Memorandum

To: STRUCTURE POLICY BOARD

From: THOMAS A. OSTROM
Deputy Division Chief
Structure Policy and Innovation
Division of Engineering Services

Date: March 24, 2017

Subject: UPDATE OF MEMO TO DESIGNERS 5-1 "ABUTMENTS"

This updated Memo To Designers (MTD) 5-1 provides guidance for design of abutments using the AASHTO LRFD Bridge Design Specifications, 6th Edition, and corresponding California Amendments (AASHTO-CA BDS-6).

It includes updated information for Structure and Geotechnical Designers regarding LRFD requirements, scour effects, general seismic design requirements, and Mechanically Stabilized Embankment Abutments (MSEA). Implementation should lead to an LRFD compliant, more efficient, and consistent design process. Attachment-I provides estimated lateral capacity for Standard Plan and H-piles that can be used for seismic design of abutment shear keys.

MTD 5-1 shall be used for projects designed according to AASHTO-CA BDS-6, and may be helpful to projects in progress and designed based on AASHTO LRFD Bridge Design Specifications, 4th Edition. The document has been posted on the publications website (http://www.dot.ca.gov/hq/esc/techpubs/).

For questions or concerns, you may contact Amir Malek, Technical Committee Chair at (916) 227-5981.

Attachment

c: Michael D. Keever, Chief, Division of Engineering Services
   Mark Samuelson, Chief, Division of Local Assistance
   John Babcock, Structure Construction
   Mark DeSalvatore, Geotech Design Policies & Practices
   Sudhakar Vatti, Program/Project Management
   Structure Policy & Innovation Office Chiefs

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