

4.5 PSP Cover Sheet (Attach to the front of each proposal)

Proposal Title: Lake Red Bluff Riparian Area Restoration and Education Support Project
 Applicant Name: The California Conservation Corps
 Mailing Address: 1313 Hartnell Avenue, Suite A, Redding, CA 96002
 Telephone: (530) 222-0513
 Fax: (530) 222-2432
 Email: ehealy@ccc.ca.gov

Amount of funding requested: \$ 29,114 for 3 years

Indicate the Topic for which you are applying (check only one box).

- | | |
|---|---|
| <input type="checkbox"/> Fish Passage/Fish Screens | <input type="checkbox"/> Introduced Species |
| <input checked="" type="checkbox"/> Habitat Restoration | <input type="checkbox"/> Fish Management/Hatchery |
| <input type="checkbox"/> Local Watershed Stewardship | <input type="checkbox"/> Environmental Education |
| <input type="checkbox"/> Water Quality | |

Does the proposal address a specified Focused Action? yes X no

What county or counties is the project located in? Tehama

Indicate the geographic area of your proposal (check only one box):

- | | |
|---|---|
| <input checked="" type="checkbox"/> Sacramento River Mainstem | <input type="checkbox"/> East Side Trib: _____ |
| <input type="checkbox"/> Sacramento Trib: _____ | <input type="checkbox"/> Suisun Marsh and Bay |
| <input type="checkbox"/> San Joaquin Mainstem | <input type="checkbox"/> North Bay/South Bay _____ |
| <input type="checkbox"/> San Joaquin Trib: _____ | <input type="checkbox"/> Landscape (entire Bay/Delta watershed) |
| <input type="checkbox"/> Delta: _____ | <input type="checkbox"/> Other: _____ |

Indicate the primary species which the proposal addresses (check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> San Joaquin and East-side Delta Tributaries fall-run chinook salmon | <input type="checkbox"/> Spring-run chinook salmon <input type="checkbox"/> |
| <input type="checkbox"/> Winter-run Chinook salmon | <input type="checkbox"/> Fall-run chinook salmon |
| <input type="checkbox"/> Late-fall run chinook salmon | <input type="checkbox"/> Longfin smelt |
| <input type="checkbox"/> Delta smelt | <input type="checkbox"/> Steelhead trout |
| <input type="checkbox"/> Splittail | <input type="checkbox"/> Striped Bass |
| <input type="checkbox"/> Green Sturgeon | <input type="checkbox"/> All chinook species |
| <input checked="" type="checkbox"/> Migratory birds | <input checked="" type="checkbox"/> All anadromous salmonids |
| <input checked="" type="checkbox"/> Other: <u>Native Flora/Fauna</u> | |

Specify the ERP strategic objective and target(s) that the project addresses. Include page numbers from January 1999 version of ERP Volume I and II:

ERP targets: Land Use Target 1 (ERP Vol 2, p. 243); Waterfowl Target (ERP Vol 2, p. 248).

Indicate the type of applicant (check only one box)

- | | |
|--|---|
| <input checked="" type="checkbox"/> State agency | <input type="checkbox"/> Federal Agency |
| <input type="checkbox"/> Public/Non-profit joint venture | <input type="checkbox"/> Non-profit |
| <input type="checkbox"/> Local government/district | <input type="checkbox"/> Private Party |
| <input type="checkbox"/> University | <input type="checkbox"/> Other: _____ |

Indicate the type of project (check only one box):

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> Planning | <input checked="" type="checkbox"/> Implementation |
| <input type="checkbox"/> Monitoring | <input type="checkbox"/> Education |
| <input type="checkbox"/> Research | |

By signing below, the applicant declares the following:

- 1.) The truthfulness of all representations in their proposal;
- 2.) The individual signing the form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or organization); and
- 3.) The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 2.4) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

Erin Healy
Printed name of applicant


Signature of applicant

Lake Red Bluff Riparian Area Restoration and Protection Project

The California Conservation Corp
Erin Healy, Conservation Administrator
1313 Hartnell Ave, Suite A
Redding, CA 96002
Phone: 530.222-0513
Fax: 530.222-2432
email: ehealy@ccc.ca.gov
State Agency
TAX ID NUMBER - 68-0298653

Cooperating Organizations

The Sacramento River Discovery Center, 501(c)(3)
The United States Forest Service - Mendocino National Forest, Federal Agency

Executive Summary

The Lake Red Bluff Riparian Area Restoration and Protection Project consists of approximately 200 feet of boardwalk construction over a sensitive old-growth riparian forest area on land managed by the U.S. Forest Service, south and adjacent to the city of Red Bluff, CA. The riparian area in question, 2+ acres, lies on the Sacramento River mainstem. The riparian area will be cleared of invasive exotic plant species (including Tree of Heaven, *ailanthus*) and replanted with native perennial grasses.

The Project forms a discreet part of a larger U.S.F.S. plan for the area, which includes the elimination of several "incidental" trails with one designed, one-half-mile-long, engineered trail, thereby reducing the impact of visitors on the area. The site also serves as part of an outdoor classroom utilized by some 4000 students annually through programs of the Sacramento River Discovery Center, an on site, local non-profit, which strongly supports this project. The USFS estimates annual visitation of 106,000. Congressman Vic Fazio has also toured the area and voiced his support.

The area has been designated as a State of California "Watchable Wildlife Site," and is part of the National "Sacramento River Wildlife Refuge Corridor" established by the U.S. Fish and Wildlife Service.

There are no negative impacts on any third-party. The Project replaces an over-used incidental trail (the result of those 100,000 annual visitors), with an engineered structure. The only impacted population will be those individuals whose mobility is limited, who will find the new trail much more accessible.

The Project will be monitored, and all aspects of the Project evaluated, by the USFS, who has prepared all necessary NEPS documents, and plans to operate and maintain the proposed facility in perpetuity for the benefit of the public.

Over \$37,000 has been allocated for this project, with funding from the USFS and in-kind match from the California Department of Forestry. The additional \$29,114 will bring the project to completion.

The primary ecological objectives are to reduce the destruction of habitat in the area; improve the habitat by eradication of invasive exotic species and the reintroduction of native plants; reduce silt and runoff to the Sacramento mainstem by reducing erosion, thereby reducing damage to spawning areas; and provide an outdoor classroom for use by students in the area.

Letters of support from the USFS and the Sacramento River Discovery Center are attached.

Project Description

The Project consists of four phases: the boardwalk construction; exotic invasive species eradication; reintroduction of native plants, and monitoring. These three phases are discussed in order of their priority. All three phases are independently beneficial and can be completed as independent tasks. The entire project will be completed within a three week time-frame.

The boardwalk will be constructed of redwood, adhering to the plans drawn by USFS engineers (drawings attached). The boardwalk is five feet wide, with a redwood hand-rail on the down-slope side. All fasteners are screws or bolts, no nails will be utilized, and all stress points are supported by sheet-metal splice-plates. The redwood piers supporting the structure, on five-foot centers, are sunk into the soil a minimum of 3 feet. Construction will begin in late Winter or early Spring, 2000, and require 2 weeks for completion.

The second phase of the project, the removal of invasive plant species, will begin immediately following the completion of the boardwalk construction. This will require approximately two days for a crew of twelve.

The third phase, reintroducing 1000 native seedlings and plugs of grass, along with necessary clearing of debris and manual release, will require 3 days for completion. Ten percent of the reintroduced native species (approximately 120 specimens), and twenty specimens of existing native plants, will be marked with stakes for monitoring and evaluation purposes.

The fourth phase will consist of monitoring and evaluating the survival rate of the various species reintroduced to the Project area. This will involve approximately 200 hours over a period of three years.

The project is located in Tehama County, approximately 1 mile south of the City of Red Bluff. The watershed involved is the Sacramento mainstream, which is approximately feet from the Project site. A USGS map is attached showing the project location, as is a more detailed map based provided by the USFS. The Project is located in the Butte Ecological Unit, Antelope Creek Zone. A USGS map is attached. The project conforms to Lake Red Bluff Recreational Development Environment Impact Statement dated June 3, 1991 and amendments filed in 1995 (file code 1950).

Ecological and Biological Benefits

The ecological benefits to the Sacramento mainstream include reduced run-off and reduced sediment deposits in the river, which will reduce the damage to sensitive spawning areas. Run-off will be reduced by replacing shallow rooted annual grasses and invasive species with deep-rooted native vegetation, as well as rehabilitation of existing, incidental trails.

Biological benefits include the material improvement of the habitat by the eradication of invasive exotics and the reintroduction of native shrubs and perennial grasses, increasing the number of species the habitat can support. The improvement of this riparian area is an important component to Lake Red Bluff, which supports

salmonids, migratory birds, eagles, deer, raccoon, and a host of other birds, mammals, reptiles, and amphibians.

While the rest of the ½ mile trail will utilize a crusher-dust base, the area in question is both too uneven and subject to too much water to make that type of construction practical. The previously planned alternative to the Project is a concrete structure which, though less costly would seriously impact the area. A concrete trail will require leveling, grading, and the use of heavy equipment, all which would permanently, and negatively impact this very sensitive area and not allow for the natural watercourses already extant. A concrete structure would itself be subject to erosion and encroachment by plants.

The Project is directly linked to long-term plans of the USFS, who manages the land. The USFS is mandated to provide for the public interest, and provide adequate recreation opportunities in this area while protecting and, when feasible, improving the existing habitat. The Project is an important part of a USFS redesign of the area, which includes the creation of an engineered trail and the elimination of "incidental" trails which are seriously impacting an old-growth riparian habitat.

The benefits of the project include the aforementioned biological and ecological items. Besides these, there is a substantial esthetic component involved with this popular area. Literally thousands of visitors come to this site to camp, fish, picnic, take part in educational programs, visit the native gardens, ecological pond and experimental forest, or visit the salmon viewing platform. A wood boardwalk is both a more sound approach and, through improved esthetics, will help develop a sense of stewardship in all visitors. The area has been designated as a State of California "Watchable Wildlife Site," and is part of the National "Sacramento River Wildlife Refuge Corridor" established by the U.S. Fish and Wildlife Service.

The Project is a permanent installation requiring a minimum of maintenance. The USFS already maintains several trails in the immediate vicinity, as well has having to invest resources in response to the environmental damage caused by myriad incidental trails. It is expected that this project will actually reduce necessary maintenance. In other words, it is, by its practicality, and by the commitment of the USFS to the area, completely sustainable. The Project will also increase the safety of the visiting public and students by providing a maintained, engineered structure which will be considerably safer, and more accessible, to those individuals less mobile than typical fourth-graders.

The Project links indirectly with all other Sacramento mainstem efforts to decrease erosion, protect sensitive riparian areas, decrease run-off, and maintain or increase native riparian habitat. There is direct linkage with at least two other CALFED funded projects, including a Fish Passage Improvement Project at the Red Bluff Diversion Dam, and the Sacramento River Discovery Center's (SRDC) Public Information and Education program. The SRDC supports the Project and it is anticipated that the SRDC will be one of the major users of the Project. The applicant has a five-year working relationship with the SRDC.

As a whole, the Project increases and protects old-growth habitat, riverine habitat, provides spawning substrate, rearing and escape cover, feeding sites, and increases the diversity and numbers of both native plant and animal species. The affected watershed is the Sacramento Mainstem.

ERP STRATEGIC OBJECTIVES

The Project increases and protects the area of an sensitive old-growth riparian habitat, (ERP Vol 1, p. 108), which forms part of a critical shaded riverine habitat, providing spawning substrate, rearing and escape cover, feeding sites, and refuge from turbulent streamflows for fish and other aquatic organisms (ERP Vol 1, p. 107). The project will improve the foodweb, and provide critical habitat (ERP Vol 1, p. 106) improvement and protection.

The current overuse of the area, and the expected increase of usage in the future, due to pressures of increased local population, holds little promise for the natural recovery of the area (ERP Vol 1, p. 109). The Butte Basin, in which this project lies, has been targeted for programmatic actions including riparian and riverine habitat implementation programs (ERP Vol 1, p. 79). Species targeted for the Butte Basin Ecological Zone include Splittail, White and Green Sturgeon, Chinook Salmon, Steelhead Trout, and Waterfowl, which all stand to benefit from the improved and protected Riparian and Riverine habitat which lies at the heart of this project (ERP Vol 1, p. 130-31).

The project conforms with the stated CALFED objective "to improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta to support sustainable population of diverse and valuable plant and animal species" (ERP Vol 2, p. 1). The project addresses those concerns for Riparian and Riverine Aquatic Habitats in the Butte Basin Ecological Zone: "Improvements are needed to restore riparian, shaded riverine (of rivers) aquatic, and woody debris habitats" (ERP Vol 2, p. 233).

The potential benefits to third parties include increased access for both students and the general public to a biologically complex and interesting area, along with the benefits realized by protection of the same area.

Technical Feasibility and Timing

The technical feasibility of other alternatives has been eliminated due to the deleterious effects on the very sensitive riparian habitat. The proposed Project is an easily accomplished alternative, with virtually no short- or long-term denigration directly linked to its implementation, and long term benefits associated with habitat preservation and improvement. The construction of the Project, with the contiguous elimination of other, incidental trails, will have a significant, positive impact on the area.

The timing of the Project is crucial, as the Project construction forms a vital link in the ½ mile trail planned by the USFS. Final completion is to be no later than Fall of 2000.

The Federal Government owns the property, and, being managed by the USFS, has in place all necessary NEPS documents for this project. The project conforms to Lake Red Bluff Recreational Development Environment Impact Statement dated June 3, 1991 and amendments filed in 1995 (file code 1950). There are no permits or agreements in place, as none are required, and no zoning regulations or county planning ordinances impact the Project. There are no implementation issues. This

project is completely free from any Y2K problems. All support systems for the project, both direct and indirect, payroll, etc. are Y2K-proof or have adequate backup systems and procedures.

Biological and Ecological Objectives

The biological and ecological objectives are: to restore damaged areas to their native state; to reduce the impact of visitors to the site; to reduce erosion and its deleterious effects on the Sacramento mainstem, and, through a combination of these efforts, and linkages to existing fisheries and educational projects, instill a sense of stewardship in all visitors to the area.

Monitoring and Data Collection Approach

Monitoring of the project will fall under the overall monitoring implemented by the USFS as outlined by existing NEPS documents. Data collection will be collected by members of the California Conservation Corps and consist of documenting survival rates of reintroduced native plant life. This information will be reported directly to the USFS and the Sacramento River Discovery Center for agency and public utilization. Data will be collected quarterly for a period of three years.

Data-Collection will consist of monitoring the growth rate and survival rate of a ten percent sampling of reintroduced native plants.

In addition, the growth and survival rate of 20 samples of existing native perennials will be determined quarterly and compared to the survival and growth rate of the reintroduced specimens. This data will be collected for three years.

What is the survival rate and rate of growth of reintroduced specific native plant species in a riparian habitat?	Data on Reintroduced Specimens: Survival/Size Data on existing Native Specimens Survival/Size	Data Evaluation Approach How does the rate of growth and survival rate of introduced native specimens compare with existing native plants?	Comments/Data Priority Comparisons of two sets of data will yield vital information on survival and growth rates of introduced native plant specimens which can be utilized for future planning of ecosystem rehabilitation in the immediate area.

Local Involvement

Tehama County Supervisor Barbara McIver has been notified of this application, and the letter is attached. Complete support is expected. The US Fish and Wildlife service, which maintains a salmon-observation platform near the site, has also been notified, with the letter attached. Other local effected entities include the Sacramento River Discovery Center, whose letter of support is attached, and the USFS, whose letter is also attached. There are no other affected landowners, facility operators, or facility owners.

Budget

Task	Direct Labor Hours	Direct Salary and Benefits	Service Contract	Material and Acquisition Costs	Misc. and other costs	Overhead and indirect costs	Total Cost
Boardwalk construction	960	9,120		5,270	2,064	1,212	17,666
Exotic Species Eradication	192	1,824			413	422	2,659
Native plant re-introduction	288	2,736		1,950	619	633	5,938
Monitoring and Evaluation	192	1,824			413	422	2,851
*Project Management	na	na	na	na	na	na	na

*Project Management is the responsibility of the USFS, Mendocino National Forest, which has already allocated funds for this project. Work will be inspected daily by the on-site civil service supervisor as part of his/her responsibility. Reporting requirements and related costs are allocated on a per-hour basis included in the "Overhead and Indirect Cost." This cost runs approximately 5% of the grant request.

Cost-Sharing

The USFS Service, Mendocino National Forest, has already allocated \$37,000 for the ½ mile project and construction is scheduled for completion by Fall of 2000. The additional \$29,114 will complete the ½ mile trail.

Quarterly Budget 1999/00

Task	Oct-Dec 99	Jan-Mar 00	Apr-Jun 00	Jul-Sep 00	Oct-Dec 00	
Boardwalk construction	17,666					17,66
Exotic Species Eradication	2,659					2,659
Native plant re-introduction	5,938					5,938
Monitoring and Evaluation		238	238	238	238	952
TOTAL	26,263	238	238	238	238	27,215

Quarterly Budget 2001-02

Task	Jan-Mar 01	Apr-Jun 01	Jul-Sep 01	Oct-Dec 01	Jan-Mar 02	
Boardwalk construction						
Exotic Species Eradication						
Native plant re-introduction						
Monitoring and Evaluation	238	238	238	238	238	1,190

Quarterly Budget 2002-03

Task	Apr-Jun 02	Jul-Sep 02	Oct-Dec 02			
Boardwalk construction						
Exotic Species Eradication						
Native plant re-introduction						
Monitoring and Evaluation	238	238	238			714

Applicant Qualifications

The applicant, The California Conservation Corps (CCC), a state agency, has collaborated with the USFS for many projects in this area, and has more than adequate resources to complete the project in a timely manner. The CCC, Shasta Cascade Operations, as of this writing, has four different resource crews within commuting distance of the Project site. Shasta Cascade Operations also administrates Butte Fire Center in Magalia, CA, and the state-wide AmeriCorps Watershed Project, the third-largest AmeriCorps program in the state, with a \$3.1 million annual budget.

The crew supervisor is Mark Hanson, a civil-service employee of the State of California with significant experience in construction. Overall project coordination will be handled by Russ Irvin. In charge of all operations at Shasta Cascade Operations of the CCC is Erin Healy, Conservation Administrator. Shasta Cascade has several other staff with construction experience ready to assist with this project.

Compliance with Standard Terms and Conditions

There are no sub-contractors on this project. The California Conservation Corps is part of the State of California Resources Agency which complies with all state mandates. An interagency agreement covers all activities with the USFS, but, in this case, no funds are involved.

CALIFORNIA CONSERVATION CORPS

Shasta Cascade Operations

1313 Hartnell Avenue Suite A, Redding, CA 96002

Phone 530.222-0513

Fax 530.222-2432



April 14, 1999

George Robson
Planning Department
County of Tehama
444 Oak Street
Red Bluff, CA 96080

Dear Mr. Robson:

This letter is to inform you that the California Conservation Corps (CCC) has applied for funding for two projects in Tehama County from the CALFED Bay Delta Program.

One project is located at Lake Red Bluff, where the CCC is partnering with the United States Forest Service and the Sacramento River Discovery Center to complete a new, engineered trail in the area. The CCC has applied for CALFED funds to build a 184-foot boardwalk over a sensitive riparian area.

The other project is a riparian area expansion and restoration project at Red Bluff Union High School (RBUHS). The proposed 3.5 acre oak and grass planting will be accomplished through cooperation with the OPTIONS program (Daniel Backstrom) and the RBUHS Maintenance Department (Ron Hein), with whom we have been working. The project forms an integral part of the trail and outdoor classroom planned for the site. Students in the OPTIONS program will be heavily involved in this project. Your support for these two projects would be invaluable.

Sincerely,

A handwritten signature in black ink that reads "Erin Healy".

Erin Healy
Conservation Supervisor

CALIFORNIA CONSERVATION CORPS

Shasta Cascade Operations

1313 Hartnell Avenue Suite A, Redding, CA 96002

Phone 530.222-0513

Fax 530.222-2432



April 14, 1999

Barbara McIver
Tehama County Supervisor
County of Tehama
633 Washington
Red Bluff, CA 96080

Dear Ms. McIver:

This letter is to inform you that the California Conservation Corps (CCC) has applied for funding for two projects in Tehama County from the CALFED Bay Delta Program.

One project is located at Lake Red Bluff, where the CCC is partnering with the United States Forest Service and the Sacramento River Discovery Center to complete a new, engineered trail in the area. The CCC has applied for CALFED funds to build a 184-foot boardwalk over a sensitive riparian area.

The other project is a riparian area expansion and restoration project at Red Bluff Union High School (RBUHS). The proposed 3.5 acre oak and grass planting will be accomplished through cooperation with the OPTIONS program (Daniel Backstrom) and the RBUHS Maintenance Department (Ron Hein), with whom we have been working. The project forms an integral part of the trail and outdoor classroom planned for the site. Students in the OPTIONS program will be heavily involved in this project. Your support for these two projects would be invaluable.

Sincerely,

A handwritten signature in black ink that reads "Erin Healy".

Erin Healy
Conservation Administrator



Cathy Klinesteker
Executive Director

P.O. Box 1298
Red Bluff, CA 96080

Phone: (530) 527-1196

Fax: (530) 527-1312

E-Mail: cklinest@tehama.k12.ca.us

Web Page: <http://www.srdc.tehama.k12.ca.us>

March 28, 1999

CALFED Bay Delta Program

This letter is written in support of the California Conservation Corps proposal to improve riparian habitat and educational programs near the Sacramento River Discovery Center. For this particular project, a boardwalk trail will be constructed to provide access with minimal impact, and exotics including *Ailanthus*, Tree of Heaven, will be eradicated and native species planted to help preclude the re-establishment of pervasive exotics.

The Discovery Center routinely facilitates educational programs in this area near the group campground that is managed by Mendocino National Forest, the other partners in this project. Thousands of students will directly benefit from this project. Additionally, the rare section of old-growth riparian habitat on the site will be minimally impacted by both the trail work and the plant eradication/revegetation by using CCC crews practicing hand-tool techniques as opposed to bringing heavy machinery into the area. This project is critical to maintaining the integrity of this habitat while still allowing access for low-impact recreational and educational programs.

Your support of this proposal is strongly encouraged as it provides a wonderful opportunity to get large returns from minimal dollar investments.

Sincerely,

A handwritten signature in cursive script that reads "Cathy Klinesteker".

Cathy Klinesteker, Executive Director



United States
Department of
Agriculture

Forest
Service

Mendocino N.F.
Supervisor's Office

825 N. Humboldt Ave.
Willows, CA 95988
(530) 934-3316
(TTY) 530-934-7724

File Code: 2330

Date: April 5, 1999

Cal Fed Selection Committee

Dear Selection Committee:

The U. S. Forest Service is working cooperatively with the California Conservation Corps/AmeriCorps to construct a trail along the edge of an old growth riparian forest connecting the primary parking/trailhead area with an environmental education/pond study area of the U. S. Forest Service managed lands at Lake Red Bluff. The Forest Service is constructing approximately 1/2 mile of trail using a crusher dust base, and the California Conservation Corps, (CCC), is proposing to construct approximately 200 feet of boardwalk through an area where the drainage and slopes require a boardwalk. The Federal Government owns this property, has prepared all necessary NEPA documents for this project, and plans to operate and maintain the proposed facility for perpetuity for the benefit of the public. The CCC is also working cooperatively with the Forest Service in removal of exotic 'Tree of Heaven' and replacing them with native plant materials.

FRED BELL
Forest Recreation Officer



Caring for the Land and Serving People

Printed on Recycled Paper



I - 0 1 4 3 7 4

I-014374

I - 0 1 4 3 7 5

SENT BY: MEXICO N.F.

4-13-99

9:15AM

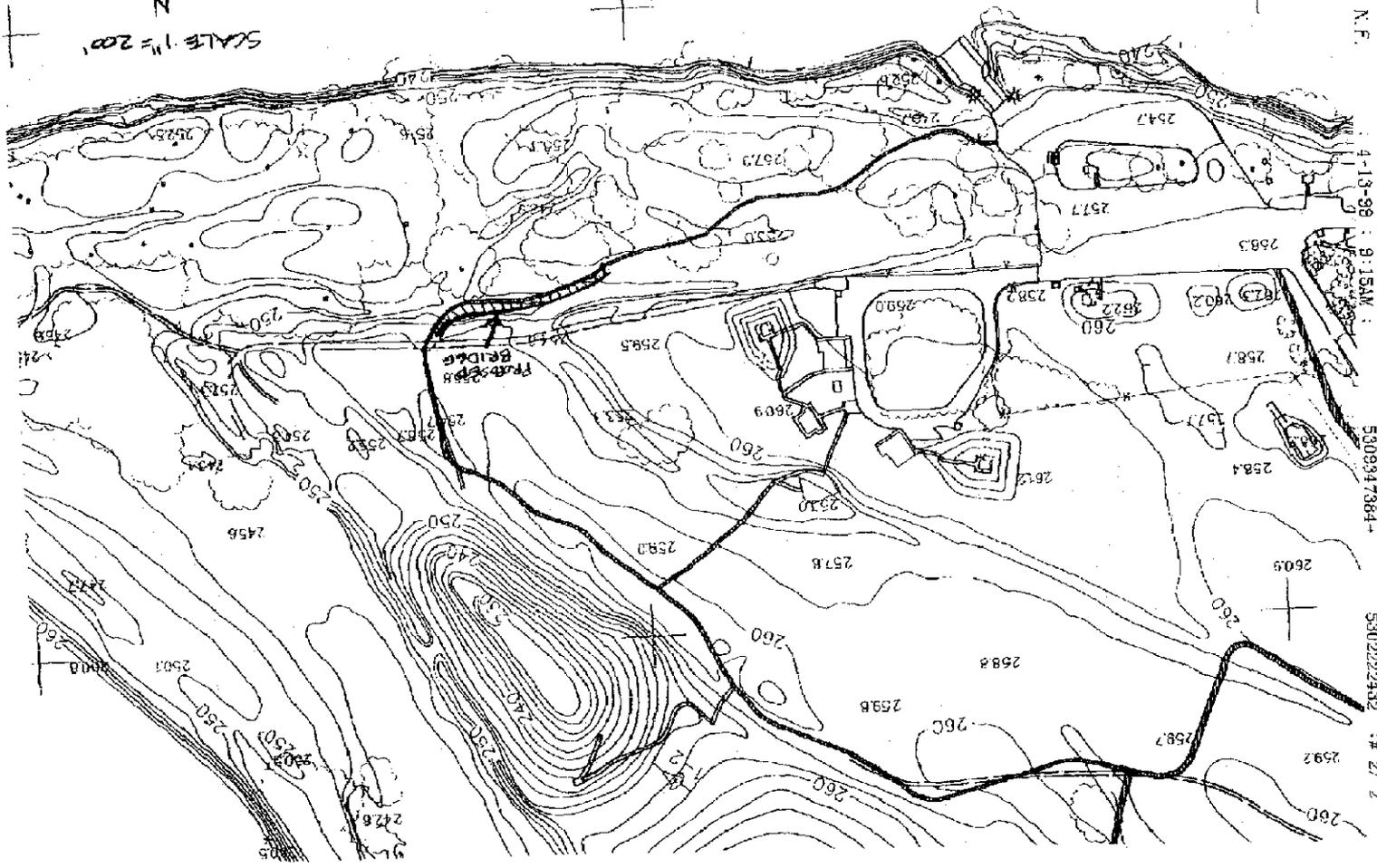
5309347384

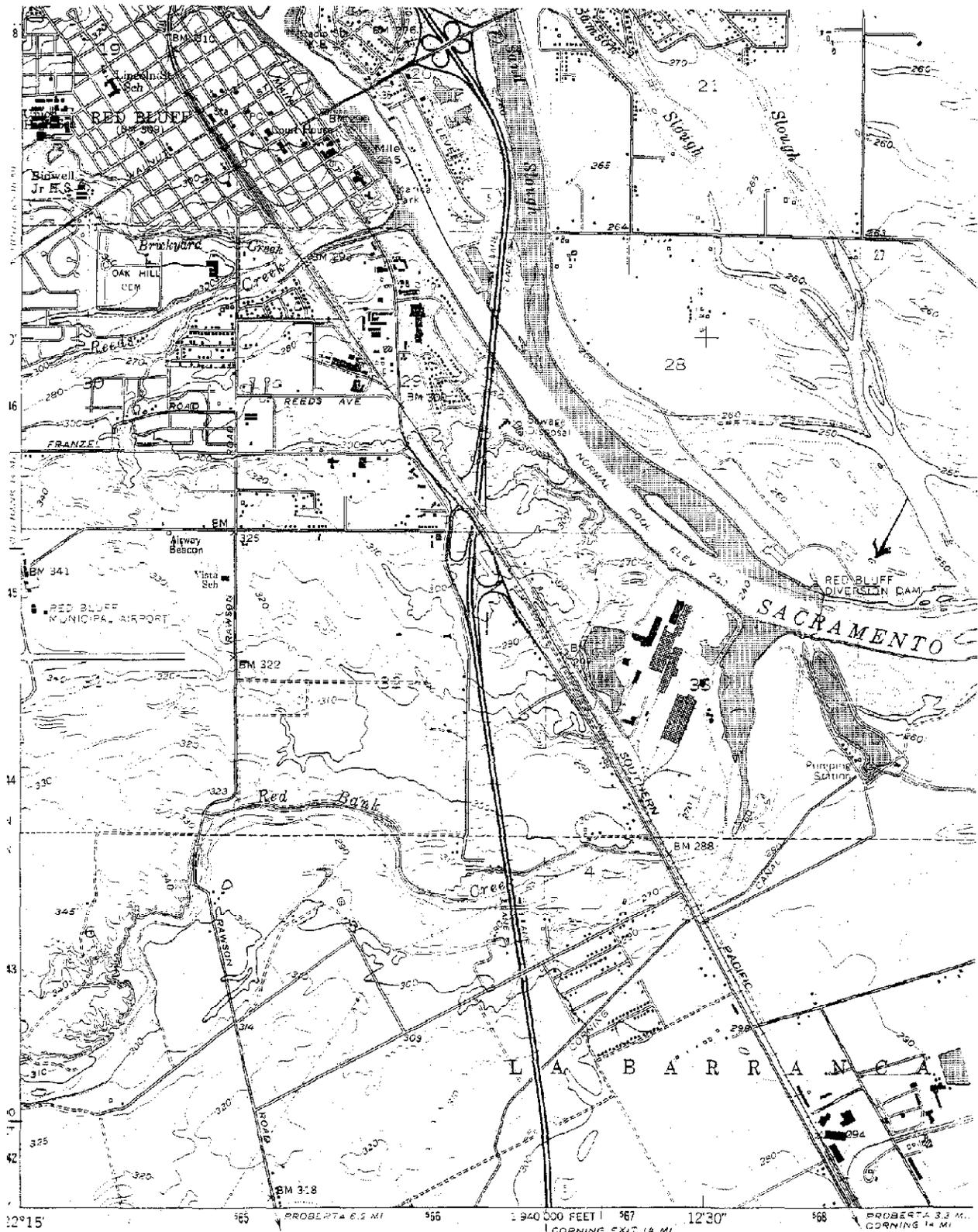
530222432

2 / 2

SACRAMENTO RIVER

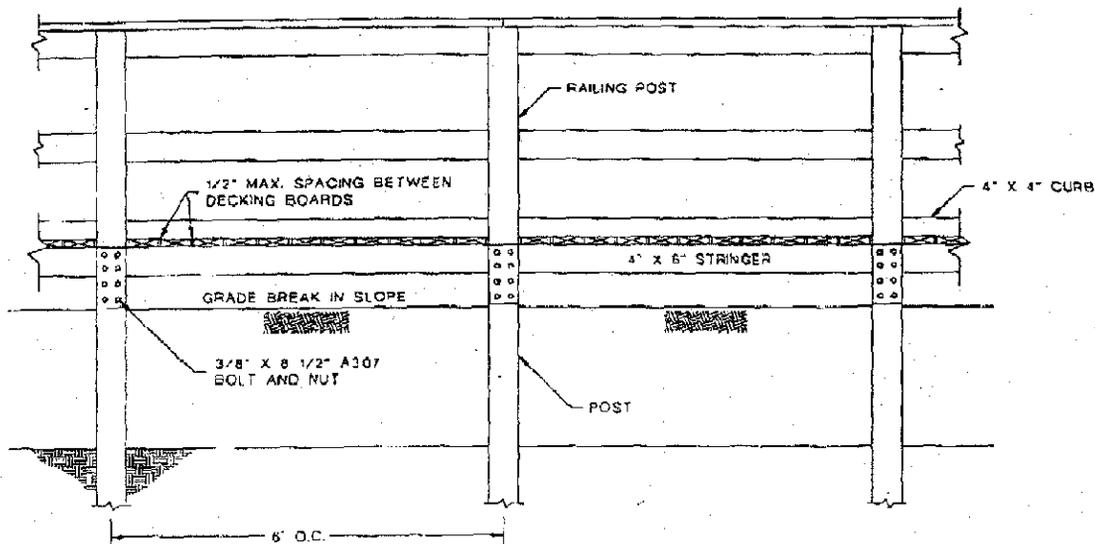
SCALE 1" = 200'



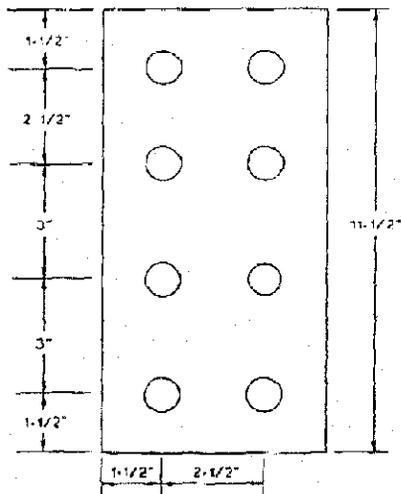


12°15' 365 PROBERTA 6.5 MI 565 1940 000 FEET 567 12'30" 568 PROBERTA 3.3 MI CORNING 14 MI

I - 0 1 4 3 7 6



SIDE VIEW

FRONT POSTS AT JOINTS
& INTERMEDIATE POSTS**GENERAL NOTES FOR BOARDWALK**

1. POSTS, STRINGERS, CURB AND DECK SHALL BE DF/LARCH NO. 1 & BETTER, PRESSURE TREATED @ 0.5 LB/CF CCA.
2. 2" X 6" RAILINGS SHALL BE SELECT STRUCTURAL REDWOOD.
3. ALL VISIBLE SURFACES SHALL BE STAINED TO MATCH REDWOOD RAILS AND SEALED WITH A HIGH QUALITY WATERPROOF SEALER.

GENERAL NOTES FOR SPLICE PLATES

1. MAKE ALL SPLICE PLATES FROM 1/4" A36 MILD STEEL.
2. DRILL ALL HOLES AT 7/16" DIAMETER.
3. ALL PLATES AND FASTENERS SHALL BE PAINTED TO MATCH THE COLOR OF THE WOOD.
4. USE ONE SPLICE PLATE ON EACH BACK POST AND 2 PLATES ON EACH FRONT POST.

BASE BID

CALE: 1" = 1'
LOT SCALE: 1" = 2'

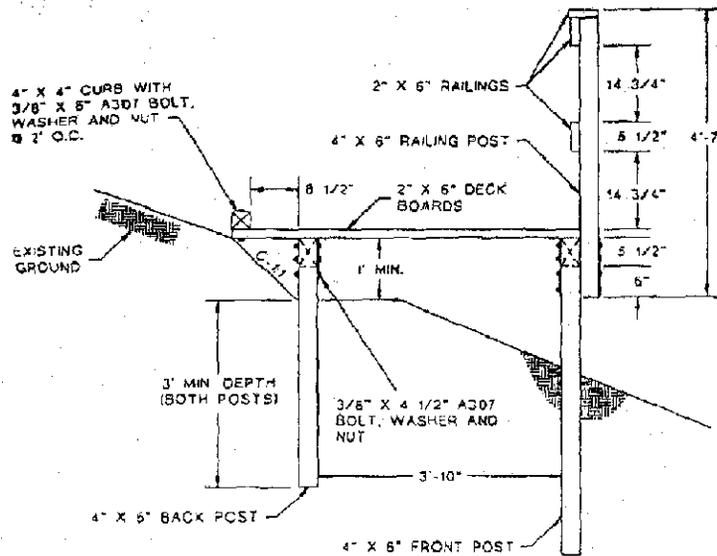
SHEET DESCRIPTION

LAKE RED BLUFF TRAILS
BOARDWALK AND RAILING TYPICAL SECTIONS

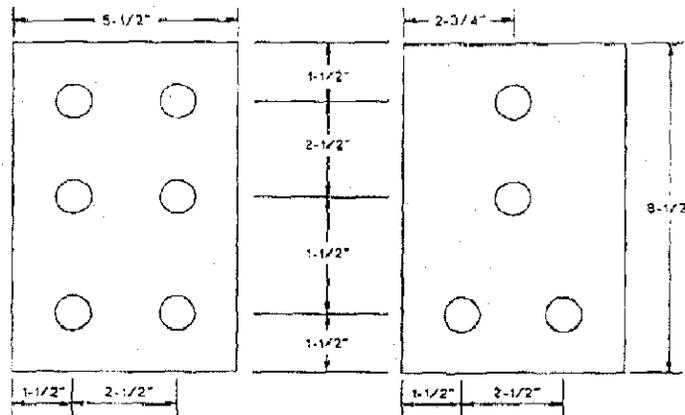
DATE: MAY 2, 1998

PLAN NUMBER: 08-98-2434-32

SHEET



END VIEW



**BACK POSTS AT
STRINGER JOINTS**

**BACK POSTS AT
INTERMEDIATE JOINTS**

TYPICAL SPLICE PLATES



MENDOCINO NATIONAL FOREST

DESIGNED BY: G. HODGSON
DRAWN BY: G. HODGSON
CHECKED BY: F. JOHNSON

ORIGINAL SCALE: 1/4" = 1'-0"