# Meeting of the Central Valley Flood Protection Board December 2, 2011

# Staff Report

# California Department of Transportation (Caltrans) – District 6 State Route 198 Vegetation Mitigation Project, Kings County

# <u> 1.0 – ITEM</u>

Consider approval of Permit No. 18353-1 (Attachment B)

# <u> 2.0 – APPLICANT</u>

California Department of Transportation (Caltrans) - District 6

#### <u>3.0 – LOCATION</u>

Located in between 6th and 4th Avenue along State Highway 198 within the Cross Creek Designated Floodway (DF). (Cross Creek, Kings County, see Attachment A)

# 4.0 – DESCRIPTION

The applicant proposes to replace the vegetation that was removed from the north (upstream) side of route 198 due to construction of new lanes across the Cross Creek Designated Floodway (Permit 18353). The project includes planting one and five gallon sized plants (12-inch diameter, 12-inch deep and 22-inch diameter, 16-inch deep) consisting of 6 Valley Oaks, 20 Black Willows, 4 California Sycamores, 16 Toyons, and one Chaste Tree for approximately 3700 feet west and 800 east of Cross Creek.

# 5.0 – PROJECT ANALYSIS

The proposed project is a mitigation measure for the vegetation removed during the bridge widening project constructed under Permit No. 18353. The proposed work is designed in compliance with California Code of Regulations (CCR), Title 23 standards and all planting will be completed outside of the channel and will not affect flows within

the channel (see Attachment C for a Typical Cross Section). The planting quantities species common names, and botanical names are given below:

Common Name/Botanical Name		
Valley Oak (Quercus lobata)	6	
Black Willows ( <i>Salix nigra</i> )	20	
California Sycamores ( <i>Platanus racemosa</i> )		
Toyons (Heteromeles arbutifolia)		
Chaste Tree (Vitex agnus-castus)		

The above vegetation will be planted in accordance with the Approved Planting Plans that are incorporated by reference into Permit No. 18353-1, as Exhibit A.

# 5.1 – Hydraulic Analysis

All plantings for the proposed project are outside of the channel that confines the flow of water in Cross Creek to its banks and will not impede the flow of water. Therefore, the project requires no separate hydraulic analysis for the plantings. The hydraulics submitted for the bridge and channel work under issued Permit No. 18353 has already been accepted for its own work independently. This project will not negatively affect the channel hydraulics in Cross Creek and is therefore, in compliance with Title 23 standards.

# 5.2 – Geotechnical Analysis

Upon completion of staff review of the design plans, staff is in agreement with the applicant's conclusion that this project does not bear any significant geotechnical impacts on the floodway and all work to be completed will be done in a manner that does not pose a threat to the structural integrity of the channel, structures, or floodway. All earthwork shall be completed in compliance with Permit No. 18353-1 (Attachment B) and Title 23 Standards.

# 5.3 – Long-Term Management

Caltrans has a Landscape Maintenance Department that is responsible for the maintenance along the roadway where the plantings are proposed. Also, within the channel, the Kaweah Delta Water Conservation District has endorsed the project and is responsible for maintenance within the channel if any vegetation entered the channel or banks (see Exhibit C to Permit No. 18353-1).

#### 6.0 – AGENCY COMMENTS AND ENDORSEMENTS

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

- U.S. Army Corps of Engineers (USACE) Non-Federal letter was received on November 9, 2011. This letter stated that the USACE District Engineer has no comments or recommendations regarding flood control because the proposed work does not affect a federally constructed project and the letter has been incorporated by reference into Permit No. 18353-1 as Exhibit B.
- A letter from the Kaweah Delta Water Conservation District, dated July 22, 2011, is incorporated by reference to Permit No. 18353-1 as Exhibit C.

#### 7.0 – PROPOSED CEQA FINDINGS

Board staff has prepared the following CEQA Findings:

Caltrans, as lead agency under CEQA, approved the project on July 6, 2010 determined that the project was categorically exempt under Class 4, (CEQA Guidelines Section 15304) covering minor alterations to land.

The Board, acting as a responsible agency under CEQA, has reviewed the Caltrans determination and has independently determined that the project is exempt from CEQA under Class 4, (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:

This project does not have significant impacts on the State Plan of Flood Control, as the project does not impair the structural or hydraulic functions of the system.

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

There are no foreseeable projected future events that would impact this project.

#### 9.0 – STAFF RECOMMENDATION

Staff recommends that the Board find the project exempt from CEQA, approve Permit No.18353-1, and direct the Executive Officer to take necessary actions to execute the permit.

#### <u>10.0 – LIST OF ATTACHMENTS</u>

- A. Location Maps and Photos
- B. Draft Permit No. 18353-1

Exhibit A:	Approved Planting Plan
Exhibit B:	USACE Non-Federal Interest letter, dated 11-9-11
Exhibit C:	Kaweah Delta Water Conservation District Letter,
	dated 7-22-11

- C. Typical Cross Section
- D. Memo for Steve Ng of Caltrans Structure Hydraulics, dated 1-17-11

Design Review:	Nancy C. Moricz, P.E.
Environmental Review:	James Herota, E.S.
	Andrea Mauro, E.S.
Document Review:	David R. Williams, P.E. – Senior Engineer, WR
	Eric R. Butler, P.E. – Supervising Engineer, WR
	Len Marino, P.E. – Chief Engineer, WR

# Location Maps



LAKESIDE CANAL LOOKING NORTH FROM NORTH RW FENCELINE



# SR 198 WESTBOUND AT CROSS CREEK BRIDGE

SR 198 AT CROSS CREEK LOOKING WESTERLY



SR 198 CROSS CREEK BRIDGE N.E. BRIDGE ABUTMENT

# DRAFT

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

**PERMIT NO. 18353-1 BD** 

This Permit is issued to:

California Department of Transportation 2015 East Shields Avenue Suite 100 Fresno, California 93726

Te replace the vegetation that was removed from the north (upstream) side of route 198 due to construction of new lanes across the Cross Creek Designated Floodway (Permit 18353). The project includes planting one and five gallon sized plants (12-inch diameter, 12-inch deep and 22-inch diameter, 16-inch deep) consisting of 6 Valley Oaks, 20 Black Willows, 4 California Sycamores, 16 Toyons, and one Chaste Tree for approximately 3700 feet west and 800 east of Cross Creek. The project is located east of Hanford along State Highway 198, Section 36, T18S, R22E, MDB&M, Kings County. Located in between 6th and 4th Avenue along State Highway 198 within the Cross Creek, Kings 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. 18353-1 BD

THIRTEEN: All work approved by this permit shall be in accordance with the Approved Planting Plans attached to this permit and incorporated by reference as Exhibit A, 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: There shall be no additional plantings within the project area under this permit. Only those plantings expressly described under this permit shall be allowed within the project area and any modifications to the quantity, species, or location of the plantings will require a modification to the approved planting tile, species count, and location map, as well as a Board approved modification to this permit based on the aforementioned modified documents.

FIFTEEN: Prior to commencement of work, the permittee shall create a photo record, including associated descriptions, of the project conditions. The photo record shall be certified (signed and stamped) by a licensed land surveyor or professional engineer registered in the State of California and submitted to the Central Valley Flood Protection Board within 30 days of beginning the project.

SIXTEEN: 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.

SEVENTEEN: The mitigation measures approved by the CEQA lead agency and the permittee are found in its Mitigation and Monitoring Reporting Program (MMRP) adopted by the CEQA lead agency. The permittee shall implement all such mitigation measures.

EIGHTEEN: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted encroachments and shall defend 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.

NINETEEN: The permittee shall be responsible for securing any necessary permits incidental to habitat manipulation and restoration work completed in the flood control project, and will provide any biological surveying, monitoring, and reporting needed to satisfy those permits.

TWENTY: The permittee agrees to incur all costs for compliance with local, State, and Federal permitting and resolve conflicts between any of the terms and conditions that agencies might impose under the laws and regulations it administers and enforces.

TWENTY-ONE: The Central Valley Flood Protection Board and the 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.

TWENTY-TWO: 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-THREE: The permittee shall provide supervision and inspection services acceptable to the Central Valley Flood Protection Board.

TWENTY-FOUR: Except with respect to the activities expressly allowed under this permit, the work area shall be restored to the condition that existed prior to start of work.

TWENTY-FIVE: Temporary staging, formwork, stockpiled material, equipment, and temporary buildings shall not remain in the floodway during the flood season from November 1 to July 15.

TWENTY-SIX: Any construction activities shall not be permitted during the flood season from November 1 to July 15 without prior approval of the Central Valley Flood Protection Board.

TWENTY-SEVEN: No new wild rose, grape, blackberries, or other bushy thickets shall be propagated at this site, except for those described within this permit.

TWENTY-EIGHT: The landscaping, appurtenances, and maintenance practices shall conform to standards contained in Section 131 of the Central Valley Flood Protection Board's Regulations.

TWENTY-NINE: The Central Valley Flood Protection Board may require clearing and/or pruning of trees planted within the floodway in order to minimize obstruction to floodflows.

THIRTY: The ground surface shall be kept clear of fallen trees, branches, and debris.

THIRTY-ONE: Cleared trees and brush (or prunings therefrom) 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.

THIRTY-TWO: After each period of high water, debris that accumulates at the site shall be completely removed from the floodway.

THIRTY-THREE: All debris generated by this project shall be disposed of outside the floodway.

THIRTY-FOUR: Areas where plantings are lost to erosion on the floodplain shall not be replanted.

THIRTY-FIVE: 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.

THIRTY-SIX: If the proposed project 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.

THIRTY-SEVEN: The permittee shall operate and 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 Department of Water Resources or any other agency responsible for maintenance. Maintenance may include actions to preserve the integrity of the flood control system under emergency conditions. These actions will be taken at the sole expense of the permittee.

THIRTY-EIGHT: 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.

THIRTY-NINE: 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.

FORTY: 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.

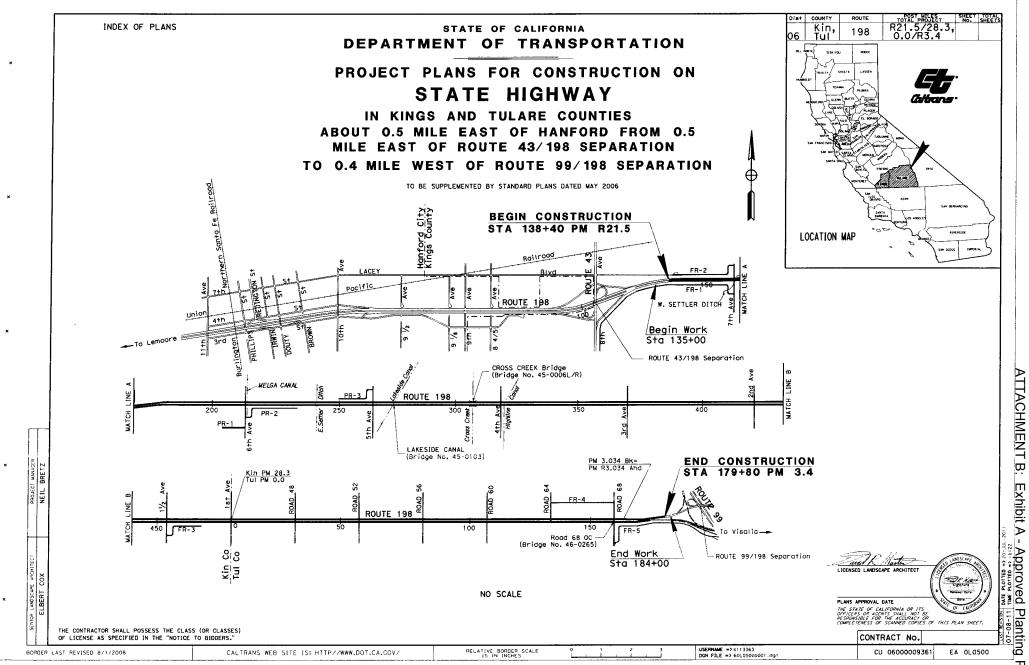
FORTY-ONE: The permittee shall submit as-built drawings to the Department of Water Resources' Flood Project Inspection Section, located at 3310 El Camino Ave, Room 256, Sacramento, California, 95821, upon completion of the project.

FORTY-TWO: 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.

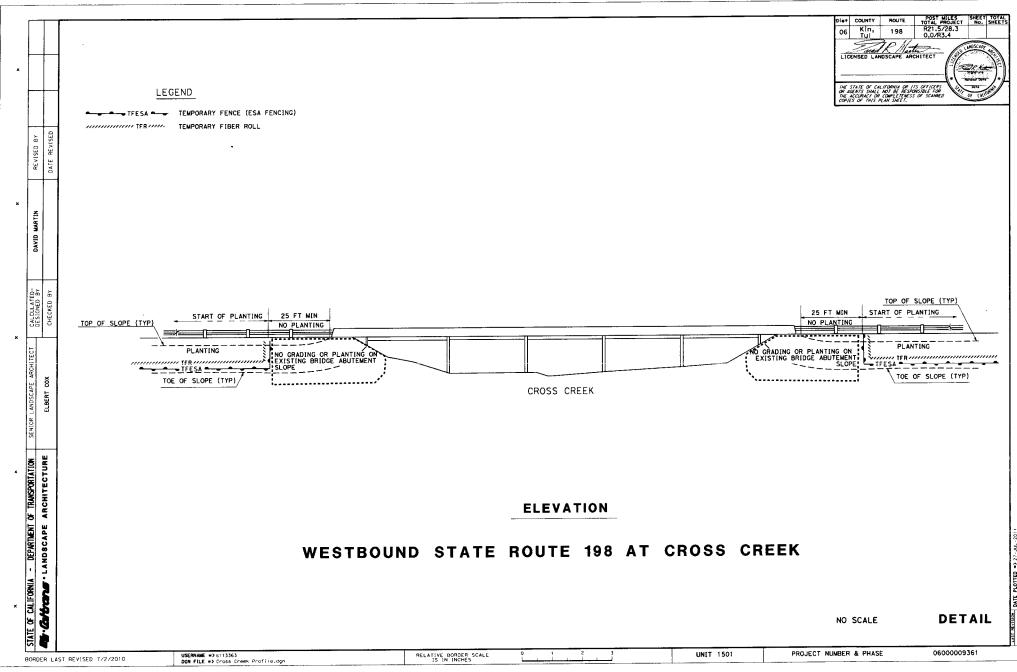
FORTY-THREE: The U.S. Army Corps of Engineers expressed in a letter from the District Engineer, dated November 9, 2011, that they have no comments or recommendations regarding flood control because the proposed work does not affect a federally constructed project. The letter is attached to this permit as Exhibit B and is incorporated by reference.

FORTY-FOUR: The permittee shall comply with all conditions set forth in the letter from the Kaweah Delta Water Conservation District, dated July 22, 2011, which is attached to this permit as Exhibit C and incorporated by reference.

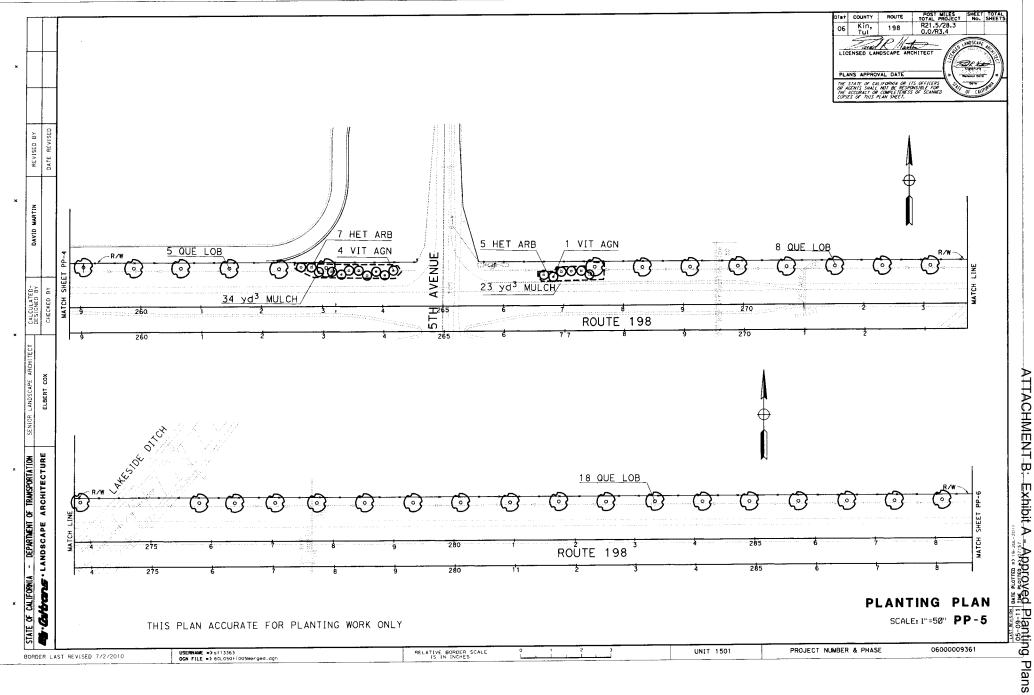
FORTY-FIVE: This permit shall run with the land and all conditions are binding on permitee's successors and assigns.

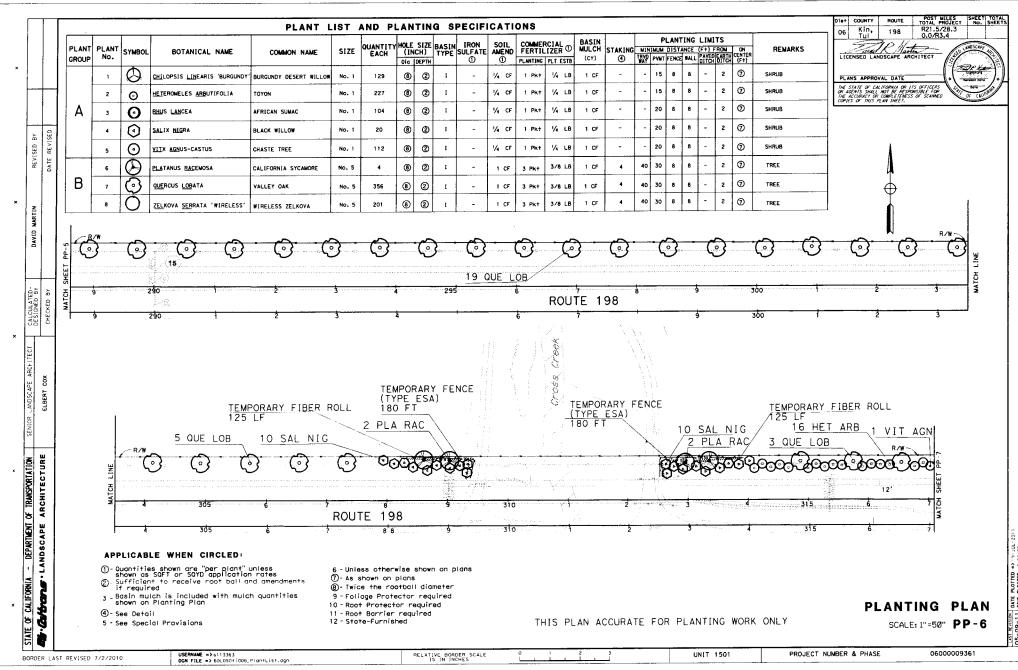


Planting Plans

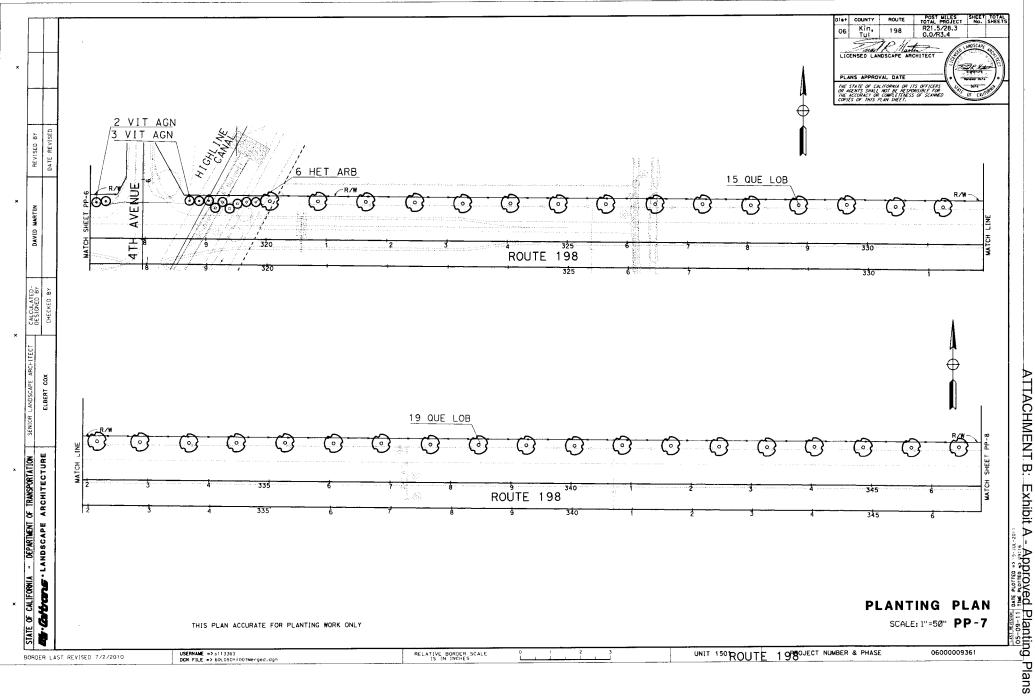


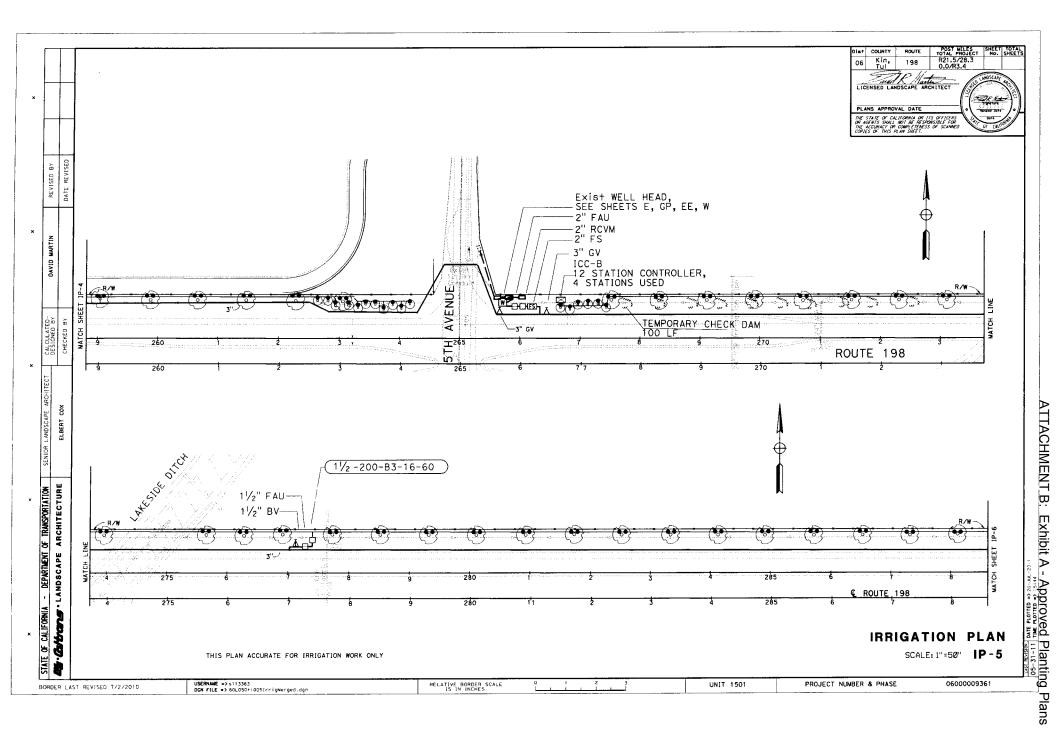
ATTACHMENT B: Exhibit A - Approved Planting Plans

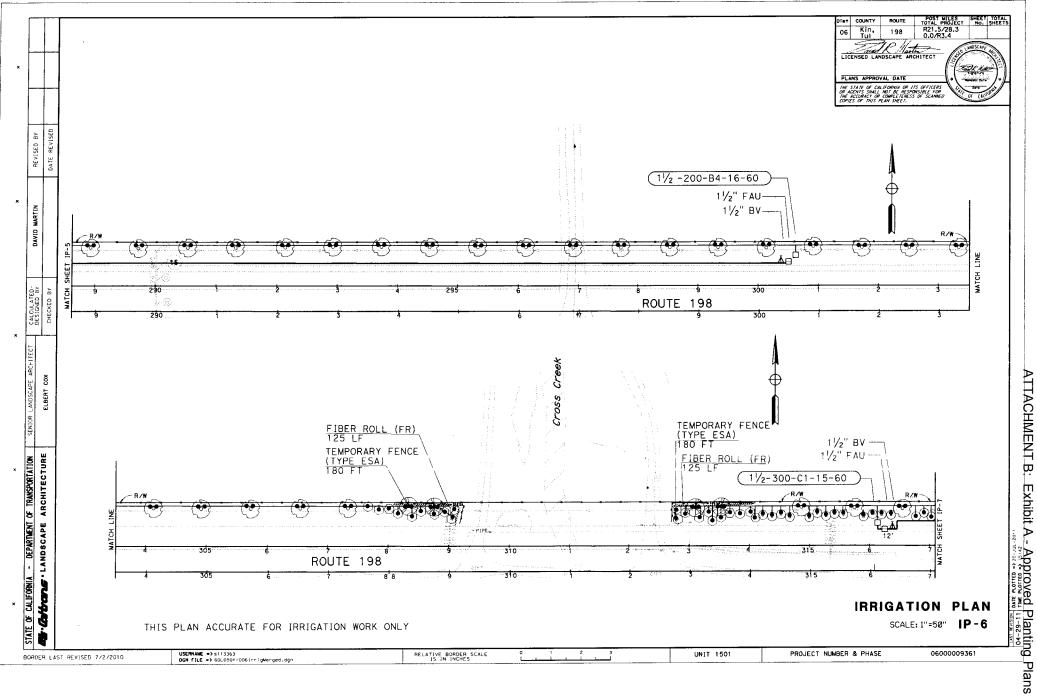


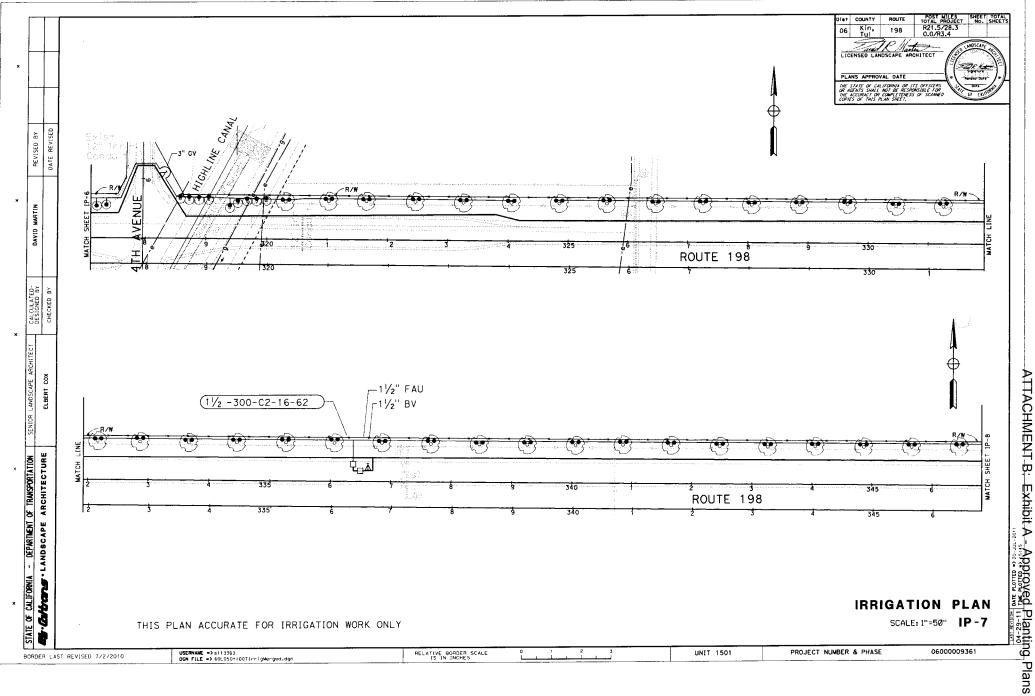


ATTACHMENT B: Exhibit A - Approved Planting Plans











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

REPLY TO ATTENTION OF

Flood Protection and Navigation Section (18353-1)

NOV 0 9 2011

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 California Department of Transportation (application number 18353-1). This project includes installing an irrigation system and planting trees and shrubs within the Cross Creek Designated Floodway. The project is located in between 4<sup>th</sup> and 6<sup>th</sup> Avenues along State Highway 198, at 36.3279°N 119.5863°W NAD83, Kings 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 404 permit (SPK-2008-00154) has been issued 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,

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



July 22, 2011

Caltrans, Central Region, District 6 2015 East Shields Avenue, Suite A-100 Fresno, California 93726-5428

Attn: Elbert Cox, Senior Landscape Architect

Subject: State Route No. 198 Landscaping at Cross Creek (Hanford Expressway Replacement Planting Project)

Kaweah Delta Water Conservation District regularly performs channel and bank maintenance along that section of Cross Creek, within Kings County that passes through State Route No. 198. The District has reviewed the submitted landscape planting and irrigation project plans for the Construction of the State Highway. The plans indicate that all improvements will be located outside of the Cross Creek channel and banks. It appears, based upon the plans that the improvements will not conflict with the District's channel maintenance operations for Cross Creek within the Central Valley Flood Protection Boards designated floodway. Therefore the District has no comments to the proposed landscaping improvements for the State's project.

Thank you for the opportunity to review and provide comment. Please feel free to contact me if you have any questions regarding this matter.

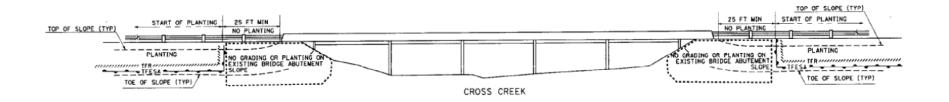
Respectfully,

Larry<sup>'</sup>Dotson Senior Engineer

#### LEGEND

TEMPORARY FENCE (ESA FENCING)

-



#### ELEVATION

#### WESTBOUND STATE ROUTE 198 AT CROSS CREEK

Business, Transportation and Housing Agency

# Memorandum

To: Nancy Moricz Central Valley Flood Control Board 3310 El Camino Ave, Rm 151 Sacramento, CA 95821

Date: November 17, 2011

File: 06-Kin/Tul-198-PM 0.0/5.3 EA 04 3568U1 Cross Creek Bridge Br. No. 45-0006L/R Lakeside Canal Br. No. 45-0103

From: Steve Ng Branch Chief Department of Transportation Structure Hydraulics 1801 30th Street Sacramento, CA 95816

Subject: Proposed Landscaping at Cross Creek Bridge

Attached for your records is the Final Hydraulic Report for the above referenced project. The proposed plantings at Cross Creek are parallel to the roadway and outside of the bridge opening proper. Structure Hydraulics does not have any concerns with the proposed planting and does not expect the landscaping to impact the proposed conveyance.

If you have any additional concerns please contact me at (916) 227-8018

Sincerely,

Steve Ng

Steve Ng Branch Chief Hydrology/Hydraulics Engineer