our employees the way we want them to treat our guests

2.2.1 *Hospitality Standards*

Hospitality standards exemplify the sincere, guest-focused attention designed to exceed guest expectations whenever possible. Our **Employee Manual for Customer Service** will be developed for Resort operations as a primary tool which highlights our approach to the specifics of the guest-staff interaction.

2.3 Overview of RNPR Employee Training Program

2.3.1 *Objectives of the Training Program*

The objective of the ongoing employee training program for employees is to ensure that our products and services to visitors help them enjoy the high-quality recreation, health, inspiration, and the educational benefits of the Park while protecting its cultural, historic, and natural resources.

Our training will cover specific job related skills and procedures and will vest the employee with the responsibility for bringing his or her best attitude and skills to the job. The employee will be coached by his or her supervisor to develop an individual development plan which will include business and personal goals and objectives.

Training Handbook

Each employee will also receive a copy of our **Visitor Services Employee Handbook**. The information in this manual will provide guidance and procedures, allowing employees to understand what is expected of them and what they can expect in return.

Schedule of Training and Syllabus

The annual schedule of the **Staff Training Program** will be set to coincide with the opening of the Resort. A series of 2- to 4-hour workshops are scheduled depending on the number of new hires versus returning staff. Training in the Safety Program, including specifics of the Evacuation Plan for the Resort, will be completed for each employee within 2 weeks of hire.

The following syllabus represents topics covered in the Staff Training Program.

- The Resort, its mission, history, and resources
- Organization and Team Building
- Communication and Problem Solving; Prohibitions in the Workplace: Drug-Free Policy and Anti-Harassment Policy
- Safety Practices and Procedures, Health Department Sanitation
- Hazardous Materials Communication Plan
- Sustainable enterprises by department
- Emergency Action Plan including fire, flood, earthquake, tsunami, terrorist attack, and coordination with the Orick community and local authorities
- Side by side training in retail practices and procedures
- Side by side training in hospitality and housekeeping operations
- Specialized training in safety and security responsibilities (how to use a fire extinguisher, assist in firefighting, evacuation, notification procedures)
- Understanding and communicating the environmental stewardship responsibilities of the company
- Community service opportunities
- Incentive, recognition, and reward programs
- Visitor education and understanding the significant natural and cultural resources of the surrounding Redwoods National and State Parks

Inasmuch as the selection, placement, and duration of employment is predicted to be seasonal in nature, training for sufficient and capable staff available to ensure the provision of uninterrupted, high-quality services to all Resort visitors will be an ongoing process throughout the year. Management places the primary responsibility on the General Manager in the belief that the supervisory relationship is key to employee satisfaction and longevity. The Resort will be assisted by the corporate Director of Safety and Training. The administration will provide consistent support to the recruitment process and will favor retention of staff from year to year as a valuable means of maintaining the quality of services.

2.3.2 *Park Orientation; Natural and Cultural Resources Training; Communicating with the Public*

The cultural and natural history of Redwood National and State Parks is of primary concern to the company. Company employees will participate in a program of directed reading and site familiarity in order to become more aware of the resources and to be able to respond effectively and accurately to questions or inquiries from the visiting public.

All staff members will be provided the initial orientation to the mission of the Redwood National and State Parks. Specific topics include the history of the park, the interpretive goals, and the schedule of Park activities that are routinely provided to the visitors. Special training necessary for special park events or activities will be provided in cooperation with the Park.

An understanding and familiarity with the services and capacities of the Park, its hours of operation, sources of available assistance, Park rules, restrictions on pets and vehicles, trail usage requirements, and the necessity for permits or trail reservations will be emphasized.

2.3.3 *Departmental Training*

Each Department will have specific training in the duties of each position. For example, retail clerks will be provided basic training in register, credit card, and cash handling skills, and will be schooled in the features of the nearby local community hospitality assets and the National and State Parks and general Park history, rules, and mission. Particular skills related to merchandise and vendor management, display designs and themes, and special promotions or in store events will be generally enhanced in staff meetings, seminars, and pre-season planning for supervisors.

2.3.4 *Safety Training*

All staff members will be provided the initial safety training and ongoing "tailgate" training in order to better respond to customer needs as well as personal safety needs. The Employee Training Checklist in the Injury and Illness Prevention Plan (IIPP) will be the basic record for safety training for all employees. It will include:

- Review of health and safety program policy statements
- Review of the Hazardous Materials Communications Plan
- Review of the Blood Borne Pathogens Exposure Control Plan (BBPECP) for housekeeping and first responders only
- General Work Safety Rules

- Site Safety Rules
- Proper use of personal protective equipment
- Procedures for reporting injuries
- Procedures for reporting safety concerns
- Location and use of fire extinguishers and first aid kits
- Review of Emergency Action Plan and evacuation routes including tsunami evacuation
- Specific tools, materials, and handling precautions

2.3.5 Sustainability Features and Mission Training

All staff will be encouraged to read and understand the Resort Environmental Policy Statement. Opportunities for each department to create model practices and best solutions to the sustainability of the operation and exceed the facility design features will be rewarded. All critical public access systems will be the responsibility of each member of the staff. Efforts to fine tune the reliability of our sustainable methods to further reduce and manage impacts, and to leave our guests with a heightened sense of participation, will be expected.

2.4 Overview of Accessibility Plan

The purpose of the plan is to make the facilities at the Resort enjoyable to all visitors. The plan will focus on achieving positive and lasting results to the accessibility of facilities as they are designed. The Resort is committed to ensuring compliance with the Americans with Disabilities Act of 1990, the Rehabilitation Act of 1973, and the California Government Code Sections 4450 et. Seq. and 7250.

3.0 MAINTENANCE PLAN

3.1 Overview of Maintenance Plan

The purpose of the Maintenance Plan is to maintain the facilities at the Resort in condition for optimum sustainable use. The extent of planning and final decisions on the mix, count, make-up, and materials used will dictate the scope and character of the Plan.

3.2 Guest Amenities Plan

The design of structures, placement, furnishings, and other fixtures will be acquired based on a natural color theme conducive to the environment. Use of high contrast colors in fabric or interior wall coverings will be minimized. Earth tones will dominate and natural fibers will be common. The primary goal is to provide comfortable accommodations with both inside and outside seating areas so as to encourage active participation and interaction in a comfortable environment between guests.

Guest amenities will include an array of bicycles for general use. As provided by industry standards, room soaps, lotions, and shampoo will be organic, biodegradable, and dispensed from bulk containers where feasible. We will seek suppliers that hold to the highest quality and sustainability in the manufacture and distribution of these products.

Convenience store, retail goods, and necessities will be selected and displayed for general ease of purchase and to provide for the comfort of guests, travelers, and visitors.

3.3 Housekeeping Maintenance Plan

The maintenance and housekeeping of the Resort facilities, in clean and safe condition, is a core value of our company. Housekeepers come in direct contact with many chemicals, particulate matter, and other potentially hazardous materials. The Resort will adopt a system to strategically reduce the volume and toxicity of chemicals used at the facility. The Resort will track cleaning product consumption and hazardous materials consumption, and select biodegradable and non-toxic alternatives wherever possible.

Byproducts including room waste, general waste of the housekeeping and maintenance departments will be disposed of in lined waste containers before transferring to dumpsters for removal by the County designated hauler. No hazardous materials will enter the waste stream by providing alternative receptacles and suitable signage.

The Resort Housekeeping Conservation Policy will include:

- Turning off heating and fan systems in unoccupied rooms
- Creating reminder cards for guests to turn off lights, electronics, and radios when not in use
- Limiting the amount of hot water used for cleaning
- Regularly scheduled equipment maintenance to increase performance and decrease energy consumption
- Laundry and cleaning chemicals will be biodegradable and non-toxic. The exception would be the controlled use of bleach as a disinfectant and any required chemicals for approved pest management and sanitation
- Purchasing laundry, cleaning, pesticides and other chemicals in bulk packaging so as to minimize the amount of packaging needing disposal
- Changing bed linens every three days and exchanging towels left on floor or in tub
- Donating old linens and towels to charities or other facilities (homeless shelter, humane societies, veterinarian offices, school, car washes, etc.)

Operation and guest laundry efficiency will be an important component to the Resort Housekeeping and Maintenance Plan. The Resort will establish linen service with a reliable off-site provider that complies with industry standards for water and energy conservation. The Resort will maintain a small laundry facility for guest use and a secondary facility for cleaning house and kitchen linens.

The Resort will also create a linen and towel reduction program to save housekeeping labor-time, reduce detergent use, conserve hot water, and reduce wear and tear of washers, dryers, and linens.

3.3.1 *Housekeeping Standards Including Daily, Weekly, and Seasonal Routines*

The maintenance and housekeeping functions will be shared by the entire staff of the Resort. Departmental standards and practices will be developed to satisfy guest expectations regarding care, repair, and cleanliness.

3.3.2 *Preventative Maintenance Program (PMP)*

The Preventative Maintenance Program for the Resort will be an asset tracking list maintained by the Facilities Foreman. All major repairs, upgrades, and replacements to the equipment and physical plant will be recorded. This progressive activity will allow the Resort to keep track of condition and level of repair, as well as the responsibilities and commitments made by vendor warranties, and induces a level of accountability that is common in the hospitality industry.

3.3.3 *Maintenance Staff Skills and Schedules*

The maintenance activities will be under the direction of the Maintenance Foreman. This key person will train the housekeeping and janitorial crew required for all of the housekeeping needs of the operation. The skills will primarily include an ability to handle simple repair chores to the standards that will be expected. Staff will be given instruction, the proper tools, and personal protective equipment to perform the tasks in a timely and safe manner.

Our staffing plan and schedule will include adequate time and coverage of all aspects of the maintenance and housekeeping requirements. The responsibility for supplementing the staffing levels when necessary will be assigned to the General Manager.

3.3.4 *Use of Sub-Contractors*

Specialized repair and maintenance including large painting jobs will be carried out by licensed contractors or by individuals specifically hired with the required skills and training. Where the code specifically calls for a certified sub-contractor, such as an electrical repair or chimney cleaning, the Resort management will defer to that requirement.

3.4 Spa Maintenance Plan

3.4.1 *Spa Operator*

The spa operator is responsible for complying with all regulations relating to public pool and spa sanitation, operation and maintenance, and health and safety of spa users. The spa operator will be certified to assure a sanitary, healthy, and safe environment for the public when using the spas. Required training includes:

- The basis for the code requirements and why a violation is a public health hazard
- How to perform an inspection of the pool and spa area
- How to evaluate swimming spa operation and maintenance
- How the circulation system and its components work
- How to evaluate a facility for Pool & Spa Safety Act compliance
- The uniqueness in spa inspections
- Information on recreational water illnesses
- Supervision and operator records
- Basic spa design standards and their impact on public health

3.4.2 *Spa Maintenance Policy*

1. The spa operator shall maintain a test kit for measuring the disinfectant residual, pH, and cyanuric acid, if used, at the spa. This test kit shall be available for use by the spa operator and the enforcing agent at all times the public pool is in use.
2. The spa operator will test the disinfectant residual and pH of the spa water a minimum of once per day. The spa operator will test combined chlorine at a frequency required to maintain maximum combined chlorine levels below 0.4 ppm. The Spa will be disinfected continuously by a chemical which imparts a measurable disinfectant.
3. The spa operator will also test spa water temperature a minimum of once per day. The spa operator will perform these daily tests using a properly calibrated thermometer and automatic chemical monitoring in accordance with the manufacturer's equipment specifications for calibration and directions for proper use.
4. The spa operator will maintain a written daily record of all test results, equipment readings, and calibration and corrective action taken at the spa site. The spa operator will maintain a written record of routine maintenance and repairs to the public pool at the public pool site.
5. The spa operator will maintain data and records collected for at least two years for inspection by the enforcing agent and shall submit all data and records to the enforcing agent upon the agent's request.
6. The spa operator shall maintain all parts of the public spa site including but not limited to the public pools, water treatment systems appurtenances, ancillary facilities, signs, showers, toilets, dressing facilities, drinking fountains, diaper changing stations, floors, walls, partitions, doors, and lockers.

3.4.3 *Safety and First Aid Equipment*

The spa operator shall ensure the following safety and first aid equipment be provided and maintained readily visible and available for use at the spa at all times:

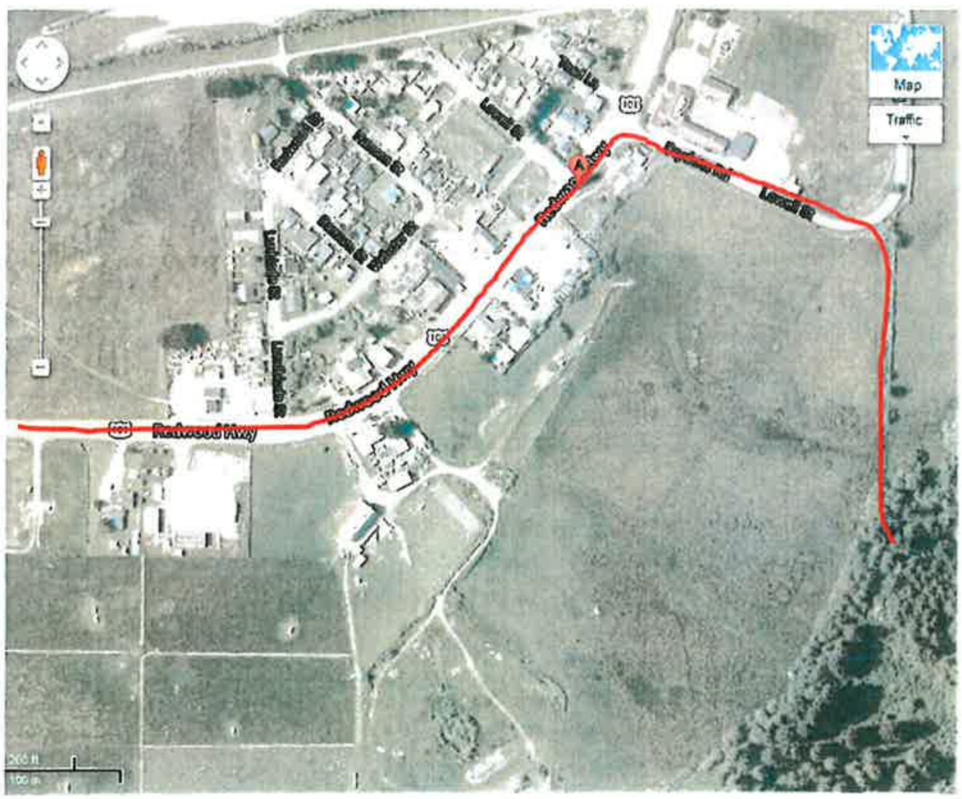
- A 17-inch minimum exterior diameter life ring with an attached throw rope of 3/16-inch minimum diameter. The throw rope shall be of sufficient length to span the maximum width of the spa and shall be stored in such a way as to prevent kinking or fouling. When rescue can be affected from the perimeter of a spa, the enforcing agent may exempt the spa from the requirements of this paragraph.
- A 12-foot minimum fixed length rescue pole with a permanently attached body hook.
- A Red Cross 10-Person Industrial First Aid Kit or the equivalent.
- An operating telephone.

3.4.4 *Emergency Preparedness*

The Resort recognizes its role in assisting the local authorities in emergency preparedness. We will have on-site security personnel to facilitate the appropriate response to emergencies, including medical issues, catastrophic wind and rain storms, wild-land and structural fire threats, floods, tsunamis, earthquakes, and non-Resort emergencies such as a missing child. A NOAA Weather Radio will be kept on site so that staff will receive alerts and warnings regarding potential hazardous conditions and can instruct guests accordingly.

The primary hazard threat is earthquake and subsequent tsunami inundation. Resort guests will come from all over the nation and world; they may not have any awareness of the local hazard conditions and the potential tsunami threat. The Resort will implement recommendations in the Redwood National and State Parks Tsunami Contingency Plan. Specifically all Resort guests will be given informational literature on what to do in the event of a tsunami. Resort staff will be trained in tsunami preparedness including evacuation procedures for both distant source and near source tsunami threats. In the event of a Cascadia event earthquake, staff will direct guests to the designated evacuation route - the Orick School Route identified in the Redwood National and State Parks Tsunami Contingency Plan.

Orick School Evacuation Route



4.0 EDUCATION AND INTERPRETIVE PLAN

4.1 Overview of Interpretive Plan

The interpretive plan for the Resort is intended to encourage the active involvement of all persons occupying the site, to offer the guests the opportunity to support the objectives of the company and the surrounding National and State Parks, and to provide our agency neighbors with opportunities to interact with our guests. To accomplish this, the Resort intends to:

- Participate and showcase events that celebrate features of the North Coast in collaboration with the local Chamber and the regional destination marketing organization (DMO)
- Participate at sponsorship levels with local service groups and events
- Expand special event capacity with group promotions and family gatherings such as weddings and reunions
- Create activities that allow artistic and creative use of materials common in the surrounding biota or made from materials gleaned from the waste stream
- Invite local artisans to teach and display their works including burl carvers, quilters, salmon smoking, and preserving

4.2 Business Interpretive Theme

The business venture of the Resort will only be possible with the preservation and continuation of the surrounding Park values and resources. Without these elements, the business opportunity has no chance of success, due to its remote location. The scenic, historic, cultural, and natural resources create the interest in visiting Redwood National and State Parks. The recreational pursuits, from hiking and camping to nature study, are all dependent upon this primary asset. The Resort's proposed interpretive theme is to challenge the visitors to the Park to embrace the stewardship role and/or ethic in their own lives, and while visiting the park.

The Resort's proposed interpretive theme is to challenge the visitors to the Park to embrace the stewardship role and/or ethic in their own lives, and while visiting the park.

The establishment of the "stewardship ethic" predates the modern "environmental ethic" that became the rally point for so many important changes in environmental law and regulation in the 1970s and 80s. Earlier in that century, the outdoorsman spirit of President Theodore Roosevelt, the early creator of so many national parks and reserves, provided great inspiration to other levels of government. There was a conservation spirit that said, "Come visit these great outdoor places that have been set aside for future generations." The creation of the National Park Service in 1916, and the creation of the State Department of Parks and Recreation in 1927, was recognition that management and "stewardship" were national priorities.

Challenging today's visitors can be a task since human connectedness to the land is currently somewhat abbreviated, if non-existent. On the plus side, visitors are seeking information and are quickly coming to appreciate the Park atmosphere and values. The Resort's Redwood Adventures component of the business seeks to convey the atmosphere and values in a fashion that is readily consumed by visitors who may be reluctant to venture out by themselves.

Lastly, our interpretive theme must be an expression of the people that work in the Park and in the Resort operation. Training will do little without the consistency of message. The Resort believes that unifying the interpretive theme of the business with the interpretive work of Park staff is essential.

4.3 The Redwood Adventures Program Offering

The goal of Redwood Adventures is to provide an experience that exceeds expectations and that will create memories for a life time. Our friendly, professional guides enjoy sharing their vast knowledge of the local history, flora, and fauna, and they strive to ensure that every guest's needs are met.

Redwood Adventures will offer a wide array of eco-adventures to help visitors have fun and learn about the ecology, culture, history, and scenic beauty found in the Redwood National and State Parks.

These eco-adventures include:

- Guided tours of old growth redwood forests, coastal habitats, and scenic places
- Mountain bike tours and rentals in Redwood National and State Parks
- Kayak tours and rentals in the coastal lagoons and Pacific Ocean
- Horseback rides in Redwood National Park
- Fishing excursions in rivers, coastal lagoons, and Pacific Ocean deep-sea fishing
- Salmon spawning observation tours of the migration and spawning of wild salmon
- Photography classes at a variety of locations in Redwood National Park
- Birding tours to various popular birding environments on the North Coast and Redwood National and State Parks
- Culinary tasting tours with local chefs featuring local fish, crab, cheese, chocolate, dairy, breweries, and local grass-fed beef
- Shuttle service to park locations that are unreachable for visitors with RVs.

Redwood Adventures program offerings will be open to all visitors to Redwood National and State Parks, but we expect 80 percent of the clients will be guests of the Resort. We anticipate approximately five on-site parking spaces will be available for Redwood Adventures clients who are not guests at the Resort.

Redwood Adventures' equipment for rent includes mountain bikes and kayaks, which will be stored in the maintenance barn.

4.4 Event Management

When appropriate, particularly around holiday weekends and seasonal periods, the Resort will sponsor or provide programs of an event nature. The following is a sample plan for such events.

4.4.1 Proposed Resort Special Events Plan

Specific Uses

Camping, weddings and celebrations, nature/educational walks on site and to the adjacent Redwood National and State Parks, family reunions, school/youth field trips, and small musical productions.

Hours of Operation

Start Time: 12:00pm (Noon)
End Time: 9:00 pm

Maximum Number of Attendees

100 people not staying on-site

Parking

Parking will be available on-site

Sanitary Provisions

On-site bathroom and hand washing facilities

Drinking Water Provisions

Drinking water on-site will be provided by the event coordinator

Waste Management Provisions

Waste will be collected in bear-proof and corvid-proof containers and removed from the site by event coordinators/attendees after the close of each event.

Additional Facilities

For individual events, it is anticipated that a range of temporary structures will be brought to the site, including pop-up tents, dining tables and chairs, and outdoor cooking appliances

Frequency of Events

Proposed total of 12 events

Types of Events

- Kick-Off Season Event
- National Trails Day
- Music Festival
- Food Festival
- Lifestyle Festival
- Johnny Redwood Memorial Festival
- Octoberfest

5.0 CONSERVATION AND RECYCLING PLAN

5.1 Solid Waste Management: Reduce, Reuse, Recycle

The first step in Solid Waste Management and conservation is to measure how much you use and to then use less. It is easy to say and easier to do with some minor modifications to the way we live our lives. Hospitality operations are consumptive by nature and since the Resort's products and services are intended to be used, the trick is to eliminate the waste. The Resort will make it a priority to lower its energy consumption by controlling lights and heating in its operations. The Resort will encourage its staff to plan their transportation needs efficiently.

Reuse has the added incentive of taking maximum value out of something you already own, e.g. the Resort may provide a reusable cloth carrier rather than a disposable paper grocery bag. Customers will be asked to return the bag for reuse, but if not, the bag will likely be used in a positive way when they get it home. Machine washable, the carriers should reduce the staggering number of plastic or paper bags consumed by the typical American shopper.

Recycling has become the norm for most visitors to the Resort. It is common for persons to seek to return bottles and cans. We will install recycling containers in all rooms and on the grounds for use by the public and we will maintain the waste hauling responsibility. Targets to reduce solid waste to the landfill will be established each season.

Managing and containing waste behind hard barrier covers is important as a wildlife management practice. The nature of certain predatory birds including corvids (jays, ravens, and crows) is to scavenge from human generated waste.

The waste stream for facility operations will consist of a volume from a number of sources:

- Day visitors to the facility will contribute their personal waste including food and beverage containers, food scraps, refuse from their vehicles, waste wrappings from items purchased in the store or otherwise, etc.
- The office, Deli, and Convenience Store and Gasoline station will generate waste in the form of packaging received from vendors of resale products, food preparation waste, office product waste, and automotive supplies.
- Waste produced by guests in the lodging and camping facilities will include partially burned ash and wood from stoves and campfire grills; food scraps from self-prepared cooking and clean-up; destroyed or worn-out items of camping supply or clothing; empty propane cartridges; depleted batteries; food packaging materials including cardboard, bags, bottles, and cans; and various other items of personal waste.
- Custodial operations and maintenance will generate a minimum amount of personal waste from the in-residence staff and paper consumed in the restrooms and showers.

5.2 Methods of Waste Management

5.2.1 Segregation and Compacting

Public-generated waste placed in recycling containers will be segregated and sorted at the collection points throughout the Resort. Recycling containers for holding (cans and glass) and composting (food scraps and clippings) will be maintained away from public access. Waste removal from the Resort by Humboldt Sanitation Company is the responsibility of the Maintenance and Grounds Department, and dumpsters will be provided. Department maintenance staff will walk the grounds daily to monitor the facilities and collect trash. Trash compacting by mechanical means is planned. Recyclable waste remaining in the Resort operation including cans, glass, cardboard, repair-generated waste, light fixtures, bulbs, electronic parts, and other recyclables will be compacted for transport to the appropriate disposal transfer station. Records of generated volumes will be maintained for progress reporting.

5.2.2 *Special Solid Waste Recycling*

The operation will also look for waste propane canisters, tattered ponchos, plastic rain flies, Styrofoam ice chests, and other used camping equipment. The Resort will establish a local recycling hauler to remove the cardboard generated by the operation. When the Resort is unable to negotiate a return container policy with the vendor, we will store those items that are not a health risk for transport.

Used batteries of all types and sizes usually contain one or more materials that are regulated as hazardous wastes, including heavy metals and acid electrolyte solutions. The Resort will provide appropriate containers for the recycling of all consumer batteries and will install collection points throughout the Resort. Lodging guests and store patrons will be encouraged to make use of the program.

5.3 Hazardous Materials Handling and Disposal

The identification of hazardous materials generated by Resort operations includes the following:

- Copier and fax toner in whole cartridges
- Printer cartridges
- Fluorescent fixtures and ballasts
- Canvass waterproofing material for treatment of tent tops
- Gasoline, motor oil
- Deep cell battery electrolyte in grounds carts
- Oil based enamel paints in restrooms
- Latex based paints throughout
- Mineral Spirits and linseed oil mixture for treatment of floors, picnic tables
- Spa chemicals

The Resort will manage the hazardous waste it generates as "universal waste" under the defined requirements of the EPA. The handling and disposal of all hazardous materials will conform to the regulations managing these materials and will follow best management practices including transport under manifest by certified waste haulers and disposal at certified sites when required.

5.4 Water and Energy Conservation

5.4.1 *Water Conservation*

The Resort realizes that water is one of our most important natural resources. Even in a location with an annual rainfall of over 80 inches, water is a resource that cannot be wasted. The Resort will develop a holistic water conservation policy in every department to maximize water efficiency and minimize loss, including the following:

- Maintain all plumbing fixtures in a state of repair and fix leaks as they occur
- Use flow restrictor showerheads in the shower house area and in all guest rooms, shower timers will be posted
- Keep storm drains and culverts free running and clear
- Keep a spill cleanup cache available on site in case a camper has a vehicle problem that causes oil or other fluids to leak in the parking area
- Sandbag or otherwise divert storm runoff away from all structures

- Manage landscape and all planted areas, provide low flow emitters and watering timers to control growth, and add mulch to retain water
- Use of water for grounds clean-up will be kept to a minimum. Mechanical (electric) blowers, sweeping, and raking will be the alternative. Pressure washing will be an acceptable practice as required by cyclic maintenance schedules.
- Company staff will be on-call during storm events to help keep guests aware of potential danger from runoff, downfall from trees, and to provide general traffic route instructions should evacuation become needed

5.4.2 Energy Conservation

Lights and heat used will be maintained at the best level commensurate with public presence and safety, security, and visitor comfort. Lights in overnight facilities such as restrooms, when provided, will include both motion and light sensitive timers to allow for conservation, as well as provide for visitor safety, security, and comfort. Energy efficient procurement practices have been noted and new installations will include these considerations.

Energy efficiency also comes from attention to the preventative maintenance of key equipment and fixtures including HVAC, refrigeration, freezers, icemakers, and similar equipment.

Heated Spaces Include All Indoor Facilities

The use of electric or LPG space heating is considered the most viable solution since maintaining both sanitation and comfort in a redwood forest requires energy. Prior to arrival, guests will be coached through confirmation materials to plan for a damp coastal experience and bring warm jackets and rain gear.

Noise Reduction and Light Pollution Reduction

Recognizing the importance of minimizing noise and night light influences on the Park experience, Resort operations will place attention on the source generation under its control. Portable noise sources such as generators, blowers, and electric saws will be limited in use and duration to only the most necessary daylight periods. Camper use of portable generators will be disallowed and RV generators may not be operated during the posted quiet hours. All vehicles will be maintained with their mufflers in proper working order. Outside condensers and fans will be located behind sound barriers or away from public sight lines. The Resort staff will ask bus operators that are parked for any duration while passengers visit the resort, to turn off their engines rather than idle.

Light sources at night will be limited to the prudent safety and security needs of the facility. Lights that cast downward rather than flood an area will be favored. Campground visitors will be encouraged to turn down camp lanterns, use flashlights that are less obtrusive, and in general be considerate nighttime camp neighbors.

Light sources that are efficient for area lighting include low pressure sodium, high pressure sodium, and metal halide. Mercury vapor, incandescent, and quartz halogen (except with motion detector or timed use) lights will be avoided or replaced.

Lights for the illumination of the exterior of a building shall be so called "full cut-off fixtures." These lights are shielded such that the bulb is not visible from below the shield on a horizontal plane, nor does the shield allow up-lighting that extends beyond the roofline or overhang of the building. Exceptions to the full cut-off style may be made when low wattage luminaries are needed for definition of walkway or decorative exposures so long as the lights have opaque tops and are on timed circuits or otherwise turned off when not in use.

5.5 Landscape Conservation Planning and Management

The Resort landscape design hinges on one basic concept: the right plant in the right place. Careful planning and site evaluation are the first steps in applying this concept. Landscape planning will include selecting and grouping plants according to their needs for sunlight and water. Many of these will likely be native plants and other "climate appropriate" landscape materials which can reduce irrigation water use by more than 50 percent. An additional benefit to using native plants is that they tend to attract wildlife, which is an element of interest to visitors to the site.

The Resort will address the large amounts of water consumed through watering landscapes. Over-watering not only reduces our water supply but can result in excess water runoff carrying fertilizers and pollutants into our waterways. Efficient watering or irrigation practices are essential to conserve water. Planting the right plant for each location decreases the amount of water needed.

The Resort will also utilize an extensive composting system. Grass clippings, leaves, and yard trimmings are recycled rather than thrown away. By recycling yard debris, we gain free mulch and return valuable nutrients to the soil. Mulching flower beds, shrub beds, and trees will keep moisture in the soil, will moderate soil temperature, and will reduce erosion and weeds.

In summary, the Resort will:

- Use trickle, drip, or soaker hose irrigation systems where possible
- Reduce runoff by directing downspouts onto lawns, landscaped beds, and bio-swales
- Use rain water catchment systems to collect rain water for irrigation
- Use pervious materials such as gravel or mulch for internal roads and paths
- Allow only biodegradable, non-toxic applications to planted areas
- Use native plants and other "climate appropriate" landscape materials
- Remove invasive exotic plants and replace with appropriate natives or other non-invasive exotics
- Mulch flower beds, shrub beds, and trees

6.0 CONCLUSIONS

The vision of the Redwood National Park Resort is to develop an exceptional resort featuring a convenience store, food service, a gas station, RV facilities, cottage cabins, and glamping and tent camping for the enjoyment, health, inspiration, and education of visitors to the Resort and the surrounding Redwood National and State Parks. Our mission will be enhanced by our extraordinary level of service, commitment to the betterment of our environment and communities, and open acknowledgment of the value our employees bring to this company.

LACO

July 30, 2014

6782.06

Humboldt County Planning and Building Department
3015 H Street
Eureka, California 95501

Attention: Michael Wheeler, Senior Planner

Subject: Redwood Parks Lodge Company, Redwood National Park Resort
Responses to Referral Agency Comments
Appl. No.: 8926 - APN: 520-142-009
Case Nos.: CDP-14-016, CUP-14-008, SP-14-22

Dear Michael:

Thank you for keeping LACO informed regarding the status of referral agency responses received between April 24, and June 24, 2014 on the Redwood National Park Resort project. This letter provides our responses to referral agency comments as received. Please note agency comments have been summarized from original letters.

California Coastal Commission, May 19, 2014

Comment

To demonstrate project consistency with the water quality protections of the LCP the County should require that the applicant complete a polluted runoff and hydrologic site characterization. LID and BMPs should be implemented.

Response

As part of the project application, LACO submitted a preliminary drainage analysis technical memorandum prepared by a registered professional engineer. The memorandum includes a discussion of anticipated stormwater infiltration measures, runoff flow calculations, storage volume calculations, and stormwater retention measures. The site has been designed to incorporate LID strategies. All stormwater will be retained on site in rain gardens and swales. All landscaping, with the exception of the lawn areas which are at least 320 feet from coastal wetlands, will be native vegetation with no permanent irrigation.

As part of the construction phase of the project a grading and erosion control plan and storm water pollution prevention plan (SWPPP) will be prepared; the plan will elaborate on appropriate BMPs to control water quality impacts during construction.

By implementing BMPs and other recommendations of the drainage analysis; implementing future drainage, grading, and erosion plans; and incorporating LID strategies throughout the site, the project will be consistent with the water quality protections of the LCP.

Comment

The site plan should be revised to incorporate a 100-foot buffer from the mitigated wetlands.

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311 S. Main Street, Ukiah, California 95482 707 462-0222 Fax 707 462-0223
3450 Regional Parkway, Suite B2, Santa Rosa, California 95403 707 525-1222
Toll Free 800 515-5054 www.lacoassociates.com

Response

Approximately 1.39 acres of inland wetlands will be filled as a result of the project. The wetlands to be filled are dominated by non-native plants and have little to no natural resource value *(Redwood National Park Resort Wetland Buffer Area Criteria Evaluation*, LACO April 4, 2014). The wetland found at the base of the levee will not be filled and is mostly located on the coastal portion of the property with a small portion located on the inland side. The 1.39 acres of inland wetland fill will be mitigated with wetland creation at a 2:1 ratio. A minimum of 2.79 acres of wetlands will be created adjacent to the natural wetland at the base of the levee (see attached revised site plan dated July 30, 2014).

Typically a minimum buffer of 100 feet is required from a wetland. However the North Coast Area Plan Section 3.41E5.b. allows for less than this distance when the applicant can demonstrate to the satisfaction of the County and the Department of Fish and Wildlife that there will be no significant adverse impacts to the wetland habitat and will be compatible with the continuance of such habitats.

The development at the site will maintain at least a 100 foot buffer from the natural wetland at the base of the levee. From the created wetland area the variable width buffer will be between 20 feet to 120 feet with an average buffer of approximately 58 feet (see attached revised site plan dated July 30, 2014). The proposed buffer will be adequate to protect the natural and created wetland.

The following demonstrate that the buffer will be adequate to protect both the natural and created wetland and that the project will have no significant adverse impacts to the wetland habitat:

- A spit rail fence will be constructed at the edge of the variable width buffer areas providing a physical and visual barrier between the wetland habitat areas (and buffer) and the recreational uses of the site.
- Low impact development strategies will be implemented throughout the par. Storm water will be filtered through rain gardens. Uncontrolled runoff will not infiltrate the wetlands.
- The biologist identified small remnant riparian habitat (Biological Survey Results, December 2014) occurring at the furthest downstream edge off the property as the most biologically significant. This area will not be altered and there is a greater than 100 foot setback from the natural wetland at this location.
- No special status plant and animal species were identified on the site.
- The created wetland area will be monitored for 5 years and must achieve at least an 80% survival rate of plantings.

The proposed mitigation plan will protect the wetland habitat at the base of the levee, maximizes the area of created wetland and provides a sufficient buffer to protect wetland habitat.

Comment

To protect adjacent ESHA, County Findings must demonstrate that any post-construction discharge of stormwater or dry weather flows shall protect adjacent wetlands and riparian habitats from any significant disruption of habitat values. Landscaping should be limited to regionally appropriate native plants.

Response

In addition to the preliminary drainage analysis (LACO, April 2014), LACO also submitted a wetland buffer area criteria evaluation, prepared by LACO's senior biologist (LACO, April 2014). Together these documents demonstrate that on-site stormwater retention is feasible and that development setbacks are sufficient to protect the wetland resources from significant disruption of habitat values. There will be no concentrated flows of stormwater or dry weather discharges.

The project includes landscaping with regionally appropriate native plants; these areas will have temporary irrigation during establishment. No permanent irrigation of these areas is proposed. The lawn area, located more than 240 feet from the existing and created wetlands, is the only area that will require long-term irrigation. The lawn area will serve as an outdoor recreation field.

Comment
Ensure protection of lower cost visitor serving and recreational facilities and ensure measures are in place to prevent the facility from supporting residential uses.

Response
RV parks provide accommodations at a lower cost than other accommodations, such as bed and breakfast establishments, motels and hotels. For example, PKF Consulting, an international consulting firm with expertise in travel and tourism, found that typical RV family vacations are on average 27 to 61 percent less expensive than other types of vacations studied (http://www.pkfc.com). Additionally, Redwood National Park Resort will provide a range of accommodations: park models, tent cottages, RV sites, and tent camping sites. The most affordable will be the tent camping sites and these are the predominate accommodation on the Coastal portion of the property.

Other than the manager's residence, the park is not intended for permanent residential use. This is memorialized in the plan of operations which limits length of stay to no more than 4 months in any 12 month period.

Comment
Address conversion of agricultural lands.

Response
The zoning at the site does not allow for agricultural uses. The site history provided by the applicant indicates that the property has intermittently been used to pasture cows, horses and produce hay. However over the last 15 years the main income from the property comes from renting the existing residence. There is no economically viable agricultural operation at the site. There will be no conversion of agricultural lands.

Caltrans, May 9, 2014
Comment
Request clarification of lane configuration

Response
The lane configuration for traffic leaving the site and traveling southbound will be one through lane, one acceleration/ merging lane and an area of improved shoulder. Clarification was sent to Caltrans staff via email on June 12, 2014. Caltrans did not have any further questions.

County Department of Public Works, May 14, 2014
Comment
Applicant must coordinate with Caltrans regarding overflow from bioswale.

Response
LACO has requested more information from Caltrans. In previous meetings and correspondence Caltrans has not indicated any concern over the roadside bioswale. We anticipate that any concerns will be addressed through the encroachment permit.

Comment
An encroachment permit will be required for trail work within the levee right-of-way.

Response
It is anticipated that this will be a condition of approval for the project.

Comment
Coordinate with Environmental Services Division to ensure buildings comply with the Flood Damage Prevention ordinance.

Response
It is anticipated that this will be a condition of approval for the project.

CDFW, May 16, 2014
Comment
Implement a corvid management plan.

Response
It is anticipated that this will be a condition of approval for the project and become part of the overall wildlife management plan for the site.

CalFire, June 10, 2014
Comment
Will construction meet 7A construction standards?

Response
Chapter 7A is Wildland Urban Interface construction standards; the buildings within the project will meet these standards.

Comment
Will access accommodate fire apparatus, especially during special events?

Response
Site access and all road surfaces within the resort will be suitable for fire apparatus. The roads will be a combination of paved and gravel. Internal road widths and turning radii are designed to accommodate large recreational vehicles towing another vehicle; these specifications will also support fire apparatus travel and turning movements. Signage within the park will clearly designate one way and two way travel lanes. The project site is nearly flat and the road grades will pose no issues for fire access. There is primary access through the commercial center and secondary access near the manager's residence. During events parking will be allowed within designated parking areas only. At no point will vehicles be allowed to block travel ways.

Comment
Will the facility have fire, traffic, and medical plans?

Response
Fire, traffic, and medical plans will be developed for the resort. It is anticipated that this will be a condition of approval for the project.

Comment
Has the Orick Fire Department been consulted?

Response
Orick CSD, responsible for providing fire protection and medical aid services through the Orick Volunteer Fire Department, has been referred on the project. It is our understanding that they have yet to reply to the referral request.

The revised site plan (attached, dated July 30, 2014) shows changes to the mitigation area. Other changes include increasing the number of parking spaces near the park models and moving the park models and tent sites closer to the internal circulation routes and parking areas. The dump station area has been revised to allow for two recreational vehicles to dump their holding tanks at one time. The dog park has been moved near the dump station and recreation field. Although no new sites have been created, two sites were relocated from the isle along the eastern property line to the isle along the south west property line.

Please contact me if you have any questions regarding this information. Once you have a chance to review this information please inform me of the project schedule and estimated hearing date. Thank you for your assistance.

Sincerely,
LACO Associates

Elizabeth Burks, AICP
Senior Planner

EAB:gg

CC: Mike Nelson, Donna Hufford, John Koeberer
P:\6700\6782 Redwood Parks Lodge Company\6782.06 RPLC Orick Town Site Entitlements\04 Correspondence\Regulatory\response to comments 20140730.docx

UNIT SUMMARY

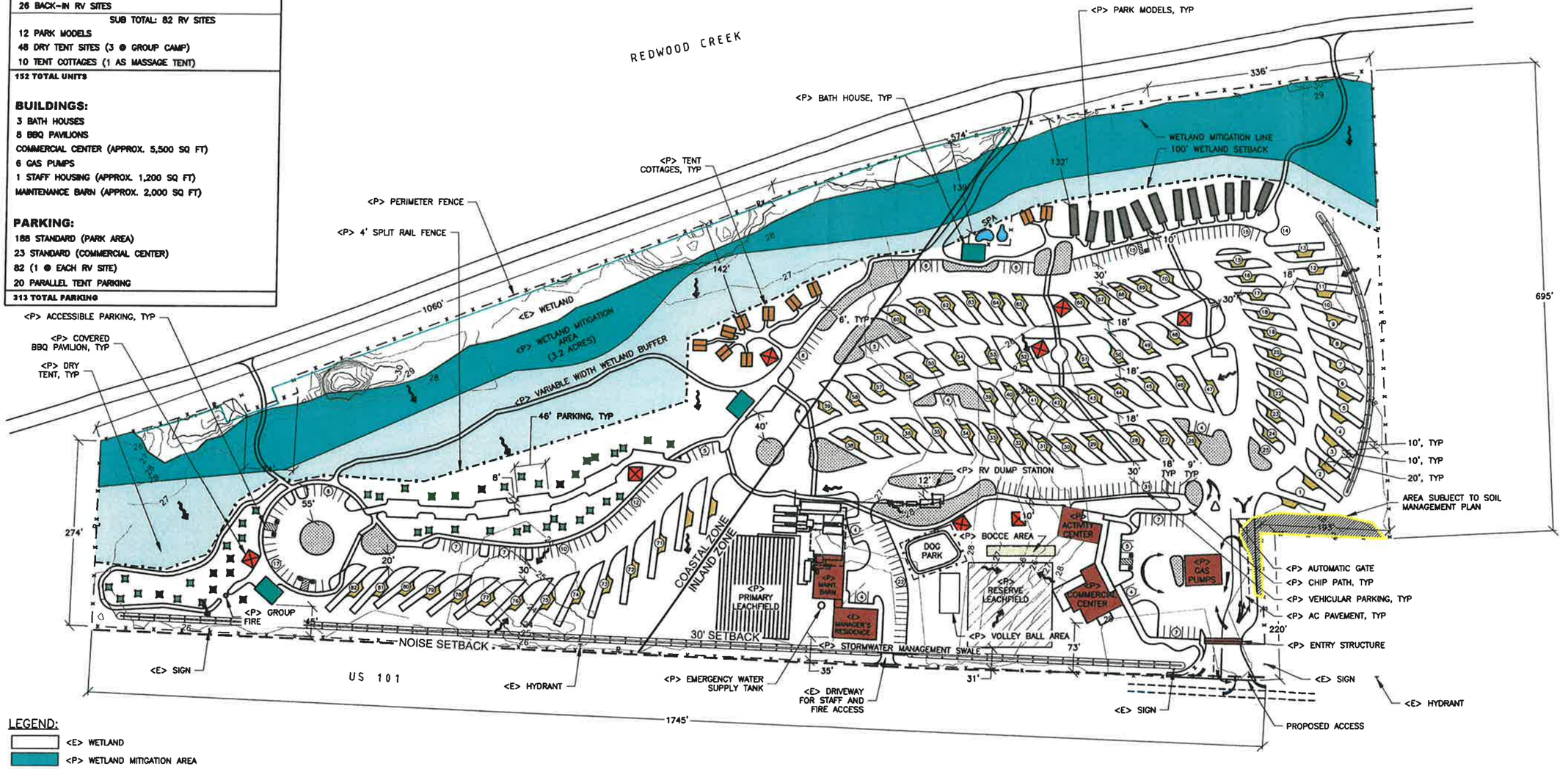
56 FULL SIZE – PULL-THROUGH RV SITES
26 BACK-IN RV SITES
SUB TOTAL: 82 RV SITES
12 PARK MODELS
48 DRY TENT SITES (3 @ GROUP CAMP)
10 TENT COTTAGES (1 AS MASSAGE TENT)
152 TOTAL UNITS

BUILDINGS:

3 BATH HOUSES
8 BBQ PAVILIONS
COMMERCIAL CENTER (APPROX. 5,500 SQ FT)
6 GAS PUMPS
1 STAFF HOUSING (APPROX. 1,200 SQ FT)
MAINTENANCE BARN (APPROX. 2,000 SQ FT)

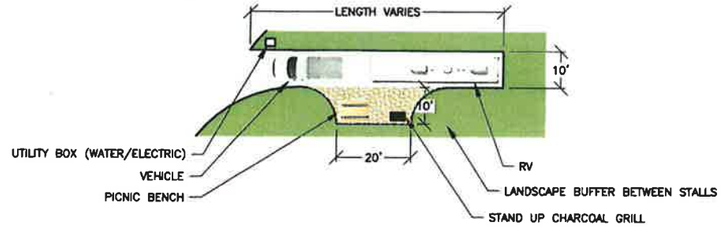
PARKING:

188 STANDARD (PARK AREA)
23 STANDARD (COMMERCIAL CENTER)
82 (1 @ EACH RV SITE)
20 PARALLEL TENT PARKING
313 TOTAL PARKING



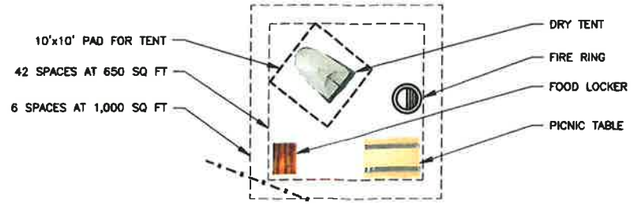
LEGEND:

- <E> WETLAND
- <P> WETLAND MITIGATION AREA
- <P> VARIABLE WIDTH WETLAND BUFFER



TYPICAL RV STALL DETAIL
SCALE: 1"=20'

0 40' 80'
SCALE: 1"=80'



TYPICAL DRY TENT SITE DETAIL
SCALE: 1"=10'

DRAFT

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NO.	HISTORY / REVISION	BY	CHK.	DATE

REDWOOD NATIONAL PARK RESORT
SITE PLAN
APN: 520-142-009

REDWOOD PARKS LODGE COMPANY
ORICK TOWNSITE

DRAWN	JDB
CHECK	MDN
APPROVED	MDN
DATE	7/30/14
JOB NUMBER	6782.06
SHEET	1 OF 1

Jul 30,2014-4:32pm
I:\Cadfiles\6700\6782.06 ORICK TOWN SITE\DWGS\ 6782.06 CITY SITE.dwg

Wheeler, Michael

From: Elizabeth Burks <burkse@lacoassociates.com>
Sent: Thursday, June 12, 2014 9:51 AM
To: Tatiana Ahlstrand (tatiana.ahlstrand@dot.ca.gov)
Cc: Wheeler, Michael
Subject: Redwood National Park Resort
Attachments: Comment Letter 05-09-14.pdf; existing and proposed.pdf

Hi Tatiana,
I am writing to follow up on the referral comment we received on the Redwood National Park Resort project in Orick. In terms of the lane configuration there will be one through lane, one acceleration/ merging lane and improved shoulder.

I think the location of the merging arrow on the diagram may have created some confusion. There arrow should have come off the acceleration/ merging lane, but was incorrectly shown at the end of the shoulder. I attached a redlined version here for clarification.

Please let me know if you need further information.

Thank You,
Beth

LACO
Elizabeth Burks, AICP
Senior Planner
LACO Associates
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Advancing the quality of life for generations to come
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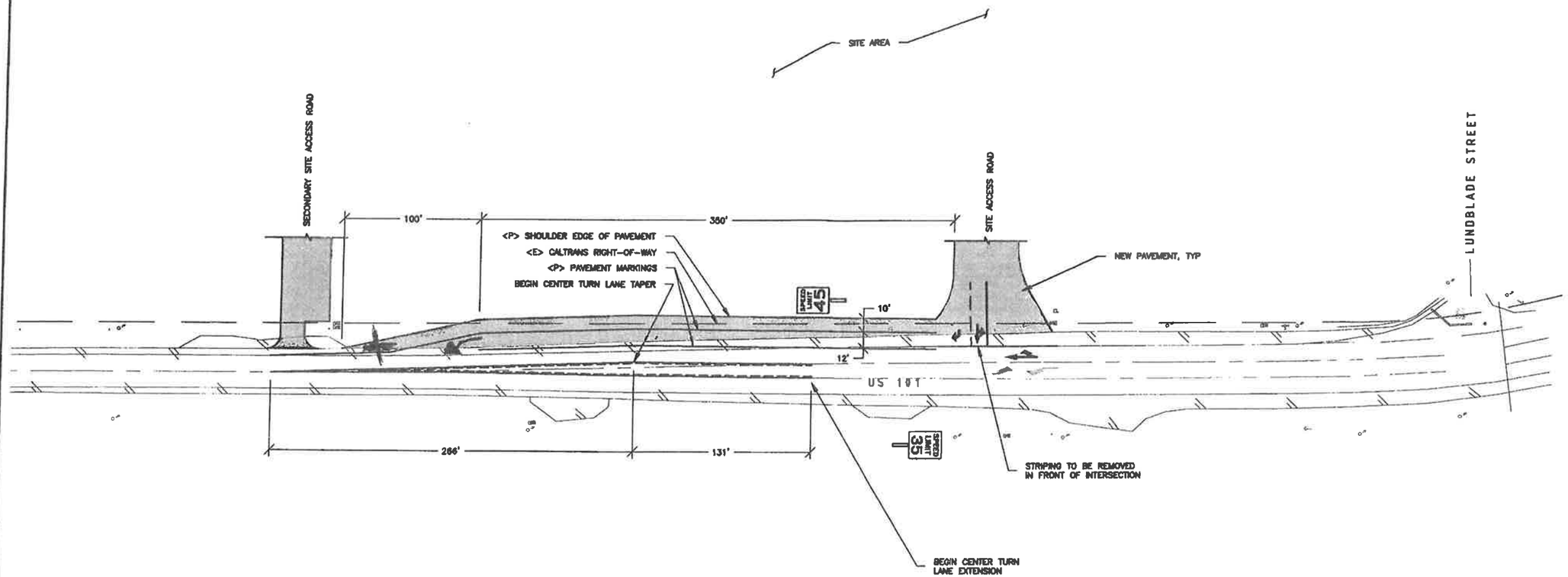

0 40' 80'

SCALE: 1"=80'

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NO.	HISTORY / REVISION	BY	CHK.	DATE

REDWOOD NATIONAL PARK RESORT
EXISTING AND PROPOSED LANE CONFIGURATION

REDWOOD PARK LODGE COMPANY, INC
ORICK, CA

DRAWN	JDB
CHECK	RLD
APPROVED	RLD
DATE	4/2/14
JOB NUMBER	6782.06
FIGURE	3

Apr 02,2014–10:11am
T:\Cadfiles\6700\6782.06 ORICK TOWN SITE\DWG\ 6782.06 CIV TRAFFIC FIG 3.dwg

LACO

TECHNICAL MEMORANDUM

Biological Survey Results
Redwood National Park Resort
Assessor's Parcel Number 520-142-009
Redwood Parks Lodge Company, Inc.

Date: December 4, 2013
Project No.: 6782.06

Prepared For: Redwood Parks Lodge Company, Inc.

Prepared By: Gary Lester, Senior Biologist

Attachments:
Figure 1: Site Location Map
Figure 2: Remnant Riparian Map
Appendix A: Plant Species Encountered During Field Survey

INTRODUCTION

The Redwood Parks Lodge Company's Orick Townsite project (hereafter, "Project") is approximately 27 acres of Humboldt County land. The parcel is located partially inside (west half) and partially outside (east half) of the Coastal Zone (Figure 1). Redwood Parks Lodge Company, Inc. (Client) retained LACO Associates to identify special habitat areas, such as habitat edges and wetlands, and rare plant species for the Project as described in the Scope of Services of the Agreement dated June 21, 2013.

On July 26, 2013, LACO's senior biologist, Gary Lester, conducted a biological field survey of the Project area (Assessor's Parcel Number [APN] 520-142-009). Mr. Lester conducted the survey and prepared this report to record the biological concerns. This Technical Memorandum presents an overview of biological resources present in the Project area, for use in establishing opportunities or identifying constraints for the proposed Project, and to determine the potential impacts to sensitive biological species or habitats from the Project.

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311 S. Main Street, Ukiah, California 95482 707 462-0222 Fax 707 462-0223
3450 Regional Parkway, Suite B2, Santa Rosa, California 95403 707 525-1222

Toll Free 800 515-5054 www.lacoassociates.com

METHODS

A field survey of the Project area was conducted by Gary Lester on July 26, 2013. Mr. Lester is qualified to conduct biological surveys, having earned an undergraduate degree in Botany and received training in recognition of the local flora and fauna and in rare plant identification and survey protocol. Additionally, Mr. Lester has conducted sensitive plant surveys, biological site investigations, and wildlife surveys for over 25 years.

USGS topographic maps, aerial photography maps, and the California Department of Fish and Wildlife (DFW 2013) Orick, Rodgers Peak, Ball Hills, Ah Pah Ridge, Holter Ridge, Fern Canyon quads California Natural Diversity Data Base (CNDDB), relating to the Project areas were reviewed prior to and during the survey for potential sensitive species occurrence. The U.S. Fish and Wildlife Service Wetlands Inventory (FWS 2013) was reviewed for recognized wetlands to provide survey location guidance. The survey was conducted following California Department of Fish and Game protocol (DFG 2009). A single, intuitively-controlled, seasonally-appropriate survey was conducted that sampled the identified potential habitat. Plants were identified to the lowest taxonomic level (genus or species) necessary for rare plant identification. The scientific nomenclature follows the Jepson Manual (Baldwin, et. al. 2012).

ENVIRONMENTAL SETTING

The proposed Orick Townsite Project area is located in Orick, California (Figure 1) and is flanked by Highway 101 to the south and Redwood Creek and levee to the north. The ground surface elevations for the Project area range between 25 and 28 feet above mean sea level. The Project area features one rural residential home, livestock fencing, water troughs, and scattered groundwater monitoring wells. Habitats in the Project area include remnant Redwood Creek riparian, very widely scattered non-native trees (Monterey Pine [*Pinus radicata*, false cypress [*Chamaecyparis* sp.]), and agricultural (hay and cattle production) and ruderal (weedy) vegetation.

Underlying the Site are Holocene age sediments (hundreds of feet thick) deposited by Redwood Creek, which is the regional unconfined groundwater aquifer. Soil types within 50 feet of the ground surface between the subject site and Redwood Creek are loose, coarse sand/gravel with discontinuous lenses of soft fine grained soil which extend below the Redwood Creek levees.

The prominent vegetation occurring at the Orick Townsite is ruderal (non-native). The ruderal vegetation is dominated by pasture grasses, including velvet grass (*Holcus lanatus*), sweet vernal grass (*Anthoxanthum oderatum*), creeping bent grass (*Agrostis stolonifera*), orchard grass (*Dactylis glomerata*), tall fescue (*Festuca arundinacea*) with associated herbaceous cover of white clover (*Trifolium repens*), English plantain (*Plantago lanceolata*), perennial cat's ear (*Hypochaeris radicata*), bird's foot tre-foil (*Lotus corniculatus*), creeping buttercup (*Ranunculus repens*), curly dock (*Rumex crispus*), stinging nettle (*Urtica dioica*), common dandelion (*Taraxacum officinale*), Canadian thistle (*Cirsium arvense*), red clover (*Trifolium pratense*), sheep sorrel (*Rumex acetocella*), riverbank lupine (*Lupinus latifolius*), and cut-leaved geranium (*Geranium dissectum*). Ruderal vegetation ground cover coverage was visually estimated at 90 to 100 percent. Outside of areas of regular mowing are scattered individual shrub and herbaceous cover consisting of Himalaya blackberry (*Rubus armeniacus*), coyote brush (*Baccharis pilularis*), white sweet

clover (*Melilotus alba*), pennyroyal (*Mentha pulegium*), California blackberry (*Rubus ursinus*), giant bindweed (*Calystegia silvatica*), and wild radish (*Raphanus sativa*).

A small remnant riparian habitat occurs at the furthest downstream edge of the property and consists of mature red alder (*Alnus rubra*), Pacific willow (*Salix lasiandra* var. *lasiandra*), black cottonwood (*Populus trichocarpa*), with associated native shrub and herbaceous cover of thimbleberry (*Rubus parviflorus*), twinberry (*Lonicera involucrata*), Indian plum (*Oemleria cerasiformis*), California blackberry (*Rubus ursinus*), sword fern (*Polystichum munitum*), stinging nettle (*Urtica dioica*), lady fern (*Athyrium felix-femina*), cascara (*Frangula purshiana*), coyote brush, fire weed (*Chamerion angustifolium*), hedge nettle (*Stachys ajugoides*), and California aster (*Symphyortrichum chilensis*).

Portions of the Redwood Creek levee frontage contains seasonal wetland vegetation, with native vegetation represented by widely scattered tall-flat sedge (*Cyperus eragrostis*), small-fruit bulrush (*Scirpus* microcarpus), toad rush (*Juncus bufonius*), silverweed (*Potentilla anserina*), common monkey flower (*Mimulus guttatus*), dagger rush (*Juncus ensifolius*), meadow foxtail (*Alopecurus genticulatus*), and widely scattered non-native cover of white sweet-clover, common canary grass (*Phalaris canariensis*), hyssop loosestrife (*Lythrum hyssopifolia*), modiola (*Modiola caroliniana*), lady's thumb (*Polygonum persicaria*), castor bean (*Ricinus communis*), and Klamath weed (*Hypericum perfoliata*). Seasonal wetland vegetation ground cover was visually estimated at 60 to 90 percent. Ruderal herbaceous ground coverage was visually estimated at 5 to 100 percent. A plant list of those species encountered during the biological survey is provided in Appendix A.

SENSITIVE SPECIES ANALYSIS

Sensitive Plant Species Historically Reported Nearby

All species included on Lists 1 to 4 (herein referred to as sensitive species) of the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (http://www.cnps.org 2013) were reviewed to determine potential presence in the vicinity of the Project area (all the species data base referred to in this Report use the U.S. Geological Survey Orick Quad as a reference point). The CNPS inventory includes all species listed as rare or endangered by the Federal and State governments. Based on the species identified in the CNDDB and CNPS records, the range of habitats present, and the geographical range of the various sensitive species, the species considered most likely to occur in the vicinity of the Project areas are listed in Table 1. Only Redwood Creek habitats, riparian, seasonal wetlands, and ruderal habitats are present in the Project area, eliminating many sensitive species specific to other types of habitats.

Table 1: Sensitive Plant Species Potentially Present in the Project Area

Species	Common Name	CNPS List	Preferred Habitat
Calamagrostis bolanderi	*Bolander's reed grass*	*4.2*	*Wet coastal prairies, flowers June-August*
Cardamine angulata	*Seaside bittercress*	*2B.1*	*Shady thickets; flowers April to June*
Carex praticola	*Northern meadow sedge*	*2B.2*	*Coastal prairies; flowers May to July*
Fissidens pauperculus	*Minute pocket moss*	*1B.2*	*Stream banks; identifiable year-round*
Iliamna latibracteata	*California globe mallow*	*1B.2*	*Coastal forest, prairies; June-July*
Montia howellii	*Howell's montia*	*2B.2*	*Disturbed forest edges, damp roadsides; flowers February to May*
Oenothera wolfiii	*Wolf's evening primrose*	*1B.1*	*Coastal bluffs; flowers May to October*
Sidalcea malviflora ssp. patula	*Siskiyou checkerbloom*	*1B.2*	*Coastal prairies, flowers May to August*
Trichodon cylindricus	*cylindrical trichodon*	*2B.2*	*Forest openings; identifiable year-round*

The following summaries are for the sensitive plant species shown in Table 1:

Bolander's reedgrass is known from Patrick's Point State Park and Big Lagoon Bog (Jepson Interchange 2013). A nearby Rodgers Peak Quad reference is based on an unknown observation (CNPS 2013). There is extremely limited habitat for this species in the Project area. The Bolander's reedgrass is classified as a California Rare Plant Ranking (CRPR) (CNPS 2013) of 4.2, and is defined as uncommon in California, but more common elsewhere. A majority number of the California populations are fairy threatened. A concerted effort was made to locate this native grass from the non-native dominated Project area. No Bolander's reedgrass populations were located during the survey.

Seaside bittercress is known from Prairie Creek Redwoods State Park (Jeff Barrett, North Coast State Parks, pers. comm.) and a recent observation (pers. obs.) from Fern Canyon. There is no habitat for this species in the Project area. The seaside bittercress is classified as a CRPR (CNPS 2013) of 2.1, and is defined as rare, threatened, or endangered in California, but more common elsewhere. A majority number of the California populations are seriously threatened.

Northern meadow sedge is known only from an historical collection on Gans Prairie (DFG/CNDDB 2013; Jepson Interchange 2013). There is little or no habitat for this species in the Project area. The northern meadow sedge is classified as a CRPR (CNPS 2013) of 2B.2, and is defined as endangered in California, but more common elsewhere. A majority number of the California populations are fairy threatened.

The **minute pocket moss** is known from collections on the James Irving Trail, Prairie Creek Redwoods State Park (DFG/CNDDB 2013). The known occurrences are from bare, moist, clay-enriched soil habitats. This species may occur in nearby clearings, although no such clay-dominated soil habitats were seen in the Project area. The minute pocket moss is classified as a CRPR of 1B.2, and is defined as rare, threatened, or endangered in California and elsewhere, and the majority of the California populations are seriously threatened.

The **California globe mallow** is known from historical collections at Davison's Prairie in Redwood National Park and numerous locations near Orick (DFG/CNDDB 2013). The known occurrences are from coastal prairie and forest edges in deep, rich soil habitats. This species may occur in nearby Redwood Creek riparian edges, but little such undisturbed habitat was seen in the Project area. The California globe mallow is classified as a CRPR of 1B.2, and is defined as rare, threatened, or endangered in California and elsewhere, and the majority of the California populations are seriously threatened. An effort was made to locate this species near the riparian influenced sections of the Project area, but no populations of California globe mallow were observed.

The **Howell's montia's** nearest known occurrence is a historic collection at Berry Glen. This species occupies exposed, recently impacted soils that remain seasonally moist through the spring. Only as much as 500 square feet of suitable habitat occurs near the southeast corner of the Project area. The Howell's montia is classified as a CRPR of 2.2, and is defined as rare, threatened, or endangered in California, but more common elsewhere, and a moderate number of the California populations are threatened. A seasonally appropriate survey for this species would still need to be conducted.

Habitat for the **Siskiyou checkerbloom** is coastal forest and margins in northwest California. It is reported historically on Gans Prairie. Potential habitat for this species is present within the Project area, especially along the relatively less disturbed fence line margins. The Siskiyou checkerbloom is classified as a CRPR of 4.2, and is defined as California plant of limited distribution and a moderate number of the California populations are threatened. A concerted effort was made to locate this native species in the non-native dominated Project area. No Siskiyou checkerbloom populations were located during the survey.

The **cylindrical trichodon** is known from near Dry Lagoon along the Highway 101 roadside. It grows in acidic habitats, and is often abundant in recently mowed fields. It also grows in sand pits and gravel pits, on the banks of streams and rivers, in disturbed roadsides, and sometimes on seasonally-flooded ground at the edge of lakes and reservoirs. The cylindrical trichodon is classified as a CRPR of 2.2, and is defined as rare, threatened, or endangered in California, but more common elsewhere and a moderate number of the California populations are threatened. Very little moss establishment was noted in the Project area.

Sensitive Animal Species Potentially Present

According to CNDDB records, the U.S. Fish and Wildlife Service (FWS) Orick Quad species list (FWS 2013), the range of habitats present, and the geographical range of the sensitive animal species, the species considered most likely to occur in the vicinity of the Project area are listed in Table 2. Only Redwood Creek habitats (non-native grasslands and riparian), and ruderal habitats are present in the Project area, eliminating many of the sensitive species specific to other types of habitats.

Table 2: Sensitive Animal Species Potentially Present in the Project Area

Species	Common Name	Fed/State List	Preferred Habitat
Ardea herodias	Great Blue Heron	None	Nests in mature tree canopies
Coccyzus americanus	Western Yellow-billed Cuckoo	Candidate/ Endangered	Nests in mature riparian forests
Elanus leucurus	White-tailed Kite	None	Nests in suitable tree canopy cover
Empidonax traillii	Willow Flycatcher	State Threatened	Riparian
Falco peregrinus	Peregrine Falcon	None	Documented recently nesting in nearby mature coniferous forests
Haliaeetus leucocephalus	Bald Eagle	State Endangered	Nests in mature canopy trees or snags
Myotis evotis	Long-legged Myotis	None	Breeds in tree cavities, structures
Nycticorax nycticorax	Black-crowned Night Heron	None	Riverine
Pandion haliaetus	Osprey	None	Nests in mature canopy trees or snags
Rana aurora	Northern Red-legged Frog	None	Breeds in freshwater ponds
Speyeria zerene behrensii	Behren's silverspot	Extirpated	Known only from coastal prairie near Pt. Arena

The following summaries are for the sensitive animal species shown in Table 2:

Great Blue Heron and **Black-crowned Night Heron** are known from California waterways, marshes, and other wetlands. Documented Great Blue Heron canopy tree nesting occurs on Redwood Creek (and nearby Skunk Cabbage Creek), but no rookeries were observed during the biological evaluation. Colonial rookeries in California are protected (DFG 2011).

The **Western Yellow-billed Cuckoo** and **Willow Flycatcher** both nest in mature riparian vegetation in northwest California. No individuals of either species were observed during the biological evaluation. Recent nesting of Willow Flycatcher has been documented in Blue Lake. The cuckoo has not been documented breeding outside of the Lower Eel River in Humboldt County. The cuckoo is a Federal Candidate for listing (FWS 2012) and listed by the State as Endangered (DFG 2011). The flycatcher is listed by the State as threatened (DFG 2011). Extremely little suitable breeding habitat for either species was found in the Project area.

The **Bald Eagle** and the **Osprey** are known from northern California water ways. Nests in mature canopy trees or snags are recorded. No nests of either species were observed in the Project area. DFG (2011) lists the California populations of the Bald Eagle as threatened and active Osprey nests are protected.

The **Long-legged Myotis** habitat requirements are forests for roosting and open watercourses for feeding. It may establish nursery colonies in abandoned structures. The California populations are considered Species of Special Concern by DFG (2011). There is extremely little roosting or feeding habitat for the long-legged myotis is located in the Project area.

BIOLOGICAL SURVEY RESULTS

The biological survey did not record any population of sensitive plant species in the proposed Project area. Due to long-established agricultural use and the Redwood Creek levee (isolation from periodic high creek flows and depauperate natural habitats) at the Project area, few sensitive plant species would be expected. It is recommended that an early season sensitive plant survey still be conducted, to ensure no impacts to those sensitive plant species only detectable during the spring, such as Howell's montia.

Black-capped Chickadees (*Poecile atricapillus*) were observed in the riparian area (DFW 2011,California Watch List). It is a species of limited distribution in California, primarily found in coastal riparian and well-developed river riparian in northern California and in Humboldt and Del Norte counties. No nests of Herons, Osprey, Bald Eagles, or any raptors were seen in the Project area, although fledgling White-tailed Kites were observed in the Project area during this survey, and both Osprey and Peregrine Falcon were observed near the riparian of Redwood Creek, opposite the Project area. Riparian and gravel bar habitats are found adjacent to the Project area and located within the Stream Management Zone (SMZ) of Redwood Creek River. The general location of the SMZ shown in Figure 1 is the channelized section of Redwood Creek opposite the Project site. The FWS Wetlands Mapper (FWS 2013) does indicate seasonal wetlands on the Project site, but does not indicate that Redwood Creek riparian vegetation is present or occurs opposite the Project area, but the digital system has an accuracy disclaimer that field confirmation investigations are recommended. Wetland delineation was conducted by SHN (2010) for the Project area and LACO (2013) is providing a confirming document delineating wetlands on-site.

It is highly recommended that the remnant riparian habitat (Figure 2) found on-site be protected from further disturbance during project construction or operations. Habitat protection can be provided with the installation of a prominent wood split rail fence opposite the natural features to be protected. Additionally, construction activities opposite the remnant riparian shall avoid the potential land bird on-site breeding season (March 1-August 15). If the breeding season cannot be avoided, a qualified biologist must confirm that there are no nesting cavities of Black-capped Chickadees. If Black-capped Chickadees nesting cavities are present at the site, wetland creation construction will not commence until the birds have fledged. Prior to construction, an early season sensitive plant survey shall be conducted to ensure no impacts to those sensitive plant species only detectable during the spring, such as Howell's montia. If any sensitive plant species are located then Michael van Hattem at the CDFW Eureka District 1 office shall be notified. If necessary prior to transplanting or any sensitive plant disturbance, actions should be discussed with CDFW and a mitigation plan submitted to Mr. van Hattem.

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FIGURES

Figure 1: **Site Location Map**

Figure 2: **Remnant Riparian Vegetation Map**

LACO

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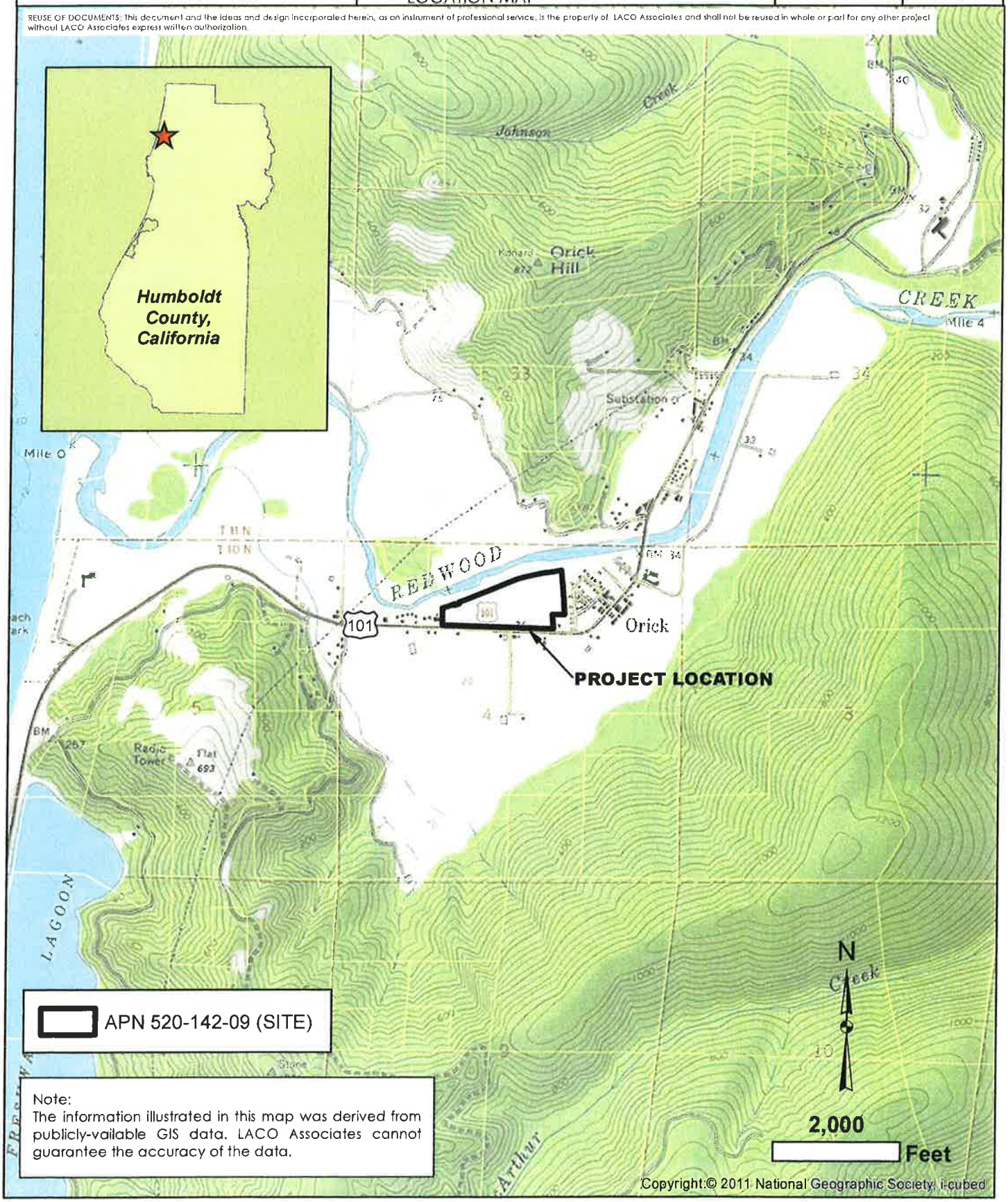
1-800-515-5054 www.lacoassociates.com

PROJECT	REDWOOD NATIONAL PARK RESORT WETLAND STUDY	BY JB	FIGURE 1
CLIENT	REDWOOD PARKS LODGE COMPANY	CHECK EAB	
LOCATION	ORICK, CA.	DATE 11/25/13	JOB NO. 6782.06
	LOCATION MAP		



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PROJECT	REDWOOD NATIONAL PARK RESORT ENTITLEMENTS	BY JB	FIGURE 2
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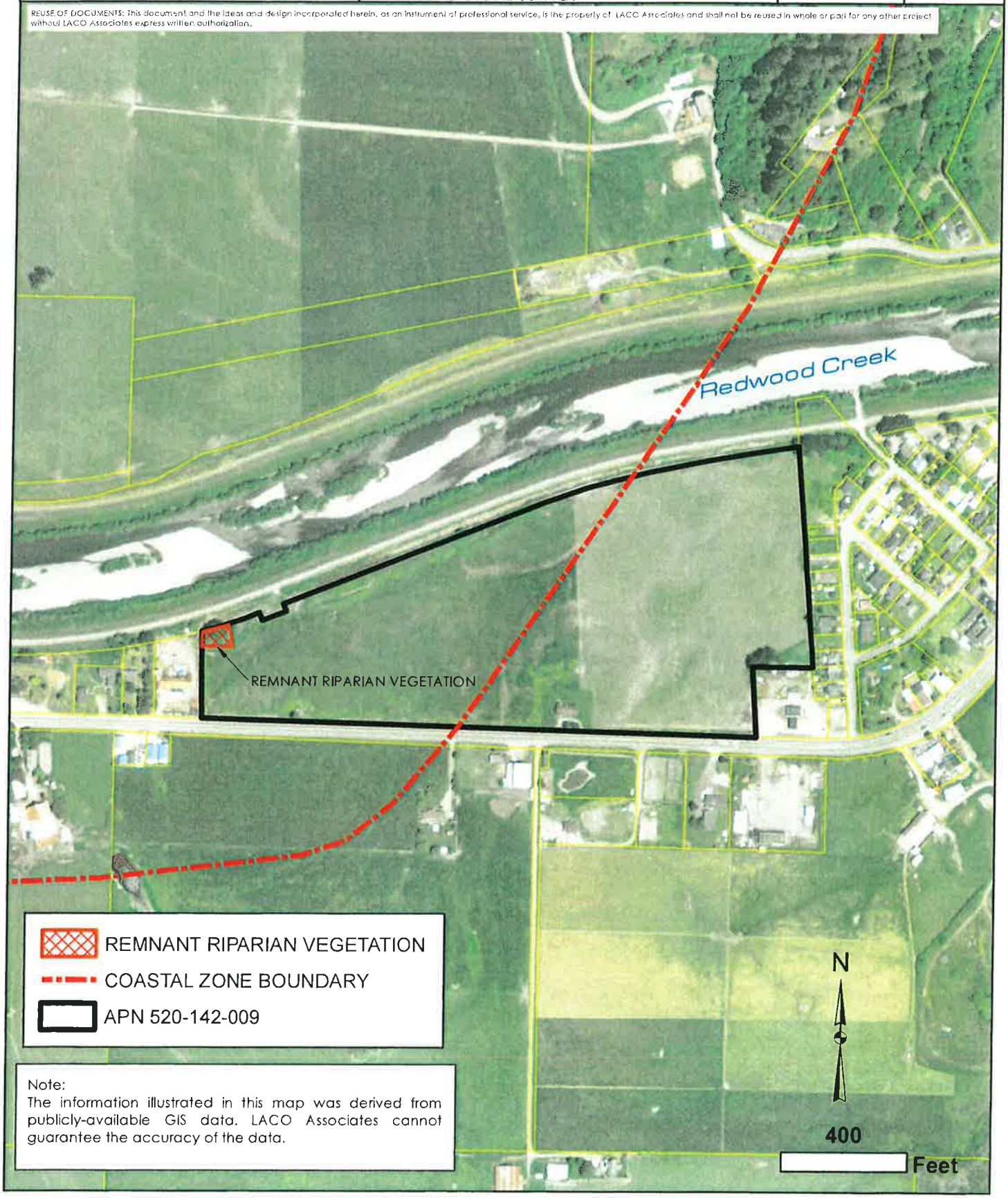
LOCATION	ORICK, CA.	DATE 12/3/13	JOB NO. 6782.06
	BIOLOGICAL SURVEY		



Note:
The information illustrated in this map was derived from publicly-available GIS data. LACO Associates cannot guarantee the accuracy of the data.

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APPENDIX A

Plant Species Encountered During Field Survey

Appendix A – Plant Species Encountered During Field Survey of the Orick Townsite

Species	Common Name	Fed/State List	Native / Non-Native
Achillea millefolium	yarrow	none	Native
Alnus rubra	red alder	none	Native
Agrostis stolonifera	creeping bentgrass	none	Non-Native
Aira caryophyllea	silver hair grass	none	Non-Native
Alopecurus geniculatus	meadow foxtail	none	Native
Amaranthus retroflexus	redroot pigweed	none	Non-Native
Anagallis arvensis	scarlet pimpernel	none	Non-Native
Anaphalis margaritacea	pearly everlasting	none	Native
Anthoxanthum odoratum	sweet vernal grass	none	Non-Native
Athyrium filix-femina	lady fern	none	Native
Atriplex hortensis	garden orach	none	Non-Native
Avena barbata	slender oat grass	none	Non-Native
Baccharus pilularis	coyote brush	none	Native
Briza maxima	large quaking grass	none	Non-Native
Briza minor	small quaking grass	none	Non-Native
Bromus catharticus	rescue grass	none	Non-Native
Bromus diandrus	ripgut grass	none	Non-Native
Brassica nigra	black mustard	none	Non-Native
Calystegia silvatica	giant bindweed	none	Non-Native
Carduus nutans	musk thistle	none	Non-Native
Centaurium erythraea	European centaury	none	Non-Native
Cerastium glomeratum	common chickweed	none	Non-Native
Chamaecyparis sp.	false cypress	none	Non-Native
Chamerion angustifolium	fireweed	none	Native
Chicorium intybus	chicory	none	Non-Native
Cirsium arvense	Canadian thistle	none	Non-Native
Cirsium vulgare	bull thistle	none	Non-Native
Conium maculatum	poison hemlock	none	Non-Native
Cortaderia jubata	weedy pampus grass	none	Non-Native
Crocosmia x crocosmiifolia	crocosmia	none	Non-Native
Cynosurus enchinatus	annual dogtail	none	Non-Native
Cyperus eragrostis	tall-flat sedge	none	Native
Cytisus scoparius	Scotch broom	none	Non-Native
Daucus carota	Queen Anne's lace	none	Non-Native
Dactylis glomerata	orchard grass	none	Non-Native
Descurainia pinnata	tansy mustard	none	Native
Dipsacus fullonum	wild teasel	none	Native
Elymus repens	quack grass	none	Non-Native
Epilobium ciliatum	annual fireweed	none	Native
Equisetum arvense	common horsetail	none	Native
Equisetum telmateia	giant horsetail	none	Native
Erigeron canadensis	horseweed	none	Native
Euphorbia lathyris	caper spurge	none	Non-Native
Foeniculum vulgare	fennel	none	Non-Native

Species	Common Name	Fed/State List	Native / Non-Native
Festuca arundinacea	tall reed fescue	none	Non-Native
Festuca perennis	perennial ryegrass	none	Non-Native
Festuca bromoides	brome fescue	none	Non-Native
Frangula purshiana	cascara	none	Native
Geranium dissectum	cut-leaved geranium	none	Non-Native
Geranium molle	wild geranium	none	Non-Native
Gnaphilum sp.	cudweed	none	Non-Native
Helminthotheca echinoides	ox-tongue	none	Non-Native
Holcus lanatus	velvet grass	none	Non-Native
Hypericum perfoliata	Klamath weed	none	Non-Native
Hypochaeris radicata	perennial cat's ear	none	Non-Native
Juncus bufonius	toad rush	none	Native
Juncus effusus	soft rush	none	Native
Juncus patens	spreading rush	*none*	Native
Lathyrus latifolius	common sweet pea	*none*	Non-Native
Lapsana communis	nipplewort	*none*	Non-Native
Leontodon saxatilis	hairy hawkweed	*none*	Non-Native
Lepidium didymum	lesser swine grass	*none*	Non-Native
Leucanthemum vulgare	ox-eye daisy	*none*	Non-Native
Linum bienne	blue flax	*none*	Non-Native
Lonicera involucrata	twinberry	*none*	Native
Lotus corniculatus	bird's foot trefoil	*none*	Non-Native
Leucanthemum vulgare	ox-eye daisy	*none*	Non-Native
Lupinus bicolor	annual lupine	*none*	Native
Lupinus rivularis	riverside lupine	*none*	Native
Lythrum hyssopifolia	hyssop loosestrife	*none*	Native
Marah oregana	wild cucumber	*none*	Native
Matricaria chamomilla	German chamomile	*none*	Non-Native
Matricaria discoidea	pineapple weed	*none*	Non-Native
Medicago arabica	spotted burclover	*none*	Non-Native
Melilotus alba	white sweet clover	*none*	Non-Native
Melilotus officinalis	yellow sweet clover	*none*	Non-Native
Mentha pulegium	penny royal	*none*	Non-Native
Modiola caroliniana	modiola	*none*	Non-Naive
Navarretia squarosa	*skunkweed*	*none*	Native
Parentucellia viscosa	*yellow parentucellia*	*none*	Non-Native
Phacelia bolanderi	*Bolander's phacelia*	*none*	Native
Phalaris canariensis	*canary grass*	*none*	Non-Native
Pinus radicata	*Monterey pine*	*none*	Non-Native
Plantago lanceolata	*English plantain*	*none*	Non-Native
Plantago major	*common plantain*	*none*	Non-Native
Poa annua	annual bluegrass	none	Non-Native
Poa pratensis	Kentucky bluegrass	none	Non-Native
Polygonum arenastrum	common knotweed	none	Non-Native
Polygonum periscaria	lady's thumb	none	Non-Native

Species	Common Name	Fed/State List	Native / Non-Native
Polypogon monspelianus	rabbit's foot grass	none	Non-Native
Polystichum munitum	sword fern	none	Native
Populus trichocarpa	black cottonwood	none	Native
Potentilla anserina	silverweed	none	Native
Prunella vulgaris	self-heal	none	Non-Native
Ranunculus repens	creeping buttercup	none	Non-Native
Raphanus sativa	wild radish	none	Non-Native
Ricinus communis	castor bean	none	Non-Native
Rubus armeniacus	Himalaya blackberry	none	Non-Native
Rubus parviflorus	thimbleberry	none	Native
Rubus spectabilis	salmonberry	none	Native
Rubus ursinus	California blackberry	none	Native
Rumex acetocella	sheep sorrel	none	Non-Native
Rumex crispus	curly dock	none	Non-Native
Salix laevigata	red willow	none	Native
Salix lasiandra var. *lasiandra*	Pacific willow	none	Native
Salix scouleriana	Scouler's willow	none	Native
Sambucus racemosa	red elderberry	none	Native
Scirpus microcarpus	small-flowered bulrush	none	Native
Senecio jacobea	tansy ragwort	none	Non-Native
Senecio minimus	coastal burnweed	none	Non-Native
Senecio vulgaris	common groundsel	none	Non-Native
Solanum nigrum	black nightshade	none	Non-Native
Sonchus oleraceus	sow thistle	none	Non-Native
Spergularia rubra	red sand-spurrey	none	Non-Native
Stachys ajugioides	hedge nettle	none	Non-Native
Symphyotrichum chilensis	California aster	none	Native
Taraxacum officinale	common dandelion	none	Non-Native
Trifolium pratense	red clover	none	Non-Native
Trifolium repens	white clover	none	Non-Native
Tripleurospermum inodorum	false chamomile	none	Non-Native
Tropaeolum majus	garden nasturtium	none	Non-Native
Urtica dioica	stinging nettle	none	Native
Veronica americana	American brooklime	none	Native
Veronica persica	Persian speedwell	none	Non-Native
Vicia hirsuta	annual vetch	none	Non-Native

LACO

TECHNICAL MEMORANDUM

Redwood National Park Resort Wetland Confirmation
Assessor's Parcel Number 520-142-009
Redwood Parks Lodge Company, Inc.

Date:	December 6, 2013
Project No.:	6782.06
Prepared For:	John Keoberer, CEO, Redwood Parks Lodge Company, Inc.
Prepared By:	LACO Associates
Cc:	Donna Hufford, Redwood Parks Lodge Company, Inc. Mike Nelson, AICP, Planning Director
Attachments:	Figures: Figure 1: Location Map Figure 2: Confirmed Wetlands Map Figure 3: Sampling Locations Map Figure 4: Conceptual Site Plan Appendix A: Wetland Determination Data Forms Appendix B: Test Pit Photographs

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1.0 INTRODUCTION

Redwood Parks Lodge Company proposes to develop a recreational vehicle park and commercial center on Assessor's Parcel Number 520-142-009 (hereafter Survey Site), located at 120465 U.S. Highway 101, in the unincorporated community of Orick in Humboldt County, California (Figure 1). The Survey Site, comprising approximately 26.7 acres, is primarily grazing land and has one residential unit. Redwood Creek is north of the Survey Site and Redwood Creek Levee is located along the northern property line.

The National Wetlands Inventory (NWI), developed by the U.S. Fish and Wildlife Service, is a nationwide inventory of wetlands. The purpose of the inventory is to provide biologists and others with information on the distribution and type of wetlands and to aid in conservation efforts. Wetlands are identified and added to the NWI primarily based on high-altitude aerial photography interpretation (U.S. Fish and Wildlife Service, 2012). When a wetland appears on the NWI, site specific investigations are required to confirm the presence or absence of wetlands. Three distinct pocket wetlands on the eastern portion of the Survey Site are identified in the NWI.

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SHN Consulting Engineers and Geologists (SHN) conducted a wetland delineation in January 2010 for the Orick Community Services District and reported their findings in *Waters of the United States and State Delineation (APN520-142-009)*. Their findings delineated two distinct pocket wetlands, one in the southeast corner of the Survey Site and one along the northern boundary of the Survey Site.

At Client's request, LACO Associates (LACO) staff visited the Survey Site to confirm the presence of NWI wetlands and the wetlands delineated by SHN. This technical memorandum presents the results of the site visit.

LACO confirmed the wetlands identified on the NWI map and the wetlands identified in SHN's report (Figure 2).

2.0 METHODS

The primary purpose of the site visit was to confirm the presence of NWI wetlands and the wetlands identified by SHN in 2010.

Six soil test pits were hand-dug to a depth of 16 inches, or until refusal of the soil, to determine soil character, saturation, and level of water table (Figure 3). In accordance with United States Army Corps of Engineers (USACE) methodology, herbaceous vegetation and saplings/shrubs were identified within a 3-foot radius of each soil test pit, and trees were identified within a 30-foot radius of each soil test pit. Determinations for dominant vegetation were made using visual estimations of percent cover for each stratum (tree, sapling/shrub, and herb) and applying the 50/20 rule. The 50/20 rule indicates that all vegetation be ranked in descending order by percent cover for each stratum and cumulatively totaled. Species that cumulatively total 50 percent, and any additional species that comprise 20 percent or more of the cover for each stratum, are considered dominants.

In addition to the 50/20 rule, the weighted average or prevalence index was applied. All species in a plant community are used to calculate a weighted-average wetland indicator by multiplying indicator status category ratings (OBL=1, FACW=2, FAC=3, FACU=4 and UPL=5) by the relative abundance of species in a sample plot. Typically a plant community is considered to be hydrophytic if the prevalence index is less than or equal to 3.0.

The Wetland Determination Data Forms include both methods (Appendix A).

Plants encountered during the wetland confirmation were identified by their assigned wetland status indicator, taken from the 2013 National Wetland Plant List published by the USACE.

Soil colors were described using Munsell Soil Color Charts (2009). Hydric soil determinations are based on hydric soil indicators that include either a chroma of 1 or a chroma of 2 with oxidation-reduction (redox) features present. Redox features in the soil usually result from the presence of periodic reducing soil conditions. Soils with bright redox features and/or low matrix chromae are indicative of a fluctuating water regime. Additionally, the presence of gleyed soil in upper horizons is indicative of waterlogged conditions during at least a major part of the growing season and is used to determine wetlands. Gley is a condition in which the soil is under prolonged anaerobic conditions and iron is chemically reduced to compounds that have low-chromae (gray, bluish, or gray-green) colors.

Soils with low chromae were verified as being hydric or upland utilizing the indicators outlined in *Field Indicators of Hydric Soils in the United States*, Version 7.0, 2010, (Natural Resources Conservation Service, 2010).

Wetland hydrology determinations were based upon the presence of at least one primary indicator (such as inundation or saturation in the upper 16 inches of soil) or, in the absence of any primary indicators, at least two secondary indicators, in accordance with USACE methodology. For instance, the presence of oxidized root channels (called rhizospheres) in the upper 16 inches is considered a secondary wetland hydrology indicator, and suggests that soils likely fluctuate between wet and dry for significant periods of time. Another common secondary indicator is the use of the FAC-neutral test, wherein plant species with a facultative designation are disregarded (due to their versatility in upland and wetland environments), and the remaining dominants are considered.

For the purpose of this wetland confirmation, the presence of any one of the three parameters (wetland hydrology, hydric soils, or wetland vegetation) was considered to be confirmation of the presence of the previously identified wetlands.

3.0 ENVIRONMENTAL CONDITIONS

The Survey Site is located in the rural community of Orick, approximately 1.5 miles east of the Pacific Ocean. Elevations range from approximately 22 to 29 feet above Mean Sea Level. The community of Orick is located on an uplifted marine terrace and topography is steep outside of the Orick Valley. Orick is located within the North Coast Hydrologic Region, Redwood Creek Hydrologic Unit, Orick Hydrologic Sub-Area, Redwood Creek Planning Watershed, and Skunk Cabbage Creek Planning Watershed.

The environmental setting is predominately affected by the mild maritime climate, active tectonic processes that are manifested in the geomorphic landscape, and current and historical development. Influence from these factors is evident in the variety of habitat types found in the vicinity, which include freshwater and estuarine wetlands, coastal prairie, coastal strand, scrub shrub, and North Coast coniferous forest. Land in the Orick Valley and the Survey Site has been historically used as pasture land and in many cases has been seeded with non-native grass mixes for cattle grazing.

3.1 Soils

According to the California Soil Resource Lab at U.C. Davis and the Soil Survey Geographic Database (SSURGO), soils on the Survey Site are classified as the Kerr Series (90% of the Survey Site), which consists of a coarse-silty loam to 16 inches in depth. The Kerr series consists of very deep, well-drained soils on high floodplain steps, alluvial fans, and fan remnants on alluvial plains. Kerr soils characteristically have dark olive gray silt loam surface horizons. The report *Soils of Western Humboldt County, California*, McLaughlin and Harradine, 1965, also classified the soils at the Survey Site as Kerr sandy loam. The Kerr series is not included on the U.S. Department of Agriculture Natural Resource Conservation Service list of hydric soils (USDA, April, 2012).

Soil color in the upper 16 inches of the soil profile observed during the site visit on July, 15, 2013, indicated that the soil was predominately grayish brown (10YR 5/2), with some areas that exhibit redox features and contain gleyed soils.

Several areas have a dense hardpan created presumably by construction of the Redwood Creek levee that borders the northern portion of the parcel. The levee was constructed in 1968, four years after the massive 1964 flood, and causes retention of surface waters for extended periods of time. This hardpan in the A-horizon prevents surface hydrology from penetrating and is of an unknown depth. The primary hardpan area is at the toe of the levee.

Soils observed at the Survey Site did not vary substantially from profile to profile or from the Kerr profile description.

3.2 Hydrology

Orick is located within the North Coast Hydrologic Region, Redwood Creek Hydrologic Unit, Orick Hydrologic Sub-Area, Redwood Creek Planning Watershed, and Skunk Cabbage Creek Planning Watershed.

The long, narrow Redwood Creek drainage basin encompasses 280 square miles on the western slopes of the California Coast Ranges, entirely within Humboldt County. It stretches about 35 miles from north to south. Most of the stream flows in a broad, 1,500-foot-deep valley sandwiched between the Mad River basin to the west, and the Klamath River drainage to the east. Elevations range from over 5,000 feet on higher peaks of the mountains near the headwaters to sea level at the creek's mouth at the Pacific. The small community of Orick and the narrow strip of surrounding farmland are the only significant development in the entire basin. The river is free flowing and has no dams, and only a few agricultural diversions occur in the last 3 miles above the mouth.

Prior to the site visit, the USGS topographic quadrangle map and site-specific Light Detection and Ranging (LiDar) data were reviewed to verify site topography and identify hydrologic features located on or near the Survey Site. During the site visit, the Survey Site was studied to determine the presence of primary wetland hydrology indicators including inundation, saturation, water marks, cracked soil, vegetation matting, sediment deposits, drainage patterns, and drift-lines.

Landscape position is an important contributing factor influencing the hydrology of the Survey Site. The Survey Site abuts the Redwood Creek levee; at the toe of levee is an "engineered low spot" which is approximately 1 foot lower in elevation than the pasture. At the time of the site visit (July 15, 2013), no surface water was observed along the levee or elsewhere on the Survey Site.

3.3 Vegetation

The majority of vegetation at the Survey Site has been altered by historical animal grazing and hay production. At the time of site visit, vegetation was up to 24 inches in height. Vegetation mainly consists of non-native herbaceous species including water foxtail (*Alopecurus geniculatus*), perennial ryegrass (Festuca *perennis*), creeping bentgrass (*Agrostis stolonifera*), hairy cat's ear (*Hypochaeris radicata*), English plantain (*Plantago lanceolata*), cut-leaf geranium (*Geranium dissectum*), tall fescue (*Festuca arundinacea*), white clover (*Trifolium repens*), birdfoot trefoil (*Lotus corniculatus*), and common velvet grass (*Holcus lanatus*).

Along the toe of levee there are large clumps of Himalayan blackberry (*Rubus armeniacus*), common rush (*Juncus effusus*), and common horsetail (*Equisetum arvense*).

Other vegetation is included in Table 1.

Table 1 – Vegetation at the Survey Site

Common Name	Latin Name	Indicator
bird's-foot-trefoil	*Lotus corniculatus*	FAC
Canadian thistle	*Cirsium arvense*	FAC-
castor-bean	*Ricinus communis*	FACU
common plantain	*Plantago major*	FAC
creeping bentgrass	*Agrostis stolonifera*	FACW
creeping buttercup	*Ranunculus repens*	FACW
curly dock	*Rumex crispus*	FACW-
cut-leaf geranium	*Geranium dissectum*	NL
dandelion	*Taraxacum officinale*	FACU
English plantain	*Plantago lanceolata*	FAC-
hairy cat's ear	*Hypochaeris radicata*	FACU*
Himalaya berry	*Rubus armeniacus*	FAC+
tall fescue	*Festuca arundinacea*	FAC-
meadow foxtail	*Alopecurus geniculatus*	OBL
penny royal	*Mentha pulgeium*	OBL
perennial rye grass	*Festuca perennis*	FAC*
sweet vernal grass	*Anthoxanthum odoratum*	FACU
tall flatsedge	*Cyperus eragrostis*	FACW
thimbleberry	*Rubus parviflorus*	FAC+
velvet grass	*Holcus lanatus*	FAC
white clover	*Trifolium repens*	FAC
wild carrot	*Daucus carota*	NL

4.0 DISCUSSION AND CONCLUSION

The purpose of the site visit was to confirm the presence of NWI wetlands and the wetlands identified by SHN in 2010. An area is determined to be a wetland when at least one of three wetland indicators (hydrophytic vegetation, hydric soils, or wetland hydrology) is present.

A test pit was established in each of the identified wetland areas (Figure 3). At least one wetland indicator was present at each location. The Wetland Determination Data Forms (Western Mountains, Valleys, and Coast – Version 2.0) and photographs documenting conditions observed during the site visit are included in Appendices A and B.

Table 2 - Plot ID & Determination

Plot ID	Predominance of Hydophytic Vegetation	Hydric Soils	Wetland Hydrology	Determination
RPL-01	Yes	Yes	Assumed	Wetland
RPL-02	Yes	No	None	Wetland
RPL-03	Yes	Yes	Assumed	Wetland
RPL-04	Yes	No	None	Wetland
RPL-05	Yes	Yes	Assumed	Wetland
RPL-06	No	No	None	Atypical

Wetland vegetation is the predominant indicator at the Survey Site and is present in small pockets. This vegetation is composed chiefly of native perennials and non-native grasses and herbaceous species. However, the overall characteristics of the Survey Site are not indicative of wetland habitats; upland habitats are pervasive. Low-lying features, possibly resulting from past Redwood Creek drainage meanderings before the construction of the levee, appear to acquire adjacent run-off through episaturation and support scattered seasonal wetlands.

Wetlands shown in the NWI and in the SHN report are considered confirmed for the purpose of planning development at the site. The five distinct wetland areas total approximately 2.77 acres.

A recreational vehicle park and commercial center with gas station is proposed for the site (Figure 4). The proposed development involves direct filling of approximately 1.39 acres of wetlands, identified as wetlands 2 through 5 in Figure 2. Wetland fill will be offset by wetland creation and enhancement. Wetland creation will occur at a 2:1 ratio, on the coastal portion of the site contiguous with the existing wetlands. Approximately 2.78 acres will be planted with a mixture of native wetland trees, shrubs, and perennials. A full wetland mitigation plan has been developed.

5.0 REFERENCES

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SHN Consulting Engineers and Geologists, Inc., 2010. Waters of the United States and State Delineation (APN 520-142-009), prepared for Orick Community Services District Wastewater Project.

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United States Department of Agriculture, Natural Resources Conservation Service, Field Indicators of Hydric Soils in the United States, Version 7.0, 2010.

Web Sites

County of Humboldt WebGIS: http://gis.co.humboldt.ca.us/

FEMA Map Service Center (Subscription Required):
https://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?langId=1&storeId=10001&catalogId=10001&ddkey=https:Logoff

NCRS Web Soil Survey: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

USFWS National Wetland Inventory Data Mapper:
http://www.fws.gov/wetlands/Data/Mapper.html

LACO

TECHNICAL MEMORANDUM

Redwood National Park Resort Wetland Buffer Area Criteria Evaluation
Assessor's Parcel Number 520-142-009

Date:	April 4, 2014	
Project No.:	6782.06	
Prepared For:	Redwood Parks Lodge Company	
Prepared By:	Gary Lester, Senior Biologist	Gary S. Lester
Appendix A:	Figure 1:	Location Map
	Figure 2:	Confirmed Wetlands Map
	Figure 3:	Site Plan
Appendix B:	Excerpt from California Coastal Commission Statewide Interpretive Guidelines for Wetlands and Other Wet Environmentally Sensitive Habitat Areas	

INTRODUCTION

Redwood Parks Lodge Company (Client) proposes to develop a recreational vehicle park and commercial center on Assessor's Parcel Number 520-142-009 (hereafter Project Site), located at 120465 U.S. Highway 101, in the unincorporated community of Orick in Humboldt County, California (Appendix A, Figure 1 Location Map). The Project Site, comprising approximately 26.7 acres, is primarily grazing land and has one residential unit. Redwood Creek is north of the Survey Site and Redwood Creek Levee is located along the northern property line.

The National Wetlands Inventory (NWI), developed by the U.S. Fish and Wildlife Service, is a nationwide inventory of wetlands. The purpose of the inventory is to provide biologists and others with information on the distribution and type of wetlands and to aid in conservation efforts. Wetlands are identified and added to the NWI primarily based on high-altitude aerial photography interpretation (US Fish and Wildlife Service 2012). When a wetland appears on the NWI site specific investigations are required to confirm the presence or absence of wetlands. Three distinct pocket wetlands on the eastern portion of the Project Site are identified in the NWI. Additionally SHN Consulting Engineers and Geologists conducted a wetland delineation in January 2010 for the Orick Community Services District. They reported their findings in *Waters of the United States and State Delineation (APN520-142-009)*.

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Their findings delineated two distinct pocket wetlands, one in the southeast corner of the Project Site and one along the northern boundary of the Project Site. At Client's request, LACO Associates (LACO) staff visited the Project Site to confirm the presence of these wetlands and prepared a technical memorandum which presents the results of the site visit (*Redwood National Park Resort Wetland Confirmation*, (LACO, December 2013). LACO confirmed the wetlands identified on the NWI map and the wetlands identified in SHN's report (Appendix A: Figure 2 Confirmed Wetlands Map).

The three wetlands shown on the NWI map are outside of the coastal zone and are regulated by Humboldt County's Streamside Management Area Ordinance, as is the wetland in the southeast corner of the Project Site, identified by SHN. The wetland identified by SHN along the northern boundary of the Project Site is regulated by the North Coast Area Plan.

The North Coast Area Plan is a part of the Humboldt County General Plan and identifies land uses and standards by which development will be evaluated within the coastal zone. Section 3.41 E of the North Coast Area Plan outlines the requirements for a 100-foot "development setback" from wetlands and the requirements for a 250-foot "Wetland Buffer Area". Client requested that LACO evaluate the guidelines for establishing a site-specific wetland buffer area.

This technical memorandum presents the results of a biological review of the Project Site and an evaluation of the criteria used to establish a site-specific wetland buffer area.

METHODS

A biological field survey of the Project Site was conducted by LACO's Senior Biologist Gary Lester on July 26, 2013. Mr. Lester is qualified to conduct biological surveys, having earned an undergraduate degree in Botany and having received training in recognition of the local flora and fauna and in rare plant identification and survey protocol. He has over 30 years of experience in wetland surveys throughout the North Coast.

Mr. Lester's evaluation was based on the seven evaluation criteria for establishing buffer areas, found in the California Coastal Commission's *Statewide Interpretive Guidelines for Wetlands and Other Wet Environmentally Sensitive Habitat Areas* (1981), Chapter One, Section V: Criteria for Establishing Buffer Areas.

ENVIRONMENTAL SETTING

The Project Site is located in Orick, California and is bordered by U.S. Highway 101 to the south and the Redwood Creek flood control levee to the north. The ground surface elevations of the Project Site range between 25 feet and 28 feet above mean sea level. The Project Site includes one rural residential home, livestock fencing, water troughs, and scattered groundwater monitoring wells. Habitats on the Project Site include remnant Redwood Creek riparian, very widely scattered non-native trees, and agricultural (hay and cattle production) and ruderal (weedy) vegetation. Underlying the Site are Holocene age sediments (hundreds of feet thick) deposited by Redwood Creek, which is the regional unconfined groundwater aquifer. Soil types within 50 feet of the ground surface between the subject site and Redwood Creek are loose, coarse sand/gravel with discontinuous lenses of soft fine grained soil which extend below the Redwood Creek levees.

The prominent vegetation occurring at the Project Site is ruderal (non-native). The ruderal vegetation is dominated by pasture grasses, including velvet grass (*Holcus lanatus*), sweet vernal grass (*Anthoxanthum oderatum*), creeping bent grass (*Agrostis stolonifera*), orchard grass (*Dactylis glomerata*), tall fescue (*Festuca arundinacea*) with associated herbaceous cover of white clover (*Trifolium repens*), English plantain (*Plantago lanceolata*), perennial cat's ear (*Hypochaeris radicata*), bird's foot tre-foil (*Lotus corniculatus*), creeping buttercup (*Ranunculus repens*), curly dock (*Rumex crispus*), stinging nettle (*Urtica dioica*), common dandelion (*Taraxacum officinale*), Canadian thistle (*Cirsium arvense*), red clover (*Trifolium pratense*), sheep sorrel (*Rumex acetocella*), riverbank lupine (*Lupinus latifolius*), and cut-leaved geranium (*Geranium dissectum*). Ruderal vegetation ground cover coverage was visually estimated at 90 to 100 percent. Outside of areas of regular mowing are scattered individual shrub and herbaceous cover consisting of Himalaya blackberry (*Rubus armeniacus*), coyote brush (*Baccharis pilularis*), white sweet clover (*Melilotus alba*), pennyroyal (*Mentha pulegium*), California blackberry (*Rubus ursinus*), giant bindweed (*Calystegia silvatica*), and wild radish (*Raphanus sativa*).

A small remnant riparian habitat occurs at the furthest downstream edge of the property and consists of mature red alder (*Alnus rubra*), Pacific willow (*Salix lasiandra* var. *lasiandra*), and black cottonwood (*Populus trichocarpa*), with associated native shrub and herbaceous cover of thimbleberry (*Rubus parviflorus*), twinberry (*Lonicera involucrata*), Indian plum (*Oemleria cerasiformis*), California blackberry (*Rubus ursinus*), sword fern (*Polystichum munitum*), stinging nettle (*Urtica dioica*), lady fern (*Athyrium felix-femina*), cascara (*Frangula purshiana*), coyote brush, fire weed (*Chamerion angustifolium*), hedge nettle (*Stachys ajugoides*), and California aster (*Symphyortrichum chilensis*).

Portions of the Redwood Creek levee frontage contains seasonal wetland vegetation, with native vegetation represented by widely scattered tall flatsedge (*Cyperus eragrostis*), small-fruit bulrush (*Scirpus* microcarpus), toad rush (*Juncus bufonius*), silverweed (*Potentilla anserina*), common monkey flower (*Mimulus guttatus*), dagger rush (*Juncus ensifolius*), and meadow foxtail (*Alopecurus genticulatus*); and widely scattered non-native cover of white sweetclover, common canary grass (*Phalaris canariensis*), hyssop loosestrife (*Lythrum hyssopifolia*), modiola (*Modiola caroliniana*), lady's thumb (*Polygonum persicaria*), castor bean (*Ricinus communis*), and Klamath weed (*Hypericum perfoliata*). Seasonal wetland vegetation ground cover was visually estimated at 60 to 90 percent. Ruderal herbaceous ground cover was visually estimated at 5 to 100 percent.

The biological survey did not record any population of sensitive plant species on the Project Site. Due to long-established agricultural use and the Redwood Creek levee, resulting in isolation from periodic high creek flows and depauperate natural habitats, no sensitive plant species would be expected. Black-capped Chickadees (*Poecile atricapillus*) were observed in the riparian area. The Black-capped Chickadee is a species of limited distribution in California, primarily found in coastal riparian and well-developed river riparian in northern California and in Humboldt and Del Norte counties (DFW, 2011, California Watch List). No nests of Herons, Osprey, Bald Eagles, or any raptors were seen at the Project Site, although fledgling White-tailed Kites were observed at the Project Site during the survey, and both Osprey and Peregrine Falcon were observed near the riparian of Redwood Creek, opposite the Project Site. Riparian and gravel bar habitats are found adjacent to the Project Site and located within the streamside management area of Redwood Creek.

SETBACK ANALYSIS

Seven Evaluation Criteria for Establishing Buffer Areas

Biological significance of adjacent lands

The clear biologically-significant adjacent lands to the Project Site are the riparian habitat and stream channels of Redwood Creek. The creek waters provide transport for the resident, diverse populations of fish and other freshwater- dependent wildlife. The stream channel riparian habitat is an important cover for birds and other wildlife and is essential to stream channel dynamics. The stream channel is an important corridor for nearly all species of wildlife in lower Redwood Creek; however, the entire Redwood Creek stream channel is physically and functionally separated from the Project Site by the flood control levee. The stream corridor is 100 feet or greater from the Project Site based on the width of the levee bordering the north side of the Project Site.

On the Project Site itself, remnant creek riparian vegetation is limited to a few widely scattered trees (Monterey Pine [*Pinus radicata*], false cypress [*Chamaecyparis* sp.]) in the most northwesterly corner. This remnant riparian habitat has lost much of its resource value due to understory grazing and the inability to replenish the stand composition by the flood control levee. The levee is 100 feet wide along the length of the creek frontage and is 10 feet to 20 feet high. The physical features of the levee isolate the creek habitats from Project Site disturbance.

Seasonal wetlands located on the south side of the levee, identified by SHN (2010) and confirmed by LACO (2013), appear to have developed solely as a result of the artificial blockage of natural run-off created by the levee; the seasonal wetlands are dominated by non-native plants and have little to no natural resource value. Other isolated seasonal wetlands on the Project Site (Appendix A: Figure 2 Confirmed Wetlands Map [wetland numbers 2-5]) are of poor quality as well, degraded by grazing, hay operations, and flood control. The site is bound by U.S. Highway 101 to the south and Redwood Creek levee to the north. A residential neighborhood is located to the east of the Site and an abandoned service station is located in the southeast corner. Immediately west of the Site are commercial properties. Because of the isolation of the Project Site from the natural creek processes and the very low-grade value of the on-site riparian and seasonal wetlands, a 100-foot setback from the existing wetlands is more than adequate.

Sensitivity of species to disturbance

The lower Redwood Creek species most sensitive to disturbance are the anadromous, native salmonids. Also highly sensitive to disturbance are alluvial, flood plain, gravel-nesting bird species. Raptors and land birds using the riparian habitat are also relatively sensitive. All of these naturally occurring species are protected from Project Site disturbance by the presence of the flood control levee. The levee is 100 feet wide along the length of the creek frontage and is 10 feet to 20 feet high. The physical features of the levee isolate the creek habitats from Project Site disturbance.

Susceptibility of parcel to erosion

The entire Project Site is relatively flat and is protected from creek flows by the adjacent flood control levee, limiting its susceptibility to erosion. Post development, the site will remain largely impervious. Runoff from gravel roads and camping sites will be routed to adjacent landscaped areas. The commercial center in the south east corner of the Project Site will have a paved parking area. The parking area will be developed to incorporate low impact development strategies including an on-site storm water management swale. This feature will be located adjacent to U.S. Highway 101, over 900 feet from the coastal wetland. The Project Site currently has a very low susceptibility to erosion and this will continue to be the case post development.

Use of natural topographic features to locate development

The Project Site is generally flat and lacks any natural topographic features.

Use of existing cultural features to locate buffer zones

The existing flood control levee provides a 100-foot-wide, 10 to 20-foot-high feature buffering Redwood Creek from development. There are no cultural features near the coastal wetland on the Project Site off which to locate the buffer zone.

Lot configuration and location of existing development

Little or no buffers exist opposite the Redwood Creek levee on adjacent properties.

Type and scale of development

The proposed project involves a large recreational development, but because of the limited resource value found on the Project Site, a strict 100-foot setback from wetlands and the protective buffer provided by the bordering flood control levee is considered adequate. The type and scale of development is compatible with on-site biological resources.

RESULTS AND RECOMMENDATIONS

The biological survey did not record any population of sensitive plant species on the Project Site. Due to long-established agricultural use and the Redwood Creek levee, few sensitive plant species would be expected. As noted earlier in this report, because of the isolation of the Project Site from the natural creek processes and the very low-grade value of the on-site riparian and seasonal wetlands, a 100-foot setback from the existing wetlands is more than adequate.

Additionally, proposed wetland mitigation designed to create a larger and enhanced wetland area will contribute to habitat protection (Appendix A: Figure 3 Site Plan). Approximately 2.78 acres of wetland habitat will be created adjacent to the existing coastal wetland within the 100 foot setback. This is the only development that will occur within the setback. The natural and created wetland h will be protected by the installation of a prominent wood split rail fence that will discourage inadvertent development or recreational use of the habitat area. Native land bird use of the riparian habitat on the Project Site, including use by Black-capped Chickadees, will benefit from the 100-foot wetland setback and enhanced habitat.

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Orick Town Site Wastewater Treatment & Disposal
Preliminary Design

Orick, California

April 1, 2014

Prepared For:
Redwood Parks Lodge Company

Prepared By:
LACO Associates, Inc.
21 W. 4th Street
Eureka, California 95501
707 443-5054

Project No. 6782.06

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Orick Town Site Wastewater Treatment & Disposal Preliminary Design

Orick, California

April 1, 2014

Prepared for:
Redwoods Park Lodge Company

LACO Project No. 6782.06

Christopher J. Watt, CEG 2145 exp. 3/31/16

Scott Kelly, PE 49254 exp. 9/30/14

LACO

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1.0 INTRODUCTION

The following report documents our on-site septic suitability field investigation and preliminary design of a new on-site wastewater treatment and disposal system (OWTS) to serve the future Orick Town Site, located in Orick, California (Figure C1). The project will consist of a service station and short-order sandwich restaurant, recreational vehicle (RV) park, tent camping, a laundry facility for overnight residents, an RV dump station for overnight residents, and a single-family on-site residence. The OWTS will treat wastewater produced by commercial, recreational, and residential activities at the site, with a total estimated flow of approximately 21,025 gallons per day (gpd). The location of the proposed disposal field and 100 percent reserve area were previously selected by the site owner and LACO Associates' (LACO) planning team (Figure C1).

LACO was retained by Redwood Parks Lodge Company (Client) to complete several tasks related to the project as described in our Service Agreement dated June 6, 2013. LACO performed a soils suitability analysis and wet-weather testing for the site, and prepared the Orick Town Site On-Site Wastewater Soils Suitability Exploration Technical Memorandum dated June 18, 2013 (Attachment 1).

Our scope of services regarding the preliminary design of the OWTS is included as Task 2460 of our Service Agreement, which was limited to the following:

1. Review existing geologic and site information, and evaluate the following:
   - Consistency with North Coast Region Water Quality Control Board (NCRWQCB) Basin Plan Requirements;
   - Maximum wastewater treatment plant loading;
   - Seasonal variation in loading;
   - Seasonal constraints on on-site disposal; and,
   - Potential wastewater quality concerns with recreational vehicle wastewater dump stations.
2. Reconnaissance to evaluate Site constraints and opportunities.
3. Review current limitations and wastewater treatment requirements with NCRWQCB.
4. Review and assess package wastewater treatment technologies to meet project and regulatory requirements. Review disposal options, including potential for irrigation with recycled water. Communicate with treatment package vendors to verify performance, references, warranties, and appropriate applications.
5. Prepare a preliminary design report based on the soils report and wet-weather testing, anticipated wastewater loading (including daily and seasonal variations), regulatory requirements, treatment and disposal options, and monitoring protocols.
6. Prepare an engineer's opinion of probable construction cost and monitoring/maintenance costs for submittal to the Owner.

Upon approval of the preliminary design by the Client and regulatory agencies, the scope of services includes the preparation of final design documents for construction of the system. This scope of services does not include services during the bidding or construction phases of the project.

1.1 Proposed Development

Redwood Parks Lodge Company proposes to develop the site with a Resort consisting of a recreational vehicle (RV) park and commercial center. Preliminary design of the site includes camping spots to accommodate 82 standard RV sites, 12 RV cottage unit sites (covered RV sites), 48 tent sites, and 10 tent cottages. Amenities provided for overnight guests include bathhouses, parking, walking trails, hot tubs, BBQ pavilions, bocce courts, recreational fields, and a dog park area. Additionally, a commercial center consisting of a deli, convenience store, adventure touring center, and gas station will be located at the entrance to the resort, and open to the general public.

The resort is expected to experience a peak season from April through October. The majority of use will occur during this time. Hours for the commercial center during peak season will be 6 a.m. to 9 p.m. Off-peak season is expected from November to March. Hours during the off-peak season will be 7 a.m. to 7 p.m. There will be 21 full-time equivalent staff during the peak season. Operations will pare down for the off-peak season and staff will be reduced as necessary for efficiency and functional resort operations.

Additionally, the resort is expected to host up to 12 special events per year. These events may include weddings, celebrations, family reunions, school/youth field trips, and small musical productions. Events will generate a maximum of 100 attendees that are not staying on-site overnight.

All new development will be served by Orick Community Services District (OCSD) water. The estimated daily demand for water is 21,882 gallons per day (peak). Electricity will be provided by Pacific Gas and Electric Company (PG&E). All electrical lines within the park will be underground.

2.0 SITE DESCRIPTION AND GEOLOGIC CONDITIONS

The subject site is an approximately 26.7-acre parcel (APN 520-142-009) located between U.S. Highway 101 and Redwood Creek, in the Town of Orick, Humboldt County, California (see Figure C1). The site is bisected by the California coastal zone boundary, with approximately 11.7 acres (43.8%) of the site within the California coastal zone and approximately 15 acres (56.2%) inland. The proposed location for the disposal field and reserve area is an approximately 0.8-acre area located in the inland portion, along the southern edge of the property (Figure C1). Currently, the site is generally flat, undeveloped land which is regularly used as livestock pasture land. Redwood Creek and its levee system abut the northern boundary of the subject site. Underlying the site are Holocene age sediments (hundreds of feet thick) deposited by Redwood Creek, which is the regional unconfined groundwater aquifer. Soil types within 50 feet of the ground surface between the subject site and Redwood Creek are loose, coarse sand/gravel with discontinuous lenses of soft fine-grained soil which extend below the Redwood Creek levees.

3.0 FIELD EXPLORATION

3.1 Methods

Soil and groundwater conditions at the site were characterized by LACO on April 12, 2013, utilizing a backhoe provided by the Client. Ten exploratory test pits, denoted as BP-1 and BP-10, were excavated to depths of up to 8 feet below ground surface (bgs). Additionally, monitoring wells (denoted MW6 through MW8) were installed at locations within the proposed disposal area. Soil Profile Logs and Monitoring Well Logs are included in the *Orick Town Site On-Site Wastewater Soils Suitability Exploration Technical Memorandum* (Technical Memorandum) dated July 30, 2013, prepared by LACO (Attachment 1).

Prior field explorations at the project site were completed by SHN Consulting Engineers & Geologists (SHN) in 2010, and a geotechnical evaluation of the Redwood Creek levee to the north of the site was prepared by CGI/Fugro in 2011. These studies were reviewed and considered where applicable to the project in the Technical Memorandum prepared by LACO (Attachment 1).

3.2 Subsurface Conditions

Soils encountered during our field exploration and prior field explorations (SHN 2010) generally consisted of a sandy silt topsoil (USDA Loam – Zone 2) ranging from 1 to 6 feet thick, underlain by loamy sands (USDA Sand – Zone 1) which grade coarser with depth. Groundwater was encountered at depths ranging from 14 to 18 feet bgs during the dry season (see Attachment 1), and at depths ranging from 10 to 12 feet bgs during the wet season (SHN 2010).

3.3 Percolation Test Data

Percolation tests were conducted at four locations within the general locations of the anticipated disposal areas. A sump was hand excavated in each percolation test pit in order to test a 1-foot by 1-foot area. The percolation tests were conducted at depths ranging from 1 foot to 4 feet bgs to measure percolation rates of the different soils present at the site (including Zone 1 and 2 soils). The test pits were pre-soaked for 1 hour prior to the start of each percolation test.

Measured percolation rates stabilized at rates of less than 1 minute per inch (mpi) in the Zone 1 soils and from 3 to 8 mpi in the Zone 2 soils. Soil percolation test sheets are included in Attachment 1. For design purposes, a maximum soil loading rate of 2.5 gallon per day per square foot (gpd/ft^2), equal to the minimum percolation rate of less than 1 mpi (Zone 1 soils), was used to size the primary disposal field and 100 percent reserve area. The soil basal loading rate is derived from Appendix II, page 41, of the Humboldt-Del Norte County Department of Public Health Sewage Disposal Regulations, dated January 1984.

4.0 GROUNDWATER MONITORING

4.1 Hydraulic Gradient and Groundwater Velocity

Hydraulic gradients were determined using hydraulic head data collected from monitoring wells MW1 through MW8 and domestic well IRR-1 on May 7 and May 24, 2013. Specifically, groundwater levels measured in monitoring wells MW2, MW3, and MW4 (screened from 10 to 20 feet bgs) were used to determine the hydraulic gradient. Table 1 presents the calculated hydraulic gradients determined for the site for the monitoring events.

Table 1: Calculated Hydraulic Gradients for Orick Town Site

Date	Hydraulic Gradient	Direction
May 24, 2013	0.0009	N88°W
May 7, 2013	0.0012	N73°W

Groundwater monitoring forms for the May 7 and May 24, 2013, monitoring events are included in Attachment 1.

Groundwater velocity was estimated using results from an aquifer dilution test performed at the site by LACO on May 24, 2013. Details for test and calculation methods are included in the Orick Town Site On-Site Wastewater Soils Suitability Exploration Technical Memorandum (Attachment 1). Based on the borehole dilutions results, we estimate a groundwater velocity range of 45 to 113 feet per day for the sand and gravel unit between 15 and 20 feet bgs. Redwood Creek is located approximately 700 feet downgradient from the proposed disposal field area.

4.2 Nitrogen Attenuation

Nitrogen attenuation at the site was modeled using the Domenico analytical model for contaminant attenuation in groundwater. The Domenico model incorporates one-dimensional advection, three-dimensional dispersion, retardation, and biological decay to estimate contaminant transport in groundwater. The nitrogen attenuation model was used to determine the maximum allowable nitrogen concentrations in effluent, using the following compliance requirements established by the NCRWQCB for the site:

- Nitrate concentration less than 10 mg/L at a distance of 10 feet from the disposal field, and
- Nitrate concentrations equal to background levels (2 mg/L) at the down-gradient location of groundwater discharge into Redwood Creek.

Results from the model indicate the maximum allowable nitrogen concentration of effluent is 12.5 mg/L for the proposed disposal field location, loading, and size. A detailed description of the method and the results of our analysis are included in the Orick Town Site On-Site Wastewater Soils Suitability Exploration Technical Memorandum, and its Addendum, included in Attachments 1 and 2.

5.0 ON-SITE WASTEWATER TREATMENT AND DISPOSAL SYSTEM DESIGN

5.1 Wastewater Loads

Estimated daily wastewater flow rates were based on the anticipated peak occupancy rates for the commercial, recreational, and residential activities proposed for the site. Assumed loading rates are based on rates recommended in Table VII of the Humboldt County Department of Public Health Sewage Disposal Regulations (HCDPH 1984). Additionally, we estimate the daily loading for the RV dump station will be 2,350 gallons per day, which was determined assuming a changeover rate of 50 percent and an average waste dump load of 50 gallons. This loading assumes only overnight RV residents will be allowed to utilize the RV dump station, as confirmed by the Client.

Additionally, the nitrogen loading (presented as Total Kjeldahl Nitrogen, TKN) per each effluent source was estimated using published data and recommended values from industry experts.

Table 2 presents the anticipated peak daily wastewater loading and nitrogen loading at Orick Town Site.

Table 2: Anticipated Wastewater Loading

Effluent Source	Loading Per Unit (gpd)	Number of Units	Total Loading (gpd)	TKN
RV Cottage Unit Stalls (long-term)	100	12	1,200	100
RV Standard Short-Term Stalls	100	82	8,200	100
RV Dump Station	50 (per dump)	47	2,350	250
Tent Sites and Tent Cottages (average 2 campers per site)	35 (per camper)	116	4,060	100
Laundry	50 (per user)	40	2,000	30
Short-order Restaurant	6 (per customer)	50	300	120
Service Station	5 (per customer)	300	1,500	120
	15 (per employee)	21	315	120
Spa/Hot Tub	800	1	800	200
Residence	75 (per person)	4	300	100
			21,025	

5.2 Design

Wastewater Treatment System Design

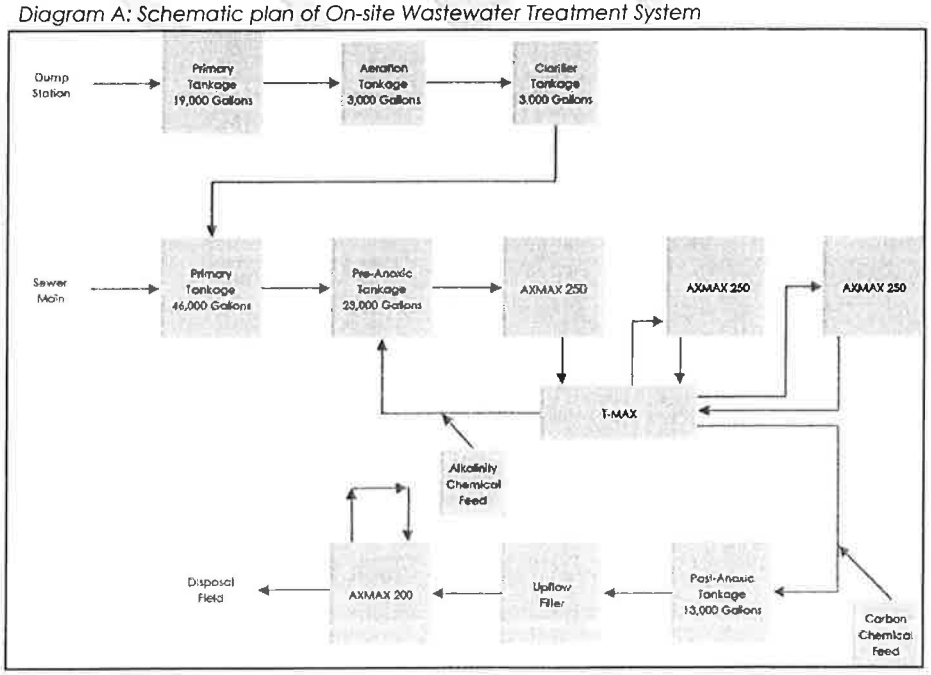
Primary treatment of raw sewage will be accomplished with a central treatment system consisting of several underground tanks which provide primary settling, anoxic/post-anoxic treatment, and textile media treatment of the sewage (see Diagram A, below). The recommended on-site wastewater collection and treatment system has been selected by LACO (with assistance from Orenco Systems, Inc.) to reduce the total nitrogen levels of effluent to less than 12.5 mg/L (see Section 4.2 of this report).

Design alternatives considered for this site include the following:

- Multiple wastewater collection and treatment "centers" located across the site, which would pump treated effluent to the disposal field.
- Separate collection and treatment of dump station waste (which has the highest nitrogen and BOD levels). Other site wastewater would still be collected and treated using similar methods to those which we have recommended.
- Sizing the system to handle three quarters of the anticipated maximum wastewater loading, and incorporate an overflow tank to hold peak wastewater loads until capacity in the system is available.
- Partial or complete use of treated effluent as irrigation water for the site, which would reduce the size of or remove the need for a disposal field. This alternative was rejected due to the significantly higher cost to comply with State regulations for the reuse of recycled wastewater (California Department of Health Water Regulations - Title 22 Section 60304[d]).

These other alternatives were ultimately rejected due to high costs, space restrictions, and possibility of system failure.

Diagram A: Schematic plan of On-site Wastewater Treatment System



Wastewater from the recreational, commercial, and residential activities on site (including dump station waste) will flow into a 46,000-gallon primary septic tank, sized for two times the anticipated daily wastewater loads. Effluent would then flow into a treatment network consisting of pre/post-anoxic tanks, Orenco Advantex treatment pods (AXMAX 250), an upflow filter, and a final Orenco Advantex treatment pod (AXMAX 200), before dispersal into a disposal field. Effluent recirculation occurs multiple times throughout the process. We recommend Orenco AdvanTex treatment systems for the site due to its ability to reduce effluent BOD, TSS, and TKN to the target concentrations, and the local availability of the products. The proposed layout of the treatment system and the treatment system details are included in Figures C2 and C3, respectively. A brochure for the Orenco AdvanTex treatment systems is included as Attachment 3.

Due to the anticipated high concentrations of solid waste and oxidation inhibitor chemicals (commonly used in RV septic tanks) in the dump station waste, additional treatment and retention time of the raw dump station sewage is required before incorporated into the primary treatment system. Raw sewage from the dump station will flow into a 19,000-gallon primary tank which will provide over 8 days of retention time. Raw sewage will then flow into a series of 3,000-gallon aeration and clarifier tanks before flowing into the primary tank of the treatment system.

The final AdvanTex treatment pod (AXMAX 200) will house an effluent pump and a high water alarm switch. The effluent pump will be sized to pump 185 gallons per minute and 19 feet of total head (pump sizing calculations are included as Attachment 4). The high water alarm will be set to trigger when wastewater in the tank reaches 21,000 gallons (approximately equal to the estimated daily flow).

We recommend fiberglass tanks be used to minimize potential leaking issues which commonly occur along the joints of concrete tanks. The use of fiberglass tanks will require concrete deadmen be used to prevent the tanks from floating should high groundwater conditions occur.

Disposal Field Design

Dispersal of the treated effluent will occur through pressure dosing to a disposal field, comprising 19 150-foot long disposal laterals in parallel which are spaced 6 feet apart (on center). Pressure dosing will provide a means for achieving equal distribution which will enhance treatment of the effluent within the native soil and the longevity of the infiltration site. A total required disposal field with trench sidewall area of 8,410 square feet was calculated using a soil loading rate of 2.5 gallons per day per square foot (gpd/ft$^{2)}$ of trench sidewall area below the pipe), as recommended for soils with a percolation rate greater than 1 mpi in Appendix II of the Humboldt-Del Norte County Department of Public Health Sewage Disposal Regulations (Humboldt 1984). The location of the dripfield and 100 percent reserve area are shown in Figure C2. Dripfield details are presented in Figure C3. Calculations for the dripfield design are included as Attachment 4.

The pressurized disposal laterals are to be constructed of 1 ½-inch Schedule 40 PVC with $^1/_8$-inch orifices spaced 5 feet apart. The disposal laterals are to be placed into 12-inch wide trenches constructed to the coarse native sands 4 feet bgs. The drip lines should be placed at least 6 inches into the coarse native sands. The drip lines and at least 6 inches of surrounding coarse materials are to be wrapped in woven geotextile fabric.

Monitoring Protocol

Monitoring wells are to be installed at a location 10 feet down-gradient of the disposal field (two wells located at opposite ends of the disposal field and one at the center), and at two locations 100 feet down-gradient of the disposal field to check for attenuation needed to comply with nitrogen removal requirements. Monitoring wells are to be constructed with a screen interval from 15 to 20 feet bgs. Groundwater samples from the monitoring wells are to be tested to check that nitrate concentrations are within the ranges allowed under Waste Discharge Requirements to be issued by North Coast Regional Water Quality Control Board for the site.

6.0 COST ESTIMATE FOR OWTS

An engineer's estimate of construction costs of the wastewater treatment and disposal system is included as Attachment 5.

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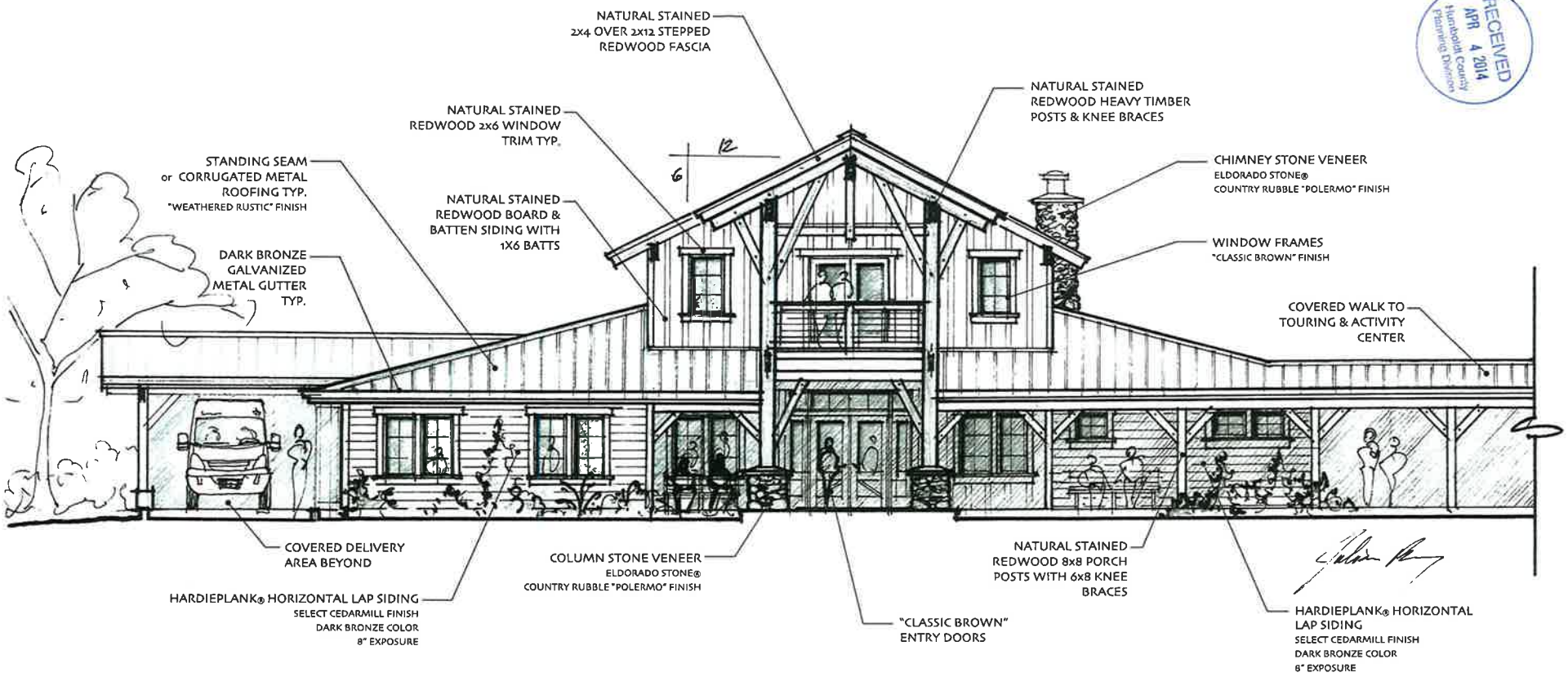

CONCEPTUAL EAST ELEVATION

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REDWOOD NATIONAL PARK RESORT

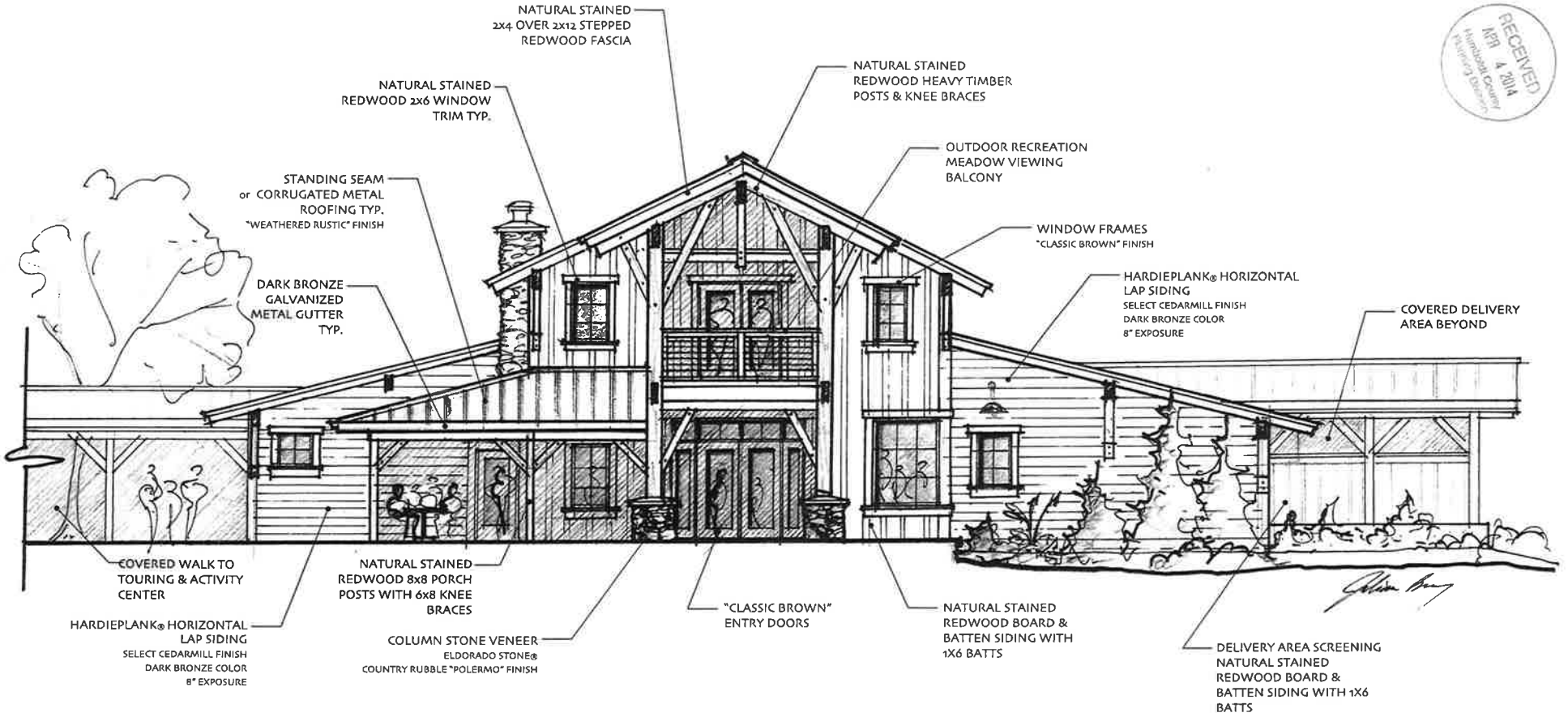
ORICK TOWN SITE

REDWOOD PARKS LODGE COMPANY

MARCH 31st, 2014

0' 5' 10'

1" GRAPHIC SCALE MEASURES 1 INCH ON FULL-SIZE PLANS



CONCEPTUAL WEST ELEVATION

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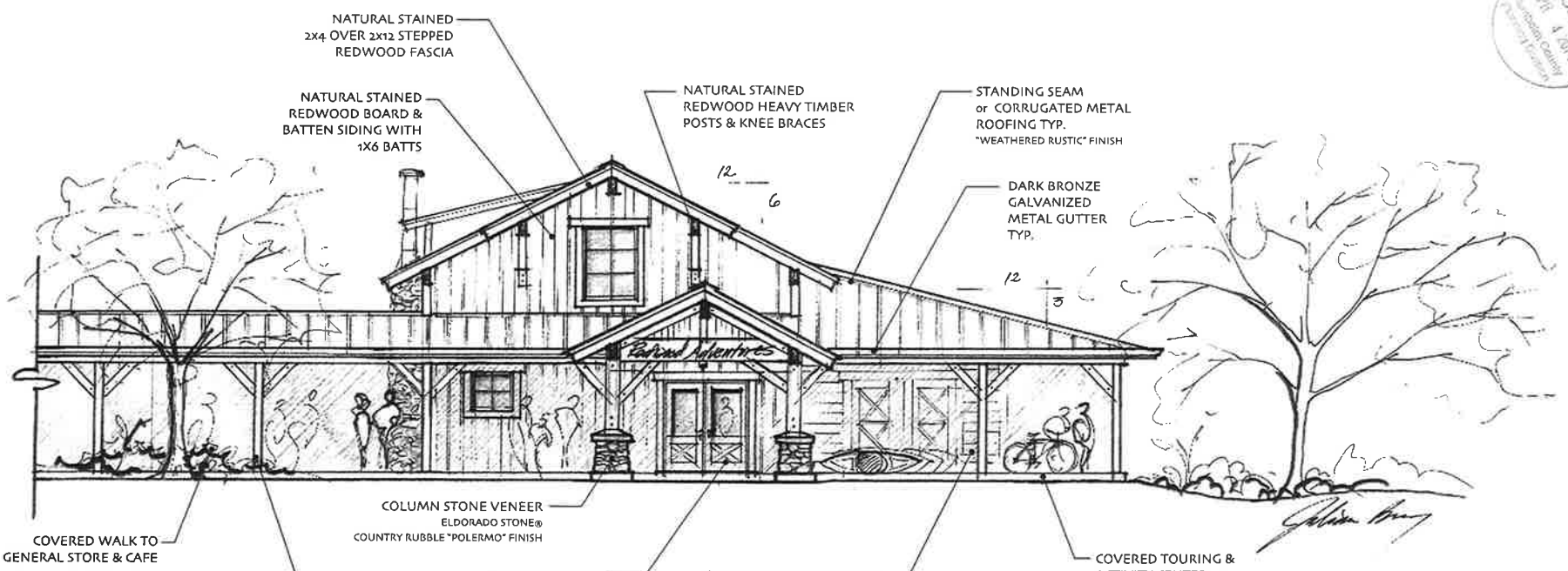
MARCH 31st, 2014

0' 5' 10'

1" GRAPHIC SCALE MEASURES 1 INCH ON FULL-SIZE PLANS



CONCEPTUAL WEST ELEVATION

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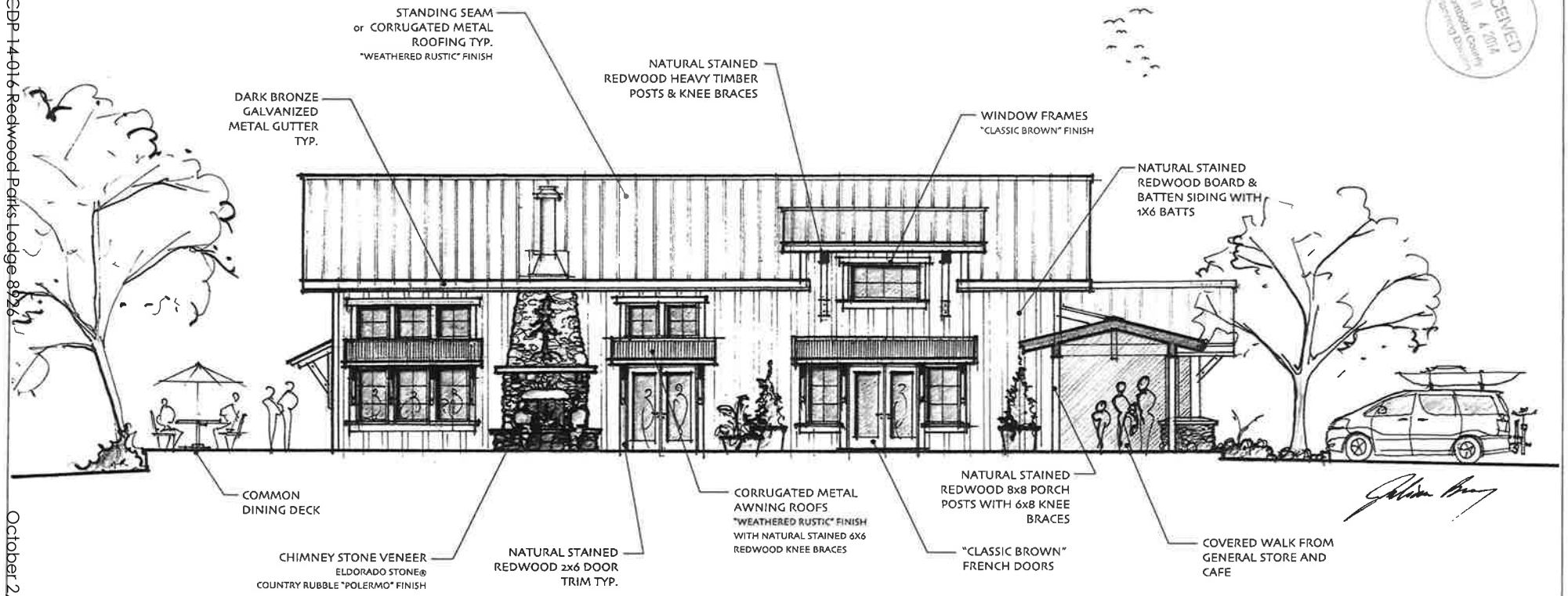
REDWOOD NATIONAL PARK RESORT

ORICK TOWN SITE

REDWOOD PARKS LODGE COMPANY
MARCH 31st, 2014

0' 5' 10'

1" GRAPHIC SCALE MEASURES 1 INCH ON FULL-SIZE PLANS



CONCEPTUAL WEST ELEVATION

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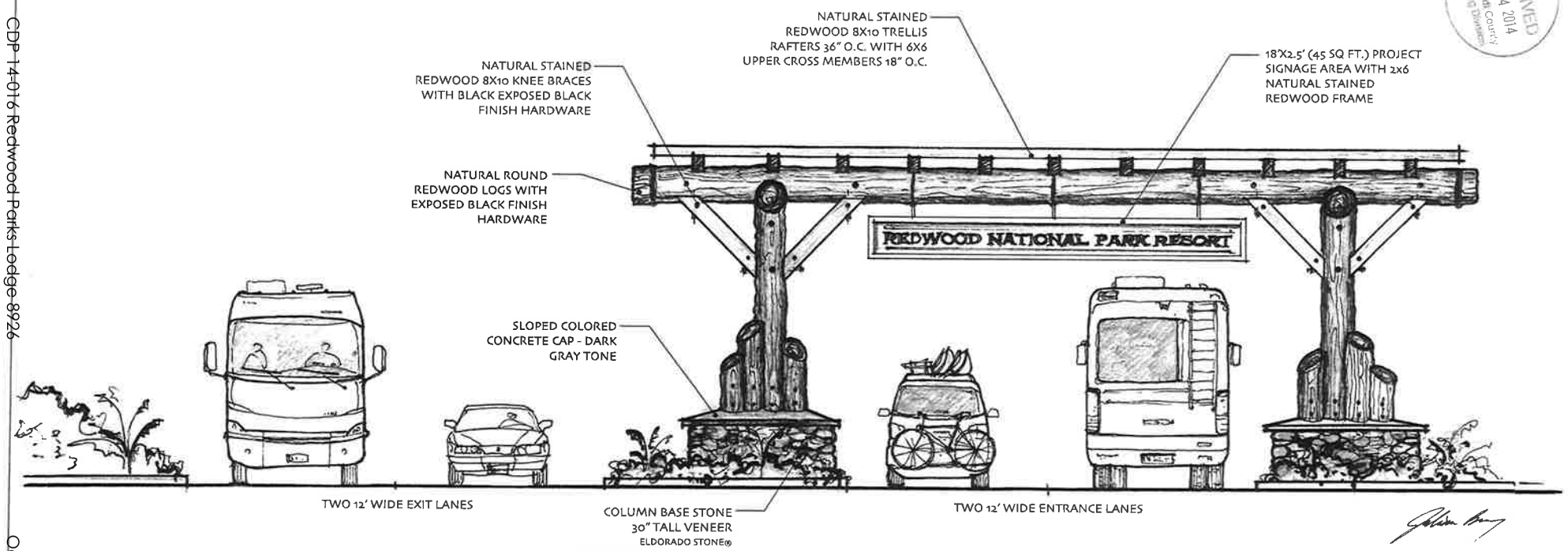
MARCH 31st, 2014

0' 5' 10'

1" GRAPHIC SCALE MEASURES 1 INCH ON FULL-SIZE PLANS



RESORT ENTRY GATEWAY - CONCEPTUAL FRONT ELEVATION

ALONG HWY 101 FRONTAGE

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REDWOOD NATIONAL PARK RESORT

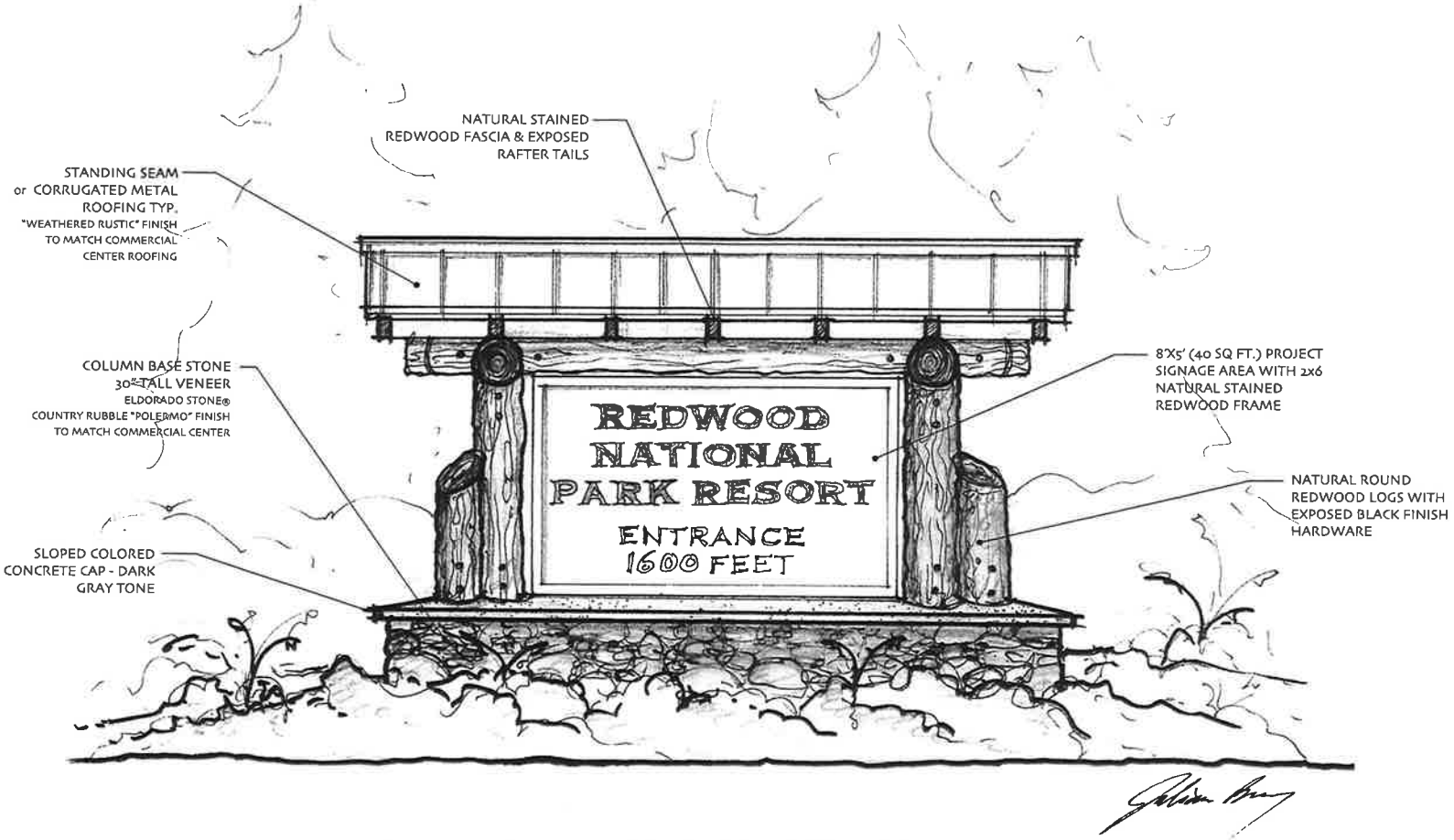
ORICK TOWN SITE

REDWOOD PARKS LODGE COMPANY

MARCH 31st, 2014

0' 5' 10'

1" GRAPHIC SCALE MEASURES 1 INCH ON FULL-SIZE PLANS



RESORT SIGNAGE - CONCEPTUAL FRONT ELEVATION

ALONG HWY 101 FRONTAGE - SOUTH EAST PROPERTY CORNER

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REDWOOD PARKS LODGE COMPANY
MARCH 31st, 2014

0' 2.5' 5'
1" GRAPHIC SCALE MEASURES 1 INCH ON FULL-SIZE PLANS

LACO

TECHNICAL MEMORANDUM

Drainage Analysis
Redwood National Park Resort
Redwood Parks Lodge Co.

Date:	April 2, 2014
Project No.:	6782.06
Prepared For:	Redwood Parks Lodge Company, Inc.
Prepared By:	Becky Dower, PE
Cc:	Beth Burks, AICP (LACO) Mike Nelson, AICP (LACO)
Attachments:	Appendix 1: IDF Curve Appendix 2: Calculations

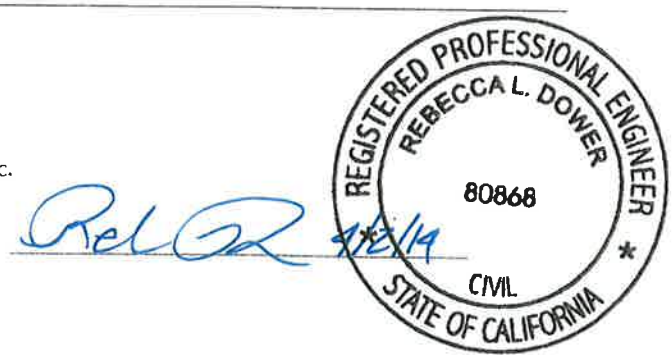

Figure 1: Location Map
Figure 2: Conceptual Drainage Plan

1.0 INTRODUCTION

Redwood Parks Lodge Company, Inc. proposes to develop a special occupancy park and commercial center to be known as Redwood National Park Resort (Resort). The subject site is a relatively flat, approximately 26.4-acre parcel within the community of Orick, California (Figure 1: Location Map). The purpose of this technical memorandum is to provide a basis for preliminary recommendations for design of a stormwater drainage and retention system at the Resort. The analysis and recommendations herein are based on the *Conceptual Drainage Plan* dated March 11, 2014, prepared by LACO Associates. The *Conceptual Site Plan* is incorporated into the *Conceptual Drainage Plan* attached as Figure 2.

Aside from an existing approximately 1,800-square-foot (sq.ft.), single-family residence located on the southern edge of the site, the majority of the site is pasture land. Several wetlands have been identified (*Redwood National Park Resort Wetland Confirmation*, LACO Associates December 2013) and the site is bisected by the coastal zone boundary. Based on field reconnaissance the site appears to generally drain toward the southern property line, with a small area of the site also draining toward the north into the existing wetland area. An existing open ditch/drainage swale is present along the southern property line, adjacent to the site's frontage on U.S. Highway 101. The ditch/drainage swale varies in depth from approximately 1 foot to approximately 3 feet below adjacent grades and tapers slightly at both ends, near the eastern and western boundaries of the property, providing a degree of hydraulic isolation between the

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project site and the adjacent properties to the immediate east and west. There was no observed evidence of storm drain infrastructure in place at either end of the ditch/drainage swale to convey stormwater flow from the ditch to an off-site location. As currently situated, the ditch/drainage swale is heavily vegetated with a mix of grass and berry bushes. A levee exists between the site and Redwood Creek to the north, preventing surface drainage from the site from entering the creek.

Proposed improvements include development of 152 campsites to accommodate RVs, park models, tents, and tent cottages. Additionally, the proposed project includes the construction of an approximately 5,500-sq.ft. commercial center, a 6-pump gas station, an approximately 2,000-sq.ft. maintenance barn, an approximately 1,200-sq.ft staff house, 3 bath houses, and 8 barbeque pavilions. The existing residence on the property will be retrofitted for use as the proposed manager's residence. A total of 295 paved parking spaces are planned for the site along with a chip-surface trail. Approximately 20.3 acres will be developed; the remaining approximately 6.1 acres will include wetland setback and mitigation areas. The Humboldt County Planning Department is currently processing an application for a Conditional Use Permit (CUP), Coastal Development Permit (CDP), and a Special Permit (SP) for the development and operation of the commercial-recreational facility.

2.0 DESIGN REQUIREMENTS AND CONSIDERATIONS

2.1 Humboldt County Department of Public Works

The Humboldt County Department of Public Works, Land Use Division has developed a standard requiring stormwater be controlled within a new development such that peak runoff from the site for a post-development 100-year frequency storm does not exceed peak runoff from the site for a pre-development 2-year frequency storm. The drainage facilities on this site will be designed to retain and infiltrate all the stormwater runoff from a post-development 100-year storm without discharging water off site; therefore, discharge-restriction devices will not be required. This technical memorandum includes peak flow calculations for the pre- and post-development site conditions, as well as calculations to determine the water volume that will be generated from the 100-year storm.

2.2 State Water Resources Control Board

The State Water Resources Control Board (SWRCB) Construction General Permit (CGP) requires construction sites disturbing over one acre, retain a volume of runoff produced by the 85th percentile, 24-hour rain event, as determined from the local historical rainfall record. The newer Municipal Separate Storm Sewer Systems (MS4) General Permit from the SWRCB includes more compulsory language for low-impact development (LID) features in project design (e.g., bioswales, infiltration basins).

The drainage design included in this technical memorandum is conceptual. The final site design will need to indicate appropriate grading of the site to direct stormwater runoff to the proposed swales and rain gardens, as shown in Figure 2. Through a combination of swales, rain gardens, and natural percolation, 100 percent of the calculated post-development stormwater runoff generated by the proposed project can be retained on site. As the Humboldt County design storm is capable of producing much more stormwater runoff than the much smaller CGP design storm, providing sufficient retention volume for the Humboldt County design storm would also provide more than adequate storage for the CGP storm event.

3.0 METHOD AND CALCULATIONS FOR RUNOFF VOLUME DETERMINATION

3.1 Stormwater Infiltration Measures

According to *Orick Town Site On-Site Wastewater Soils Suitability Exploration*, a draft technical memorandum prepared by LACO in June 2013, soil percolation tests were conducted at the site to determine how well the in situ soils infiltrate water. Percolation rates describe the amount of time it takes (in minutes) for the soil to absorb one inch of standing water. As described in the memorandum, measured percolation rates varied from 2 minutes per inch (mpi) to 37 mpi. The reported average percolation rate at 1.5 feet below ground surface (bgs) was 13 mpi; the rate at a depth of 2 feet bgs was 7 mpi. Depth to seasonally high groundwater is approximately 12 feet bgs, leaving considerable depth between the surface and the groundwater table for infiltration to take place. For the purpose of this analysis, a conservative 13 mpi percolation rate is used to account for likely stormwater infiltration within the drainage facilities.

3.2 Runoff Flow Calculations

The Rational Method (Eqn. 1) was used to determine the post-development peak discharge flows at the site. This method takes into account the rainfall intensity for a given storm event, the type of surfaces present at the site, and the area associated with each surface.

Rational Method

$$Q = CiA \qquad Eqn. 1$$

Where

- Q = Peak stormwater discharge flow, in cubic feet per second (cfs)
- C = Surface runoff coefficient
- i = Rainfall intensity, in inches per hour (in/hr)
- A = Surface area, in acres (ac)

Table 1 outlines the Rational Method parameters of the pre- and post-development conditions at the site. Appendix 1 contains a copy of the rainfall intensity-duration-frequency (IDF) curve used to determine the appropriate rainfall intensity values (*i*) for this Memorandum. Runoff flow calculation results are presented in the following section.

Table 1: Surfaces and runoff coefficients

Surface Type	Runoff Coefficient (C)	Area (ac)	Weighted Runoff Coefficient (C_x)
Pre-Development Conditions			
Roof top/paving	0.90	0.13	0.10
Landscape/pasture	0.10	26.27	
Post-Development Conditions			
Roof top/paving	0.90	6.8	0.33
Landscape/pasture	0.10	18.4	
Chip Paths	0.7	1.2	

Reference: Civil Engineering Reference Manual, 11th Edition, 2011

3.3 Storage Volume Calculations

To determine the largest required stormwater storage volume needed on site to retain the 100-year storm, a selection of storm durations and the associated storm intensities were analyzed to determine what storm duration produced the largest runoff volume. The following equation (Eqn. 2) was used to calculate the stormwater runoff volume produced by each storm duration/storm intensity scenario:

$$V = \frac{3 * tc * Q}{2} + (T - tc) * Q \qquad Eqn. 2$$

Where

- V = Volume of stormwater, in cubic feet (cf)
- t_c = Time of Concentration (mins)
- Q = Peak stormwater discharge flow, in cubic feet per second (cfs)
- T = storm duration (mins)

The Rational Method was used to calculate peak flows at the site for a variety of storm intensities. Equation 2 was then applied to determine the corresponding volumes associated with the different peak flow results. The County minimum time of concentration of 10 minutes was used in our calculations; this value is conservative for this analysis. Outflow from the site in the form of infiltration was subtracted from the peak flow results produced using the Rational Method. Infiltration contributing to outflow was only assumed to occur within the drainage features where runoff would be stored (i.e., the bioswales and rain gardens). Considering a percolation rate of 13 mpi, about 42,000 sq.ft. of percolation area (representing all of the area to be developed as rain gardens on the site) would be needed to produce about 4.5 cfs of outflow from the drainage facilities.

Table 2 shows the post-development stormwater flows and the corresponding volume of stormwater produced for the varying 100-year storm durations.

Table 2: Runoff Flow and Storage Volume Calculations

T (mins)	t_c (mins)	C	i(in/hr)	A	Q_{in} (cfs)	Q_{out} (cfs)	$Q_{storage}$ (cfs)	V_{store} (cf)
10	10	0.33	3.87	26.4	33.6	4.5	29.1	26,179
30	10	0.33	2.12	26.4	18.4	4.5	13.9	29,189
60	10	0.33	1.49	26.4	12.9	4.5	8.4	32,884
120	***10***	***0.33***	***1.06***	***26.4***	***9.2***	***4.5***	***4.7***	***35,248***
180	10	0.33	0.88	26.4	7.7	4.5	3.2	35,212

Using the percolation outflow rate of 4.5 cfs, a total percolation area of 42,120 sq.ft. and a total storage volume of 35,248 cubic feet is required to control and retain all of the stormwater generated on site by the worst-case, 100-year storm conditions, or the 2-hour, 100-year storm. Calculations are provided in Attachment 2 of this memorandum.

3.4 Stormwater Retention Measures

To meet the requirements of Humboldt County (thereby also meeting the CGP requirements), two bioswales and numerous rain gardens are proposed for the site. As mentioned in the Introduction section of this memorandum, a swale currently exists along the frontage of the site, and can be easily restored and expanded, as needed, to form an approximately 1,600-foot-long bioswale for stormwater retention. Stormwater runoff from the proposed commercial center and gas station parking lot, along with the staff housing and maintenance barn, can be discharged to this swale. Infiltration through the swale into the groundwater will occur as it currently does across the site. The bioswale provides above-ground storage for a large influx of runoff while infiltration continues to take place. Similarly, a new 600-foot-long bioswale is proposed along the eastern edge of the property and is positioned to receive surface runoff from the adjacent paved RV stalls. Furthermore, a series of rain gardens comprised of uniformly-graded gravels underneath planted areas provide additional underground storage for stormwater within the voids of the gravel. Similar to the bioswale, the rain gardens can accommodate a substantial amount of peak stormwater flow, removing the runoff from the surface and storing it until it can infiltrate the soil. Table 3 and Table 4 summarize the characteristics of the bioswales and the rain gardens, and provide a summary of the expected storage capacity of each of these drainage features.

Table 3: Bioswale Storage Capacity

Post-Development Conditions	
Length	2,200 ft
Cross-Sectional Area	12 ft²
Total Storage Capacity	**26,400 ft³**
Available Percolation Area	**24,077 ft²**

Table 4: Rain Garden Storage Capacity

Post-Development Conditions	
Surface Area	22,500 ft²
Depth	1 ft
Void Space	40%
Total Storage Capacity	**9,000 ft³**
Available Percolation Area	**22,500 ft²**

Table 5 provides a summary of the required and available stormwater volumes.

Table 5: Stormwater Volumes Summary

Required On-Site Storage Volume	Required On-Site Percolation Area	Provided On-Site Storage Volume	Provided On-Site Percolation Area
35,248 ft³	42,120 ft²	35,400 ft³	46,577 ft²

4.0 CONCLUSIONS AND RECOMMENDATIONS

The Humboldt County Department of Public Works requires stormwater runoff from the 100-year post-development storm be detained such that the peak flow discharge from the site is no greater than the 2-year pre-development peak flow discharge. Furthermore, the Construction General Permit requires retention volume be provided to accommodate runoff from the 85th percentile of the 24-hour storm event. In consideration of both requirements, implementation of a bioswale along the project frontage, a bioswale along the eastern edge of the property, and rain gardens located throughout the paved areas on site are recommended to provide the necessary storage volume to accommodate the calculated runoff volume while the site soils allow natural infiltration of the stormwater. The drainage features, as discussed in this memorandum, have the ability to provide excess stormwater storage beyond the calculated volumes.

The available on-site storage volume and percolation area both exceed the calculated storage volume and percolation area to retain all of the runoff volume produced by the worst-case duration 100-year storm as determined by this analysis. As percolation rates can vary by location on the site and may be slower within the top 1.5 feet of soil, this excess storage capacity is considered to be a factor of safety against slower percolation rates that may be experienced after the project is built.

Upon completion of final site design, additional analysis and modifications to the proposed drainage features may be necessary. The analysis performed during the preparation of this memorandum demonstrates the drainage features illustrated on the *Conceptual Drainage Plan* will provide adequate capacity to meet the Humboldt County runoff standards and the Construction General Permit retention requirements. The stormwater drainage features proposed for the site will retain the stormwater runoff on site until it can percolate naturally into the groundwater table, thereby preventing discharge from the site.

P:\6700\6782 Redwood Parks Lodge Company\6782.06 RPLC Orick Town Site Entitlements\10 Civil\Hydrology\Draft Drainage Memo.docx

FIGURES

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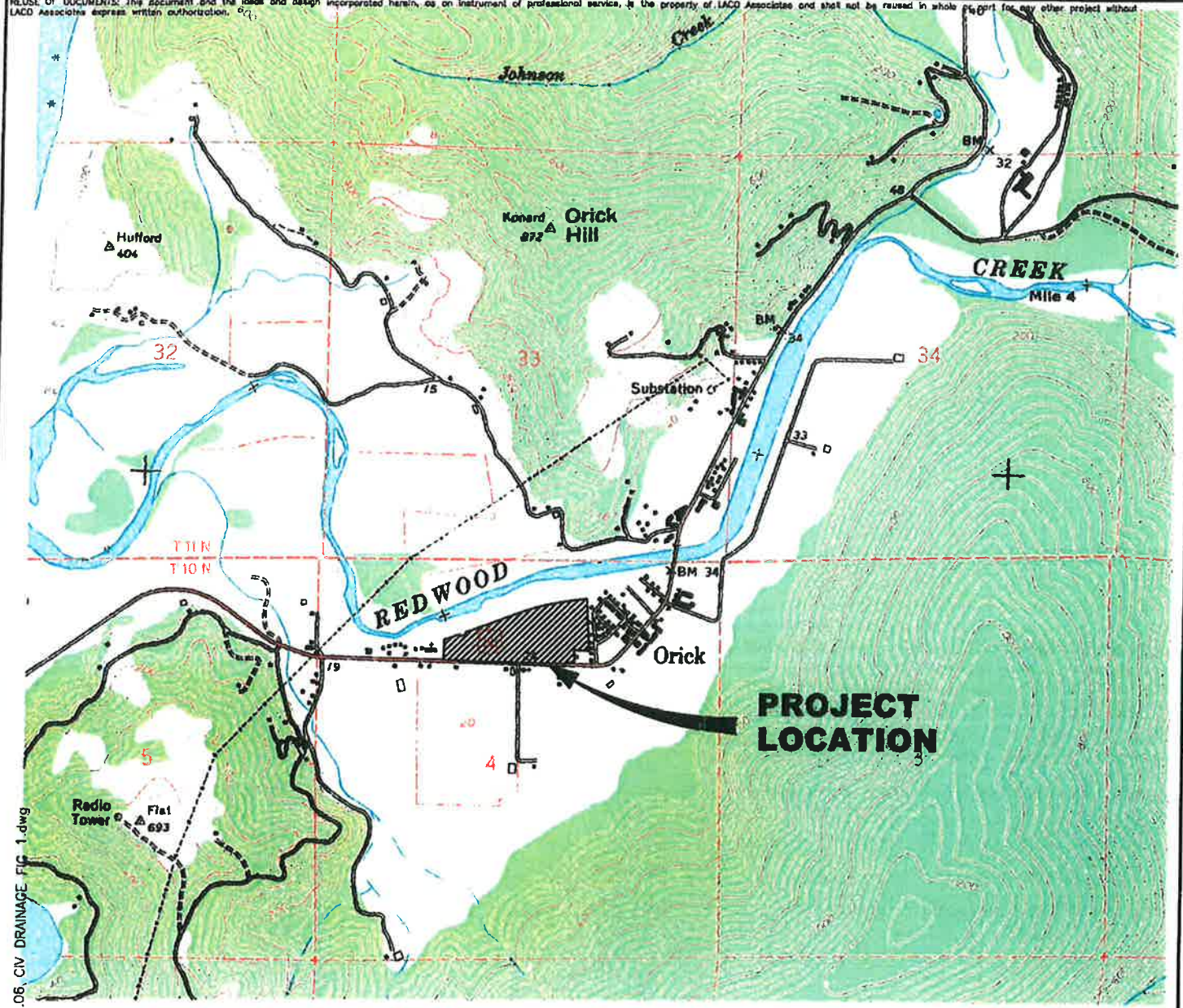
PROJECT	REDWOOD NATIONAL PARK RESORT	BY JDB	FIGURE 1
CLIENT	REDWOOD PARK LODGE COMPANY, INC	DATE 1/31/14	
LOCATION	ORICK, CA	CHECK RLD	JOB NO. 6782.06
	LOCATION MAP	SCALE NONE	



LOCATION MAP
1" = 2,000'

Jan 31,2014—12:28pm T:\Cadfiles\6700\6782.06 ORICK TOWN SITE\DWG\ 6782.06_CIV DRAINAGE FIG 1.dwg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REDWOOD NATIONAL PARK RESORT
CONCEPTUAL DRAINAGE PLAN
REDWOOD PARKS LODGE COMPANY
ORICK TOWNSITE
DRAWN RLD
CHECK RLD
APPROVED RLD
DATE 4/2/14
JOB NUMBER 6782.06
FIGURE 2
QUANTITIES
DESCRIPTION ACRES
LANDSCAPING 18.4
CHIP PATHS 1.2
ASPHALT CONCRETE 5.9
STRUCTURES 0.9
TOTAL 26.4
LEGEND:
PROPOSED FLOW DIRECTION
REDWOOD CREEK
LEVEE
PARK MODEL, TYP
BIOSWALE
CHIP PATH, TYP
AC PAVEMENT, TYP
GAS PUMPS
COMMERCIAL CENTER
BIOSWALE, TYP
BATH HOUSE, TYP
TENT COTTAGES, TYP
DOG PARK
COASTAL ZONE
INLAND ZONE
100' WETLAND SETBACK
PRIMARY LEACHFIELD
POTENTIAL CULVERT
US 101
COVERED BBQ PAVILION, TYP
RAINGARDEN, TYP
SCALE: 1"=80'
BIOSWALE
RAINGARDEN
PAVEMENT SURFACE
6" TOPSOIL FOR LANDSCAPING, APPROXIMATELY 1" LOWER THAN PAVEMENT SURFACE
12" POORLY-GRADED GRAVEL (APPROX. 40% VOID SPACE)
FILTER FABRIC/LANDSCAPE FABRIC
NATIVE SUBGRADE

Preliminary Transportation & Circulation Analysis

Orick, California

April 4, 2014

Prepared For:
Redwood Parks Lodge Company

Prepared By:
LACO Associates, Inc.
21 W. 4th Street
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Project No. 6782.06

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Preliminary Transportation and Circulation Analysis

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Becky Dower, PE

LACO

TABLE OF CONTENTS

Figures

1.0 INTRODUCTION

This Preliminary Transportation and Circulation Analysis (herein Analysis) presents the results of a transportation and circulation analysis of the anticipated new peak-hour vehicle trips that would be generated upon development of the proposed Redwood National Park Resort.

The proposed project involves commercial-recreational development, to be known as Redwood National Park Resort (Resort), on the currently vacant 26.7-acre parcel (APN 520-142-009) located between U.S. Highway 101 and Redwood Creek, in the town of Orick, Humboldt County, California (hereafter, Site; see Figure 1: Location Map). The Site is bisected by the California coastal zone boundary: approximately 11.7 acres (43.8 percent) are within the coastal zone; and approximately 15.0 acres (56.2 percent) are within the inland portion of the Site.

Proposed improvements include 56 pull-through RV sites, 26 back-in RV sites, 12 park model cabins, 48 dry tent sites, and 10 tent cottages. The proposed project also includes the construction of an approximately 5,500-square-foot (sq. ft.) commercial center, a 6-pump gas station with 12 fueling positions, an approximately 2,000-sq. ft. maintenance barn, an approximately 1,200-sq. ft. manager's residence, 3 bath houses, and 8 barbeque pavilions. A total of 295 parking spaces have been planned for the Site, including 172 standard spaces in the overnight guest area, 23 standard spaces at the commercial center, and 80 camper spaces. The Conceptual Site Plan (dated April 2, 2014) is enclosed as Figure 2. An application is being submitted to the Humboldt County Planning Department for a Conditional Use Permit (CUP), Coastal Development Permit (CDP), and a Special Permit (SP) for the development and operation of the commercial-recreational facility.

It was determined after consultation with Caltrans staff that the study area for this Analysis would consist of the following intersection:

- U.S. Hwy 101 and Site Access Road

This Analysis has been completed in accordance with the *Caltrans Guide for the Preparation of Traffic Impact Studies*. The purpose of this Analysis is to provide County and Caltrans staff and policy makers with the data necessary to make informed decisions regarding the potential trip generation and traffic impacts that may be caused by the development of the proposed RV Park, camp ground, and commercial center.

2.0 SIGNIFICANCE CRITERIA

2.1 Level of Service Standards

Level of service (LOS) is commonly used by state, county, and city regulatory agencies to quantify traffic operations on various types of roads based on traffic volumes and roadway capacity, using a series of letter designations ranging from A to F, as established in the *Highway Capacity Manual* (HCM) (Transportation Research Board of the National Academies of Science in the United States 2010). Generally, LOS A represents free-flow conditions and LOS F represents restricted-flow or breakdown conditions. Level of service is determined by estimating the average intersection delay in seconds per vehicle. The through movements on an uncontrolled main street are assumed to operate at free flow (LOS A).

The California Department of Transportation (Caltrans) holds jurisdiction for the operation and maintenance of the roadways within the vicinity of the study area. Caltrans has the following policy in regards to Level of Service, as noted in the *Guide for the Preparation of Traffic Impact Studies*:

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

The Circulation Element of the Humboldt County General Plan, Section 4200, includes the following statement with regard to traffic LOS:

> *Typically, a Level of Service D is used as the design standard in urban areas and Level of Service C is used as the design standard in rural areas.*

For the purposes of this Analysis it is assumed that LOS C represents the minimum acceptable LOS at the study intersection.

LOS criteria for unsignalized intersections are shown in Table 1.

Table 1: *LOS Criteria for Unsignalized Intersections*

Stop Control	LOS Average Delay Range (seconds per vehicle)					
	A	B	C	D	E	F
Unsignalized	0 - 10	>10 - 15	>15 - 25	>25 - 35	>35 - 50	>50

Source: Highway Capacity Manual, Transportation Research Board, 2010

3.0 EXISTING TRAFFIC CONDITIONS

3.1 Methodologies

The study intersection was analyzed using Synchro Eight Light, a software application used for performing capacity analyses for both signalized and unsignalized intersections. The software, which follows the procedures specified in the 2010 HCM, can optimize trip distribution splits, offset, and cycle lengths for individual intersections or a complete roadway network. Synchro has the ability to report the delay and LOS for each leg of the intersection, and the average delay and LOS for the intersection as a whole. As specified in the HCM, the resultant LOS for an unsignalized intersection is the same as the LOS on the worst-case leg of that intersection.

3.2 Traffic

Figure 3 shows the existing and proposed lane configurations at the study area intersection; Figure 4 illustrates the anticipated trip distribution trends at the study intersection based on existing traffic trends near the intersection. As the study intersection is not yet constructed, the following assumptions are made regarding the existing-plus-project and future-plus project distribution trends at the intersection:

- The percentage of drivers making a westbound right turn into the site will be the same as the current percentage of drivers heading westbound past the site.
- The percentage of drivers making an eastbound left turn into the site will be the same as the current percentage of drivers heading eastbound past the site.
- The percentage of drivers making a southbound right turn out of the site (to become westbound traffic) will be the same as the current percentage of drivers heading westbound past the site.
- The percentage of drivers making a southbound left turn out of the site (to become eastbound traffic) will be the same as the current percentage of drivers heading eastbound past the site.

3.3 Volumes and Level of Service

Peak-hour traffic data in the vicinity of the Site (Caltrans Station ID: South Limits Orick/Post Mile 120.4) was obtained from the California Department of Transportation Traffic Data Branch website on January 22, 2014, and are shown in Figure 5. The traffic data were collected in 2012, and will be used as the baseline traffic volumes at the study intersection. Heavy vehicles and trucks account for about 14 percent of the traffic volumes near the site. As discussed during a pre-project meeting with Caltrans staff, the Orick area typically experiences peak-hour traffic between 11AM and 3PM, and does not have distinguishable AM and PM peak hours. As such, this Analysis considers one peak-hour traffic period only. Using the Caltrans peak-hour traffic count data, the delay (in seconds per vehicle) and level of service was calculated for each leg of the study intersection, as illustrated in Table 2.

Table 2: Existing Peak-Hour Delay and Level of Service

Intersection	Southbound		Westbound		Eastbound		Intersection	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
U.S. Highway 101 and Site Access Road	-	-	0.0	A	0.0	A	0.0	A

It should be noted that, under existing conditions, the Site Access Road does not exist, and as such, there is no traffic associated with the turning movements that would be available once the Site Access Road is constructed. Under current conditions, traffic in the vicinity of the project area is operating at free flow conditions where drivers do not experience delays due to turning movements or stop controls, resulting in no delay and an LOS A at the study intersection.

3.4 Existing Pedestrian and Bicycle Conditions

Currently there are no dedicated pedestrian or bicycle facilities on U.S. Highway 101 adjacent to the Site. The section of U.S. Highway 101 that runs along the Site frontage provides a 10-foot paved shoulder for bicycle traffic, but is not a declared bike lane or bike route. There are no marked crosswalks to facilitate pedestrian traffic across the section of U.S. Highway 101 adjacent to the Site. Immediately to the north of the Site is a levee that has an existing dirt trail along the top. This trail extends northwest from the Redwood Creek estuary all the way through the town of Orick. This levee trail intersects with U.S. Highway 101 near the middle of the town of Orick, providing pedestrian connectivity to and from the Site without needing to walk along the highway. Although not paved, the levee trail also provides an alternative bike route for some cyclists.

4.0 EXISTING-PLUS-PROJECT TRAFFIC CONDITIONS

4.1 Trip Generation

Vehicle trips generated by the project were calculated using *Trip Generation Manual*, 9th Edition, issued by the Institute of Transportation Engineers (ITE). According to the *Trip Generation Manual*, a vehicle trip is defined as a single, one-directional vehicle movement where either the origin or the destination is inside the project area. The *Trip Generation Manual,* a standard reference used by jurisdictions throughout the state, is based on actual trip generation studies performed at numerous locations in areas of varied population.

It was assumed the proposed Resort is best represented by a combination of land uses: ITE LU 416 (campground/recreational vehicle park) and ITE LU 945 (gasoline/service station with convenience market). The *Trip Generation Manual* shows different trip generation and distribution characteristics for the AM and PM peak-hour periods. As noted earlier, the Orick area does not have typical AM and PM traffic periods, but rather one peak hour timeframe between about 11AM and 3PM. For trip generation purposes, both the AM and PM generation rates from the *Trip Generation Manual* were calculated. In order to establish a conservative trip generation rate, the highest peak-hour traffic generation time period, the PM peak hour, will be used to establish likely project-related traffic volumes. Table 3 and Table 4 depict the summary of the AM and PM peak-hour trip generation rates for the Project (only the PM trip-generation rates will be consider hereafter).

Table 3: AM Peak-Hour Trip Generation Summary

No. of Camp Sites	Fueling Positions	ITE Land Use Type	Trip Generation Rate	AM Peak Hour		
				In	Out	Total
152	-	Campground/recreational vehicle park (416)	0.25 trips/occupied site	14	24	38
-	12	Gasoline/Service Center with convenience market (945)	10.56 trips/fueling position	63	64	127
Total AM Peak-Hour Project-Generated Trips				**77**	**88**	**165**

Table 4: PM Peak-Hour Trip Generation Summary

No. of Camp Sites	Fueling Positions	ITE Land Use Type	Trip Generation Rate	PM Peak Hour		
				In	Out	Total
152	-	Campground/recreational vehicle park (416)	0.41 trips/occupied site	38	24	62
-	12	Gasoline/Service Center with convenience market (945)	13.57 trips/fueling position	81	82	163
Total PM Peak-Hour Project-Generated Trips				**119**	**106**	**225**

For this analysis the calculated number of PM peak-hour trips is used as a conservative estimate of project-related traffic volumes.

It should be further noted that the project trip generation calculations are based on an assumed 100 percent occupancy of the Site. Based on an assessment prepared by Peterson Economics titled *An Evaluation of Market and Financial Potential for a Proposed Activity Center, RV Park, Commercial Center, and Gas Station in Orick, California*, the following occupancy rates are anticipated to occur at the site:

- Peak occupancy of 90 percent from May 15 to September 30
- Shoulder occupancy of 40 percent from March 1 to May 14 and from October 1 to November 16
- Off-peak occupancy of 10 percent from November 17 to February 28
- Overall annual occupancy rate of 50.5 percent

As such, accounting for trip generation rates based on 100 percent occupancy of the site represents a conservative over-estimate of the likely traffic volumes associated with the project.

4.2 Pass-By Trip Reduction

Pass-by trips are made by traffic which is already using the adjacent roadway and is entering the project site only as an intermediate stop on the way to another destination. The trip may not necessarily be "generated" by the project, and thus, is not added as a new trip to the transportation system. According to the *Trip Generation Manual*, pass-by trips for *gasoline/service center with convenience market* range from 48 percent to 78 percent. This means between 48 percent and 78 percent of the traffic "generated" by this type of land use is traffic that is already on the roadway, regardless of the new development. For the purposes of this analysis, it is assumed 50 percent of the trips generated by the *gasoline/service center with convenience market* are pass-by trips, and can be deducted from the calculated trip generation volumes shown in Table 4. Table 5 shows the estimated peak-hour trip generation volumes after considering pass-by trips associated with the proposed gas station and convenience store.

Table 5: Peak-Hour Trip Generation Summary Considering Pass-By Trips

No. of Camp Sites	Fueling Positions	ITE Land Use Type	Trip Generation Rate	PM Peak Hour In	Out	Total
152	-	Campground/recreational vehicle park (416)	0.41 trips/occupied site	38	24	62
-	12	Gasoline/Service Center with convenience market (945)	6.78 trips/fueling position	40	41	81
Total PM Peak-Hour Project-Generated Trips				**78**	**65**	**143**

The total trip generation volumes shown in Table 5 will be considered the project-generated traffic volumes hereafter.

4.3 Distribution of Traffic

Trip distribution characteristics for the existing-plus-project traffic condition are assumed to follow the same trip distribution trends established based on existing traffic patterns. Figure 4 illustrates the trip distribution characteristics at the study intersection.

4.4 Volumes and Level of Service

Distribution of the project-generated traffic volumes is based on the trends and assumptions discussed in section 4.2 of this Analysis. Intersection delay for the study intersection was calculated using the existing-plus-project traffic volumes shown in Figure 6. In order to accommodate the project, a new intersection on U.S. Highway 101 would need to be formed, creating additional turning movements that do not exist under the existing conditions. The Synchro calculations for Existing-plus-Project conditions are summarized in Table 6.

Table 6: Existing-Plus-Project Peak-Hour Delay and Level of Service

Intersection	Southbound		Westbound		Eastbound		Intersection	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
U.S. Highway 101 and Site Access Road	15.2	C	0.0	A	0.6	A	15.2	C

With the addition of the project-generated traffic to the existing traffic volumes, it is anticipated the southbound movements on the new intersection (those movements which involve traffic leaving the Site) would experience average vehicle delays of about 20.6 seconds, resulting in LOS C for the southbound leg of the new intersection. Westbound traffic will continue to operate under free-flow conditions while eastbound traffic will experience a slight increase in average vehicle delay (0.6 seconds). This small increase in delay can be attributed to eastbound drivers waiting for a gap in traffic before making a left turn across the westbound travel lane to enter the Site. The wait time before turning is estimated to average less than 1 second.

The LOS for an unsignalized intersection is the same as the LOS on the worst-case leg of the intersection. In this case, the worst-case leg is the southbound leg with an LOS C. An LOS C for the intersection is within the applicable standards discussed in section 3 of this Analysis.

4.5 Project-Related Pedestrian and Bicycle Improvements

The proposed project will provide nearly two miles of internal trails for pedestrian use. These trails are also proposed to connect to the levee trail, providing a means for pedestrians to leave the Site on foot and travel either to the Redwood Creek estuary or into the center of town without having to interface with U.S. Highway 101. The dirt levee trail will also provide access to the estuary and the center of town for some bicyclists, especially mountain bikes; however, it is anticipated that some bicyclists from the proposed project will use the paved shoulders of U.S. Highway 101. No off-site pedestrian or bicycle improvements are proposed as part of this project.

5.0 FUTURE TRAFFIC CONDITIONS

5.1 Distribution of Traffic

Trip distribution characteristics for the future traffic conditions are assumed to following the same trip distribution trends established based on existing traffic patterns. Figure 4 illustrates the trip distribution characteristics at the study intersection.

5.2 Volumes and Level of Service

Based on traffic growth information and standards provided by Caltrans for the Orick area, the projected growth rate for Orick-area traffic is 20 percent over 20 years. This growth factor was used to calculate anticipated 2034 traffic volumes. Table 7 shows the anticipated future peak-hour delay and level of service at the study intersection. Figure 7 shows the anticipated future traffic volumes.

Table 7: Future Peak-Hour Delay and Level of Service

Intersection	Southbound		Westbound		Eastbound		Intersection	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
U.S. Highway 101 and Site Access Road	-	-	0.0	A	0.0	A	0.0	A

The LOS is anticipated to remain at LOS A for future traffic conditions without the project. It should be noted that under the future-only condition, the intersection of U.S. Highway 101 and the Site Access Road would exist, with the only traffic movements through the area being westbound and eastbound through traffic traveling at free-flow conditions.

5.3 Future Pedestrian and Bicycle Improvements

Caltrans, in conjunction with the County of Humboldt, prepared a document in 2012 titled *Improving Orick's Sense of Place as a Gateway Community* (hereafter Gateway Community document). This document outlines various improvements that can be made to Orick's "main street" (U.S. Highway 101) to enhance the downtown Orick area. These improvements generally include monuments, transportation art, traffic calming, pedestrian and bicycle safety features, lighting, landscaping, and trail access. Improvements identified adjacent to the Site include colorized shoulders along the project frontage with

U.S. Highway 101. Colorized shoulders (usually a red brick-like color) is believed to narrow the vision of the driver, which often results in a decrease in speed, acting as a form of traffic calming. This colorization also provides a delineated part of the travel way of the road which pedestrians can use.

Based on review of the Gateway Community document and discussion with Caltrans staff, it appears as though funding for the desired improvements has not yet been secured. The improvements illustrated in the Gateway Community document were identified prior to conception of the proposed project, and were not identified in anticipation of development of the project. As such, no provisions to fund the construction of the colorized shoulders has been made by Redwood Park Lodge Company. Development of the proposed project will not interfere with the future implementation of the Gateway Community plan when funding becomes available.

6.0 FUTURE-PLUS-PROJECT TRAFFIC CONDITIONS

6.1 Distribution of Traffic

Trip distribution characteristics for the future plus project traffic condition are assumed to following the same trip distribution trends established based on existing traffic patterns. Figure 4 illustrates the trip distribution characteristics at the study intersection.

6.2 Volumes and Level of Service

As noted in section 6.2 of this Analysis, based on traffic growth information and standards provided by Caltrans for the Orick area, a growth factor of 20 percent in 20 years was used in calculating future traffic volumes. The estimated project-generated traffic volumes were added to the estimated future volumes. The future-plus-project condition involves travel associated with the intersection of U.S. Highway 101 and the Site Access Road. Intersection delay for the study intersection was calculated and is reported in Table 8; Figure 8 shows the future-plus-project peak-hour traffic volumes.

Table 8: Future-Plus-Project Peak-Hour Delay and Level of Service

Intersection	Southbound		Westbound		Eastbound		Intersection	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
U.S. Highway 101 and Site Access Road	17.3	C	0.0	A	0.5	A	17.3	C

Analysis shows that the anticipated future-plus-project traffic conditions will result in LOS C for the intersection as a whole, which meets applicable traffic standards.

7.0 INTERSECTION IMPROVEMENT DESIGN CRITERIA

Construction of a new intersection at U.S. Highway 101 and the proposed Site Access Road will be needed to facilitate development of the proposed project. As the project will accommodate large vehicles (RVs), an acceleration lane out of the site and use of a center turn pocket/left turn lane will likely be required to safely and efficiently move traffic through the new intersection. The 2013 *Highway Design Manual* (HDM) and the 2001 AASHTO *A Policy on Geometric Design of Highways and Streets* (herein referred to as Green Book) were both referenced to determine the necessary components and dimensions of the new intersection. Based on conversations with Caltrans staff, intersection design should provide storage capacity for one typical heavy vehicle (RV) and one typical passenger vehicle within the left turn lane in addition to providing adequate acceleration length. As 25 miles per hour of deceleration is typically allowed within the through travel lane, a deceleration lane into the Site is not needed, as vehicles will be able to reach a low speed for turning prior to entering the site.

As discussed in Chapter 9 (Auxiliary Lanes) and in Chapter 10 (Grade Separations and Interchanges) of the Green Book, the following criteria were used to determine a preliminary length for the acceleration lane out of the proposed intersection, as well as the length of the center two-way turn lane.

According to the Green Book,

> *The length of the auxiliary lanes for turning vehicles consists of three components: (1) entering taper, (2) deceleration length, and (3) storage length. Desirably, the total length of the auxiliary lane should be the sum of the length of these three components. Common practice, however, is to accept a moderate amount of deceleration within the through lanes and to consider the taper length as a part of the deceleration within the through lane.*

Figure 3 illustrates the proposed preliminary auxiliary lane locations and lengths in relation to the existing roadway. The sections below outline the anticipated basic auxiliary lane dimensions; these dimensions are preliminary estimates only, not to be used for final lane design.

7.1 Acceleration Lane

The acceleration lane is provided to allow outbound vehicles to adjust speed prior to entering the travel lane. Both an acceleration length and a taper to transition vehicles into the roadway are needed, and are further described in the outline below. Queued vehicle storage can be provided on the Site Access Road rather than in the acceleration lane, and has not been included in the determination of the likely acceleration lane lengths stated below:

- Taper Length
  - Lane taper rate of 8:1 (longitudinal: transverse)
    - 8:1 taper rate results in 96 foot-long taper
- Acceleration Length
  - Exhibit 10-70: for design speeds, lane length should be **350 feet**
- Total Desirable Acceleration Lane length is **450 feet**

The acceleration lane can be accommodated within the Site's right of way and is not expected to conflict with the Community Gateway plans for colorized shoulders in that area.

7.2 Center Two-Way Left-Turn Lane

The center two-way left-turn lane functions as both an acceleration lane and a deceleration lane for traffic making left turns either out of or into the Site. Currently there is a center two-way left-turn lane along U.S. Highway 101 that extends approximately 179 feet to the west of the proposed Site Access Road before tapering and terminating. This center two-way left-turn lane continues through the town of Orick to the east, and provides adequate storage and acceleration length as-is. Eastbound traffic using the center two-way left-turn lane to make a left turn into the Site would need to use this center lane as a deceleration and storage lane. As such, it is anticipated that the center turn lane would need to be 310 feet in length to provide adequate deceleration length for a vehicle prior to turning left into the Site. This equates to a **131 foot** extension of the center two-way left-turn lane to the west.

8.0 INTERNAL CIRCULATION

An analysis of the Site layout was conducted to assess the suitability of the layout to accommodate large vehicle traffic (RVs). A large RV or motorhome typically has an approximately 30-foot wheel base and can experience off-tracking (the dragging of the rear wheels off of the pavement surface) while making sharp turns on narrow roadways. As a conservative measure, the Caltrans 40-foot wheel base truck turning template (known as WB-40) was placed at various locations on the Site plan to analyze if the most restrictive turning movements could be navigated by the template without significant off-tracking from the roadway. As illustrated in Figure 9, the template was used to demonstrate that a 40-foot-wheel base truck can navigate the designed turns and curves of the conceptual site plan with little or no off-tracking.

In further considering the turning ability of large RVs and the safety of pedestrians who may be using the internal park trails, a circulation plan for the Site has been established, as identified by arrows shown on Figure 9. The recommended internal circulation route provides primarily one-way travel aisles, thereby avoiding conflicts between opposing vehicles on the narrow (18-foot-wide) aisles and reducing vehicle traffic across the trail crossing. The majority of the RV sites provide a pull-through option; drivers can pull into the RV site from one aisle and pull out into the next aisle. There are a number of pull-in/back-out sites

located on the eastern edge of the Site that would be ideal for RVs towing a vehicle (the vehicle can be detached from the RV and used without having to move the RV), as well as several sites located to the southwest portion of the Site which are capable of functioning as either pull-in/back-out sites or back-in/pull-out sites (which are better suited for visitors who are using a truck to tow a trailer, as the truck can be detached and used with moving the trailer from the site). A one-way staging area for vehicles entering the Site is located adjacent to the gas pumps and is large enough to store approximately four RVs as needed.

Control over the internal circulation can be accommodated by providing "one-way" signage as well as site maps indicating the allowable path of travel. Pavement striping could also be used if the site owners decide to pave the internal aisle and parking sites. Ultimately, it will be the responsibility of the site manager to direct internal circulation and to assign RVs and motorhomes to the most suitable spaces, as length, width, and ability to back in or back out of the space varies throughout the park.

9.0 CONCLUSIONS AND RECOMMENDATIONS

The proposed Redwood National Park Resort in Orick has the potential to generate considerable traffic volumes during the peak-hour timeframe during the peak season. The Site would need to be enhanced through the construction of a new intersection on U.S. Highway 101, approximately 300 feet west of the intersection of U.S. Highway 101 and Lundblade Street. Analysis of the existing-plus-project and future-plus-project traffic conditions at the study intersection indicate the proposed intersection will function at or above LOS C, in compliance with the applicable Caltrans and Humboldt County LOS standards and policies.

Nonetheless, as the Site will accommodate heavy vehicle traffic turning off a highway, provisions for an acceleration lane and extension of the existing center two-way left-turn lane should be made to ensure maximum traffic efficiency and safety. In consideration of pedestrian and bicycle traffic, as well as the proposed improvements discussed in the Gateway Community document, shoulders should be maintained along the recommended acceleration lane. While discussion regarding preliminary lane design is included in section 7.0 of this Analysis, a final site design is needed to determine the auxiliary lane dimensions and to address possible constraints associated with development of the auxiliary lanes, such as the need to acquire additional right-of-way, regulatory approvals and restrictions, and construction costs.

We recommend the following improvements be further analyzed and incorporated into the proposed project:

- Development of the proposed on-site pedestrian trail, with connectivity between the on-site trail and the existing levee trail to the north of the Site
- Development of an acceleration lane for southbound traffic turning right out of the Site, while maintaining a paved shoulder
- Extension of the existing center two-way turn-lane to the west to accommodate the deceleration of eastbound traffic turning left into the Site
- Reduction of the speed limit within Orick from 35 mph to 25 mph

ATTACHMENT 4
Mitigated Negative Declaration

DRAFT MITIGATED NEGATIVE DECLARATION

FOR

REDWOOD NATIONAL PARK RESORT

JUNE 2014

Lead Agency:
County of Humboldt

Lead Agency Contact:
Michael Wheeler, Senior Planner
County of Humboldt
Planning and Building Department
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Eureka, California 95501
(707) 443-5054

LACO Project No. 6782.06

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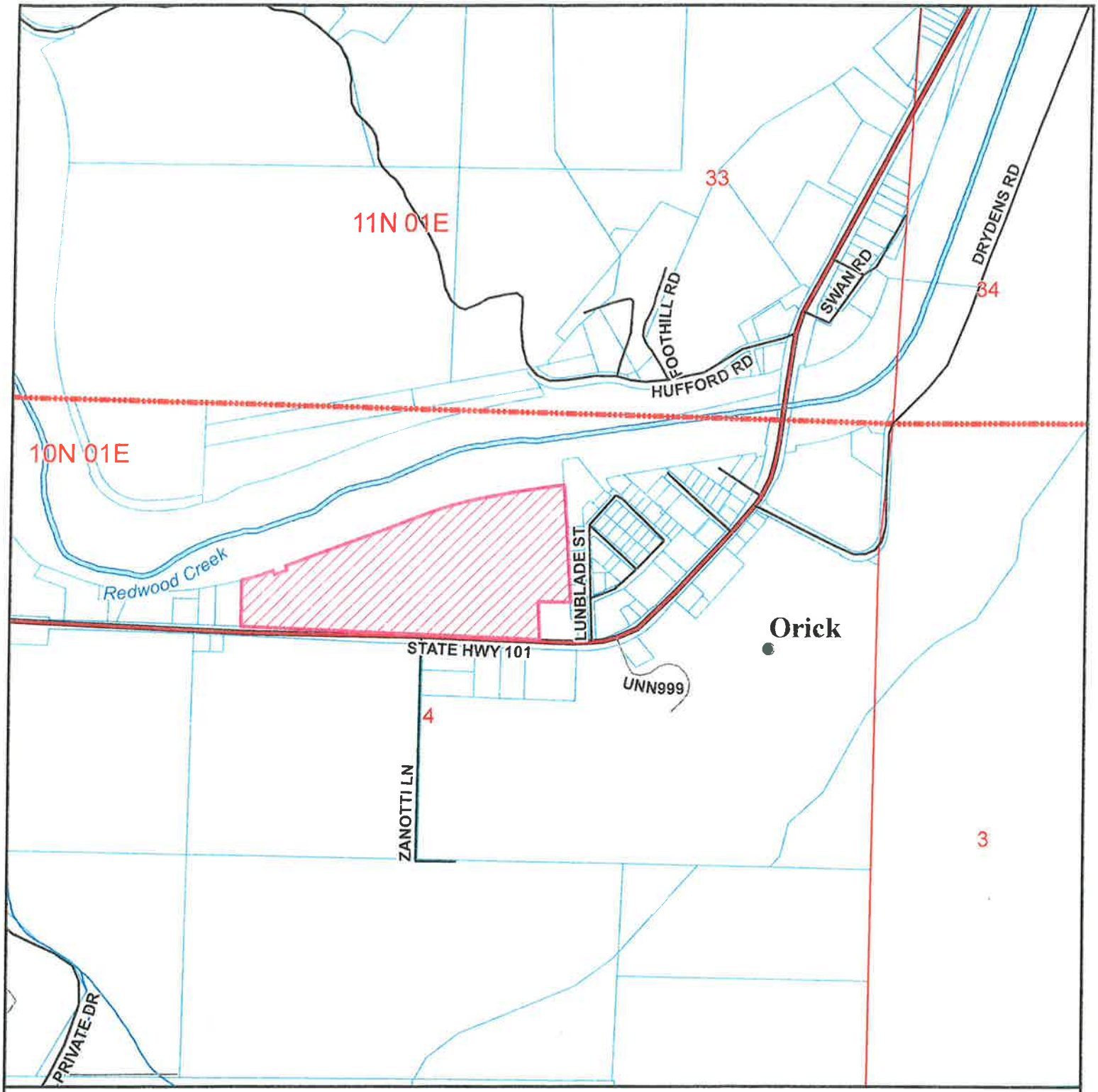
FIGURES AND APPENDICES



LOCATION MAP

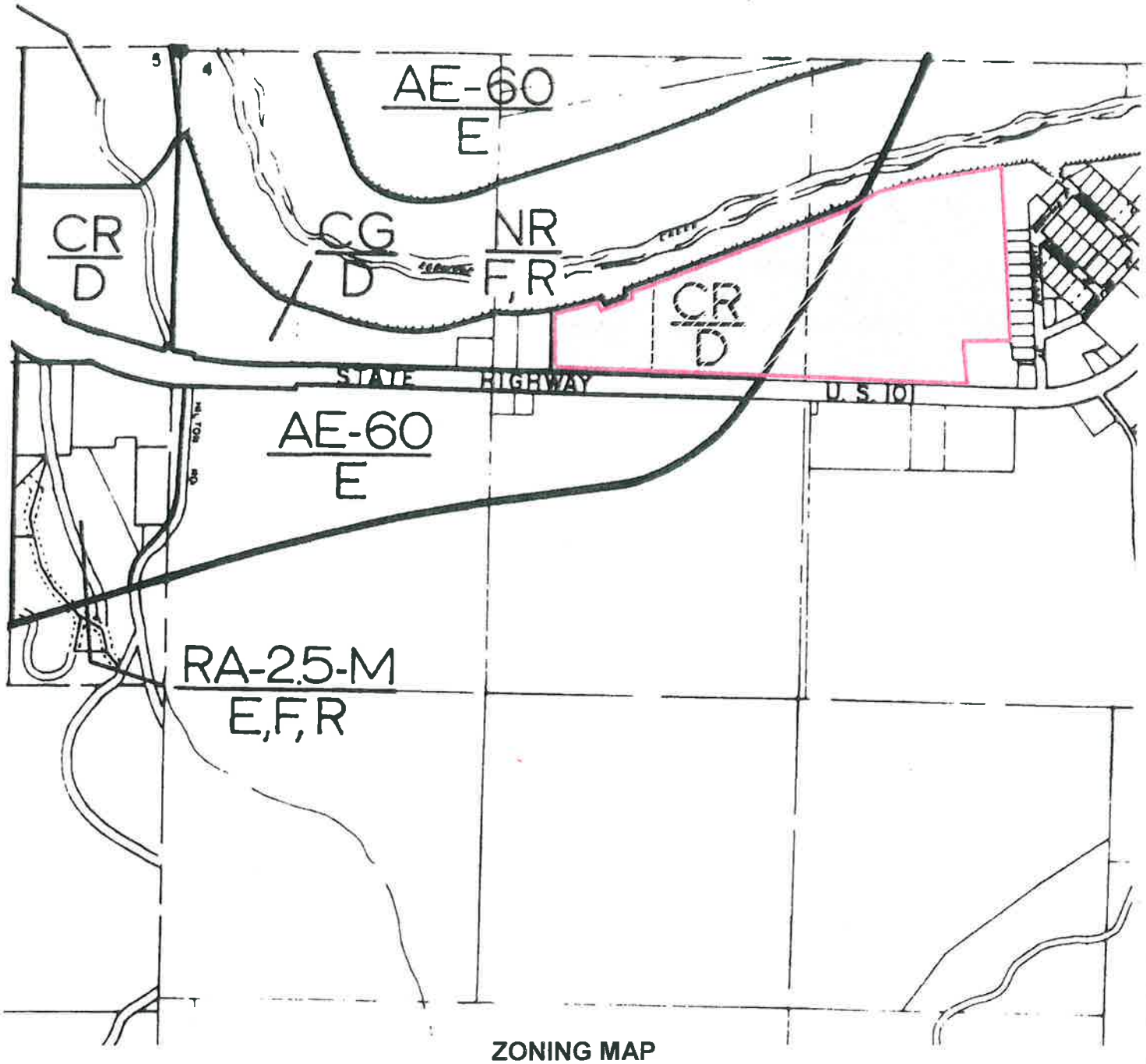
PROPOSED REDWOOD PARKS LODGE CO, INC
COASTAL DEVELOPMENT PERMIT,
CONDITIONAL USE PERMIT & SPECIAL PERMIT
ORICK AREA
CDP-14-016/CUP-14-008/SP-14-022
APN: 520-142-009
T10N R01E S04 HB&M (Orick)

N

Project Area =

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

0 250 500 750 1,000 Feet



ZONING MAP
(COASTAL)
1 of 2

PROJECT AREA =

PROPOSED REDWOOD PARKS LODGE CO, INC
COASTAL DEVELOPMENT PERMIT,
CONDITIONAL USE PERMIT & SPECIAL PERMIT
ORICK AREA
CDP-14-016/CUP-14-008/SP-14-022
APN: 520-142-009
T10N R01E S04 HB&M (Orick)

N
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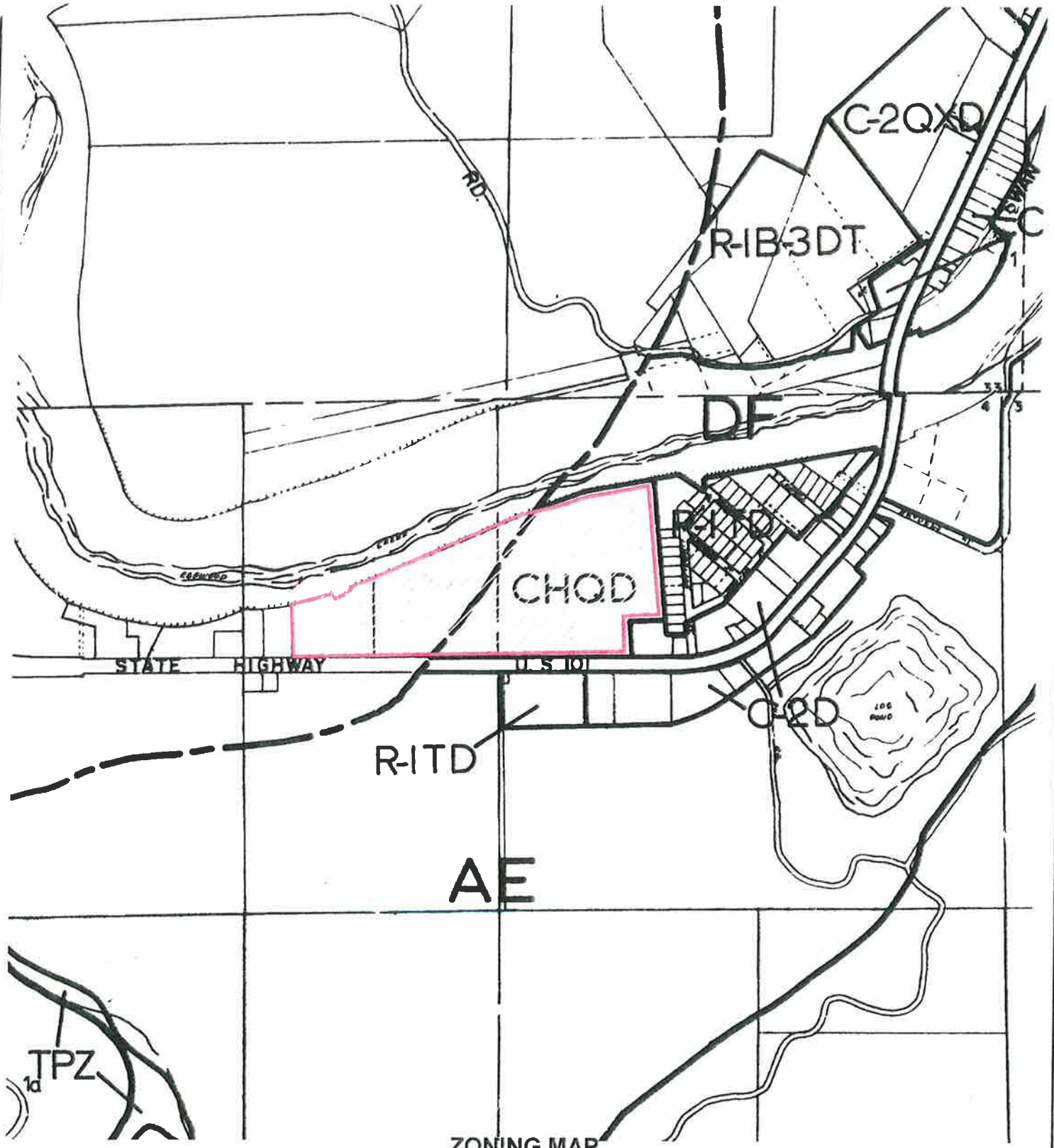
MAP NOT TO SCALE

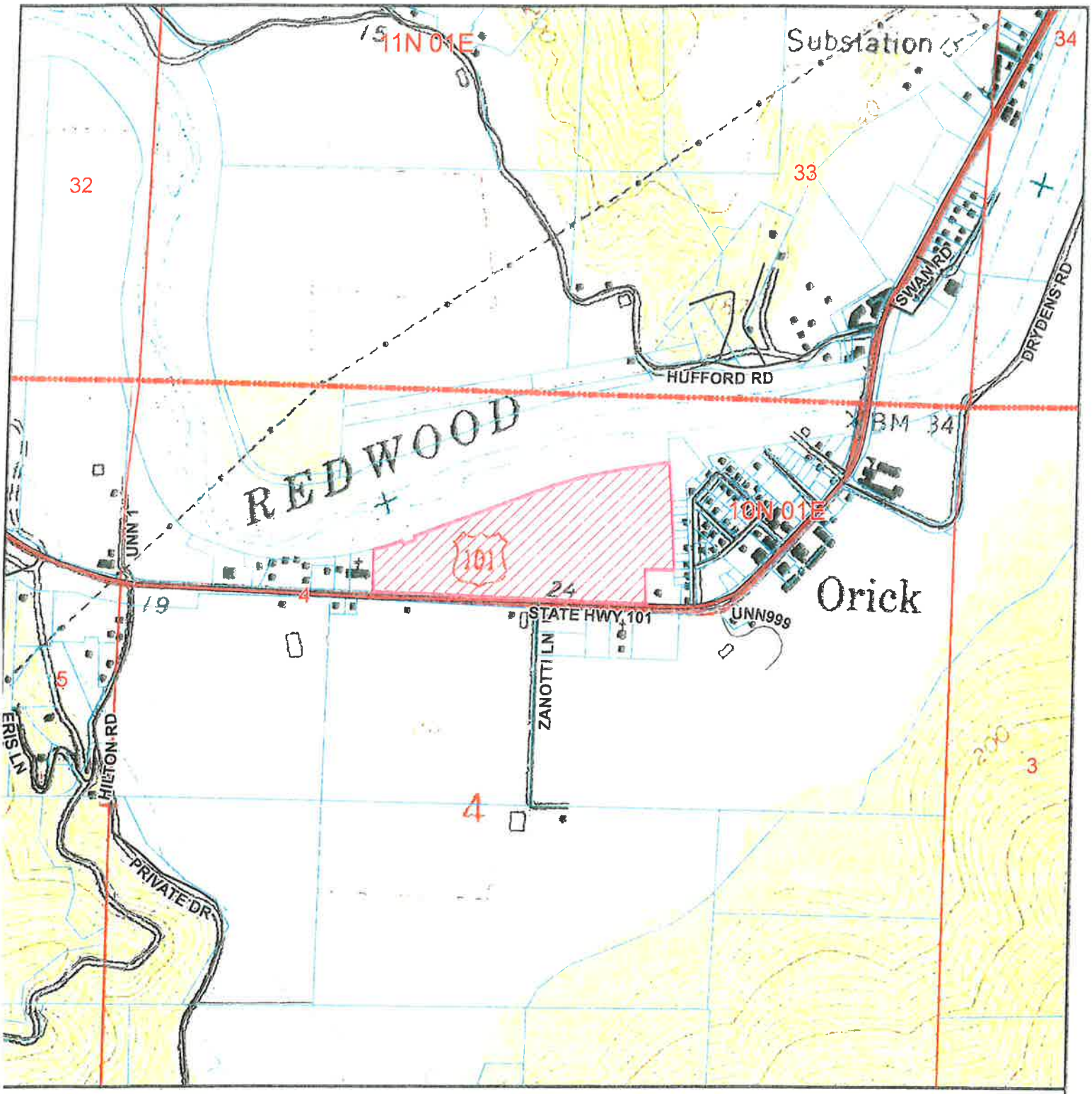


ZONING MAP
(INLAND)
2 of 2

PROJECT AREA =

PROPOSED REDWOOD PARKS LODGE CO, INC
COASTAL DEVELOPMENT PERMIT,
CONDITIONAL USE PERMIT & SPECIAL PERMIT
ORICK AREA
CDP-14-016/CUP-14-008/SP-14-022
APN: 520-142-009
T10N R01E S04 HB&M (Orick)

MAP NOT TO SCALE



TOPO MAP

PROPOSED REDWOOD PARKS LODGE CO, INC
COASTAL DEVELOPMENT PERMIT,
CONDITIONAL USE PERMIT & SPECIAL PERMIT
ORICK AREA
CDP-14-016/CUP-14-008/SP-14-022
APN: 520-142-009
T10N R01E S04 HB&M (Orick)

Project Area =

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

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LACO
EUREKA • UKIAH • SANTA ROSA
REDWOOD NATIONAL PARK RESORT
SITE PLAN
APN: 520-142-009
REDWOOD PARKS LODGE COMPANY
ORICK TOWNSITE
1 OF 1
REDWOOD CREEK
US 101
UNIT SUMMARY
TYPICAL DRY TENT SITE DETAIL
TYPICAL RV STALL DETAIL
COASTAL ZONE
INLAND ZONE
NOISE SETBACK
100' WETLAND SETBACK

I. PROJECT SUMMARY

Project Title: Redwood National Park Resort

Lead Agency: County of Humboldt

Lead Agency Contact: Michael Wheeler, Senior Planner

Report Authors: Elizabeth Burks, LACO Associates

Report Authors Contact:
LACO Associates
21 W. 4th Street, Eureka, CA 95501
(707) 443-5054

Location: 120465 U.S. Highway 101, Orick, Humboldt County, California
Lat: 41.2856°N, Long: -124. 066°W
See Figure 1: Location Map

Coastal Zone: Approximately 11.7 acres of the project site are located within the local jurisdiction of the coastal zone. The remaining 15 acres is inland.

Affected Parcels: Assessor Parcel Number 520-142-009

General Plan Designation:
North Coast Area Plan: Commercial Recreation
Orick Community Plan: Commercial Recreation
See Figure 2: General Plan Land Use Designation Map

Zoning:
Coastal Zone: Commercial Recreation and Design Review
Inland Zone: Highway Service Commercial and Design Review
See Figure 3: Zoning Designation Map

Anticipated Permits and Approvals:

1) Humboldt County adoption of the Mitigated Negative Declaration
2) Humboldt County Coastal Development Permit, Conditional Use Permit, and Special Permit
3) Caltrans Encroachment Permit
4) Humboldt County Building Permit
5) Humboldt County Division of Environmental Health On-site Sewage Disposal Permit
6) Humboldt County Division of Environmental Health Underground Storage Tank Permit
7) Humboldt County Division of Environmental Health approval of kitchen and food service plan
8) U.S. Army Corps of Engineers Section 404 Permit
9) RWQCB Section 401 Water Quality Certification
10) California Housing and Community Development Special Occupancy Park Construction Permit and Permit to Operate
11) State Water Resources Control Agency Storm Water Pollution and Prevention Plan

CEQA Requirement:

This project is subject to the requirements of the California Environmental Quality Act (CEQA). The Lead Agency is Humboldt County. The purpose of this Initial Study (IS) is to provide a basis for determining whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration. This Initial Study is intended to satisfy the requirements of the CEQA (Public Resources Code, Div 13, Sec 21000-21177) and the State CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387).

CEQA encourages lead agencies and applicants to modify their projects to avoid significant adverse impacts (CEQA Section 20180[c] [2] and State CEQA Guidelines Section 15070[b] [2]).

Section 15063(d) of the State CEQA Guidelines states that an IS shall contain the following information in brief form:

1) A description of the project including the project location
2) Identification of the environmental setting
3) Identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to provide evidence to support the entries
4) Discussion of means to mitigate significant effects identified
5) Examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls
6) The name of the person or persons who prepared and/or participated in the IS

II. PROJECT DESCRIPTION

Redwood Parks Lodge Company Inc., owner, proposes to develop a special occupancy park and commercial center to be known as Redwood National Park Resort (Resort) (see Conceptual Master Site Plan dated 10-3-2013). The major components of the Resort include a 152-unit campground, activity center, gas station, convenience store, adventure touring headquarters, and deli.

Site Description

The project site is a relatively flat, 26.7-acre parcel located at the southern entrance to the community of Orick, California, and is identified as Assessor's Parcel Number 520-142-009 (hereafter "Site"). The Site is bound by U.S. Highway 101 to the south, Redwood Creek levee to the north, a residential neighborhood to the east, and commercial properties to the west. An approximately 1,800-square-foot single-family residence is located on the southern edge of the Site and an abandoned service station is located in the southeast corner. The Site is primarily populated by non-native, introduced, agricultural pasture grasses; the levee is populated by non-native plant species. Much of the Site is bordered by Himalayan blackberry (*Rubus armeniacus*). Multiple pocket wetlands have been identified.

The Site is bisected by the coastal zone. Both the Orick Community Plan and the North Coast Area Plan identify the Site's land use designation as Commercial Recreation (CR). The inland portion of the Site is zoned Highway Services Commercial with Design Review and Qualified Combining Zones. The Qualified Zone requires commercial recreation uses including resorts. The coastal portion of the Site is zoned Commercial Recreation with a Design Review Combining Zone.

Table 1 *General Plan Land Use Designations and Zoning Designations Summary*

General Plan Land Use Designations		
GPLU	***Acres***	***Percent***
Coastal (NCAP) Commercial Recreation (CR)	11.7	43.8
Inland (OCP) Commercial Recreation (CR)	15	56.2
Total Area	26.7	100
Zoning		
Zoning	***Acres***	***Percent***
Coastal - Commerical Recreation (CR/D)	11.7	43.8
Inland- Highway Service Commercial (CH/Q/D)	15	56.2

Special Occupancy Park

The Special Occupancy Park will have 152 units: 82 RV sites, 48 tent camping sites, 12 park model cabins, and 10 tent cottages (see Table 1).

Table 1: Unit Counts

Type of Unit	**Number of units**
RV (full hook ups)	82
Park model cabins (full hook ups)	12
Tent cottages	10
Tent sites	48
Total	152

The RV camping area will include 56 pull-through sites and 26 back-in sites with access to hookups for water, sewer, and electricity. Each RV site will consist of an impervious parking area and a concrete patio with permanently installed picnic table and charcoal grill. The parking area varies by site but will be a minimum of 10 feet wide by 80 feet long. Each site will have parking for one RV and one personal vehicle

Forty-eight dry tent sites will be located on the coastal portion of the Site. Each tent space has parking for one vehicle in close proximity, with additional parking spaces available nearby to serve additional vehicles.

No more than two tents are allowed in each space, with the exception of one group camp location with room for three to five tents. The group camp is approximately 4,800 square feet and includes a BBQ pavilion. Communal potable water faucets will be conveniently located in the tent camping area. A bathhouse with showers and toilets will be located in close proximity to the tent camping area. Each tent site will have a picnic table and fire ring. As a service to Resort guests, tent camping packages (tent, sleeping bags, and lantern) will be offered for a fee. Laundering of bedding will occur off site.

Photo: Example of typical park model cabin.

Initially 12 park model cabins are planned in the northeast corner of the Resort. Park model cabins will be single story and a maximum of 399 square feet. They will be placed on compacted gravel. Each unit will have water, sewer, and electrical connections. There will be a permanently installed picnic table and charcoal grill at each site. There is one designated parking space for each park model cabin unit. As demand dictates, additional park model cabins may be installed on previously designated RV sites on the inland portion of the Resort. Each RV space is appropriately sized to support a park model cabin.

Typical tent cottage

Ten tent cottage sites are initially proposed. Eight of these sites are located on the coastal portion of the Site in close proximity to each other and a bathhouse. Two of the tent cottage sites are located in the inland portion of the property adjacent to the spa area. The tent cottage sites will be developed with permanent wood platforms. Park staff will erect tents made of canvas and plywood that will stay pitched for the duration of the busy summer season. Park staff will maintain the tents, bedding, and other amenities in the tent cottage sites. Each tent cottage site will have a picnic table and fire ring. Tent cottages will not have running water. Water will be provided at communal potable water faucets located in close proximity to the tent cottage area. Tent cottages will have electricity and baseboard heating. Dry tent sites may be converted to tent cottage sites as demand dictates.

Operations

The Resort is expected to experience a peak season from April through October. The majority of use will occur during this time. Hours for the commercial center during peak season will be 6AM to 9PM. The off-peak season is from November to March; commercial center hours during the off-peak season will be 7AM to 7PM. There will be 21 full-time-equivalent staff during the peak season. During the off-peak season staff will be reduced as necessary to coincide with reduced operations. The plan of operations report (prepared under separate cover) provides a full description of how the Resort will operate.

RV and park model cabin guests may stay a maximum of four months in any 12-month period. Tent camping and tent cottage guests will be limited to 30 days in any 12-month period. A full description of the Resort's operation is provided in the Plan of Operations Report. The length of stay limits are consistent with Humboldt County Zoning Regulations Sections 313-113.1.5 and 314-113.1.5.

Bathhouses

Three bathhouses are proposed. Each will have three showers, three toilets, and three lavatories for each gender. Accessible facilities will be included for each gender in each bathhouse. Toilets and lavatories will also be provided in the commercial center.

Recreational Amenities

Approximately 1.2 miles of trails are proposed within the Resort for exclusive use by Resort guests. These trails meander within the Resort and connect with the existing Redwood Creek Levee Trail in three locations. Only pedestrian and bicycle access to the levee trail will be allowed. No equestrian or motorized vehicle access will be permitted.

There will be a spa area with three open-air hot tub pools for the exclusive use of Resort guests. The hot tub pools will be screened by landscaping and safety fencing. One tent cottage site next to the spa area may be used for appointment-based massage services.

Directly west from the commercial center will be an open playing field. In this area a volley ball court, bocce ball court, and BBQ pavilions will be developed. This is the primary outdoor play area for Resort guests. A children's play structure may be added to this open space area as demand dictates.

Additional BBQ pavilions will be located at various locations throughout the Resort for exclusive use of campground guests. A pet exercise area will be provided.

Commercial Center

The entrance to the Resort will be the commercial center constructed in a traditional lodge building style. The commercial center will include the Resort activity center and administrative offices, a deli and convenience store/gift shop, Redwood Adventures touring center, and gas station. An entry structure will serve as gateway to the Resort and as the main Resort signage.

The Resort activity center will be located on the northern end of the commercial center. The activity center will have a meeting and gathering area for guests where they can play board games or cards, have potlucks, and enjoy indoor time when weather is not suitable for outdoor activities. A coin-operated laundry for the exclusive use of campground guests will be located in the activity center.

The deli will feature quick, fresh, hot and cold meals (sandwiches, salads, soup, and snacks). A grill with limited service for breakfast items, hot sandwiches, and dinner items will be included. Initially the deli will serve beer and wine only. Full bar service may be included in the future. There will be counter seating and table seating in the deli area. Additional seating will be available at an outdoor covered deck area.

The convenience store/gift shop will carry food (snacks and basic staples such as canned goods, bread, milk, cheese, and fruit), beer and wine, a small inventory of fishing and camping gear (fishing poles, bait and tackle, firewood, camp chairs, hats, ponchos, towels, flashlights, and batteries), and gift and souvenir items (coffee mugs, t-shirts, magnets, etc.). Gas station patrons paying cash will pay at the store checkout.

The commercial center will be the hub for Redwood Adventures. Redwood Adventures will offer a wide array of eco-adventures to help visitors have fun and learn about the ecology, culture, history, and scenic beauty found in and around Redwood National and State Parks.

The commercial center will include a six-pump gas station with three islands for use by the traveling public and Resort guests. The gas station will have unleaded and diesel fuel. Gas station hours for cash paying customers will coincide with the commercial center hours. The gas station will be open 24 hours a day for patrons paying at the pump with a credit or debit card. The gas station will require an underground storage tank permit through the Humboldt County Division of Environmental Health, and an Authority to Construct and Permit to Operate from the North Coast Unified Air Quality Management District.

The commercial center will be open to the general public during the following hours:

- Peak Season (April through October) 6 AM to 9 PM
- Off-peak Season (November through March) 7 AM to 7 PM

Accessory Facilities

The existing residence will remain and will be used as a caretaker residence and office space. Exterior upgrades to blend in with the feel of the Resort concept are proposed. An interior remodel to reconfigure the space is proposed.

An approximately 2,076-square-foot maintenance barn will be constructed to the north of the residence. The barn will house the wastewater treatment system operations and maintenance area. There will be room for storage of recreational equipment and a washer and dryer (for back-of-house use only).

The maintenance barn and caretaker residence will be for staff use only.

Special Events

The Resort will host up to 12 special events per year. These events may include weddings, celebrations, family reunions, school/youth field trips, and small musical productions. Events will generate a maximum of 100 attendees who are not staying on site. Most event attendees will be guests at the Resort. Events may be held between the hours of 12 PM and 9 PM. The Plan of Operations provides more detail on how the events will operate.

Services and Utilities

An on-site sewage disposal system is proposed: Orenco's AdvanTex Wastewater Treatment System suitable for processing approximately 19,500 gallons of waste per day. The entire on-site wastewater disposal system will be located within the inland portion of the Site; the primary leach field will be located near the existing house.

All arriving RVs will dump their septic tanks upon arrival. A dump station for the exclusive use of the Resort overnight RV guests will be located adjacent to the outdoor recreation fields which also serve as the Resort's reserve leach field.

Water will be provided by Orick Community Services District (OCSD). Electricity will be provided by Pacific Gas and Electric Company (PG&E). Frontier Communications will provide land-line telephone service. Wi-Fi or similar services will be made available. All utility lines within the Resort will be underground.

Parking

The proposed parking is designed to be sufficient for Resort operations at peak use. Uses generating parking demand include the campground, touring center, special events, and the retail aspects of the commercial center. The design includes a total of 295 parking spaces. Parking spaces are a minimum of 8 feet wide and 18 feet long. Accessible parking will be provided in accordance with ADA regulations.

Parking within the campground is provided in accordance with County of Humboldt's standards for special occupancy parks (H.C.C. § 313-113.1.3.11 and 314-113.1.3.11). There are 272 parking spaces within the campground. Of these, 82 are provided in tandem with the RV spaces. The remaining parking spaces are conveniently located throughout the campground. There are spaces near the tent cottages, park model cabins, and dry tent sites. There are also spaces near the spa, activity center, bathhouses, and recreational fields. Six parking spaces are provided in the commercial center parking lot for the purpose of registration (H.C.C §313.113.1.3.11.3).

The Humboldt County Code (§§314-109.1 through 314-109.1.5) requires that commercial uses include adequate parking on site. The number of required on-site parking spaces for the commercial center has been calculated at one space per 300 square feet of gross floor area, in addition to one space for each employee during peak shift, as described in the above cited sections. Approximately 4,448 square feet of the commercial center will be open to the general public. Based on the gross floor area calculation; 15 parking spaces are required. These spaces are provided in the commercial center parking lot.

There will be an estimated 21 full-time-equivalent employees at the Resort during peak season. Employee parking will be provided near the manager's residence.

Humboldt County Code does not specify the number of spaces required for special events; therefore, the application includes a Special Permit to establish parking for a non-enumerated use. A maximum of 100 additional guests (i.e., those not staying overnight at the Resort) will be attending special events. To meet this demand 50 parking spaces are proposed.

A loading space is required and will be located at the commercial center. The loading space will be 10 feet wide and 60 feet long.

Roads/Surfacing

The roads within the Resort will be initially surfaced with gravel. The gravel will be regularly watered or otherwise treated with a binding agent to reduce dust. The RV sites will be gravel with a concrete patio area. The commercial area will be paved. The long-term intention is to pave the internal roads. All drainage and stormwater calculations have been figured assuming that the internal roads will be paved to account for the maximum amount of impervious surfaces.

Internal roads will drain to landscaped areas and vegetated stormwater management swales. The drainage from the commercial center will be filtered through an oil-water separator and then conveyed to a stormwater management swale. All drainage will be retained on site.

Landscaping

The landscaping at the Site will be focused on low-maintenance, aesthetically pleasing native species and non-invasive ornamental species. The only formal lawn area will be located adjacent to the commercial center. Other areas within the Resort will have native vegetation. Two- to three-foot-tall berms covered with native vegetation are proposed as a landscaping feature in select locations throughout the Resort. Berms will be used for privacy screening and to create slight topographic changes on the nearly level site.

A formal landscape plan will be developed for the project.

Wetlands

The Site contains approximately 2.77 acres of wetlands located in five distinct areas. Wetlands 1 and 5 were delineated by SHN Consulting Engineers and Geologists in 2010 and confirmed by LACO staff on July 15, 2013. Wetlands 2, 3, and 4 appear on the National Wetlands Inventory (NWI). The presence of these wetlands was also confirmed by LACO on July 15, 2013.

Wetland 1 is located at the base of Redwood Creek Levee. Portions of Wetland 1 are within the coastal zone. The coastal wetland will not be altered as a result of the project.

The NWI wetlands (Wetlands 2, 3, and 4) and Wetland 5 will be filled to facilitate orderly development of the Site. Fill will be mitigated by wetland creation and enhancement; wetland creation will be implemented at a 2:1 ratio on the coastal portion of the Site adjacent to the existing wetland, within the 100-foot wetland setback area. Wetland creation will be accomplished with site grading and planting of native plants listed as wetland plants in the 2013 National Wetland Plant List published by the U.S. Army Corps of Engineers. The area will be demarcated with a spit rail fence.

A full wetland mitigation plan has been prepared and submitted with the Conditional Use Permit application.

Signage

On-site signage to advertise the Resort and available services is proposed. The most prominent sign will be a gateway entry structure that will bear the name "Redwood National Park Resort". Signage is also proposed on the commercial center building to include Redwood National Park Resort and services such as deli, gas, and tour center, placed in such a way to be visible from U.S. Highway 101. Up to three monument signs are proposed along the frontage of U.S. Highway 101. All signage will be backlit or illuminated with down-shielded lighting.

IV. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by the Project, involving at least one impact that is a **"Potentially Significant Impact"** as indicated by the checklist on the following pages.

x	Aesthetics		Agriculture Resources	x	Air Quality
x	Biological Resources	x	Cultural Resources	x	Geology and Soils
	Greenhouse Gas Emissions	x	Hazards and Hazardous Materials	x	Hydrology and Water Quality
x	Land Use and Planning		Mineral Resources	x	Noise
	Population and Housing		Public Services		Recreation
x	Transportation		Utilities and Service Systems		Mandatory Findings of Significance

An explanation for all checklist responses is included, and all answers take into account the whole action involved, including off-site as well as on-site; cumulative as well as project-level; indirect as well as direct; and construction as well as operational impacts. The explanation of each issue identifies (a) the significance criteria or threshold, if any, used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance. In the checklist the following definitions are used:

"Potentially Significant Impact" means there is substantial evidence that an effect may be significant.
"Potentially Significant Unless Mitigation Incorporated" means the incorporation of one or more mitigation measures can reduce the effect from potentially significant to a less than significant level.
"Less Than Significant Impact" means that the effect is less than significant and no mitigation is necessary to reduce the impact to a lesser level.
"No Impact" means that the effect does not apply to the Project, or clearly will not impact nor be impacted by the Project.

DETERMINATION: *(To be completed by the Lead Agency on the basis of this initial evaluation)*

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

Michael E. Wheeler
Signature

6-4-14
Date

I. AESTHETICS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

THRESHOLDS OF SIGNIFICANCE: This Initial Study considers to what degree the Project would: (i) have a substantial adverse effect on a scenic vista; (ii) substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; (iii) substantially degrade the existing visual character or quality of the site and its surroundings; and (iv) create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

DISCUSSION: The Site is a 26.7-acre, flat, relatively-undeveloped parcel, located on the north side of U.S. Highway 101 at the southern entrance to the town of Orick. The nearby vicinity is primarily a pastoral setting with properties south of U.S. Highway 101 engaged in agricultural operations. An abandoned service station is located to the east of the Site; a small contractor's yard is located to the west of the Site. The Redwood Creek levee is 10-20 feet tall; located at the northern property line. Due to the height of levee Redwood creek cannot be seen from Highway 101 or the subject parcel. Caltrans identifies US Highway 101 throughout Humboldt County as eligible to be designated as a Scenic Highway, but not officially designated.

I.a,b) The Project is not located within a city- or county-mapped or designated scenic vista, within a scenic resources area, or along a state scenic highway (Caltrans, 2013). There are no rock outcroppings or historic buildings at the Site. Views toward the north are obstructed by the Redwood Creek Levee. No impact would occur.

I.c) The existing visual character of the Site will change as a result of the Project. Currently the Site is a relatively flat open pasture. The Project will increase the built environment on the parcel. The impact will be reduced by screening and by retaining large areas of open space within the Resort. Agricultural or split rail fencing will be erected along the perimeter of the Site. The northerly portion of the Site will be planted with wetland plant species. On-site utilities will be placed underground. These measures will reduce the visual impact of the Project on those traveling on U.S. Highway 101 or those hiking along the Redwood Creek levee. The commercial center will be designed in a redwood rustic lodge theme. With visual buffers proposed as part of the Project there will be a less than significant impact on the visual character of the Site.

I.d) As described in the Plan of Operations, the Resort will use down-shielded, non-obtrusive lighting to limit the source of light and glare. Light sources at night will be limited to safety and security needs of the facility.

Mercury vapor, incandescent, and quartz halogen (except with motion detector or timed use) lights will be avoided in favor of low-pressure sodium, high-pressure sodium, and metal halide lights.

Lights for the illumination of the exterior of buildings will be full cut-off fixtures. These lights are shielded such that the bulb is not visible from below the shield on a horizontal plane, nor does the shield allow up-lighting that extends beyond the roofline or overhang of the building. Exceptions to the full cut-off fixtures may be made when low-wattage luminaries are needed for definition of walkway or decorative exposures, have opaque tops, and are on timed circuits or otherwise turned off when not in use.

Pathways, trails, and unit numbers will be illuminated by low-impact LED lighting systems.

The Project will not substantially increase glare at the Site. The proposed structures may have metal roofs, but they will be painted with a non-reflective finish. Windows in the commercial center will be treated to reduce glare, reducing potential impact from glare on day or nighttime views or on drivers. See Mitigation Measure AES-1.

MITIGATION MEASURES:

AES-1: Windows in the commercial center will be treated to reduce glare.

FINDINGS: With mitigation incorporated, the Project would have a **Less than Significant Impact** on Aesthetic Resources.

II. AGRICULTURE AND FORESTRY RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?	☐	☐	☒	☐

THRESHOLDS OF SIGNIFICANCE: This Negative Declaration considers to what degree the Project would: (i) 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; (ii) conflict with existing zoning for agricultural use, or a Williamson Act contract; (iii) conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)), (iv) result in the loss of forest land or conversion of forest land to non-forest use, or (v) 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 forestland to non-forest use .

DISCUSSION: The greater Orick area comprises commercial timber, timbered land preserved in national and state parks, and pasture for cattle and sheep. The Project is located in the Orick valley, which is a pastoral landscape. According to Humboldt County General Plan resource maps, prime agricultural soils cover the majority of the Site. Current use of the Site includes a single family residence and intermittent cattle grazing.

II.a) According to Humboldt County WebGIS (County of Humboldt), prime agricultural soils are found on the majority of the Site (see image below).

Image: prime Soils on the Site. Map Source: Humboldt County WebGIS

The current use of the Site includes intermittent cattle grazing; however the zoning for the property (Commercial Recreation and Highway Services Commercial) does not allow commercial agriculture. The Site was evaluated for removal from the agricultural land inventory with the adoption of the North Coast Area Plan (December 1981) and the Orick Community Plan (May 1985). Although the soils are agricultural, the location along U.S. Highway 101 and within the Orick town center makes it a prime commercial property in the Orick area. It is one of only three properties in Orick planned for Commercial Recreation. The Site is not 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. A less than significant impact would occur.

II.b) The property is not under a Williamson Act contract or zoned for agricultural use. No impact would occur.

II.c,d) The Site is not planned or zoned for forestry-related uses. No timber grows on the Site. The Project, located in the community of Orick, would not directly or indirectly result in the loss or conversion of forest land to non-forest land use. No impact would occur.

II.e) The Project will not involve 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 forestland to non-forest use. The site is buffered to the north by Redwood Creek and to the south by U.S. Highway 101. Properties east of the Site are residentially developed and properties west of the site have commercial uses. The nearest agricultural use is pasture south of Highway 101. There is no forestland in the immediate vicinity of the Site. The use of the Site for a Resort will not create any changes that jeopardize off-site agricultural or forestry resources. A less than significant impact would occur.

MITIGATION MEASURES: No mitigation required.

FINDINGS: The Project would have a **less than significant impact** on Agricultural and Forestry Resources.

III. **AIR QUALITY**. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

THRESHOLDS OF SIGNIFICANCE: This Initial Study considers to what degree the Project would (i) conflict with or obstruct implementation of the applicable air quality plan; (ii) violate any air quality standard or contribute substantially to an existing or projected air quality violation; (iii) result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors); (iv) expose sensitive receptors to substantial pollutant concentrations; or (v) create objectionable odors affecting a substantial number of people.

DISCUSSION: The Project is located within the North Coast Air Basin (NCAB) and is subject to North Coast Unified Air Quality Management District (NCUAQMD) requirements. The NCUAQMD is responsible for monitoring and enforcing local, state, and federal air quality standards in the County of Humboldt. The NCUAQMD sets air quality standards for emissions that may include, but are not limited to, visible emissions, particulate matter, and fugitive dust. The Humboldt County portion of the NCAB is currently designated as "non-attainment" or in excess of allowable limits for breathable particulate matter of 10 microns or less (PM_{10}), and as "attainment" or within allowable limits with respect to all other federal and state criteria pollutants. Because the NCAB is in "nonattainment" for PM_{10}, the NCUAQMD has prepared a draft PM_{10} Attainment Plan identifying control measures that can be implemented to reduce ambient PM_{10} levels. More information on California standards and the draft PM_{10} Attainment Plan can be found on NCUAQMD's website (http://www.ncuaqmd.org/index.php).

III.a-c) Humboldt County is considered to be in non-attainment for California's 24-hour PM_{10} standard (NCUAQMD, 2013). Vehicle exhaust is the most prevalent source of PM_{10}. Within the North Coast Air Basin PM_{10} levels fluctuate seasonally. PM_{10} levels increase in winter months and are at their lowest levels during the summer months (April through August) (North Coast Air Quality Management District, 1995). The Project has the potential to contribute to 24-hour PM_{10} levels, predominantly through vehicle exhaust, driving on gravel roads, and the use of campfires. The roads at the Site will be a mixture of pavement and crushed gravel.

The peak season for Redwood National Park Resort will be the summer months when PM_{10} levels are at their lowest (North Coast Air Quality Management District, 1995). This reduces the Project's potential to impact PM_{10} levels when they are of highest concern. Mitigation measures will reduce PM_{10} emissions within the resort. To mitigate vehicle emissions within the resort, vehicles will not be allowed to idle during check-in times or while at individual campsites. Gravel roads within the resort will be treated with water or other binding agent to reduce dust. To further mitigate fugitive dust, the speed limit for vehicles traveling within the resort will be 5 miles per hour (US EPA Region 10, 2012).

Open campfires can also contribute to PM_{10}. This will be mitigated by allowing only clean, dry wood to be burned within the resort. To simplify enforcement of this mitigation measure, clean, dry, locally-sourced wood will be sold at the convenience store in the commercial center. This will be the only allowed wood for campfires within the resort (North Coast Air Quality Management District, 1995).

Construction equipment and grading may also contribute to PM_{10} levels on a temporary basis. To minimize the potential impact, best management practices will be used during the construction period, including keeping construction vehicles in good working order, rocking heavily-used paths of travel, limiting daily ground disturbance, and keeping any stockpiles covered. With mitigation incorporated, a less than significant impact would occur.

Temporary air pollutant emissions may be associated with grading, excavation, and construction on the subject site. The property is relatively level, which will limit the potential need for excavation. Furthermore, the NCUAQMD has established policies regarding the control of fugitive dust during excavation, grading, and construction. The project will comply with NCUAQMD Rules and Regulations, specifically Rule 104 Section 4.0 regarding fugitive dust emissions. This includes covering open bodied trucks used for transporting materials likely to give rise to airborne dust, using water or chemicals for dust control during construction operations, grading of the roads and clearing of the land, applying water or suitable chemicals on dirt roads, materials stockpiles and other surfaces which can give rise to airborne dusts, and prompt removal of earth or other tracked material from paved streets.

With mitigation incorporated, a less than significant impact would occur.

III.d) The nearest sensitive receptors are in a residential neighborhood located immediately east of the Site. Potential pollutants related to the Project include vehicle exhaust, campfires, and dust from gravel roads. Mitigation measures AIR-1and AIR-2, will reduce impacts to sensitive receptors to a less than significant level.

III.e) Objectionable odors produced by the Project could include gasoline fumes from the operation of the gas station. Odors will be minimized by using California Air Resources Board-certified vapor control/ recovery systems on the underground storage tank and individual gas pumps. These systems are required for all gas stations as part of the Clean Air Act (Santa Barbara Air Pollution Control District, 2013). Additionally, "Do not top off" signage will be placed at the gas pumps.

The septic loads from RVs and the dump station may cause odors. As part of the plan of operations, upon arrival each RV will be required to have its black water tank emptied at the dump station located in the interior of the Resort. This will ensure that RVs are not sitting full at individual sites. While at their assigned sites, RVs will be connected to the on-site waste water system with an odor tight connection seal. Keeping connection equipment in good repair will control odors. A less than significant impact would occur.

MITIGATION MEASURES:

AIR-1: Vehicles will not be allowed to idle during check-in times or while at individual campsites. Signage and written materials will inform guests of this rule. Enforcement will be provided by Resort staff.

AIR-2: Campfires will be permitted only in designated campfire rings. The convenience store will offer clean, dry locally-sourced wood for sale. Only wood purchased at the convenience store will be permitted for use within the campground.

FINDINGS: With mitigation incorporated, the Project would have a **Less than Significant Impact** on Air Quality.

IV. BIOLOGICAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c) 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 pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

THRESHOLDS OF SIGNIFICANCE: This Mitigated Negative Declaration considers to what degree the Project would: : (i) 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; (ii) have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service; (iii) 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 pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means; (iv) interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; (v) conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or (vi) 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: A senior biologist from LACO Associates (LACO) visited the Site on July 26, 2013, to conduct a biological survey (Appendix A: Biological Survey Report). According to the biological survey, habitats in the Project area include remnant Redwood Creek riparian, very widely scattered non-native trees (Monterey Pine [*Pinus radicata]*, false cypress [*Chamaecyparis* sp.]), and agricultural (hay and cattle production) and ruderal (weedy) vegetation. Outside regularly mowed areas there are scattered individual shrubs and herbaceous cover. A small remnant riparian habitat occurs at the furthest downstream edge of the Site. Portions of the Redwood Creek levee frontage contain seasonal wetland vegetation.

The biological survey did not record any plant species identified as candidate, sensitive, or special status species on the Site. Due to long-established agricultural use, the Site, has experienced continual impacts from cattle grazing and lacks natural habitat diversity. Because of the presence of the Redwood Creek levee, the Site is isolated from periodic high creek flows. As a result of these conditions, few sensitive plant species would be expected at the site.

Black-capped Chickadees (*Poecile atricapillus*) were observed in the Redwood Creek riparian area adjacent to the project site (DFW 2011, California Watch List). Black-capped Chickadees is a species of limited distribution in California, primarily found in coastal riparian and well-developed river riparian areas in northern California, including Humboldt and Del Norte counties. No nests of Great Blue Herons (*(Ardea herodia), Black-crowned Night Herons (Nycticorax nycticorax*), Osprey (*Pandion halieatus*), Bald Eagles (*Halieaatus leucocephalus*), or any raptors were seen in the Project area. Fledgling White-tailed Kites (*Elanus leucurus*) were observed in the Project area during the survey. Osprey and Peregrine Falcon (*Falco peregrinus*) were observed near the riparian corridor of Redwood Creek, opposite the Site.

Roosevelt elk (*Cervus canadensis roosevelti)* is a regionally significant species; its natural range includes the Site.

IV.a) During the biological survey conducted by LACO, candidate, sensitive, or special status plant species were not observed; given the disturbed nature of the Site, their presence is unlikely. However, it is recommended that an early-season sensitive plant survey be conducted to determine whether the Site contains any sensitive plant species only detectable during the spring, such as Howell's montia (Montia howellii) (Mitigation Measure BIO-1).

Although not found on the Site, Osprey, and Peregrine Falcon were observed near the riparian corridor of Redwood Creek, opposite the Project area. There is no raptor nesting habitat on the Site or immediately adjacent. Because the Site has been historically used for grazing, it has very limited habitat value. The only suitable on-site chickadee nesting habitat is remnant Redwood Creek riparian vegetation occurring at the furthest downstream edge of the Site. This feature will not be removed. A mitigation measure is included to address possible Black-capped Chickadee nesting activity at the Site (Mitigation Measure BIO-2). The proposed wetland creation and enhancement (see section IV.c) will add valuable foraging habitat to the Site.

Roosevelt elk are not a special status species but they are regionally significant and their natural range includes the Site. Appropriate operational, educational, and management techniques will be employed to protect the elk, employees, and guests of the resort. These techniques are specified in mitigation measures BIO-3 through BIO-5.

With mitigation incorporated, a less than significant impact will occur. See Mitigation Measures BIO-2 through BIO-5.

IV.b) Redwood Creek is adjacent to the Site, but physically separated by a (10-20 foot high) levee. A small remnant riparian habitat occurs at the furthest downstream edge of the Site and consists of mature red alder (*Alnus rubra*), Pacific willow (*Salix lasiandra* var. *lasiandra*), black cottonwood (*Populus trichocarpa*), with associated native shrub and herbaceous cover of thimbleberry (*Rubus parviflorus*), twinberry (*Lonicera involucrata*), Indian plum (*Oemleria cerasiformis*), California blackberry (*Rubus ursinus*), sword fern (*Polystichum munitum*), stinging nettle (*Urtica dioica*), lady fern (*Athyrium felix-femina*), cascara (*Frangula purshiana*), coyote brush, fire weed (*Chamerion angustifolium*), hedge nettle (*Stachys ajugoides*), and California aster (*Symphyortrichum chilensis*).The remnant riparian vegetation will not be altered as a result of the project. The riparian vegetation will be buffered by 100 feet of wetland creation. The existing vegetation and the newly created wetland area will be protected from foot traffic and other park operations by the placement of a split rail fence to protect the habitat area.

With mitigation incorporated, a less than significant impact will occur. See Mitigation Measure BIO-6.

IV.c) The U.S. Fish and Wildlife Service National Wetland Inventory (NWI) identifies three distinct pocket wetlands at the Site. Additionally, wetland delineation conducted by SHN Consulting Engineers and Geologists (SHN) at the Site in January 2010 delineated two distinct pocket wetlands that did not appear in the NWI. On July 15, 2013, LACO staff visited the Site to confirm the presence of NWI wetlands and the wetlands identified by SHN in 2010 (Appendix B: Redwood National Park Resort Wetland Confirmation). The overall characteristics of the Site are not indicative of wetland habitat; upland habitats are pervasive. Low-lying features, possibly resulting from past Redwood Creek drainage meanderings before the construction of the levee, appear to acquire adjacent run-off and support scattered seasonal wetlands. Wetland vegetation is the predominant wetland indicator at the Site and is present in small pockets. This vegetation is composed chiefly of native perennials and non-native grasses and herbaceous species.

The Project involves direct filling of approximately 1.39 acres of wetlands on the inland portion of the Site. This includes Wetlands 2, 3, 4, and 5 as they appear on Figure 5: Confirmed Wetlands Map. Wetland 1 is predominately in the coastal portion of the Site and will not be filled. Wetland fill on the inland portion of the Site will be offset by wetland creation on the coastal portion of the Site and wetland enhancement on the inland portion of the Site. A formal wetland creation and enhancement plan will be developed by a qualified biologist and approved by the County of Humboldt prior to project implementation. Wetland creation will occur at a 2:1 ratio and be located immediately adjacent to Wetland 1, creating contiguous wetland habitat. The only development that will occur within the 100-foot setback of Wetland 1 will be wetland creation. No other development will be allowed. Wetland creation will involve 2.78 acres of new wetland planting. In addition to wetland creation, enhancement will be provided by removing invasive species such as Himalayan blackberry from the existing wetland. Wetland creation and enhancement will significantly enrich the quality of wetland habitat at the Site. A Wetland Mitigation Plan will be developed to provide full details, including a planting plan.

With mitigation incorporated there will be a less than significant impact. See Mitigation Measures BIO-7 and BIO-8.
IV.d,f) Redwood Creek is a regionally important salmon and steelhead stream. Coho salmon (*Oncorhynchus kisutch)* is state and federally listed as "threatened". The California Department of Fish and Wildlife (CDFW) has identified Humboldt County's entire coho salmon population as important to maintain or improve as part of *Recovery Strategy for California Coho Salmon* (Recovery Strategy) (California Department of Fish and Game, 2004). The Recovery Strategy includes two goals that are relevant to the Site: (1) un-confining the channels of Redwood Creek by modifying levees and (2) restoring riparian vegetation, tree cover, wetlands, and off-channel rearing habitat. The Recovery Strategy is not a binding regulatory document but is a type of habitat conservation plan documenting best management practices for land management adjacent to critical coho habitat such as Redwood Creek (van Hattem, 2013). The Project does not interfere with the goals of the Recovery Strategy. Wetland creation and enhancement are the only activities and development that will occur within 100 feet from the base of Redwood Creek levee.

The Project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors. The proposed wetland and levee setback will provide adequate passage for Roosevelt elk (*Cervus canadensis roosevelti*) across the length of the Site. There is no evidence that development of the Site will interfere with native wildlife nursery sites; none were observed on the Site or in the immediate vicinity.

A less than significant impact would occur.

IV.e) The inland and coastal portions of the Site are subject to local ordinances and policies regarding biological resources protection. The Humboldt County Streamside Management Area Ordinance applies to "wet areas" on the inland portion of the Site. The Humboldt County General Plan: North Coast Area Plan (1982) includes Natural Resources Protection Policies and Standards that apply to the planning and operation of new development on the coastal portion of the Site. Section 3.41E establishes a 250-foot wetland buffer within which no land use or development shall be permitted if it degrades the wetland or detracts from the natural resource value.

The Project includes filling approximately 1.39 acres of isolated wetlands on the inland portion of the Site, offset by creating 2.78 acres of wetlands (2:1 ratio) which will be contiguous with Wetland 1. The Humboldt County Streamside Management Area Ordinance allows for wetland fill partnered with appropriate mitigation if it is necessary to permit orderly development of the Site. The applicant has submitted an alternatives analysis demonstrating that wetland fill is necessary to permit the development of the Site and meet project objectives. A specific Wetland Mitigation Plan will be developed and will be implemented prior to beginning operations at the Site. This will ensure that there is no net loss of wetlands at the site.

LACO's senior biologist conducted an evaluation to determine the appropriate wetland buffer and to determine if the development would have any impact on coastal wetlands (Appendix C: Redwood National Park Resort Wetland Buffer Area Criteria Evaluation). Using the seven evaluation criteria for establishing buffer areas (California Coastal Commission Statewide Interpretive Guidelines for Wetlands and Other Wet Environmentally Sensitive Habitat Areas [1981]), 100 feet was determined to be a sufficient buffer; at that distance proposed Project elements would not have a substantial impact on coastal wetlands.

By providing adequate mitigation in the form of wetland creation and enhancement the Project will not conflict with local habitat protection ordinances. With mitigation incorporated there will be a less than significant impact.

MITIGATION MEASURES:

BIO-1: Prior to construction, conduct an early-season sensitive plant survey to determine whether the Site contains any sensitive plant species only detectable during the spring, such as Howell's montia (Montia howellii). If any special status plant species is observed, a mitigation plan must be developed and approved by the California Department of Fish and Wildlife prior to construction.

BIO-2: If construction activities to create wetlands are proposed during the potential land bird breeding season (March 1-August 15), a qualified biologist must confirm that there are no nesting cavities of Black-capped Chickadees prior to initiating operations. If Black-capped Chickadees nesting cavities are present at the Site, wetland creation construction will not commence until the birds have fledged.

BIO-3: A wildlife management plan shall be developed to address issues such as managing elk encounters, and managing trash containers, food storage and human activities so as not to be an attractant for species such as corvids (crows, ravens and jays) and bears. Resort staff shall use the plan to educate resort visitors about the proper human etiquette when near elk herds, small groups of elk, or lone elk on the Site and on adjacent trails. Guests will be instructed to keep a safe distance from elk at all times. Calving and rutting season (September through December) will require greater distances for safe viewing. Upon arrival Resort guests will be given written information regarding proper etiquette near wildlife and the proper handling of food and trash. The written information will be developed in consultation with Redwood National Park staff and the California Department of Fish and Wildlife.

BIO-5: Any threat to visitors posed by elk shall be reported immediately to Redwood National Park Service (RNPS) and California Department of Fish and Wildlife (DFW). A log book at resort welcome center shall be available for resort users and other visitors to document elk/human interactions (include date, time, number of elk, and observation/issues). An annual report (with copy of logbook entries to date) documenting elk/human interactions/issues on resort grounds shall be prepared and submitted to RNSP and the DFW, who may recommend amendments to the management strategy.

BIO-6: Walking paths shall be established generally as shown on the project plans; pioneering trails through the wetland creation area shall be discouraged through revegetation, signage, and barriers such as split rail fencing. Trails shall have signage instructing visitors to provide distance from wild elk.

BIO-7: The applicant shall retain remnant Redwood Creek riparian vegetation occurring at the furthest downstream edge of the Site. The location of this vegetation is shown on Figure 6: Redwood Creek Remnant Riparian Vegetation.

BIO-8: Wetland fill will be offset by wetland creation at a ratio of 2:1. A Wetland Mitigation Plan shall be prepared by a qualified biologist. The Wetland Mitigation Plan will describe how the 2:1 ratio will be achieved and include a planting plan. This plan shall be reviewed and approved by Humboldt County Planning and Building Department prior to implementation.

BIO-9: Wetland 1 shall be protected from disturbance to the maximum extent feasible during adjacent wetland creation activities. The boundaries of Wetland 1 shall be demarcated with temporary fencing or flagging. There shall be no use of heavy equipment within the wetland area and erosion control measures shall be specified to reduce sedimentation to the wetland area.

FINDINGS: With mitigation incorporated, the Project will have a **Less than Significant Impact** on Biological Resources.

V. CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE:

This Initial Study considers to what degree the proposed project would (i) cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5; (ii) cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5 ; (iii) directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; and (iv) disturb any human remains, including those interred outside of formal cemeteries.

DISCUSSION: On July 25, 2013, the Lead Agency's consultant prepared and delivered a Record Search Request to the Northwest Information Center (NWIC) to evaluate the potential to encounter archaeological or historic resources while developing the Site. The consultant received the Records Search Results letter from NWIC on July 31, 2013; the results indicated approximately100 percent of the Site was previously surveyed in 1982. Although cultural resources were not identified at that time, NWIC recommended additional archeological study due to the passage of time and change in archeological research methods since the 1982 survey. The NWIC letter also recommended contacting local Native American tribes. The Yurok Tribal Historic Preservation Officer (THPO) was contacted as the property is within Yurok Tribe ancestral territory. The Yurok Tribe THPO indicated known local significance at the Site and requested an investigation by a qualified archeologist. Nick Angeloff, M.A. was retained to perform a cultural resource investigation at the Site. Appendix D: Confidential Phase I Archaeological Survey is available to agencies upon request. This document is not available for release to the general public.

V.a-d) The cultural resource investigation included evaluation of the site for the presence of archeological and historic resources. The Site is not currently listed on any register of historic places (national, state, or local). No paleontological resources are known to be on the Site nor were any discovered during fieldwork. No human remains are known to be on the Site nor were any discovered during fieldwork. During the cultural resource investigation no significant archeological resources were found at the Site. The Site does have local significance in that the Cultural Resource Investigation found that it is identified as a place where people significant to the Yurok Tribe and north coast history were born, lived, and passed. The old cabin location is the most significant portion of the Site that has the potential to be impacted by the project. The archaeologist's report includes avoidance and mitigation measures, developed in consultation with the Yurok Tribe, which will prevent significant adverse effects to this resource.

MITIGATION MEASURES:

CUL-1: A qualified cultural resource monitor familiar with north coast history shall be present during initial ground disturbing activities within 50 feet of the Tree Cedars location as delineated on the Monitoring Area Map Tear Sheet included in Appendix A of *Confidential Phase I Archaeological Survey*. This tear sheet will be made available to those doing fieldwork.

CUL-2: If cultural resources are encountered during construction activities, the contractor on site shall cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist, as well as the appropriate Tribal Historic Preservation Officer(s), is to be contacted to evaluate the discovery and, in consultation with the applicant and lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

CUL-3: The applicant shall work with the Yurok tribe to develop an appropriate representation (interpretive panel, kiosk or monument) of the history and significance of individuals associated with the Site. This interpretive feature will be included with the final design for the project.

FINDINGS: With mitigation incorporated the Project would have **Less Than Significant Impact** on Cultural Resources.

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

THRESHOLDS OF SIGNIFICANCE: This Mitigated Negative Declaration considers to what degree the Project would: (i) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides; (ii) result in substantial soil erosion or the loss of topsoil; (iii) be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse; (iv) be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; (v) have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; by professional geologists, which could result in damage to Project elements or other sites or structures.

DISCUSSION: According to the California Soil Resource Lab at UC Davis and the USDA Natural Resources Conservation Service Soil Survey Geographic (SSURGO) Database, soils on the Site are classified as the Kerr Series (90% of the Site). The Kerr series consists of very deep, well-drained soils on high floodplain steps, alluvial fans, and fan remnants on alluvial plains. These soils formed in mixed alluvium. Slopes range from 0 to 2 percent.

VI.a)

i) According to the most recent Alquist-Priolo Earthquake Fault Zoning Map, there are no fault lines located at or near the property (http://www.consrv.ca.gov/cgs/rghm/ap/Pages/index.aspx). No impact would occur.

ii) The Site is situated within a seismically-active area and multiple seismic sources capable of producing moderate to strong ground motions exist in the vicinity of the Site. Given the proximity of significant active faults (e.g., offshore Cascadia Subduction Zone) within northern California, this Site will experience ground shaking of some magnitude during the economic life span of any site development. Buildings will meet the most current building code standards for seismic safety. Educational materials will be provided to Resort guests regarding what to do in the event of an earthquake. Staff will receive training on an earthquake action plan to be able to assist Resort guests in the event of an earthquake. (See Mitigation Measure **GEO-1,** below).

iii) The Site is not mapped as being prone to liquefaction (Humboldt County General Plan,; Humboldt County Planning and Building Department). No impact would occur.

iv) The Site is relatively flat, located in a valley that is not subject to landslides (Humboldt County General Plan, Humboldt County Planning and Building Department). No impact would occur.

VI.b) The Site is currently an open pasture. The Project will involve substantial grading for roads and the installation of utility lines, water lines, and an on-site sewage disposal system. The majority of the top soil at the Site will be disturbed during construction. A Stormwater Pollution Prevention Plan (SWPP) will be required for the project. The SWPPP must list Best Management Practices (BMPs) that will use to protect storm water runoff. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs. During construction earthwork the potential loss of topsoil will be mitigated through the use of best management practices (BMPs) that will be listed in the SWPP. These will include at minimum containing and protecting stockpiled material from wind and rain at all times unless the materials are actively being used (See Mitigation Measure **GEO-2**). Once the Site is developed, most portions of the Site that are not developed with buildings, gravel and paved roads, and parking areas will be landscaped, and will not contribute to erosion or loss of topsoil. These areas will not contribute to a loss of topsoil or erosion. With mitigation incorporated, a less than significant impact would occur.

VI.c,d) Based on the Humboldt County General Plan hazard mapping the Site is in an area of low geologic instability and it is not prone to liquefaction. The Project will not result in increased potential for on- or off-site landslides. The Site is relatively flat. The soils at the Site are not expansive in nature, as described Table 18-1-B of the Uniform Building Code (1994). No impact would occur.

VI.e) The Project includes an Orenco Advantex on-site wastewater treatment system (OWTS) designed for maximum wastewater volume generation based on peak occupancy, a primary leachfield, and a 100 percent reserve leach field. The OWTS will treat wastewater produced by commercial, recreational, and residential activities at the Site, with a total estimated flow of approximately 19,500 gallons per day (gpd). The system is will be required to comply with the Water Quality Control Plan for the North Coast Region (Basin Plan, May 2011) requirements. The system will be approved by the Regional Water Quality Control Board with no waiver to the standards. A less than significant impact would occur.

MITIGATION MEASURES:

GEO-1: The owner/operator of the Resort will prepare and implement an earthquake and tsunami hazard plan. The plan will include staff training on what to do in the event of an earthquake, informational signage at the Resort, and an informational brochure for registered guests on what to do in the event of an earthquake or tsunami. The plan will be reviewed and approved by the Humboldt County Current Planning Division prior to commencing operation at the Resort.

GEO-2: A Storm Water Pollution and Prevention Plan (SWPPP) shall be prepared and approved by the California State Water Resources Agency prior to commencing construction. The SWPP will list best management practices to control sediment during construction. Implementation of the SWPP will require that all stockpiles be covered, stabilized, or protected with a sediment barrier (such as silt fencing or fiber rolls) prior to the onset of precipitation, and that during the rainy season soil stockpiles be covered and protected with a sediment barrier at all times (Caltrans, 2003).

FINDINGS: The Project would have a **Less Than Significant Impact with Mitigation Incorporated** on Geology and Soils.

VII. GREENHOUSE GAS EMISSIONS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions (GHG), either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE: This Mitigated Negative Declaration considers to what degree the Project would: (i) generate greenhouse gas emissions (GHG), either directly or indirectly, that may have a significant impact on the environment; (ii) conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

DISCUSSION: The Project includes an approximately 152-site campground and a commercial center with a gas station. The campground and gas station will be open to the general public. The primary greenhouse gas contribution of the project is expected to be from vehicle emissions for arriving vehicles. Most visitation is expected to be pass-by rather than destination travel, indicating that most arriving trips would occur in the absence of the project. It is expected that RV users will typically arrive towing a personal vehicle. Forty-eight of the sites will be tent sites and will typically involve a single vehicle arriving at each site. Electrical hookups will be available at all RV sites, however some RVs will use generators as a matter of preference, except during established quiet hours when the use of a generator is prohibited. Vehicles will not be allowed to idle during check in or while at the campsites. The availability of electrical hookups and limitations on idling and operation of generators during quiet hours will reduce the production of greenhouse gasses from operations.

VII.a) According to the Humboldt County General Plan Update, Draft Environmental Impact Report (DEIR), (April 2012), which has been circulated but not certified, Humboldt County has seen a significant decline in greenhouse gas (GHG) emissions since 1990. This is likely attributable to a steady and significant decline in the local lumber industry and closure of major industrial facilities related to timber processing, including lumber and pulp mills. The 2006 data included in the DEIR reveal that the overall GHG emission in unincorporated Humboldt County is approximately a half-million metric tons less than 1990. The DIER concludes that a single development such as the Project, would not have an individually-discernible effect on GHG emissions. A less-than-significant impact would occur.

VII.b) Currently there is no adopted plan or policy in Humboldt County specifically related to greenhouse gas emissions. The January 2012 Draft Climate Action Plan of the Humboldt County General Plan Update has been approved by the Planning Commission but has not been adopted by the Board of Supervisors.

No Impact would occur.

MITIGATION MEASURES: No mitigation required.

FINDINGS: The Project would have a **Less than Significant Impact** on Greenhouse Gas Emissions.

VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d)	Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g)	Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h)	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE: This Mitigated Negative Declaration considers to what degree the Project would: (i) create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; (ii) create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; (iii) emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; (iv) 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, create a significant hazard to the public or the environment; (v) 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, result in a safety hazard for people residing or working in the project area; (vi) for a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area; (vii) impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan; or (viii) expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

DISCUSSION: The majority of the Site is not known to contain any hazardous materials; however, an approximately 8,500-square-foot area near the entrance to the Site has been impacted from petroleum hydrocarbon and heavy metals generated by a former gas station and scrap yard located on an adjacent property (APN 520-081-011). The impacted area is subject to a soil management and contingency plan (Appendix E) which provides guidance for earthwork activities with respect to the identified areas of impact, the hazards associated with the impacts, and appropriate methods of minimizing personal exposure to the impacts. The impacted area is shown in Appendix E: Figure 2.

The proposed new gas station in the commercial center will involve receiving and dispensing diesel and unleaded fuel. These substances are considered hazardous and must be handled properly to avoid environmental impacts.

VIII.a,b) The gas station portion of the Project does involve the routine use and transport of both diesel and unleaded gasoline. The gasoline will be stored in underground fuel tanks and be permitted through the Humboldt County Division of Environmental Health. Adherence to best management practices for these substances is necessary to limit the possibility of upset and accident conditions involving the release of hazardous materials into the environment. To limit the possibility of hazardous materials entering the environment, mitigation measures are included which focus on spill prevention and spill response. With the incorporation of HAZ-1, a less than significant impact would occur.

VIII.c) The Site is not located within one-quarter mile from any existing or proposed school. The nearest school is Orick Elementary School which is approximately .32 miles away. A less than significant impact would occur.

VIII.d) The Site has been checked against the lists of hazardous materials sites maintained by the State of California Environmental Protection Agency (http://www.calepa.ca.gov/sitecleanup/corteselist/); the Site has not been identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, a report prepared by LACO in 2013, *Limited Scope Phase II Environmental Assessment* (LACO Associates, 2013) identified impacts from petroleum hydrocarbon and heavy metals on a very small portion of the Site. A soil management and contingency plan (Appendix E) has been developed and describes proper soil handling in the impacted area.

The soil management and contingency plan allows use of impacted soils in development of the Site, with certain restrictions, if covered by a minimum of 18 inches of clean soil, or capped by an impermeable surface (e.g., asphalt, concrete, etc.), and located more than 25 feet from a water course. The impacted soil will be retained on site approximately 800 feet from Redwood Creek, the nearest water course. A portion near the entrance will be covered by asphalt. The remainder will be placed in a landscaping berm and covered with a minimum of 18 inches of clean soil.

Under implementation procedures in the soil management and contingency plan, contractors are instructed to avoid personal exposure to the impacted materials during construction activities. To mitigate impacts to the public and the environment from impacted soils, the Soil Management and Contingency Plan will be implemented.

With the incorporation of HAZ-2, a less than significant impact would occur.

VIII.e, f) The Site is not in the vicinity of a private or public airstrip and is not subject to an airport land use plan. No impact would occur.

VIII.g) The Project would not have an impact on the County of Humboldt's Emergency Operations Plan (Humboldt County Office of Emergency Services, 2002). The Site is designed with suitable road widths and turn radii to accommodate emergency vehicles. A secondary access to the east of the manager's residence will be available for emergency services. No impact would occur.

VIII.h) The Project is located in Redwood Creek valley in a pastoral setting. According to the General Plan Hazard Mapping the area has a low fire hazard rating and therefore is not likely to be subject to wildland fires. No impact would occur.

MITIGATION MEASURES:

HAZ-1: The gas station facility shall adhere to the following to limit the possibility of hazardous materials from entering the environment:

- Maintain fuel dispensing areas using dry cleanup methods such as sweeping for removal of litter and debris, and use of rags and absorbents for leaks and spills. Fueling areas shall not be washed down unless the wash water is collected and disposed of properly.
- Fit underground storage tanks with spill containment and overfill prevention systems meeting the requirements of Section 2635(b) of Title 23 of the California Code of Regulations.
- Fit fuel dispensing nozzles with "hold-open latches" (automatic shutoffs) except where prohibited by local fire departments. Post signs at the fuel dispenser or fuel island warning vehicle owners/operators against "topping off" of vehicle fuel tanks.
- "Spot clean" leaks and drips routinely using a spill absorbent product. Maintain and keep current, as required by other regulations, a spill response plan and ensure that employees are trained on the elements of the plan.
- Manage materials and waste to reduce adverse impacts on stormwater quality.
- Upon hiring and annually thereafter, train all employees on proper methods for handling and disposing of waste. Make sure that all employees understand stormwater discharge prohibitions, wastewater discharge requirements, and best management practices. A training log or similar method shall be used to document training.

Inspect and clean, if necessary, storm drain inlets and catch basins within the facility boundary before October 1 each year. (City of Eureka)These requirements shall be implemented to the satisfaction of the Humboldt County Division of Environmental Health.

HAZ-2: All recommendations in *Soil Management and Contingency Plan* (Appendix E) shall be implemented. Redwood Parks Lodge Company shall provide a copy of this plan to all contractors whose duties may reasonably be expected to lead to contact with hazardous material and/or petroleum hydrocarbon-impacted soil in, or from, the impacted area delineated on Figure 2 of the plan. Contractors shall provide a copy of this plan to each of their employees working on the Site whose duties may put them in contact with impacted soils.

FINDINGS: With Mitigation incorporated, the Project would have a **Less Than Significant Impact** on Hazards or Hazardous Materials.

IX. HYDROLOGY AND WATER QUALITY. Would the project:		Potentially Significant Impact	Less Than Significant with Miligation Incorporation	Less Than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level, (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c)	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?	☐	☐	☒	☐
d)	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?	☐	☐	☒	☐
e)	Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☒	☐
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	☐	☒	☐	☐
i)	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?	☐	☒	☐	☐
j)	Result in inundation by seiche, tsunami, or mudflow?	☐	☒	☐	☐

THRESHOLDS OF SIGNIFICANCE: This Mitigated Negative Declaration considers to what degree the Project would: (i) violate any water quality standards or waste discharge requirements; (ii) substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level, (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted); (iii)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; (iv) 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; (v) create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff(vi) otherwise substantially degrade water quality ; (vii) place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map; (viii) place within a 100-year flood hazard area structures, which would impede or redirect flood flows, (viv) 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; or (x) result in inundation by seiche, tsunami, or mudflow.

DISCUSSION: The Site is located on nearly level ground within tsunami run-up zone (Cal EMA). The northern property line abuts the Redwood Creek levee. Orick Community Service District will provide water service to the Site. The Project will use an Orenco Advantex on-site wastewater treatment system which will be subject to permits through the Regional Water Quality Control Board.

IX.a) Project implementation and operation will not violate any water quality standards or waste discharge requirements. Landscaping within the Resort will incorporate low-impact development (LID) strategies to retain stormwater runoff on site. Internal roads will be crowned to direct drainage to rain gardens. RV and tent camping sites will drain to adjacent vegetated areas and swales. Rain gardens and other drainage features appear on the site plan (Figure 4).

The drainage for the commercial center will be filtered through an oil-water separator then drain to a drainage swale where it will percolate into the ground. The drainage swale will be located within the front yard setback and will be enhanced with wetland vegetation plantings. (Appendix F: Preliminary Technical Drainage Memorandum)

The Project includes an Orenco Advantex on-site wastewater treatment system (OWTS) designed to comply with North Coast Regional Water Quality Control Board (NCRWQCB) Basin Plan standards without waiver. Meeting these standards will ensure that the Project complies with NCRWQCB water quality standards and waste discharge requirements. (Appendix G: Preliminary Design Report On-Site Wastewater Treatment and Disposal Design)

During construction, best management practices (BMP) will be implemented to control runoff and ensure that the construction site does not generate any water quality or waste discharge impacts. These BMPs include fiber rolls or silt fencing as necessary to confine construction materials, and covering or seeding any stockpiles that will remain on site through the rainy season (See Mitigation Measure GEO-2). With mitigation incorporated, a less than significant impact would occur.

IX.b) The Project will be served by Orick Community Services District. The District receives water from two 60-foot wells. The District has provided a letter indicating its ability to serve the Project (Appendix H: Orick Community Services District Will Serve Letter). A less than significant impact would occur.

IX.c,d) The Project will not 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 on- or off-site erosion or siltation or result in on- or off-site flooding. No water courses will be altered by the Project. Surface water at the Site is physically disconnected from Redwood Creek by the existing levee. The Site is relatively level and rain water percolates in place or ponds in small depressions. Road and building construction associated with the Project will change drainage patterns; however, with the incorporation of low-impact development strategies, such as vegetated swales, the surface water will continue to be retained on site. Therefore there will not be significant drainage impacts that would result in on- or off-site erosion, siltation, or flooding. A less than significant impact would occur.

IX.e,f) There are no existing or planned off-site or community stormwater systems to serve the Site.., the septic system will meet requirements of the Basin Plan and not degrade water quality. Stormwater will be retained within the LID features and percolate naturally into the ground. Internal roads will be gravel to further reduce impervious surfaces. Runoff from the paved area in the commercial center, including the gas station, will be directed to an oil-water separator before discharging into an infiltration basin. A less than significant impact would occur.

IX.g) The Project does not involve the construction of housing on the Site No impact would occur.

IX.h,i) According to the July 19, 1982, FEMA FIRMette map (Community Panel Number 060060 0150 B) for the Site and surrounding area, the Special Flood Hazard Area (SFHA, or Zone A, essentially the 100-year flood area) is fully contained within the Redwood Creek levee system (see Figure 7: FEMA Flood Zone Map); the Site is completely outside the 100-year flood zone. However, a recent capacity assessment for the Redwood Creek levee suggests that aggradation in the lower Redwood Creek system has reduced the flood capacity of the levee (Northern Hydrology and Engineering, 2010). To support recertification of the levee by the Federal Emergency Management Agency (FEMA), the Humboldt County Department of Public Works is currently managing an effort to characterize the geotechnical stability of the levee system. Although the Project currently is outside the 100-year flood zone, given the unknown ability of the levee to contain flood waters, the Project will include a requirement to develop a flood management plan to limit the loss of life and property should a flood event occur. Peak occupancy is expected to occur during summer months when flood hazards are at their lowest. With mitigation incorporated, no impact would occur. See Mitigation Measure HYDRO-1.

IX.j) The Site is not subject to seiche or mudflow, but is subject to tsunami hazard. The Project is located in the Redwood Creek Valley adjacent to Redwood Creek and approximately 1.5 miles from the Pacific Ocean. According to the Humboldt County Hazard Mitigation Plan maps (see Figure 8: Tsunami Run Up Map), the entire community of Orick is within the tsunami run-up zone. Within the run-up zone flooding associated with a tsunami is anticipated and may be triggered by a near source (Cascadia Subduction Zone) or distant source (Pacific Rim) earthquake. The community of Orick participates in the "TusnamiReady" Program administered by the National Weather Service; Orick received the TsunamiReady designation in 2007. To be designated TsunamiReady, communities must establish a 24-hour Warning Point and Emergency Operations Center, establish multiple ways to alert the public to tsunami hazards, demonstrate community preparedness by designating a tsunami shelter in the safe zone, install evacuation route signage, and conduct educational programs related to tsunami hazards (National Weather Service, 2012). The nearest established evacuation point in relation to the Site is the Orick School Route identified in the Redwood National And State Parks Tsunami Ready and Tsunami Contingency Plan (see Figure 9: Tsunami Evacuation Route). This route will allow resort guests and staff to reach the evacuation point in approximately 13 minutes (Nicolini, 2013). Signs will be placed within the Resort marking the evacuation route. An informational brochure will be provided to all Resort guests to help educate them about tsunami and earthquake hazards. Staff will be trained in both earthquake and tsunami hazard preparedness and response. With the application of Mitigation Measure HYDRO-2, a less than significant impact would occur.

MITIGATION MEASURES:

HYDRO-1: A flood management plan will be prepared for the Resort and will be reviewed and approved by the Humboldt County Planning and Building Department prior to first occupancy. If the National Weather Service issues a flood warning for the adjacent portion of Redwood Creek, the Resort will be evacuated.

HYDRO-2: Prior to operation of the Resort the operator shall ensure that the Resort complies with the TsunamiReady standards by displaying information, installing proper signage, and providing Resort guests with an informational brochure. Resort staff will be trained in procedures to follow in the event of a tsunami and the Resort office will be equipped with a weather radio with automatic alert function.

FINDINGS: With mitigation incorporated, the Project would have a **Less than Significant Impact** on Hydrology and Water Quality.

X. **LAND USE AND PLANNING**. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒	☐	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE: This Mitigated Negative Declaration considers to what degree the Project would have the following impacts: (i) divide an established community or conflict with existing land uses within the Project's vicinity, such as agriculture resources; (ii) conflict with the Orick Community Plan / Orick Area Plan (LCP) designations, policies, and zoning ordinances regarding commercial facilities; or (iii) conflict with applicable environmental plans and protection measures enforced by regulatory agencies, such as habitat conservation plans or a natural community conservation plan.

DISCUSSION: The Site is located in the unincorporated community of Orick, California. Approximately 11.7 acres of the Site are located in the coastal zone and within the planning area of the North Coast Area Plan, a local coastal plan. This portion of the Site has a land use designation and zoning designation of commercial recreation. The remaining approximately 15 acres of the Site are located inland and within the Orick Community Plan. This portion of the Site has a land use designation of commercial recreation and a zoning designation of highway services commercial. There is a qualified zone which stipulates that the property must be used for commercial recreation, including resorts. The property use proposed in this Project is conditionally permitted and requires a County of Humboldt conditional use permit, County of Humboldt and State of California coastal development permits, and County of Humboldt special permit. The special permit is required to allow work within a wetland to occur on the inland portion of the property.

X.a) The Project will not physically divide an established community. It is located on the north side of U.S. Highway 101 within the town of Orick. The highway to the south and Redwood Creek Levee to the north provide community connectivity that will not be affected by the Project. No impact would occur.

X.b) The proposed use of the Site as a resort is conditionally permitted (highway services commercial in the inland area and commercial recreation in the coastal area). Additionally, both inland and coastal portions of the Site have a land use designation of commercial recreation with visitor serving uses being the primary uses identified. The commercial center, including the convenience store, deli, and gas station, are principally permitted.

The County of Humboldt adopted a Streamside Management Area Ordinance in 2002 to protect sensitive riparian and wetland resources. The Project involves work within wetlands on the inland portion of the Site: approximately 1.39 acres of wetland fill to be mitigated by wetland creation and enhancement at a 2:1 ratio. This mitigation measure is included as BIO-1. With the incorporation of BIO-1 the Project will meet the intent of the Streamside Management Area Ordinance. With the application of Mitigation Measure BIO-1, a less than significant impact would occur.

X.c) There are no adopted habitat conservation plans or natural community conservations plans that apply to the Site. No impact would occur.

MITIGATION MEASURES: See **BIO-1**.

FINDINGS: The Project would have a **Less than Significant Impact with Mitigation** on Land Use and Planning.

XI. MINERAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE: This Mitigated Negative Declaration considers to what degree the Project would: (i) 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; or (ii) 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 involves the construction and operation of a resort and commercial center. There are no known mineral resources of significance at the Site that would be made unavailable by the Project. The only known locally-available mineral resource is alluvial gravels that are extracted from gravel bars in the Redwood Creek channel. The nearest active Redwood Creek gravel extraction operation is approximately 1.3 miles northeast of the Site.

XI.a,b) The Site and surrounding areas do not contain mineral resources that are of value locally, to the region, or to residents. The Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan, as the Site is not identified as a locally important mineral resource recovery site. No impact would occur.

MITIGATION MEASURES: No mitigation required.

FINDINGS: The Project would have **No Impact** on Mineral Resources.

XII. NOISE. Would the project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b)	Expose persons to or generate excessive ground borne vibration or ground borne noise levels?	☐	☐	☒	☐
c)	Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
d)	Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f)	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?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE: This Mitigated Negative Declaration considers to what degree the Project would: (i) expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; (ii) expose persons to or generate excessive ground borne vibration or ground borne noise levels; (iii) result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; (iv) result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; (v) 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; or (vi) 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 main source of noise at the Site is U.S. Highway 101 (County of Humboldt , 1984). The land use compatibility guidelines in the HUD Noise Guidebook recommend a limit of 60 dBA as a "clearly acceptable" noise level for day-night averaged sound (L_{DN}); for transient lodging facilities the guidelines recommend a limit of 70 dBA as a "normally acceptable" limit for day-night averaged sound (L_{DN}). The HUD calculation for L_{DN} includes a 10 dBA penalty for nighttime noise measurements. This standard has also been accepted by Humboldt County, as outlined in the Humboldt County General Plan, Figure 3-2: Land Use/Noise Compatibility Standards.

LACO Associates prepared a preliminary noise evaluation for the Site in August 2013 (Appendix I: Preliminary Noise Evaluation). The overall L_{DN} calculated from direct measurements was 62.7 dBA at a distance of 86 feet north of the centerline of U.S. Highway 101.

Resort activities and guests have the potential to generate noise that may affect adjacent areas. This will be controlled by operational guidelines.

XII.a) The existing (pre-project) L_{DN} on for the Site ranges from 70 dBA at a distance of 26 feet from the centerline of U.S. Highway 101, down to 50 dBA at a distance of 600 feet from the centerline of U.S. Highway 101. The overall L_{DN} at the Site is 62.7 dBA at a distance of 86 feet north of the centerline of U.S. Highway 101. Figure 3 of *Preliminary Noise Evaluation* (see Appendix I) shows noise contours. Distances of 13 feet to 26 feet from the southern property line were determined to have a 70 dBA L_{DN}; according to the HUD guidelines, this noise level is not acceptable. The Project includes a noise setback; no lodging will be allowed within 26 feet of the southern property line. The remainder of the Site was determined to have a noise level of 65 dBA L_{DN}, which is within the normal accepted level for outdoor noise exposure for transient lodging, outdoor playgrounds, and commercial establishments. A less than significant impact would occur.

XII.b) The Project involves substantial site grading and construction work associated with the proposed buildings and site infrastructure. Although construction activities may generate ground-borne vibrations they are not expected to be substantial as the Project does not require pile driving or other types of construction methods known to cause excessive ground-borne vibrations. A less than significant impact would occur.

XII.c,d) During construction there will be a temporary increase in ambient noise levels at the Site. The nearest sensitive receptors are located adjacent to the eastern property line where there is a residential neighborhood. Temporary impacts to the neighborhood noise levels will be mitigated through operational controls on the timing of construction activities. Construction activities will be limited to between 7:30 AM. and 6 PM. Monday through Friday and between 9 AM. and 5 PM. on Saturdays. No construction will occur on Sundays. Post-construction noise will be generated by Resort activities. The primary sources of noise will be vehicles entering and exiting the Site, the recreational activities of Resort guests, and special programs sponsored by the Resort. Additionally, RV generators may generate noise. The primary control for noise generated by the Resort will be operational guidelines instituting quiet hours. The Plan of Operations and Principles and Guidelines for Development (Appendix J: Plan of Operations and Principles and Guidelines for Development) specifies quiet hours from 10 PM to 8 AM. During this time there will be no amplified announcements or presentations, no running of generators, and no excessively loud use of outdoor spaces. With mitigation incorporated, a less than significant impact would occur.

XII.e,f) The Project is not located in an airport land use plan area. The Project is not located within the vicinity of a private airstrip. No impact would occur.

MITIGATION MEASURES:

NOISE-1: Construction noise shall be limited through operational standards. Construction activities will be limited to between 7:30 AM and 6 PM. Monday through Friday and between 9 AM and 5 PM. on Saturdays. No construction will occur on Sundays. Neighboring landowners will be notified of the anticipated construction schedule prior to commencement of construction activities.

NOISE-2: Noise generation from Resort operations shall be limited through operational standards. Resort quiet hours shall be enforced from 10 PM. to 8 AM.

FINDINGS: With Mitigation incorporated, the Project would have a **Less than Significant Impact** on Noise.

XIII. POPULATION AND HOUSING. Would the project:	Potentially Significant Impact	Less Than Significant with Miligation Incorporation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and/or businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

THRESHOLDS OF SIGNIFICANCE: This Mitigated Negative Declaration considers to what degree the Project would result in, or would contribute to, population growth, displacement of housing units, demolition or removal of existing housing units, or any Project-related displacement of people from occupied housing.

DISCUSSION: The Project will be located within the community of Orick, an unincorporated, census designated place with a population of 357 (US Census Bureau, 2013). The Project is located on 27.7-acre parcel developed with a single-family residence.

XIII.a) The Project is expected to employ 21 individuals in peak season; there will be reduced staffing in the off season. It is not likely that all of these individuals would be new permanent residents of Orick. The population is not expected to significantly increase due to the additional, seasonally-variable, project-related employment. A less than significant impact would occur.

XIII.b) The existing single-family residence will be used as a manager's residence. No housing will be displaced with the Project. No impact would occur.

XIII.c) There is a tenant in the existing on-site residence. This tenant will be given notice to vacate prior to occupancy of the Resort. Although the current tenant will not remain in the dwelling, a single tenant does not constitute substantial displacement of people. Additionally, because the property has been used as a rental, turnover is expected. A less than significant impact would occur.

MITIGATION MEASURES: No mitigation required.

FINDINGS: The Project would have a **Less than Significant Impact** on Population and Housing.

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

THRESHOLDS OF SIGNIFICANCE: This Mitigated Negative Declaration considers to what degree the Project would 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: (i) fire protection; (ii) police protection; (iii) schools; (iv) parks; or (v)other public facilities.

DISCUSSION: The Site is located within unincorporated community of Orick. Fire protection is provided by CalFire and the Orick Community Services District (OCSD). The Humboldt County Sheriff's Office and California Highway Patrol provides police protection. The Site is within the vicinity of Redwood National and State Parks. Orick Elementary School is the only school in the community.

XIV.a) Fire protection will be provided by CalFire, operating out of the Trinidad Fire Station, approximately 20 miles south of the site. Supplemental fire service is available under the terms of mutual aid agreements between CalFire, the Orick Volunteer Fire Department (which is operated under the authority of the Orick Community Services District), and Redwood National and State Parks. The Project, once operational, will increase the number of people within the service area on any given day. Fire hydrants will be installed to the specifications of California Housing and Community Development (HCD) and in accordance with directions from Orick Community Services District regarding the location of hydrants. There is no evidence that the Project would result in the need for additional fire facilities beyond the required on-site improvements, such as fire hydrants and emergency water storage. The Project would not result in a significant increase in demand for fire protection services. A less than significant impact would occur.

XIV.b) The Project is located within the jurisdiction of the Humboldt County Sheriff's Office. The nearest station is approximately 26 miles to the south in McKinleyville, CA. The California Highway Patrol has responsibility on U.S. Highway 101. The nearest station is approximately 36 miles to the south in Arcata. Although the Project will result in an increased number of people on any given day, several aspects of the project proposal will limit the need for a significant increase in protection service at the Site. The Project plan of operations includes a resident manager at the Resort and quiet hours beginning at 10 PM. The resident manager will have the ability to monitor the Resort, ensure orderly conduct of park guests, and refuse stay to guests who do not follow the rules of the Resort. The resident manager will also be a point of contact for the surrounding community. Contacting the resident manager will be the first step to resolving any issue that may be generated by Resort guests. This approach is expected to reduce calls to the Sheriff's Office. For any issues that the resident manager is unable to resolve, the Sheriff's Office would be contacted. The Project would not result in a significant increase in demand for police services. No new Sherriff's facilities are expected to be required to provide service to the subject site. A less than significant impact would occur.

XIV.c) The Project does not involve any growth-inducing impacts that would create additional demand for area schools. The Resort is designed to serve transient visitors. The Project is expected to employ 21 individuals in peak season; there will be reduced staffing in the off season. It is not likely that all of these individuals would be new permanent residents of Orick. The population is not expected to increase due to the additional, seasonally-variable, project-related employment. The Project will not increase the need for schools or cause alterations to the existing school services. No impact would occur.

XIV.d) The Project will serve visitors to the Redwood National and State Parks and other north coast area attractions by offering overnight accommodations and guided tours. Redwood Adventures will be located in the commercial center and will cater to those looking to explore the region by horse, mountain bike, canoe, or kayak. The Resort will offer conveniences to tourists already drawn to the region. The majority of people staying at the Site are expected to visit the area with or without the Project. The multitude of county, state, and national parks will not be overburdened by the Project. No residential units will be constructed as part of the Project and the population in the Orick area is not expected to increase due to the Project. The Project will not increase the usage of parks beyond their existing capacity or necessitate the construction of additional parks. A less than significant impact would occur.

XIV.e) No other public facilities will be impacted significantly by the Project. Orick CSD will provide water to the Project and has existing capacity to do so. A less than significant impact will occur.

MITIGATION MEASURES: No mitigation required.

FINDINGS: The Project would have a **less than significant impact** on Public Services.

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

THRESHOLDS OF SIGNIFICANCE: This Mitigated Negative Declaration considers to what degree the Project would: (i) increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or (ii) include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

DISCUSSION: The Project will serve visitors to the Redwood National and State Parks and other north coast area attractions. Redwood Adventures will be located in the commercial center and will cater to those looking to explore the region on horseback, mountain bike, canoe, or kayak.

XV.a,b) The Resort will provide overnight accommodations and guided tours to tourists already drawn to the region. The majority of people staying at the Site are expected to visit the area with or without the Project. The multitude of county, state, and national parks will not be overburdened by the Project. Within the Resort recreational facilities will be provided for Resort guests and include internal trails, hot tubs, and outdoor game areas. A less than significant impact would occur.

MITIGATION MEASURES: No mitigation required.

FINDINGS: The Project would have **a Less than Significant impact** on Recreation.

XVI. TRANSPORTATION / TRAFFIC. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) 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?	☐	☒	☐	☐
b) Conflict with an applicable congestion management program including, but not limited to, level of service (LOS) standards and travel demand measures, or other standards established by the county congestions management agency for designated roads or highways?	☐	☒	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE: This Mitigated Negative Declaratino considers to what degree, if any, the project would: (i) 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; (ii) conflict with an applicable congestion management program including, but not limited to, level of service (LOS) standards and travel demand measures, or other standards established by the county congestions management agency for designated roads or highways; (iii) result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks; (iv) substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); (v) result in inadequate emergency access; or (vi) 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 Site is located on U.S. Highway 101 in Orick, California. While U.S. Highway 101 is generally north-south trending, the Site is located along a portion of the highway that runs east-west for approximately one mile. Note discussion here refers to northbound and southbound lanes.

The entrance to the Resort will be at the eastern property corner (Figure 4: Site Plan), this will require a new commercial encroachment. U.S. Highway 101 is a two-lane highway along most of the Site's frontage. There is an existing center turn lane that runs along the easternmost 275 feet of the Site's southern property line (frontage). The speed limit in front of the Site is 35 miles per hour. The most recent traffic counts, conducted by Caltrans in 2011, show annual average daily traffic at the site is 3,825 vehicles (California Department of Transportation, 2011). There are no local roads servicing the Site.

XVI.a) In 2011 a group of community and government agencies along with a design team worked with the Orick community to develop ideas for enhancing Orick's main street (U.S. Highway 101 through the central business district) by improving Orick's sense of place as a gateway community to Redwood National and State Parks. The resulting report *Improving Orick's Sense of Place as a Gateway to Redwood Parks,* outlines various improvements that can be made to Orick's main street to enhance the downtown Orick area. The report lists desired improvements in a prioritized phased schedule to be implemented as funding becomes available. Improvements generally include monuments at the southern entrance to the community, sidewalks, crosswalks and a raised median north of the project site, a radar feedback sign, and colorized shoulders. Improvements identified adjacent to the Site are to be initiated in the final phase and include colorized shoulders along the Project frontage with U.S. Highway 101. No funding source has been identified for the initial phases of the improvements. The Project has been designed so that if and when the final phase is initiated it will not conflict with the development of colorized shoulders.
A less than significant impact would occur.

XVI. b) The level of use at the Site will not conflict with an applicable congestion management program including, but not limited to, level of service (LOS) standards and travel demand measures, or other standards established by the county congestions management agency for designated roads or highways.

LOS is commonly used by state, county, and city regulatory agencies to quantify traffic operations on various types of roads based on traffic volumes and roadway capacity, using a series of letter designations ranging from A to F, as established in the *Highway Capacity Manual* (HCM) (Transportation and Research Board of the National Academies of Science in the United States, 2010). Generally, LOS A represents free-flow conditions and LOS F represents restricted-flow or breakdown conditions. Level of service is determined by estimating the average intersection delay in seconds per vehicle. The through movements on an uncontrolled main street are assumed to operate at free flow (LOS A).

Caltrans holds jurisdiction for the operation and maintenance of U.S. Highway 101 along the frontage of the Site. The following excerpt is from Caltrans's *Guide for the Preparation of Traffic Impact Studies*:

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

LACO Associates performed a preliminary transportation and circulation analysis for the proposed new intersection (Appendix K: Preliminary Transportation and Circulation Analysis) which includes an LOS analysis. Analysis shows the estimated future-plus-project traffic conditions will result in LOS C at the intersection of U.S. Highway 101 and the proposed access road; LOS C meets applicable traffic standards.

A less than significant impact would occur.

XVI.c) The Project does not involve air traffic or transport of goods by air, and will not 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. No impact would occur.

XVI.d) The design of the new intersection will be subject to a Caltrans encroachment permit. Based on the Transportation and Circulation Analysis (Appendix K), an acceleration lane and extension of a center turn pocket/left turn lane will be required (Mitigation Measure Traffic–1), The new intersection will not increase hazards due to sharp curves or dangerous intersections. With mitigation incorporated, a less than significant impact would occur.

XVI. e) The Project will not result in inadequate emergency access on the existing road system. The Project design allows for a primary and secondary emergency access. Internal roads are planned at 18 to 30 feet wide, and will be of sufficient width to allow for emergency vehicle access. Additionally, the preliminary transportation and circulation analysis evaluated the internal roads turning radii and found internal road tuning movements to be sufficient for RV and emergency vehicle maneuvering. No impact would occur.

XVI.f) The Project will not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities; no such plans exist. The Project design provides pedestrian access to the trail along Redwood Creek. No impact would occur.

MITIGATION MEASURES:

Traffic-1: Construction of an acceleration lane and extension of the center turn pocket/left turn lane is required. The final design of these facilities will be engineered through a Caltrans Encroachment Permit. Caltrans shall approve the final design prior to construction of any facilities in the right of way.

FINDINGS: With **Mitigation incorporated,** The Project would have a **Less than Significant Impact** to Transportation/Traffic.

XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) 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?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider, which serves the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

THRESHOLDS OF SIGNIFICANCE: This Mitigated Negative Declaration considers to what degree the Project would: (i) exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, (ii) require or result in the construction of new water or wastewater facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; (iii) 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; (iv) have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed; (v) result in a determination by the wastewater treatment provider, which serves the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; (vi) be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or (vii) Comply with federal, state, and local statutes and regulations related to solid waste.

DISCUSSION: The Project involves new water service provided by Orick Community Services District and electrical service provided by Pacific Gas and Electric. Both of these services will be provided without the need for additional capacity along existing service lines. There is no storm drain system. Stormwater will be retained on site and filtered through low-impact development features. An on-site wastewater treatment system will be installed to the specifications of the Regional Water Quality Control Board.

XVII.a,b,e) There is no municipal wastewater treatment provider. A new on-site Orenco Advantex wastewater treatment system will be developed. Wastewater treatment requirements will not be exceeded. The on-site wastewater treatment system will be designed to meet all applicable North Coast Regional Water Quality Control Board standards. Water will be provided by Orick Community Services District, which has the capacity to serve the Project without construction of new water facilities. A less than significant impact would occur.

XVII.c) The Project will not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities. The Project design incorporates low-impact development strategies to retain stormwater on site. See discussion in Hydrology section. No impact would occur.

XVII.d) The Orick Community Services District has existing capacity to serve the Project as indicated in a "will-serve letter" (November 6, 2013). Water demand was estimated using loading values provided by Humboldt County Division of Environmental Health (for wastewater), anticipated occupancy/usage values for the site for the dry (April 15 through October 14) and wet (October 15 through April 14) seasons, and the proposed irrigation of an approximately 1.7-acre area at 1 inch of water per week (dry season only).The estimated water demand is shown in Table 3.

Table 3: Estimated Water Demand

Demand Source	Peak Demand (gpd)	Average Dry Season Demand (gpd)	Average Wet Season Demand (gpd)
RV Stalls	9,800	7,250	2,450
Camping/Glamping	1,330	980	350
On-site Laundry	1,500	1,100	400
Service Station Restroom	2,500	1,860	630
Restaurant	150	111	39
Irrigation	4,952	4,952	---
Single-family Residence	150	150	150
Spa / Pool	1,500	---	---
Total	**21,882**	**16,403**	**4,019**

gpd = gallons of water per day

A less than significant impact would occur.

XVII.f,g) Humboldt Waste Management Authority (HWMA) is a Joint Powers Authority made up of the following municipalities: Arcata, Blue Lake, Eureka, Ferndale, Rio Dell, and Humboldt County. There are no active local landfills. HWMA manages the transport of solid waste for disposal at either the Anderson Landfill in Shasta County or the Dry Creek Landfill in Medford, Oregon. Neither of these landfills is approaching capacity. The Project will not generate solid waste quantities that would exceed existing capacity. HWMA contracts with Humboldt Sanitation for solid waste pick-up in the northern portion of the county. Solid waste and recyclables will be collected in dumpsters screened by a fence enclosure and picked up by Humboldt Sanitation on a not-less-than weekly basis. HWMA provides services consistent with California Code of Regulations requirements. There is no evidence that the Project as proposed would not be able to comply with federal, state, and local statutes and regulations related to solid waste. No impact would occur.

MITIGATION MEASURES: No mitigation required.

FINDINGS: The Project would have **a Less than Significant Impact** on Utilities and Service Systems.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) 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, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).	☐	☐	☒	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

DISCUSSION:

XVIII.a) The Project will not degrade the quality of the environment. There is no evidence that the Project will substantially reduce the habitat of a fish or wildlife species or cause a fish or wildlife population to drop below self-sustaining levels. There will be no impacts to fish populations as the Project does not alter any riparian areas and Redwood Creek levee will prevent surface runoff from the Site from entering Redwood Creek. The on-site wastewater treatment system will be designed to fully comply with North Coast Regional Water Quality Control Board requirements. Fill of approximately 1.39 acres of low-quality wetlands on the inland portion of the Site will be offset by creating 2.78 acres of high-quality wetlands (2:1 ratio). The biological survey did not record any populations of sensitive plant species on the Site (*Biological Survey Results*, LACO, 2013). The dominant vegetation is non-native pasture grasses. Given the lack of habitat at the Site there is no evidence that it supports rare or endangered animal species. Therefore the Project will not threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. There is no evidence that the Project would eliminate important examples of the major periods of California history or prehistory. There are no such resources at the Site. A less than significant impact would occur.

XVIII.b) The Project is in alignment with the Humboldt County General Plan land use and zoning designations for the Site: Commercial Recreation and Highway Services Commercial. The potential effects of these designated uses have been considered in the County General Plan and Local Coastal Program (North Coast Area Plan). Orick is not developing rapidly and no new developments other than the proposed project are currently anticipated in the vicinity. As with any development or operation, the Project will contribute incrementally to a variety of potential impacts; however, this contribution is less than significant and is not "cumulatively considerable".

XVIII.c) The Project will not have environmental effects that will cause a substantial adverse effect on human beings either directly or indirectly. The Project involves the construction and operation of a recreational vehicle park and commercial center in an area that is already well-traveled by tourists. The Project will provide convenience items and lodging for the traveling public. Loss of low-quality wetlands will be fully offset by wetland creation and enhancement, resulting in no net loss of wetlands.

Based on the Project as described there is no evidence to indicate the Project will have the potential to degrade the quality of the environment, reduce the habitat of a fish or wildlife species, threaten to eliminate a plant or animal community, or eliminate important examples of the major periods of California history or pre-history; will have impacts that are individually limited but cumulatively considerable; or will have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

MITIGATION MEASURES: No mitigation required.

FINDINGS: **The Project would have a less than significant impact on mandatory findings of significance.**

V. REFERENCES

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P:\6700\6782 Redwood Parks Lodge Company\6782.06 RPLC Orick Town Site Entitlements\06 Planning\Environmental Docs_CEQA_NEPA\6782.06 Orick Townsite Draft Initial Study 20131027.docx

Appendix A

Biological Survey Report, LACO Associates

(On File at Humboldt County Planning and Building Department,
3015 H Street, Eureka, CA 95501)

Appendix B

Redwood National Park Resort Wetland Confirmation, LACO Associates

(On File at Humboldt County Planning and Building Department,
3015 H Street, Eureka, CA 95501)

Appendix C

Redwood National Park Resort Wetland Buffer Criteria Analysis, LACO Associates

(On File at Humboldt County Planning and Building Department,
3015 H Street, Eureka, CA 95501)

Appendix D

Confidential Phase I Archeological Survey (Available to public agencies upon request, not for public release), *LACO Associates*

(On File at Humboldt County Planning and Building Department, 3015 H Street, Eureka, CA 95501)

Appendix E

Soil Management & Contingency Plan, LACO Associates

(On File at Humboldt County Planning and Building Department, 3015 H Street, Eureka, CA 95501)

Appendix F

Preliminary Technical Drainage Memorandum, LACO Associates

(On File at Humboldt County Planning and Building Department,
3015 H Street, Eureka, CA 95501)

Appendix G

Preliminary Design Report On-Site Wastewater Treatment & Disposal Design, LACO Associates

(On File at Humboldt County Planning and Building Department, 3015 H Street, Eureka, CA 95501)

Appendix H

Orick Community Services District Will Serve Letter

(On File at Humboldt County Planning and Building Department, 3015 H Street, Eureka, CA 95501)

Appendix I

Preliminary Noise Evaluation, LACO Associates

(On File at Humboldt County Planning and Building Department,
3015 H Street, Eureka, CA 95501)

Appendix J

Plan of Operations & Principles & Guidelines for Development, Redwood Parks Lodge Company

(On File at Humboldt County Planning and Building Department,
3015 H Street, Eureka, CA 95501)

Appendix K

Preliminary Transportation & Circulation Analysis, LACO Associates

(On File at Humboldt County Planning and Building Department,
3015 H Street, Eureka, CA 95501)

Appendix L

Mitigation & Monitoring Program

(On File at Humboldt County Planning and Building Department,
3015 H Street, Eureka, CA 95501)

ATTACHMENT 5
Referral Agency Comments and Recommendation

Referral Agency	Response	Recommendation	Attached	On File
County Building Inspection Division	✓	Conditional Approval		✓
County P/W, Land Use Division	✓	Conditional Approval	✓	
County Division of Environmental Health	✓	Approval		✓
Orick Design Review Committee	✓	Approval		✓
Humboldt Bay Municipal Water District	✓	Approval		✓
California Coastal Commission	✓	Question as to wetland buffers	✓	
USACOE		No Corps permit req.		
USFWS	✓	Conditional Approval	✓	
CalFire	✓	Standard Conditions		✓
California Dept. of Fish & Game	✓	Corvid Mgmt Plan	✓	
CalTrans	✓	Clarification request	✓	
RWQCB	✓	Requires permits from RWQCB	✓	
NCUAQMD				

DEPARTMENT OF PUBLIC WORKS
COUNTY OF HUMBOLDT
MAILING ADDRESS: 1106 SECOND STREET, EUREKA, CA 95501-0579
AREA CODE 707

ARCATA-EUREKA AIRPORT TERMINAL
McKINLEYVILLE
FAX 839-3596
AVIATION 839-5401

PUBLIC WORKS BUILDING
SECOND & L ST., EUREKA
FAX 445-7409

ADMINISTRATION	445-7491	NATURAL RESOURCES	445-7741
BUSINESS	445-7652	NATURAL RESOURCES PLANNING	267-9540
ENGINEERING	445-7377	PARKS	445-7651
FACILITY MAINTENANCE	445-7493	ROADS & EQUIPMENT MAINTENANCE	445-7421

CLARK COMPLEX
HARRIS & H ST., EUREKA
FAX 445-7388
LAND USE 445-7205

LAND USE DIVISION INTEROFFICE MEMORANDUM

TO: Michael Wheeler, Senior Planner, Planning & Building Department

FROM: Robert W. Bronkall, Deputy Director

VIA: Kenneth Freed, Senior Engineering Technician

DATE: 05/14/2014

RE: REDWOOD PARKS LODGE CO, INC., APN 520-142-009-000, AA 13-052, CDP 14-016, CUP 14-008, SP 14-022

The Department of Public Works (Department) provided comments to a previous site plan for this project on 04/15/2005. Although most of the Departments concerns have been addressed, a few issues still need to be addressed before the project is presented to the Planning Commission:

1. After reviewing the Conceptual Drainage Plan it is unclear where the drainage will go if the bioswale is capacity is exceeded. The applicant must coordinate with Caltrans regarding overflow from the bioswale.

2. Applicant will need to apply for an "encroachment" permit from the Department for the proposed trail connections proposed within the levee right-of-way. Any proposed improvements within the levee right-of-way will need to be compatible with ongoing levee operation and maintenance. Issuance of an "encroachment" permit will require concurrence from the U.S. Army Corps of Engineers.

3. Under the current effective Flood Insurance Rate Map, the project area is not situated within a special flood hazard area. However, FEMA may revise the Flood Insurance Rate Map in 2015 based on new federal policy regarding levee accreditation. A technical study to calculate the base flood water surface elevations behind the Redwood Creek levee will be completed within two to three months. The Department recommends that the applicant consult with the Environmental Services Division to obtain the results of this study and use the data to design new structures to comply with the Flood Damage Prevention ordinance.

// END //

Wheeler, Michael

From: Van Hattem, Michael@Wildlife <Michael.vanHattem@wildlife.ca.gov>
Sent: Friday, May 16, 2014 1:02 PM
To: Wheeler, Michael
Cc: Merkel, Karynn; bill_mciver@fws.gov
Subject: CDFW - Redwood Parks Lodge Company Orick Townsite Proposal

Good afternoon Michael,

Thank you referring the California Department of Fish and Wildlife the Redwood Parks Lodge Company Orick Townsite Proposal (Project). Briefly, our main concern with this Project is trash management as it relates to corvids (e.g. jays, crows, and ravens). We need to see in full detail what the strategy is for this project. Infrastructure is important as well as management. We'd like an opportunity to review the plan in detail and the plan should be fully enforceable through some legally binding measure. I have communicated directly with Beth Burks (LACO) on some of these strategies. Other recommendations would include:

- Fully shielded lighting (no photo pollution)
- Include LID stormwater management
- Use native plants in landscaping

Please let me know if you or the applicant have any questions- thank you.

Michael G. van Hattem
Environmental Scientist – Coastal Conservation Planning
California Department of Fish and Wildlife Northern Region
707-445-5368
Michael.vanHattem@wildlife.ca.gov
REPORT POACHERS & POLLUTERS: 1-888-334-2258

DEPARTMENT OF TRANSPORTATION
DISTRICT 1, P. O. BOX 3700
EUREKA, CA 95502-3700
PHONE (707) 441-4540
FAX (707) 441-5869
TTY (707) 445-6463

Serious drought.
Help Save Water!

May 9, 2014

Michael Wheeler
Humboldt County Planning and Building Dept.
3015 H Street
Eureka, CA 95501

1 - HUM - 101 - 120.8
Orick RV Park
DB #18961, 19054, 19149

Dear Mr. Wheeler,

Thank you for the opportunity to comment on the proposed Redwood National Park Resort and associated Plan of Operations/Principals and Guidelines for Development, Preliminary Transportation and Circulation Analysis, and Draft Initial Study and Environmental Checklist. The project proposes a 152-unit transient habitation facility to include a campground, RV Park, Lodge/Commercial Center and gas station in the community of Orick (1-HUM-101-120.8). Caltrans' Planning and Operations Departments have been working with the consultant during the pre-development of this proposal and have provided comments on various drafts in the past. We offer the following additional comments:

- It is unclear what is being proposed in the cross-section "Existing and Proposed Lane Configuration" of the *Preliminary Transportation and Circulation Analysis*. It appears that there are two lanes to the north/west of U.S. Highway 101 in this drawing. Please clarify.

As a reminder, any work done within the State right-of-way will require an encroachment permit from the Caltrans District 1 Permits Office. Encroachment permit applications are reviewed for consistency with State standards and are subject to Department approval. Requests for Caltrans encroachment permit application forms can be sent to Caltrans District 1 Permits Office, P.O. Box 3700, Eureka, CA 95502-3700, or requested by phone at (707) 445-6389. For additional information, the Caltrans Permit Manual is available online at: http://www.dot.ca.gov/hq/traffops/developserv/permits/.

If you have questions or would like further clarification, please contact me at the number above or tatiana.ahlstrand@dot.ca.gov.

Sincerely,

Tatiana Ahlstrand
Associate Transportation Planner
Office of Regional and Community Planning

Merkel, Karynn

From: Keiran, Paul@Waterboards <Paul.Keiran@waterboards.ca.gov>
Sent: Monday, April 28, 2014 10:16 AM
To: Planning Clerk
Cc: Bargsten, Stephen@Waterboards; Reed, Charles@Waterboards; Dougherty, Mona@Waterboards; Grady, Kason@Waterboards
Subject: Redwood Park Lodge Orick CDP-14-016

Hello Michael, As I'm sure you are aware, this large project will require Regional Water Board construction Stormwater and onsite wastewater permitting and potential certification for any wetland issues onsite. Paul Keiran RB1

Lorenzo, Norma

From:	McIver, Bill <bill_mciver@fws.gov>
Sent:	Thursday, May 15, 2014 4:43 PM
To:	Planning Clerk
Cc:	Kathleen Brubaker; Transou, Amber@Parks; Keith Bensen; Michael van Hattem
Subject:	Redwood Parks Lodge County Application

Dear Planning Commision Clerk,

We recieved, on April 25, 2014, a project description for the Redwood parks Lodge (APPS # 8926). Our preliminary review is that we look forward to coordinating with the Applicant, the County and others to offer suggestions regarding, at a minimum, the Applicant's food & trash management activities for the proposed projects. Our concerns are possible impacts principally to the federally listed as threatened marbled murrelet (*Brachyramphus marmoratus*), a seabird that nests in Redwood national & State Parks.

We look forward to continuing to provide input on this project.

Sincerely,

Bill

==========

Bill McIver, Biologist
U.S. Fish and Wildlife Service
Arcata Fish and Wildlife Office
1655 Heindon Road
Arcata, California 95521

phone: 707.822.7201
fax: 707.822.8411
email: bill_mciver@fws.gov

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STATE OF CALIFORNIA -- NATURAL RESOURCES AGENCY
Edmund G. Brown, Jr., Governor

CALIFORNIA COASTAL COMMISSION
NORTH COAST DISTRICT OFFICE
1385 EIGHTH STREET • SUITE 130
ARCATA, CA 95521
VOICE (707) 826-8950
FACSIMILE (707) 826-8960

May 19, 2014

Michael Wheeler, Senior Planner
Humboldt County Planning and Building Dept.
3015 H Street
Eureka, CA 95501

RE: Comments on CDP-14-016/CUP-14-008 (Redwood Parks Lodge Co., Inc.) for the development of a 152-unit transient habitation facility (special occupancy park), Orick (APN 520-142-09).

Dear Michael:

We received the subject referral on April 29, 2014 and offer the following comments. In your analysis of the proposed development's consistency with the certified North Coast Area Plan (NCAP) and coastal zoning regulations (CZR), please consider the following:

1. Water quality protection. Sections 3.40 and 3.41 of the NCAP include various policies to protect the water quality of coastal waters and wetlands. Since the proposed project would be located adjacent to environmentally sensitive habitat areas, including riparian habitat and wetlands associated with the Redwood Creek floodplain, the LCP requires that potential adverse impacts from stormwater and dry-weather runoff to coastal water quality and hydrology be minimized. To demonstrate project consistency with the water quality protection policies of the LCP, the County should require that the applicant complete a polluted runoff and hydrologic site characterization (should be conducted by a qualified licensed professional) and document the expected effectiveness of any proposed water quality protection Best Management Practices (BMPs). The project should be required to implement a Low Impact Development (LID) approach to stormwater management that uses site design and source control BMPs to retain on-site (by means of infiltration, evapotranspiration, retention, or harvesting) the volume of runoff from the appropriate design storm. Appropriate runoff control BMPs, sized for the appropriate design storm, should be used to minimize adverse post-development changes in the runoff flow regime (i.e., volume, flow rate, timing, and duration of runoff). Any approved development at the project site should include enforceable permit conditions to ensure that appropriate construction and post-construction BMPs are required to minimize adverse impacts on coastal wetlands and waters from changes in post-development runoff quality and flow regime and from dry-weather runoff (e.g., discharges from landscape irrigation and other land uses unrelated to precipitation).

2. Wetland buffers. As proposed, there would be no buffer area established between the wetland mitigation area (which proposes to create new wetlands to compensate for wetland fill impacts associated with the portion of the project outside of the coastal zone) and the park development area. Section 3.41-E-3 of the NCAP requires that there be a minimum setback distance of 100 feet between development areas and coastal wetlands, which in this case would include the proposed new mitigation wetlands within the coastal zone portion of the site. The site plan should be revised to incorporate a minimum 100-foot buffer zone between proposed mitigation wetlands and any new development.

3. Measures to protect adjacent ESHA. The NCAP requires that development in areas adjacent to environmentally sensitive habitat areas (ESHA) shall be sited and designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat areas. The County findings must include evidence demonstrating that any post-construction discharge of stormwater or dry weather flows shall protect adjacent wetlands and riparian habitats from any significant disruption of habitat values. The County also should restrict landscaping to the use of regionally appropriate native plants to avoid the potential introduction of nonnative invasive plant species into surrounding sensitive habitat areas.

4. Protection of lower-cost visitor serving and recreation facilities. Section 3.23 of the NCAP requires the protection of lower cost visitor and recreation facilities. The proposed project appears to be consistent with this policy, but the County should inquire about expected rates for occupancy at the site and ensure that the approved project will indeed be considered lower-cost. The County also should ensure that adequate measures are in place to prevent the visitor-serving facility from supporting residential uses (e.g., limits on length of stay for RVs).

5. Conversion of agricultural lands. While we understand that the site is planned and zoned for commercial recreational uses, and the conversion of the agricultural lands on the site presumably was addressed when the NCAP was certified by the Commission in the 1980s, the site currently is being used for agricultural purposes, and we recommend the County include findings related to the project's effect on agricultural productivity and resources in the area.

Thank you for the opportunity to provide comments on the proposed CDP application. If you have any questions, please feel free to contact me.

Sincerely,

Melissa B. Kraemer
Coastal Planner

Cc: Planning Commission Clerk, Humboldt County Planning and Building Dept.

September 17, 2014

Martha Peals
PO Box 437
Orick, CA 95555

County of Humboldt Planning and Building Department
3015 H Street
Eureka, CA 95501

To whom it may concern,

My name is Martha Peals and I have lived in the town of Orick since 1959. I have owned and operated the Palm Café and Motel during much of this time. I have seen many changes in the community of Orick and have current concerns for the town's lack of economic prosperity.

I am writing to state my support for the Redwood Parks Lodge Company's proposed campground, RV park, lodge, and gas station project and urge you to approve their application and permit. If successful, this endeavor will be of great benefit to the local community and will provide much needed services for visitors to the area.

Thank you for your consideration and should you have any questions, please contact me.

Very Sincerely,

Martha Peals

Martha Peals
707/488-3381