

**Meeting of the Central Valley Flood Protection Board  
March 22, 2013**

**Staff Report – Encroachment Permit**

**City of Red Bluff  
Boat Ramp, Tehama County**

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**1.0 – ITEM**

Consider approval of Permit No. 9856-1 (Attachment B)

**2.0 – APPLICANT**

City of Red Bluff

**3.0 – LOCATION**

The project is located on the right bank of the Sacramento River, approximately 0.4 miles downstream of the Antelope Blvd. bridge in Red Bluff (Sacramento River, Tehama County, see Attachment A)

**4.0 – DESCRIPTION**

Applicant proposes to repair and reconstruct an existing boat ramp at the Red Bluff River Park, which was previously authorized under Permit No. 9856 issued on December 6, 1974 (see Attachment C).

**5.0 – PROJECT ANALYSIS**

Construction of the new ramp became necessary to provide river access because the existing ramp became isolated from the Sacramento River due to the permanent opening of the diversion gates at the downstream Red Bluff Diversion Dam and the resulting receding of Lake Red Bluff. The project will include the construction of a new ramp (24-ft wide by 100-ft long); 24-feet wide and approximately 480-feet long access ramp; and a maneuver area of approximately 8,000 square feet, including placement of rock slope protection around the ramp to provide scour protection.

## **5.1 – Hydraulic Analysis**

The proposed ramp and access ramp will be flush with the existing ground. The hydraulic impacts of the proposed project are considered negligible therefore a hydraulic analysis was not required.

## **5.2 – Geotechnical Analysis**

The scope of work for this project does not require a geotechnical analysis.

## **6.0 – AGENCY COMMENTS AND ENDORSEMENTS**

The comments and endorsements associated with this project, from all pertinent agencies are shown below:

- The U.S. Army Corps of Engineers 208.10 comment letter has been received for this application. The USACE District Engineer has no comments or recommendations for the project because it does not affect a federally constructed project. The letter is attached to the permit as Exhibit A in reference to the project.
- Tehama County Flood Control and Water Conservation District supports the application as stated in their letter dated November 20, 2012. The letter is attached to the permit as Exhibit B in reference to the project.

## **7.0 – CEQA ANALYSIS**

Board staff has prepared the following California Environmental Quality Act (CEQA) determination:

The Board determined that the project is categorically exempt from CEQA under a Class 1 Categorical Exemption (CEQA Guidelines Section 15301) covering minor alteration to existing facilities and a Class 2 Categorical Exemption (CEQA Guidelines Section 15302) covering replacement or reconstruction of existing structures.

## **8.0 – SECTION 8610.5 CONSIDERATIONS**

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

*The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.*

- 2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

*The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.*

- 3. Effects of the decision on the entire State Plan of Flood Control:

The proposed boat ramp will have no adverse effect on facilities of the State Plan of Flood Control and is consistent with the Central Valley Flood Protection Plan.

- 4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

*There will be no effects to the proposed project from reasonable projected future events.*

**9.0 – STAFF RECOMMENDATION**

Staff recommends that the Board find the project exempt from CEQA, approve the permit, and direct staff to file a Notice of Exemption with the State Clearinghouse.

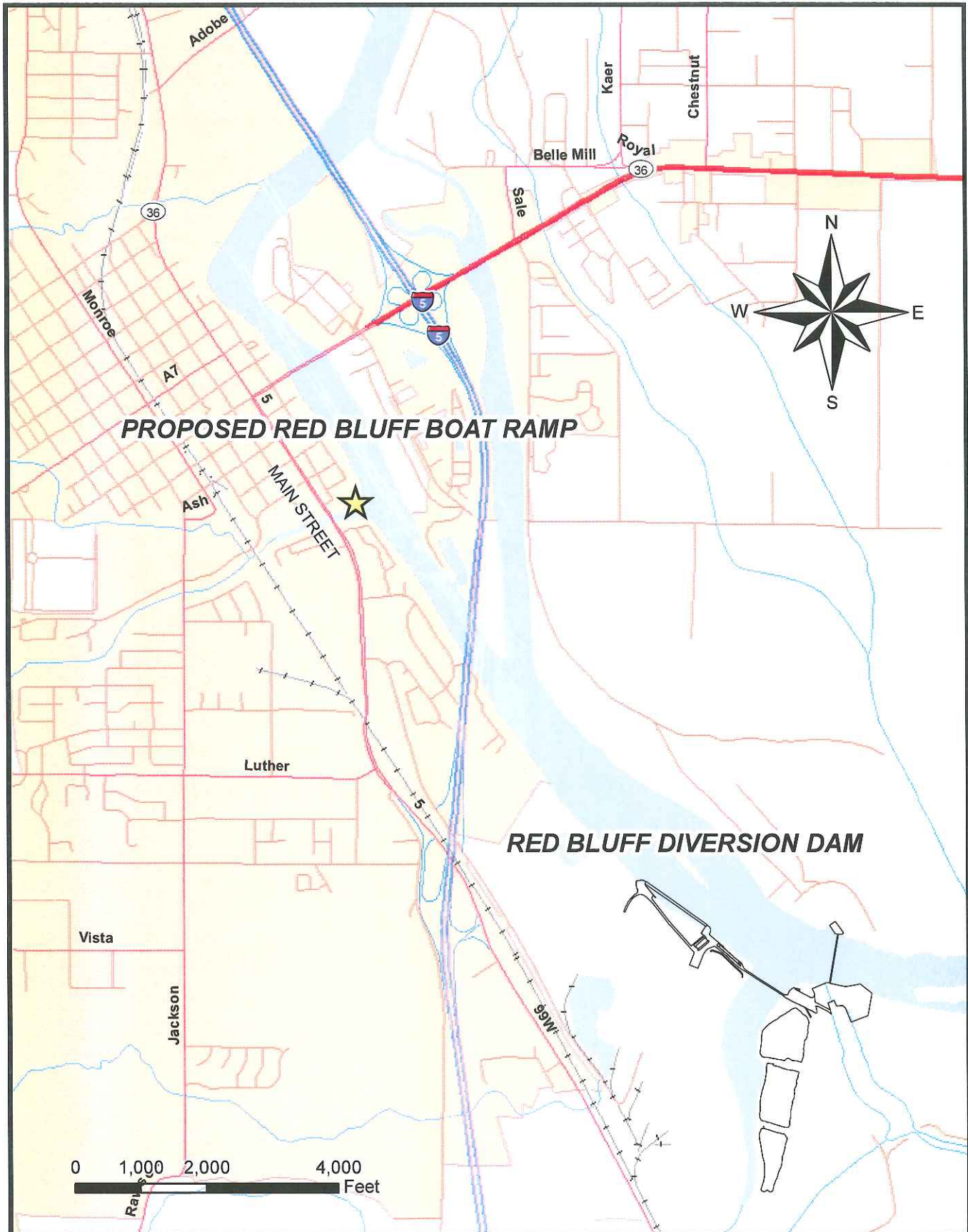
**10.0 – LIST OF ATTACHMENTS**

- A. Location Maps and Photos
- B. Draft Permit No. 9856-1
- C. Permit No. 9856 issued December 6, 1974
- D. Design Drawings

Design Review:	Angeles Caliso
Environmental Review:	James Herota, Andrea Mauro
Document Review:	Gary Lemon P.E., Len Marino P.E.

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# ATTACHMENT A



**Stoll Engineering**  
 800 Leisha Ln.  
 Redding, CA 96001  
 (530) 243-1760

## SITE LOCATION MAP

PROJECT NAME:  
RED BLUFF B.R.

PROJECT  
011113.00

DATE:  
3/23/2012

CLIENT:  
CITY OF RED BLUFF

DRAWN BY:  
D. ZAITZ

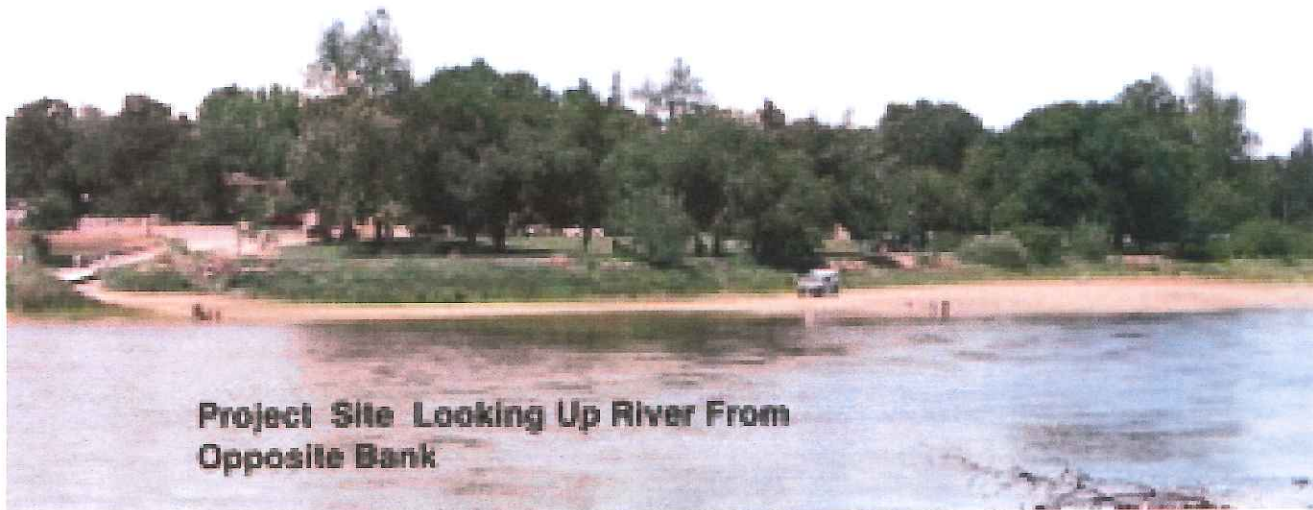
ITEM 8

SCALE:  
1 in = 2,000 feet

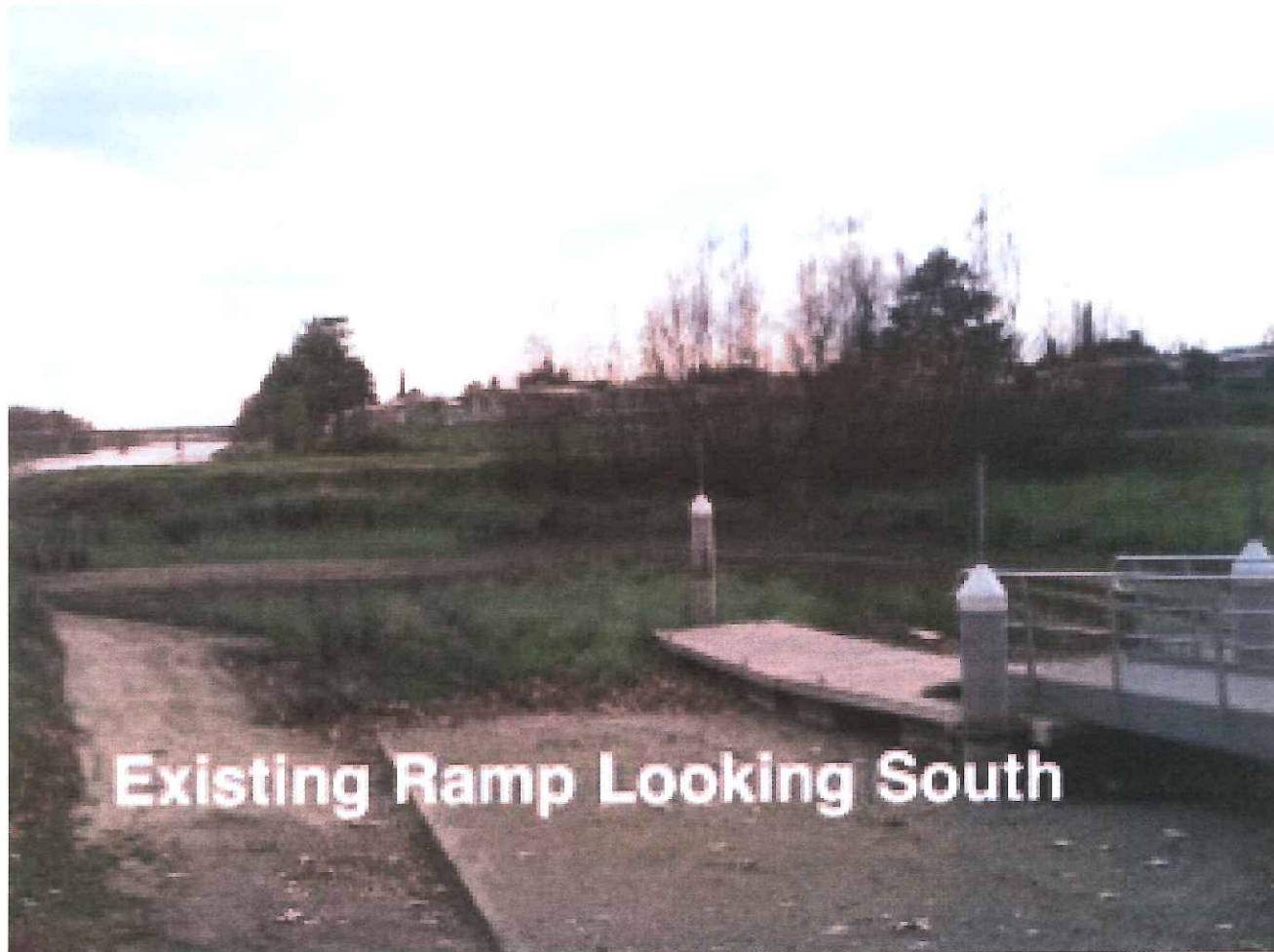
CHECKED BY:  
J. STOLL



Existing Ramp From Park



**Project Site Looking Up River From  
Opposite Bank**



Existing Ramp Looking South





Project Site - Looking Up River At Location of Proposed Ramps

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STATE OF CALIFORNIA  
THE RESOURCES AGENCY  
**THE CENTRAL VALLEY FLOOD PROTECTION BOARD**

**PERMIT NO. 9856-1 BD**

**This Permit is issued to:**

City of Red Bluff  
555 Washington Street  
Red Bluff, California 96080

To repair and reconstruct an existing boat ramp at the Red Bluff River Park. The project includes constructing a new ramp, a 24-foot wide access road approximately 480 feet long, 8,000 square foot maneuver area, and rock slope protection. The project is located on the right bank of the Sacramento River approximately 0.4 miles downstream of the Antelope Blvd. bridge in Red Bluff. (Section 20, T27N, R3W, MDB&M, Sacramento River, Tehama County).

**NOTE:** Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

**(SEAL)**

Dated: \_\_\_\_\_

\_\_\_\_\_  
Executive Officer

**GENERAL CONDITIONS:**

**ONE:** This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

**TWO:** Only work described in the subject application is authorized hereby.

**THREE:** This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

**FOUR:** The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

**FIVE:** Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

**SIX:** This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

**SEVEN:** It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

**EIGHT:** This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

**NINE:** The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

**TEN:** The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

**ELEVEN:** The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

**TWELVE:** Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

**SPECIAL CONDITIONS FOR PERMIT NO. 9856-1 BD**

**THIRTEEN:** All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

**FOURTEEN:** The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion

**FIFTEEN:** The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Central Valley Flood Protection Board's approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

**SIXTEEN:** The Central Valley Flood Protection Board and Department of Water Resources shall not be held liable for damages to the permitted encroachment(s) resulting from releases of water from reservoirs, flood fight, operation, maintenance, inspection, or emergency repair.

**SEVENTEEN:** No construction work of any kind shall be done during the flood season from November 1st to April 15th without prior approval of the Central Valley Flood Protection Board.

EIGHTEEN: The permittee shall contact the Department of Water Resources by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

NINETEEN: Stockpiled material, temporary buildings, or equipment shall not remain in the Floodway during the flood season from November 1st to April 15th.

TWENTY: The overflow area and project site shall be restored to at least the same condition that existed prior to commencement of work.

TWENTY-ONE: All debris generated by this project shall be disposed of outside the Floodway.

TWENTY-TWO: Debris that may accumulate on the permitted encroachment(s) and related facilities shall be cleared off and disposed of outside the Floodway after each period of high water.

TWENTY-THREE: The permittee shall maintain the permitted encroachment(s) in the manner required and as requested by the authorized representative of the Department of Water Resources or any other agency responsible for maintenance.

TWENTY-FOUR: In the event that bank erosion injurious to the adopted plan of flood control occurs at or adjacent to the permitted encroachment(s), the permittee shall repair the eroded area and propose measures, to be approved by the Central Valley Flood Protection Board, to prevent further erosion.

TWENTY-FIVE: The permitted encroachment(s) shall not interfere with operation and maintenance of the flood control project. If the permitted encroachment(s) are determined by any agency responsible for operation or maintenance of the flood control project to interfere, the permittee shall be required, at permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Central Valley Flood Protection Board or Department of Water Resources. If the permittee does not comply, the Central Valley Flood Protection Board may modify or remove the encroachment(s) at the permittee's expense.

TWENTY-SIX: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

TWENTY-SEVEN: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Central Valley Flood Protection Board and Department of Water Resources, at the permittee's or successor's cost and expense.

TWENTY-EIGHT: The letter from the Department of the Army dated February 13, 2013 is attached to this permit as Exhibit A in reference to this project.

TWENTY-NINE: Upon completion of the project, the permittee shall submit As-Built Drawings to:

## **ATTACHMENT B**

Department of Water Resources, Flood Project Inspection Section, 3310 El Camino Avenue, Suite 256, Sacramento, California 95821.



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U.S. Army Engineer District, Sacramento  
Corps of Engineers  
1325 J Street  
Sacramento, California 95814-2922

**ATTACHMENT B**  
**EXHIBIT A**

Flood Protection and Navigation Section (9856-1)

**FEB 13 2013**

Mr. Jay Punia, Executive Officer  
Central Valley Flood Protection Board  
3310 El Camino Avenue, Room 151  
Sacramento, California 95821

Dear Mr. Punia:

We have reviewed a permit application by the City of Red Bluff, California (application number 9856-1). This project includes repairing and reconstructing an existing boat ramp at the Red Bluff River Park which includes constructing a new ramp, a 24 foot wide access ramp approximately 480 feet long, an 8,000 square foot maneuver area, and placing rock slope protection. The project is located on the right bank of the Sacramento River approximately 0.4 miles downstream of the Antelope Boulevard bridge in Red Bluff, at 40.1727°N 122.2290°W NAD83, Tehama County, California.

The District Engineer has no comments or recommendations regarding flood control because the proposed work does not affect a federally constructed project.

A Section 10 and/or Section 404 permit application (SPK-2012-00283) is in process for this work.

A copy of this letter is being furnished to Mr. Don Rasmussen, Chief, Flood Project Integrity and Inspection Branch, 3310 El Camino Avenue, Suite LL30, Sacramento, CA 95821.

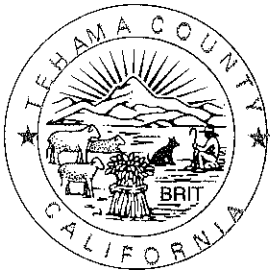
Sincerely,

A handwritten signature in black ink, appearing to read "Meegan G. Nagy".

Meegan G. Nagy, P.E.  
Chief, Flood Protection and Navigation Section

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**COUNTY OF TEHAMA  
DEPARTMENT OF PUBLIC WORKS**

9380 SAN BENITO AVENUE  
GERBER, CA 96035-9701  
BUS: (530) 385-1462  
FAX: (530) 385-1189

**ATTACHMENT B  
EXHIBIT B**

ROAD COMMISSIONER  
SURVEYOR  
ENGINEER  
PUBLIC TRANSIT  
FLOOD CONTROL AND  
WATER CONSERVATION DISTRICT  
SANITATION DISTRICT No. 1

November 20, 2012

Mitra Emami, Chief  
St. of Calif. Natural Resources Agency  
Central Valley Flood Protection Board  
Floodway Protection Section  
3310 El Camino Ave., Rm. 151  
Sacramento, CA 95821

F-12-210

Re: Letter of Support for the Red Bluff River Park Boat Ramp Improvement Project, T2012106, located in Tehama County

To whom it may concern:

The City of Red Bluff's proposal to construct Boat Ramp Improvements at the Red Bluff River Park, located in Tehama County, is supported by the Tehama County Flood Control and Water Conservation District. The project addresses the need to restore public boat launching access to the Sacramento River at the City's historic River Park location. The existing boat ramp facility was rendered unusable when the river channel shifted 300 feet to the east upon the loss of the Red Bluff Diversion Dam facility and subsequently Lake Red Bluff, leaving a dry grassy land area between the existing River Park Boat Launch Facility and the new river location. Boating access at this river location has served the residents of Tehama County and its visitors for a significant number of years, meeting both a critical need for public safety access to the river as well as the needs of the Department of Water Resources and recreational users. Additionally, this site is the only public boat launch facility on the Sacramento River north of the Diversion Dam for more than 12 miles, the site of the county's Bend Bridge launching facility.

Therefore, the Tehama County Flood Control and Water Conservation District offers its support of the City of Red Bluff's proposed Red Bluff River Park Boat Ramp Improvement Project and permanent access to the Sacramento River at the long standing site of the City of Red Bluff River Park boat launch facility in Red Bluff, California.

Sincerely

Chairman of the Board  
Tehama County Flood Control &  
Water Conservation District

Cc: City of Red Bluff

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ORDER OF THE RECLAMATION BOARD **ATTACHMENT C**  
3005.70.400

Application No. 9856

The Matter of  
**City of Red Bluff**  
P. O. Box 400  
Red Bluff, CA 96080

For approval of retention of existing encroachments:

**to retain a riprapped fill out into the chan-  
nel, a concrete boat ramp and floating boat  
docking facilities on the left bank of Reeds  
Creek at the junction with the Sacramento  
River, south of Red Bluff. Section 20,  
T. 27 N., R. 3 W., M.D.B.&M., Tehama County.  
(Tehama County Flood Control District)**

having been set for hearing on the 6th day of December, 1974, and having been heard on said day; NOW, THEREFORE, IT IS ORDERED, that said existing encroachments are hereby approved and permission to retain said encroachments is hereby granted, subject to all the terms, conditions and restrictions attached hereto, which are incorporated herein by reference and made a part hereof.

**GENERAL CONDITIONS**

ONE: This order is issued under the authority of Sections 8700 - 8723 of the State Water Code;

TWO: This order is to be strictly construed and no work other than that specifically described herein is authorized hereby;

THREE: This approval does not carry with it permission to construct any works on lands owned by the Sacramento and San Joaquin Drainage District, nor on any other lands whatsoever;

FOUR: This order shall remain in effect until revoked. This order is revokable on 15 days' notice in the event that any conditions contained herein are not complied with;

FIVE: This order is granted with the understanding that this action is not to be considered as establishing any precedent with respect to any other application received by The Reclamation Board;

SIX: The permittee agrees by the acceptance of this order to exercise reasonable care to operate and maintain properly any work authorized herein and agrees to conform to standards of operation and maintenance prescribed by the State of California;

SEVEN: The permittee to whom this order is issued shall, whenever the same is required by law, secure the written order or consent to any work hereunder from any other public agency having jurisdiction;

EIGHT: The permittee is responsible for all liability for personal injury or property damage which may arise out of failure on the permittee's part to perform his obligations under this order. In the event any claim of liability is made against the State of California or any department thereof, the United States of America, a local district or other maintaining agency and the officers, agents or employees thereof, permittee shall defend, indemnify and hold them and each of them harmless from such claim.

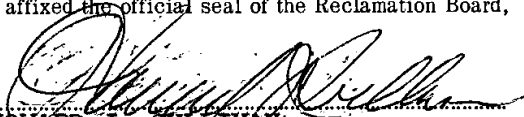
**SPECIAL CONDITIONS (See reverse side.)**

STATE OF CALIFORNIA  
COUNTY OF SACRAMENTO ss.  
Office of the Reclamation Board

I HOWARD J. SULLIVAN do hereby certify that the above and foregoing is a true and correct copy of an Order made by said Board at the above indicated meeting.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the Reclamation Board, this 12th day of December, 1974.

(SEAL)

  
**HOWARD J. SULLIVAN**  
Assistant Secretary  
Reclamation Board

SPECIAL CONDITIONS:

NINE: That the proposed boating facilities and walkways shall be properly anchored at all times to prevent flotation into the floodway in the event of high water.

TEN: That the top of the driven timber pile shall be a minimum distance of two (2) feet above design flood plane elevation.

ELEVEN: That no further construction shall be done in the area without the prior approval of The Reclamation Board.



DEPARTMENT OF THE ARMY  
SACRAMENTO DISTRICT, CORPS OF ENGINEERS  
650 CAPITOL MALL  
SACRAMENTO, CALIFORNIA 95814

REPLY TO SPKCO-O #9856  
ATTENTION OF

16 October 1974

The Reclamation Board  
State of California  
1416 - 9th Street, Room 335  
Sacramento, California 95814

Gentlemen:

Reference is made to your letter dated 18 September 1974, inclosing copy of application submitted by the City of Red Bluff (Reclamation Board No. 9856), for approval of plans. These plans cover the construction of a jetty concrete boat ramp and boat docks within the flowage area of Reeds Creek and Sacramento River. The location of this proposed work is southeast of the town of Red Bluff in Section 20, T. 27N., R. 3W, M.D.B.&M., County of Tehama.

The District Engineer has no objection to approval of this application by your Board from a flood control standpoint.

Sincerely yours,

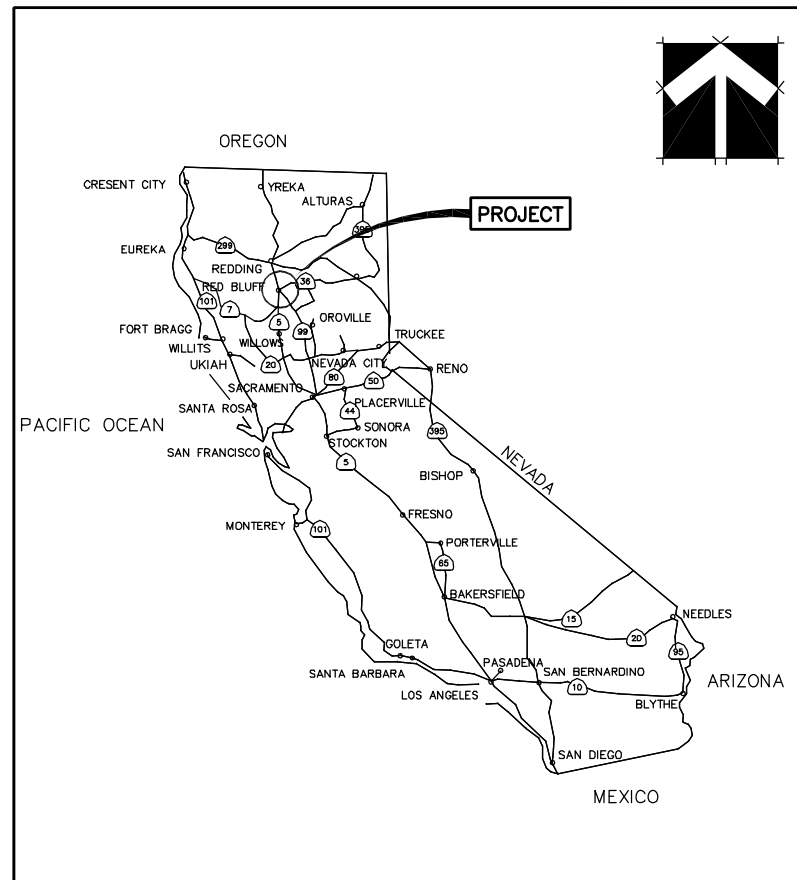
E. C. McKINSEY  
Chief, Construction-Operations  
Division

Copy furnished:  
DWR, ATTN: John Wright

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## CITY OF RED BLUFF

### PROJECT PLANS FOR THE CONSTRUCTION OF RED BLUFF BOATING FACILITY IMPROVEMENT PROJECT



**PROJECT LOCATION**  
NO SCALE

SHEET INDEX	
SHEET NO.	SHEET
T-1	TITLE SHEET
C-1	IMPROVEMENT PROJECT
C-2	PROFILES
C-3	DETAILS
C-4	DETAILS
C-5	DETAILS
C-6	DETAILS

#### LEGEND

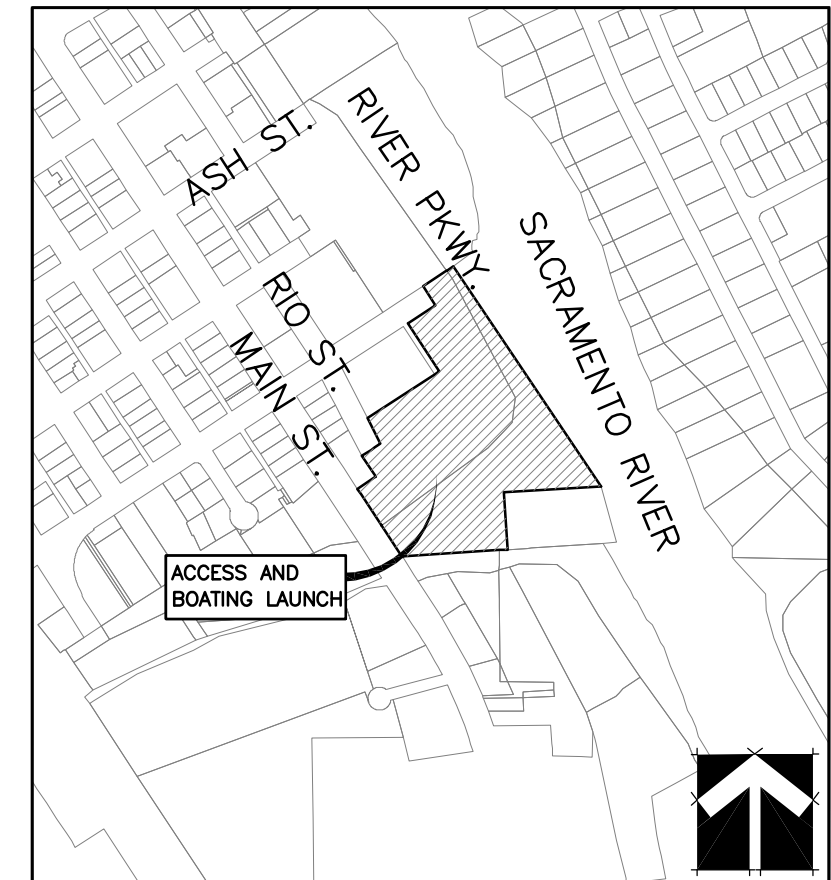
- 2800— CONTOUR LINE (EXISTING)
- - - CENTER LINE
- 3  
C-4  
3 - DETAIL/SECTION NUMBER  
C-4 - SHEET NUMBER
- PT 1  
▲ SURVEY POINT
- +256.6 EXISTING ELEVATION
- 256.6 FINISH GRADE ELEVATION

#### ABBREVIATIONS

- AGG. AGGREGATE
- C-C CENTER TO CENTER
- DESC. DESCRIPTION
- N.T.S. NOT TO SCALE
- PVI POINT OF VERTICAL INTERSECTION
- RSP ROCK SLOPE PROTECTION
- STA STATION
- VC VERTICAL CURVE
- W/ WITH

#### GENERAL NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, DATED 2009, (GREENBOOK) THE CITY OF RED BLUFF CONSTRUCTION STANDARDS, DATED 2007, AND THE CONTRACT SPECIFICATIONS AS THEY PERTAIN TO THE WORK DEPICTED HEREIN.
2. ALL UTILITIES SHOWN ARE STRICTLY FOR THE CONVENIENCE OF THE CONTRACTOR. UTILITY LOCATIONS ARE ONLY APPROXIMATE AND THE CONTRACTOR IS ADVISED TO INVESTIGATE EACH UTILITY SHOWN AS WELL AS BE AWARE OTHER UTILITIES NOT SHOWN MAY EXIST. SEE NOTICE AT LOWER LEFT.
3. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK, AND TO PROVIDE FOR THE PROPER AND CONTINUOUS SAFE ROUTING OF VEHICLE AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO WORKING HOURS. THE USE OF FLAGGERS, BARRICADES AND CONSTRUCTION SIGNING SHALL COMPLY WITH CHAPTER 5 OF THE CALTRANS MANUAL OF TRAFFIC CONTROLS CURRENT EDITION.
4. CARE SHALL BE TAKEN TO PROTECT EXISTING PLANTS, SHRUBS, TREES, LAWN, LANDSCAPE AREAS AND IRRIGATION SYSTEMS. ANY ITEMS REMOVED OR DAMAGED SHALL BE REPLACED. ALL ITEMS WHICH REQUIRE REMOVAL OR ARE DAMAGED BY THE CONTRACTOR'S OPERATION SHALL BE REPLACED TO ORIGINAL CONDITION AND TO THE APPROVAL OF THE ENGINEER.



**VICINITY MAP**  
NO SCALE

APPROVED BY:

CITY ENGINEER

DATE



**Stoll  
Engineering**

800 Leisha Lane  
Redding, California 96001  
(530) 243-1760  
FAX (530) 243-1503

DSGN	J. STOLL
DR	D. ZAITZ
CHK	
APVD	

NO.	DATE	REVISION	BY	APVD

VERIFY SCALE BAR IS 1/2  
INCH ON ORIGINAL  
DRAWING.  
0 0.5"  
IF NOT 1/2" ON THIS  
SHEET, ADJUST  
SCALES ACCORDINGLY.

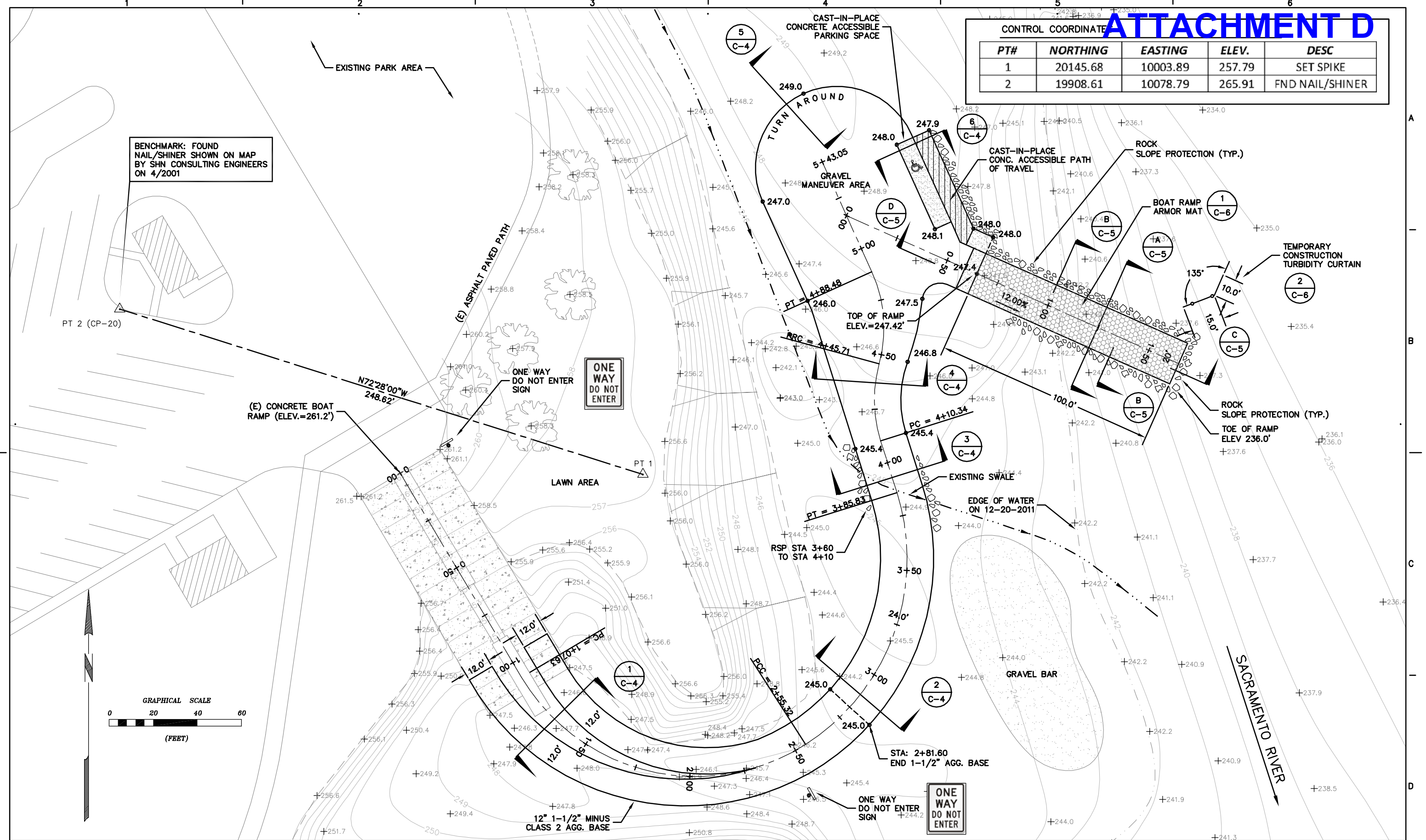
CLIENT:  
**CITY OF RED BLUFF**  
555 WASHINGTON ST.  
RED BLUFF, CA 96080

**RED BLUFF BOATING FACILITY  
IMPROVEMENT PROJECT**  
TITLE SHEET

SHEET	T-1
DWG NO.	
DATE	2/6/13
PROJ NO.	

# ATTACHMENT D

CONTROL COORDINATE				
PT#	NORTHING	EASTING	ELEV.	DESC
1	20145.68	10003.89	257.79	SET SPIKE
2	19908.61	10078.79	265.91	FND NAIL/SHINER



Stoll  
Engineering

800 Leisha Lane  
Redding, California 96001  
(530) 243-1760  
FAX (530) 243-1503

NO.	DATE	REVISION	BY	APVD

VERIFY SCALE BAR IS 1/2  
INCH ON ORIGINAL  
DRAWING.  
0 0.5'  
IF NOT 1/2" ON THIS  
SHEET, ADJUST  
SCALES ACCORDINGLY.

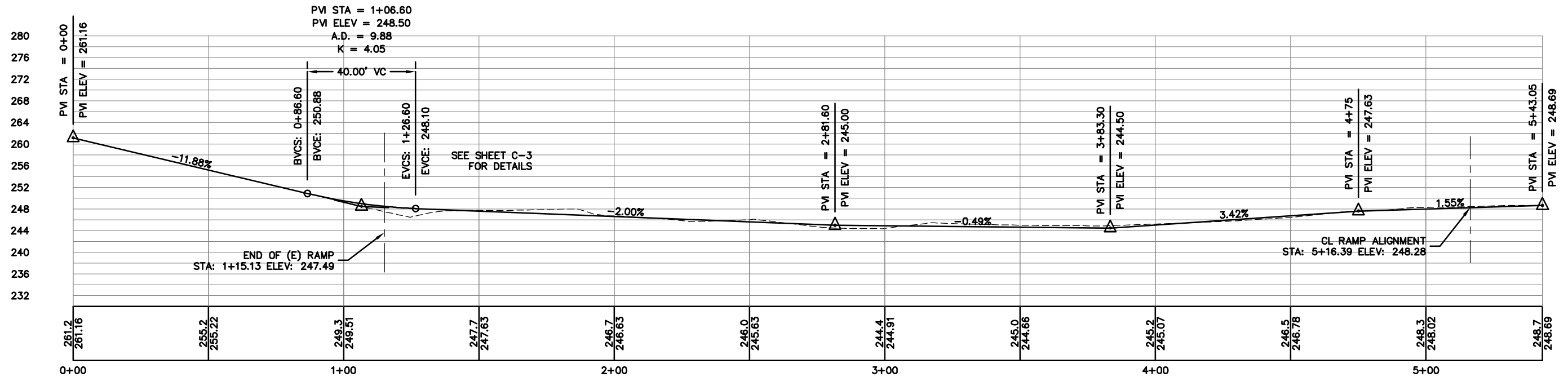
CLIENT:  
CITY OF RED BLUFF  
555 WASHINGTON ST.  
RED BLUFF, CA 96080

RED BLUFF BOATING FACILITY  
IMPROVEMENT PROJECT

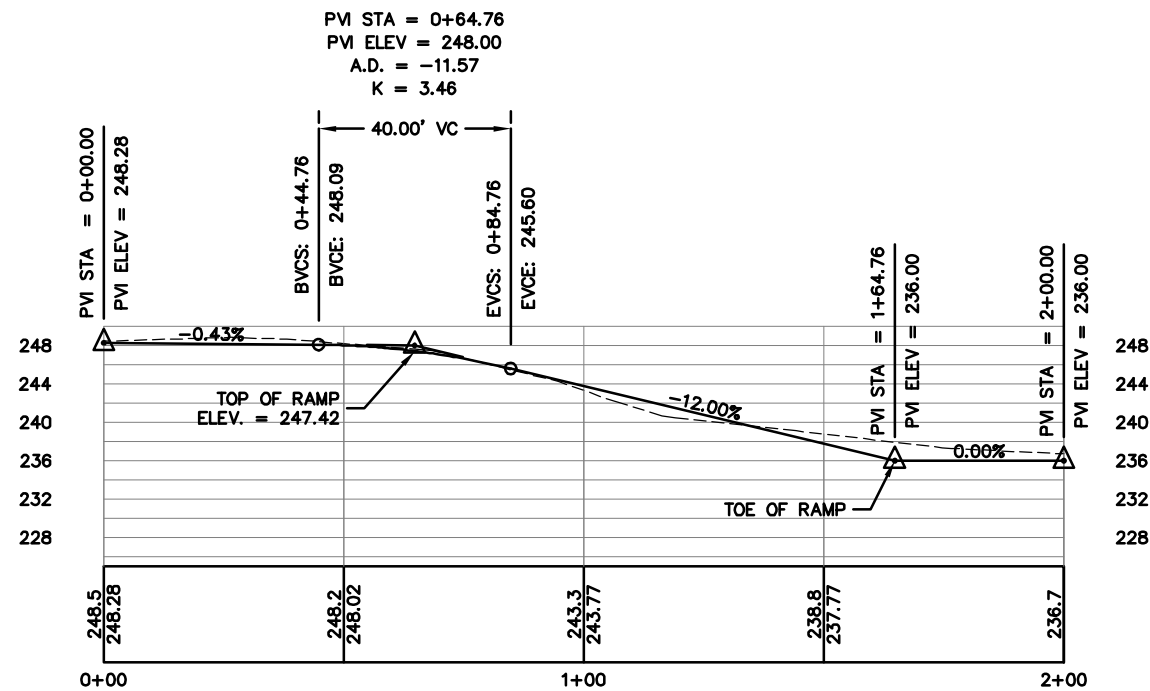
SHEET C-1
DWG NO.
DATE 2-6-13
PROJ. NO.



# ATTACHMENT D



RAMP ACCESS ROAD PROFILE  
SCALE: 1"=20' H, 1"=10'V



RAMP PROFILE  
SCALE: 1"=20' H, 1"=10'V

Stoll  
Engineering

800 Leisha Lane  
Redding, California 96001  
(530) 243-1760  
FAX (530) 243-1503

DSGN J. STOLL  
DR D. ZAITZ  
CHK  
APVD

NO.	DATE	REVISION	BY	APVD

VERIFY SCALE BAR IS 1/2 INCH ON ORIGINAL DRAWING.  
0 0.5'  
IF NOT 1/2" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

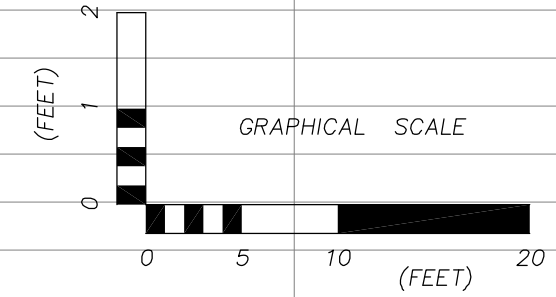
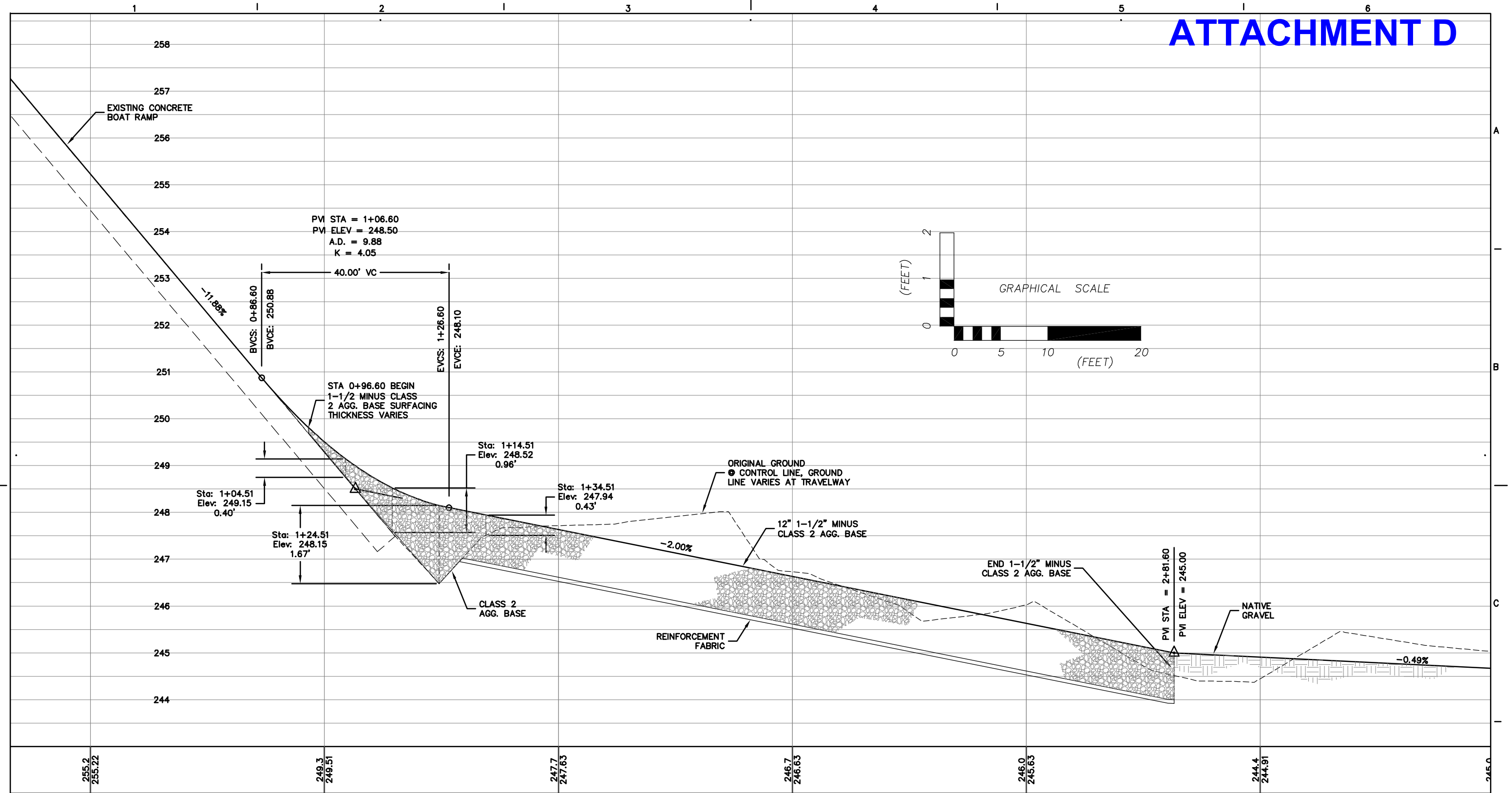
CLIENT:  
CITY OF RED BLUFF  
555 WASHINGTON ST.  
RED BLUFF, CA 96080

RED BLUFF BOATING FACILITY  
PROFILES

SHEET C-2  
DWG NO.  
DATE 2-6-13  
PROJ NO.

P:\01113.00\_stoll\_red bluff boat ramp\profile\_phase\dwg D.B.Z. 2/6/2013

# ATTACHMENT D



1  
-

EXISTING RAMP MODIFICATION

N.T.S.

Stoll  
Engineering

800 Leisha Lane  
Redding, California 96001  
(530) 243-1760  
FAX (530) 243-1503

DSGN	J. STOLL
DR	D. ZAITZ
CHK	
APVD	

NO.	DATE	REVISION	BY	APVD

VERIFY SCALE BAR IS 1/2  
INCH ON ORIGINAL  
DRAWING.  
0 0.5"  
IF NOT 1/2" ON THIS  
SHEET, ADJUST  
SCALES ACCORDINGLY.

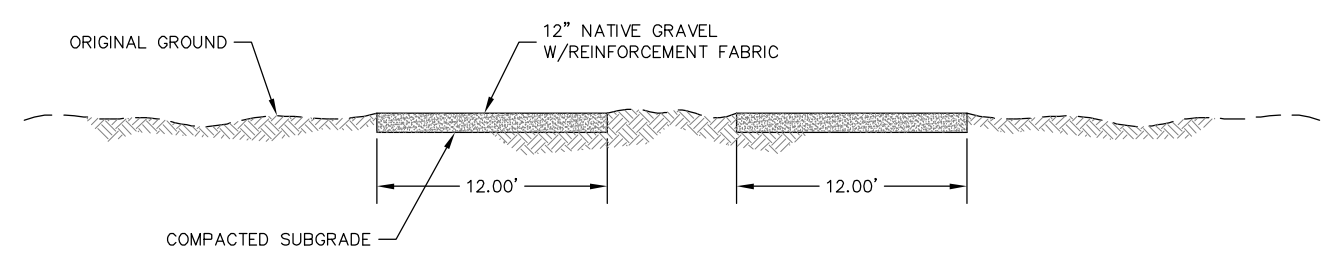
CLIENT:  
CITY OF RED BLUFF  
555 WASHINGTON ST.  
RED BLUFF, CA 96080

RED BLUFF BOATING FACILITY  
DETAILS

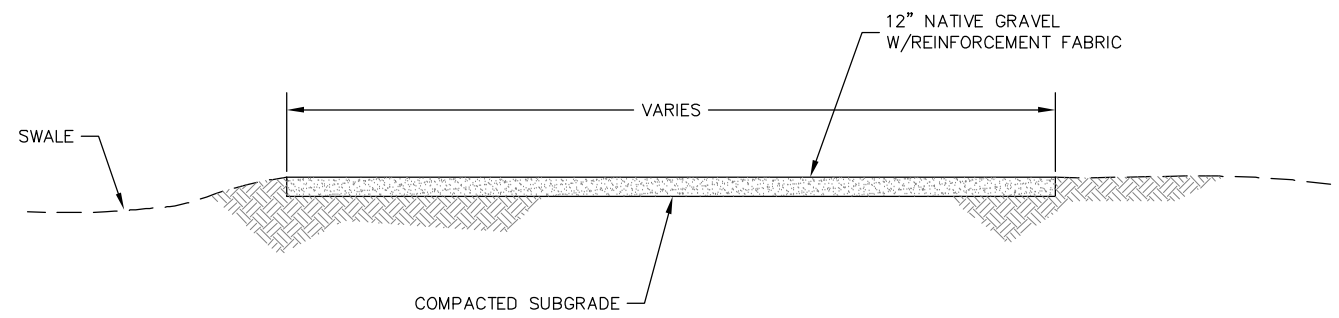
SHEET	C-3
DWG NO.	
DATE	2-6-13
PROJ NO.	

P:\01113.00\_stoll\_red bluff boat ramp\details.dwg DBZ 2/6/2013

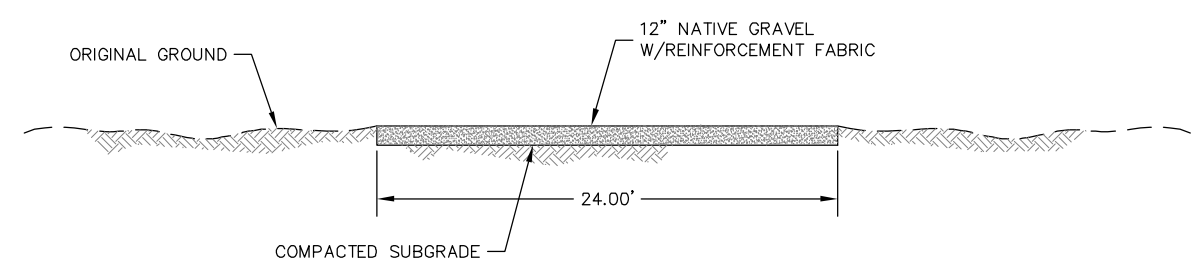
# ATTACHMENT D



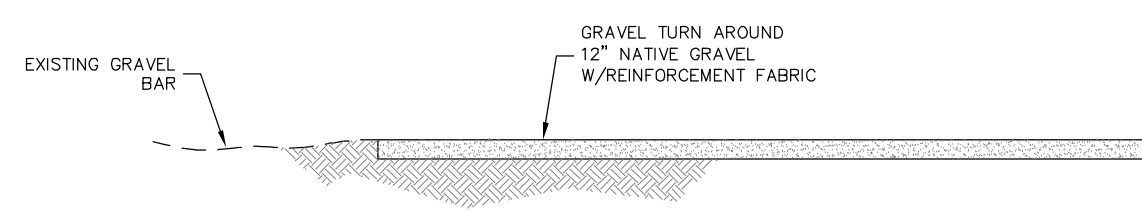
1  
-  
ACCESS ROAD  
N.T.S.



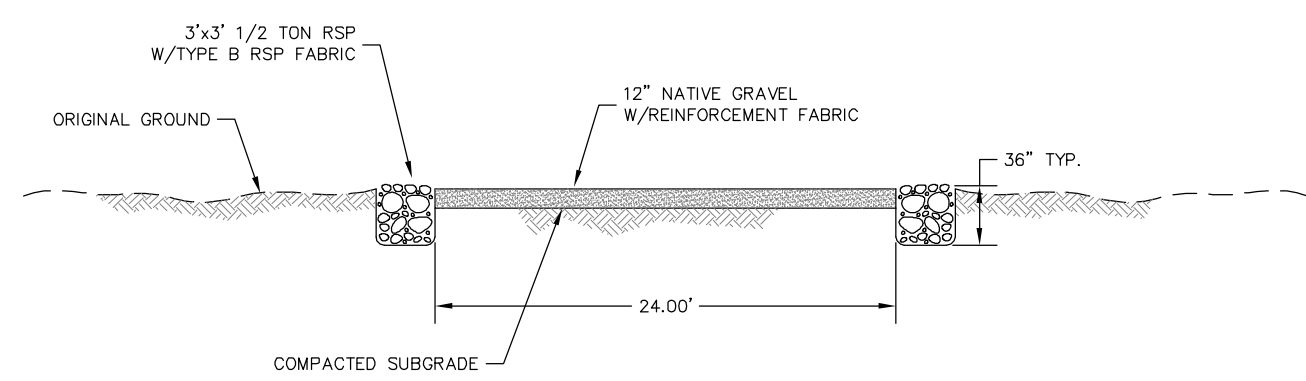
4  
-  
ACCESS RD. TO MANEUVER AREA TRANSITION  
± STA 4+25 - 4+75 (50')  
N.T.S.



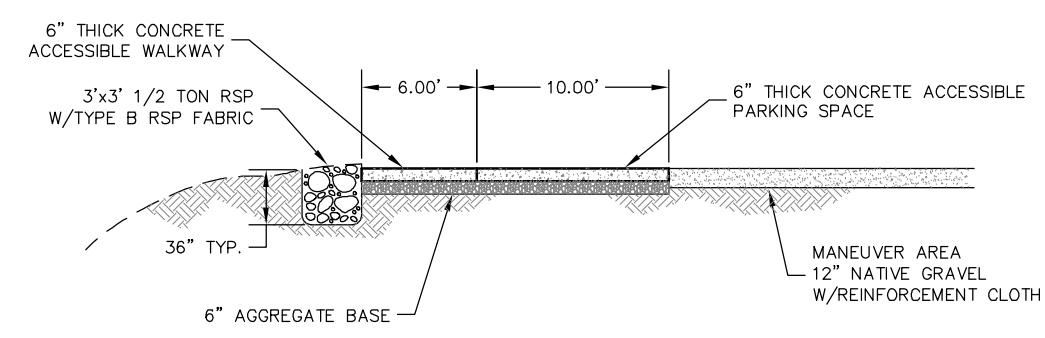
2  
-  
ACCESS ROAD  
N.T.S.



5  
-  
TURN AROUND EDGE TREATMENT  
N.T.S.



3  
-  
SWALE CROSSING ± STA 3+60 - 4+10 (50')  
N.T.S.



6  
-  
ACCESS PARKING AND ACCESS PATH  
N.T.S.

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NO.	DATE	REVISION	BY	APVD

VERIFY SCALE BAR IS 1/2  
INCH ON ORIGINAL  
DRAWING.  
0 0.5'  
IF NOT 1/2" ON THIS  
SHEET, ADJUST  
SCALES ACCORDINGLY.

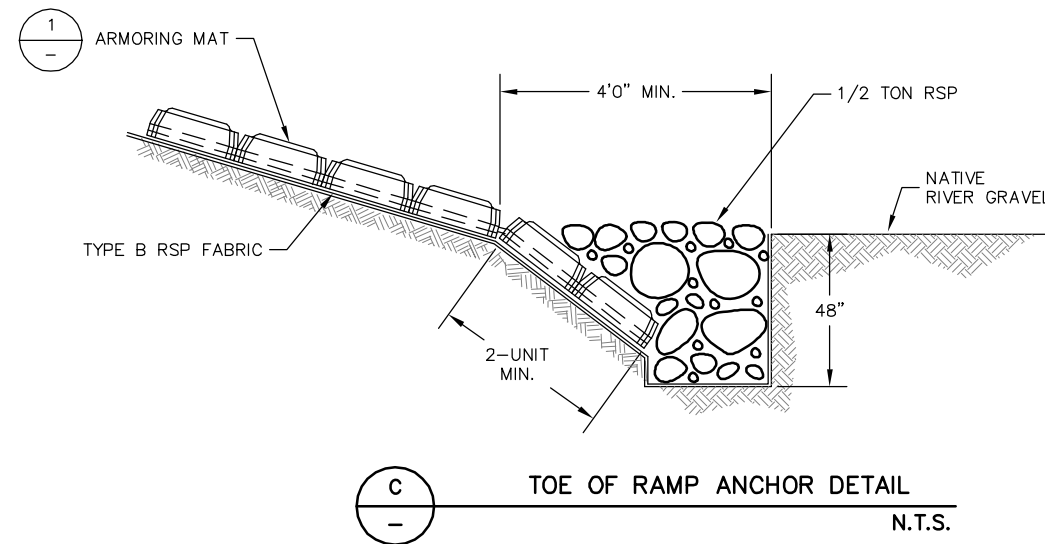
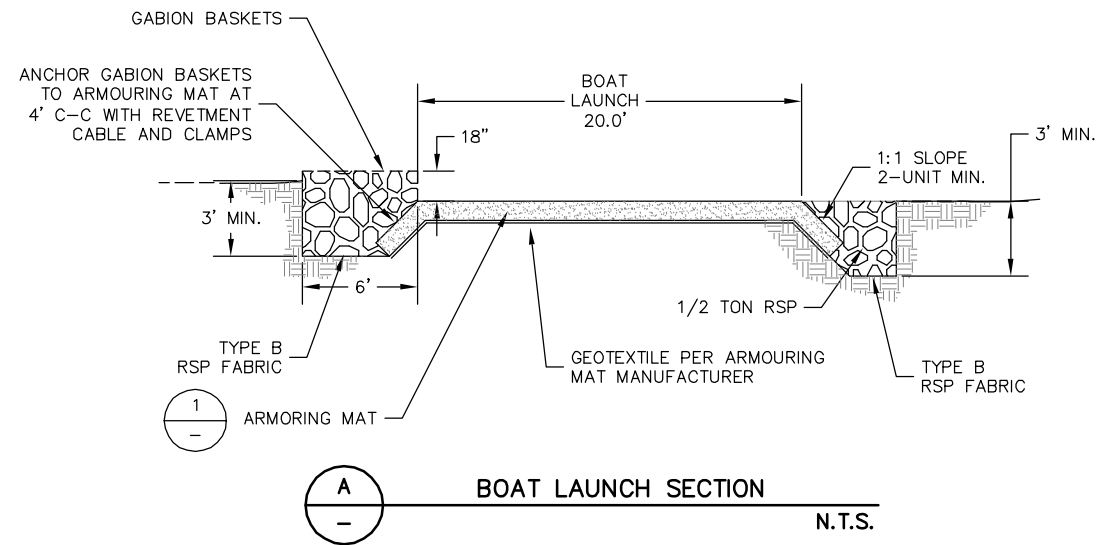
CLIENT:  
CITY OF RED BLUFF  
555 WASHINGTON ST.  
RED BLUFF, CA 96080

RED BLUFF BOATING FACILITY  
DETAILS

SHEET	C-4
DWG NO.	
DATE	2-6-13
PROJ NO.	

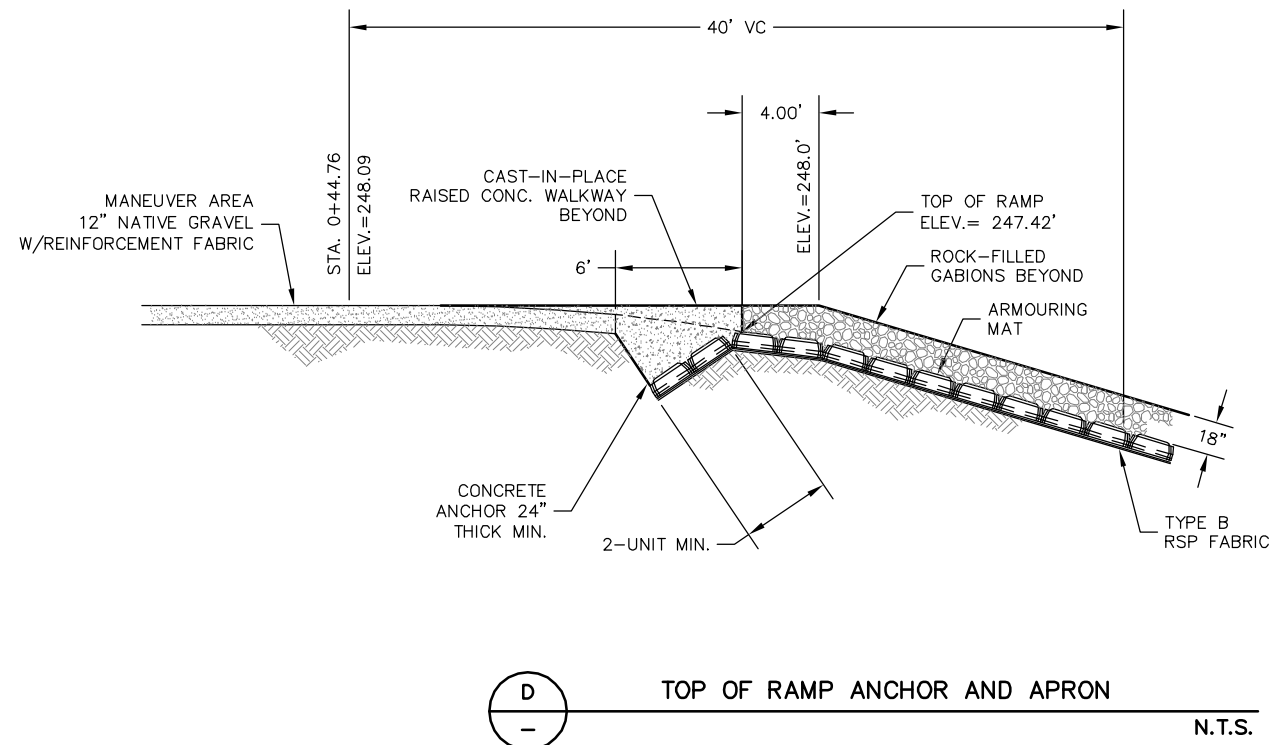
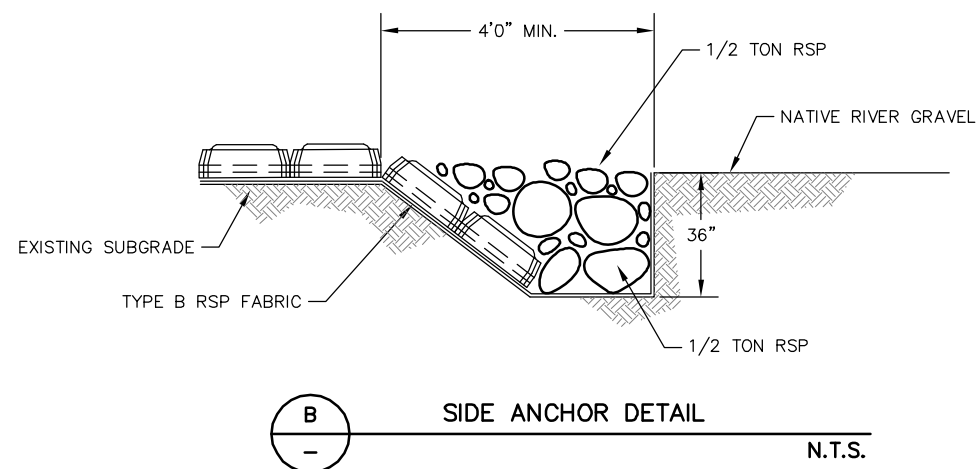
P:\01113.00\_stoll\_red bluff boat ramp\details.dwg D.B.Z. 2/6/2013

# ATTACHMENT D



NOTE:

1. EXCAVATE AND BACKFILL SUBGRADE MATERIAL TO CONFORM TO THE LINES AND GRADES SHOWN. EXPORT EXCESS MATERIAL OR IMPORT BORROW AS NEEDED. PLACE RSP FABRIC ON FINISHED SUBGRADE. PLACE RSP MEETING THE CALTRANS REQUIREMENTS FOR 1/2 TON RSP. IMPORT 1/2 TON RSP AS NEEDED TO CONFORM TO THE LINES AND GRADES SHOWN.



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NO.	DATE	REVISION	BY	APVD

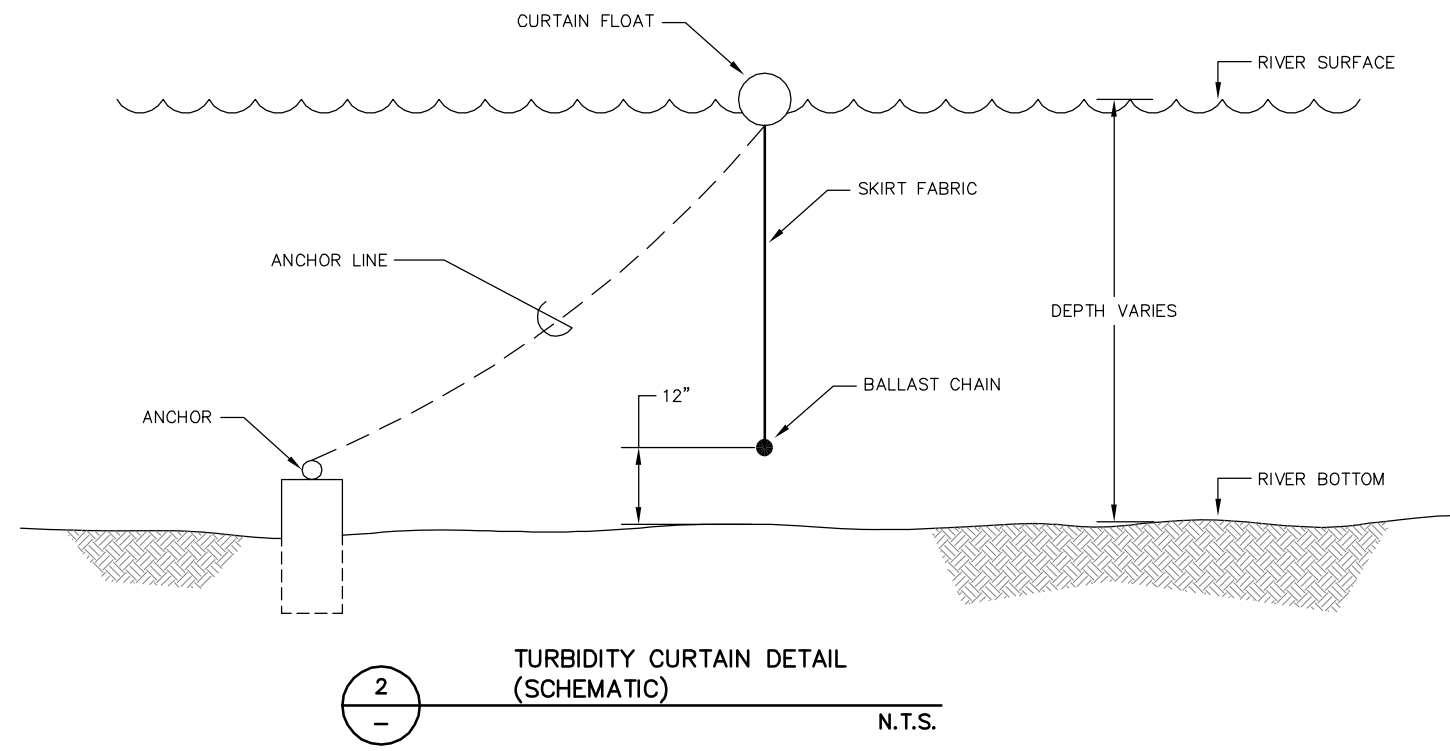
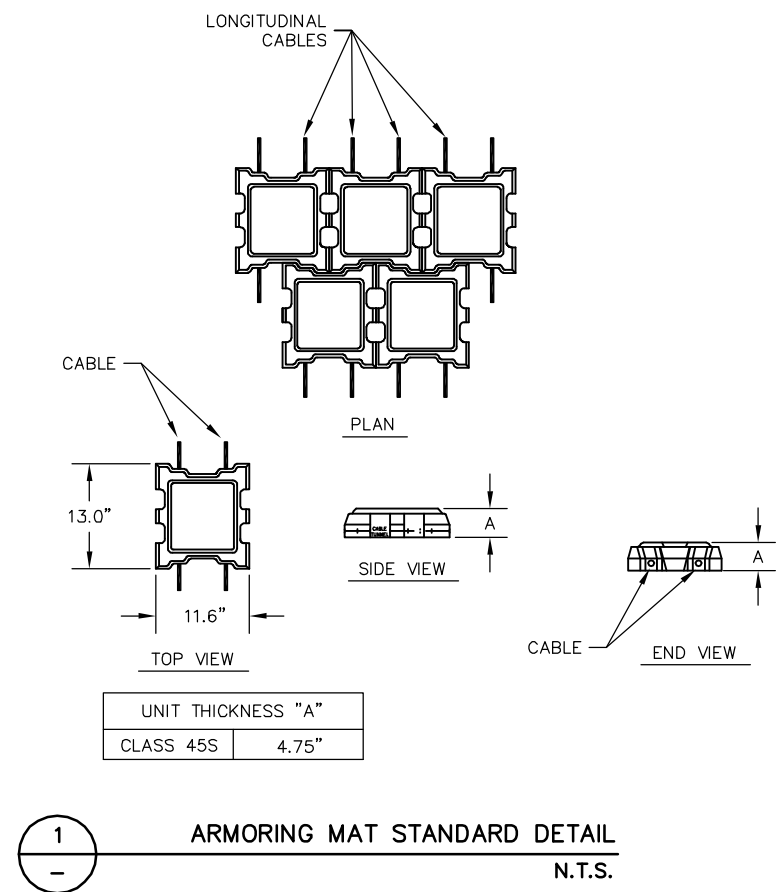
VERIFY SCALE BAR IS 1/2 INCH ON ORIGINAL DRAWING.  
0 0.5'  
IF NOT 1/2" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CLIENT:  
CITY OF RED BLUFF  
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RED BLUFF, CA 96080

RED BLUFF BOATING FACILITY  
DETAILS

SHEET C-5  
DWG NO.  
DATE 2-6-13  
PROJ NO.

# ATTACHMENT D



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DR D. ZAITZ  
CHK  
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NO.	DATE	REVISION	BY	APVD

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INCH ON ORIGINAL  
DRAWING.  
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**RED BLUFF BOATING FACILITY  
DETAILS**

SHEET C-6  
DWG NO.  
DATE 2-6-13  
PROJ NO.