

**Meeting of the Central Valley Flood Protection Board  
February 25, 2011**

**Staff Report – Encroachment Permit**

**James and Jennie White  
Boat Dock, Sacramento County**

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**1.0 – ITEM**

Consider approval of Permit No. 18629 (Attachment B)

**2.0 – APPLICANT**

James and Jennie White

**3.0 – LOCATION**

The project is located south of Rio Vista at 18560 Sherman Island Road on the right (north) bank of the San Joaquin River.  
(San Joaquin River, Sacramento County, see Attachment A)

**4.0 – DESCRIPTION**

The applicant proposes to construct a 28- by 60-foot boat dock supported by six 14-inch-diameter steel or concrete pilings, attached to a 4.5-foot-wide, 32-foot-long metal gangway attached to a 4'-8' by 5'-4' concrete landing; and install (trench) a utility conduit encased in a 10-inch-diameter steel pipe through the right (north) bank levee of the San Joaquin River.

**5.0 – PROJECT ANALYSIS**

The project as proposed and when constructed will conform to Title 23 standards. The location of this project is downstream from the downstream limits of the federal levee system where the San Joaquin River is approximately 2000 feet wide, therefore the project will have negligible impacts to the adopted plan of flood control.

### **5.1 – Hydraulic Analysis**

A hydraulic analysis is not needed as the proposed dock structure extends approximately 40 feet into the river which is approximately 2000 feet from the left (south) bank of the San Joaquin River (Bradford Island).

### **5.2 – Geotechnical Analysis**

A geotechnical analysis is not needed because there is only very minimal disturbance the existing non-project levee for the utilities pipe crossing and concrete landing.

### **5.3 – Additional Staff Analysis**

Additional staff analysis will be required when staff receives a completed utilities plan as required by Special Condition Thirty-One of the permit. This analysis will be limited to utilities being attached to the gangway and boat dock as these details do not yet exist. No construction on the utilities crossing in the levee is allowed until these plans are reviewed and approved by Board staff.

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

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

- Reclamation District 341 is in the process of endorsing this project and will do so at its' March 8, 2011 Board meeting. Reclamation District 341 issued their own encroachment permit for this project dated 9-16-09 (see Attachment C).
- The U. S Army Corps of Engineers 208.10 comment letter has not yet been received for this application. Upon receipt of a favorable letter and review by Board staff the letter will be incorporated into the permit as Exhibit B.

## **7.0 – CEQA ANALYSIS**

Board staff has prepared the following CEQA determination:

The California State Lands Commission, as the lead agency under CEQA, approved the project (SCH No. 2010048310) on April 28, 2010 and determined that the project was

categorically exempt under a Class 3 Categorical Exemption (CEQA Guidelines Section 15303) covering new construction of small structures and Class 4 Categorical Exemption (CEQA Guidelines Section 15304) covering minor alterations to land.

The Board, acting as a responsible agency under CEQA, has reviewed the California State Lands Commission's determination and has independently determined that the project is exempt from CEQA under a Class 3 Categorical Exemption (CEQA Guidelines Section 15303) covering new construction of small structures and Class 4 Categorical Exemption (CEQA Guidelines Section 15304) covering minor alterations to land.

### **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 project will have no effects upon the State Plan of Flood Control.

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

Future changes in hydrology caused by climate change could result in the need for removal or redesign and replacement of the project caused by the need for modification of the existing flood control project works.

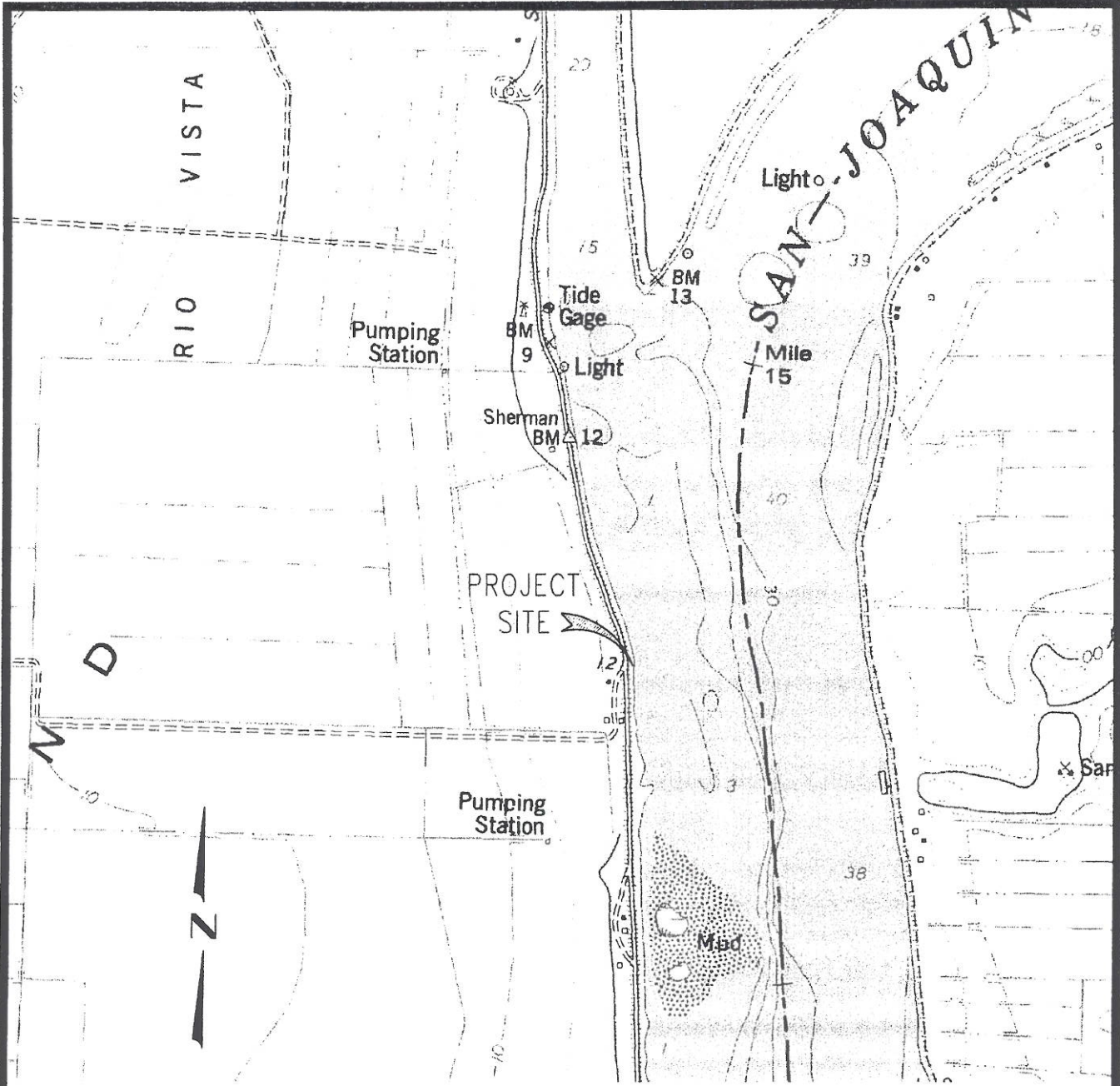
## **9.0 – STAFF RECOMMENDATION**

Staff recommends that the Board determine the project to be exempt from CEQA and approve the permit conditioned upon receipt of a favorable U.S. Army Corps of Engineers comment letter and a project endorsement letter from Reclamation District 341.

## **10.0 – LIST OF ATTACHMENTS**

- A. Location Maps and Photos
- B. Draft Permit No. 18629
- C. Reclamation District No. 341 Encroachment Permit No. 090609
- D. Design Drawings

Design Review:	Steve Dawson
Environmental Review:	James Herota and Andrea Mauro
Document Review:	Mitra Emami P.E., Curt Taras P.E., Len Marino P.E.



NOT TO SCALE

OWNER: JAMES & JENNIE WHITE  
5885 HERON DR.  
OAKLAND, CA. 94618

DATUM: NGVD 29

ADJACENT PROPERTY OWNER:

UPSTREAM: APN: 158-0020-031  
ANDREA & RUILO DIAZ  
18460 SHERMAN ISLAND  
EAST LEVEE RD.  
RIO VISTA, CA. 94571

DOWNSTREAM: APN: 158-0020-033  
BENNY R. & KAREN A. VENEGAS  
481 GENI CT.  
WALNUT CREEK, CA. 94597

CONTENTS:

VICINITY MAP

APN: 158-0020-032  
18650 SHERMAN ISLAND  
EAST LEVEE RD



Architecture  
Civil Engineering  
Land Use Planning  
Feasibility Studies  
Environmental Permitting  
Program Construction Management

PROJECT: WHITE PRIVATE RECREATIONAL DOCK

IN: SAN JOAQUIN RIVER  
RIVERMILE: 14.6±

COUNTY: SACRAMENTO

STATE: CA

APPLICATION BY:  
DCC ENGINEERING CO., INC.

JOB #: 1619.01

DATE: 12/15/08

SHEET 1 OF 5 REV. \_\_\_\_\_

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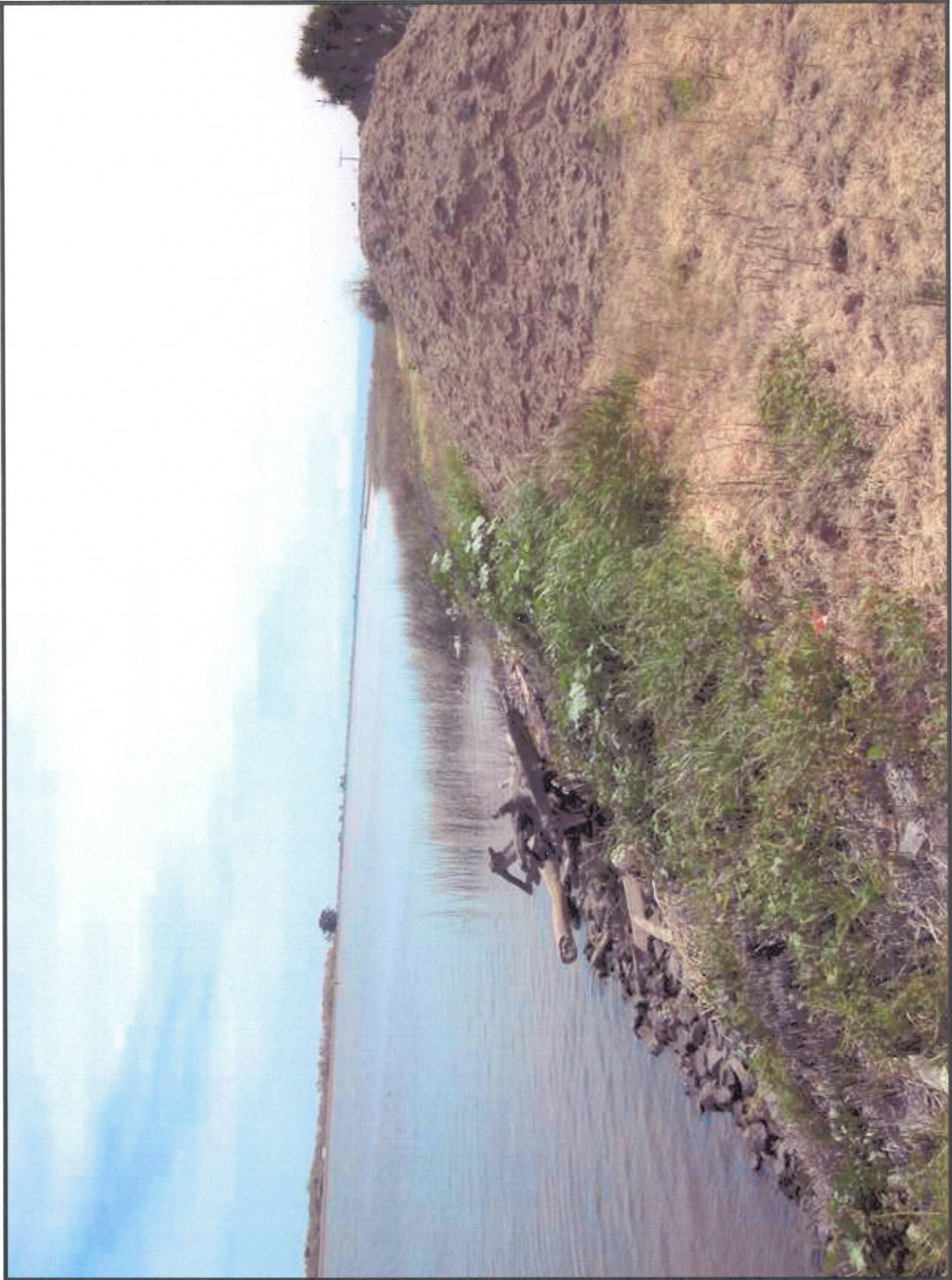


Figure 1 : Project Site looking downstream





Figure 2 : Project site looking upstream.



**DRAFT**

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

**PERMIT NO. 18629 BD**

**This Permit is issued to:**

James and Jennie White  
5885 Heron Drive  
Oakland, California 94618

To construct a 28- by 60-foot boat dock supported by six 14-inch-diameter steel or concrete pilings, attached to a 4.5-foot-wide, 32-foot-long metal gangway attached to a 4'-8" by 5'-4" concrete landing; and install (trench) a utility conduit encased in a 10-inch-diameter steel pipe through the right (north) bank of the San Joaquin River. The project is located south of Rio Vista at 18650 Sherman Island East Levee Road (Section 30, T3N, R3E, MDB&M, Reclamation District 341, San Joaquin River, Sacramento 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. 18629 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 shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources, Reclamation District No. 341 or any other agency responsible for maintenance.

**FIFTEEN:** 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.

**SIXTEEN:** The Central Valley Flood Protection Board, Department of Water Resources, and Reclamation District No. 341 shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

**SEVENTEEN:** 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.

**EIGHTEEN:** The permittee should contact the U.S. Army Corps of Engineers, Sacramento District, Regulatory Branch, 1325 J Street, Sacramento, California 95814, telephone (916) 557-5250, as

compliance with Section 10 of the Rivers and Harbors Act and/or Section 404 of the Clean Water Act may be required.

NINETEEN: The permittee shall be responsible for repair of any damages to the project levee and other flood control facilities due to construction, operation, or maintenance of the proposed project.

TWENTY: 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

TWENTY-ONE: 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.

TWENTY-TWO: 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-THREE: No construction work of any kind shall be done during the flood season from November 1 to July 15 without prior approval of the Central Valley Flood Protection Board.

TWENTY-FOUR: Cleared trees and brush shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1 to July 15.

TWENTY-FIVE: No excavation shall be made or remain in the levee section during the flood season from November 1 to July 15 without prior approval of the Central Valley Flood Protection Board.

TWENTY-SIX: 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-SEVEN: The top of driven piles shall be a minimum distance of 2 feet above the highest point of the crown of the levee.

TWENTY-EIGHT: The gangway shall be a maximum of 4.5 feet wide and the hinge point on the levee

section shall be at least 2 feet above the design flood plane elevation of 7.0 feet, NGV Datum.

TWENTY-NINE: The proposed floating facilities shall be properly anchored to prevent detachment from the anchoring system during periods of high water.

THIRTY: At all times during construction, at least one lane of the levee crown roadway shall be kept clear for vehicular access.

THIRTY-ONE: The permittee shall submit to the Central Valley Flood Protection Board detailed plans indicating the types, location, and method of installing the proposed power, domestic water and irrigation utility lines along the gangway and boat dock. No work of any kind is allowed on the project until the submitted plans have been reviewed and approved by Board staff.

THIRTY-TWO: Objects connected to the dock shall be properly secured to prevent detachment during periods of high water.

THIRTY-THREE: The permittee shall be responsible for removing all boats or other objects moored to the dock upon receiving notification to do so from the Central Valley Flood Protection Board, Department of Water Resources, or any other federal, State, or local agency having applicable authority.

THIRTY-FOUR: The utilities casing pipe shall be placed in the center of an open trench 2 feet wider than the diameter of the pipe.

THIRTY-FIVE: Pipe installed in the levee section and within 10 feet of the levee toes shall be new steel and at least 10 gauge. Steel pipe shall be corrosion-proofed externally with a coating of coal-tar enamel; asphalt-saturated felt wrap; cement mortar; or PVC or polyethylene tape wrapped to a thickness of 30 mils. Steel (non-casing) pipe shall be corrosion-proofed internally with a continuous lining of cement mortar or asphalt.

THIRTY-SIX: The invert of the casing pipe through the levee section shall be above the design flood plane elevation of 7.0 feet, NGV Datum.

THIRTY-SEVEN: All pipe joints within the levee section shall be butt welded or threaded.

THIRTY-EIGHT: The casing pipe shall be installed through the levee section at a right angle to the centerline of the levee.

THIRTY-NINE: The annular space between the casing pipe and the utility pipes shall be completely filled with grout.

FORTY: The casing pipe shall be buried at least 24 inches below the levee crown.

FORTY-ONE: The casing pipe shall be buried at least 12 inches below the landward levee slope.

FORTY-TWO: Backfill material for excavations within the levee section and within 10 feet of the levee toes shall be placed in 4- to 6-inch layers, moisture conditioned above optimum moisture content, and compacted to a minimum of 90 percent relative compaction as measured by ASTM Method D1557-



91.

FORTY-THREE: Density tests by a certified materials laboratory will be required to verify compaction of backfill within the levee section and within 10 feet of the levee toes.

FORTY-FOUR: The project site shall be restored to at least the condition that existed prior to commencement of work.

FORTY-FIVE: Any additional encroachment(s) in the floodway, on or in the levee section or within 10 feet of the landward levee toe, require an approved permit from the Central Valley Flood Protection Board and shall be in compliance with the Central Valley Flood Protection Board's regulations (Title 23 California Code of Regulations).

FORTY-SIX: All debris generated by this project shall be disposed of outside the floodway and off the levee section.

FORTY-SEVEN: 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.

FORTY-EIGHT: In the event existing revetment on the levee section or channel bank is disturbed or displaced, it shall be restored to its original condition upon completion of the proposed installation.


FORTY-NINE: In the event that levee or 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.

FIFTY: If the permitted encroachments result(s) in an adverse hydraulic impact, the permittee shall provide appropriate mitigation measures, to be approved by the Central Valley Flood Protection Board, prior to implementation of mitigation measures.

FIFTY-ONE: The permittee shall comply with all conditions set forth in the letter from the Department of the Army dated February XX, 2011, which is attached to this permit as Exhibit A and is incorporated by reference.

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NO FEE PER GOV'T CODE 6203

RECORDING REQUESTED BY  
AND  
WHEN RECORDED MAIL TO:RECLAMATION DISTRICT NO. 341  
c/o WAGNER & BONSIGNORE  
CONSULTING CIVIL ENGINEERS  
2151 RIVER PLAZA DRIVE, SUITE 100  
SACRAMENTO, CA 95833


Sacramento County Recorder  
Craig A. Kramer, Clerk/Recorder  
BOOK **20091009** PAGE **1413**  
Friday, OCT 09, 2009 3:02:45 PM  
Ttl Pd \$0.00 Nbr-0006080514  
ABG/86/1-11

SPACE ABOVE THIS LINE FOR RECORDER'S USE

**RECLAMATION DISTRICT NO. 341  
ENCROACHMENT PERMIT NO. 090609**

To: James & Jennie White, Owners  
5885 Heron Drive  
Oakland, CA 94618

Permission is hereby granted to encroach upon the area of jurisdiction of Reclamation District No. 341 (hereafter, "District") in the following manner: **Construct a private recreational dock on the San Joaquin River at approximate levee station 199+00; river mile  $\pm$ 14.6, APN 158-0020-032, 18650 Sherman Island East Levee Road (maps and plans attached). The construction elements of the proposed dock consists of a 28' x 60' dock with a single 16' x 54' slip. Access to the dock via 4'-6" wide metal gangway approximately 32' long connected to a 4'-8" x 5'-4" concrete-CMU landing. Construction to include 10" diameter steel pipe chase for utility conduit.**

**Landside levee slope work to include the permitting of 1½" dia., Schedule 40, PVC irrigation line parallel to levee minimum 20' from landside levee crown hinge with sprinklers 25' on center. All work shall be constructed in accordance with plans submitted with the encroachment permit application and shall be completed and maintained to the satisfaction of the District.**

This permit is granted upon the following conditions which, by acceptance of this permit, permittee agrees to observe and perform:

1. All permit fees must be paid with submission of application. Permit fees are charged to defray a portion of District's administrative and inspection costs.
2. This permit shall be canceled and void unless work contemplated hereunder is initiated within 90 days from the date hereof and diligently prosecuted to completion. The District Engineer must be notified at least 3 days prior to the commencement of the permitted work.
3. The permittee shall indicate acceptance of this permit, and the terms and conditions thereof, by executing the form of acceptance on one copy of this permit and returning it to the District office. The permit shall not become effective until accepted and signed by the permittee.
4. Each and every recommendation and requirement set forth herein as well as in the report from the District's Engineer regarding the encroachment above described, shall be fully complied with.
5. The District's property, levees and other reclamation works are used, maintained and operated by the District for District purposes only, and not for any other purposes relating to any use or activity thereon that may be made under this

shall be solely responsible for any personal injury, death or property damage occurring from activities arising out of or under this permit. Permittee agrees to defend, indemnify and hold harmless the District, its Trustees, officers, employees and agents from and against any liability which may be incurred through injury to person or damage to property resulting from or arising out of or connected with the construction, installation or use of the encroachment above described, and from any such liability arising out of or connected with the maintenance and operation of such encroachment, except where maintenance thereof is herein accepted by District.

6. Permittee will provide District with proof of liability insurance satisfactory to the District and an endorsement naming the District, its Trustees, officers, employees and agents as additional insureds, and maintain the same for as long as this encroachment permit continues in effect.

7. Permittee shall acquire no easement or property right in or to the property or right of way of the District by virtue of this permit and the District does not hereby relinquish any right or title therein.

8. Except as herein otherwise provided, all cost of maintenance and repair of the encroachment above described shall be borne by permittee. Permittee shall, whenever instructed by District to do so, repair such encroachment in the manner prescribed by District whenever District shall determine that such repair is required in the interest of District. Any such repair ordered by District which shall not have been performed by permittee within thirty (30) days after written notice has been given by District of such required repair may be performed by District, at permittee's expense and permittee shall promptly reimburse District therefor.

9. District reserves the right of access to the portion of its easement and right of way for such maintenance, repairs or alterations of District facilities or of the facilities described above as may be required for District purposes. District shall not be responsible for any damage done to improvements of permittee whether herein permitted or otherwise where necessary as part of the ordinary and necessary access to or exercise of District's easement and right of way for District purposes and need not replace any paving, black top or other improvement damaged or required to be removed in the process of such maintenance repair or alteration. Permittee shall reimburse District for any increased cost of such access or maintenance or repair occasioned by the improvements of permittee described herein.

10. Permittee may make no alteration or improvement of any portion of District's levee or its easement and right of way not specifically herein permitted nor alter or remove any portion of the encroachment or improvement herein described without further permit from District.

11. This permit is revocable in whole or in part by District on thirty (30) days written notice to permittee when such revocation is determined by Board of Trustees to be necessary for District purposes.

12. Upon the failure of permittee to conform to any of the terms and conditions herein specified this permit shall, at the option of District, cease and terminate and District may remove the encroachment or improvement above described together with any appurtenances thereto located within the easement and right of way of District and permittee shall promptly pay to District all costs and expenses incurred in such removal.

13. Permittee shall cause no adverse environmental impacts during the construction or installation of the encroachment described above.

14. Issuance of this encroachment permit does not relieve the Permittee of his/her responsibility for obtaining any other permits required by federal, state or local statutes, or any right of entry from a private landowner.

15. Except as permitted by the terms of this encroachment permit, permittee shall comply with all District Regulations pertaining to Levees.

16. The terms and conditions hereof shall be binding upon the heirs, successors and assigns of the permittee

17. Special Conditions In the event the District determines that levee repairs are required in the vicinity permitted under this encroachment permit, all relocation and/or removal costs will be the responsibility of the permittee.

18. Special Conditions Permittee shall reimburse the District for all engineering, legal and other administrative fees, costs and expenses reasonably incurred by the District in reviewing, and evaluating documents and data submitted by Permittee for processing and preparing the encroachment permit; field inspection by District engineers during construction to assure compliance with encroachment permit conditions.

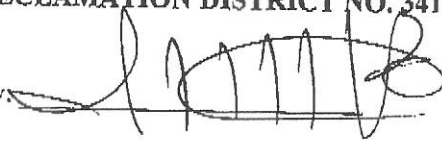


19. Special Conditions Permittee is not authorized to construct any element of the encroachment herein described until CEQA has been completed (i.e. the validity of this permit is expressly contingent upon the successful completion of CEQA). Permittee shall file with the District, as a responsible agency, any document Applicant is required to publicly file in compliance with CEQA. Once completed, Applicant shall provide a copy of the final CEQA documents to the District and District will confirm or deny compliance with CEQA. If confirmed, District shall provide written notice to Applicant that the contingency has been met and this permit is valid.

20. Special Conditions The permittee agrees that as a condition of approval of this permit, that it will defend, indemnify, and hold harmless the District and/or its agents, officers, trustees, and employees including, but not limited to, lawsuits, protests, challenges, and requests for information arising out of claims related to CEQA or other legal requirements in connection with permittee's project.

Dated: 9/16, 2009

RECLAMATION DISTRICT NO. 341

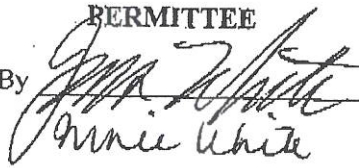
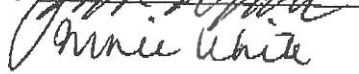
By: 

ACCEPTANCE

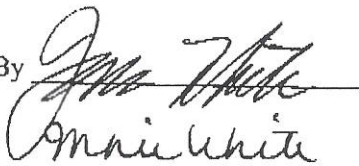
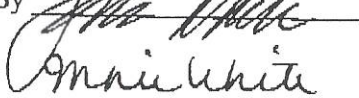
Permittee and/or landowner hereby accepts the above permit and agrees to comply with all of the requirements thereof.

Dated: 9/2, 2009

PERMITTEE

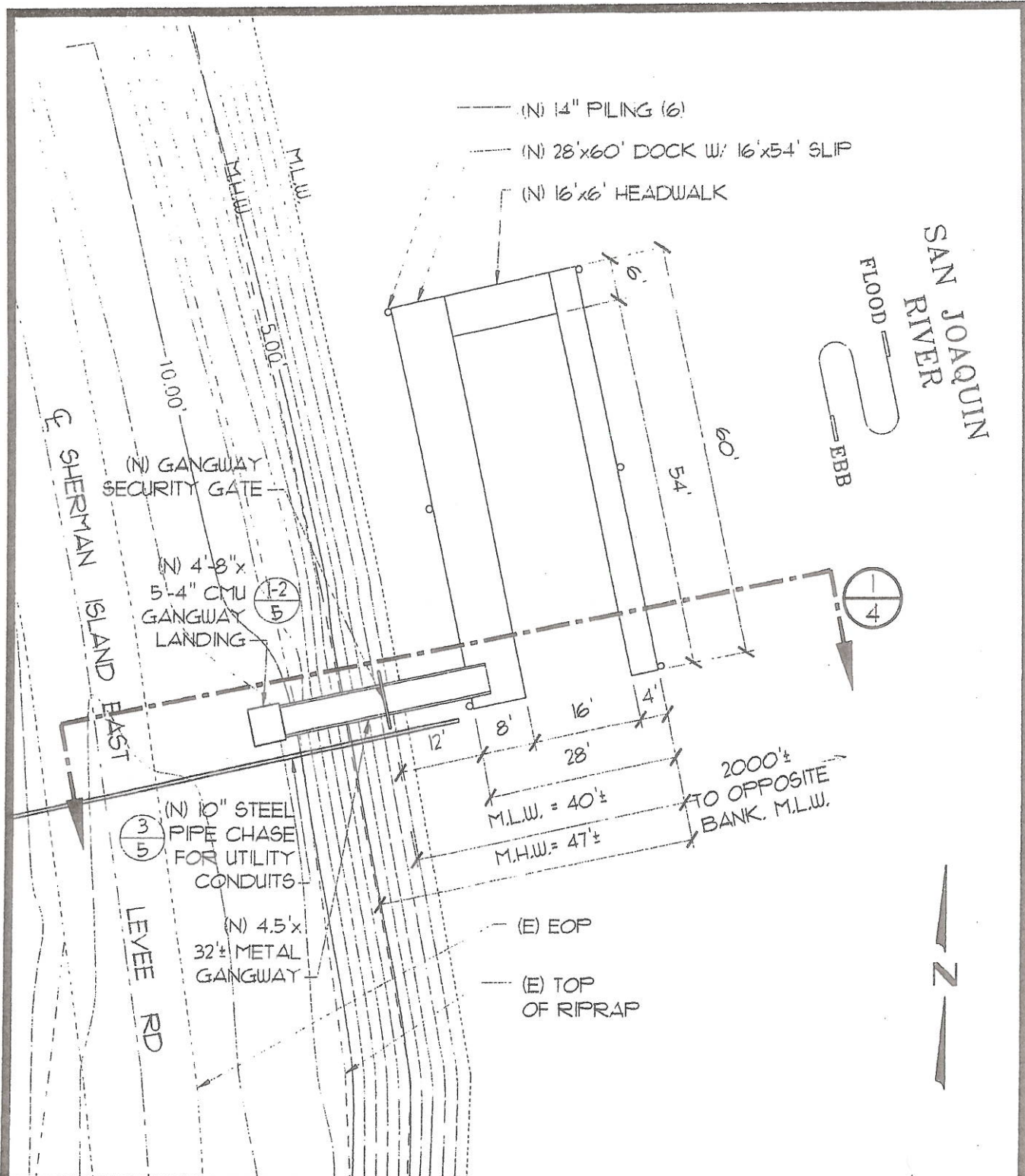
By:  James White  
 Jennie White

LANDOWNER (if applicable)

By:  James White  
 Jennie White

Please see attached Notary Certificate

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APPLICANT: JAMES & JENNE WHITE  
5885 HERON DR.  
OAKLAND, CA. 94618

DATUM: NGVD29

CONTENTS: DETAILED PLAN

APN: 158-0020-032



Architecture  
Civil Engineering  
Land Use Planning  
Feasibility Studies  
Environmental Permitting  
Program/Construction Management

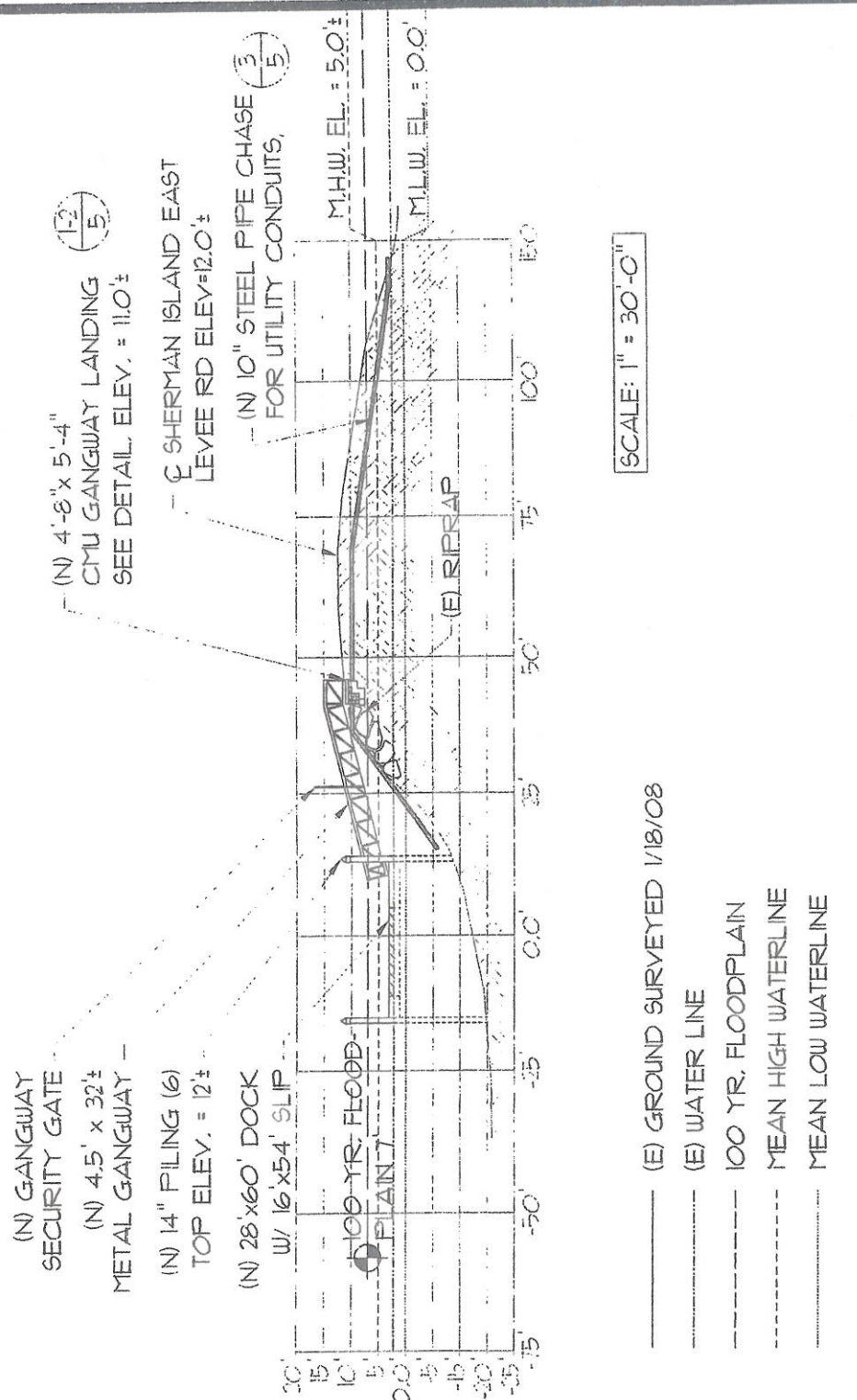
PROJECT: WHITE PRIVATE RECREATIONAL DOCK

RIVER: SAN JOAQUIN, RIVERMILE 14.6±

SCALE: 1" = 20'-0"

DATE: 12/15/08

SHEET: 3 OF 5, REV. 0



APPLICANT: JAMES & JENNE WHITE  
 5885 HERON DR.  
 OAKLAND, CA. 94618

DATUM: NGVD23

CONTENTS: ELEVATION  
 APN: 158-0020-032



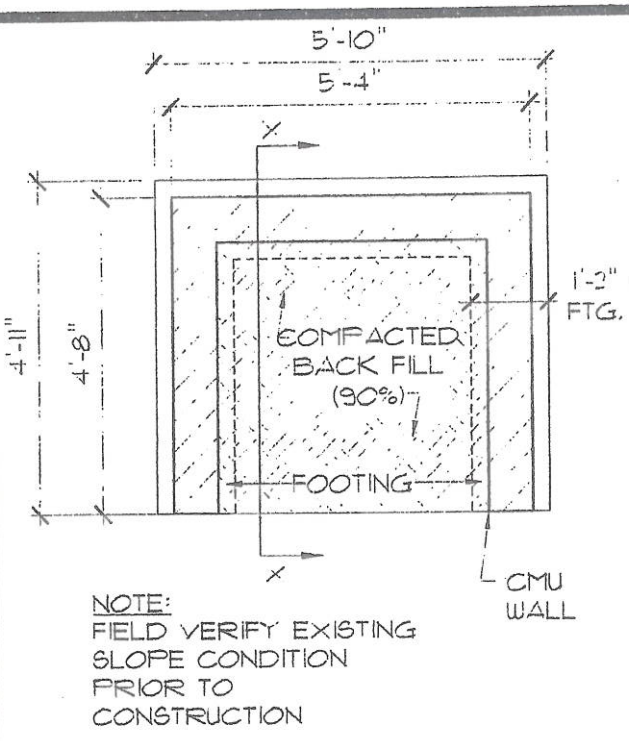
Architecture  
 Civil Engineering  
 Land Use Planning  
 Possibility Studies  
 Environmental Permitting  
 Program/Construction Management

PROJECT: WHITE PRIVATE RECREATIONAL DOCK  
 RIVER: SAN JOAQUIN, RIVERMILE 14.6±

SCALE: 1" = 30'-0" DATE: 12/15/08

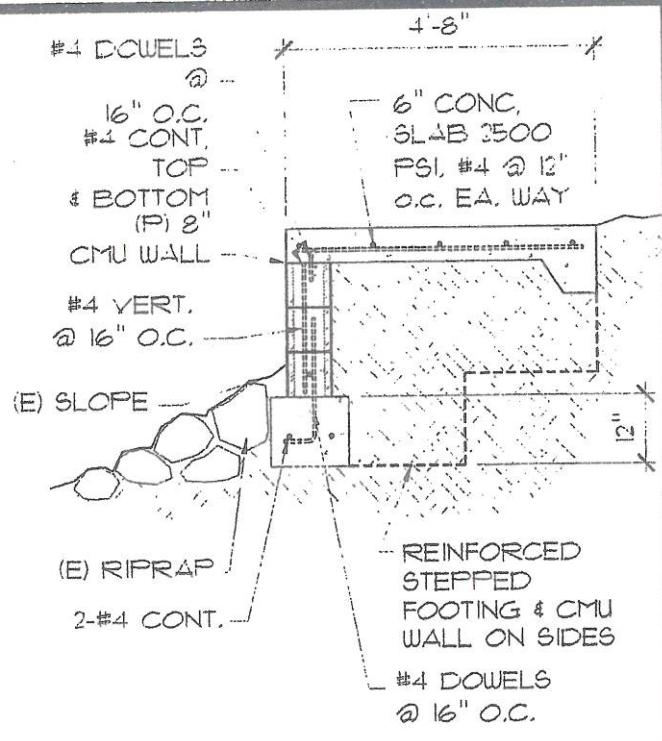
SHEET: 4 OF 5, REV. 0





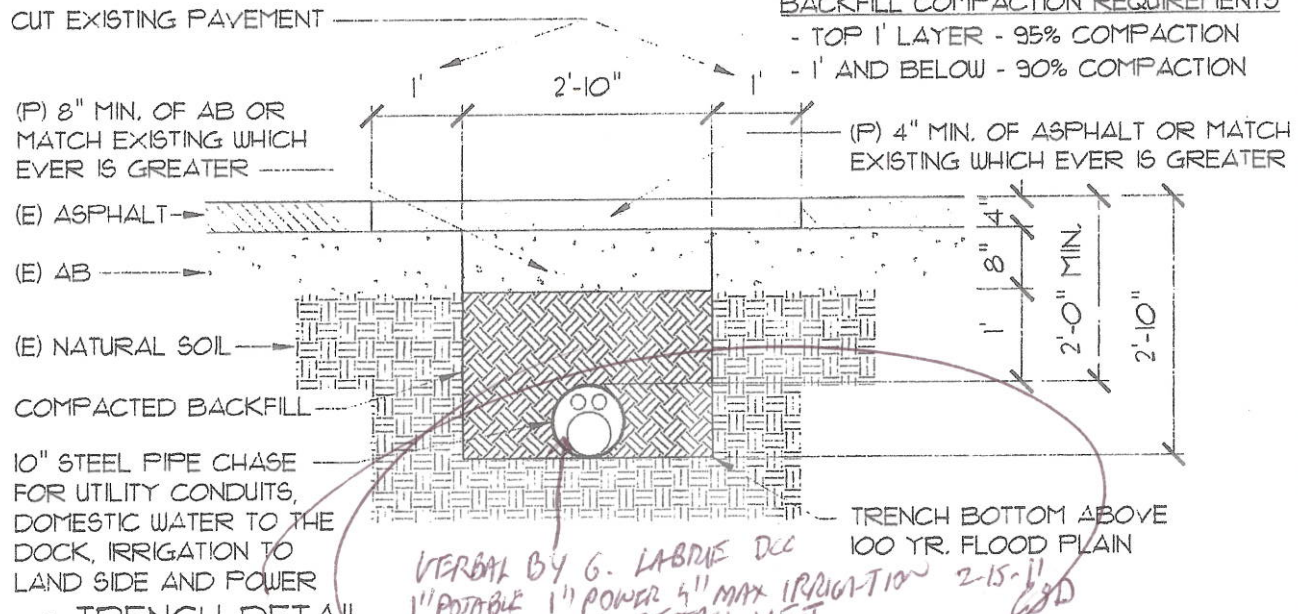
NOTE:  
FIELD VERIFY EXISTING  
SLOPE CONDITION  
PRIOR TO  
CONSTRUCTION

① FOUNDATION PLAN DETAIL  
SCALE: 3/8"=1'-0"



② SECTION X-X  
SCALE: 3/8"=1'-0"

BACKFILL COMPACTION REQUIREMENTS  
- TOP 1' LAYER - 95% COMPACTION  
- 1' AND BELOW - 90% COMPACTION



③ TRENCH DETAIL  
SCALE: 1/2"=1'-0"

APPLICANT: JAMES & JENNIE WHITE  
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OAKLAND, CA. 94618

DATUM: NGVD29

CONTENTS: DETAILS  
APN: 158-0020-032



Architecture  
Civil Engineering  
Land Use Planning  
Feasibility Studies  
Environmental Permitting  
Program/Construction Management

PROJECT: WHITE PRIVATE RECREATIONAL DOCK  
RIVER: SAN JOAQUIN, RIVERMILE 14.6±

SCALE: AS NOTED DATE: 12/15/08  
SHEET: 5 OF 5 REV. 0