TO: Project Engineers
Project Design Engineers

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SUBJECT: Revisions to Cored Slab and Box Beam Standard Design Plans

DATE: February 14, 2025

The following revisions have been made to the Cored Slab and Box Beam Standard Design Plans, which are available on the network drive and online.

Revision Date	Revised SDP	Bridge Width	Bridge Skew	Beam Length	Revision and Explanation
8/28/14	21" Cored Slab Superstructure	All	All	All	Added a note to prohibit flame cutting of post-tensioning strands. Added notes and a detail for permitted threaded inserts on the exterior face of exterior cored slab and box beam units to provide the option of installing falsework for various applications. Modified the spacing of the "S" bars in the barrier rail to avoid interference with the rail expansion joint. Reduced the asphalt wearing surface thicknesses and the barrier rail heights and modified the camber tables as a result of the new Refined Method for predicting the camber of cored slabs and box beams.
	24" Cored Slab Superstructure	All	All	All	
	24" Cored Slab Superstructure (Top-Down)	All	All	All	
	33" Box Beam Superstructure	All	All	All	
	39" Box Beam Superstructure	All	All	All	
	Cored Slab Miscellaneous (Approach Slabs)	All	All	All	Modified the Approach Slab concrete quantities to account for the reduction in the asphalt wearing surface on the bridge.

Revision Date	Revised SDP	Bridge Width	Bridge Skew	Beam Length	Revision and Explanation
8/28/14 (cont.)	Cored Slab Substructure (Cast-In-Place and Precast Bents with all Pile/Drilled Pier types)	All	All	All	For the 21" to 24" bent cap step details, reduced the cap step height to account for the reduction in the asphalt wearing surface on the bridge.
	Box Beam Substructure (End Bents)	All	All	All	Reduced the backwall height to account for the reduction in the asphalt wearing surface on the bridge.
9/10/14	24" Cored Slab Superstructure	All	75°, 90°, and 105°	All	Reduced the barrier rail concrete quantities to account for the reduction in asphalt wearing surface thickness and rail height.
9/11/14	21" Cored Slab Superstructure	33', 36', and 39'	All	All	Adjusted the asphalt wearing surface thicknesses at the crown in the normal crown Typical Sections to more accurately achieve 0.02 superelevation; note that the asphalt thicknesses at the gutterline will remain the same.
	24" Cored Slab Superstructure	33' and 36'	All	All	
	24" Cored Slab Superstructure (Top-Down)	33' and 36'	All	All	
	33" Box Beam Superstructure	33' and 36'	All	All	
	39" Box Beam Superstructure	33' and 36'	All	All	
9/16/14	33" Box Beam Superstructure	All	90°	90'	Revised the number of S5 bars in the Box Beam B.O.M. to match the number on the Plan of Span sheets.
9/22/14	33" Box Beam Superstructure	All	60°, 75°, 105°, and 120°	All	Revised the S5 bar projection length in the Exterior Box Beam Section for consistency with Design Manual Figure 6-11, which specifies the projection as the wearing surface at mid-span plus 1'-3".
	33" Box Beam Superstructure	All	All	All	Reduced the S5 bar projection length in the Vertical Concrete Barrier Rail Details; see above.
	39" Box Beam Superstructure	All	All	All	
11/17/14	21" Cored Slab Superstructure	All	All	All	Adjusted the vertical spacing of the barrier rail “B” bars in the Vertical Concrete Barrier Rail Details to provide adequate top clearance at mid-span and to avoid interference with the guardrail anchorage at the ends.
	24" Cored Slab Superstructure	All	All	All	
	24" Cored Slab Superstructure (Top-Down)	All	All	All	
	33" Box Beam Superstructure	All	All	All	
	39" Box Beam Superstructure	All	All	All	

Revision Date	Revised SDP	Bridge Width	Bridge Skew	Beam Length	Revision and Explanation
11/17/14 (cont.)	Cored Slab Substructure (2'-6" Cast-In-Place End Bents)	All	All	All	Removed the lateral guides; note that the bent cap lengths will remain the same.
	Cored Slab Substructure (Cast-In-Place Bents with all Pile/Drilled Pier types)	All	All	All	Removed the lateral guides; note that the bent cap lengths will remain the same. For the 21" to 24" bent cap step details, reduced the cap step height shown on the example plan sheet, which shows a Drilled Pier bent.
	Cored Slab Substructure (Cast-In-Place Bents with Drilled Piers)	All	All	All	For the 21" to 24" bent cap step details, reduced the cap step height detailed on the Section Thru Cap and End Elevation.
1/29/15	21" Cored Slab Superstructure	All	All	40' and 45'	Reduced the final concrete strength from 6500 psi to 5000 psi to match the design.
4/30/15	33" Box Beam Superstructure	All	60° and 120°	All	Corrected the weight of the S11 bars for the exterior and interior units in the Box Beam B.O.M.; also corrected the total weight of reinforcing steel for the exterior and interior units as a result.
	33" Box Beam Superstructure	All	All	All	Removed Section T-T which shows an open joint in the rail at a bent location in the Vertical Concrete Barrier Rail Details since the Box Beam Standard Design Plans are only for single spans.
	39" Box Beam Superstructure	All	All	All	
	Cored Slab Substructure (2'-6" and 4'-0" Cast-In-Place End Bents)	All	All	All	Changed the 1½" expansion joint material between each outside edge of approach slab and the adjacent wing to 1" for consistency with Design Manual Figure 7-18.

	Box Beam Substructure (End Bents)	All	All	All	Revised the wing dimensions on the End Bent Plan view and on the Wing Details sheet; note that the wing concrete quantities will remain the same.
Revision Date	Revised SDP	Bridge Width	Bridge Skew	Beam Length	Revision and Explanation
9/8/15	Cored Slab Approach Slabs	All	All	All	Revised the Approach Slab length from 12'-1 3/4" for 60° and 120° skews, 12'-1 9/16" for 75° and 105° skews, and 12'-1 1/2" for 90° skews to 12'-0" for all skews. Revised the concrete quantities to account for the reduction in length.
	Box Beam Approach Slabs	All	All	All	
	Cored Slab Substructure (Cast-In-Place Bents with 18" Steel Pipe Piles)	All	All	All	Revised the designation of the pile type from 16" Prestressed Concrete Pile to 18" Steel Pipe Pile shown in Section A-A on Sheet 2.
10/20/15	39" Box Beam Superstructure	All	All	All	On the sheet showing the Typical Section and Section at End Bent, reduced the initial concrete strength listed in the Notes from 6000 psi to 5500 psi to match the design.
4/24/17	All End Bent Drawings (Cored Slab Units & Box Beams)	All	All	All	Add Pay Item: "PILE DRIVING EQUIPMENT SETUP FOR PILES" per Geotechnical Unit.
	All Pile Bent Drawings (Cored Slab Units)	All	All	All	
6/26/17	14" HP, 16" PS & 18" Steel Pipe Pile Bents	All	All	All	Revised bottom leg of the center vertical "U" Bars in end of cap to avoid interference with piles.
6/26/17	20" PS Concrete Pile Bents	All	All	All	Revised bottom leg of the center vertical "U" Bars in end of cap to avoid interference with piles. Revised vertical "U" Bars spacing in end of cap. Detail 5-#4 "B" Bars over piles for consistency with Design Manual Figure 7-26.
6/26/17	Precast 20" PS Concrete Pile Bents	All	All	All	Detail 6-#4 "B" Bars over piles.

12/1/17	Cored Slab Approach Slabs	All	All	All	Revised the Section Thru Slab detail to show Type II – Modified Approach Fill. Revised notes for approach fills. Removed coastal plain option.
	Box Beam Approach Slabs	All	All	All	
Revision Date	Revised SDP	Bridge Width	Bridge Skew	Beam Length	Revision and Explanation
5/17/18	21" Cored Slab Superstructure	All	All	All	Revised spacing of the "B" bars in the Vertical Concrete Barrier Rail to avoid conflict with the through-bolts of a Type III GRAU. Revised tapered end of the Vertical Concrete Barrier Rail End Post from 7" x 24" to 10" x 24"
	24" Cored Slab Superstructure	All	All	All	
	24" Cored Slab Superstructure (Top-Down)	All	All	All	
	33" Box Beam Superstructure	All	All	All	
	39" Box Beam Superstructure	All	All	All	
9/25/19	Cored Slab Approach Slabs	All	All	All	Revised Splice Length Chart for consistency with Design Manual Figure 10-6. Removed end of curb taper detail. Curb shall be full height to post #7 in accordance with Roadway Standard Drawing 862.03 Sheet 3 of 7.
	Box Beam Approach Slabs	All	All	All	Revised Splice Length Chart for consistency with Design Manual Figure 10-6. Removed end of curb taper detail. Curb shall be full height to post #7 in accordance with Roadway Standard Drawing 862.03 Sheet 3 of 7.
9/25/19	Cored Slab Approach Slabs	30'	60° and 120°	All	Revised Bill of Material for new splice lengths and 40' maximum bar lengths for #4 bars.
		33', 36', and 39'	All		
	Box Beam Approach Slabs	30'	60° and 120°	All	Revised Bill of Material for new splice lengths and 40' maximum bar lengths for #4 bars.
		33', 36', and 39'	All		

6/16/23	21" Cored Slab Superstructure	All	All	35'	Matched cored slab unit typical section with 40' & 45' cored slab units.
	21" Cored Slab Superstructure	All	All	45'	Release and final concrete strength for cored slab unit were updated to 4900 psi and to 6500 psi respectively.
	21" Cored Slab Superstructure	All	All	35', 40' & 45'	Decreased camber (slab alone in place) to ¾" and final camber to $^{5}/_{8}$".
Revision Date	Revised SDP	Bridge Width	Bridge Skew	Beam Length	Revision and Explanation
6/16/23 (cont.)	21" Cored Slab Superstructure	All	All	35'& 45'	Revised LRFR sheet to match design.
	21" Cored Slab Superstructure	All	All	All	Added 2 Emergency Vehicles (EV) to LRFR sheets.
	24" Cored Slab Superstructure	All	All	All	
	24" Cored Slab Superstructure (Top-Down)	All	All	All	
	33" Box Beam Superstructure	All	All	All	
	39" Box Beam Superstructure	All	All	All	
9/20/24	21" Cored Slab Superstructure	All	All	All	Revised Grouting/Tensioning Note on Typical Sections to match 2024 *Standard Specifications*.
	24" Cored Slab Superstructure	All	All	All	
	24" Cored Slab Superstructure (Top-Down)	All	All	All	
	33" Box Beam Superstructure	All	All	All	
	39" Box Beam Superstructure	All	All	All	
2/14/25	Cored Slab Approach Slabs	All	All	All	Revised Section Thru Slab details to reference the applicable 2024 Roadway Standard Drawing.
	Box Beam Approach Slabs	All	All	All	