COUNTY OF MENDOCINO
DEPARTMENT OF PLANNING AND BUILDING SERVICES
860 NORTH BUSH STREET · UKIAH · CALIFORNIA · 95482
752 SOUTH FRANKLIN STREET · FT. BRAGG · CALIFORNIA · 95437

JULIA KROG, DIRECTOR
TELEPHONE: 707-234-6650
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FB PHONE: 707-964-5379
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pbs@mendocinocounty.gov
www.mendocinocounty.org/pbs

August 25, 2025

Department of Transportation
Environmental Health -Fort Bragg
Building Inspection -Fort Bragg
Assessor
Forestry Advisor
Archaeological Commission
Caltrans
Department of Forestry/ CalFire
-Land Use
-Resource Management
Department of Fish and Wildlife
California Coastal Commission
Regional Water Quality Control Board
Gualala Municipal Advisory Council
County Addresser
Cloverdale Rancheria
Redwood Valley Rancheria
Sherwood Valley Band of Pomo Indians
Cahto Tribe
South Coast Fire District
Point Arena School District

CASE#: CDP_2018-0005
DATE FILED: 2/22/2018
OWNER: Clifton Joe May AND Gregg & Mary Kate Warner
APPLICANT: Clifton Joe May
REQUEST: 8/2025: Standard Coastal Development for after-the-fact grading, removal of trees, vegetation, and two unpermitted storage containers (have since been removed). Additional request to convert a test well into a production well, construct a pumphouse, a 950 square foot single-family residence, a 1,500 square foot barn, install a septic system, a culvert to reconnect stream to original channel, and temporarily use a trailer coach for occupancy while constructing dwellings per MCC 20.460.035 (C).
LOCATION: In the Coastal Zone, 5± miles northeast of Gualala Town Center, and 1.6± miles northeast of State Route 1 and its intersection with Fish Rock Rd (CR 122), located at 44948 Fish Rock Road, Gualala (APN 143-040-02).
SUPERVISORIAL DISTRICT: 5
STAFF PLANNER: Shelby Miller
RESPONSE DUE DATE: September 08, 2025

PROJECT INFORMATION CAN BE FOUND AT:
www.mendocinocounty.org
Select "Government" from the drop-down; then locate Planning and Building Services/Public Agency Referrals.

Mendocino County Planning & Building Services is soliciting your input, which will be used in staff analysis and forwarded to the appropriate public hearing. You are invited to comment on any aspect of the proposed project(s). Please convey any requirements or conditions your agency requires for project compliance to the project coordinator at the above address, or submit your comments by email to pbs@mendocinocounty.org. Please note the case number and name of the project coordinator with all correspondence to this department.

We have reviewed the above application and recommend the following (please check one):

☐ No comment at this time.

☐ Recommend conditional approval (attached).

☐ Applicant to submit additional information (attach items needed, or contact the applicant directly, copying Planning and Building Services in any correspondence you may have with the applicant)

☐ Recommend denial (Attach reasons for recommending denial).

☐ Recommend preparation of an Environmental Impact Report (attach reasons why an EIR should be required).

☐ Other comments (attach as necessary).

_____

_____

_____

_____

REVIEWED BY:

Signature _____ Department _____ Date _____

REPORT FOR: COASTAL DEVELOPMENT PERMIT **CASE:** CDP_2018-0005

OWNER/ APPLICANT: CLIFTON MAY AND GREGG & MARKATE WARNER

REVISED REQUEST: Standard Coastal Development for after-the-fact grading, removal of trees, vegetation, and two unpermitted storage containers (have since been removed). Additional request to convert a test well into a production well, construct a pumphouse, a 950 square foot single-family residence, a 1,500 square foot barn, install a septic system, a culvert to reconnect stream to original channel, and temporarily use a trailer coach for occupancy while constructing dwellings per MCC 20.460.035 (C).

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APN: 143-040-02

PARCEL SIZE: 11.25± Acres

GENERAL PLAN: Rural Residential (RR5(2))

ZONING: Rural Residential (RR:5)

EXISTING USES: Undeveloped

DISTRICT: 5 (Williams)

RELATED CASES: BC_2017-0012, Code Violation.

	ADJACENT GENERAL PLAN	ADJACENT ZONING	ADJACENT LOT SIZES	ADJACENT USES
NORTH:	Remote Residential (RMR40)	Remote Residential (RMR)	40± Acres	Residential
EAST:	Rural Residential (RR5-2)	Rural Residential (RR)	9± Acres	Residential
SOUTH:	Rural Residential (RR5-2)	Rural Residential (RR)	0.8± Acres	Residential
WEST:	Rural Residential (RR5-2)	Rural Residential (RR)	10± Acres	Residential

REFERRAL AGENCIES

LOCAL
- ☒ Archaeological Commission
- ☒ Assessor's Office
- ☒ Building Division FB
- ☒ County Addresser
- ☒ Department of Transportation (DOT)
- ☒ Environmental Health (EH)
- ☒ Forestry Advisor
- ☒ South Coast Fire District
- ☒ Gualala MAC
- ☒ Point Arena School District
- ☒ Planning Division Fort Bragg

STATE
- ☒ CALFIRE (Land Use)
- ☒ CALFIRE (Resource Management)
- ☒ California Coastal Commission
- ☒ California Dept. of Fish & Wildlife
- ☒ CALTRANS
- ☒ Regional Water Quality Control Board

TRIBAL
- ☒ Cloverdale Rancheria
- ☒ Redwood Valley Rancheria
- ☒ Sherwood Valley Band of Pomo Indians
- ☒ Cahto Tribe

ADDITIONAL INFORMATION: The original application was filed in 2018, in response to a Code Violation for removing vegetation, grading, and construction of a shed (likely cannabis related). The shed was removed during escrow and there is a new property owner. The (new 2021) property owner has encouraged plant regeneration on parcel.

This is the 4th referral.

STAFF PLANNER: SHELBY MILLER **DATE:** 8/25/2025

ENVIRONMENTAL DATA

1. MAC:
GIS
Gualala

2. FIRE HAZARD SEVERITY ZONE:
CALFIRE FRAP maps/GIS
High Fire Hazard

3. FIRE RESPONSIBILITY AREA:
CALFIRE FRAP maps/GIS
South Coast Fire Protection District

4. FARMLAND CLASSIFICATION:
GIS
Grazing

5. FLOOD ZONE CLASSIFICATION:
FEMA Flood Insurance Rate Maps (FIRM)
NO

6. COASTAL GROUNDWATER RESOURCE AREA:
Coastal Groundwater Study/GIS
Critical Water Resources Bedrock

7. SOIL CLASSIFICATION:
Mendocino County Soils Study Eastern/Western Part
Western Soil Classifications

8. PYGMY VEGETATION OR PYGMY CAPABLE SOIL:
LCP maps, Pygmy Soils Maps; GIS
NO

9. WILLIAMSON ACT CONTRACT:
GIS/Mendocino County Assessor's Office
NO

10. TIMBER PRODUCTION ZONE:
GIS
NO

11. WETLANDS CLASSIFICATION:
GIS
NO

12. EARTHQUAKE FAULT ZONE:
Earthquake Fault Zone Maps; GIS
NO

13. AIRPORT LAND USE PLANNING AREA:
Airport Land Use Plan; GIS
NO

14. SUPERFUND/BROWNFIELD/HAZMAT SITE:
GIS; General Plan 3-11
NO

15. NATURAL DIVERSITY DATABASE:
CA Dept. of Fish & Wildlife Rarefind Database/GIS
NO

16. STATE FOREST/PARK/RECREATION AREA ADJACENT:
GIS; General Plan 3-10
NO

17. LANDSLIDE HAZARD:
Hazards and Landslides Map; GIS; Policy RM-61; General Plan 4-44
Slopes toward Roseman Creek are steep

18. WATER EFFICIENT LANDSCAPE REQUIRED:
Policy RM-7; General Plan 4-34
NO

19. WILD AND SCENIC RIVER:
www.rivers.gov (Eel Only); GIS
NO

20. SPECIFIC PLAN/SPECIAL PLAN AREA:
Various Adopted Specific Plan Areas; GIS
NO

21. STATE CLEARINGHOUSE REQUIRED:
Policy
NO

22. OAK WOODLAND AREA:
USDA
NO

23. HARBOR DISTRICT:
Sec. 20.512
NO

FOR PROJECTS WITHIN THE COASTAL ZONE ONLY

24. LCP LAND USE CLASSIFICATION:
LCP Land Use maps/GIS
Land Use Map 30: Anchor Bay

25. LCP LAND CAPABILITIES & NATURAL HAZARDS:
LCP Land Capabilities maps/GIS; 20.500
Prime Agricultural Lands

26. LCP HABITATS & RESOURCES:
LCP Habitat maps/GIS; 20.496
Upland Forest Habitat- Pygmy Forest

27. COASTAL COMMISSION APPEALABLE AREA:
Post LCP Certification Permit and Appeal Jurisdiction maps/GIS; 20.544
NO

28. CDP EXCLUSION ZONE:
CDP Exclusion Zone maps/GIS
NO

29. HIGHLY SCENIC AREA:
Highly Scenic & Tree Removal Area Maps/GIS; Secs. 20.504.015, 20.504.020
NO

30. BIOLOGICAL RESOURCES & NATURAL AREAS:
Biological Resources & Natural Area Map; GIS; General Plan 4-9
NO

31. BLUFFTOP GEOLOGY:
GIS; 20.500.020
NO

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Mendocino County
Case No(s)
CDF No(s)
Date Filed JUL 22 2025
Fee
Receipt No.
Received by
Office Use Only
JUL 22 2025
Planning & Building Services
Mendocino County

COASTAL ZONE APPLICATION FORM

Planning & Building Services

APPLICANT

Name Clifton J. May & Gregg Warner
Mailing Address P.O Box 1931 (Clifton J. May) Email: mayday2264@aol.com
City Gualala State CA. Zip Code 95445 Phone (512) 635-5951

PROPERTY OWNER

Name Clifton J. May & Gregg Warner/MaryKate Warner
Mailing Address 32250 Hwy 1 (Gregg/MaryKate Warner) Email: warnergonefishing@gmail.com
City Gualala State CA. Zip Code 95445 Phone (707) 328-5572

AGENT

Name
Mailing Address Email:
City State Zip Code Phone

PARCEL SIZE

11.25 ☐ Square feet ☑ Acres

STREET ADDRESS OF PROJECT

44948 Fish Rock Road, Gualala CA 95445

ASSESSOR'S PARCEL NUMBER(S)

143-040-02

I certify that the information submitted with this application is true and accurate.

Clifton J. May July 8, 2025 Clifton J. May JUL 8, 2025
Signature of Applicant/Agent Date Signature of Owner Date

Gregg Warner 7-8-25

CDP 2018-0005

COASTAL ZONE - SITE AND PROJECT DESCRIPTION QUESTIONNAIRE

The purpose of this questionnaire is to relate information concerning your application to the Planning and Building Services Department and other agencies who will be reviewing your project proposal. Please remember that the clearer picture that your give us of your project and the site, the easier it will be to promptly process your application. Please answer all questions. Those questions which do not pertain to your project, please indicate "Not Applicable" or "N/A".

THE PROJECT

1. Describe your project and include secondary improvements such as wells, septic systems, grading, vegetation removal, roads, etc.

A) Build a 950 sq.ft. home
B) Install a septic system for the home.
C) Build a pump house
D) Build a 50ft x 30ft. Ag. building
E) Replace a culvert to a 24inch size culvert.
F) retro-permit of removal of a storage bin.
G) retro-permit of removal of a metal garage building.
H) retro-permit of previous grading.

2. If the project is residential, please complete the following:

TYPE OF UNIT	NUMBER OF STRUCTURES	SQUARE FEET PER DWELLING UNIT
☑ Single Family	1	950 sq.ft.
☐ Mobile Home		
☐ Duplex		
☐ Multifamily		

If Multifamily, number of dwelling units per building: _____

3. If the project is commercial, industrial, or institutional, complete the following:

Total square footage of structures: _____
Estimated employees per shift: _____
Estimated shifts per day: _____
Type of loading facilities proposed: _____

4. Will the proposed project be phased? ☑ Yes ☐ No
If Yes, explain your plans for phasing.

1) pump house
2) Ag building
3) septic system
4) Single family home

CDP 2018-0005

5. Are there existing structures on the property? ☑ Yes ☐ No
If yes, describe below and identify the use of each structure on the plot plan.

There is a water well established.

6. Will any existing structures be demolished? ☐ Yes ☑ No
Will any existing structures be removed? ☐ Yes ☑ No

If yes to either question, describe the type of development to be demolished or removed, including the relocation site, if applicable.

7. Project Height. Maximum height of structure 35 feet.

8. Lot area (within property lines): 11.25 ☐ square feet ☑ acres

9. Lot Coverage:

	EXISTING	NEW PROPOSED	TOTAL
Building coverage (house, Ag building, pump house)	0 square feet	600+ square feet	2200 square feet
Paved area	0 square feet	1500+100 square feet	0 square feet
Landscaped area	0 square feet	0 square feet	0 square feet
Unimproved area	490,050 square feet (11.25 acres)	487,850 square feet	487,850 square feet

GRAND TOTAL: 490,050 (11.25 acres) square feet
(Should equal gross area of parcel)

10. Gross floor area: 2200 square feet (including covered parking and accessory buildings).

11. Parking will be provided as follows:

Number of Spaces Existing 2 Proposed 2 Total 2

Number of covered spaces	0	Size 0
Number of uncovered spaces	2	Size standard
Number of standard spaces		Size
Number of handicapped spaces		Size

CDP 2018-0005

12. Utilities will be supplied to the site as follows:

A. Electricity
- [x] Utility Company (service exists to the parcel).
- [ ] Utility Company (requires extension of services to site: _____ feet _____ miles
- [ ] On Site generation, Specify: _____
- [ ] None

B. Gas
- [x] Utility Company/Tank
- [ ] On Site generation, Specify: _____
- [ ] None

C. Telephone: [ ] Yes [x] No

13. Will there by any exterior lighting? [x] Yes [ ] No
If yes, describe below and identify the location of all exterior lighting on the plot plan and building plans.

down lites at front entrance of proposed 950 structure.

14. What will be the method of sewage disposal?

- [ ] Community sewage system, specify supplier _____
- [x] Septic Tank
- [ ] Other, specify _____

15. What will be the domestic water source?

- [ ] Community water system, specify supplier _____
- [x] Well
- [ ] Spring
- [ ] Other, specify _____

16. Is any grading or road construction planned? [ ] Yes [x] No
If yes, grading and drainage plans may be required. Also, describe the terrain to be traversed (e.g., steep, moderate slope, flat, etc.).

For grading and road construction, complete the following:

A. Amount of cut: _____ cubic yards
B. Amount of fill: _____ cubic yards
C. Maximum height of fill slope: _____ feet
D. Maximum height of cut slope: _____ feet
E. Amount of import or export: _____ cubic yards
F. Location of borrow or disposal site: _____
_____

CDP 2018-0005

17. Will vegetation be removed on areas other than the building sites and roads? ☑ Yes ☐ No
If yes, explain: Septic area

18. Does the project involve sand removal, mining or gravel extraction? ☐ Yes ☑ No
If yes, detailed extraction, reclamation and monitoring may be required.

19. Will the proposed development convert land currently or previously used for agriculture to another use? ☐ Yes ☑ No
If yes, how many acres will be converted? _____ acres (An agricultural economic feasibility study may be required.)

20. Will the development provide public or private recreational opportunities? ☐ Yes ☑ No
If yes, explain:

21. Is the proposed development visible from:

A. State Highway 1 or other scenic route? ☐ Yes ☑ No
B. Park, beach or recreation area? ☐ Yes ☑ No

22. Will the project involve the use or disposal of potentially hazardous materials such as toxic substances, flammables, or explosives? ☐ Yes ☑ No
If yes, explain:

23. Does the development involve diking, filling, dredging or placing structures in open coastal waters, wetlands, estuaries or lakes?

A. Diking ☐ Yes ☑ No
B. Filling ☐ Yes ☑ No
C. Dredging ☐ Yes ☑ No
D. Placement of structures in open coastal waters, wetlands, estuaries or lakes ☐ Yes ☑ No

Amount of material to be dredged or filled? _____ cubic yards.

Location of dredged material disposal site: _____

Has a U.S. Army Corps of Engineers permit been applied for? ☐ Yes ☑ No

If you need additional room to answer any question, attach additional sheets.

CDP 2018-0005

SUBMIT ONLY ONE COPY

CERTIFICATION AND SITE VIEW AUTHORIZATION

1. I hereby certify that I have read this completed application and that, to the best of my knowledge, the information in this application, and all attached appendices and exhibits, is complete and correct. I understand that the failure to provide any requested information or any misstatements submitted in support of the application shall be grounds for either refusing to accept this application, for denying the permit, for suspending or revoking a permit issued on the basis of such misrepresentations, or for seeking of such further relief as may seem proper to the County.

2. I hereby grant permission for County Planning and Building Services staff and hearing bodies to enter upon and site view the premises for which this application is made in order to obtain information necessary for the preparation of required reports and render its decision.

Clayton J. Mayo — Owner/Authorized Agent — JUN 8, 2025 — Date

Gregg Warner — Owner/Authorized Agent — 7-8-25 — Date

NOTE: IF SIGNED BY AGENT, OWNER MUST SIGN BELOW.

AUTHORIZATION OF AGENT

I hereby authorize _____ to act as my representative and to bind me in all matters concerning this application.

_____ Owner

_____ Date

MAIL DIRECTION

To facilitate proper handling of this application, please indicate the names and mailing addresses of individuals to whom you wish correspondence and/or staff reports mailed if different from those identified on Page One of the application form.

Name	**Name**	**Name**
Mailing Address	**Mailing Address**	**Mailing Address**

COMPLETE FOR PROJECTS LOCATED WITHIN THE COASTAL ZONE ONLY

DECLARATION OF POSTING

At the time the application is submitted for filing, the applicant must **Post**, at a conspicuous place, easily read by the public and as close as possible to the site of the proposed development, notice that an application for the proposed development has been submitted. Such notice shall contain a general description of the nature of the proposed development and shall be on the standard form provided in the application packet. If the applicant fails to post the completed notice form and sign the **Declaration of Posting**, the Department of Planning and Building Services cannot process the application.

As **Proof of Posting**, please sign and date this Declaration of Posting form when the site is posted; it serves as proof of posting. It should be returned to the Department of Planning and Building Services with the application.

Pursuant to the requirements of Section 20.532.025(H) of the Mendocino County Code, I hereby certify that on July 11, 2025 (date of posting), I or my authorized representative posted the "NOTICE OF PENDING PERMIT" for application to obtain a Coastal Development Permit for the development of:

Building a 950 sq. ft. home, septic system, pump house, 50x30ft. Ag. building

(Description of development)

Located at: 44948 Fish Rock Rd. #143-040-02

(Address of development and Assessor's Parcel Number)

The public notice was posted at:

44948 Fish Rock Rd.

(A conspicuous place, easily seen by the public and as close as possible to the site of proposed development)

Clifton J. Wayne

Owner/Authorized Representative

Peggy Wayne

July 8, 2025

Date

(A copy of the notice which was posted shall be attached to this form).

NOTE: YOUR APPLICATION CANNOT BE PROCESSED UNTIL THIS "DECLARATION OF POSTING" IS SIGNED AND RETURNED TO PLANNING AND BUILDING SERVICES.

Provide one copy only

INDEMNIFICATION AND HOLD HARMLESS

ORDINANCE NO. 3780, adopted by the Board of Supervisors on June 4, 1991, requires applicants for discretionary land use approvals, to sign the following Indemnification Agreement. Failure to sign this agreement will result in the application being considered incomplete and withheld from further processing.

INDEMNIFICATION AGREEMENT

As part of this application, applicant agrees to defend, indemnify, release and hold harmless the County of Mendocino, its agents, officers, attorneys, employees, boards and commissions, as more particularly set forth in Mendocino County Code Section 1.04.120, from any claim, action or proceeding brought against any of the foregoing individuals or entities, the purpose of which is to attack, set aside, void or annul the approval of this application or adoption of the environmental document which accompanies it. The indemnification shall include, but not be limited to, damages, costs, expenses, attorney fees or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent, passive or active negligence on the part of the County, its agents, officers, attorneys, employees, boards and commissions.

Date: July 8, 2025

Clifton J. May

Applicant

Gregg Warner

COUNTY OF MENDOCINO
DEPARTMENT OF PLANNING & BUILDING SVCS.

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ACKNOWLEDGEMENT OF DEPOSIT/HOURLY FEE

By signing below, the applicant acknowledges that the staff at Planning and Building Services has discussed the potential for collection of a deposit fee for the projects listed below (as adopted by the Board of Supervisors Resolution No.'s 11-072, 16-150, 18-122, 19-170, 21-194 and 23-190)

1. Division of Land Project
2. General Plan Project
3. Coastal Project
4. Zoning Project
5. Administrative Project
6. Cannabis Project
7. Private Road Naming

Once an application has been submitted and the processing costs approach 80% of the application fee, additional staff processing time will be billed at ***$98.00/hour***. Staff will notify the applicant/owner that a deposit equal to 50% of the initial filing fee is required for further processing, and more than one deposit may be required depending on the complexity of the project and the staff time necessary to complete application processing.

I acknowledge that I was advised of the deposit fee for continued processing after the initial application fee has been expended.

Clifton J. Uhy — Applicant Signature

Jul 8, 2025 — Date

Gregg Warner

7-8-25

OFFICE USE ONLY:

Project or Permit Number



CASE: CDP 2018-0005
OWNER: MAY, Clifton & Mary
APN: 143-040-02
APLCT: Clifton & Mary May
AGENT:
ADDRESS: 44948 Fish Rock Rd., Gualala

Major Towns & Places
Highways
Coastal Zone Boundary
Major Roads

0 2,600 5,200 Feet
0 0.5 1 Miles
1:63,360

LOCATION

THIS MAP AND DATA ARE PROVIDED WITHOUT WARRANTY OF ANY KIND.
DO NOT USE THIS MAP TO DETERMINE LEGAL PROPERTY BOUNDARIES

MENDOCINO COUNTY PLANNING DEPARTMENT - 10/3/2022



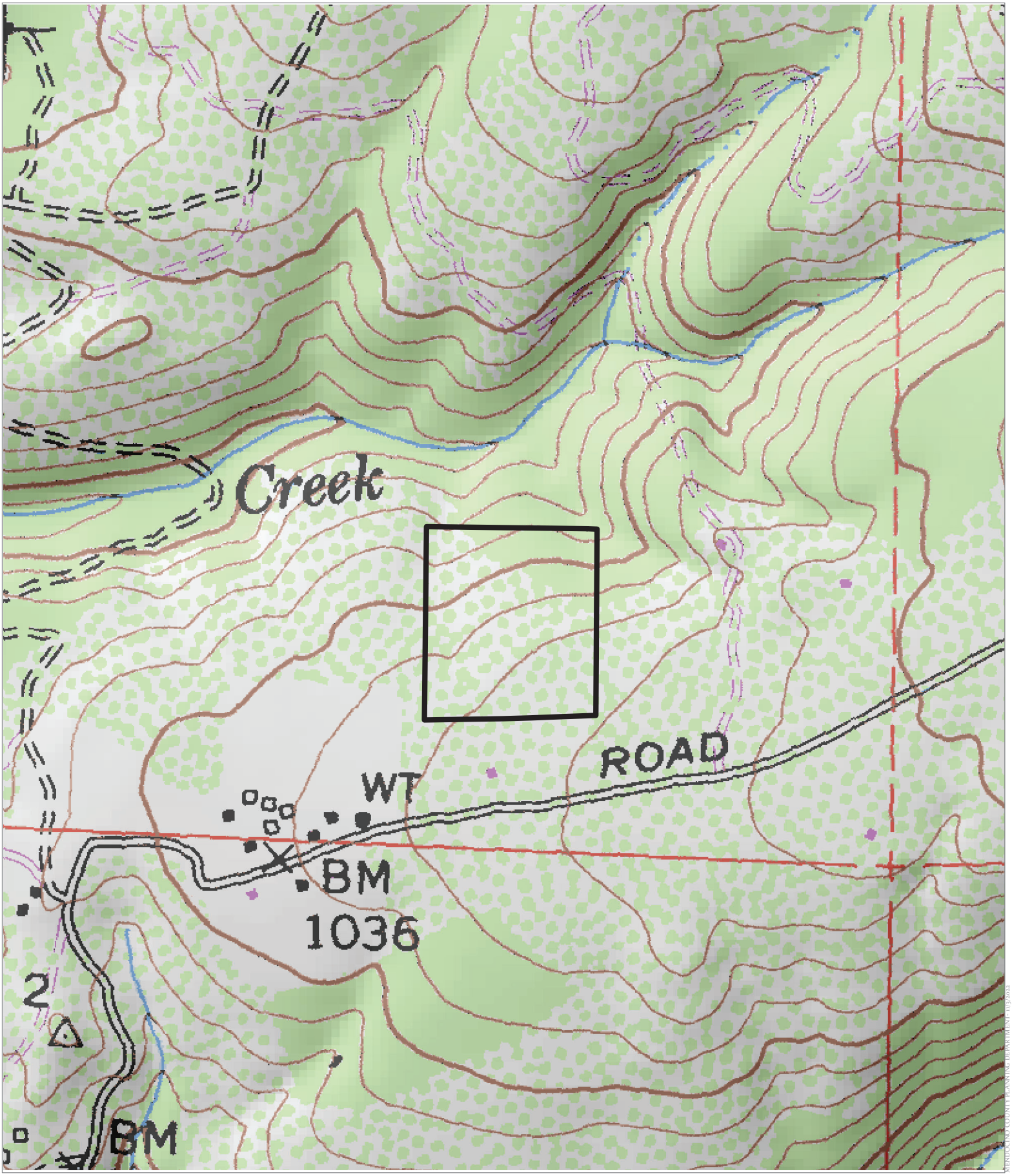
MENDOCINO COUNTY PLANNING DEPARTMENT - 10/5/2022

CASE: CDP 2018-0005
OWNER: MAY, Clifton & Mary
APN: 143-040-02
APLCT: Clifton & Mary May
AGENT:
ADDRESS: 44948 Fish Rock Rd., Gualala

0 62.5 125 Feet
0 0.01 0.02 Miles
1:1,500

AERIAL IMAGERY

THIS MAP AND DATA ARE PROVIDED WITHOUT WARRANTY OF ANY KIND.
DO NOT USE THIS MAP TO DETERMINE LEGAL PROPERTY BOUNDARIES



CASE: CDP 2018-0005
OWNER: MAY, Clifton & Mary
APN: 143-040-02
APLCT: Clifton & Mary May
AGENT:
ADDRESS: 44948 Fish Rock Rd., Gualala

0 250 500 Feet
0 0.045 0.09 Miles
1:6,000

N W E S

TOPOGRAPHIC MAP
CONTOUR INTERVAL IS 40 FEET

MENDOCINO COUNTY PLANNING DEPARTMENT 10/3/2022

THIS MAP AND DATA ARE PROVIDED WITHOUT WARRANTY OF ANY KIND.
DO NOT USE THIS MAP TO DETERMINE LEGAL PROPERTY BOUNDARIES

AG BUILDING & RESIDENCE

44948 Fish Rock Road, Gualala, Ca. 95445

APN 143-040-02

VICINITY MAP



GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE AS SPECIFIED AND AS REQUIRED BY THE CURRENT EDITION OF THE C.B.C., LOCAL CODES AND AUTHORITIES.
2. THE DESIGNER IS NOT RESPONSIBLE FOR THE ACCURACY OF INFORMATION CONTAINED IN OWNER AND TENANT SUPPLIED DOCUMENTS.
3. EACH CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. SHOULD A DISCREPANCY APPEAR IN THE SPECIFICATIONS OR DRAWINGS, OR IN THE WORK DONE BY OTHERS FROM THE CONTRACT DOCUMENTS THAT AFFECT ANY WORK, NOTIFY THE DESIGNER AT ONCE FOR INSTRUCTIONS ON HOW TO PROCEED. IF THE CONTRACTOR PROCEEDS WITH THE WORK AFFECTED WITHOUT INSTRUCTIONS FROM THE DESIGNER, THE CONTRACTOR SHALL MAKE GOOD ANY RESULTING DAMAGE OR DEFECT TO THE SATISFACTION OF THE DESIGNER. SHOULD A CONFLICT OCCUR IN OR BETWEEN DRAWINGS AND SPECIFICATIONS, OR WHERE DETAIL REFERENCES ON CONTRACT DRAWINGS HAVE BEEN OMITTED, THE CONTRACTOR IS DEEMED TO HAVE ESTIMATED THE MOST EXPENSIVE MATERIALS AND CONSTRUCTION METHOD INVOLVED, UNLESS A WRITTEN DECISION FROM THE DESIGNER HAS BEEN OBTAINED WHICH DESCRIBES AN ALTERNATE METHOD AND/OR MATERIALS.
4. EACH CONTRACTOR SHALL CONFINE HIS OPERATIONS ON THE SITE TO AREAS PERMITTED BY THE OWNER. THE WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE LAWS, LOCAL ORDINANCES, PERMITS AND THE CONTRACT DOCUMENTS. THE JOB SITE SHALL BE MAINTAINED IN A CLEAN, ORDERLY CONDITION FREE OF DEBRIS AND LITTER, AND SHALL NOT BE UNREASONABLY ENCUMBERED WITH ANY MATERIALS OR EQUIPMENT. EACH CONTRACTOR DURING AND IMMEDIATELY UPON COMPLETION OF EACH PHASE OF HIS WORK SHALL REMOVE ALL TRASH AND DEBRIS AS A RESULT OF HIS OPERATION.
5. ALL MATERIALS STORED ON THE SITE SHALL BE PROPERLY STACKED AND PROTECTED TO PREVENT DAMAGE AND DETERIORATION UNTIL USE. FAILURE TO PROTECT MATERIALS MAY BE CAUSE FOR REJECTION OF WORK.
6. EACH CONTRACTOR SHALL DO ALL CUTTING, FITTING OR PATCHING OF HIS WORK THAT MAY BE REQUIRED TO MAKE ITS SEVERAL PARTS FIT TOGETHER PROPERLY AND SHALL NOT ENDANGER ANY OTHER WORK BY CUTTING, EXCAVATING OR OTHERWISE ALTERING THE TOTAL WORK OR ANY PART OF IT. ALL PATCHING, REPAIRING AND REPLACING OF MATERIALS AND SURFACES, CUT OR DAMAGED IN EXECUTION OF WORK, SHALL BE DONE WITH APPLICABLE MATERIALS SO THAT THE SURFACES REPLACED, UPON COMPLETION, MATCH SURROUNDING SIMILAR SURFACES.
7. NO PORTION OF THE WORK REQUIRING A SHOP DRAWING OR SAMPLE SUBMISSION SHALL BE COMMENCED UNTIL THE SUBMISSION HAS BEEN REVIEWED BY THE DESIGNER. ALL SUCH PORTIONS OF THE WORK SHALL BE IN ACCORDANCE WITH APPROVED SHOP DRAWINGS AND SAMPLES.
8. DIMENSIONS:
9. A. ALL DIMENSIONS SHALL HAVE PREFERENCE OVER SCALE.
10. B. CEILING HEIGHT DIMENSIONS ARE FROM FINISH FLOOR TO FINISH PLATE.
11. NO PRODUCTS CONTAINING ASBESTOS IN ANY FORM SHALL BE USED ON ANY PART OF THE WORK.
12. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING NOISE, ODORS, DUST, AND DEBRIS TO MINIMIZE IMPACTS ON SURROUNDING PROPERTIES AND ROADWAYS. CONTRACTOR SHALL BE RESPONSIBLE THAT ALL CONSTRUCTION EQUIPMENT IS EQUIPPED WITH MANUFACTURER APPROVED MUFFLERS/BAFFLES.
13. CONSTRUCTION WORK SHALL BE LIMITED TO THE HOURS BETWEEN 7:00AM AND 7:00PM, MONDAY THROUGH SATURDAY.
14. ACCESS ROADS MUST BE IN AND USEABLE AT A POINT WHEN CONSTRUCTION GOES BEYOND THE FOUNDATION LEVEL.
15. APPROVED NUMBERS OR ADDRESSES SHALL BE PLACED IN SUCH A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. SAID NUMBERS SHALL BE CONTRASTING IN COLOR WITH THE SIGN BACKGROUND.
16. PROVIDE ALL NECESSARY BLOCKING, BACKING AND FRAMING FOR LIGHT FIXTURES, ELECTRICAL UNITS, A.C. EQUIPMENT AND ALL OTHER ITEMS REQUIRING SAME.
17. ALL PIPING SHALL BE IN WALLS OR FURRED CEILING SPACES UNLESS NOTED OTHERWISE.
18. VERIFY ALL ELECTRICAL PANEL LOCATIONS WITH DESIGNER OR JOB SUPERVISOR PRIOR TO INSTALLATION.
19. THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT A SLOPE OF NOT LESS THAN ONE UNIT VERTICAL IN 48 UNITS HORIZONTAL (2% SLOPE) FOR A MINIMUM DISTANCE OF FIVE FEET (1524 MM) MEASURED PERPENDICULAR TO THE FACE OF THE WALL. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT 5 FEET (1524 MM) OF HORIZONTAL DISTANCE A 2% SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING WATER AWAY FROM THE FOUNDATION. SWALES USED FOR THIS PURPOSE SHALL BE SLOPED A MINIMUM OF 2% WHERE LOCATED WITHIN 10 FEET (3048 MM) OF THE BUILDING FOUNDATION. IMPERVIOUS SURFACES WITHIN 10 FEET OF THE BUILDING SHALL BE SLOPED A MINIMUM OF 2% AWAY FROM THE BUILDING. THE PROCEDURE USED TO ESTABLISH THE FINAL GROUND LEVEL ADJACENT TO THE FOUNDATION SHALL ACCOUNT FOR ADDITIONAL SETTLEMENT OF THE BACKFILL.
20. LIMIT SITE GRADING TO BUILDING.
21. REMOVE EXCESS EARTH TO AN APPROVED SITE.
22. DOWNSPOUTS SHOULD BE CONNECTED TO CLOSED CONDUITS AND BE DISCHARGED AWAY FROM THE BUILDING.
23. DEMOLITION MAY NOT START UNTIL THE CONTRACTOR HAS OBTAINED A PERMIT FROM THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT. THE PERMIT NUMBER (J#) MUST BE PROVIDED TO THE INSPECTOR AND NOTED ON THE JOBSITE INSPECTION CARD.
24. PROVIDE ADDRESS NUMBERS THAT ARE VISIBLE AT THE EDGE OF THE PROPERTY AND FRONT DOOR. THEY MUST BE AT LEST 4" TALL AND MINIMUM ½" STROKE. INTERNALLY ILLUMINATED AND CONTROLLED BY A PHOTOCELL AND SWITCHED ONLY BY A BREAKER, SO IT WILL REMAIN ILLUMINATED ALL NIGHT. LIGHT MUST NOT HAVE A SCREW-BASE SOCKET AND MUST CONSUME NO MORE THAN 5 WATTS OF POWER AND MAY NOT BE USED FOR GENERAL PORCH ILLUMINATION.
25. SEWER LATERAL SHALL BE TESTED. THE TEST MUST BE CONDUCTED BY A LICENSED PLUMBING CONTRACTOR WITH A DISTRICT INSPECTOR PRESENT. LATERAL THAT DO NOT PASS THE AN AIR OR WATER TEST ARE REQUIRED TO BE REPLACED AND BROUGHT INTO COMPLIANCE TO DISTRICT STANDARD SPECIFICATIONS FOR SEWER LATERALS.
26. BEFORE FINAL INSPECTION, ANY AREA WHERE SOIL IS DISTURBED MUST BE RE-VEGETATED WITH A GROUND COVER ACCEPTABLE BY GOVERNING DEPARTMENTS OR A PERMANENT EROSION CONTROL SYSTEM.
27. EROSION CONTROL MEASURES MUST BE IN PLACE AND MAINTAINED CURING THE PERIODS BETWEEN OCTOBER 15 AND APRIL 15. A SIGNED COPY OF THE EROSION CONTROL PLAN MUST BE POSTED AT THE SITE, ALONG WITH THE BUILDING PERMIT.

CONSULTANT LIST

Owner
Clifton May & Gregg Warner
PO Box 1931
Gualala, Ca. 95445
512.635.5951

Designer
Taylor Building Designs
David Taylor
600 Feliz Creek Road
Hopland, Ca. 95449
707.838.0816

Environmental
Sol Ecology
PO Box 5214
Petaluma, Ca. 94955
707.241.7721

Waste Disposal
Carl Ritterman & Associates
PO Box 590
Mendocino, Ca. 95460
707.937.0804

Surveyor
Richard A. Seale
L.S. 4455

SCOPE OF WORK

- PERMIT PREVIOUS GRADING WORK DONE WITHOUT AUTHORIZATION AND APPROVALS.
- PERMIT AND BUILD A 30'X50' AGRICULTURE STORAGE BUILDING.
- PERMIT AND BUILD A 950 SQUARE FOOT TWO STORY/TWO BEDROOM RESIDENCE.
- PERMIT AND BUILD A 10'X10' PUMP HOUSE NEXT TO EXISTING WELL.
- INSTALL A SEPTIC SYSTEM (DESIGN BY OTHERS).
- TRENCH WATER FROM EXISTING WELL TO PROPOSED NEW TWO STORY RESIDENCE ONLY.
- TRENCH NEW UNDERGROUND POWER FROM EXISTING PG&E SERVICE POLE.
- REPLACE EXISTING CULVERT.

ARCHITECTURAL NOTES

The 2022 California Residential Code (CRC) with amendments
The 2022 California Fire Code (CFC) with amendments
The 2022 California Mechanical Code (CMC) with amendments
The 2022 California Plumbing Code (CPC) with amendments
The 2022 California Electrical Code (CEC) with amendments
The 2022 California Energy Code with amendments
The 2022 California Green Building Standards Code

ARCHITECTURAL ABBREVIATIONS

ACT.	- ACOUSTIC TILE	CPT	- CARPET	GEN.	- GENERAL	MAX	- MAXIMUM
A.F.F.	- ABOVE FINISHED FLOOR	CTR	- CENTER	GFRC	- GLASS FIBER REINFORCED CONCRETE	MECH.	- MECHANICAL
ALT	- ALTERNATE	DET	- DETAIL	GFRG	- GLASS FIBER REINFORCED GYPSUM	MFR	- MANUFACTURER
ALUM	- ALUMINUM	DF	- DRINKING FOUNTAIN	GL	- GLASS/GLAZING	MH	- MANHOLE
APPROX.	- APPROXIMATE/LY	DIA	- DIAMETER	G.S.	- GRAVEL STOP	MIC	- MICROWAVE
ARCH.	- ARCHITECT/ARCHITECTURAL	DIM	- DIMENSION	GYP. BD.	- GYPSUM BOARD	MIN.	- MINIMUM
BLDG	- BUILDING	DO	- DOOR OPENING	H.B.	- HOSE BIB	MISC.	- MISCELLANEOUS
BLK	- BLOCK	DS	- DOWNSPOUT	HC	- HANDI-CAP	MO	- MASONRY OPENING
B.M.	- BENCH MARK	DW	- DISH WASHER	HDW	- HARDWARE	MR	- MOISTURE RESISTANT
BM	- BEAM	DWG	- DRAWING	HDWD	- HARDWOOD	MTL	- METAL
BN	- BULLNOSE	(E)	- EXISTING	HM	- HOLLOW METAL	(N)	- NEW
BP	- BENT PLATE	EIFS	- EXTERIOR INSULATION & FINISH SYSTEM	HORIZ	- HORIZONTAL	N.I.C.	- NOT IN CONTRACT
B/	- BOTTOM OF	EL	- ELEVATION	H.P.	- HIGH POINT	NO.	- NUMBER
BTM	- BOTTOM	ELEV	- ELEVATOR	HR	- HOUR	NTS	- NOT TO SCALE
CAB	- CABINET	ELEC	- ELECTRIC/AL	HTG	- HEATING	OA	- OVERALL
C.B.	- CATCH BASIN	EJ	- EXPANSION JOINT	HYD	- HYDRANT	OC	- ON CENTER
CEM	- CEMENT	EWC	- ELECTRIC WATER COOLER	I.D.	- INSIDE DIAMETER	OD	- OUTSIDE DIAMETER
CJ	- CONTROL JOINT	EXIST.	- EXISTING	INFO	- INFORMATION	OFL	- OVERFLOW LEADER
CL	- CENTER LINE	EXP	- EXPANSION	INSUL	- INSULATION/INSULATING	OH	- OVERHEAD
CLR	- CLEAR	EXT	- EXTERIOR	INT	- INTERIOR	OPP	- OPPOSITE
CLG	- CEILING	F.DIM	- FRAME DIMENSION	INV	- INVERT	OS	- OVERFLOW SCUPPER
CM	- CONSTRUCTION MANAGER	FD	- FLOOR DRAIN	JAN.	- JANITOR	PR	- PAIR
CMT	- CERAMIC MOSAIC TILE	FDC	- FIRE DEPARTMENT HOSE CONNECTION	JST	- JOIST	PC	- PRE-CAST
CMU	- CONCRETE MASONRY UNIT	FDN	- FOUNDATION	JST BRG.	- JOIST BEARING	PJ	- PANEL JOINT
COL	- COLUMN	FE	- FIRE EXTINGUISHER	JT	- JOINT	PL	- PLATE
CONC.	- CONCRETE	FIN	- FINISH	LAV	- LAVATORY	PLAM	- PLASTIC LAMINATE
CONSTR.	- CONSTRUCTION	FLR	- FLOOR	LG	- LONG	PLUMB.	- PLUMBING/PLUMBER
CONT.	- CONTINUOUS	FPHB	- FROST PROOF HOSE BIBB	LLD	- LANDLORD	PLYWD	- PLYWOOD
CONTR.	- CONTRACTOR	FR	- FIRE RATED	LLH	- LONG LEG HORIZONTAL	POL	- POLISHED
CRS	- COURSE	FTG	- FOOTING	LLV	- LONG LEG VERTICAL	PREFIN.	- PREFINISHED
CT	- CERAMIC TILE	FURR	- FURRING	L.P.	- LOW POINT	PROJ	- PROJECTED/PROJECTION
CNTR	- COUNTER	FVC	- FIRE VALVE CABINET	LT	- LIGHT	P.S.	- PARAPET STEP
		GA	- GAUGE	MAS	- MASONRY	PTD	- PAINTED
		GALV.	- GALVANIZED			R	- RADIUS
		GC	- GENERAL CONTRACTOR				

RAD	- RADIUS
RD	- ROOF DRAIN
REF	- REFRIGERATOR
REINF.	- REINFORCEMENT/REINFORCED
REQ	- REQUIRED
RM	- ROOM
RO	- ROUGH OPENING
R.O.D.	- ROOF OVERFLOW DRAIN
RTU	- ROOF TOP UNIT
S/S	- SLOP/SERVICE SINK
SHT.	- SHEET
SIM	- SIMILAR
SPEC	- SPECIFICATION(S)
SQ	- SQUARE
S. STL.	- STAINLESS STEEL
ST	- SUITE
STD	- STANDARD
STL	- STEEL
STRUCT.	- STRUCTURAL/STRUCTURE
SUSP	- SUSPENDED
T/	- TOP OF
T.B.D.	- TO BE DETERMINED
TERR.	- TERRAZZO
THRESH.	- THRESHOLD
TPO	- THERMAL PLASTIC POLYOLEFIN
TYP.	- TYPICAL
UNO	- UNLESS NOTED OTHERWISE
VCT	- VINYL COMPOSITION TILE
VERT	- VERTICAL
V.I.F.	- VERIFY IN FIELD
WC	- WATER CLOSET
WD	- WOOD
WP	- WORK POINT
WT	- WEIGHT
WWF	- WELDED WIRE FABRIC

MATERIAL LEGEND

EARTH
GRAVEL FILL
CEMENT OR SAND
CONCRETE
CMU
BRICK OR FACING MASONRY
METAL LARGE SCALE
WOOD BLOCKING
RIGID INSULATION
BATT INSULATION
GYPSUM BOARD OR DRYWALL
BRICK (ELEVATION)
STUCCO (ELEVATION)
PLYWOOD

DIMENSIONING LEGEND

DIMENSIONS ON PLANS ARE TO POINTS SHOWN:

# # #
FACE OF STUD TO FACE OF STUD

# # #
CLEAR DIMENSION

# # #
CENTERLINE TO CENTERLINE

SITE / BUILDING DATA

Address	44948 Fish Rock Road, Gualala, Ca. 95445
Zoning Description	Residential
Assesor's Parcel No.	APN 143-040-02
Actual Site Area (SF)	11.25 acres (490100 sq.ft.)
Latitude/Longitude	38.81578 / -123.59522
Construction Type	V-B
Occupancy Group	U
Fire Sprinklers	No
Fire Zone (WUI)	Yes
Building Stories	1 story

Floor Areas	Proposed
AG Building Area	1500
Two Story/2 Bedroom Residence	950

DEFERRED SUBMITTALS

Submittal of the following items shall be deferred & submitted prior to foundation pour unless otherwise noted.

Not applicable this application.

Submittal documents for deferred submittal items shall be submitted to the structural engineer of record who shall review and forward them to the building official with a notation indicating that the deferred submittal documents have been reviewed and have been found to be in general conformance with the design of the building. The deferred submittal items conformance with the design of the building. The deferred submittal items shall not be installed until their design and submittal documents have been approved by the building official.

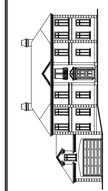
SHEET SCHEDULE

Sheet Number	Sheet Title
A1.1	Cover Sheet
A1.2	Site Plan
A1.3	Project Area & Impact Site Plan Overlay

REVISIONS	BY
Aug 18, 2025 1	

FILE:

TAYLOR BUILDING DESIGNS
CUSTOM HOMES, ADDITIONS & COMMERCIAL
429 WILSON LANE, WINDSOR, CALIF.
OFFICE & FAX (707) 838-0816



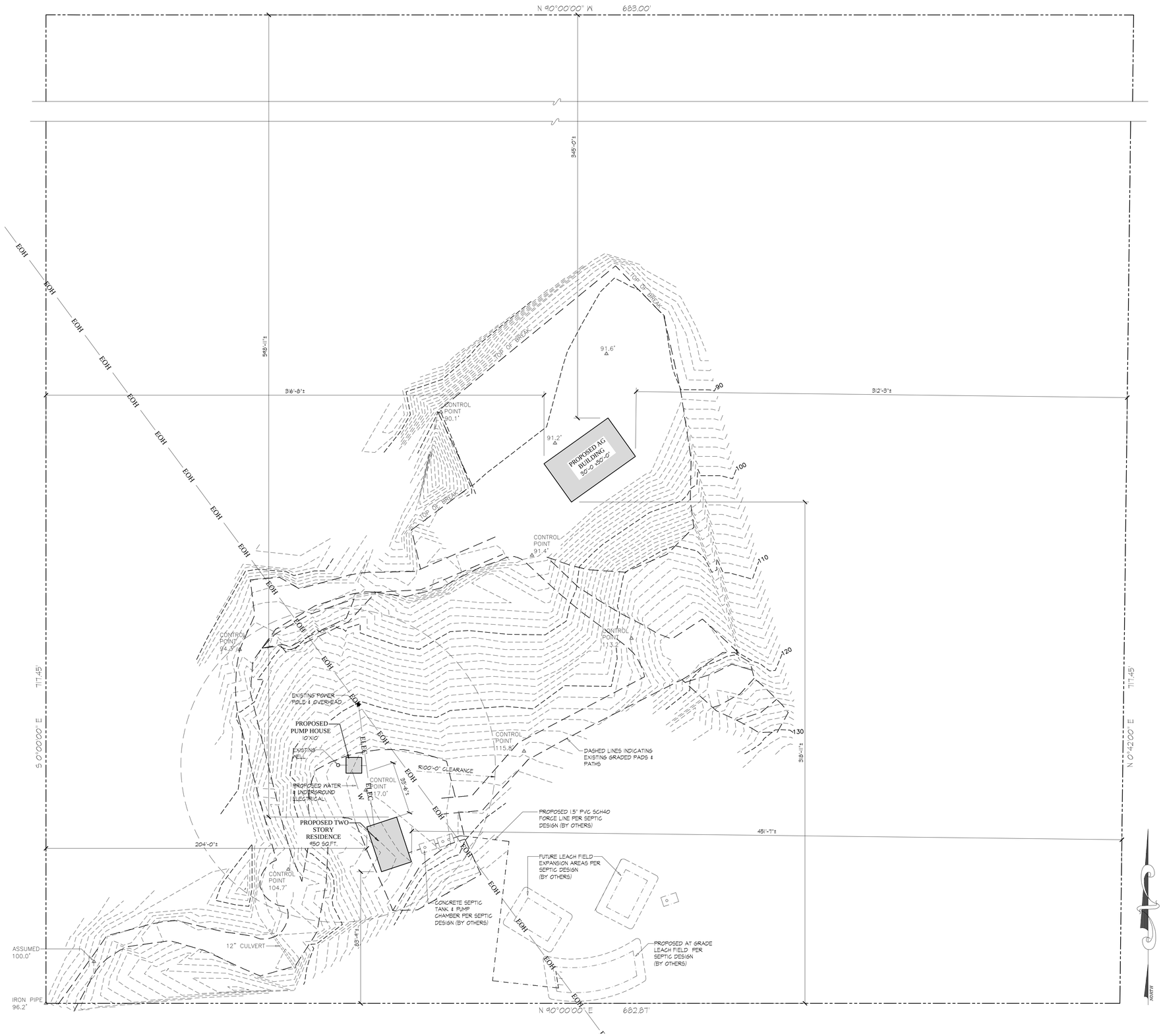


AG BUILDING & RESIDENCE
44948 Fish Rock Road, Gualala, Ca. 95445
APN 143-040-02

Cover Sheet

Date : Aug 12, 2025
Scale : AS NOTED
Engr :
Drawn : D. TAYLOR
Job : MAY & WARNER

Sheet
A1.1
Of Sheets



1 Site Plan
SCALE: 1"=30'-0"

REVISIONS	BY
Aug 18, 2025 1	

FILE:

TAYLOR BUILDING DESIGNS
CUSTOM HOMES, ADDITIONS & COMMERCIAL
429 WILSON LANE, WINDSOR, CALIF.
OFFICE & FAX (707) 838-0816

DAVID TAYLOR

AG BUILDING & RESIDENCE
44948 Fish Rock Road, Gualala, Ca. 95445
APN 143-040-02

Site Plan

Date : Aug 12, 2025
Scale : AS NOTED
Engr :
Drawn : D. TAYLOR
Job : MAY & WARNER

Sheet
A1.2
Of Sheets

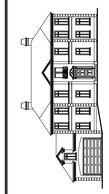


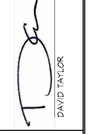
1 Project Area & Impact Site Plan Overlay
SCALE: 1"=30'-0"

REVISIONS	BY
Aug 18, 2025 ⚠1	

FILE:

TAYLOR BUILDING DESIGNS
429 WILSON LANE, WINDSOR, CALIF.
CUSTOM HOMES, ADDITIONS & COMMERCIAL
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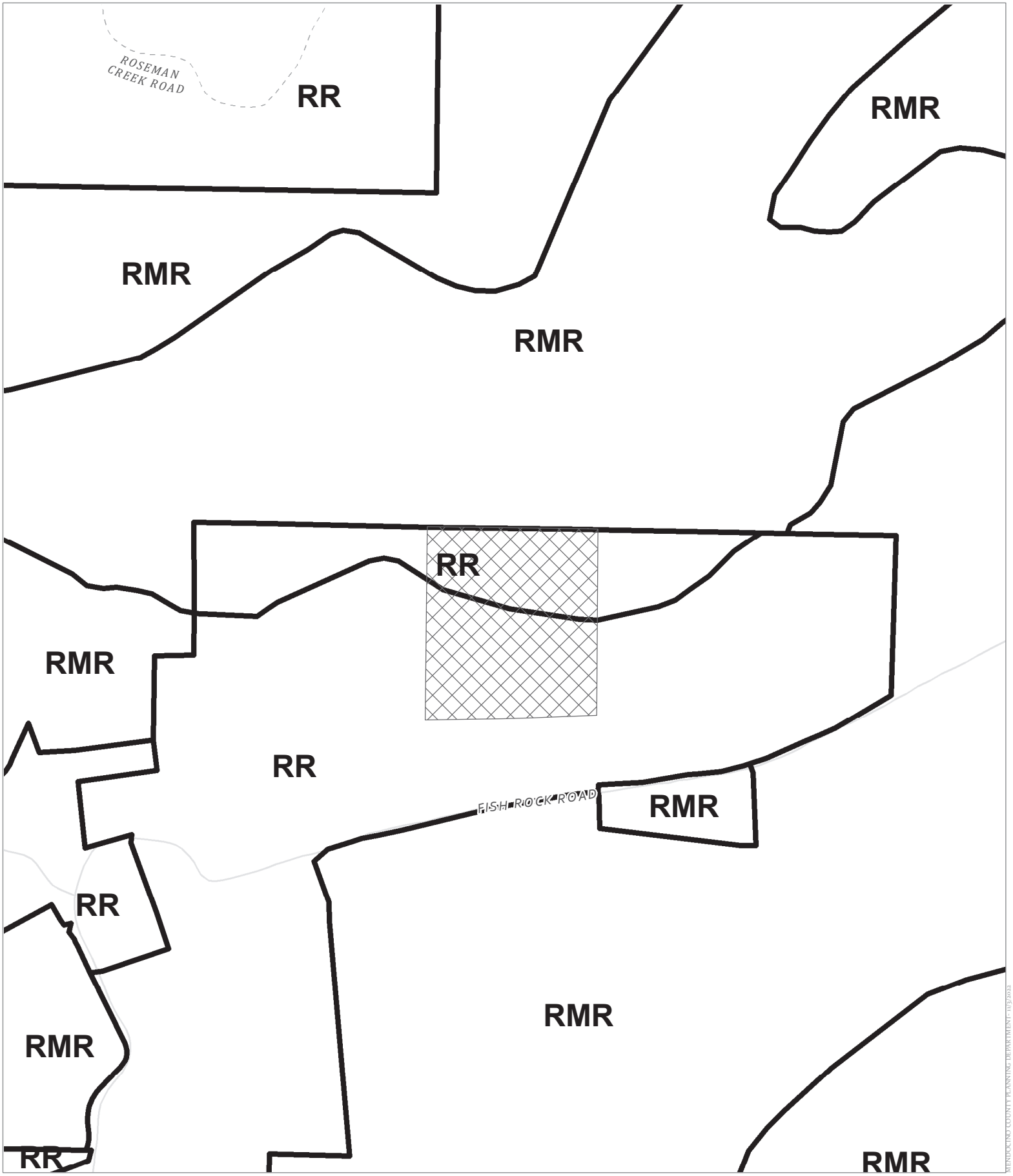


AG BUILDING & RESIDENCE

44948 Fish Rock Road, Gualala, Ca. 95445
APN 143-040-02

Project Area & Impact Site Plan Overlay

Date : Aug 12, 2025
Scale : AS NOTED
Engr :
Drawn : D. TAYLOR
Job : MAY & WARNER
Sheet
A1.3
Of Sheets



CASE: CDP 2018-0005
OWNER: MAY, Clifton & Mary
APN: 143-040-02
APLCT: Clifton & Mary May
AGENT:
ADDRESS: 44948 Fish Rock Rd., Gualala

Zoning Districts

Public Roads

0 250 500 Feet

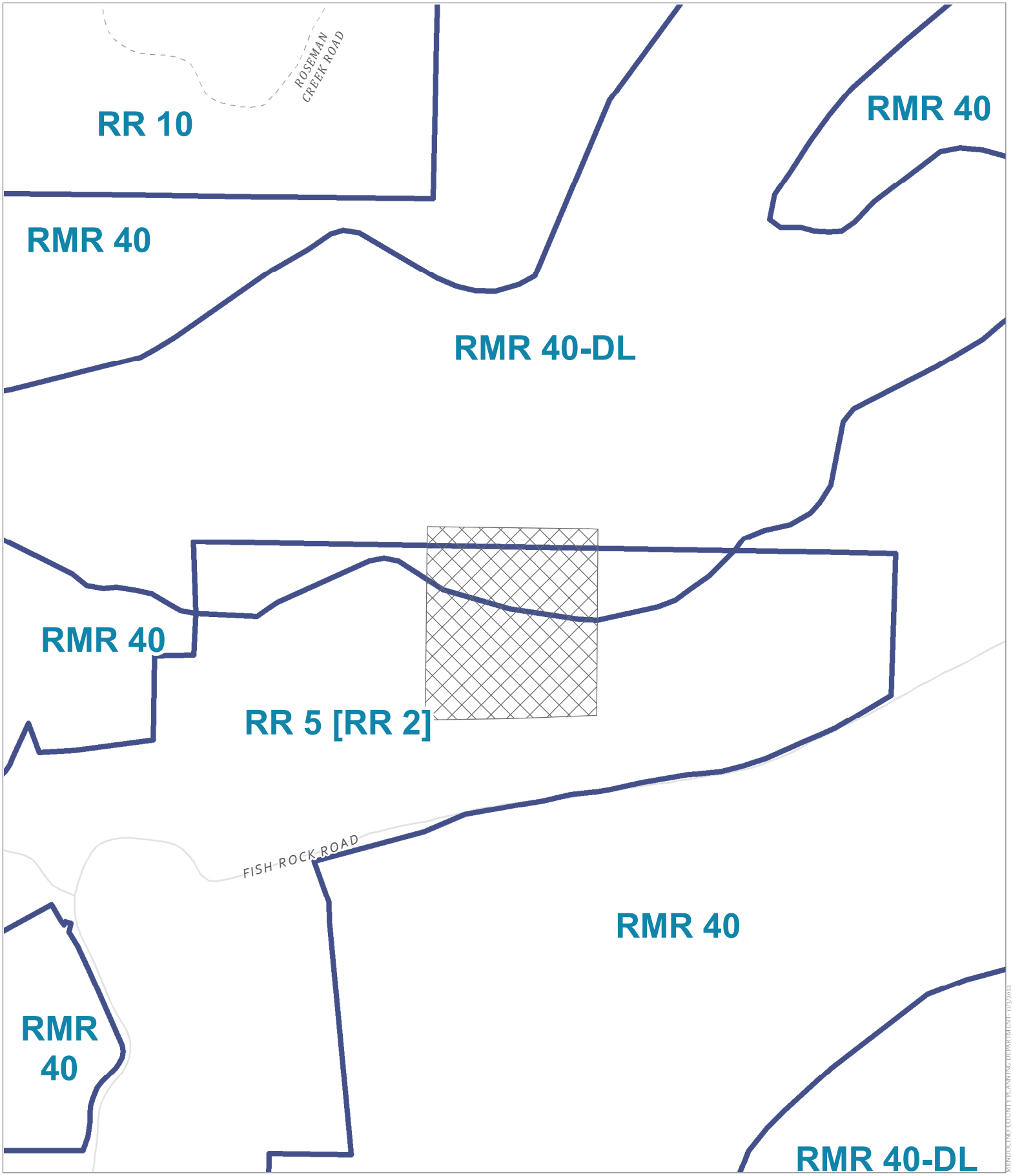
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1:6,000

ZONING

MENDOCINO COUNTY PLANNING DEPARTMENT - 11/3/2022

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CASE: CDP 2018-0005
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General Plan Classes

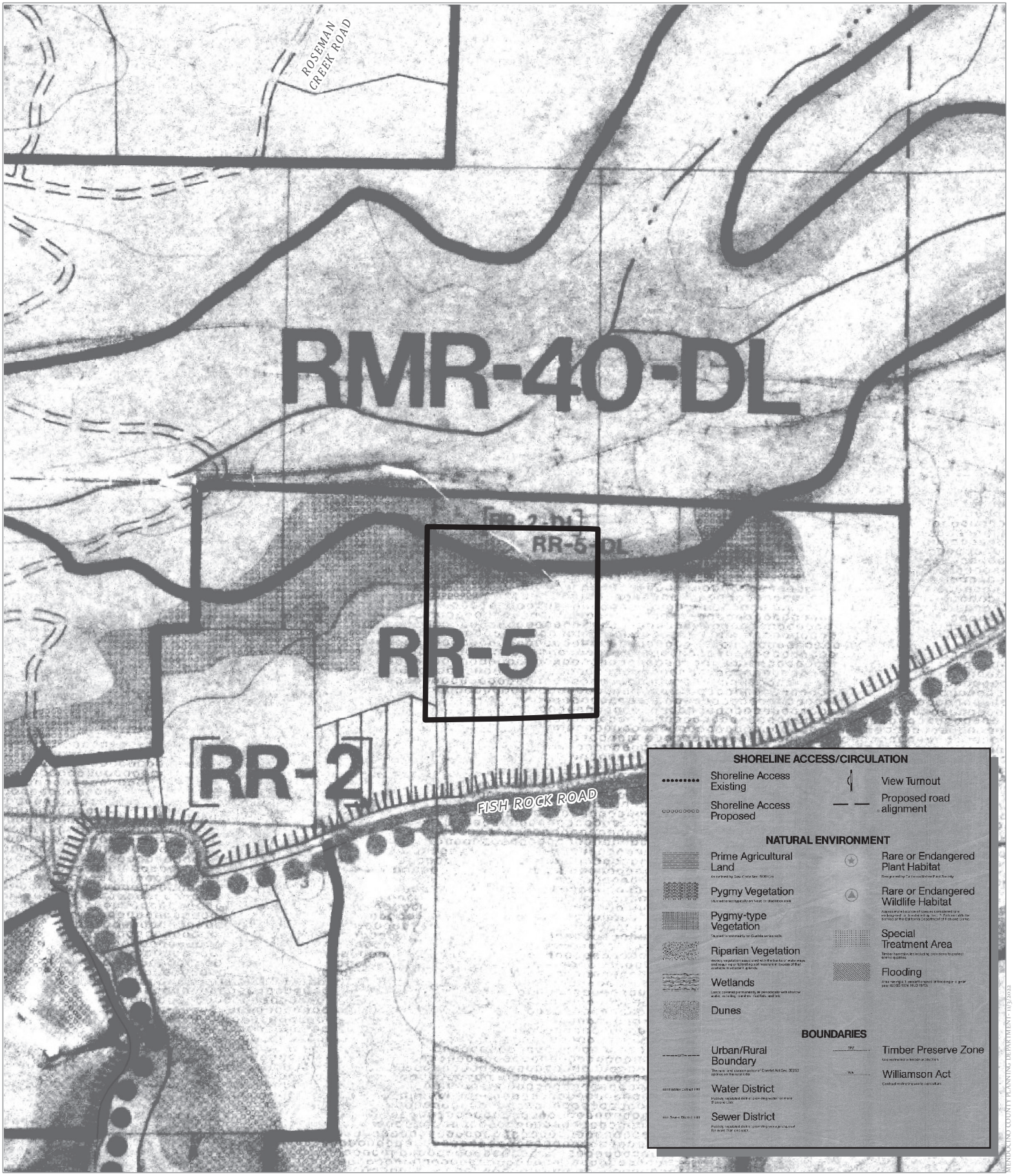
Public Roads

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0 0.045 0.09 Miles
1:6,000

GENERAL PLAN

MENDOCINO COUNTY PLANNING DEPARTMENT - 11/3/2022

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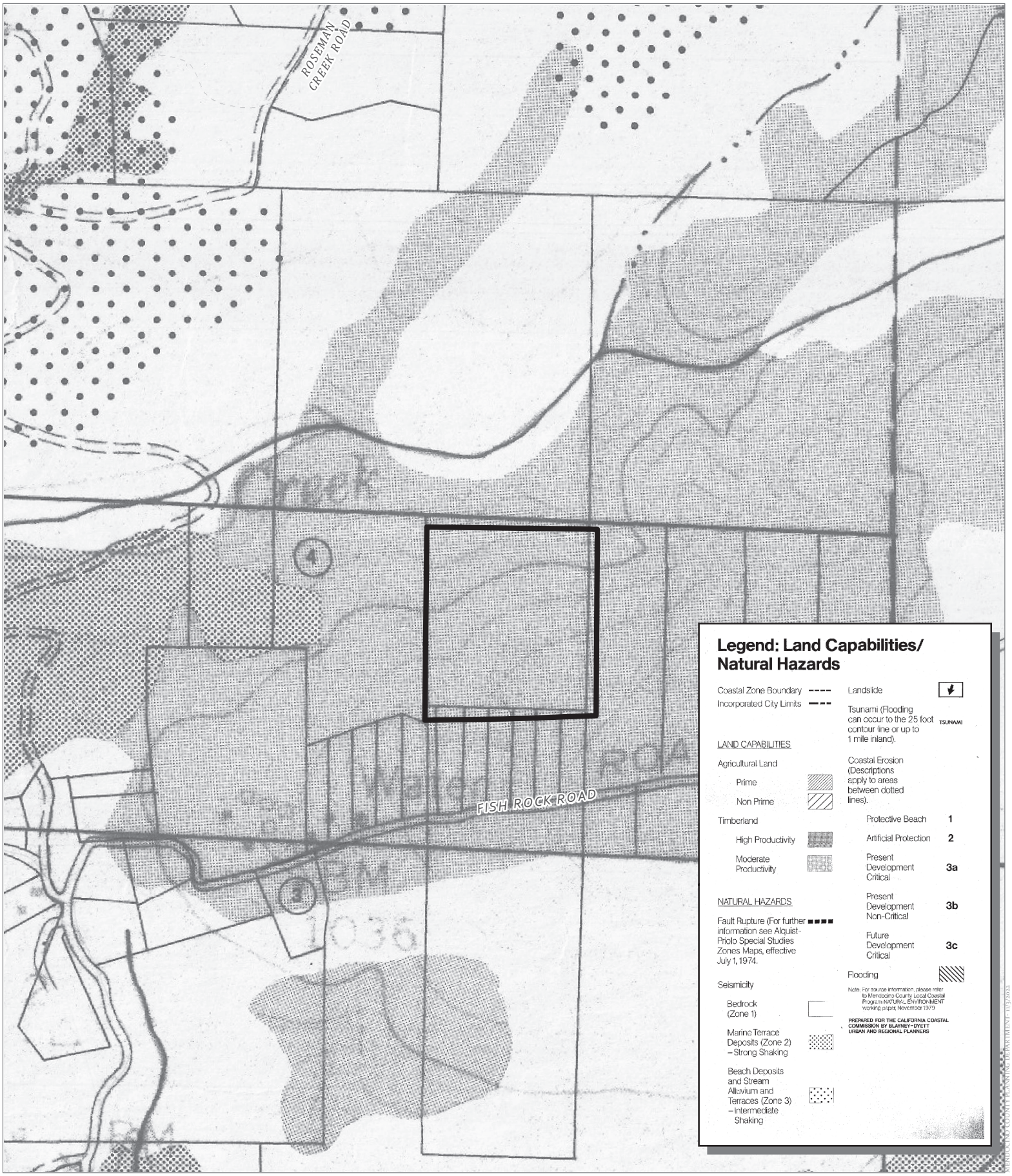
Public Roads

0 250 500 Feet
0 0.045 0.09 Miles
1:6,000

LCP LAND USE MAP 30: ANCHOR BAY

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MENDOCINO COUNTY PLANNING DEPARTMENT - 11/3/2022



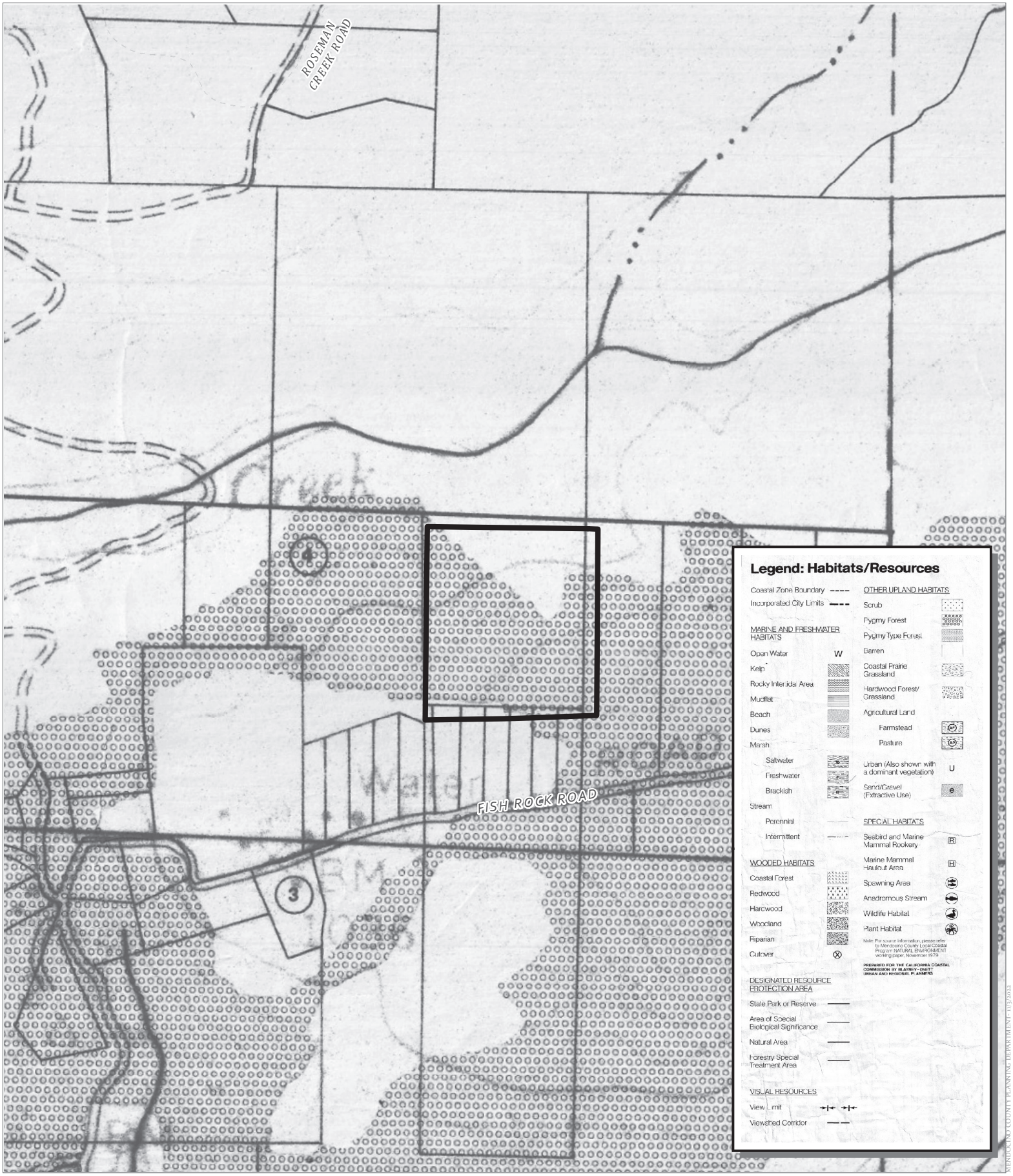
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Public Roads

0 250 500 Feet
0 0.045 0.09 Miles
1:6,000

LCP LAND CAPABILITIES & NATURAL HAZARDS

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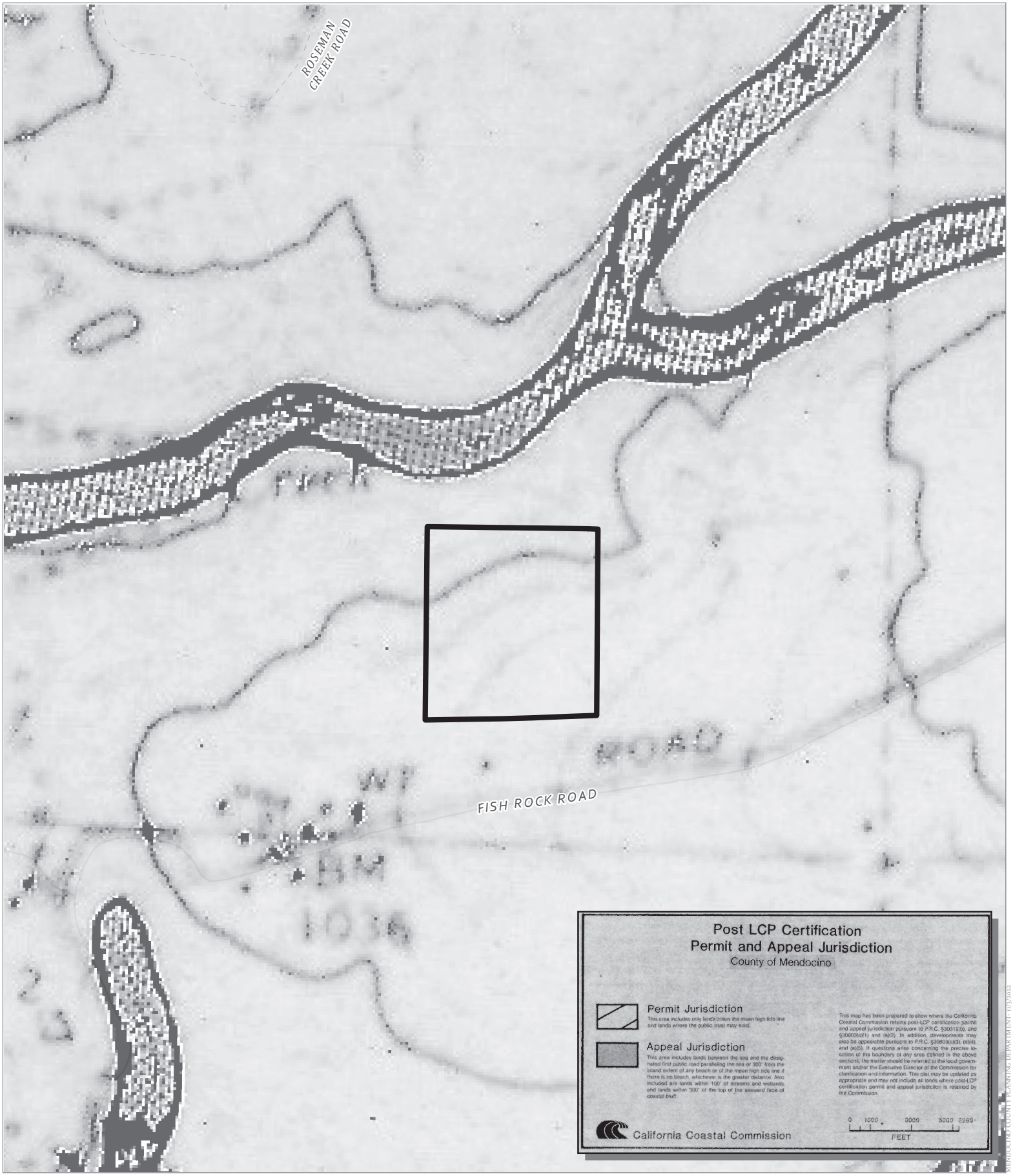
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Public Roads

0 250 500 Feet
0 0.045 0.09 Miles
1:6,000

LCP HABITATS & RESOURCES

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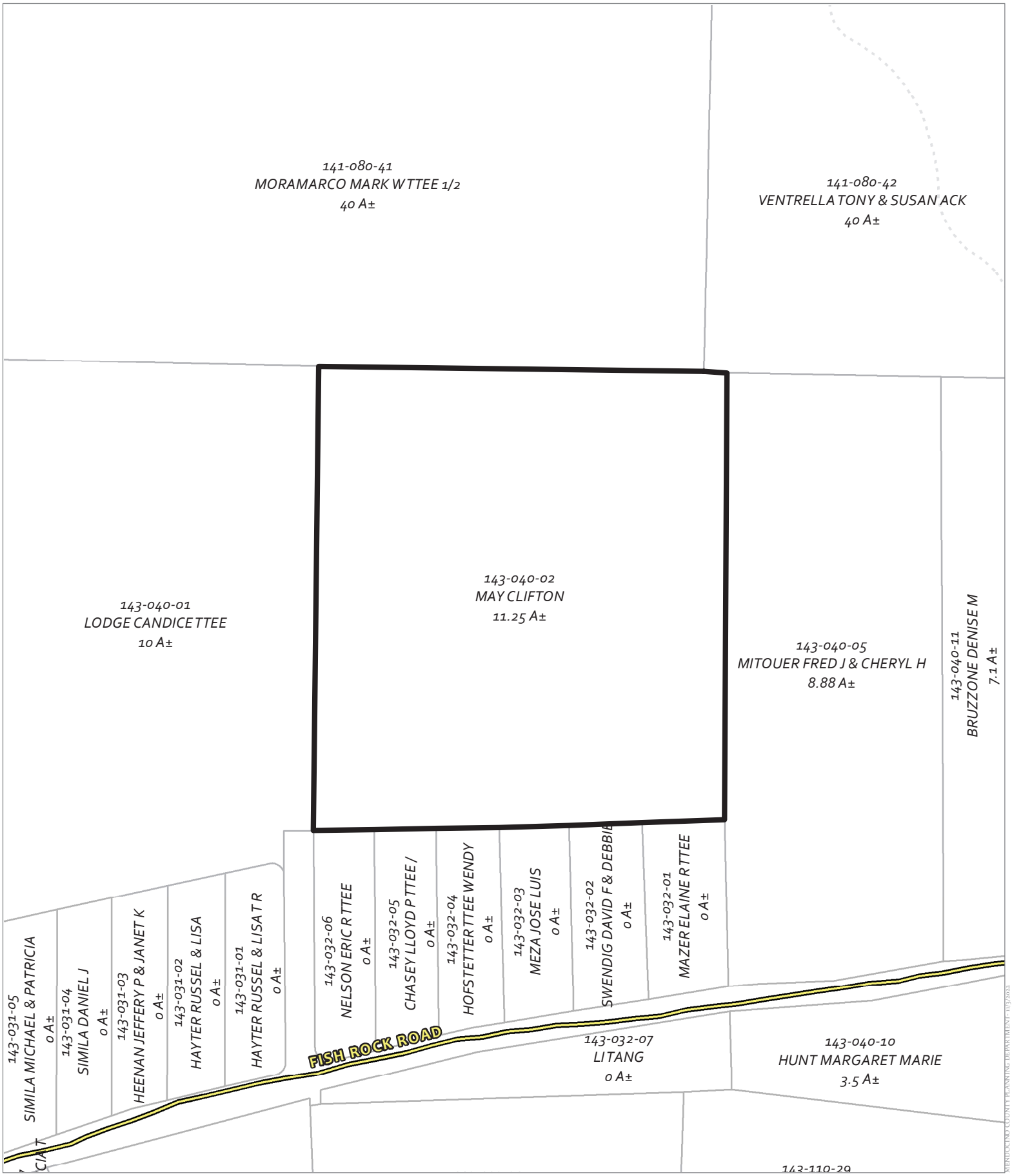
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Public Roads

0 250 500 Feet
0 0.045 0.09 Miles
N W E S
1:6,000

APPEALABLE AREAS

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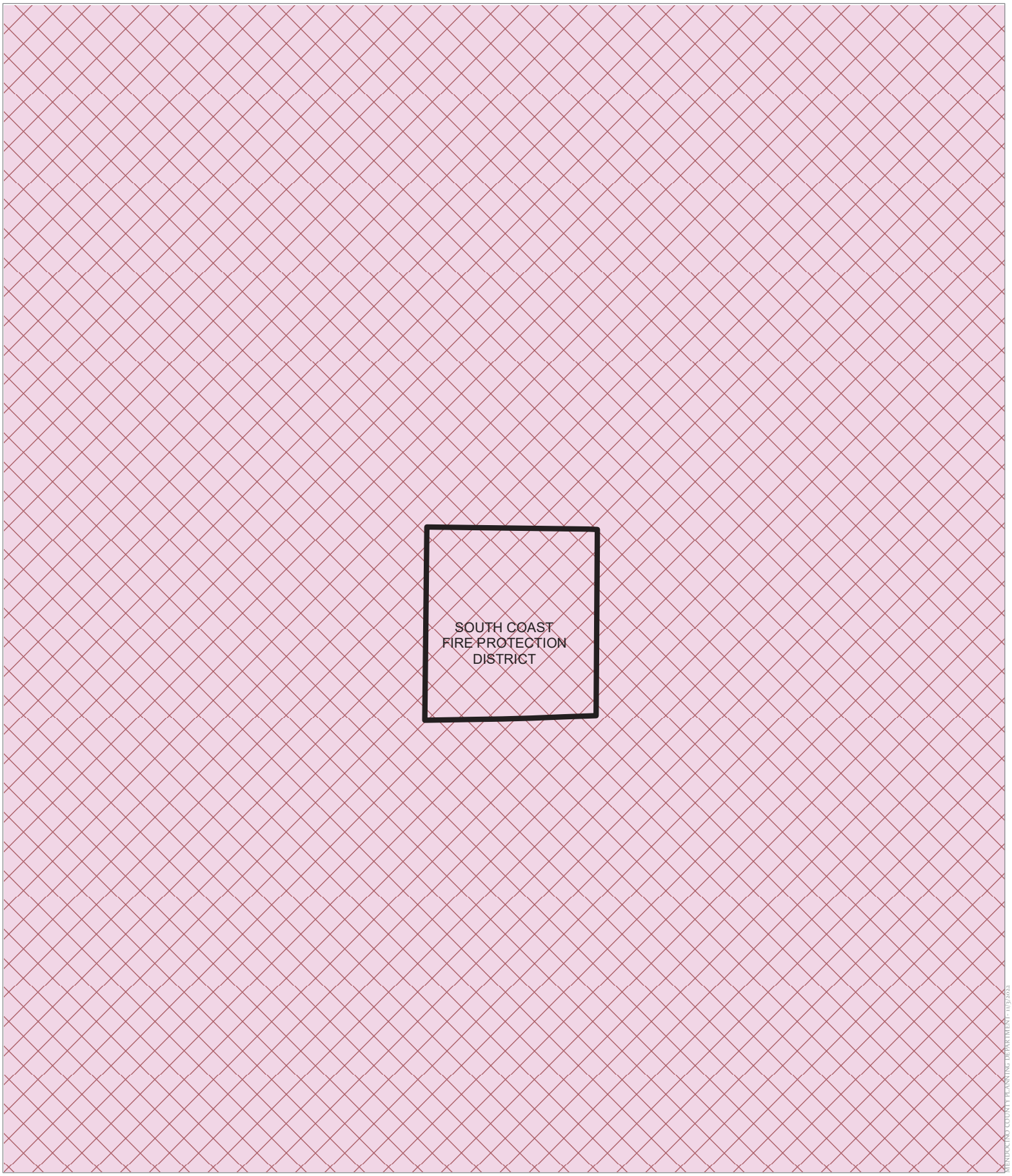
Public Roads

0 105 210 Feet
0 0.0175 0.035 Miles
1:2,500

ADJACENT PARCELS

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MENDOCINO COUNTY PLANNING DEPARTMENT - 11/3/2022



CASE: CDP 2018-0005
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High Fire Hazard

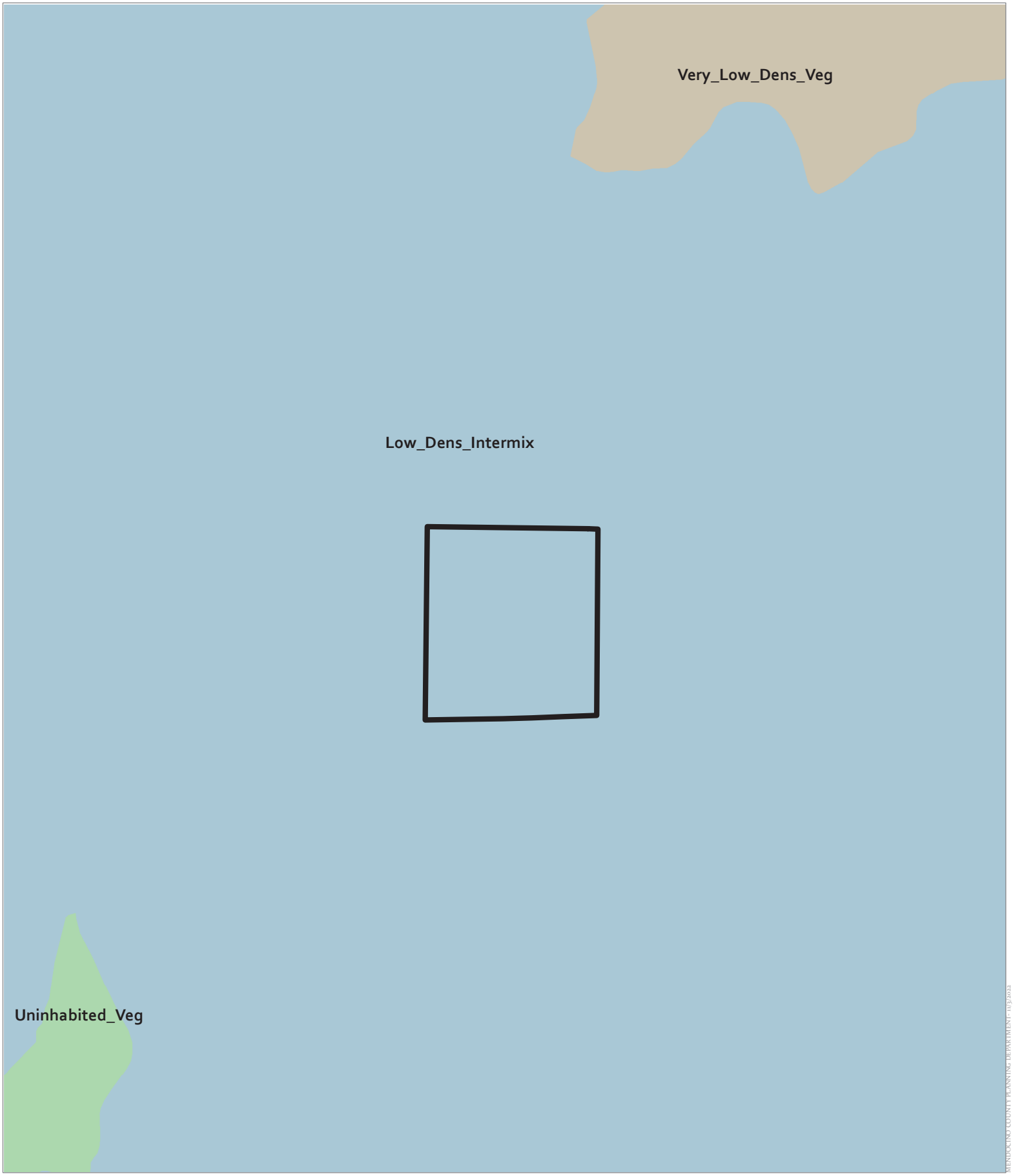
County Fire Districts

0 250 500 Feet
0 0.045 0.09 Miles
N W E S
1:6,000

FIRE HAZARD ZONES & RESPONSIBILITY AREAS
STATE RESPONSIBILITY AREA

MENDOCINO COUNTY PLANNING DEPARTMENT - 11/3/2022

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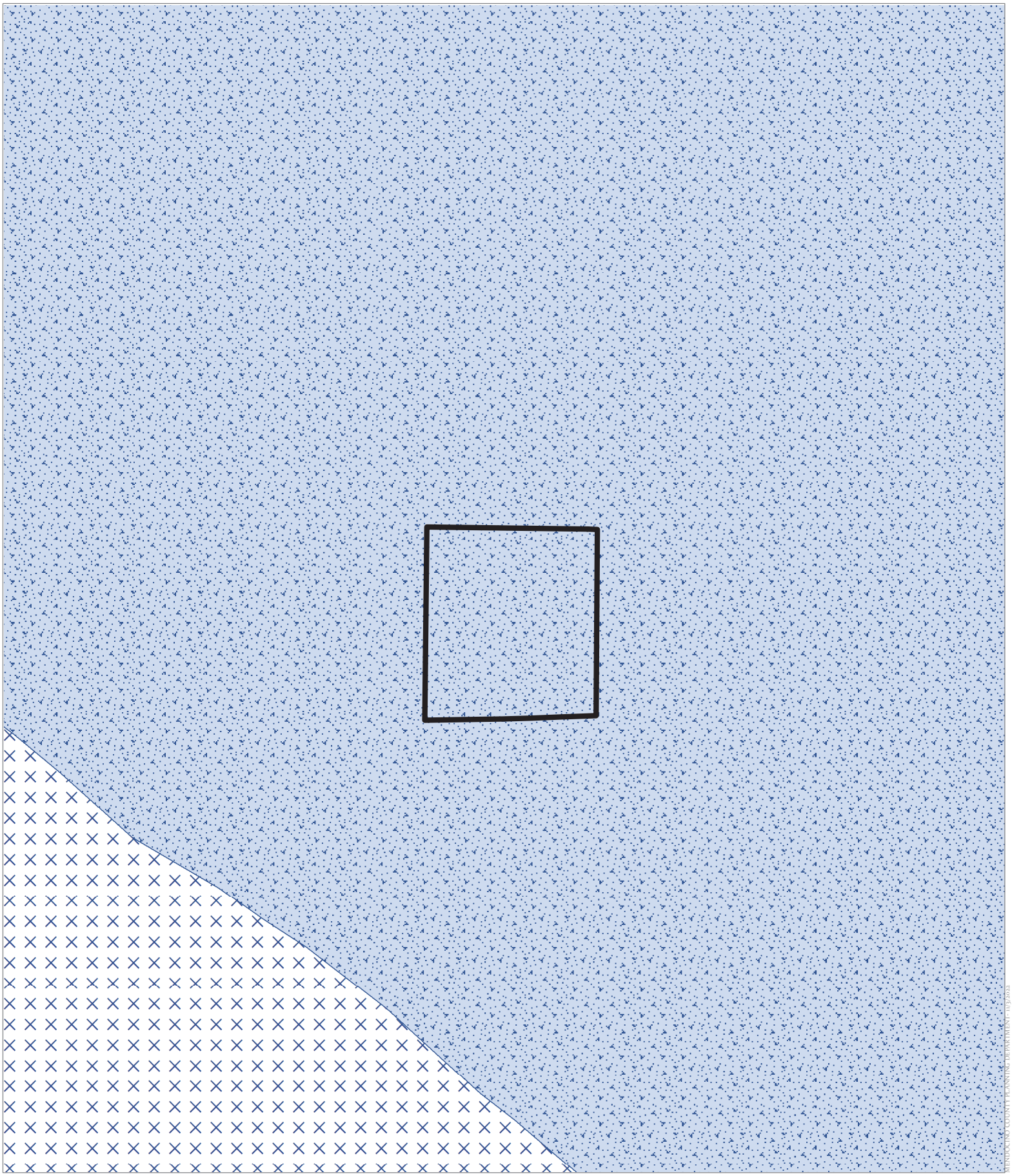
0 250 500 Feet
0 0.045 0.09 Miles
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N W E S

WILDLAND-URBAN INTERFACE

MENDOCINO COUNTY PLANNING DEPARTMENT - 11/3/2022

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ADDRESS: 44948 Fish Rock Rd., Gualala

Critical Water Resources

Critical Water Resources Bedrock

0 250 500 Feet

0 0.045 0.09 Miles

1:6,000

N W E S

COASTAL GROUND WATER RESOURCES

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CASE: CDP 2018-0005
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ADDRESS: 44948 Fish Rock Rd., Gualala

0° - 14°
15° - 32°
33° - 72°

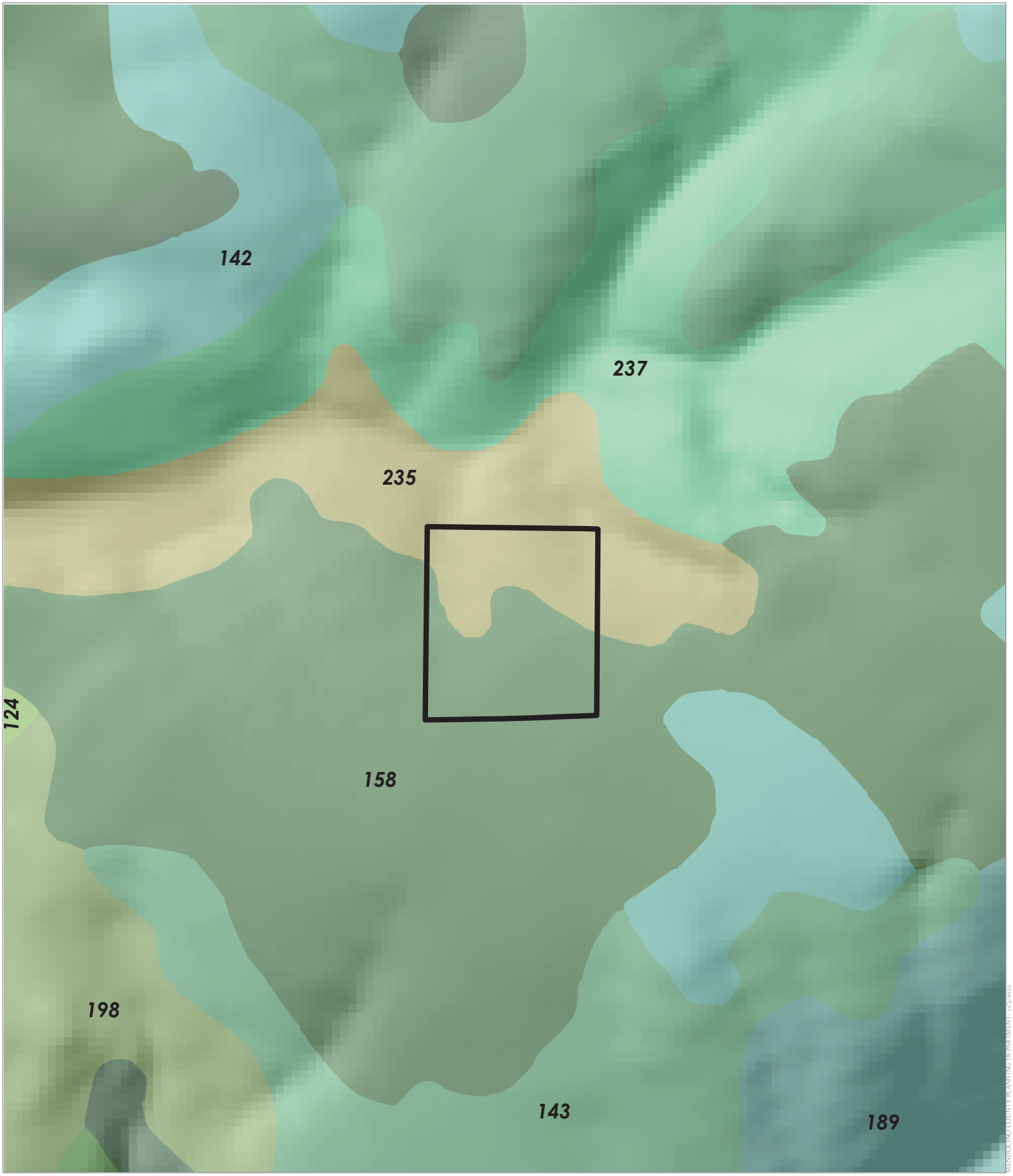
0 250 500 Feet
0 0.045 0.09 Miles
1:6,000

N W E S

ESTIMATED SLOPE

MENDOCINO COUNTY PLANNING DEPARTMENT - 11/3/2022

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AGENT:
ADDRESS: 44948 Fish Rock Rd., Gualala

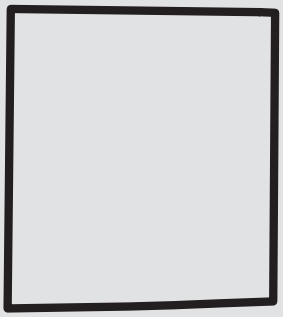
Bishop Pine

0 250 500 Feet
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1:6,000

WESTERN SOIL CLASSIFICATIONS

MENDOCINO COUNTY PLANNING DEPARTMENT - 11/3/2022

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DO NOT USE THIS MAP TO DETERMINE LEGAL PROPERTY BOUNDARIES



CASE: CDP 2018-0005
OWNER: MAY, Clifton & Mary
APN: 143-040-02
APLCT: Clifton & Mary May
AGENT:
ADDRESS: 44948 Fish Rock Rd., Gualala

Gualala MAC

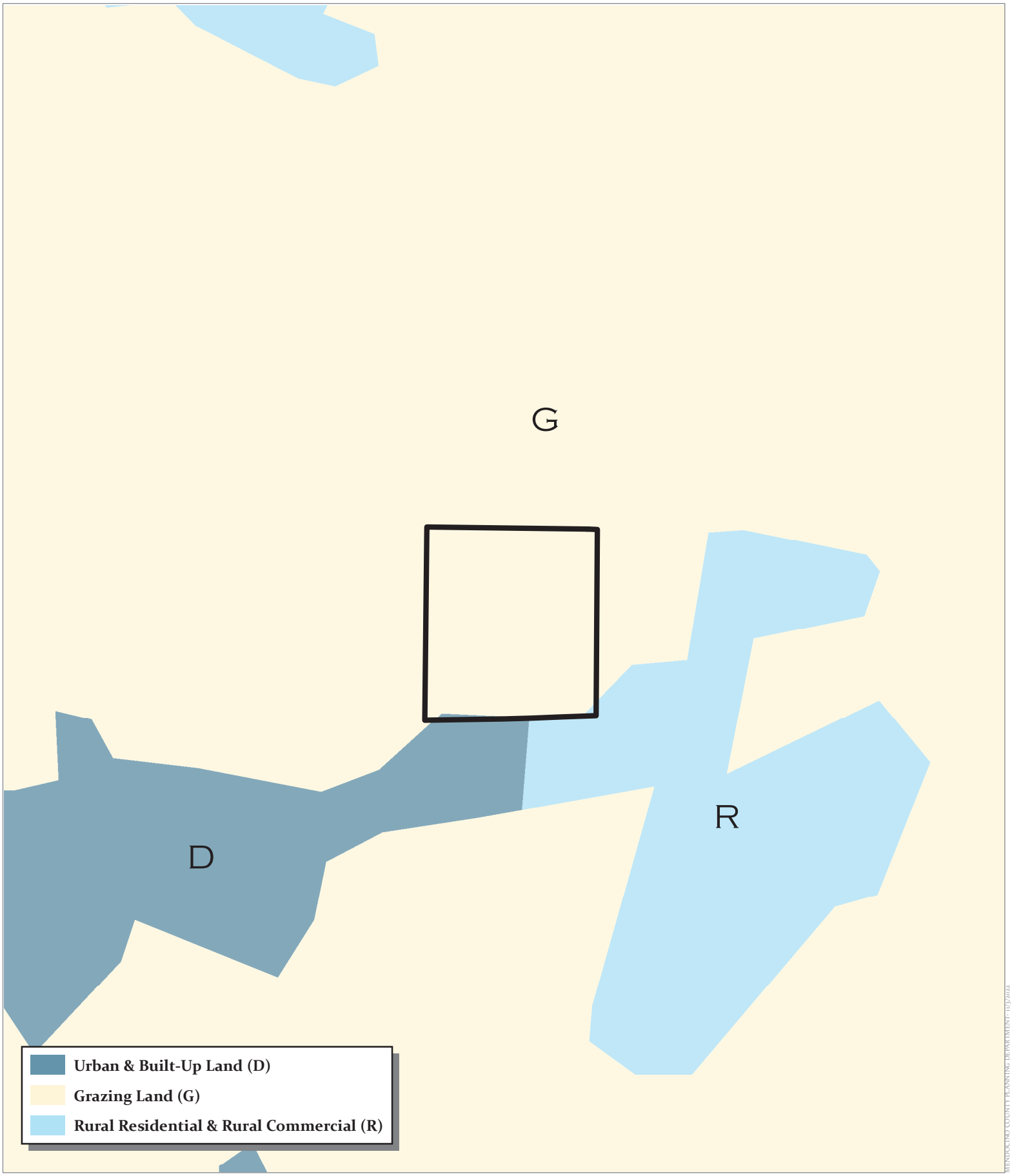
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N W E S

GUALALA MUNICIPAL ADVISORY COUNCIL

MENDOCINO COUNTY PLANNING DEPARTMENT - 11/3/2022

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CASE: CDP 2018-0005
OWNER: MAY, Clifton & Mary
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0 250 500 Feet
0 0.045 0.09 Miles
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IMPORTANT FARMLAND

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MENDOCINO COUNTY PLANNING DEPARTMENT - 11/3/2022

P.O. Box 5214
Petaluma, CA 94955
(707) 241-7718
www.solecology.com

April 12, 2022

Clifton (Joe) May
Mary May
44680 Fish Rock Road
Gualala, CA 95445

Re: Coastal Biological Resources Review for 44948 Fish Rock Road (APN 143-040-002) in Gualala, Mendocino County, California

Dear Mr. May,

The purpose of this letter report is to provide the results of an assessment of the environmentally sensitive habitat and special status species resource areas (ESHAs) potentially present on APN 143-040-002 located at 44948 Fish Rock Road in Gualala, Mendocino County, California (Project Area; Attachment A, Figure 1). This assessment is required as part of an after-the-fact application with the County of Mendocino Department of Planning and Building Services (County) for a coastal development permit (CDP). To date, site grading and vegetation removal has occurred without permits. Future development would include the construction of two single one-bedroom cottages (1500 sf and 1200 sf), a well and septic tank, associated road improvements and parking within previously impacted areas following resolution of the outstanding grading violation.

The assessment provides the results of a review of potential ESHAs on the property that may have been affected by recent non-permitted grading activities in the Project Area. The Mendocino Coastal Element of the General Plan (or "LCP") defines ESHAs as: anadromous fish streams, sand dunes, rookeries, marine mammal haul-out areas, wetlands, riparian areas, areas of pygmy vegetation which contain species of rare or endangered plants, and other habitats of rare and endangered plants and animals. In addition, though not specifically defined in the General Plan, 1st, 2nd, and 3rd order streams subject to state or federal laws and regulations are also described, even when those features do not meet the definition of ESHA. This report describes the results of the biotic assessment, impact analysis, and provides recommendations for mitigation and compliance with local, state, and federal laws and regulations for any adverse effects that may have occurred or occur in the future.

Methods

On April 17, 2019, and December 3, 2021, Sol Ecology, Inc. (Sol Ecology) biologists conducted a coastal biological resources assessment on the subject property. Prior to the site visit, Sol Ecology biologists reviewed the following literature to evaluate whether special status species or other sensitive biological resources (e.g., wetlands) could occur in the Project Area and vicinity:

- California Native Plant Society's (CNPS's) Inventory of Rare and Endangered Plants of California search for U.S. Geological Survey (USGS) 7.5-minute Gualala quadrangle and six adjacent quadrangles[1];
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) records search for USGS 7.5-minute Gualala quadrangle and six adjacent quadrangles[2];
- U.S. Fish and Wildlife Service (USFWS) list of threatened and endangered species for the Project Site (USFWS 2022)[3];
- USFWS National Wetlands Inventory, Wetlands Mapper[4]; and
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Web Soil Survey[5].

Based on the information from the above sources, Sol Ecology developed lists of special status species and natural communities of special concern that could be present in the project vicinity. A reconnaissance-level biological resources survey was conducted within the Project Area and included immediate surrounding habitats. The focus of the survey was to identify whether suitable habitat elements for special status species documented in the surrounding vicinity are present or absent within the Project Area, and whether the project would have the potential to result in impacts to any of these species and/or their habitats either on- or off-site.

Botanical surveys were performed on August 17 and November 16, 2017, and on February 3, May 10, June 22, July 19, and September 15, 2018, by Alison Gardner. During botanical surveys, the entire parcel was traversed and observed plant species (except for non-special status lichens) were recorded. When plants were not identifiable by sight, samples were taken and keyed out using the second edition of the *Jepson Manual*[6]. Reports documenting the results of the botanical surveys were prepared by Alison Gardner in 2017 and 2018 (Attachment B).

The Project Area was also evaluated for the presence of wetland and non-wetland waters potentially subject to regulation by the federal government (U.S. Army Corps of Engineers [USACE]) and the state of California (Regional Water Quality Control Board [RWQCB] and CDFW). Coastal wetlands were assessed using the one-parameter rule in accordance with the Coastal

---

[1] California Native Plant Society (CNPS), Rare Plant Program. 2022. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available at: http://www.rareplants.cnps.org. Most recently accessed: March 2022.

[2] California Department of Fish and Wildlife (CDFW). 2022. California Natural Diversity Database (CNDDB). Wildlife and Habitat Data Analysis Branch, Sacramento, CA.

[3] U.S. Fish and Wildlife Service. 2022. Information for Conservation and Planning Database. Available at: https://ecos.fws.gov/ipac/location/index. Most recently accessed: March 2022.

[4] USFWS. 2022. National Wetlands Inventory, Wetlands Mapper. Available at: https://www.fws.gov/wetlands/data/mapper.html. Most recently accessed: March 2022.

[5] USDA, NRCS. 2019. Web Soil Survey. Web application. Last updated: April 9, 2019. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Most recently accessed: March 2022.

[6] Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson manual: vascular plants of California, second edition. University of California Press, Berkeley.

Zone Act. Therefore, the preliminary delineation of wetland boundaries was based on the presence/absence of indicators of hydrophytic vegetation, hydric soil, or wetland hydrology. The boundaries of non-wetland waters were identified by locating the ordinary high-water mark (OHWM).

Results

Elevations within the Project Area range from approximately 305 to 345 meters. The Project Area encompasses two soil map units identified by the USDA, NRCS as shown in Attachment A, Figure 2:

- **Havensneck sandy loam, 2 to 15 percent slopes**: This soil is not hydric. Havensneck is well drained and occurs on mountains and hills. The parent material is residuum weathered from sandstone and shale. Minor components include Shinglemill (6%) and Fishrock (5%).

- **Yellowhound-Kibesillah complex, 50 to 75 percent slopes, MLRA 4B**: Yellowhound and Kibesillah soils are not hydric. Both soils are well drained and occur on mountains and hills. Parent material for Yellowhound is colluvium derived from conglomerate and/or colluvium derived from sandstone and/or residuum weathered from sandstone and/or residuum weathered from conglomerate. Kibesillah parent material is colluvium derived from sandstone and/or residuum weathered from sandstone. Minor components of this complex include Zeni (7%), Ornbaun (7%), and rock outcrop (6%).

Typical vegetation associated with these soil types include California huckleberry (*Vaccinium ovatum*), Douglas-fir (*Pseudotsuga menziesii* var. *menziesii*), Pacific madrone (*Arbutus menziesii*), redwood (*Sequoia sempervirens*), tan oak (*Notholithocarpus densiflorus*), and scattered sugar pine (*Pinus lambertiana*). This is consistent with plant species observed on the site. Havensneck soil may also support stunted (or pygmy) redwood, though none have been observed on site or adjacent to the site.

Vegetation communities present within the Project Area were classified using the online version of *A Manual of California Vegetation*[7]. However, in some cases it is necessary to use other cited sources to further identify variants of community types, or to describe non-vegetated areas that are not described in the literature. Vegetation communities were classified as sensitive or non-sensitive according to guidance under the LCP or as recognized by CDFW.

Natural Communities

Overall, the Project Area consists mostly of Douglas-fir and tan oak forest with a small amount of redwood forest mixed in. A total of approximately 0.8 acre of coniferous forest habitat was impacted as a result of unpermitted grading by the Applicant to expand and level out several

[7] CNPS. 2022. A Manual of California Vegetation, Online Edition. Available at: http://www.cnps.org/cnps/vegetation/. Most recently accessed: March 2022.

existing pads and roads on the property; work was performed between 2016 and 2017 approximately (see Attachment A, Figure 1). At the time of purchase in 2015, all roads and a portion of all three pads shown in Figure 1 were present, and there is no evidence that any new pads were created. Attachment C provides photographs of the site before and after grading.

Three headwater tributaries, as shown in Figure 1, occur within and adjacent to the Project Area; tributary 1 originates on-site, while the other originate off-site. All three ephemeral tributaries drain to Roseman Creek approximately one quarter mile downslope from the Project Area. Roseman Creek is an anadromous fish stream that flows to the Pacific Ocean (a traditional navigable water). The tributaries do not maintain water during the summer months and do not exhibit any definable riparian (or wetland) vegetation.[8] Ephemeral streams lacking riparian or wetland vegetation are not defined as ESHA in the General Plan, however, they are subject to state jurisdiction under the California State Water Quality Control Board (CSWQCB) Porter-Cologne Act and the CDFW Section 1600 Code and would therefore require permit approval prior to any new stream modification.

Tributaries 1 and 2 on the Project Site are approximately 2 to 3 feet in width and about one foot deep. At the time of the April 17, 2019, site visit, no water was observed in Tributary 1, and a small amount of flowing water was observed in Tributary 2 between the two access roads and could be heard downstream below the Project Area. However, no pools were observed on or immediately adjacent to the Project Area and no water was observed during a July 23, 2019, interagency site walk or on December 3, 2021. Based on photographs from 2015 and discussions with the prior owner, it seems that both Tributary 1 and 2 flowed directly across the to the unpermitted grading. Tributary 3 is located to the east of the site in a densely vegetated gully approximately 30 to 40 feet east of the project site. Tributary 3 was also dry on both visits.

Special Status Species

Special status species include those plants and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for listing under the Federal Endangered Species Act (ESA) and/or California Endangered Species Act (CESA). These acts afford protection to both listed species and those that are formal candidates for listing. Plant species on the California Native Plant Society's Rare and Endangered Plant Inventory with California Rare Plant Ranks (CRPR) of 1 and 2 are also considered special status plant species or species of local concern. CDFW Species of Special Concern, CDFW California Fully Protected species, USFWS Birds of Conservation Concern, and CDFW special status invertebrates are all considered special status species and their habitats are considered ESHA. Lastly, CDFG Fish and Game Code and the Migratory Bird Treaty Act (MBTA) prohibits the take of actively nesting birds as well as common bats and their roosts (CDFG Code only).

Twenty-four special status plants have been documented within five miles of the Project Area (Attachment A, Figure 3). Of the more than 100 plant species observed by Ms. Gardner, no special

[8] The absence of riparian vegetation was also confirmed by Daniel Harrington of CDFW during an interagency site walk on July 23, 2019.

status plants were observed. Glory brush (*Ceanothus gloriosus var. exulatus*), CRPR 4.3 was seen during the botanical surveys occurring in 2017 and 2018. CRPR 4 is essentially a watch list and 0.3 indicates that glory brush is not very threatened in California. According to Ms. Gardner, this species was observed near the southern property boundary and does not appear to have been impacted. However, a few seedlings were found in a few of the graded areas. This species is successional, and thus its presence in disturbed areas is likely opportunistic rather than evidence of impact. No evidence of any other special status plant was found. Results from Ms. Gardner's survey are provided in Attachment B.

Fourteen special status wildlife species have been documented within five miles of the Project Area (Attachment A, Figure 4, and Attachment D, USFWS IPaC Report). Of these, only one species has a moderate potential to be present on the project site: Sonoma tree vole (*Arborimus pomo*). Sonoma tree vole or STV, may be present in mature redwood and Douglas fir trees on the site; however, historic logging may preclude this species and no evidence of tree vole nests were observed despite an extensive search. Because no new tree removal is proposed, no impacts to STV are anticipated as part of the current project proposal. Furthermore, given Roseman Creek is more than one quarter mile downstream, impacts to fish and wildlife are not likely to occur. A complete list of all of the species evaluated as part of this assessment is provided in Attachment E, Wildlife Species Potential Table.

Of the remaining species documented in the vicinity of the Project Area, the potential for presence (and potential impacts) is relatively low for most species primarily given the absence of mature, old-growth forest and suitable aquatic habitats on or adjacent to the project site. Other essential habitat elements absent from the Project Area include rocky crevices, cliffs, old snags, trees with large cavities, hollow logs, etc. Additionally, many of the necessary vegetation communities are absent from the Project Area including riparian, wetland, coastal scrub, coastal prairie, grassland, and/or dune habitat. The Project Area does have the potential to support nesting birds protected under the MBTA and CDFG Code^.

Impact Analysis and Discussion

It is estimated that approximately 0.8 acre of coniferous forest habitat was impacted as a result of unpermitted grading on the property in 2016/2017. Of that, 0.1 acre is proposed for development, including two single-bedroom cottages, a well and septic tank, and fire road access and parking. The remaining 0.7 acre will be restored to prior conditions. Restoration will consist of removing all side-cast debris followed by gentle recontouring of pads to remove weedy vegetation and to soften any steep slopes. Replanting will be performed by the landowner under the guidance of the biologist. Revegetation will include a plant palette of native trees and shrubs that occur at the site and plant material will be locally sourced to the extent practicable. Mulch will be applied around each plant to improve soil conditions and protect new saplings; broadcast seeding is not prescribed due to the rocky soils and lack of herbaceous species on the site. A restoration plan has been prepared that details site preparation, maintenance, and monitoring requirements to accompany the new CDP application.

Based on photographs from 2015 and discussions with the prior owner, it seems that both Tributary 1 and 2 flowed directly across the road prior to the unpermitted grading. A newer culvert was observed at the Tributary 1 road crossing, presumably installed at the time of the unpermitted grading. Approximately 78 linear feet of Tributary 2 appears to have been diverted from its original alignment to drain to Tributary 1 and the new culvert. Based on photographs obtained prior to the unpermitted grading, it appears the roadway at this location remains relatively unchanged and culverts were likely placed in order to capture seasonal flows across the site during the winter rainy season. Some erosion of the channel below was noted likely due to proximity of the roadway and steepness of the slope. Restoring flow to the downstream Tributary 1 channel is not proposed at this time due observed erosion. Instead, this area (and all other areas within 50 feet of any channel) will be replanted and maintained as a vegetative buffer to protect steep slopes below the project site from any runoff, which could further increase sedimentation downstream below the site.

Upstream of the lower road crossing on Tributary 2, a portion of this feature was impacted during road improvements, including grading of a steep connecting roadway between the upper and lower road as shown in Figure 1. Materials, including dirt, rock, and other debris was side cast onto the bank of the tributary, resulting in impacts to approximately 61 feet of Tributary 2. Based on subsequent observations on December 3, 2021, it does not appear there is any obstruction to flow at this location, and impacts are limited to the eastern bank primarily. Natural colonization of native species was observed on the slope of the connector road, including glory bush, a Rank 4 species. Restoration includes removal of side cast material and revegetation of the eastern bank. No recontouring of this area is recommended due to the presence of predominantly native vegetation regrowth and no non-native or invasive species present.

Lastly, impacts to Tributary 2 at the upper road suggest leveling out of the roadway at this location disrupted stream flow which may have originally sheet flowed across the road resulting in some fill within the stream due to side casting of materials including dirt and other debris. At this location the channel is only 2 feet wide at most; water was observed flowing sub-surface including some water trickling into a small pool immediately downstream. No evidence of any culvert could be found. A total of 18 linear feet of this feature was impacted by the roadway at an unknown date. Proposed restoration includes removing dirt and rock from the channel, and then installing a culvert to reconvey water across the road. One or more temporary check dams or biodegradable fiber rolls would be installed in the channel below the impact area to trap any sediment during initial flows. All disturbed areas will be revegetated according to the overall restoration plan for stream setback areas.

Tributary 3 shows no evidence of disturbance other than some vegetative debris along the bank. Evidence of past logging was observed. No impacts to this feature are anticipated; debris will be removed, and best management practices will be employed to ensure no impact during recontouring of the site.

No ESHAs as defined in LCP were found to be present on or immediately adjacent to the Project Area. However, ephemeral headwater streams (tributaries 1, 2, and 3) present in the immediate vicinity are considered jurisdictional and subject to regulatory authority by the RWQCB and

CDFW. As such, all proposed restoration will be subject to review and approval by appropriate regulatory agencies. Additionally, a minimum 50-foot stream setback around each tributary will be restored to protect the functions and values of these headwater streams in the future. No proposed buildings or other new residential uses are proposed within these setback areas.'

Recommendations

To address impacts to the project site as a result of unpermitted grading, a Restoration, Mitigation and Monitoring Plan (RMMP) has been prepared to describe how impacts from unpermitted grading will be mitigated. Because tributaries on the site are not defined as ESHA given their ephemeral nature and due to the lack of definable riparian habitat, a 100-foot setback as prescribed in the LCP is not deemed essential. A minimum 50-foot setback was recommended by CDFW staff Daniel Harrington during the July 2019 interagency site walk and is sufficient for protecting the functions and values provided by these headwater streams as shown in Figure 1. Revegetation of setbacks is proposed to ensure an adequate vegetative buffer is present to protect these features in the future. Best management practices, including biodegradable fiber rolls shall be installed between proposed activities and ephemeral streams for the duration of the project, and for up to 2 years following revegetation efforts to protect downstream slopes from runoff until vegetation in the setback areas are established.

In addition to the RMMP, a Section 1602 Streambed Alteration Agreement is required for restoration of ephemeral streams and/or placement of culverts in the Project Area. Provided no new fill is proposed, no other regulatory permits are required.

Lastly, pre-construction surveys for STV and nesting birds is recommended prior to any new grading (recontouring) or construction on the site. Surveys shall be performed by a qualified biologist with experience identifying STV nests. If a nest is found, an appropriately sized buffer shall be placed around the nest until deemed inactive by the biologist.

Please do not hesitate to contact me with any questions regarding these results.

Sincerely,

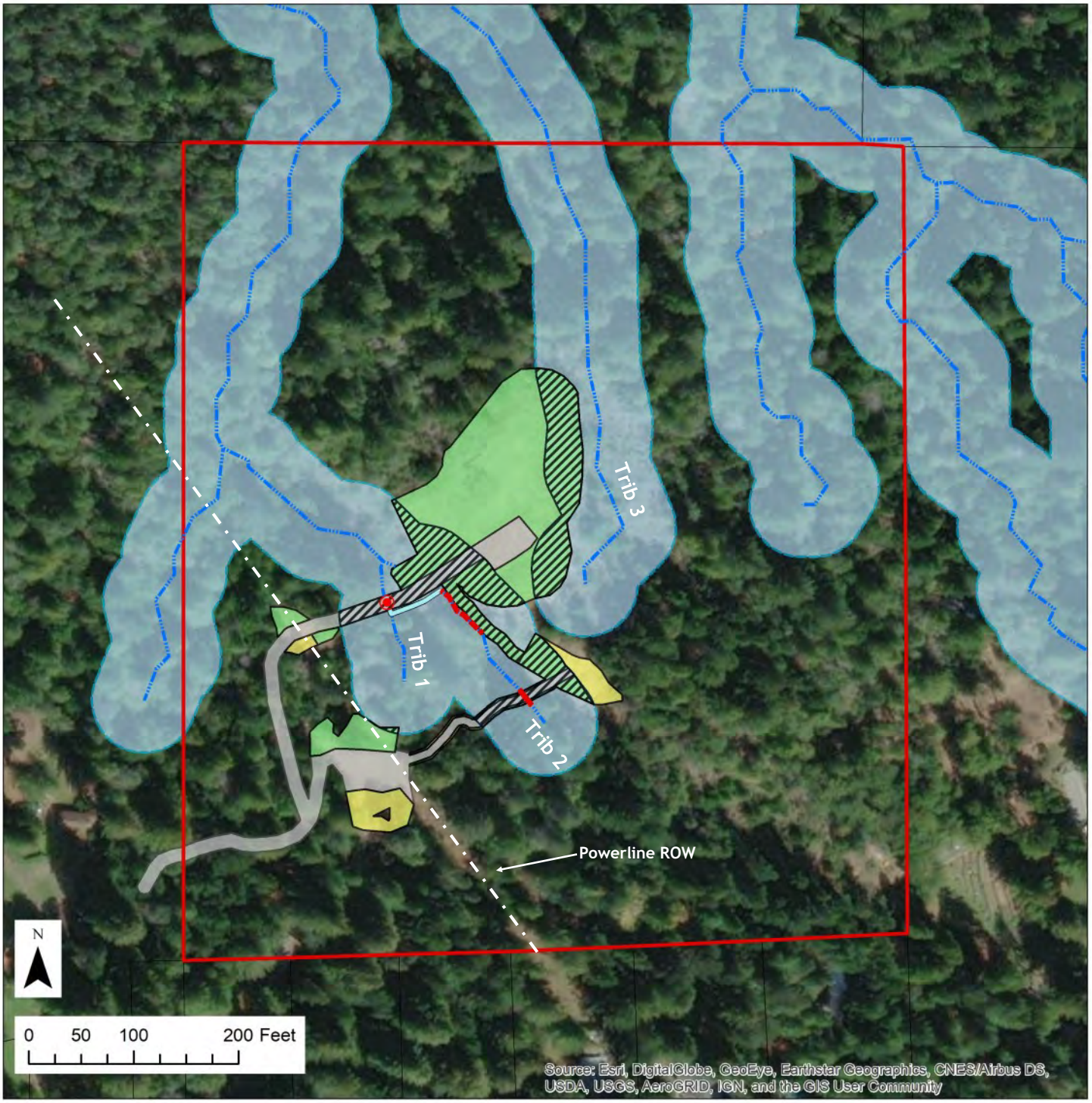


Dana Riggs,
Principal Biologist

Attachments: (A) Project Figures (Project Impact Map, Soils Map, CNDDB Plants and Animals)
(B) Gardner Botanical Survey Report
(C) Site Photographs
(D) USFWS IPaC Summary Reports
(E) Wildlife Species Potentials Table

Attachment A. Project Figures

Figure 1: Project Area and Impacts Map
44948 Fish Rock Road, Gualala, CA

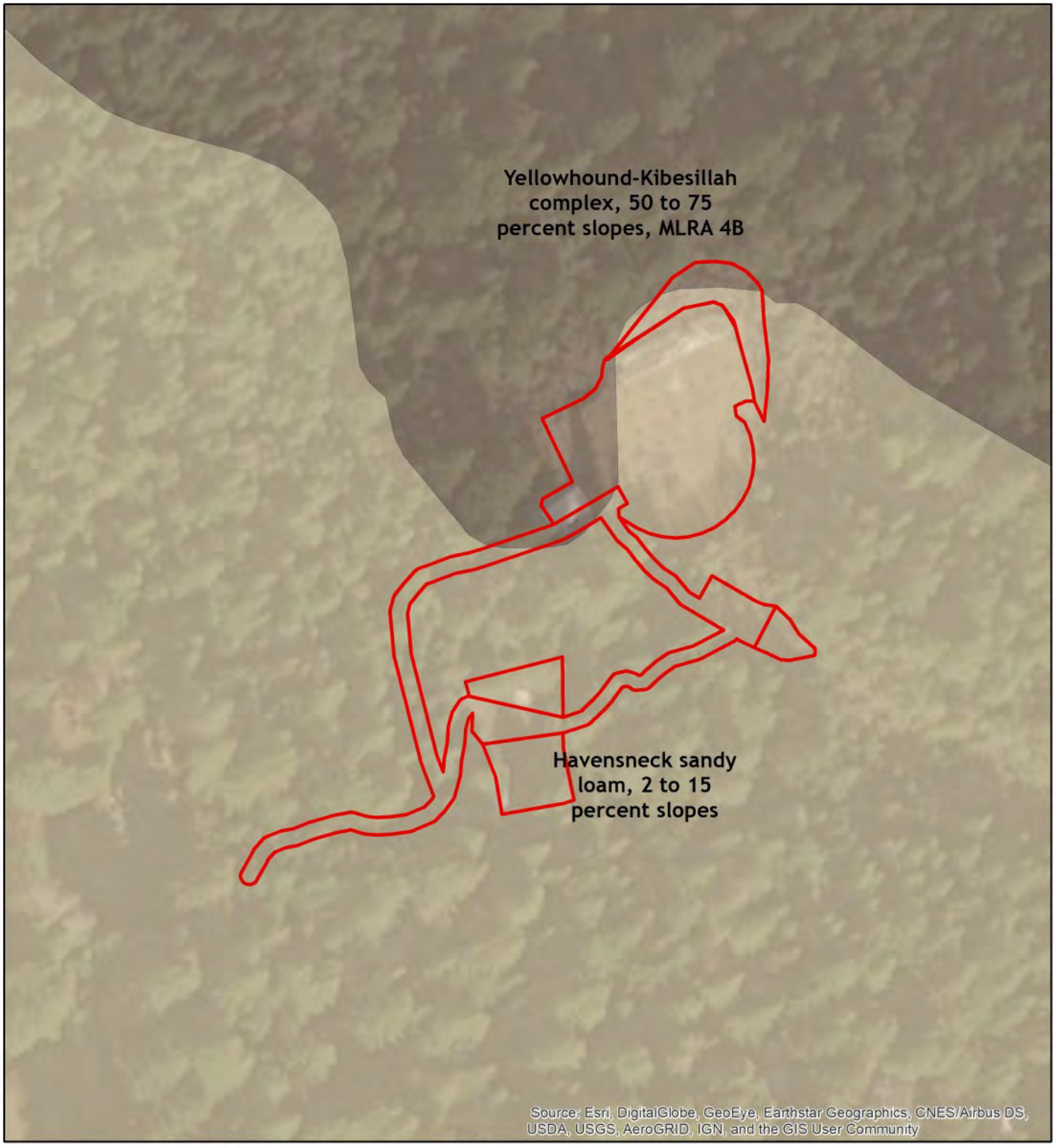


New Culvert
Impacted Stream (61 lf)
Diverted Channel (78 lf)
Steam Centerline
Project Study Area (Parcel Boundary)
Existing roads and clearings (0.34 ac; 940 lf)
Permanent impact area (0.10 ac)
Temporary impact area (0.72 ac)
50ft Setback from stream centerline
Area within 50ft setback

Date: 3-6-2022
Data: Sol Ecology Inc., NSAF (USGS/NASA)
Base: ESRI
GIS: AJG

SOL ECOLOGY
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Figure 2: Soils Map
44948 Fish Rock Road, Gualala, CA



Date: 6-11-2019
Data: Sol Ecology Inc., USDA/NRCS

Base: ESRI
GIS: AJG

SOL ECOLOGY
solecology.com

Figure 3: Special Status Plant Species within 5 Miles of the Project Site
44948 Fish Rock Road, Gualala, CA

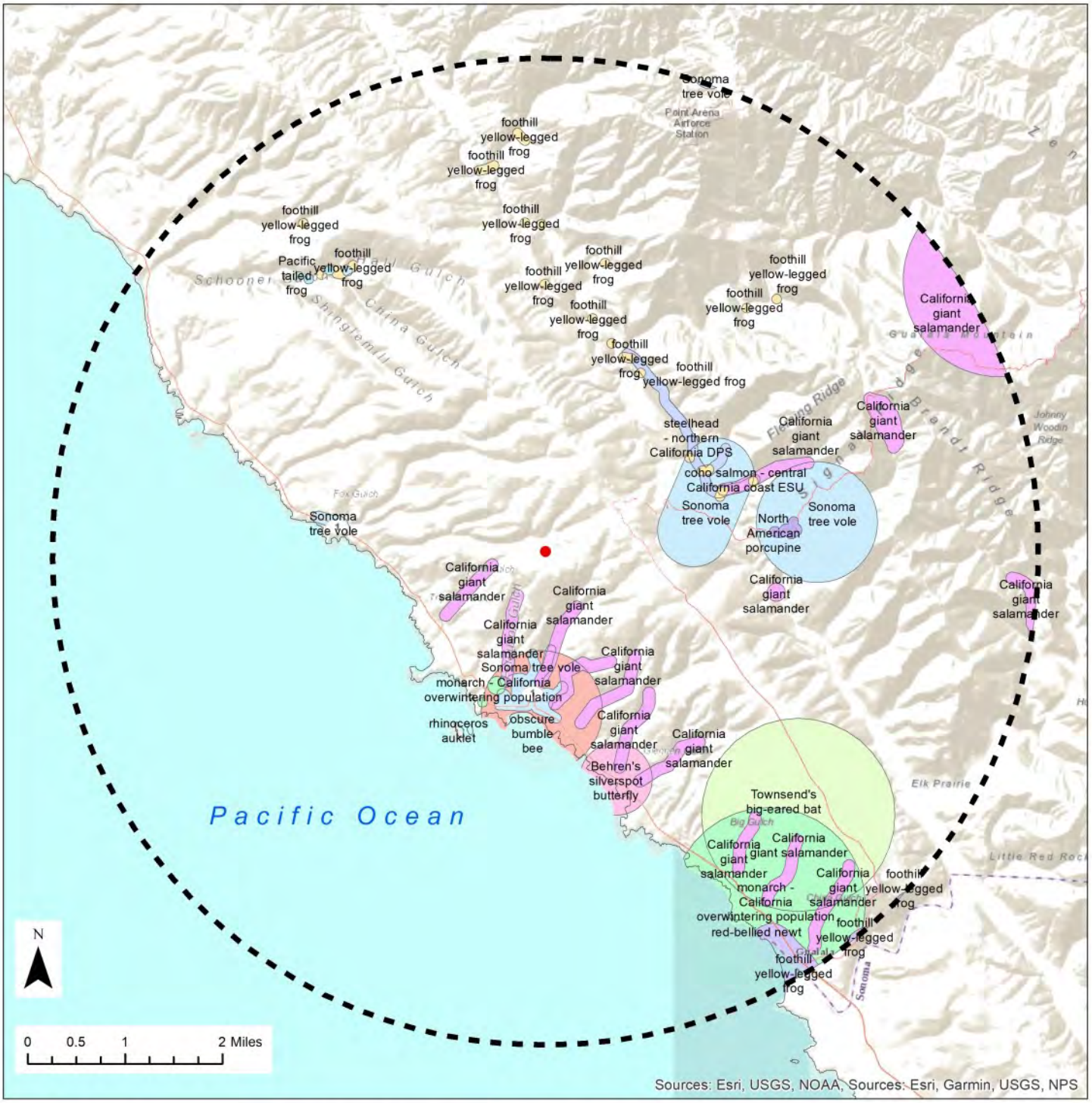


- Project Location
- 5-Mile Buffer
- American manna grass (1)
- Baker's goldfields (2)
- Blasdale's bent grass (4)
- California sedge (7)
- Humboldt County milk-vetch (3)
- Mendocino Coast paintbrush (4)
- Mendocino dodder (1)
- Nuttall's ribbon-leaved pondweed (1)
- Pacific gilia (2)
- Point Reyes checkerbloom (1)
- Point Reyes horkelia (1)
- Roderick's fritillary (3)
- Santa Cruz clover (2)
- bluff wallflower (1)
- coast lily (21)
- coastal bluff morning-glory (5)
- marsh pea (1)
- perennial goldfields (3)
- purple-stemmed checkerbloom (4)
- pygmy cypress (8)
- short-leaved evax (3)
- small groundcone (1)
- supple daisy (5)
- swamp harebell (23)
- thin-lobed horkelia (10)
- white-flowered rein orchid (3)

Date: 3-31-2022
Data: Sol Ecology Inc., CDFW
Base: ESRI
GIS: AJG

SOL ECOLOGY
solecology.com

Figure 4: Special Status Animal Species within 5 Miles of the Project Site
44948 Fish Rock Road, Gualala, CA



- Project Location
- 5-Mile Buffer
- Behren's silverspot butterfly (1)
- California giant salamander (13)
- North American porcupine (1)
- Pacific tailed frog (1)
- Sonoma tree vole (6)
- Townsend's big-eared bat (1)
- coho salmon - central California coast ESU (1)
- foothill yellow-legged frog (12)
- monarch - California overwintering population (3)
- obscure bumble bee (1)
- red-bellied newt (1)
- rhinoceros auklet (1)
- steelhead - northern California DPS (1)
- tufted puffin (1)

Date: 3-31-2022
Data: Sol Ecology Inc., CDFW

Base: ESRI
GIS: AJG

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Attachment B. Gardner Botanical Survey Report

Botanical survey for:
Patrick Barry
231 NE 8th St.
Boca Raton, Fl 33432
(561) 212-9255
patrickbarry1@yahoo.com

For parcel:
APN 143-040-02
44948 Fish Rock Rd
Gualala, Calif. 95445

By:
Alison Gardner
P. O. Box 838
Albion, CA 95410
(707) 937-5201
garaway58@gmail.com

Site visits on Aug. 17, Nov. 16, 2017, Feb. 3, May 10, June 22, July 19, Sept. 15, 2018.
Time spent in field: 10 ¼ hrs.

Description of parcel:

The parcel of 11 ¼ acres is mostly Douglas-fir & Tan-oak forest, with some Redwood forest. There is a creek on the neighboring property to the north. There are several seasonal drainages that cross the property. They are completely dry in the summer, and have no significant riparian vegetation, except for redwoods, which are not considered an indicator species. The redwoods are mostly found in these drainages, and in the gulch at the north end of the parcel. This gulch is quite steep, and will be outside of the proposed building envelope.

The areas where development would be possible are limited by the steep slope to the north, and the bisecting drainages. The soils are shallow in between the drainages, giving limited areas suitable for a septic leach field.

Many of the redwoods on the parcel (which followed the larger of these drainages) were cut by a neighbor, without the permission of the property owner. There are several existing roads on the parcel, the lower road more or less follows the contours of the parcel, and ends in a large flat graded area with an existing metal building/shed. An upper road forks off of this, going up the hill just past the first gully, and then also following the contours, and going more or less parallel to the lower road. There has also been some grading/terracing done in two spots along this upper road. At the end of the upper road, on the hillside where the owner intends to build a home and in an area which contains 3 large water tanks, where the owner hopes to drill a well.

Habitats Found on Parcel:

Pseudotsuga menziesii-Notholithocarpus densiflorus Alliance G4 S4 (Doug-fir & Tan-oak Forest) and Sequoia sempervirens Alliance G3 S3 (Redwood forest) are the only plant communities present on the parcel. In spite of the runoff gullies, there is no riparian vegetation on the parcel. There are no environmentally sensitive or protected plant communities on the parcel.

Description of proposed project:

The property owner wishes to build a 4-bedroom, single family residence, with well and septic system, a garage, caretaker's cabin, pool and pavillion. All development is planned to be upslope of the lower access road into the parcel. This area would be designated as the building envelope.

Methodology:

I made multiple visits to the parcel during the blooming seasons of the potential rare plants on the parcel. There were a few areas of the parcel that were too steep to traverse, which were outside of the proposed development area. I traversed as much of the property as was possible, noting every plant I saw creating a complete plant list for the parcel. I also noted the dominant vegetation. I took samples of plants I did not know by sight and keyed them, using the Jepson Manual, 2nd Edition. I was particularly diligent in looking in the sorts of places where the plants on the 9-quad list might be found. I did not list all the lichens, but only a few I was sure of. I am familiar with Usnea longissima, and did not find it on the parcel.

9-Quad Survey Results:

Scientific Name	Common Name	Family	Lifeform	CRPR	GRank	SRank
Astragalus agnicidus	Humboldt County milk-vetch	Fabaceae	perennial herb	1B.1	G2	S2
Calamagrostis bolanderi	Bolander's reed grass	Poaceae	perennial rhizomatous herb	4.2	G4	S4
Campanula californica	swamp harebell	Campanulaceae	perennial rhizomatous herb	1B.2	G3	S3
Coptis laciniata	Oregon goldthread	Ranunculaceae	perennial rhizomatous herb	4.2	G4?	S3?
Erigeron biolettii	streamside daisy	Asteraceae	perennial herb	3	G3?	S3?
Hosackia gracilis	harlequin lotus	Fabaceae	perennial rhizomatous herb	4.2	G3G4	S3
Kopsiopsis hookeri	small groundcone	Orobanchaceae	perennial rhizomatous herb (parasitic)	2B.3	G4?	S1S2
Lilium maritimum	coast lily	Liliaceae	perennial bulbiferous herb	1B.1	G2	S2
Lycopodium clavatum	running-pine	Lycopodiaceae	perennial rhizomatous herb	4.1	G5	S3
Sidalcea malachroides	maple-leaved checkerbloom	Malvaceae	perennial herb	4.2	G3	S3
Usnea longissima	Methuselah's beard lichen	Parmeliaceae	fruticose lichen (epiphytic)	4.2	G4	S4
Veratrum fimbriatum	fringed false-hellebore	Melanthiaceae	perennial herb	4.3	G3	S3

Plant List of Plants Found on Parcel:

Family	*Binomial*	Common Name	Native?	present?	Rare?
Fabaceae	*Acmispon parviflorus*	lotus	yes	x	
Poaceae	*Agrostis capillaris*	colonial bentgrass	no	x	
Poaceae	*Aira caryophyllea*	silver European hairgrass	no	x	
Poaceae	*Aira praecox*	European hairgrass	no	x	
Ericaceae	*Arbutus menziesii*	madrone	yes	x	
Ericaceae	*Arctostaphylos columbiana*	hairy manzanita	yes	x	
Ericaceae	*Arctostaphylos sp.*		yes	x	
Asteraceae	*Arnica discoidea*	arnica	yes	x	
Poaceae	*Avena sp.*	Wild Oats	no	x	
Asteraceae	*Baccharis pilularis ssp consanguinea*	coyote bush	yes	x	
Brassicaceae	*Brassica nigra*	black mustard	no	x	
Poaceae	*Briza maxima*	rattlesnake grass	no	x	
Poaceae	*Bromus hordeaceus*	soft chess	no	x	
Poaceae	*Bromus laevipes*	woodland brome	yes	x	
Poaceae	*Calamagrostis rubescens*	pine reed grass	yes	x	
Brassicaceae	*Cardamine oligosperma*	winter cress	yes	x	
Cyperaceae	*Carex gynodynama*	Wonder Woman sedge	yes	x	
Rhamnaceae	*Ceanothus foliosus*	wavyleaf ceanothus	yes	x	
Rhamnaceae	*Ceanothus gloriosus var. exultatus*	glory bush	yes	x	*4*
Rhamnaceae	*Ceanothus velutinus*	tobacco brush	yes	x	
Caryophyllaceae	*Cerastium glomeratum*	Sticky mouse-eared chickweed	no	x	
Agavaceae	*Chlorogalum pomeridianum var. pomeridianum*	soap root	yes	x	
Asteraceae	*Cirsium brevistylum*	western thistle	yes	x	
Asteraceae	*Cirsium vulgare*	bull thistle	no	x	
Polemoniaceae	*Colloma heterophylla*	variable-leaf collomia	yes	x	
Poaceae	*Cynosurus echinatus*	hedgehog dogtail	no	x	
Cyperaceae	*Cyperus eragrostis*	nutsedge	yes	x	
Fabaceae	*Cytisus scoparius*	Scotch broom	no	x	
Poaceae	*Dactylis glomerata*	orchard grass	no	x	
Poaceae	*Danthonia californica*	California oatgrass	yes	x	
Poaceae	*Deschampsia elongata*	slender hairgrass	yes	x	
Asteraceae	*Erigeron canadensis*	horseweed	yes	x	
Asteraceae	*Euchiton gymnocephalus*	creeping cudweed	no	x	
Asteraceae	*Eurybia radulina*	wild aster	yes	x	
Poaceae	*Festuca arundinacea*	tall fescue	no	x	
Poaceae	*Festuca bromoides*	brome fescue	no	x	
Poaceae	*Festuca myuros*		no	x	
Poaceae	*Festuca perennis*	perennial ryegrass	no	x	

Poaceae	*Festuca rubra*	red fescue	yes	x
Rhamnaceae	*Frangula purshiana ssp purshiana*	cascara sagrada	yes	x
Rubiaceae	*Galium sp.*	bedstraw		x
Asteraceae	*Gamochaeta ustulata*	cudweed	yes	x
Ericaceae	*Gaultheria shallon*	salal	yes	x
Fabaceae	*Genista monspessulana*	French broom	no	x
Orchidaceae	*Goodyera oblongata*	rattlesnake orchid	yes	x
Araliaceae	*Hedera helix*	English ivy	no	x
Rosaceae	*Heteromeles arbutifolia*	toyon	yes	x
Poaceae	*Holcus lanatus*	velvet grass	no	x
Poaceae	*Hordeum murinum*	foxtail	no	x
Fabaceae	*Hosackia rosea*	lotus	yes	x
Asteraceae	*Hypochoeris glabra*	dandelion	no	x
Asteraceae	*Hypochoeris radicata*	coast dandelion	no	x
Foliose Lichen	*Hypogymnia sp.*	lichen	yes	x
Juncaceae	*Juncus bufonius var. bufonius*	toad rush	yes	x
Juncaceae	*Juncus hesperius*	coast rush	yes	x
Juncaceae	*Juncus occidentalis*	western rush	yes	x
Juncaceae	*Juncus patens*	blue rush	yes	x
Asteraceae	*Leontodon saxatilis*	hawkbit	no	x
Brassicaceae	*Lepidium didymum*	lesser swine cress	no	x
Caprifoliaceae	*Lonicera hispidula*	twining honeysuckle	yes	x
Fabaceae	*Lotus angustissimus*	lotus	no	x
Fabaceae	*Lupinus spp.*	lupine	yes	x
Juncaceae	*Luzula comata*	wood rush	yes	x
Myrsinaceae	*Lysimachia latifolia*	star flower	yes	x
Fabaceae	*Melilotus albus*	whit sweetclover	no	x
Lamiaceae	*Mentha pulegium*	pennyroyal	no	x
Ericaceae	*Monotropa hypopitys*	Pinesap	yes	x
Fagaceae	*Notholithocarpus densiflorus var. densiflorus*	tan oak	yes	x
Oxalidaceae	*Oxalis oregana*	redwood sorrel	yes	x
Poaceae	*Panicum capillaris*	panic grass	no	x
Orobanchaceae	*Pedicularis densiflora*	Indian warriors	yes	x
Geraniaceae	*Pelargonium grossularioides*	geranium	no	x
Pinaceae	*Pinus lambertiana*	sugar pine	yes	x
Pinaceae	*Pinus muricata*	Bishop pine	yes	x
Polygalaceae	*Polygala californica*	California milkwort	yes	x
Poaceae	*Polypogon monspeliensis*	beard grass	no	x
Dryopteridaceae	*Polystichum munitum*	western sword fern	yes	x
Rosaceae	*Prunus cerasifera*	plum	no	x
Asteraceae	*Pseudognaphalium luteoalbum*	cudweed	yes	x

Pinaceae	*Pseudotsuga menziesii var. menziesii*	Douglas fir	yes	x
Dennstaedtiaceae	*Pterideum aquilinum var. pubescens*	bracken fern	yes	x
Fagaceae	*Quercus agrifolia*	coast live oak	yes	x
Rosaceae	*Rosa gymnocarpa*	wood rose	yes	x
Rosaceae	*Rubus armeniacus*	Himalayan blackberry	no	x
Rosaceae	*Rubus ursinus*	California blackberry	yes	x
Poaceae	*Rytidosperma penicillatum*	Australian oatgrass	no	x
Asteraceae	*Senecio minimus*	Australian fireweed	no	x
Cupressaceae	*Sequoia sempervirens*	coast redwood	yes	x
Asteraceae	*Soliva sessilis*		no	x
Asteraceae	*Sonchus oleraceus*	sow thistle	no	x
Caryophyllaceae	*Spergularia rubra*	sand-spurrey	no	x
Apiaceae	*Torilis arvensis*	tall sock-destroyer	no	x
Apiaceae	*Torilis nodosa*	short sock-destroyer	no	x
Anacardiaceae	*Toxicodendron diversiloba*	poison oak	yes	x
Melanthiaceae	*Toxicoscordion fremontii*	death camas		x
Fabaceae	*Trifolium dubium*	little hop clover	no	x
Fabaceae	*Trifolium repens*	white clover	no	x
Fabaceae	*Trifolium sp.*	clover		x
Fruticose Lichen	*Usnea rubicunda*	old man's beard	yes	x
Fruticose Lichen	*Usnea spp.*	old man's beard	yes	x
Berberidaceae	*Vancouveria planipetala*	Inside-out flower	yes	x
Plantaginaceae	*Veronica sp.*	speedwell		x
Violaceae	*Viola sempervirens*	redwood violet	yes	x
Hydrangaceae	*Whipplea modesta*	modesty	yes	x
Blechnaceae	*Woodwardia fimbriata*	giant chain fern	yes	x

Discussion:

On my first visit to the parcel, I found an old flowering stalk of a parasitic plant, growing near some salal, which I thought could be the remains of *Kopsiopsis hookeri*. I waited for it to bloom the following year. It did not. I had photographed the dead stalk when I had first found it, and I contacted , who wrote the key for the genus in the Jepson Manual, and sent her the photo. She said that it was definitely not *Kopsiopsis hookeri*. She thought it was most likely *Monotropa hypopitys***,** but was not 100% certain, due to the state of the specimen in the photo. She confirmed that parasitic plants often do not bloom every year.

There is one large *Ceanothus gloriosus* var. *exultatus* on the parcel, a list 4 (threatened) plant. It is beginning to get senescent, but still blooms and sets seed. It is near the southern property line and is not where it would be effected by the proposed development. There are a few seedlings of this plant, which have sprouted in the areas that have been effected by the grading that has been

done; several in the viscinity of the house site. This is a successionary plant, which needs bare mineral soil to sprout. The seedlings are only 3 to 6 inches in height. I would suggest that given that it was the grading that was done for the proposed development that gave the seeds the environmental conditions they needed to sprout, the fact that list 4 plants are not given the same protections as rare or endangered plants, and the age and size of the seedling plants, that it might be appropriate, and successful, to transplant the seedlings which might be disturbed by the development, during the fall or winter (after the rains really get going), to a suitable spot where they won't be annihilated, possibly one of the created below the grading. They could help to stabilize the slope. If possible they should be watered through the first summer after transplant.

Environmentally Sensitive Habitat Areas (E.S.H.A.'s):

There are no E.S.H.A.'s on the parcel.

Rare and Endangered species:

There are no rare or endangered species on the parcel. There is one threatened species on the parcel, *Ceanothus gloriosus* var. *exultatus*.

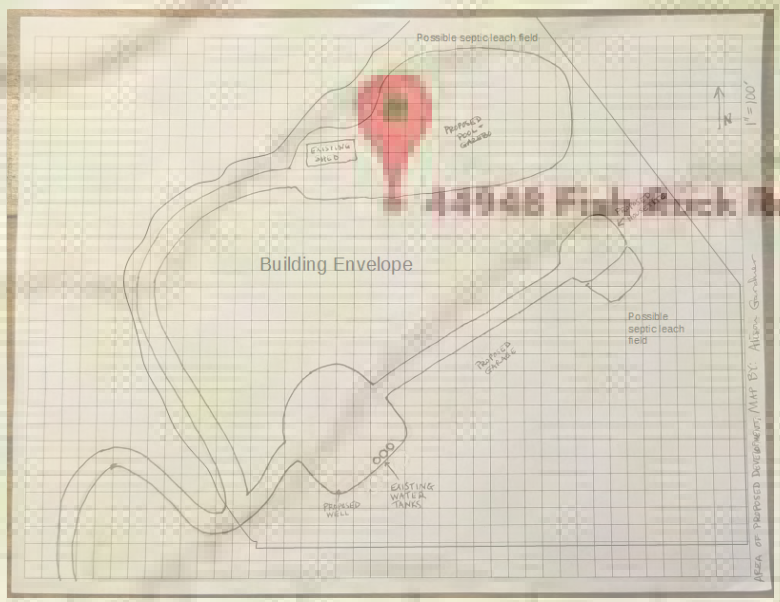
Conclusions:

This proposed project will not have any impact on any rare or endangered plants or habitats, as there are none on the parcel. It will impact a few (6 to 10) seedlings of a list 4 threatened plant, *Ceanothus gloriosus* var. *exaltatus*. I would suggest that the seedlings that are where they would be annihilated could be transplanted to a safe spot on the parcel, during the early part of the rainy season (when the soil is moist and more months of rain are expected) to give them a chance of survival. They should be watered through the first summer, every other week if the weather is hot, or less often if there is a lot of fog or mist. They could be monitored for survival. If they do not survive, seed could be collected from the older plant, and scattered, or seedlings could be grown in a local nursery and planted out.

I would also point out that there is one sugar pine (*Pinus lambertiana*) on the parcel. Sugar pines are not rare and are not protected, but they are not common on the Mendocino coast. The Pt. Arena/Gualala area is the only place in the county where they are found near the coast. The one tree is not located where I would expect it to be disturbed; it is to the west of the proposed housesite.

On the next page is the plot plan overlain on a parcel map on a topo map. It can be seen how the proposed development follows the contours of the land. I am also providing the plot plan provided by the property owner, plus one that I drew, corrected for declination.

Patrick Barry parcel overlain on topographic map

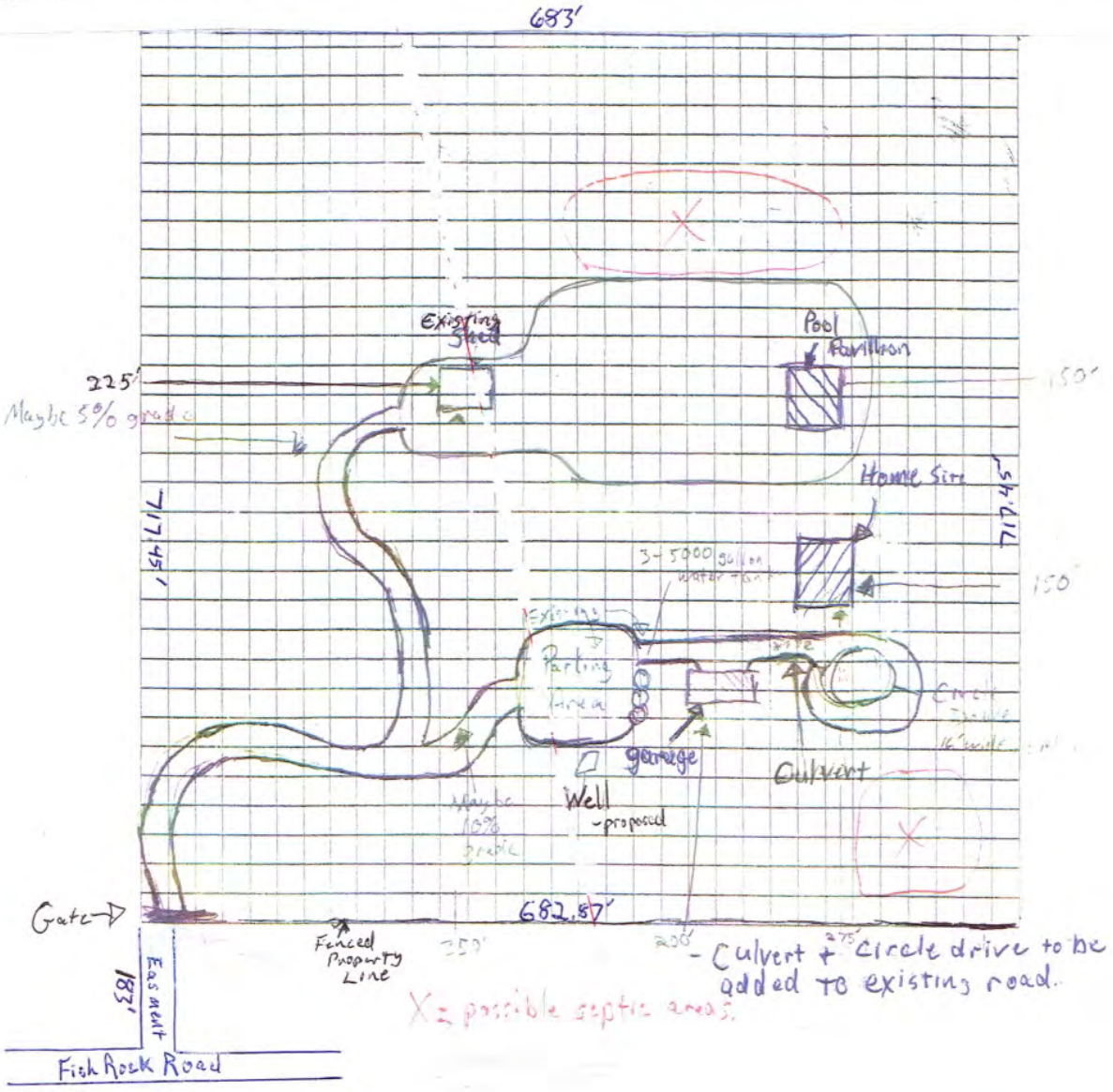


COUNTY OF MENDOCINO

PLOT PLAN
BUILDING INSPECTION DIVISION

JOB ADDRESS 44948 Fish Rock Rd. ASSESSOR'S PARCEL NO. 14304002 APPLICATION NO. _____

TOWN OR COMMUNITY Gualala OWNER'S (LEGAL) NAME Patrick Barry

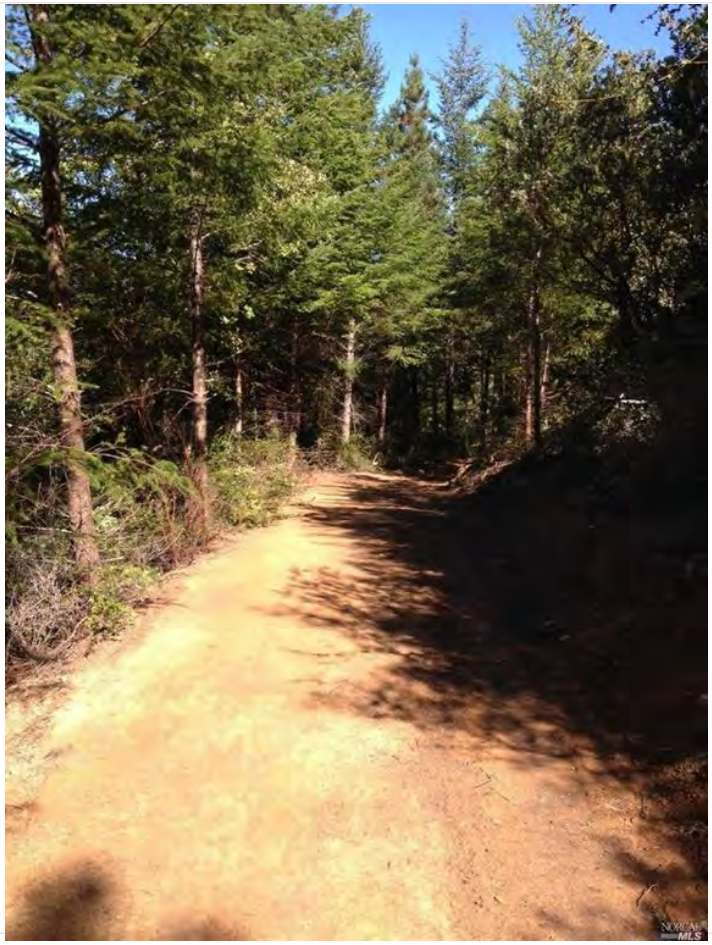


Patrick Barry
44948 Fish Rock Rd.
Gualala, CA 95445
APN: 14304002
11.25 acres

Scale - 4.5 squares ≅ 100'

N

Attachment C. Site Photographs



Existing access road - (photo taken 2015 from Zillow).



Existing access road intersection at main lower clearing (photo taken 2015 from Zillow); drainage reportedly would sheet flow across the road.



Existing westernmost clearing - (photo taken 2015 from Zillow)



Existing westernmost clearing - (photo taken 2015 from Trulia)



Existing upper clearing - (photo taken 2015 from Zillow)



Existing road- (photo take 2015 from Trulia)



Access road and associated forest habitat.

Note: date stamp is incorrect – all photographs taken on April 17, 2019



Large pad and building; logged trees from prior vegetation removal in the foreground. Pad was likely much smaller prior to grading. Shed in foreground has been removed.



Location of temporary debris piles (area mapped as temporal impact).



Additional debris below large pad. Foreground shows location of original channel where fill was placed (76 linear feet).



Location of Tributary 2 and upper road. Some sheet flow is evident by algae on roadway. However, most of the flow is sub-surface and was flowing at the time of the site assessment. Build up of road likely altered draingage pattern.



Location of Tributary 2 running parallel to roadway. Roadway construction impacted a portion of the eastern bank due to side casting of rock and other debris.



Drainage ditch along roadway (where Tributary 2 water has been diverted to).



Location of Tributary 1 culvert where water has been diverted to.

Attachment D. USFWS IPaC Reports

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

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

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

NOT FOR CONSULTATION

Location

Mendocino County, California



Local office

Arcata Fish And Wildlife Office

(707) 822-7201
(707) 822-8411

1655 Heindon Road
Arcata, CA 95521-4573

NOT FOR CONSULTATION

Endangered species

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

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

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

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

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

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

NOT FOR CONSULTATION

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

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

Mammals

NAME	STATUS
Pacific Marten, Coastal Distinct Population Segment Martes caurina Wherever found There is **proposed** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/9081	Threatened

Birds

NAME	STATUS
Marbled Murrelet Brachyramphus marmoratus There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/4467	Threatened
Northern Spotted Owl Strix occidentalis caurina Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/1123	Threatened
Western Snowy Plover Charadrius nivosus nivosus There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8035	Threatened
Yellow-billed Cuckoo Coccyzus americanus There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS

NOT FOR CONSULTATION

Green Sea Turtle Chelonia mydas — Threatened

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6199

Leatherback Sea Turtle Dermochelys coriacea — Endangered

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/1493

Amphibians

NAME	STATUS

California Red-legged Frog Rana draytonii — Threatened

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/2891

Fishes

NAME	STATUS

Tidewater Goby Eucyclogobius newberryi — Endangered

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/57

Insects

NAME	STATUS

Lotis Blue Butterfly Lycaeides argyrognomon lotis — Endangered

Wherever found

There is **proposed** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/5174

Monarch Butterfly Danaus plexippus — Candidate

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9743

NOT FOR CONSULTATION

Crustaceans

NAME	STATUS
California Freshwater Shrimp Syncaris pacifica Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7903	Endangered

Flowering Plants

NAME	STATUS
Burke's Goldfields Lasthenia burkei Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4338	Endangered
Contra Costa Goldfields Lasthenia conjugens Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/7058	Endangered
Showy Indian Clover Trifolium amoenum Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6459	Endangered

NOT FOR CONSULTATION

Critical habitats

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

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Attachment E. Wildlife Species Potentials Table

Attachment E. Table 1. Special Status Animals Potentials Table

Species	Status	Habitat	Potential for Occurrence
Mammals			
Sonoma tree vole *Arborimus pomo*	SSC	The Sonoma tree vole (STV) occurs in old-growth and other forest, mainly Douglas fir, redwood, and montane hardwood-conifer habitats and in the case of the Mendocino area, Bishop pine. The STV breeds year-round, but most often from February through September. Nests are constructed preferentially in tall trees and may be situated on a whorl of limbs against the trunk, or at the outer limits of branches between 6 to 150 feet above the ground; occasionally in shallow burrows at the base of the tree beneath the litter.	**Moderate potential.** No STV nests were observed at the Site or the surrounding habitats. Additionally, old growth forest (the preferred habitat of the STV) was not observed during the site visit likely due to historic logging and timber practices. This species is documented within one mile and may have been impacted as a result of grading and/or tree removal on the site.
Townsend's big-eared bat *Corynorhinus townsendii*	SSC, WBWG High	Associated with a wide variety of habitats from deserts to mid-elevation mixed coniferous-deciduous forest. Females form maternity colonies in buildings, caves and mines and males roost singly or in small groups. Foraging occurs in open forest habitats where they glean moths from vegetation.	**Low potential.** Individual male bats may roost on site and/or forage within the Project Area. However, no suitable maternity roost habitat is present and typical open forest habitat was not present prior to grading. Current site conditions are more conducive to this species being present.
American badger *Taxidea taxus*	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Requires friable soils and open, uncultivated ground. Preys on burrowing rodents.	**No potential.** No burrows capable of supporting badgers were observed within the Project Area or adjacent habitats during the site assessment. This species typically prefers open habitats such as grasslands, meadows, fields, prairies, deserts, farmlands and sometimes the edges of open woodlands.
Point Arena mountain beaver *Aplodontia rufa nigra*	FE	Mountain beavers are semi-fossorial, spending much of their time in underground burrow systems, but surface above ground to forage on vegetation. Sites with burrows are typically found on moist and steep north-facing slopes or gullies with well-drained and friable soil. Important factors in habitat use are a cool thermal regime, adequate soil drainage and softness, an abundant food supply, and a high percent cover of lush herbaceous and small diameter woody plants. Point Arena mountain beavers are found in a variety of habitat types including mesic coastal scrub, northern dune scrub, the edges of conifer forest, and riparian plant communities. Away from the coastal slope, Point Arena mountain beaver are found adjacent to redwood forests in riparian strips dominated by alder and sword fern.	**No potential.** No burrows capable of supporting mountain beavers were observed within the Project Area or adjacent lands during the survey. Additionally, mountain beavers prefer steep, north-facing slopes and riparian plant communities not present on the Project Area. Therefore, this species is not likely present nor impacted by prior grading activities.

Species	Status	Habitat	Potential for Occurrence
Fisher, west coast DPS *Pekania pennant*	FCT, SCT, SSC	Occurs in intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Use cavities, snags, logs and rocky areas for cover and denning. Need large areas of mature, dense forest.	**Low potential.** Large-tree stage or mature coniferous forest nor riparian habitat is present; however, dense canopy cover is available. Proximity to nearby development and lack of suitable denning habitat in the surrounding habitats suggest these species is not likely present nor impacted by prior grading activities.
North American porcupine *Erethizon dorsatum*	LC	Prefers coniferous and mixed forests; also inhabits riparian zones, grasslands, shrublands, and deserts in some parts of the range. Winter den may be in a rock outcrop, live hollow tree, hollow log, or outbuilding. May shelter in dense conifers in winter.	**Low potential.** Suitable habitat such as rock outcrops, old trees, hollow logs, or outbuildings were not observed in the Project Area or surrounding habitats. Therefore, this species is unlikely to be present and/or impacted by prior grading activities.
Birds			
tufted puffin *Fratercula cirrhata*	SSC	The Tufted Puffin is a seabird of the open waters, islands, and coastal cliffs of the north Pacific. Breeds on coastal slopes in ground burrows, sometimes under boulders and piles of rocks, occasionally under dense vegetation. Winters at sea.	**No potential.** Suitable habitat capable of supporting this species is not present within the Project Area or adjacent lands.
rhinoceros auklet *Cerorhinca monocerata*	BCC	Mostly pelagic; nests on islands in ground burrows.	**No potential.** Suitable habitat capable of supporting this species is not present within the Project Area or adjacent lands.
western snowy plover *Charadrius nivosus (alexandrines) nivosus*	FT, SSC, BCC	Federal listing applies only to the Pacific coastal population. Year-round resident and winter visitor. Occurs on sandy beaches, salt pond levees, and the shores of large alkali lakes. Nests on the ground, requiring sandy, gravelly or friable soils.	**No potential.** Suitable habitat capable of supporting this species is not present within the Project Area or adjacent lands.
marbled murrelet *Brachyramphus marmoratus*	FT, SE	Predominantly coastal marine. Nests in old-growth coniferous forests up to 30 miles inland along the Pacific coast, from Eureka to Oregon border, and in Santa Cruz/San Mateo Counties. Nests are highly cryptic, and typically located on platform-like branches of mature redwoods and Douglas firs. Forages on marine invertebrates and small fishes.	**No potential.** Old-growth forest is not present in the Project Area and there are no occurrences within 5 miles.

Species	Status	Habitat	Potential for Occurrence
northern spotted owl *Strix occidentalis caurina*	FT, SCT SSC	Year-round resident in dense, structurally complex forests, primarily those with old-growth conifers. It nests in cavities or on platforms in large trees, preferentially inhabiting old growth forests, though it can be found in mixed primary- and secondary-growth forests in the southern part of its range (southern Oregon and California). Preys on mammals.	**Low potential.** Old-growth forest is not present in the Project Area and there are no occurrences within 0.5 mile which would require surveys. The Project Area and surrounding habitats may provide foraging habitat but lacks preferred nesting habitat.
yellow-billed cuckoo *Coccyzus americanus*	FT, SE, BCC	Summer resident, breeding in dense riparian forests and jungles, typically with early successional vegetation present. Utilizes densely foliaged deciduous trees and shrubs. Eats mostly caterpillars. Current breeding distribution within California very restricted.	**No potential.** Suitable habitat capable of supporting this species is not present within the Project Area or adjacent lands.
Allen's hummingbird *Selasphorus sasin*	BCC	Summer resident along the California coast, breeding in a variety of woodland and forest habitats, including parks and gardens with abundant nectar sources. Nest in shrubs and trees with dense vegetation, typically along edges.	**Low potential.** Typical habitat is not present due to the lack of nectar sources and dense understory vegetation typical of this species.
Rufous hummingbird *Selasphorus rufus*	BCC	Summer resident, with breeding in California restricted to the northwest corner of the state. Rufous Hummingbirds typically breed in open or shrubby areas. The female builds the nest alone using soft plant down held together with spider web, and camouflages the outside with lichen, moss, and bark. Nests are typically 30 feet high in coniferous or deciduous trees, hidden in drooping branches.	**Low potential.** This species may nest in the Project Area based on availability of suitable habitat; however, the Project Area is at the southern extent of this species' range. Nectar sources are not abundant. There are no records of rufous hummingbird in the immediate area and it is unlikely this species was directly impacted.
olive-sided flycatcher *Contopus cooperi*	BCC	Summer resident. Typical breeding habitat is montane coniferous forests most often associated with forest openings, forest edges near natural openings. At lower elevations, also occurs in wooded canyons and mixed forests and woodlands. Often associated with forest edges. Arboreal nest sites located well off the ground. Breeding typically takes place at mid to high elevations (3000 to 6000 feet) but can occur closer lower in the timberline	**Low potential.** This species may nest in the Project Area based on availability of suitable habitat; however, the site is lower than of typical elevations for nesting and as such, is not likely to have been impacted by past grading activities.

Species	Status	Habitat	Potential for Occurrence
grasshopper sparrow *Ammodramus savannarum*	SSC	This species occurs in open grassland and prairie-like habitats with short- to moderate-height vegetation, and often scattered shrubs. Nests are placed on the ground. Grasshopper sparrows are secretive and generally detected by voice.	**No potential.** Suitable habitat capable of supporting this species is not present within the Project Area or adjacent lands.
Amphibians and Reptiles			
Pacific pond turtle *Emys marmorata*	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	**No potential.** Suitable aquatic habitat is not present in the Project Area or surrounding area.
California giant salamander *Dicamptodon ensatus*	SSC	Occurs in the north-central Coast Ranges. Moist coniferous and mixed forests are typical habitat; also uses woodland and chaparral. Adults are terrestrial and fossorial, breeding in cold, permanent or semi-permanent streams, often in headwater reaches. Larvae usually remain aquatic for over a year.	**Low potential.** Permanent streams are not present within or adjacent to the Project Area; this species may be present in Roseman Creek and possibly in habitat downstream of the Project Area. It is unlikely to be found on the Project Area and was not likely impacted during past grading activities.
southern torrent salamander *Rhyacotriton variegatus*	SSC	This species occurs in coastal forests of northwestern California south to Point Arena in Mendocino County. There it is found in coastal redwood, douglas fir, mixed conifer, montane riparian, and montane hardwood-conifer habitats, most typically in old growth forest. Cold, well-shaded, permanent streams and seepages, or within splash zone or on moss-covered rock within trickling water is preferred habitat.	**No potential.** Suitable aquatic habitat is not present in the Project Area or surrounding area. The Project Area is outside the known range of this species.
red-bellied newt *Taricha rivularis*	SSC	Lives in terrestrial habitats in redwood forests along the coast and will migrate several hundred meters in a season to breed in fast-moving streams with rocky bottoms. After breeding, adults leave streams but usually remain in the same drainages.	**Low potential.** Suitable breeding habitat may be present in Roseman Creek though not within any of the tributary drainages on the Project Area. This species can utilize habitats on the site, but typical terrestrial habitat is not present.
Pacific tailed frog *Ascaphus truei*		Occurs in montane hardwood-conifer, redwood, douglas fir and ponderosa pine habitats. Restricted to perennial montane streams. Tadpoles require water below 15 degrees C.	**No potential.** Permanent streams are not present within the Project Area. Mature and

Species	Status	Habitat	Potential for Occurrence
			old growth forests (preferred terrestrial habitat) is also not present.
California red-legged frog *Rana draytonii*	FT, SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Associated with quiet perennial to intermittent ponds, stream pools and wetlands. Prefers shorelines with extensive vegetation. Disperses through upland habitats after rains.	**No potential.** Permanent sources of deep water are not present on the Project Area or within the known dispersal range of this species. Riparian habitat (preferred terrestrial habitat) is also not present.
foothill yellow-legged frog *Rana boylii*	SCT	This species is found in woodland and forest streams and rivers and prefers flowing water with a rocky substrate (including at least some cobble-sized substrate), to which egg masses are attached. Needs at least 15 weeks to attain metamorphosis. Feeds on both aquatic and terrestrial invertebrates. This species does not aestivate and is rarely found far from a source of permanent water.	**No potential.** Permanent sources of deep water are not present on the Project Area or within the known dispersal range of this species. Riparian habitat (preferred terrestrial habitat) is also not present.
Fishes			
tidewater goby *Eucyclogobius newberryi*	FE, SSC	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	**No potential.** Suitable habitat capable of supporting this species is not present within the Project Area or immediate adjacent lands.
Coho salmon - central CA coast ESU *Oncorhynchus kisutch*	FE, SE, NMFS	Federal listing includes populations between Punta Gorda and San Lorenzo River. State listing includes populations south of San Francisco Bay only. Occurs inland and in coastal marine waters. Requires beds of loose, silt-free, coarse gravel for spawning. Also needs cover, cool water and sufficient dissolved oxygen.	**No potential.** Suitable habitat capable of supporting this species is not present within the Project Area or immediate adjacent lands.
steelhead - central CA coast DPS *Oncorhynchus mykiss irideus*	FT, NMFS	Occurs from the Russian River south to Soquel Creek and Pajaro River and in San Francisco and San Pablo Bay Basins. Adults migrate upstream to spawn in cool, clear, well-oxygenated streams. Juveniles remain in fresh water for one or more years before migrating downstream to the ocean.	**No potential.** Suitable habitat capable of supporting this species is not present within the Project Area or immediate adjacent lands.
pink salmon *Oncorhynchus gorbuscha*	SSC	Pink salmon are anadromous – they hatch in freshwater streams and rivers then migrate out to the saltwater environment of the ocean to feed and grow. They're found from the Arctic coast in Alaska and	**No potential.** Suitable habitat capable of supporting this species is not present within the Project Area or immediate adjacent lands.

Species	Status	Habitat	Potential for Occurrence
		territories in Canada to central California, although they do not reproduce in significant numbers south of Puget Sound.	
Gualala roach *Lavinia symmetricus parvipinnis*	SSC	The Gualala roach is a subspecies of California roach and is only found in the Gualala River. California roach are typically found in small, warm intermittent streams, and dense populations are frequently found in isolated pools (Moyle 1976, Moyle et al. 1995).	**No potential.** This species is only found within the Gualala River. As such, it is not present within the Project Area or adjacent lands.
Invertebrates			
California freshwater shrimp *Syncaris pacifica*	FE, SE, SSI	Endemic to Marin, Napa, and Sonoma counties. Found in low elevation, low gradient streams where riparian cover is moderate to heavy. Shallow pools away from mainstream flow. Winter: undercut banks with exposed roots. Summer: leafy branches touching water.	**No potential.** Suitable habitat capable of supporting this species is not present within the Project Area or immediate adjacent lands. The Project Area is outside the known range of this species.
monarch butterfly-California overwintering population *Danaus plexippus pop. 1*	LC	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby. Mendocino County hosts the northernmost roosting sites of the overwintering monarchs in the southern part of the county, but they are only present for several weeks during the winter.	**Low potential.** This species typically occurs at lower elevations closer to the coastline than the Project Area. Because this species is transient, it is not likely to have been impacted by prior grading activities.
Lotus blue butterfly *Lycaeides argyrognomon lotis*	FE, SSI	Inhabits wet meadows or poorly drained sphagnum-willow bogs, where soils are waterlogged and acidic in northern coastal California. Inhabits upper edges of peat bog between peat and surrounding low willows; hostplant is *Lotus formosissimus*.	**No potential.** Suitable habitat capable of supporting this species is not present within the Project Area or immediate adjacent lands.
Behren's silverspot butterfly *Speyeria zerene behrensii*	FE, SSI	Formerly common throughout much of western North America; populations from southern British Columbia to central California have nearly disappeared (Xerces 2015). Occurs in a wide variety of habitat types. Its preferred habitat is coastal terrace prairie. Nests are constructed annually in pre-existing cavities, usually on the ground (e.g. mammal burrows). Many plant species are visited and pollinated.	**No potential.** Suitable habitat (open grassy coastal prairies) capable of supporting this species is not present within the Project Area or adjacent lands.
western bumble bee *Bombus occidentalis*	SSI	Formerly common throughout much of western North America; populations from southern British Columbia to central California have nearly disappeared (Xerces 2015). Occurs in a wide variety of habitat types. Nests are constructed annually in pre-existing cavities, usually	**Low potential.** No suitable burrows or tree cavities were observed on-site or on adjacent lands.

Species	Status	Habitat	Potential for Occurrence
		on the ground (e.g. mammal burrows). Many plant species are visited and pollinated.	
obscure bumble bee *Bombus caliginosus*	SSI	Obscure bumble bee occurs along the Pacific Coast, from southern California to southern British Columbia, with scattered records from the east side of California's Central Valley. This species inhabits open grassy coastal prairies and Coast Range meadows. Nesting occurs in abandoned rodent nests, as well as above ground in in tufts of grass, old bird nests, rock piles, or cavities in dead trees.	**No potential.** Suitable habitat (open grassy coastal prairies and Coast Range meadows) capable of supporting this species is not present within the Project Area or adjacent lands.

FE/SE – Federal/State Endangered
FT/ST – Federal/State Threatened
SCE/T – State Candidate Endangered/Threatened
CFP – California Fully Protected
SSC – Species of Special Concern
BCC – Bird of Conservation Concern
SSI – Special Status Invertebrate
LC – Species of Local Concern
WBWG – Western Bat Working Group- Medium or High Priority Species
NL – Not Listed

RESTORATION, MITIGATION, AND MONITORING PLAN FOR 44948 FISH ROCK ROAD, GUALALA, CA

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April 11, 2022

SOL ECOLOGY

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1.0 PROJECT DESCRIPTION

1.1 Location and Purpose of the Project

The Fish Rock Road Project (Project)p is located at 44948 Fish Rock Road in Gualala, Mendocino County, California. The purpose of the project is to construct two single one-bedroom cottages, with associated septic tank and a well, along with roadway improvements to ensure access for fire trucks. The project site is north of Fish Rock Road and about 1.4 miles east of State Route 1 (SR 1). The Assessor's Parcel Number (APN) is 143-040-002. The project site is within the U.S. Geological Survey (USGS) 7.5-minute Gualala quadrangle. The habitat restoration and mitigation described in this report will occur on-site and include in-kind restoration and mitigation for the loss of approximately 0.8 acre of native vegetation removed during unpermitted grading and restoration for impacts associated with minor grading to 61 linear feet of ephemeral stream by the previous owner in 2016/17.

1.2 Existing Site Conditions

The Project is located on a forested slope above the Pacific Ocean. Evidence of past logging was present. Elevations within the project site range from approximately 305 to 345 meters. The project area encompasses two soil map units identified by the U.S. Department of Agriculture (USDA 2019): Havensneck sandy loam and Yellowhound-Kibesillah complex. Neither soil is hydric. The dominant vegetation community within the project site is Douglas-fir (*Pseudotsuga menziesii* var. *menziesii*) and tan oak (*Notholithocarpus densiflorus*) forest. There is a small portion of redwood (*Sequoia sempervirens*) forest within the Douglas-fir and tan oak forest onsite. Glory bush (*Ceanothus gloriosus* var. *exulatus*), California Rare Plant Rank (CRPR) 4.3, occurs near the southern boundary of the parcel. No special status wildlife species have a moderate or high potential to be present within the project site. The project site does have the potential to support nesting birds.

Developed areas within the project site consist of dirt and gravel roads and graded and leveled areas referred to as pads. At the time of purchase in 2015, all roads and a portion of all three pads shown had been previously developed/graded. Between 2016 and 2017, the Applicant performed unpermitted grading to expand and level out several existing pads on the property and improve road conditions in some areas (see Attachment A, Figure 1).

Three headwater tributaries as shown in Figure 1 occur within and adjacent to the project site. These ephemeral tributaries drain to Roseman Creek, an anadromous fish stream that flows to the Pacific Ocean (a traditional navigable water). The two tributaries do not maintain water during the summer months and do not exhibit any definable riparian vegetation; the absence of riparian vegetation was confirmed by Daniel Harrington of CDFW during an interagency site walk on July 23, 2019. It appears that Tributary 1 may have been culverted during the unpermitted

grading; reportedly water ran directly across the road at the time the property was purchased in 2015 by the previous owner.

1.3 Summary of Impacts

A total of approximately 0.8 acre of coniferous forest habitat was permanently impacted as a result of unpermitted grading by the Applicant to expand and level out several existing pads on the property; work was performed between 2016 and 2017 approximately (see Attachment A, Figure 1). Of this, 0.7 acre was temporarily impacted by road improvements, work within setbacks, and debris disposal. The number of trees impacted was estimated at 65 trees per acre which equals a total of 48 trees over the 0.7 acre of impact. Canopy cover was estimated within a one-acre plot sample taken in random plots throughout the parcel. Downed trees and shrubs were cast over the side of the embankment, primarily along the north side and in a small area just below the top of bank of Tributaries 2 and 3; much of this debris remains on the side of the bank. This acreage is included in the temporary impacts' calculation.

Approximately 43 linear feet of Tributary 2 appears to have been impacted during roadway construction which resulted in a flattening of the bank on the northeast side. Further downstream, it appears based on photographs from 2015 that water from this feature flowed across the lower road similar to Tributary 1. Flow was likely interrupted at the time the roadway was created at an unknown date prior to the unpermitted grading[1]. Sometime in 2016/17 it appears that the water was captured and transported to the Tributary 1 culvert via a roadside ditch; a total of 78 linear feet of stream was apparently diverted from Tributary 2 to Tributary 1 (as shown in Appendix A, Figure 1).

Further upstream of the Tributary 2, a new road crossing resulted in further impacts to this ephemeral stream. Based on photographic evidence it appears the road was present at the time of purchase. A buried culvert could not be located after a detailed search, though water was observed trickling out from under the road and may be flowing below the surface. Recent sediment observed on either side of the road suggests recent road improvements may have either buried an existing culvert at this location or altered the pattern of flow. A total of 18 linear eet of the channel may have been impacted at this location; however, if water previously did

[1] Note that in the prior assessment and site walk performed in 2019 with CCC and CDFW staff, it was previously assumed that the unpermitted grading work resulted in the filling in of this stream to allow placement of a large shed, since removed from the property. Given recently discovered photographs taken prior to the disturbance, we now understand that the lower roadway was present at the time of the unpermitted grading and no fill likely occurred at this location. As such, no stream restoration at this location is proposed.

sheet flow across the road, then the length of impact more likely is limited to a few feet on either side of the road.

2.0 RESTORATION PLAN

This restoration plan addresses efforts to return impacted habitat areas described in Section 1.3 to pre-disturbance conditions and to compensate for temporal losses associated with these impacts.

2.1 Restoration Goals and Basis for Design

Restoration and mitigation goals and objectives described in this report are based on the need to restore the function and habitat value to areas that remain affected as a result of unpermitted grading activities. Where new residential development is proposed in impacted forest habitat, on-site in-kind compensatory mitigation is provided. Temporal impacts are calculated according to the Regional Water Quality Control Board recommendations which include a multiplier of 0.1 for every year since the impact occurred. Implementation of this restoration plan will result in improved habitat functions and values greater than those existing on-site currently. Table 1 includes impact information, corrective action, and proposed mitigation. Note that recontouring within stream setback areas is not recommended due to the potential for further impacts resulting from earth work and potential introduction and/or spread of non-native and invasive plant species which have taken hold since the original earthwork was performed. Gentle recontouring is recommended in some areas prior to planting.

Table 1. Restoration and Mitigation Requirements

Impact ID	Size of Impact	Corrective Action	Target Restoration Date	Mitigation Ratio	Total Mitigation Required
Tributary 2	43 LF	Recontour and revegetate channel and setback; enhance setback areas around all streams.	Summer/Fall 2022	1:1	43 LF
Coniferous Forest Habitat	0.8 AC = 48 trees	Replant areas within setbacks and reclaimed roads (0.7 AC)	Summer/Fall 2022	5:1	240 trees/shrubs

The goals and target areas for restoration are:

1. Restore hydrologic connectivity within the existing on-site headwaters stream.

2. Ensure long-term protection of ephemeral stream setbacks and tributaries from erosion and sedimentation.

3. Restore and enhance native species cover and diversity on the site and reduce/eliminate invasive weeds on the site.

2.3 Restoration and Mitigation Design Objectives

Tributary 2

The existing shed located immediately adjacent to Tributary 2 was removed in 2020. Realignment of the Tributary 2 channel across the road is not warranted at this time given that it appears the feature formerly sheet flowed across the roadway. Furthermore, the Tributary 2 channel bank directly below the project site exhibited evidence of erosion likely due to the steepness of the slope and potentially due to runoff from the existing roadway. Rather than realigning the channel and installing a new culvert at this location which could further destabilize the slope, we propose to vegetate a buffer between the existing roadway and slope to protect the slope from further erosional processes. BMPs including biodegradable fiber rolls will be installed along the roadway until the area

Upstream of the lower road, impacts to 43 linear feet along the northeastern bank of Tributary 2 will be restored by pulling back any side cast dirt or debris from the channel. The bank would then be gently recontoured. A six-inch layer of locally sourced topsoil would be spread over the disturbed bank then the bank would be revegetated with native plant species known to occur within the region. Care will be taken to avoid existing vegetation resprouting along the adjacent roadway. Following recontouring, the bank will be replanted with native shrubs and tree as described in Section 3.2. A conceptual planting plan will be provided along with Notification to CDFW prior to any work on Tributary 2.

On the upper road, side cast dirt and non-woody debris will be removed from the Tributary 2 channel and an appropriately sized culvert (designed by a civil engineer) will be placed in the existing roadway. Given that the roadway was present prior to the unpermitted grading based on photographs obtained from 2015, water likely flowed across the roadway during storm events and only minor temporary fill occurred during roadway improvements due to side-casting of materials. A CDFW Section 1602 agreement will be obtained prior to installation of the culvert. Because no riparian nor wetland vegetation is present in the upstream reference channel, no

planting of herbaceous species in the channel is proposed; temporarily disturbed areas will be stabilized with mulch and replanted with locally sourced native seed or shrubs.

Coniferous Forest Habitat

A total of 240 trees (as described in the Table 2 planting plan below) will be planted within the 0.7-acre restoration area which includes reclaimed roads and previously graded pads, and all areas within the CDFW prescribed 50-foot setback. Reclaimed roads and pads will be recontoured using existing material on-site. Soil amendments and/or locally sourced topsoils may be added as needed. A layer of mulch will be added to protected re-planted areas. Debris cast over the sides will be removed, and these areas will also be replanted. All trees will be spaced 9 to 10 feet apart on center and a total of 200 shrubs will be planted in between to provide understory and protection from non-native colonizers. All specimens planted on the site will be locally sourced. Re-vegetated areas will be irrigated for the first year, and subsequent years if necessary. The site will be monitored for a minimum of 2 years following each year of irrigation, up to 5 years or more if needed.

2.4 Responsible Parties

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3.0 IMPLEMENTATION

3.1 Site Preparation

Prior to planting, the contractor shall verify that grades are suitable for planting and the restoration/mitigation area will be cleared of invasive species and other weeds that may threaten native plant establishment. Soil for all planting areas, except in or immediately adjacent to aquatic habitats, shall receive an application of pre-emergent herbicide as specified by a licensed pest control advisor to insure non-weedy growth. Each tree or shrub shall receive a three-foot diameter organic mulch cover one inch deep placed no closer than 10 inches to trunk (greater than one inch of mulch may dry out the plant too quickly). Weed and erosion control materials shall be installed as needed to protect planting areas. Following plant installation, browse guards will be erected around each tree to prevent deer browsing. A drip irrigation system for shrubs and trees shall be installed; details on these features will be developed as part of landscaping specifications.

The optimal time to plant native species is during the late fall after rains have begun and when more rain is predicted in the coming weeks and months. This allows the plants to establish sufficient root systems and reduces the need for supplemental irrigation.

3.2 Planting Plan

Species included in the planting plan are listed in Table 2. Plants and plant materials will be obtained from California sources, locally sourced where possible. Depending on nursery stock availability, substitutes may be necessary for the plants listed above. Where possible, plant substitutions should have the same life form, consist of the same quantity, have similar habitat/water requirements, and should be native to the area. All plant substitutes shall be approved by the biologist prior to purchase to ensure substitutions are appropriate. Non-native plants shall not be planted in the Project Area. Invasive plants or any aggressive non-native species that can easily spread into the restoration area shall not be installed anywhere on the site as it would pose a risk to the native plantings.

Table 2. Planting Plan for Mitigation Areas

Common Name	Life Form	Size	Qty
Bishop pine *Pinus muricata*	tree	Tree pot 4	50
Redwood *Sequoia sempervirens*	tree	Tree pot 4	72
Douglas-fir *Pseudotsuga menziesii* var. *menziesii*	tree	Tree pot 4	72
sugar pine *Pinus lambertiana*	tree	Tree pot 4	50
		Total Trees	**244**
tobacco brush *Ceanothus velutinus*	shrub	1 gallon	40
wavy leaved ceanothus *Ceanothus foliosus*	shrub	1 gallon	40
Columbia manzanita *Arctostaphylos columbiana*	shrub	1 gallon	40
coyote brush *Baccharis pilularis* subsp. *consanguinea*	shrub	1 gallon	20
toyon *Heteromeles arbutifolia*	shrub	1 gallon	60
		Total Shrubs	**200**

3.3 Irrigation

Irrigation is recommended immediately after planting, during any dry spells during the first few months, and approximately weekly during the first dry season; following this irrigation may be implemented as necessary to ensure survival of trees and shrubs. Plants should be watered once every other week up to every 3rd week subject to rainfall conditions in subsequent years following planting. Native trees and shrubs will benefit from occasional (approximately bi-weekly) and deep dry season watering in the second year, and do not need to be continually irrigated once they appear to be established. Excessive watering of these drought-resistant species may encourage root rot, excessive above ground growth without deep roots, or competition from weeds near the irrigation source. Water for irrigation will be provided via a water tank to be installed near the stockpile and gravity fed via a drip irrigation system. Irrigation design shall be provided by a qualified licensed landscape architect.

3.4 Implementation Schedule

Implementation will be performed according to the schedule below in Table 3, which includes preparation of final plan (and profile view if desired) for the revegetation areas, local and state agency permitting and approvals, and implementation within the appropriate season for grading and planting.

Table 3. Restoration Design, Permitting, and Implementation Schedule

% Complete	Action	Due By	Notes
100%	Submit Updated Biological Assessment	1-Apr-22	Report has been revised to reflect less impacts based on new photographs acquired from 2015 at time of purchase.
100%	Submit Restoration, Mitigation and Monitoring Plan	1-Apr-22	Report includes interim & final success criteria & performance standards for achieving goals.
50%	Submit Site Plan, Drainage Plan, and Restoration Schematics, plus 1602 Draft Agreement	1-Jun-22	Per County standards, with plan & profile view of restoration areas.
0%	Permitting/County Approvals	1-Jan-23	Subject to County and CDFW timeframe for review and approval.
0%	Implement/Construct Re-Vegetation and Channel Restoration	1-Jan-23	Utilize appropriate planting windows (Fall through Spring of the following year); implement irrigation to sustain new plantings.
0%	Submit Year 1 RMMP Annual Report	1-Jan-24	Report will evaluate the progress and success of restoration and mitigation.
0%	Submit Year 3 RMMP Annual Report	31-Jan-24	Report will evaluate the progress and success of restoration and mitigation.

3.5 Maintenance

Maintenance activities on the mitigation site will include: 1) Quarterly inspections of irrigation systems, plant protection devices, if used, followed by repair, replacement, or removal of malfunctioning items; 2) bi-annual inspections for colonization of the restoration areas by non-native plants and action to discourage them; and 3) annual inspections of the restored creek channel and banks to ensure bank stability and protection from erosion. Maintenance activities performed during each monitoring year will be described in the annual monitoring report.

4.0 MONITORING

Monitoring will be performed for a minimum 3 years and up to 5 years following the completion of restoration activities. A consulting biologist will supervise annual monitoring of the habitat restoration. The purpose of the monitoring will be to verify that the specifications and success criteria summarized below have been completed. In addition, the restoration area will be examined for signs of damage from foot traffic or any other uses besides the necessary management and monitoring outlined in this Plan. Photographs will be taken at permanent photopoints to document target areas during each monitoring year.

4.1 Performance Criteria

Tributary 2

Performance standards for the Tributary 2 are designed to detect potential aggradation or degradation of the restored channel reach that may affect downstream water quality.

Table 4. Performance Criteria for Tributary 2

Type	Final Performance Standard	Year 1	Year 2	Year 3	Year 4	Year 5
Tributary 2	Restored channel banks will be stabilized by native vegetation and not show signs of significant erosion.					

Re-Vegetation Performance Standards

Performance Standards based in part on the USACE South Pacific Division Uniform Performance Standards will be used to assess re-vegetation area success. Mitigation areas will be monitored along permanent transects for measurable metrics that will demonstrate success of the mitigation activities.

Performance standards for re-vegetation areas include the following and are further described in Table 5:

- Plant survivorship by Year 5 will be at least 75%
- Cover of native species will be at least 50% relative cover
- Absolute cover of non-native, invasive species will be <- 10%

Table 5. Survivorship and Cover Criteria

Type	Final Performance Standard	Year 1	Year 2	Year 3	Year 4	Year 5
Vegetation – Container Plant Survivorship	Survivorship of tree, shrub strata container plants shall be ≥ 60% until minimum of 2 years post-irrigation success	Survivorship ≥ 75% by Year 5				
Vegetation – Relative Cover of Natives	Re-established stream setback areas will be dominated by native species.	Relative cover ≥ 50%				
Vegetation – Absolute Percent Cover of Exotics	Absolute cover of non-native, invasive species[1] will be ≤ 10%	Absolute cover ≤ 10%				

If performance criteria have been met by Year 3 monitoring (including a minimum of 2 years of monitoring following discontinuation of supplemental irrigation), annual monitoring may be discontinued. If not, remedial actions and additional years of monitoring may need to be implemented.

4.2 Monitoring Methods

Tributary 2

Tributary 2 will be monitored annually to evaluate potential erosion and/or sediment aggradation. Monitoring will be conducted using photo documentation and qualitative analysis. Adaptive management will be performed on as needed basis as allowed for under County/State permit conditions. Remedial measures if needed will be provided in the annual monitoring report.

Vegetation Monitoring

Vegetation monitoring will be conducted utilizing permanent belt plot transects. This sampling method is based on a 50-meter by 2.5-meter belt plot (assessment occurs every 3 meters, and all species within 2.5 meters of the transect line are identified). Transects will be perpendicular to the creek channel flow beginning at channel centerline or similar linear reference feature (e.g., access roads), and extending to the outer edge of planting area. The number and location of transects will be determined upon survey of as-built conditions and submitted with the as-built report for final approvals by the County. Following approval, transects will be permanently

marked in the field and GPS points recorded so that the same transects will be sampled in subsequent years.

Vegetation will be monitored for plant survivorship and cover of native and non-native species within each stratum. These results will be used to determine species richness, cover of natives, and cover of invasives for each site based on Performance Standards described above in Tables Table 4 and Table 5. Plant survivorship will be documented by counting the number of living container stock or sapling plantings for each woody species within each planting area. Plant survivorship estimates will only occur in riparian planting areas. Health and condition of container stock and saplings will also be noted. Each species observed within 2.5 meters of the transect will be qualitatively assessed for general plant health along each of the transect locations. A qualitative health status description would be assigned to each species that includes such indicators as yellowing, leaf drop, limb sacrifice, live/dead, declining, etc. Other relevant general observations of the transect locations would be noted to describe the overall status of the vegetation community (e.g., phenology, etc.). Applicable performance standards, including relative and absolute cover and species richness measurements, will be calculated from the transect data.

Photo Documentation

Visual records will be used to document changes in the mitigation areas during the monitoring period. Photo-point monitoring will be used to document the project including pre-construction, post-construction, initial planting, and annual monitoring events. Photo-points will be established prior to implementation of mitigation activities and used throughout the monitoring period to create consistent photographic documentation of the changes within the mitigation areas. Photo-point locations will be staked in the field using a permanent marker/stake. A map will be provided in the annual reports that will show the location and direction of each photo-point. The proposed photo-point locations will be shown in the as-built report submittal.

4.3 Reporting

The Applicant will submit the as-built report within 8 weeks of completion of restoration activities. Annual monitoring reports will evaluate the progress of restoration actions towards performance standards and success of restoration and mitigation. Habitat monitoring and reports will be prepared by qualified biologists with experience in habitat monitoring. Annual reports shall compare data to previous monitoring years and describe progress towards meeting final performance criteria. The final year monitoring report should also evaluate whether the restoration area has become sufficiently self-sustaining or whether additional remedial measures are needed, including extension of monitoring and reporting period until success criteria are met. Annual reports will be prepared and submitted to the County by January 31 of each year following implementation of the RMMP.

5.0 RESTRICTIONS

The following restrictions on future development activities on the site are intended to prevent accidental discharge of materials into any Waters of the State and/or incidental future impacts to the function and values of the onsite headwaters.

5.1 Construction and Hazardous Material Storage

No unauthorized construction-related materials or wastes shall be allowed to enter into or be placed where they may be discharged into Waters of the State. Stormwater controls and BMPs will be employed to ensure all materials are stored in a manner to prevent discharge into Waters of the State. BMPs will be incorporated during all future grading near waterways to ensure accidental discharge of any materials does not occur. No refueling or staging of equipment, materials, including hazardous materials such as gasoline) will be performed within 100 feet of the top of bank of any waterway. The discharge of sediment, waste products, hazardous materials, or other materials that will degrade, or threaten to degrade water quality, or adversely affect, or threaten to adversely affect existing or potential beneficial uses of waters of the State is prohibited.

5.2 Grading or Alteration of Hydrology

All proposed ground-disturbing work within 100 feet of any top of bank, waterway, or wetland will be performed under the guidance and direct supervision of a qualified professional to ensure alteration of hydrology and/or direct impacts to Waters of the State are completely avoided.

5.3 Incidental Take of Special Status Species

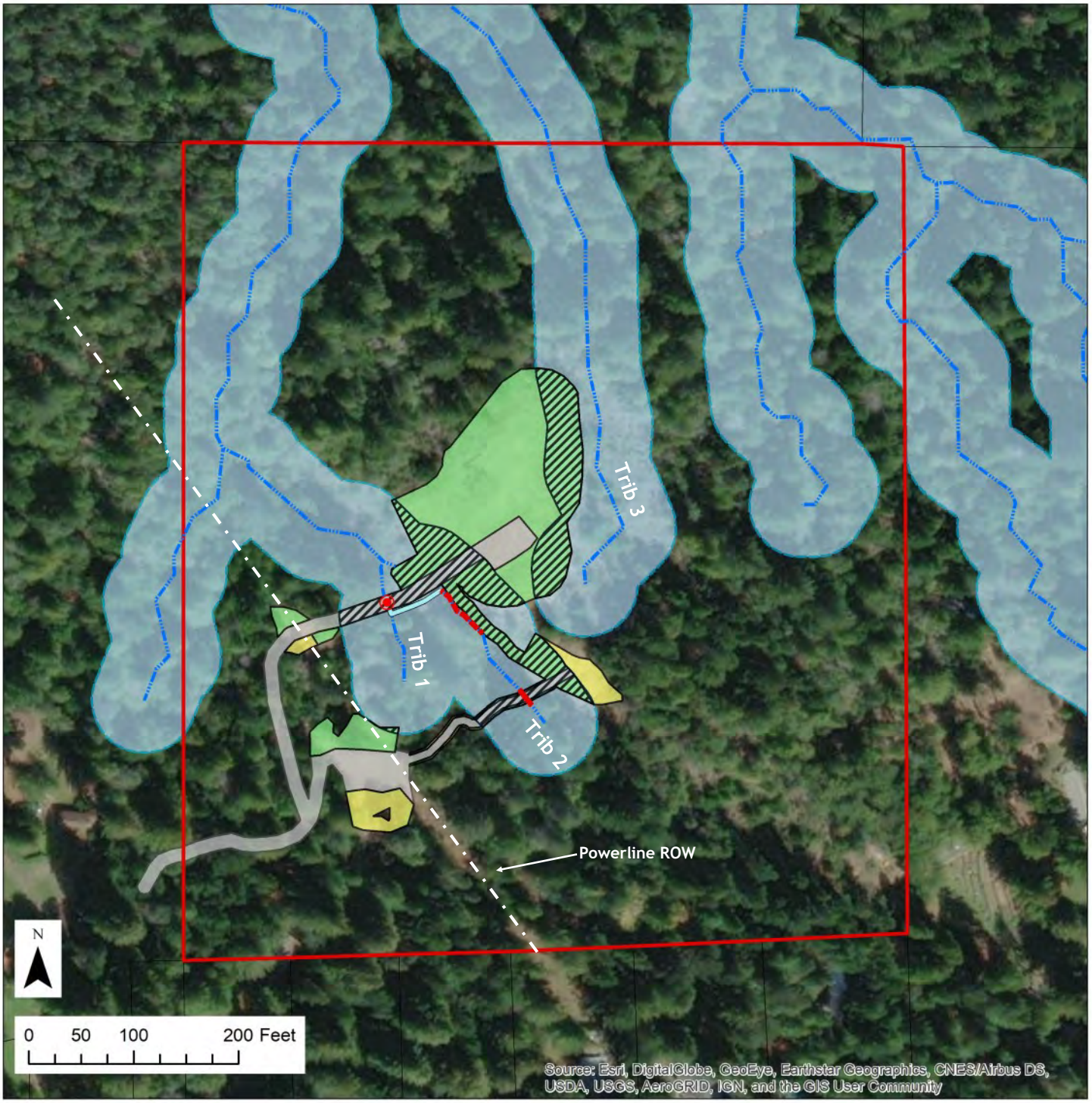
The take, or incidental take, of any special status species is prohibited. The Dischargers shall use the appropriate protocols, as approved by CDFW to ensure that activities do not impact the beneficial use of the preservation of rare and endangered species or violate the California or Federal Endangered Species Acts (ESA). A qualified biologist shall survey any sensitive habitat areas for sensitive species prior to construction activities.

6.0 REFERENCES

U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2019. Web Soil Survey. Web application. Last updated: April 9, 2019. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Most recently accessed: March 2020.

U.S. Army Corps of Engineers (USACE). South Pacific Division Uniform Performance Standards

Figure 1: Project Area and Impacts Map
44948 Fish Rock Road, Gualala, CA

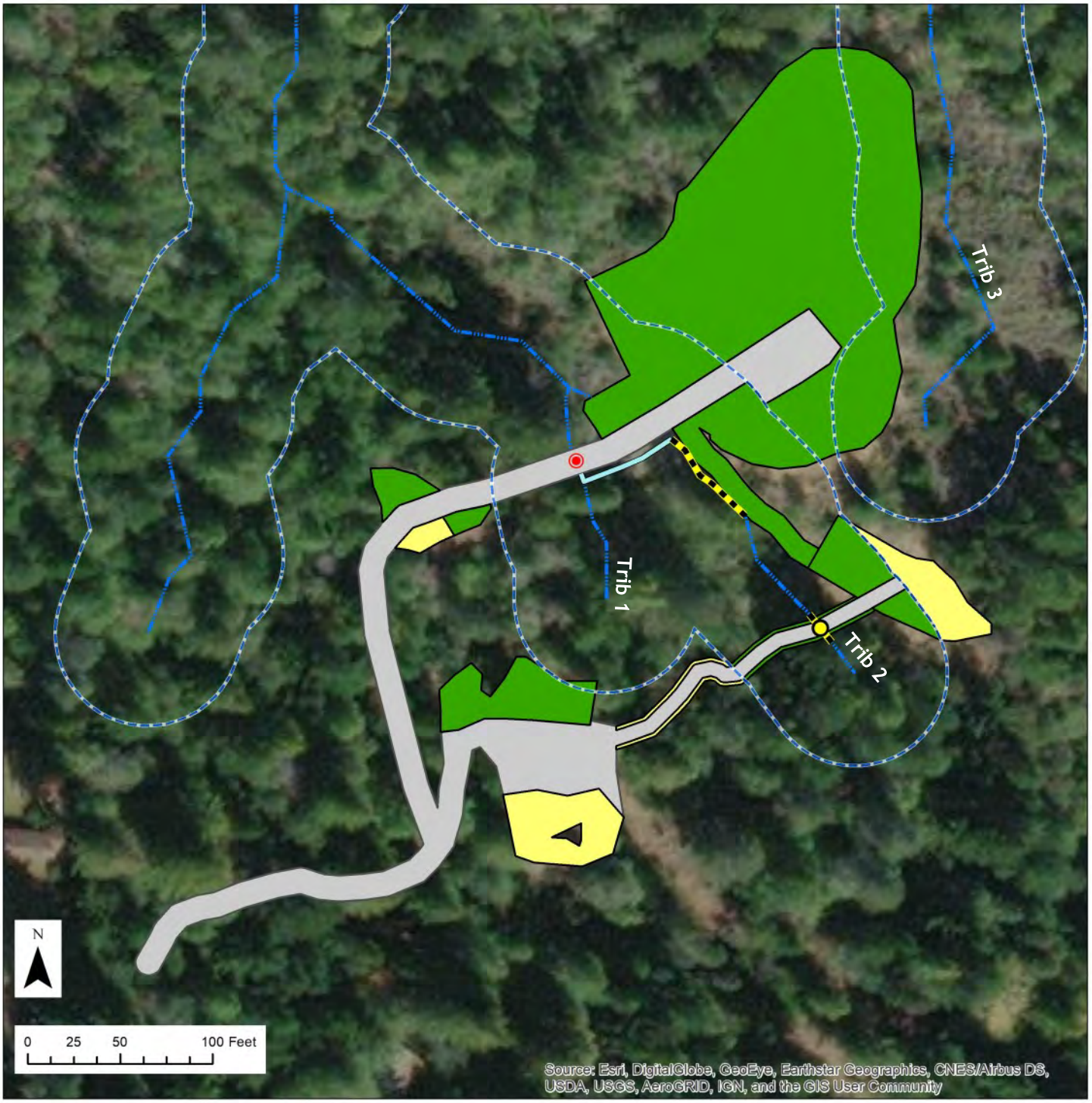


New Culvert
Impacted Stream (61 lf)
Diverted Channel (78 lf)
Steam Centerline
Project Study Area (Parcel Boundary)
Existing roads and clearings (0.34 ac; 940 lf)
Permanent impact area (0.10 ac)
Temporary impact area (0.72 ac)
50ft Setback from stream centerline
Area within 50ft setback

Date: 3-6-2022
Data: Sol Ecology Inc., NSAF (USGS/NASA)
Base: ESRI
GIS: AJG

SOL ECOLOGY
solecology.com

Figure 2: Restoration Area Map
44948 Fish Rock Road, Gualala, CA



Date: 3-6-2022
Data: Sol Ecology Inc., NSAF (USGS/NASA)

Base: ESRI
GIS: AJG

SOL ECOLOGY
solecology.com

GRADING & DRAINAGE PLAN
11.6 ACRE UNDEVELOPED PARCEL
APN 0143-040-002
UNINCORPORATED MENDOCINO COUNTY

Prepared for:
Mary May &
Joe May
Anchor Bay

Submitted to:
Mendocino County
Department of Planning & Building Services
Fort Bragg

Prepared by:
West & Associates Engineers, Inc.
Vacaville

August 2022

1.0 INTRODUCTION

West & Associates Engineers has been retained by our clients, Joe and Mary May, to prepare this Grading & Drainage Plan for an undeveloped parcel on Fish Rock Road in unincorporated Mendocino County. The project location is indicated on Figure 1.

The purpose of this Plan is to recommend actions to correct unpermitted and sub-standard grading performed at the property by a previous owner.

1.1 Problem Statement

We understand that a previous owner conducted unpermitted grading on the property. Based on a review of historical aerial imagery, it would appear the unpermitted grading was conducted between 2014 and 2017.

The unpermitted grading activity included cutting and filling pads and roads. Naturally occurring drainage patterns were altered by the earth moving project. The magnitude and extent of drainage impacts was documented by Sol Ecology in an April 2022 report titled: "44948 Fish Rock Road Project, Restoration Mitigation and Monitoring Plan".

The unpermitted grading activity was apparently conducted without the benefit of a grading plan, geotechnical evaluation, professional supervision or inspection. The completed grading is deficient in a number of areas.

The primary drainage impacts created by the unpermitted grading are along a ephemeral watercourse identified by Sol Ecology as Tributary 2. The principal objective of this Drainage Study is to propose corrective action to restore Tributary 2 to its original condition, as much as possible, and to recommend improvements to minimize sedimentation and erosion. The project study area is depicted on Figure 2, a recent (June 2021) aerial photograph.

1.2 Local Topography

Topography in the project vicinity is steep, with slopes exceeding 25%. The site is on the side of a north/south trending ridge paralleling the coast. The property is at an elevation of 1,100 feet MSL. Plate 3 illustrates the local topography.

Soil cover in the project vicinity is thin. Exposed bedrock is visible at many locations.

The unpermitted grading activity created two pads and access roads. The larger of the two pads, designated the lower pad, is approximately 15,000 square feet in size and was created by shaving down a ridge, then filling the cut material to both sides. The smaller of the pads, designated the upper pad, is actually two pads (each 1,800 square feet in size) separated by a 3 foot high grade break. The upper pad is located 30 feet higher than the lower pad.

1.3 Local Hydrology

Storm runoff is collected by numerous small ravines, swales and gullies in the vicinity which eventually confluence with Roseman Creek, the closest named watercourse. Because the project site is near the summit of a ridge the contributing area is small and water courses are ephemeral (ie class 3).

Based on an interpretation of the topographic map, the runoff contributing area to Tributary 2 is illustrated on Figure 3. The watershed is estimated to be 15 acres in size.

Access roads to both the upper pad and lower pad cross Tributary 2. Culverts were installed to convey the Tributary 2 flow under the access roads, however there was apparently no hydrologic evaluation to size the culverts to convey the standard design flowrate for a 100 year storm.

2.0 GRADING PLAN

The principal Grading Plan objective is to stabilize the lower pad so it does not pose an erosion or failure threat in the event of a large storm. A secondary objective is to specify erosion control measures to minimize sediment transport pending re-vegetation of disturbed areas.

2.1 Lower Pad Stabilization

As stated previously, the lower pad was created by cutting a ridge feature and filling in both sides of the ridge. The effort made to compact the fill is unknown, however after 10 years visible subsidence is not evident, so some degree of compaction must have been achieved.

The existing configuration of the lower pad is illustrated on Figure 4. It can be seen that the side slopes exceed the standard 2:1 angle typically specified for unsupported fill.

It is proposed to re-grade the side slopes to a minimum 2:1 angle in order to minimize the failure potential. The recommended slope configuration is depicted in Plan view on Figure 5. Selected cross sections are presented on Figures 6, 7 & 8.

The proposed re-grading activity will generate between 1,000 and 1,500 cubic yards of surplus soil. It is recommended that wood debris be separated from the soil as it is excavated. As no additional filling is proposed, the surplus soil will be stockpiled on site for potential future use. The recommended stockpile location is illustrated on Figure 5. Measures to prevent stockpile erosion are presented in the next Section.

2.2 Erosion and Runoff Control Measures

It is proposed to re-vegetate the graded areas. As an interim measure until re-vegetation matures, it is recommended to provide engineered erosion control. The locations where engineered erosion control will be deployed is depicted on Figure 9. Erosion control details are presented on Figure 10.

Erosion Control Measures

Plastic silt fences will be deployed around the perimeter of the soil stockpile(s). Silt fence will also be deployed around the toe of the re-graded lower pad.

Straw will be cast on all disturbed soil surfaces.

Straw wattles will be installed on the lower pad slope and upper pad slope. A line of wattles will be installed every 10 vertical feet.

Runoff Control Measures

Storm runoff will be managed to minimize water on the lower pad surface from flowing down the re-graded slopes. The lower pad will be graded so that water flows away from the lip of the pad towards Tributary 2. Storm water flow will thus be safely routed around graded areas.

3.0 DRAINAGE PLAN

The unpermitted grading performed at the Site altered naturally existing drainage patterns. In this Section, recommended measures to correct drainage deficiencies and to restore drainage patterns to original conditions as much as possible are described.

3.1 Hydrologic Evaluation

Standard design practice includes sizing drainage improvements for a 100 year return storm. In this Section, the maximum flowrate expected at Tributary 2 during a 100 year storm is estimated.

The stormwater runoff volume from a 100 year return frequency storm can be estimated by the Rational Method. The equation is:

$Q = C \times I \times A$
Where Q is the flow rate in cubic feet per second
C is the runoff coefficient (dimensionless)
I is the rainfall intensity in inches per hour
A is the watershed area in acres

The value for A is 15 acres as noted on Plate 2.

The runoff coefficient (C) is an empirical number dependent on the watershed terrain, slope and vegetation. Empirically developed runoff coefficients for many terrain types have been published by the State Water Resources Control Board. The range of runoff coefficient values for the category "woodland" is listed as 0.3-2.5. As the Fish Rock Road property is relatively steep, a C value near the upper end of the range, specifically 0.2, is appropriate.

The rainfall intensity is based on the historically measured rainfall in the vicinity, the slope of the watershed and the length of the watershed. Rainfall tabulations for many areas in the United States are available from the National Oceanic and Atmospheric Administration (NOAA). A tabulation of rainfall intensities for the Gualala area was consulted for this project.

The Gualala NOAA precipitation frequency table lists the one hour, 100 year return frequency storm rainfall total to be 1.44 inches. However, for short drainages the one hour rainfall total does not always represent the peak flow, since the rain which fell in the first 10 minutes of the storm may have flowed past the point of concern well before the rain falling during the last 10 minutes of the hour arrives.

To decide which rainfall duration data to use, the Time of Concentration is calculated. The equation to calculate the time of concentration is:

$T = (11.9 \times L^3 / H)^{0.385}$

Where L is the watershed length in miles and H is the difference in elevation between the point where the 100 year flow is experienced and the highest point of the watershed.

For Tributary 2, T is calculated as follows: $(11.9 \times 0.19)^3 = 11.56$

$(11.56/170)^{0.385} = 0.355$

Referring to the NOAA rainfall table, the 0.355 calculated time of concentration is less than the 100 year return frequency 5 minute rainfall total of 0.413. In this situation it is more accurate to use the default rainfall value of 10 minutes (ie 0.592 inches) multiplied by 6 to simulate a one hour rainfall.

Multiplying the 10 minute default value of 0.592 by 6 results in an hourly 100 year rainfall factor of 3.5 inches per hour.

The final flowrate calculation is then $Q = 0.2 \times 3.5$ in/hr $\times$ 15 acres = 10.5 cfs

Therefore the 100 year design flowrate for sizing improvements for Tributary 2 is 10.5 cfs.

3.2 Tributary 2

Impacts to Tributary 2 due to the unpermitted grading are thoroughly described in the SolEcology study referenced in Section 1.1. For purposes of restoration, there are three actions required at Tributary 2. These are:

1. Culvert replacement at upper pad access road
2. Roadside ditch maintenance
3. Culvert replacement at access road to lower pad

All three locations are indicated on Plate 3.

1. Culvert Replacement at Upper Pad Access Road

At the time of the site inspection for this drainage study (June 22, 2022) Tributary 2 was dry. However, Sol Ecology reports that when Tributary 2 is flowing, water is observed to be flowing under the road.

Apparently a buried culvert lies under the upper pad access road. The inlet to the culvert is buried under sediment and cast off and is not visible. The outlet is obscured by thick vegetation. Consequently, the diameter of the existing culvert is unknown.

As estimated in Section 3.1, the design flowrate for Tributary 2 is 10.5 cfs. The proper culvert size for this flowrate can be derived from the FHWA nomograph presented as Figure 11. As indicated on the nomograph, a 24 inch diameter culvert with a headwall height of 0.85 (ie 20 inches) is adequate to convey the 100 year storm flowrate.

It is therefore recommended to replace the buried culvert on the upper pad access road with a 24 inch culvert and 20 inch headwall. It is further tecommended to provide a dual mat rock slope protection (RSP) armoring of both the culvert inlet and outlet.

The underlying RSP mat would consist of two inches of ¾ inch crushed rock. The overlying mat would consist of 3-5 inch diameter cobbles. The recommended dimensions of the RSP placement are illustrated on Figure 12

The recommended improvements to the upper pad access road crossing Tributary 2 will stabilize the crossing and prevent sedimentation from reaching Roseman Creek.

2. Roadside Ditch to Lower Pad

Tributary 2 flows from the upper pad culvert described above down 30 vertical feet to the lower pad. The slope between the two pads is relatively steep with an average grade between 15-20%.

Upon reaching the lower pad, Tributary 2 is intercepted by a lateral ditch which conveys the flow south along the edge of the lower pad to an existing culvert.

A visual inspection of the ditch did not reveal any evidence of overflowing or excessive erosion. However, it was observed that weeds were growing in the ditch and some sedimentation was present. The sedimentation appeared to be predominantly material sloughing off the immediate hillside, rather than stream transported sediment.

If the ditch should overflow water would run over the top of the lower pad potentially creating erosion. Therefore, it is recommended to clean out the ditch of weeds and sediment. The ditch should be inspected and maintained yearly, ideally just before the wet season.

3. Lower Pad Culvert Access Road Culvert Crossing

An existing 12 inch diameter plastic culvert carries the flow of Tributary 2 under the Lower Pad access road. The location of the culvert is indicated on Figure 2. The existing culvert is undersized to convey the 100 year storm flow.

It is recommended to replace the culvert with a larger diameter culvert. Culvert sizing is based on guidelines as published by the Federal Highway Administration, specifically Figure 11, Culvert Sizing Nomograph. For the calculated 100 year storm flow a 24 inch culvert with a headwall to culvert ration of 0.85 (ie 20 inch headwall) will convey the flow with a margin of safety.

It is also recommended to armor the inlet and outlet of the culvert with RSP.

SUMMARY

Unpermitted and poorly planned grading completed by a previous property owner has resulted in environmentally degrading impacts to drainage at the Fish Rock Road property. The current owners are committed to implementing corrective measures designed to reverse the negative impacts caused by the existing drainage system.

The following corrective measures are proposed:

- Re-grade the lower pad
- Provide interim erosion and sedimentation measures
- Replace the upper pad culvert
- Maintain the lower pad drainage ditch
- Replace the lower pad culvert

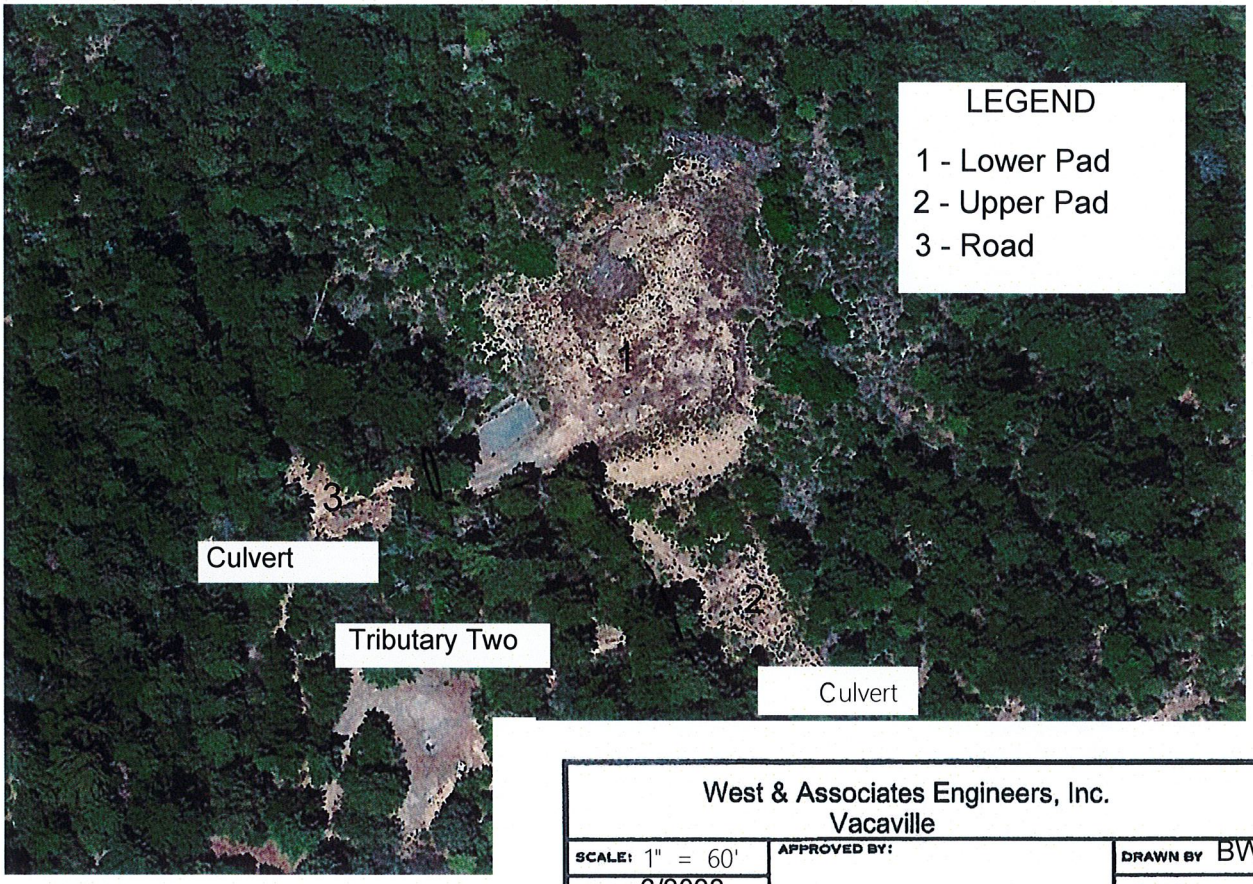
When these remedial projects are completed, erosion will be minimized and runoff from the Fish Rock Road property will deliver no more sediment to Roseman Creek than before the unpermitted grading occurred.

FIGURES 1-12



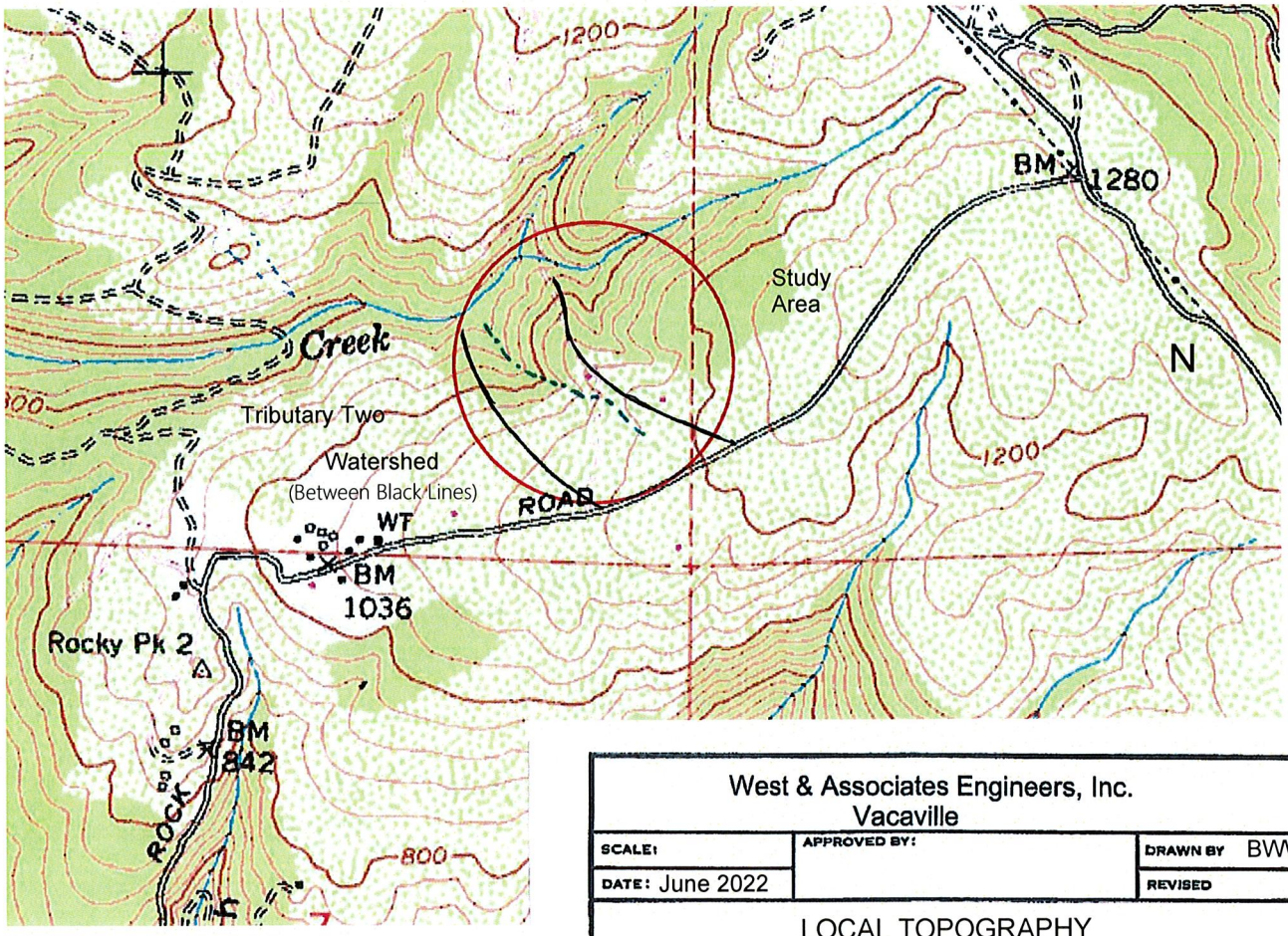
West & Associates Engineers, Inc. Vacaville		
SCALE: NA	APPROVED BY:	DRAWN BY BWW
DATE: June 2022		REVISED
VICINITY MAP		
FISH ROCK RD DRAINAGE STUDY		DRAWING NUMBER FIGURE 1

8½ X 11 PRINTED ON NO. 1000H CLEARPRINT ●



West & Associates Engineers, Inc. Vacaville		
SCALE: 1" = 60'	APPROVED BY:	DRAWN BY BWW
DATE: 6/2022		REVISED
AERIAL PHOTOGRAPH		
FISH ROCK ROAD DRAINAGE STUDY		DRAWING NUMBER FIGURE 2

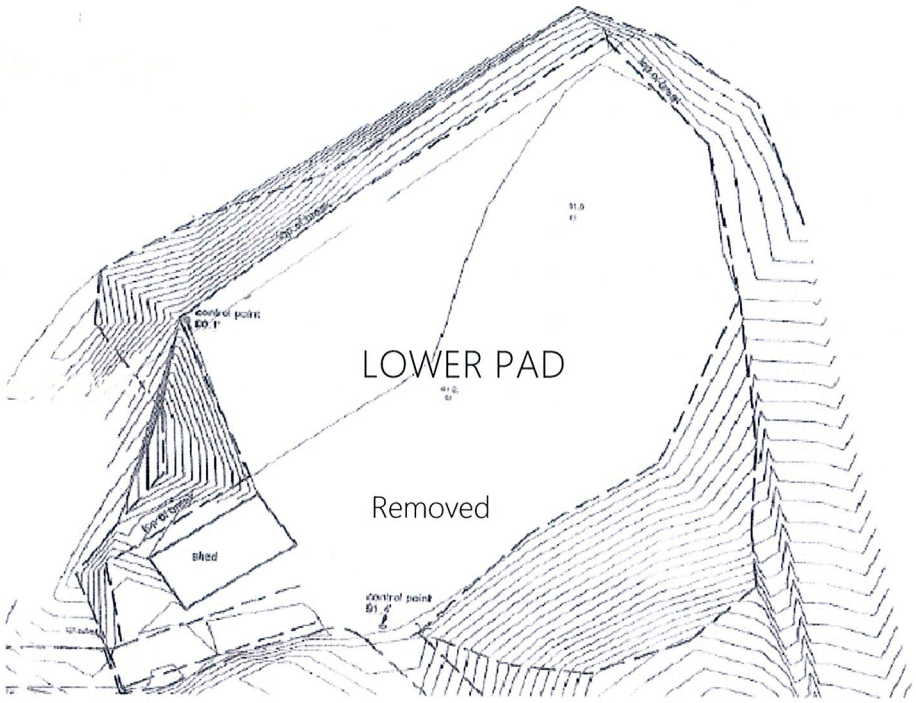
8½ X 11 PRINTED ON NO. 1000H CLEARPRINT ®



USGS 7.5' GUALALA QUADRANGLE

West & Associates Engineers, Inc. Vacaville		
SCALE:	APPROVED BY:	DRAWN BY BWW
DATE: June 2022		REVISED
LOCAL TOPOGRAPHY		
FISH ROCK RD DRAINAGE STUDY		DRAWING NUMBER FIGURE 3

8½ X 11 PRINTED ON NO. 1000H CLEARPRINT ●



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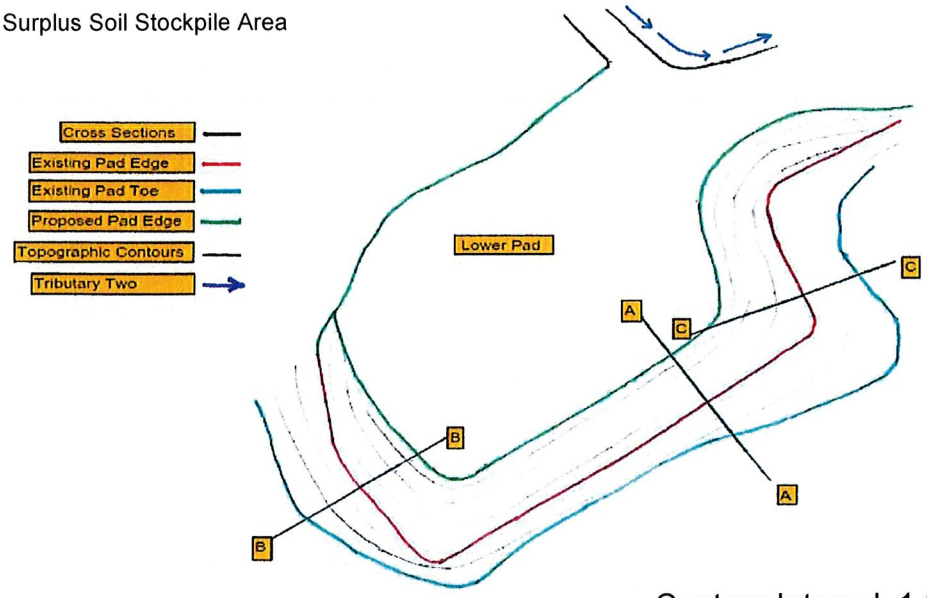
Contour Interval: 1 foot

NOTE: Survey performed by Richard A. Seale, LS dated April 2020

West & Associates Engineers, Inc. Vacaville		
SCALE: 1" = 30'	APPROVED BY:	DRAWN BY BWW
DATE: Aug 2022		REVISED
LOWER PAD - EXISTING TOPOGRAPHY		
FISH ROCK ROAD GRADING REMEDIATION		DRAWING NUMBER FIGURE 4

8½ X 11 PRINTED ON NO. 1000H CLEARPRINT ●

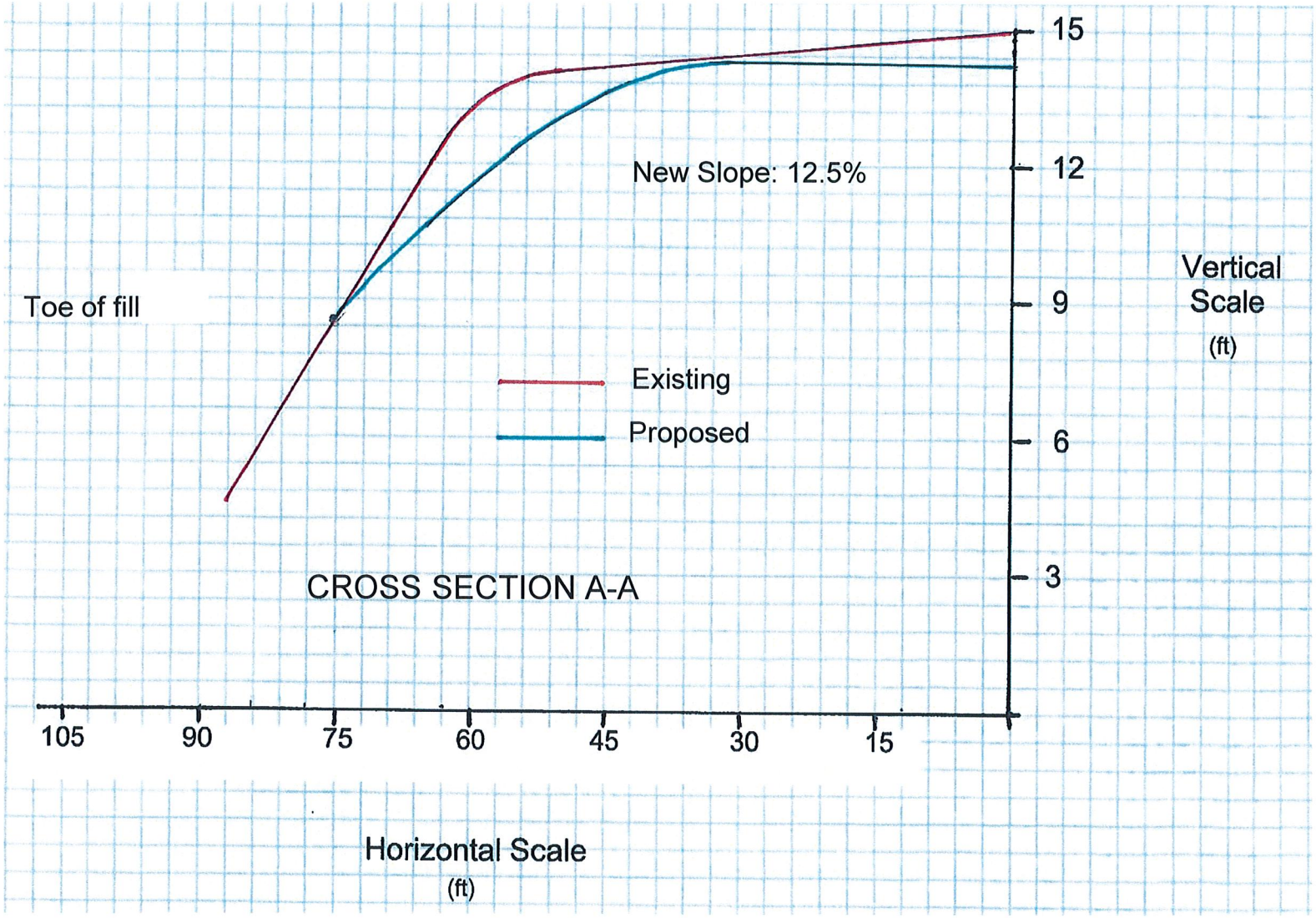
Surplus Soil Stockpile Area



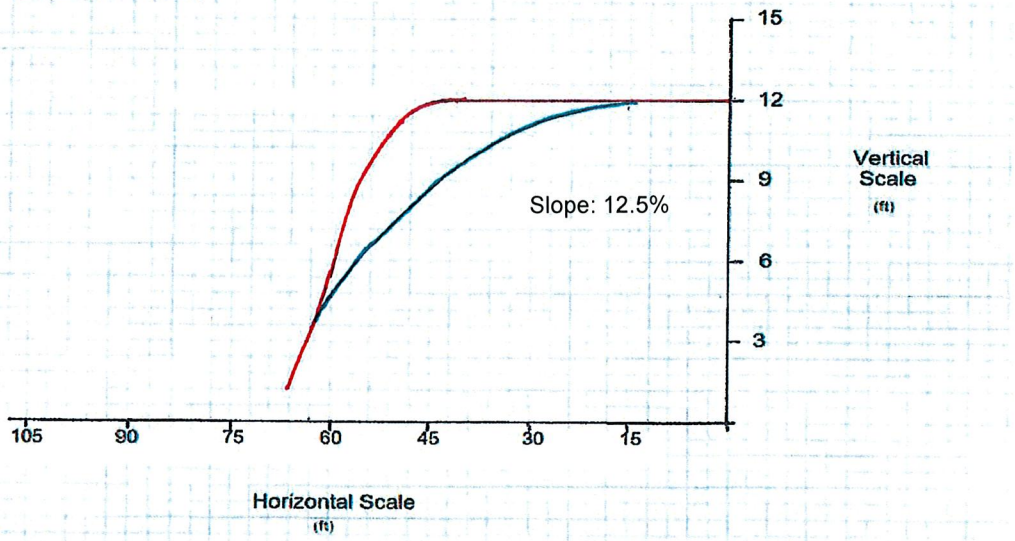
Contour Interval: 1 foot

West & Associates Engineers, Inc. Vacaville		
SCALE: 1" = 50 '	APPROVED BY:	DRAWN BY BWW
DATE: Aug 2022		REVISED
PROPOSED RE-GRADE OF LOWER PAD		
FISH ROCK ROAD GRADING REMEDIATION		DRAWING NUMBER FIGURE 5

8½ X 11 PRINTED ON NO. 1000H CLEARPRINT ●


15
12
9
6
3
Vertical Scale (ft)
New Slope: 12.5%
Toe of fill
Existing
Proposed
CROSS SECTION A-A
105
90
75
60
45
30
15
Horizontal Scale (ft)

Lower Pad Cross Sections
Parcel APN 143-040-02
Mendocino County

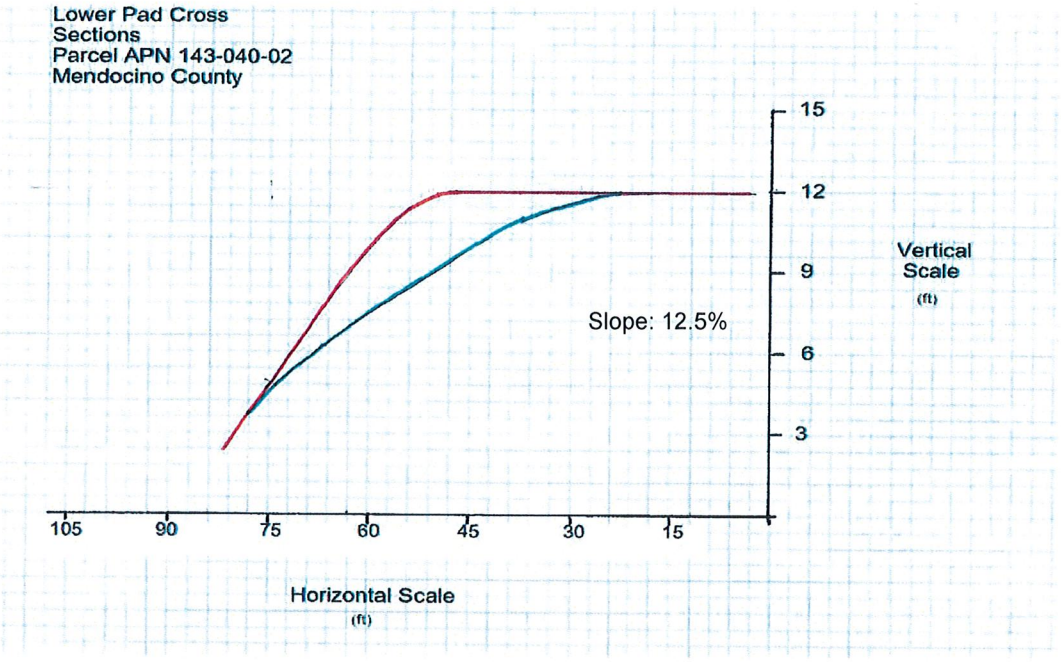


Proposed cross section

Existing cross section

West & Associates Engineers, Inc. Vacaville		
SCALE: as noted	APPROVED BY:	DRAWN BY BWW
DATE: Aug 2022		REVISED
Lower Pad Cross Section B-B		
FISH ROCK ROAD GRADING REMEDIATION		DRAWING NUMBER Figure 7

8½ X 11 PRINTED ON NO. 1000R CLEARPRINT ®



Existing cross section

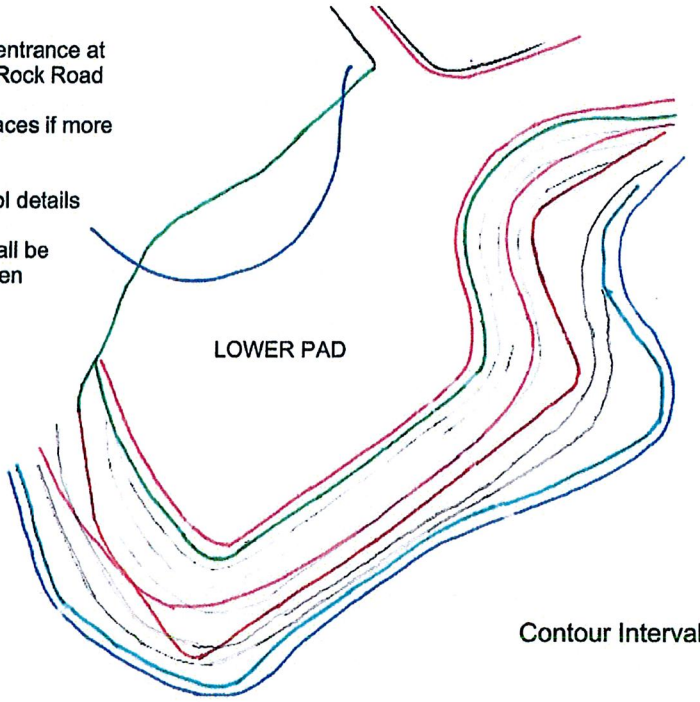
Proposed cross section

West & Associates Engineers, Inc. Vacaville		
SCALE: as noted	APPROVED BY:	DRAWN BY BWW
DATE: Aug 2022		REVISED
LOWER PAD CROSS SECTION C-C		
FISH ROCK ROAD GRADING REMEDIATION		DRAWING NUMBER FIGURE 8

8½ X 11 PRINTED ON NO. 1000H CLEARPRINT ®

EROSION CONTROL NOTES:

- Provide stabilized construction entrance at driveway intersection with Fish Rock Road
- Cast straw on all disturbed surfaces if more than 0.1 inch of rain id forecast
- See Figure 10 for erosion control details
- All erosion control measures shall be deployed and maintained between Oct, 15 and April 15



N

Contour Interval: 1 foot

LEGEND

- Topographic Contour
- Proposed Edge of PAD
- Toe of Fill
- Silt Fence
- Straw Wattles

West & Associates Engineers, Inc. Vacaville		
SCALE: 1" = 50'	APPROVED BY:	DRAWN BY BWW
DATE: Aug 2022		REVISED
EROSION CONTROL MEASURES		
FISH ROCK ROAD GRADING REMEDIATION		DRAWING NUMBER Figure 9

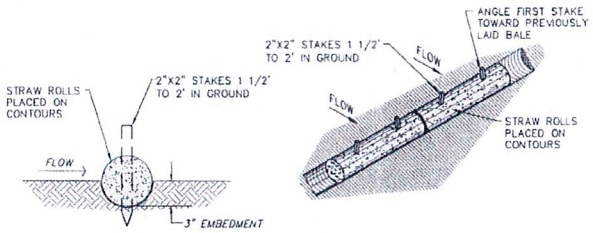
8½ X 11 PRINTED ON NO. 1000H CLEARPRINT ®

GRADING PLAN

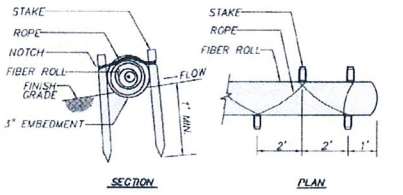
FISH ROCK ROAD PROPERTY
APN 143-040-002

EROSION CONTROL

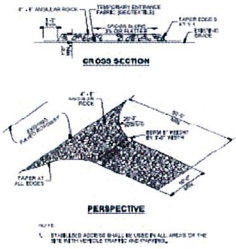
Detail Sheet*



TYPICAL STRAW WATTLE INSTALLATION
NOT TO SCALE

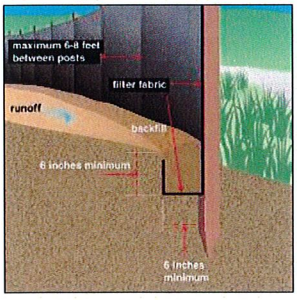


STAKING AND LASHING DETAIL
NOT TO SCALE



STABILIZED CONSTRUCTION ENTRANCE DETAIL

Typical Silt Fence Installation



Reinforce fence posts with steel "T" posts if necessary

REGISTERED PROFESSIONAL ENGINEER BRIAN W. WEST C72319 CALIFORNIA

West & Associates Engineers, Inc.		
Project Name: FISH ROCK ROAD	**Date:** AUG 2022	**Erosion Control**
Location: MENDOCINO COUNTY	**Scale:** NA	
Project No.:	**Drawn By:** DLG	FIGURE 10
Approved By: BWW	**Rev:**	

FIGURE 11

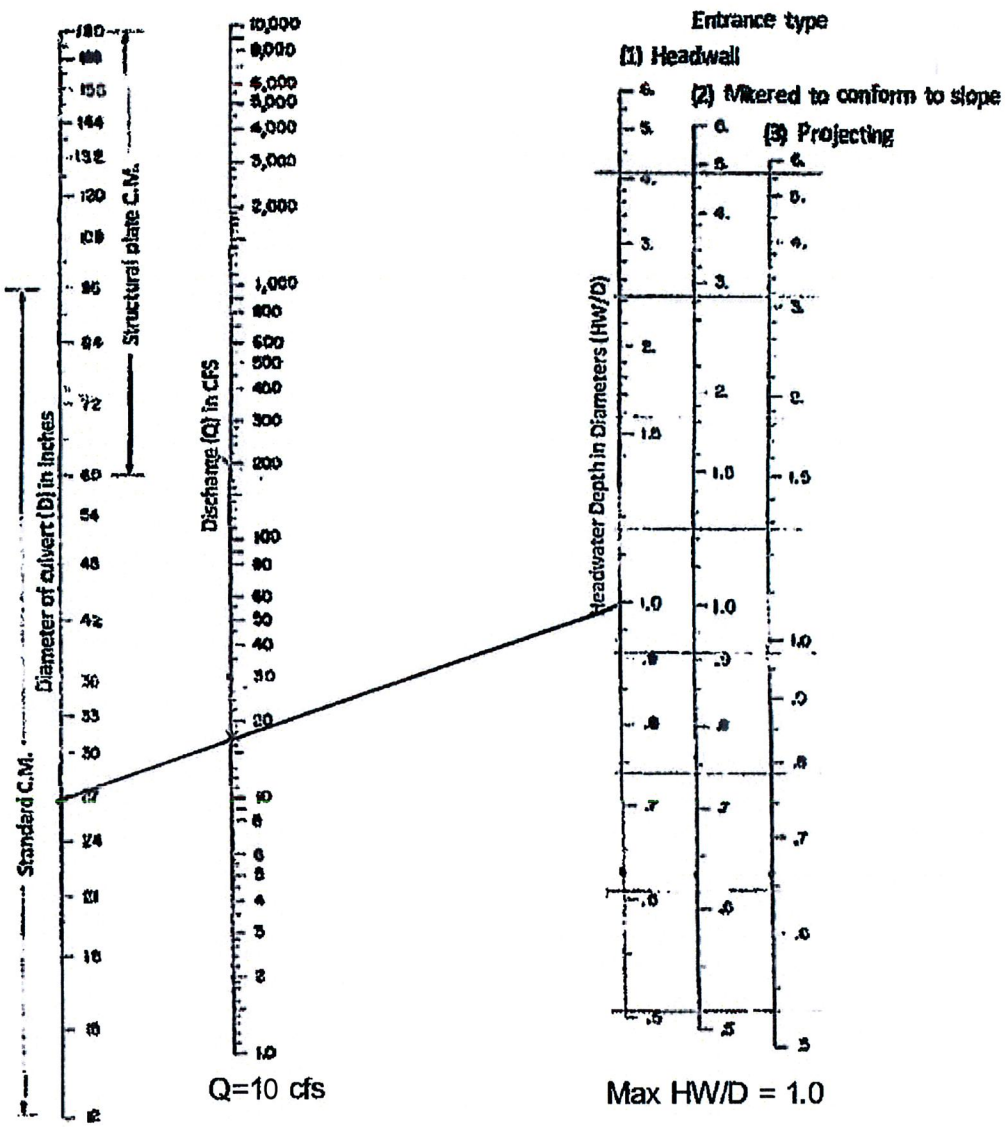
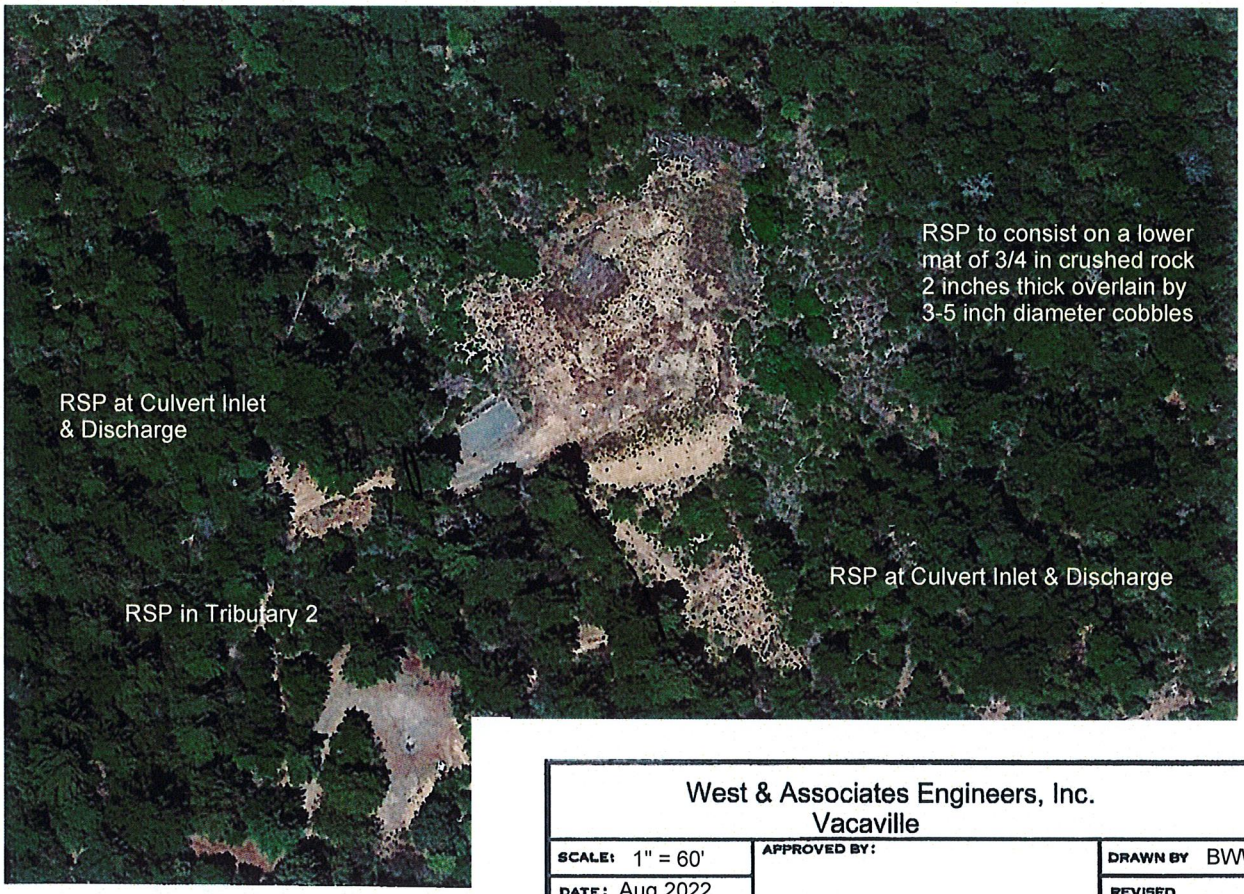


FIGURE A-1.
FHWA Culvert Capacity Inlet Control Nomograph.

FISH ROCK ROAD
APN 143-040-002
UNINCORPORATED MENDOCINO COUNTY

TRIBUTARY TWO CULVERT SIZING



West & Associates Engineers, Inc. Vacaville		
SCALE: 1" = 60'	APPROVED BY:	DRAWN BY BWW
DATE: Aug 2022		REVISED
ROCK SLOPE PROTECTION PLACEMENT		
FISH ROCK RD REMEDIATION		DRAWING NUMBER FIGURE 12

8½ X 11 PRINTED ON NO. 1000H CLEARPRINT ©