State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

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To: ALL USERS OF THE BRIDGE STANDARD DETAIL SHEETS (XS)

Date: July 24, 2013

File: http://www.dot.ca.gov/hq/esc/techpubs/

From: SHANNON POST, Chief
Office of Design and Technical Services
Structure Policy and Innovation
Division of Engineering Services

Subject: **BRIDGE STANDARD DETAIL SHEETS (XS) CHANGE TRANSMITTAL**

Attached, please find a summary of revisions to the Bridge Standard Detail Sheets (XS) from July 2011 through June 2013.

Change transmittals memorandums shall be issued on a semi-annual basis, or concurrent with major releases.

Users are reminded of the following:

Disclaimer:
The California Department of Transportation (Caltrans) provides Bridge Standard Detail Sheets (XS) on an "as is" basis. All warranties and representations of any kind with respect to these sheets are disclaimed. These sheets are not Standard Plans and are subject to frequent modification. It is the responsibility of the user to ensure usage of the most current sheets and that the details shown are applicable for their specific project. Additional guidance on the usage of these sheets can be found in Bridge Design Details 1-16, "Use of Bridge Standard Detail Sheets".

Send general questions regarding the usage of XS Sheets to "DES Design and Technical Services".

Send technical questions to the applicable Technical Specialist or Technical Manager.

Attachments

(1) Summary of Revisions to Bridge Standard Detail Sheets (XS) from July 2011 through June 2013

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XS Sheet Number	XS Sheet Title	Previous Approvals	Approval Date	Summary of Revisions
xs7-050	Cable Restrainer Type 2	July 2011	January 2012	**Minor Revisions:** 1. Swage Stud Detail, clarify diameter of standard pipe and length of stud
xs7-080-1	Pipe Seat Extender Details (Retrofit)		July 2012	**New Sheet**
xs7-080-2	Pipe Seat Extender Miscellaneous Details		July 2012	**New Sheet**
xs7-080-3	Pipe/Cable Restrainer System Details (Retrofit)		July 2012	**New Sheet**
xs8-010	Joint Seal Assembly-Maximum Movement Rating = 4"	July 2011	June 2012	**Minor Revisions:** 1. Field Weld Detail 2. Allowable weld types 3. Neoprene seal splicing
xs12-040	Sub Horizontal Ground Anchor Details	July 2011	January 2012	**Minor Revisions:** 1. Updated "drill" to "drilled" hole to conform to specifications
xs12-050	Cantilever Soldier Pile Wall Details	July 2011	January 2012	**Minor Revisions:** 1. Change from "STRUCTURE" to "STRUCTURAL" in two places to match pay items. 2. Remove note 3 regarding non-destructive testing per IQA review 3. Change "STRUCTURAL STEEL" to "STEEL SOLDIER PILES" 4. Delete ASTM A709/A709M designation for soldier pile structural steel, replace with ASTM A572/A, ASTM 572M and ASTM A36/A36M designations
xs12-060-1	Soldier Pile Wall with Walers-Details No.1	July 2011	January 2012	**Minor Revisions:** 1. Add note no. 4 "Bearing plates may be recessed, or on face of concrete waler". 2. Add the call out to Section A-A 3. Move one dimension from Section B-B to Section A-A 4. Change "STEEL ANCHOR" to "CONCRETE ANCHOR" 5. Change "FULL PENETRATION" to "COMPLETE PENETRATION" 6. Change "STRUCTURE" to "STRUCTURAL" in Typical Section 7. Change dimension on top of waler in Section B-B from 1'-6" to 1"-8".
xs12-060-2	Soldier Pile Wall with Walers-Details No.2	July 2011	January 2012	**Minor Revisions:** 1. Remove note 3, non-destructive testing 2. Change "STRUCTURE" to "STRUCTURAL" in

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				Section D-D 3. Delete ASTM A709/A709M designation for soldier pile structural steel. Add ASTM A572/A, ASTM 572M and ASTM A36/A36M designation 4. Change "STRUCTURAL STEEL" to "STEEL SOLDIER PILES" 5. Delete mild steel bars from the General Notes 6. Add to General Notes: REINFORCED CONCRETE (WALERS) fc=4000 psi, fy+ksi
xs12-070	Soldier Pile Wall with Ground Anchors	July 2011	January 2012	**Minor Revisions:** 1. Remove note 3, non-destructive testing 2. Change "STRUCTURE" to "STRUCTURAL" in Section D-D 3. Delete ASTM A709/A709M designation for soldier pile structural steel. Add ASTM A572/A, ASTM 572M and ASTM A36/A36M designation 4. Change "STRUCTURAL STEEL" to "STEEL SOLDIER PILES" 5. Delete mild steel bars from the General Notes Add to General Notes: REINFORCED CONCRETE (WALERS) fc=4000 psi, fy+ksi
xs12-080	Soldier Pile Wall Lagging Details	July 2011	January 2012	**Minor Revisions:** 1. Correct spelling of "POLYETHLYENE"
xs12-090	Concrete Barrier Slab Details	July 2011	January 2012	**Minor Revisions:** 1. Correct grammar in Note 4
xs13-020-1	Mechanically Stabilized Embankment-Details No.1	July 2011	January 2012	**Minor Revisions:** 1. Corrected spelling note 4
xs13-020-2	Mechanically Stabilized Embankment-Details No.2	July 2011	January 2012	**Minor Revisions:** 1. Updates to notes
xs13-020-3	Mechanically Stabilized Embankment-Details No.3	July 2011	January 2012	**Minor Revisions:** **1.** Minor updates to details
xs13-020-5	Mechanically Stabilized Embankment-Details No.5	July 2011	January 2012	**Minor Revisions:** 1. Add Note 5
xs13-020-6	Mechanically Stabilized Embankment-Details No.6	July 2011	January 2012	**Minor Revisions:** 1. Add under drain detail. 2. Other minor edits
xs14-210-2	Retaining Wall Type 1SW-Details No.2	July 2011	December 2012	**Minor Revisions:** 1. Reduce "hz" to "C" minus 3 inches for walls
xs14-220-2	Retaining Wall Type 1SWB-Details No.2	July 2011	December 2012	**Minor Revisions**
xs14-375-1	Retaining Wall Type 7B-Details No.1	July 2011	April 2013	**Minor Revisions:** 1. In Note 4, "b" bar should be "c"

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xs14-390-2	Retaining Wall Type 7SWB-Details No.2	July 2011	January 2012	**Minor Revisions:** 1. Anchor Factored Test Load was incorrectly labeled as "T" in the first column, the correct symbol, "Tp" has been restored.
xs14-400-2x	Retaining Wall Type 7SWP-Details No.2	July 2011	January 2012	**Minor Revisions:** 1. Wall "Design H" was not shown correctly, it was shown as from top of the stem to partial height. It is now shown from the top of the stem to the top of the footing.
xs15-120-2	Masonry Block Sound Wall on Retaining Wall-Details No.2	July 2011	July 2012	**Minor Revisions**
xs15-130-1	Masonry Block Sound Wall w/Barrier on Retaining Wall-Details No.1	July 2011	July 2012	**Minor Revisions**
xs16-026	Thrie Beam Connection-Type 2	July 2011	August 2011	**Minor Revisions**
xs16-035	Concrete Barrier Type 80, 732 & 736-Tubular Bicycle Railing Details	July 2011 March 2012	August 2012	**Minor Revisions:** 1. Update to call-out on bolt in "TUBE CONNECTION DETAIL" 2. Added the word "EXPANSION JOINTS" and replaced the word "SLICES".
xs16-045	Concrete Barrier Type 736 Retrofit on Existing Bridge Deck and Wingwall		June 2012	**New Sheet**
xs16-075	Concrete Barrier Type 60P		July 2012	**New Sheet**
xs16-090-1	Concrete Barrier Type 60R-Transition at Bridge Column-Details No.1	July 2011	July 2012	**Minor Revisions:** 1. Added dimension L for plate width
xs16-090-2	Concrete Barrier Type 60R-Transition at Bridge Column-Details No.2	July 2011	July 2012	**Minor Revision:** 1. Added the word "MAX" to length "L"
xs16-091-1	Concrete Barrier Type 60G-Transition at Bridge Column-Details No.1		August 2012	**New Sheet**
xs16-091-2	Concrete Barrier Type 60G-Transition at Bridge Column-Details No.2	July 2011	August 2012	**Major Revision:** This is a new XS sheet using Type 60G barrier for transition at bridge columns. Revisions were made to XS 16-090-1 to minimize the transition length from 40' to 20". Type 60G is 4"'8", so no transition is required.
xs16-220-1	Chain Link Railing Type 7(MOD)-Details No.1	July 2011	April 2013	**Minor Revisions:** 1. Typical Post Detail: change "See Note 8" to read "See Note 9". 2. Elevation/end post: change "See Note 10" to read "See Note 11". 3. Elevation: Change "See note 8" to read "See note 9".

Attachment: Summary of Revisions to Bridge Standard Detail Sheets (XS) from July 2011 through June 2013

				4. Splice or expansion joint detail: Change "See Note 8" to read "See Note 10" and change "See Note 9" to read "See Note 10".
xs17-030	CIP Bottomless Culvert Foundation: Piles/Footings on Rock	July 2011	November 2011	**Minor Revisions:** 1. Renumber sheets 2. Update details for corner reinforcement 3. General clean-up
xs17-040	CIP Bottomless Culvert Foundation: Piles/Footings on Soil	July 2011	November 2011	**Minor Revisions:** 1. Renumber sheets 2. Update details for corner reinforcement General clean-up
xs17-050-1	CIP Bottomless Culvert: General Configuration	July 2011	November 2011	**Minor Revisions:** 1. Renumber sheets 2. Update details for corner reinforcement General clean-up
xs17-050-2	CIP Bottomless Culvert: Wall, Slab & Foundation Details	July 2011	November 2011	**Minor Revisions:** 1. Renumber sheets 2. Update details for corner reinforcement General clean-up
xs17-050-3	CIP Bottomless Culvert: Foundation Details	July 2011	November 2011	**Minor Revisions:** 1. Renumber sheets 2. Update details for corner reinforcement General clean-up
xs18-010	Temporary Wood Pole - General Notes		November 2012	**New Sheet**
xs18-020	Temporary Wood Pole - Non-Guyed-No Signals on Spans		November 2012	**New Sheet**
xs18-030	Temporary Wood Pole - Guyed-No Signals on Spans		November 2012	**New Sheet**
xs18-040	Temporary Wood Pole - Guyed-With Signals on Spans		November 2012	**New Sheet**
xs18-050	Temporary Wood Pole - Non-Guyed-With Signals on Spans		November 2012	**New Sheet**
xs18-080-1	Temporary Wood Pole - Details No. 1		November 2012	**New Sheet**
xs18-080-2	Temporary Wood Pole - Details No. 2		November 2012	**New Sheet**
xs18-080-3	Temporary Wood Pole - Details No. 3		November 2012	**New Sheet**
xs18-080-4	Temporary Wood Pole - Details No. 4		November 2012	**New Sheet**
xs18-080-5	Temporary Wood Pole - Details No. 5		November 2012	**New Sheet**