Memorandum

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From: BARTON NEWTON
Deputy Division Chief
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Date: April 9, 2014

Subject: NEW MEMO TO DESIGNERS 5-5 “DESIGN CRITERIA OF STANDARD EARTH RETAINING SYSTEMS”

This new Memo to Designers 5-5 (MTD 5-5) “Design Criteria of Standard Earth Retaining Systems” documents material parameters and assumptions made in the development of the standard earth retaining systems (ERS) found in the 2010 Standard Plans, 2010 Revised Standard Plans and the most recent Bridge Design Detail Sheets (XS). To comply with the FHWA mandate for designing ERS using load and resistance factor design (LRFD) methodology by October 2010, all of the standard ERS were designed to the AASHTO LRFD Bridge Design Specifications (4th edition, 2007) and the corresponding California Amendments.

MTD 5-5 and these standards will remain in effect for use, after Caltrans adopts the AASHTO LRFD Bridge Design Specifications, 2012 (6th edition) with CA Amendments (AASHTO-CA BDS-6) and the 2015 (Caltrans) Standard Plans and Standard Specifications. As time and resources permit, updates may be done for AASHTO-CA BDS-6.

Users of these standards should be aware that projects often possess conditions that are in conflict with the design parameters and assumptions employed in the standard ERS. Special design should be carried out under these circumstances.

Any inquiry regarding and interpretation of MTD 5-5 should be addressed to Kathryn Griswell, the chair of the Earth Retaining Systems Committee, at 916-227-7330.

Cc: Tim Craggs, Chief, Division of Design
    Ray Zhang, Chief, Division of Local Assistance
    Susan Hida, Chief, Office of State Bridge Engineer Support
    Kathryn Griswell, Technical Specialist, State Bridge Engineer Support
    Gary Wang, Technical Specialist, State Bridge Engineer Support

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