

**Meeting of the Central Valley Flood Protection Board
July 27, 2012**

Staff Report

**California Department of Transportation, District 3
State Highway Route 65 Lincoln Bypass Project, Big Yankee Slough Crossing –
northbound, Placer County**

1.0 – ITEM

Consider approval of Permit No. 18654 (Attachment B).

2.0 – APPLICANT

California Department of Transportation (Caltrans), District 3.

3.0 – LOCATION

The project is located in Placer County, approximately 7.9 miles northwest of the City of Lincoln, 18.6 miles northwest of Roseville, and 4.3 miles south of Wheatland along the newly constructed State Highway Route 65 bypass, (see Attachment A).

4.0 – DESCRIPTION

Applicant is building three structures crossing Big Yankee Slough as part of the 12-mile, 4-lane freeway bypass around the City of Lincoln. This report is for the “right” bridge, northbound traffic, and has been constructed. This northbound bridge (Caltrans bridge No. 19-0198R) is a two-span, cast in place, pre-stressed concrete box girder, 157.5 feet in length and 44.3 feet wide (see Attachment C).

5.0 – PROJECT ANALYSIS

The overall analysis of the proposed project described in Section 4.0, is described in Sections 5.1 and 5.2 below. The project is an existing structure over Big Yankee Slough.

5.1 – Hydraulic Analysis

The model used for the one-dimensional hydraulic analysis was the USACE's Hydrologic Engineering Center (HEC-1), version 4.0.1E. The roughness coefficient for the bank was between 0.030 and 0.060. The analysis included a scenario for a 100-yr event with a design flow of 1,746 cfs.

According to the modeling results, the water surface elevation (WSE) is at 91.5 ft during a 100-yr and provides about 5.1 feet freeboard at a velocity of 4.0 fps (see Attachment D). The piles for the foundation were designed to withstand the maximum possible scouring of 83 feet (1929 NGVD Datum).

5.2 – Geotechnical Analysis

All work was done in a manner that did not pose a threat to the structural integrity of the channel, structures, or floodway. Earthwork was completed in compliance with Permit No. 18656 (Attachment B) and Title 23 Standards. Scouring is not critical as described in Section 5.1. All piles for support locations are steel H sections driven to a depth of about 88 feet at the abutments, and about 73 feet at the center support.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

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

- Letter from the USACE stating that the agency has no comments or recommendations because the work does not affect a federally-constructed project. See Attachment E.

7.0 – CEQA ANALYSIS

Board staff has prepared the following CEQA Findings:

The Board, as a responsible agency under CEQA, has reviewed Draft and Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) (SCH Number: 1990020626, May 2006) and Mitigation Monitoring Plan and State Route 65, Placer County, Highway Bypass Project prepared by the lead agency, Caltrans. These documents, including project design, may be viewed or downloaded from the Central

Valley Flood Protection Board website at <http://www.cvfpb.ca.gov/meetings/2012/07-27-2012.cfm> under a link for this agenda item. These documents are also available for review in hard copy at the Board and the Caltrans offices.

Caltrans has determined that the project would not have a significant effect on the environment and subsequently filed a Notice of Determination on May, 30, 2006 with the State Clearinghouse. 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 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 Mitigation Monitoring Plan and address impacts to biological resources, water quality, cultural resources, agricultural resources, hazards and hazardous materials, and land use.

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 adopt the CEQA findings, approve the existing bridge permit 18654, along with U.S. Army Corps of Engineers 208.10 comment letter which indicates no objection to the project, and direct staff to file a Notice of Determination with the State Clearinghouse.

10.0 – LIST OF ATTACHMENTS

- A. Location Map
- B. Draft Permit No. 18654
- C. Structure Plan and Profile, and photo
- D. Hydraulic Summary Table and profile
- E. Letter from the USACE

Technical Review:	Sergio Guillen, P.E., Atkins
Staff Recommendations:	David R. Williams, P.E. – Senior Engineer, WR
Environmental Review:	James Herota, E.S.
Document Review:	David R. Williams, P.E. – Senior Engineer, WR Eric Butler, P.E. – Supervising Engineer, WR