# Meeting of the Central Valley Flood Protection Board January 28, 2011

# **Staff Report**

California Department of Transportation, District 6
Highway 99 at Cross Creek Bridge Widening (46-0034L&R), Tulare County

#### <u>1.0 – ITEM</u>

Consider approval of Permit No. 18605-5 (Attachment B)

# 2.0 – APPLICANT

California Department of Transportation (Caltrans), District 6

# 3.0 - LOCATION

The project is located north of Goshen, along Highway 99 at Cross Creek in Tulare County. (Cross Creek, Tulare County, see Attachment A)

## 4.0 - DESCRIPTION

Applicant proposes to widen Highway 99 at bridge crossing numbers 46-0034L (southbound) and 46-0034R (northbound) of the channel of Cross Creek in Tulare County. The proposed project will remove the existing bridges and replace them with new structures that will increase the width of the bridge from 42-feet to 59-feet in the southbound direction and a reduction in width from 61-feet, 11-inches to 59-feet in the northbound direction and will modify the highway from four to six lanes.

#### 5.0 - PROJECT ANALYSIS

The overall design of the proposed project, as described in Section 4.0, is not in compliance with Title 23 standards as described in Section 5.1, below. The new structures will increase traffic flow through this reach of Highway 99, where a current restriction exists. See Attachments D and F for proposed plans.

# 5.1 - Hydraulic Analysis

The Roadway plans and profiles, in Attachment F, show the location of all the bridges. For the 2 proposed bridges to be incompliance with Title 23, the bridge's soffit must be at least 2 feet above the 100-year flood event (12,100-cfs). As designed, the new bridge structure will have 2 feet of soffit freeboard over an approximate 35-year event (4,500-cfs). In reviewing these additional plans and the hydraulics analysis for the entire widening project, it is clear that raising the Highway 99 crossing at Bridge Nos. 46-0034L&R approximately 3-feet would cause a very substantial grade-break to an area in which the roadway is sloping at only 0.024% through this stretch. This grade-break would have the potential to change the roadway's hydraulic function throughout this area. Introducing an approximate 3-foot change, in a localized area, that only drops approximately 0.34-feet over 1,400-feet of roadway would be very impractical and the existing flow patterns of the highway would not be able to continue.

The proposed project was analyzed using a one-dimensional hydraulic model, and the above referenced flows were used for both the 100-yr control event and the 35-yr design event. Hydraulic impacts for the proposed project, as designed, are 0.00-feet increase in WSE and an average overall velocity increase of 0.35-feet-per-second, which raises the velocity to approximately 4-feet-per-second, see Attachment C for Hydraulic Summary Table and Profile. The proposed bridges are not designed to meet the design 100-yr flood event. However, this is due to the reason stated above and additionally the financial costs associated to completely replace and raise the structures are prohibitive, see Attachment E for the Caltrans Justification Letter.

The widening will eliminate a bottleneck, in the highway, over a regulated stream whose crossing is currently under-designed. The proposed project to replace bridges 46-0034L&R, will not reduce the current level of protection and the determination to remove and replace the existing bridges was made to avoid the negative hydraulic impacts that would occur by merely widening these existing crossings. The proposed new and improved structures, under Permit No. 18605-5, are not in compliance with Section 128(a)(10)(B) of Title 23, shown below, (which only applies to the widened existing structures and not new structures).

"When an existing bridge being widened does not meet the clearance requirement above the design flood plane, the bottom structural members of the added section may be no lower than the bottom structural members of the existing bridge, except as may be caused by the extension of existing sloped structural members."

For the above stated reasons, staff has concluded that the project has negligible adverse incremental hydraulic effects on the floodway, despite non-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. 18605-5 (Attachment B) and Title 23 Standards.

# 5.3 - Project Benefits

The project has the following benefits associated with its completion:

- Improve infrastructure to increase traffic flow along Highway 99, in the area crossing over Cross Creek, in Tulare County.
- The above mentioned improvements present an incrementally hydraulic neutral project.
- The area currently has a bottlenecking nature, in the area of the project, and this
  project would increase traffic passage in the event of an emergency.
- This project is an integral part of a larger Highway 99 widening project.

# **5.4 – Additional Analysis**

Based upon the above analysis of hydraulics and geotechnical considerations, staff is in agreement with the applicant that the proposed project is an overall benefit to the State's infrastructure and that the benefits of the project outweigh the fact that these proposed bridges do not comply with Title 23, Section 128(10). No adverse incremental hydraulic impacts are incurred by completion of the project and the alternative of raising the proposed crossings is both financially and technically unreasonable at this time. Therefore, staff has concluded that it is the more favorable option to complete the project as proposed.

## 6.0 – AGENCY COMMENTS AND ENDORSEMENTS

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

 A U.S. Army Corps of Engineers letter stating that the proposed project does not affect a federally constructed project is expected to be received prior to the January 28, 2011 Board meeting and is incorporated to Permit No. 18605-5 as Exhibit A.

# 7.0 – CEQA ANALYSIS

Board staff has prepared the following CEQA Findings:

The Board, as a responsible agency under CEQA, has reviewed the Goshen to Kingsburg Six Lane Project Draft Initial Study/Mitigated Negative Declaration (IS/MND, SCH Number: 2006051047, April 2006) and Final Initial Study/Mitigated Negative Declaration (IS/MND, SCH Number: 2006051047, October 2006) prepared by the California Department of Transportation as the lead agency. The California Department of Transportation determined that the project would not have a significant effect on the environment and adopted the IS/MND and filed a Notice of Determination on November 8, 2006. These documents may be viewed or downloaded from the Central Valley Flood Protection Board website at <a href="http://www.cvfpb.ca.gov/meetings/2011/01-28-2011.cfm">http://www.cvfpb.ca.gov/meetings/2011/01-28-2011.cfm</a> under a link for this agenda item.

Board staff finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. The project proponent has incorporated mandatory mitigation measures into the project plans to avoid identified impacts or to mitigate such impacts to a point where no significant impacts will occur. These mitigation measures are included in the project proponent's IS/MND and address impacts to biological resources and noise.

## 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 approve Permit No. 18605-5 (Attachment B) upon receipt of a Corps letter; adopt the Board's CEQA Findings; and an order to direct the Executive Officer to take necessary actions to prepare and execute the permit and related documents and to prepare and file a Notice of Determination with the State Clearinghouse.

# 10.0 - LIST OF ATTACHMENTS

- A. Location Map
- B. Draft Permit No. 18605-5

Exhibit A: Corps Non-Fed Letter (expected prior to 1-28-11 meeting)

- C. Hydraulic Summary Table and Profile
- D. General Plan
- E. Caltrans Justification Letter
- F. Highway 99 Overall Plans and Profiles
- G. Resolution No. 11-06

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

Dan S. Fua, P.E. - Supervising Engineer, WR

# **Location Maps**





# **DRAFT**

#### STATE OF CALIFORNIA THE RESOURCES AGENCY

# THE CENTRAL VALLEY FLOOD PROTECTION BOARD

**PERMIT NO. 18605-5 BD** 

This Permit is issued to:

California Department of Transportation, District 6 2015 East Shields Avenue, Suite 100 Fresno, California 93726

The applicant proposes to widen Highway 99 at bridge crossing numbers 46-0034L (southbound) and 46-0034R (northbound) of the channel of cross creek in Tulare county. The proposed project will remove the existing bridges and replace them with new structures that will increase the width of the bridge from 42-feet to 59-feet in the southbound direction and a reduction in width from 61-feet, 11-inches to 59-feet in the northbound direction and will modify the highway from four to six lanes. North of Goshen (Section 35, T17S, R23E, MDB&M, Cross Creek, Tulare 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 Page 1 of 4

DWR 3784 (Rev. 9/85)

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. 18605-5 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: There shall be no plantigs within the project area under this permit, except that of native grasses, which may be required for slope protection.

FIFTEEN: 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

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 the Final Initial Study/Mitigated Negative Declaration adopted by the CEQA lead agency. The permittee shall implement all such mitigation measures.

EIGHTEEN: 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.

NINETEEN: 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: 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 or any other agency responsible for maintenance.

TWENTY-ONE: 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.

TWENTY-TWO: 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-THREE: Prior to start of any demolition and/or construction activities within the floodway, the applicant shall provide the Central Valley Flood Protection Board with two sets of layout plans for any and all temporary, in channel cofferdam(s), gravel work pad(s), work trestle(s), scaffolding, piles, and/or other appurtenances that are to remain in the floodway during the flood season from November 1 through July 15.

TWENTY-FOUR: 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-FIVE: All debris generated by this project shall be disposed of outside the regulated channel.

TWENTY-SIX: 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-SEVEN: Fill material shall be placed only within the area indicated on the approved plans.

TWENTY-EIGHT: Backfill material for excavations shall be placed in 4- to 6-inch layers and compacted to at least the density of the adjacent, firm, undisturbed material.

TWENTY-NINE: Density tests by a certified materials laboratory will be required to verify compaction of backfill within the regulated channel.

THIRTY: The soffit of the bridges shall be no lower than that of the existing bridges.

THIRTY-ONE: The work area shall be restored to the condition that existed prior to start of work.

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

THIRTY-THREE: The permittee shall submit as-built drawings to the Department of Water Resources' Flood Project Inspection Section upon completion of the project.

THIRTY-FOUR: 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-FIVE: The permitted encroachment(s) shall not interfere with operation and maintenance of the present or future 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.

THIRTY-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.

THIRTY-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.

THIRTY-EIGHT: 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.

THIRTY-NINE: 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.

FORTY: The permittee shall comply with all conditions set forth in the letter from the U.S. Army Corps of Engineers dated XXXXXX, which is attached to this permit as Exhibit A and is incorporated by reference.

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

# **ATTACHMENT B – Exhibit A: Corps Letter**

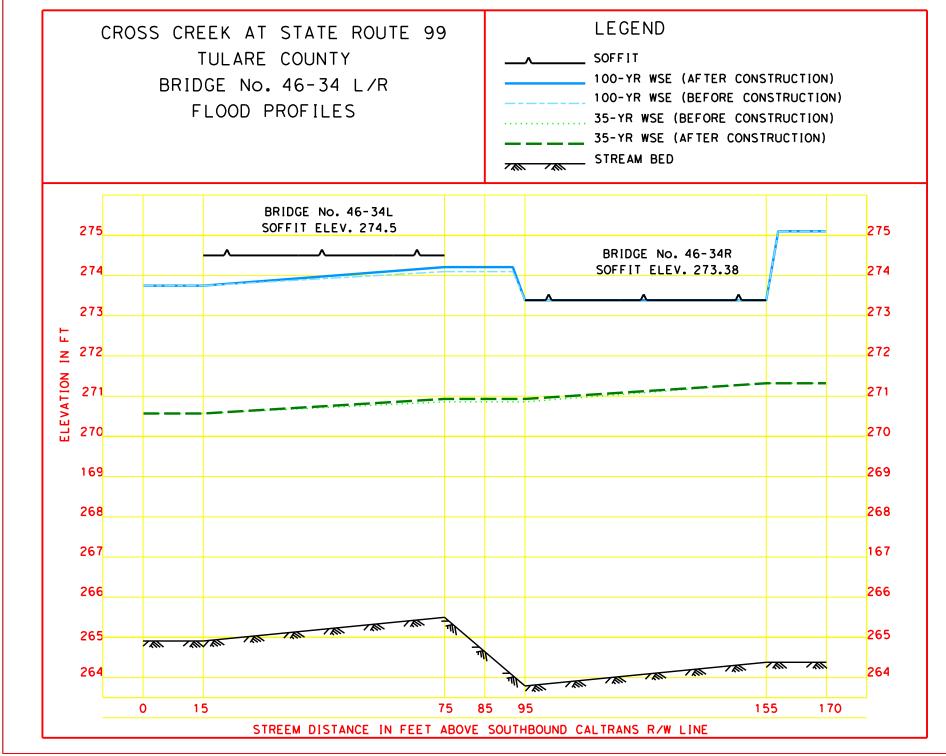
These letters have not been received by Board staff; however, it is expected to arrive prior to the Board Meeting on January 28, 2011

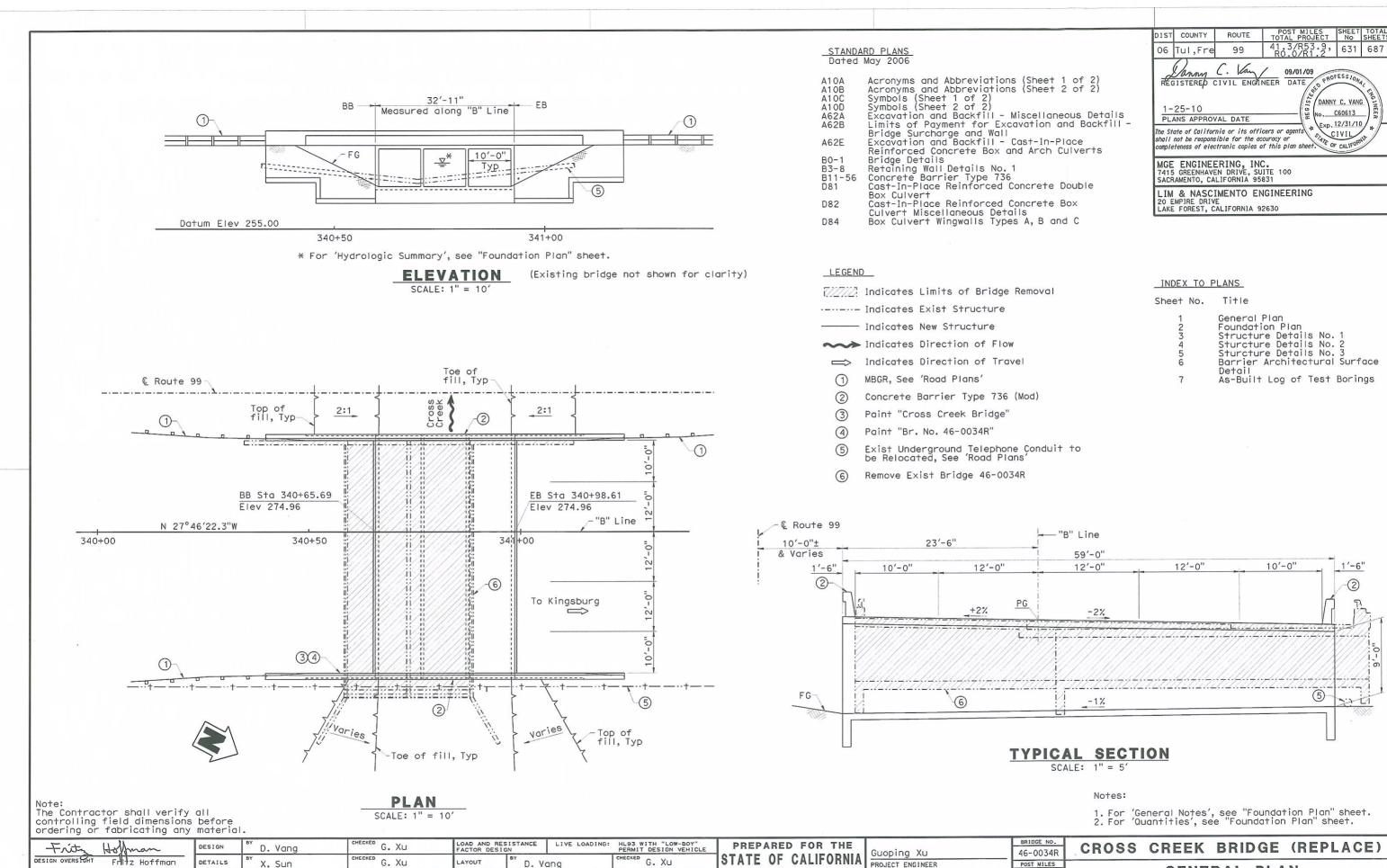
Cross Creek Bridges Hydraulics Report Bridges No. 46-30L/R, 46-31L/R, 46-32L/R 46-33L/R and 46-34 L/R Tulare County, State Route 99 PM 44.62 to 45.70 EA: 06-324504

**Cross Creek Bridges System Analysis Summary** 

	Closs Cleek Bridges System Analysis Summary											
			All Bridges with a Minimum of 2 ft Freeboard						100-year			
		offit ft)	Water Surface Elevation (ft)		Freeboard (ft)				Water Surface Elevation (ft)			
Cross Creek Bridge No.	Left Bridge	Right Bridge	35-Yr Design Flow Rate (cfs)	Before Construction	After Construction	Left Bridge	Right Bridge	Design Velocity (ft/s)	Flow Rate (cfs)	Before Construction	After Construction	Velocity (ft/s)
46-30 L/R	275.15	273.42	526	271.32	271.32	3.83	2.10	9.53	2293	275.10	275.10	5.88
46-31 L/R	275.18	273.33	984	271.32	271.32	3.86	2.01	3.42	2323	275.10	275.10	5.99
46-32 L/R	275.21	273.79	1317	271.32	271.32	3.89	2.47	3.66	3564	275.10	275.10	5.78
46-33 L/R	274.98	273.60	943	271.32	271.32	3.66	2.28	3.52	2145	275.10	275.10	6.01
46-34 L/R	274.50	273.38	700	271.32	271.32	3.18	2.06	3.27	1623	275.10	275.10	6.01
Irrigation Ditch 8x4 RCB			32	271.32	271.32			3.78	158	275.10	275.10	4.13
Total			4502						12106			

In summary, the right bridges (northbound lanes) have less capacity than the left bridges (southbound lanes). The head water elevation lost due to the extension of the left bridges (southbound) was mitigated by replacing the right bridge No. 46-34R with a larger bridge. The before construction and after construction water surface elevations downstream and upstream of Route 99 doesn't change, and the design flow rate, 4500 cfs is maintained. The design flow rate water surface elevation, maintaining a minimum of 2 ft of freeboard in all bridges is 271.33. The 100-yr flow rate water surface elevation is 275.10 ft and the overtopping elevation is 275.29 ft.





PLANS AND SPECS COMPARED R. Sennett

ORIGINAL SCALE IN INCHES

K. Wana

D. Vang

SPECIFICATIONS

R. Price

DEPARTMENT OF TRANSPORTATION

Sept 8, 2009

DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.2/25/05)

SIGN OFF DATE

DISREGARD PRINTS BEARING

45.70

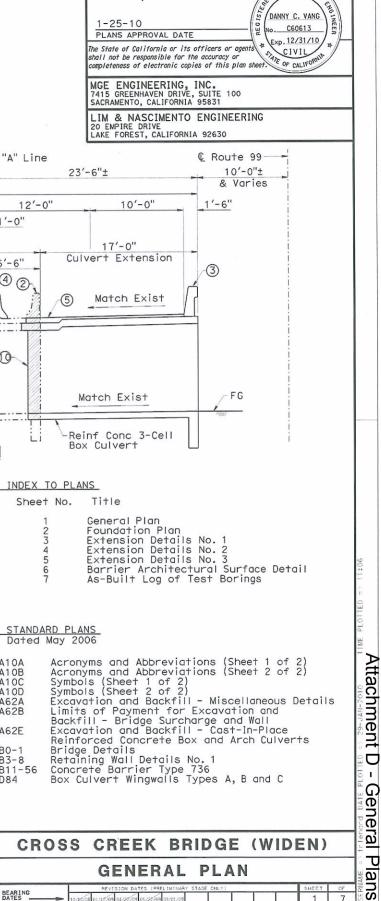
**GENERAL PLAN** 

-2

Attachment D

General Plans

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POST MILES SHEET TOTAL
TOTAL PROJECT No SHEETS 41.3/R53.9, 638 687

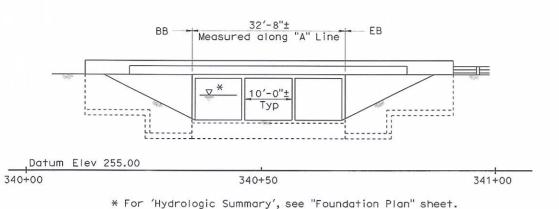
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C. Van

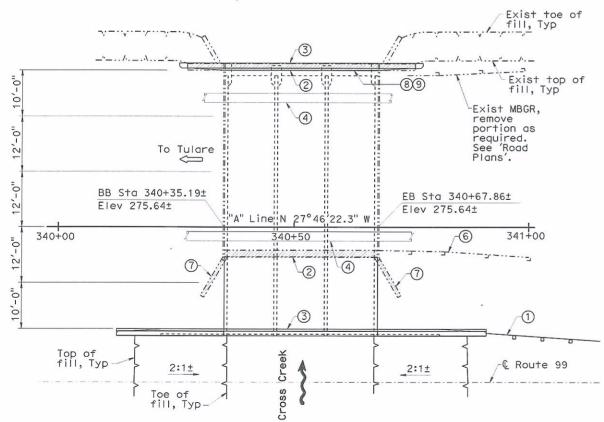
REGISTERED CIVIL ENGINEER DATE



ELEVATION

# SCALE: 1" = 10'





The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

PLAN SCALE: 1" = 10'

Fritz LOAD FACTOR DESIGN LIVE LOADING: HS20-44 ED D. Wang D. Vang D. Wang Fritz Hoffman DETAILS D. Wang AYOUT X, Sun D. Vang SPECIFICATIONS BY R. Price QUANTITIES K. Wana COMPARED R. Sennett D. Vang DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.2/25/05)

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

Guoping Xu PROJECT ENGINEER

BRIDGE NO. 46-0034L POST MILES 45.70

ILE = 46-00341-0-ap01.dar

DESIGN OVERSIGH SIGN OFF DATE

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

CU 06249 EA 324501

QUANTITIES

BRIDGE REMOVAL (PORTION), LOCATION J

ARCHITECTURAL TEXTURE (DRY STACKED

BAR REINFORCING STEEL (BOX CULVERT)

CONCRETE BARRIER (TYPE 736 MODIFIED)

12'-0"

-2%± -1%±

-1%±

Indicates Exist Structure

Indicates Direction of Flow

Indicates Direction of Travel

Concrete Barrier Type 736 (Mod)

Temporary "K" Railing, See 'Road Plans'

Remove Exist Concrete (Exist Reinf to Remain)

Remove Portion of Exist AC Overlay

Remove Portion of Exist Reinf Conc Slab

Hot Mix Asphalt (Type B), Thickness Varies

Exist MBGR to be Removed, See 'Road Plans'

Indicates New Structure

MBGR, See 'Road Plans'

Remove Exist Wingwall

Paint "Cross Creek Bridge"

Paint "Br. No. 46-0034L"

Indicates Limits of Bridge Removal (Portion)

Remove Exist Concrete Barrier Type 27R/27/27B

12'-0"

42'-0"±

Exist 3-Cell Reinf Conc Box Culvert

STRUCTURAL CONCRETE, BOX CULVERT

HOT MIX ASPHALT (TYPE B)

PREPARE AND STAIN CONCRETE

DRILL AND BOND DOWEL

STONE)

10'-0"

11'-0'

-(3) 2

-0

11

1'-6"

OG

LEGEND

(1)

2

(3)

4

(5)

6

(7)

(8)

9

(10)

(12)

LUMP

96

3 LF

131

14,100

59'-0"±

12'-0"

Exist AC Overlay

TYPICAL SECTION

SCALE: 1" = 5'

12'-0"

SUM

CY

LB 180 SQFT

LF

- "A" Line

1'-0"

4 2

(0-

A10B A10C

A10D

A62B

A62E

B3-8

Sheet No.

12'-0"

17 TON

180 SQFT

DISREGARD PRINTS BEARING EARLIER REVISION DATES

#### GIATE OF CALIFORNIA — DOSINESS, TRANSFORMATION AND HOUSING AGENC

DEPARTMENT OF TRANSPORTATION

DISTRICT 6 2015 E. Shields Avenue Fresno CA 93726 PHONE (559) 243-3421 FAX (559) 243-3426 TTY (559) 488-4066



Flex your power! Be energy efficient!

January 10, 2011

Nancy C. Moricz P.E. - Engineer, WR Central Valley Flood Protection Board Flood System Improvement Section 3310 El Camino Ave., Room 151 Sacramento, CA 95821

Dear Ms. Moricz,

Caltrans has a project ready to start construction to widen 13.8 miles of State Route 99 in Tulare County from 0.2 mile north of the Goshen Overhead to 0.2 mile north of the Conejo Avenue Separation. The capacity increase project proposes to widen the existing four and five lane freeway to a six lane freeway and widen shoulders to ten feet.

In order to accommodate the new lanes, Caltrans is planning to widen bridges at all five Cross Creek locations, referenced as follows: Bridges No. 46-30R/L, 46-31R/L, 46-32R/L, 46-33R/L, and 46-34R/L. The distance between the first Bridge No. 46-30R/L and the last Bridge 46-34R/L is 5800 feet. The existing bridges are undersized for both 100 year and 50 year storms. The bridges do not have the capacity to pass the 100 year flow rate and maintain a 2-foot freeboard.

Caltrans does not plan to increase the flow capacity of the system of bridges in this project to meet the 100 year flow. Caltrans plans to remove and replace Bridge No. 46-34R with a larger bridge in order to mitigate a small capacity loss due to widening the structures and maintain a net zero loss in hydraulic capacity in the system of bridges.

The main reason that Caltrans does not propose to meet the 100 year freeboard regulation is based on cost. In order to meet this requirement, an approximate 1.3 mile length of the freeway would need to be elevated by three feet and all ten bridges would need to be replaced at a cost of approximately \$21 million. Further study would be required to determine any impacts to the adjacent parallel county frontage road and the downstream channels and flood zone.

The impacts of raising the highway profile and replacing the bridges would require additional environmental study. Army Corps of Engineers has taken jurisdiction for two Cross Creek bridge locations, Bridge No. 46-33R/L and Bridge No.46-34R/L. The project requires a Nationwide permit for Section 404 compliance from Army Corps of Engineers. Impacting a larger area could require obtaining a higher level permit, an Individual permit for Section 404 compliance, and more costs for mitigation. Cross Creek Bridge No. 46-33R/L has been identified as a San Joaquin Kit Fox crossing. Impacting a

Nancy C. Moricz January 7, 2011 Page 2

larger area would require additional consultation of the Biological Opinion with US Fish and Wildlife Service. This could result in additional costs for mitigation.

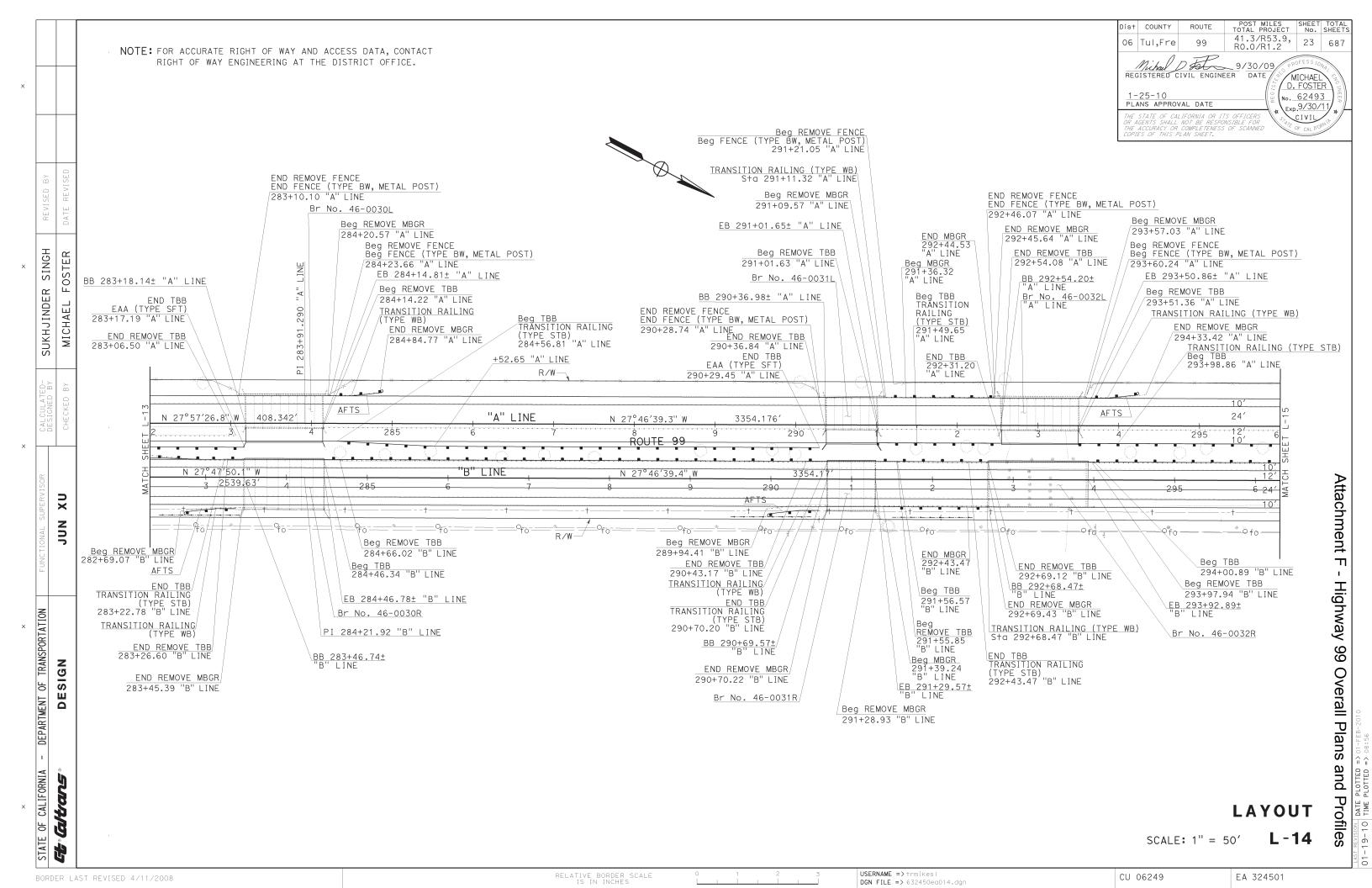
At this stage of our project, implementing a major project scope change could delay the project's capacity and related safety benefits to the travelling public by more than one year and greatly jeopardize funding availability for the project.

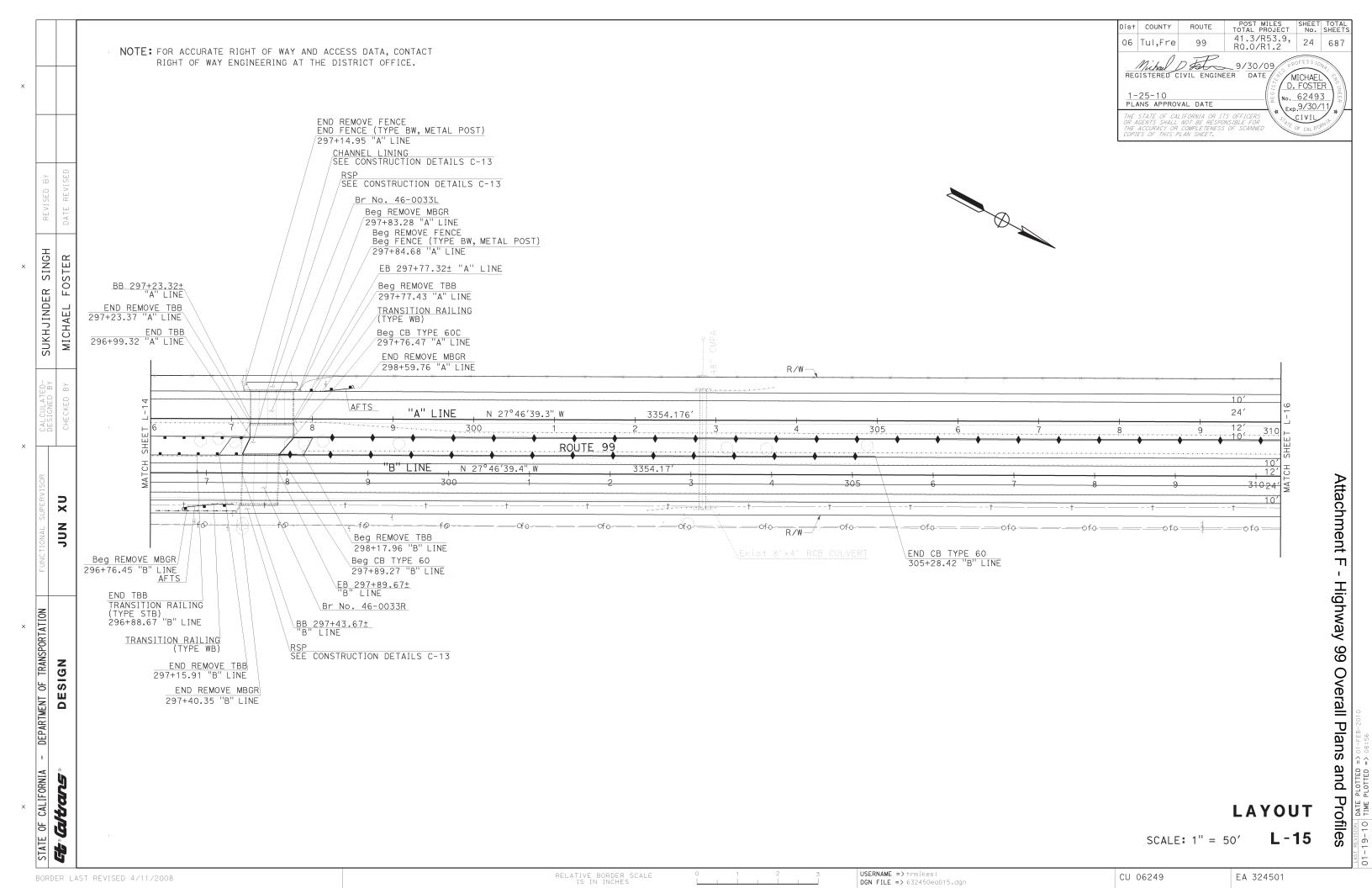
For additional information, please contact Phillip Sanchez, Project Manager, at (559) 243-3466.

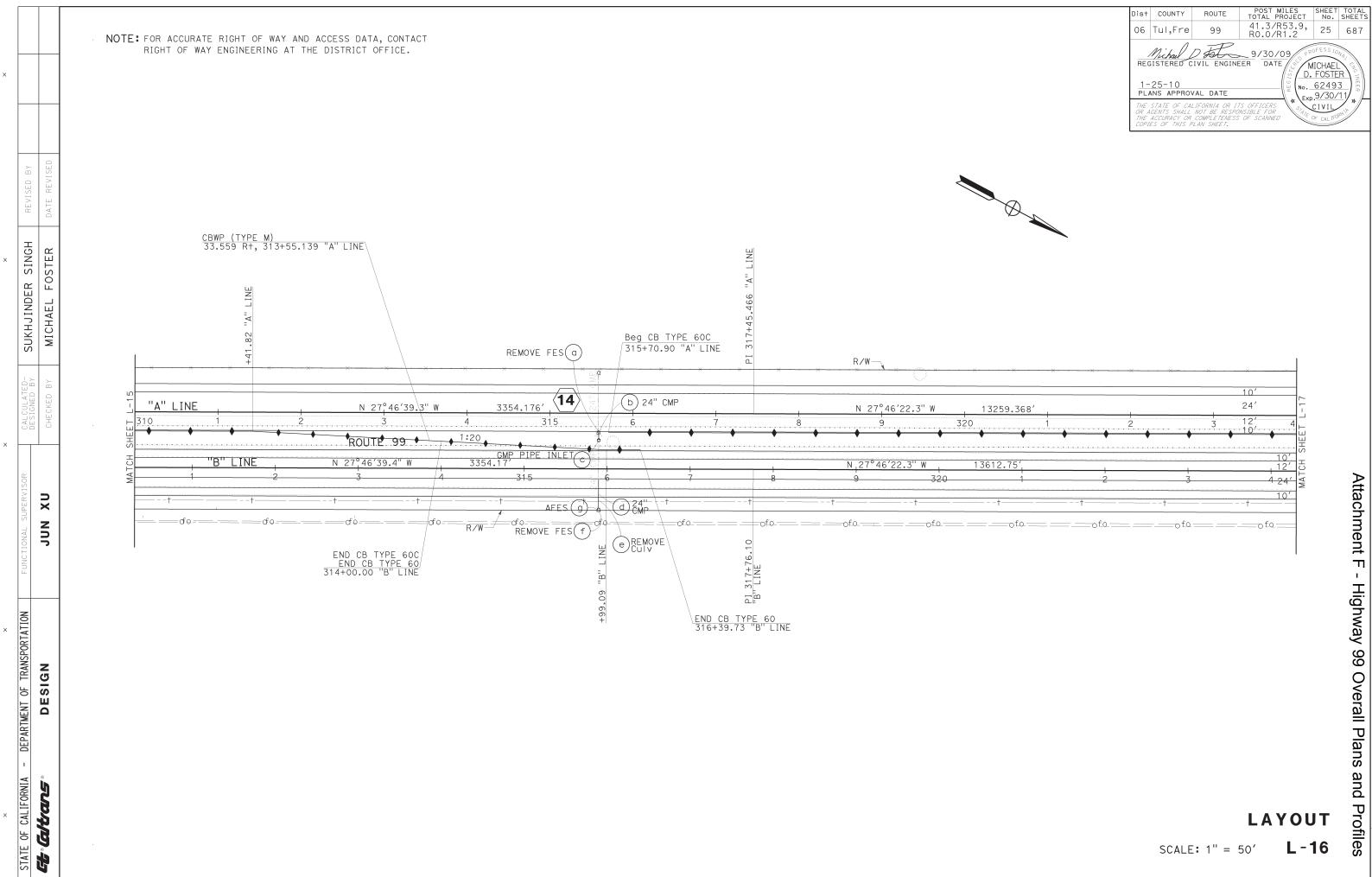
Sincerely,

MIKE R. RASTEGAR Deputy District Director

Program/Project Management







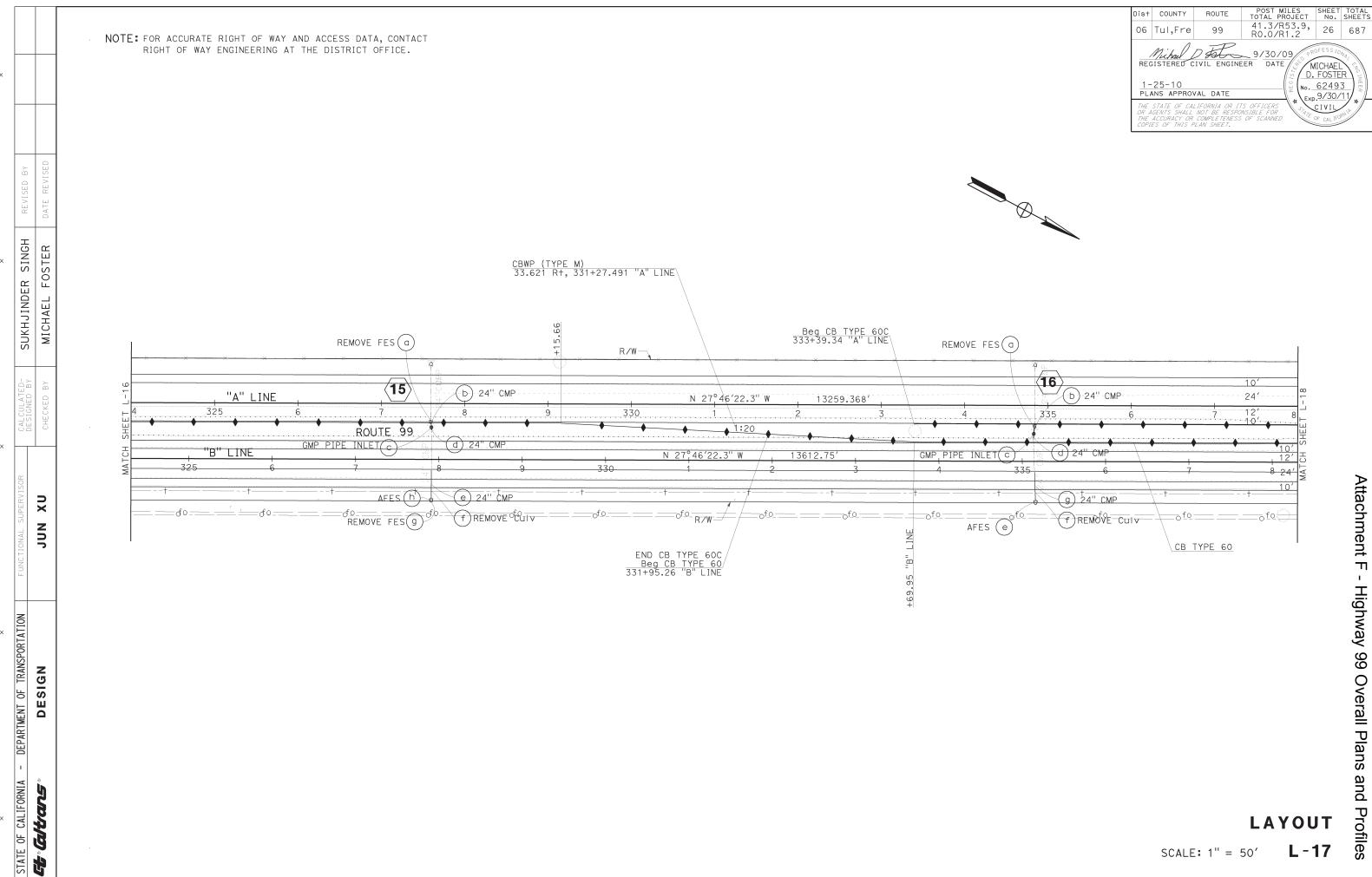
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BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES

EA 324501

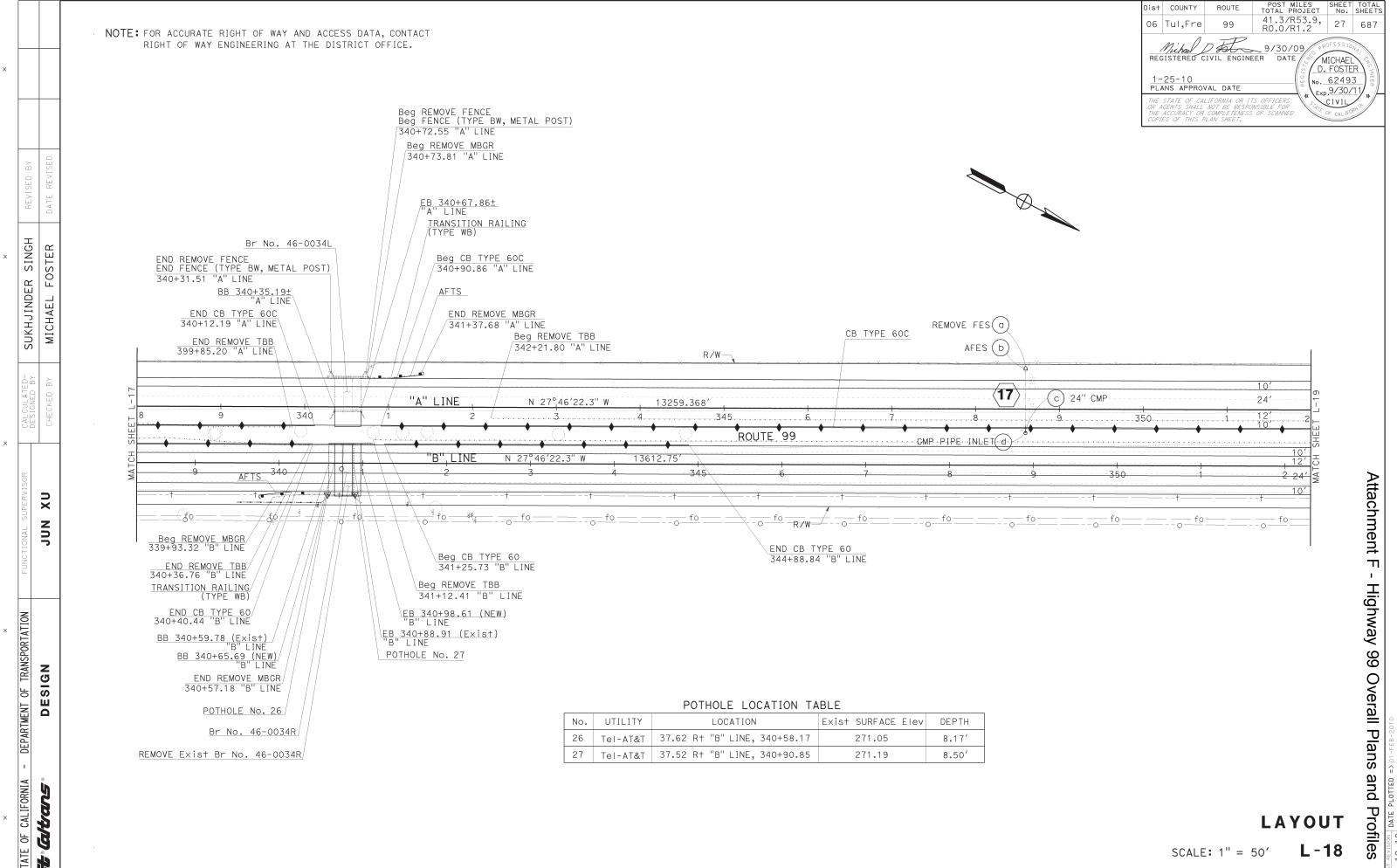


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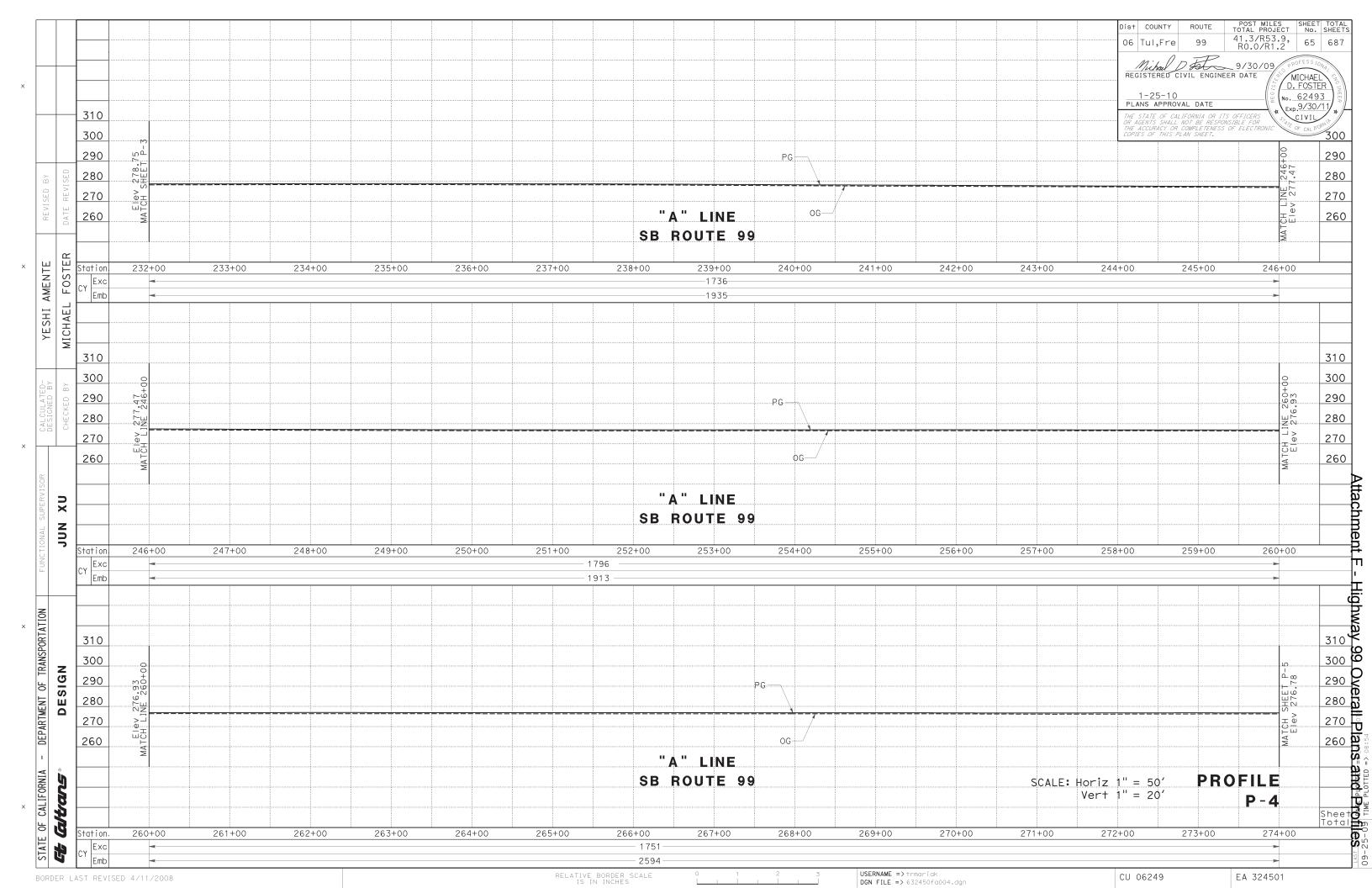


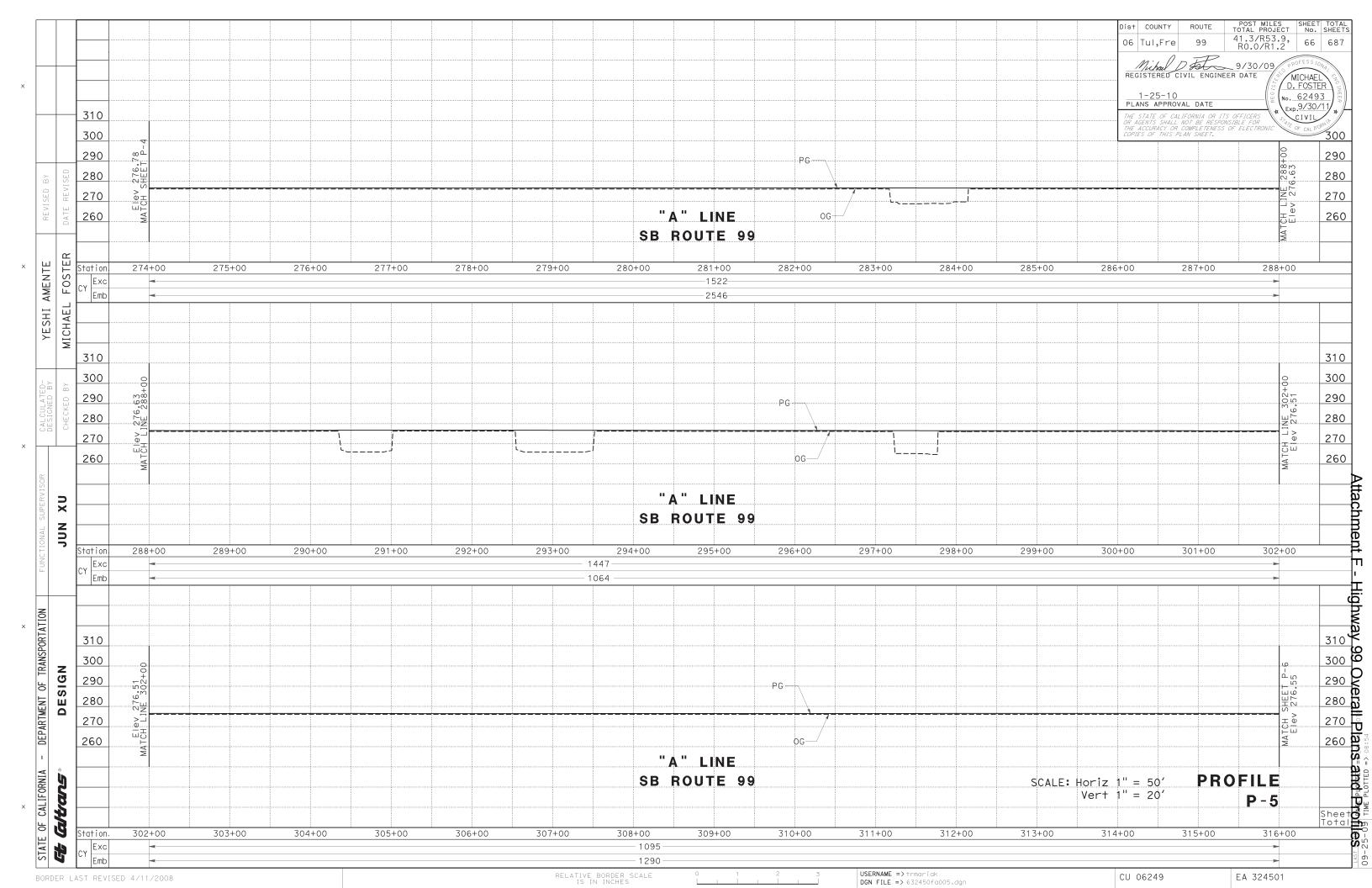
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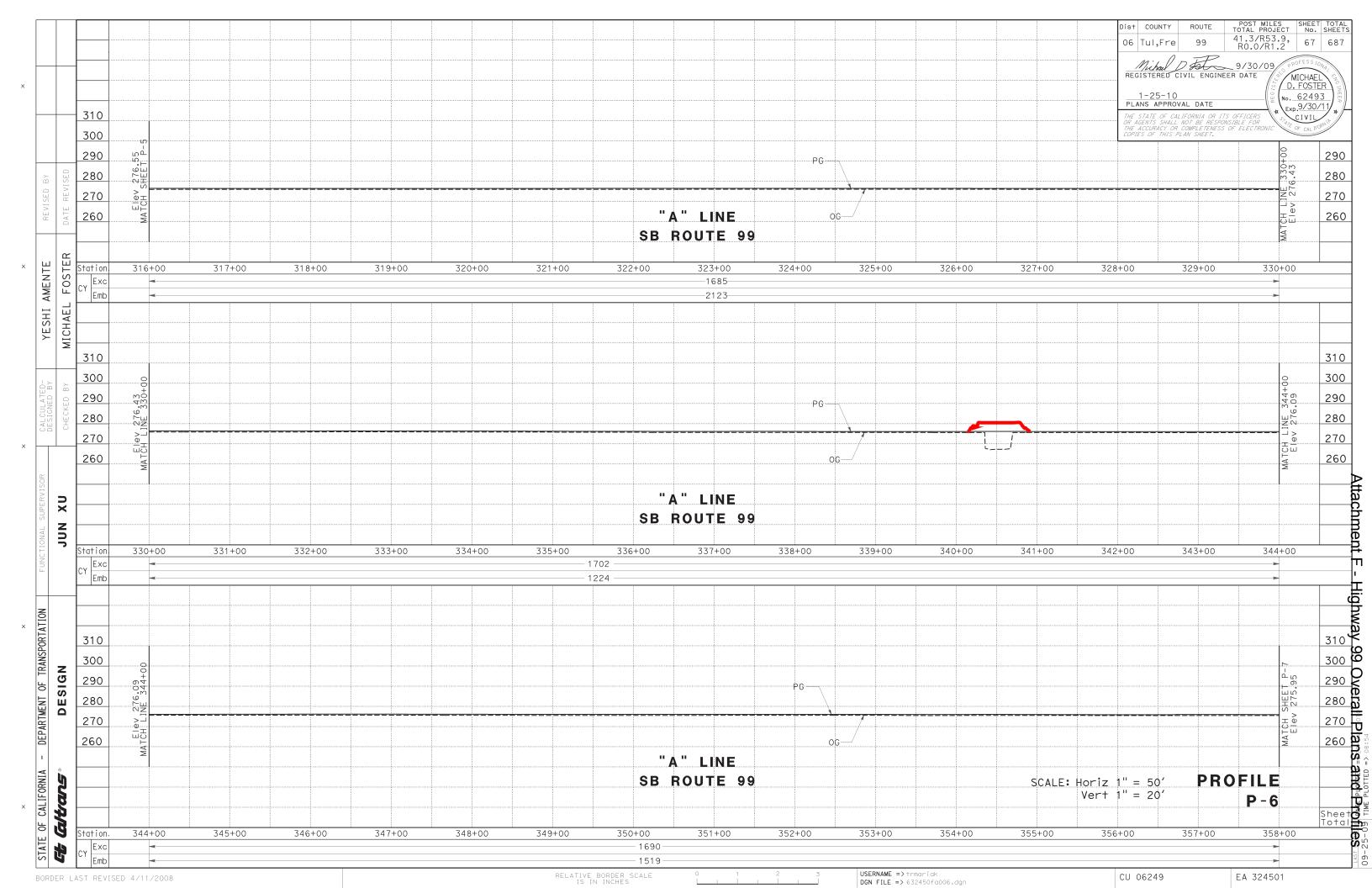
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# STATE OF CALIFORNIA THE RESOURCES AGENCY CENTRAL VALLEY FLOOD PROTECTION BOARD

#### **RESOLUTION NO. 11-06**

# FINDINGS AND DECISION AUTHORIZING ISSUANCE OF ENCROACHMENT PERMIT NO. 18605-5 DEPARTMENT OF TRANSPORATION CROSS CREEK BRIDGE WIDENING PROJECT

WHEREAS, the Department of Transportation proposes to widen Highway 99 at bridge crossing numbers 46-0034L (southbound) and 46-0034R (northbound) of the channel of cross creek in Tulare County. The proposed project will remove the existing bridges and replace them with new structures that will increase the width of the bridge from 42-feet to 59-feet in the southbound direction and a reduction in width from 61-feet, 11-inches to 59-feet in the northbound direction and will modify the highway from four to six lanes; and

**WHEREAS**, the Department of Transportation submitted Encroachment Permit Application No. 18605-5 to the Central Valley Flood Protection Board on October 27, 2010. The project is located on Highway 99 at bridge crossing numbers 46-0034L (southbound) and 46-0034R (northbound) of the channel of Cross Creek in Tulare County; and

WHEREAS, approval of Encroachment Permit No. 18605-5 is conditioned upon receipt of a favorable U.S. Army Corps of Engineers comment letter or a letter stating that the proposed project does not affect a federally constructed project, for application 18605-5; and

WHEREAS, the proposed project does not meet the Board's standards contained in Title 23, California Code of Regulations (CCR), Article 8, Section 128(a)(10)(B) which states "When an existing bridge being widened does not meet the clearance requirement above the design flood plane, the bottom structural members of the added section may be no lower than the bottom structural members of the existing bridge, except as may be caused by the extension of existing sloped structural members."; and

WHEREAS, in accordance with Title 23, CCR Section 11, the Board may grant a variance from the Board's standards for a use that is not consistent with the Board's standards. When approval of an encroachment requires a variance, the applicant must clearly state in the application why compliance with the Board's standards is infeasible or not appropriate; and

**WHEREAS**, the Department of Transportation requests the Board to grant a variance from Title 23, CCR Section 128 (a)(10)(B) and requests the Board's approval for the following reasons:

1) Approximately 1.3 miles of the freeway would need to be elevated by three feet and ten bridges would need to be replaced at a cost of approximately \$21 million;

- 2) Further study would be required to determine any impacts to the adjacent parallel county frontage road and the downstream channels and flood zone;
- 3) The proposed project would provide a safety benefit to the traveling public sooner by more than one year; and

WHEREAS, for all these reasons and based on technical evidence given in the staff report, staff recommends the Board to grant a variance from Title 23, CCR Section 128 (a)(10)(B) and approve Application No. 18605-5; and

WHEREAS, the Department of Transportation as lead agency under the California Environmental Quality Act, Public Resources Code sections 21000 *et seq*. ("CEQA") prepared the Goshen to Kingsburg Six Lane Project Draft Initial Study/Mitigated Negative Declaration (IS/MND, SCH Number: 2006051047, April 2006), Final Initial Study/Mitigated Negative Declaration (IS/MND, SCH Number: 2006051047, October 2006) and Mitigation Measures on the Cross Creek Bridge Project (incorporated herein by reference and available at the Central Valley Flood Protection Board offices or Department of Transportation office); and

WHEREAS, the Department of Transportation, as lead agency, certified the IS/MND, adopted mitigation measures (incorporated herein by reference and available at the Central Valley Flood Protection Board or at the Department of Transportation), approved findings pursuant to CEQA and the CEQA Guidelines (incorporated herein by reference); and filed a Notice of Determination with the State Clearinghouse on November 8, 2006 approving the Project; and

**WHEREAS**, the Central Valley Flood Protection Board has conducted a hearing on Encroachment Permit No. 18605-5 and has reviewed the application, the Report of its staff, the documents and correspondence in its file, and given the applicant the right to testify and present evidence on their behalf;

NOW, THEREFORE, BE IT RESOLVED THAT,

#### **Findings of Fact**

- 1. The Central Valley Flood Protection Board hereby adopts as findings the facts set forth in the Staff Report.
- 2. The Board has reviewed all Attachments listed in the Staff Report.

### **CEQA Findings**

3. The Central Valley Flood Protection Board, as a responsible agency, has independently reviewed the analysis in the IS/MND and the findings prepared by the lead agency, Department of Transportation, and has reached its own conclusions.

- 4. The Central Valley Flood Protection Board, after consideration of the IS/MND and Department of Transportation findings, adopts the project description, analysis and Findings which are relevant to activities authorized by issuance of Encroachment Permit No. 18605-5 for the Cross Creek Bridge Widening Project. Board staff finds that although the proposed project could have a potentially significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. The project proponent has incorporated mitigation measures into the project plans to avoid identified impacts or to mitigate such impacts to a point where no significant impacts will occur. These mitigation measures address impacts to biological resources and noise.
- 5. **Custodian of Record**. The custodian of the CEQA record for the Board is its Executive Officer, Jay Punia, at the Central Valley Flood Protection Board Offices at 3310 El Camino Avenue, Room 151, Sacramento, California 95821.

# Findings pursuant to Water Code section 8610.5

- 6. **Evidence Admitted into the Record**. The Board has considered all the evidence presented in this matter, including the original and updated applications, past and present Staff Reports and attachments. The Board has also considered all letters and other correspondence received by the Board and in the Board's files related to this matter.
- 7. **Best Available Science**. In making its findings, the Board has used the best available science relating to the issues presented by all parties.
- 8. **Effects on State Plan of Flood Control**. This project has no effects on the State Plan of Flood Control.

## Other Findings/Conclusions regarding Issuance of the Permit

9. This resolution shall constitute the written decision of the Central Valley Flood Protection Board in the matter of Encroachment Permit No. 18605-5.

#### **Approval of Encroachment Permit No. 18605-5**

10. Based on the foregoing, the Central Valley Flood Protection Board hereby approves the Cross Creek Bridge Widening Project on condition that the Board receives a favorable U.S. Army Corps of Engineers comment letter or a letter stating that the proposed project does not affect a federally constructed project. The Board also approves

- issuance of Encroachment Permit No. 18605-5 in substantially the form provided as Attachment B of the Staff Report after such Corps approval is received.
- 11. The Central Valley Flood Protection Board directs the Executive Officer to take the necessary actions to prepare and execute the permit and related documents and file a Notice of Determination under the California Environmental Quality Act for the Department of Transportation, Cross Creek Bridge Widening Project.

PASSED AND ADOPTED by vote of the Board on	, 2011.		
Benjamin F. Carter President			
Francis Hodgkins Secretary			