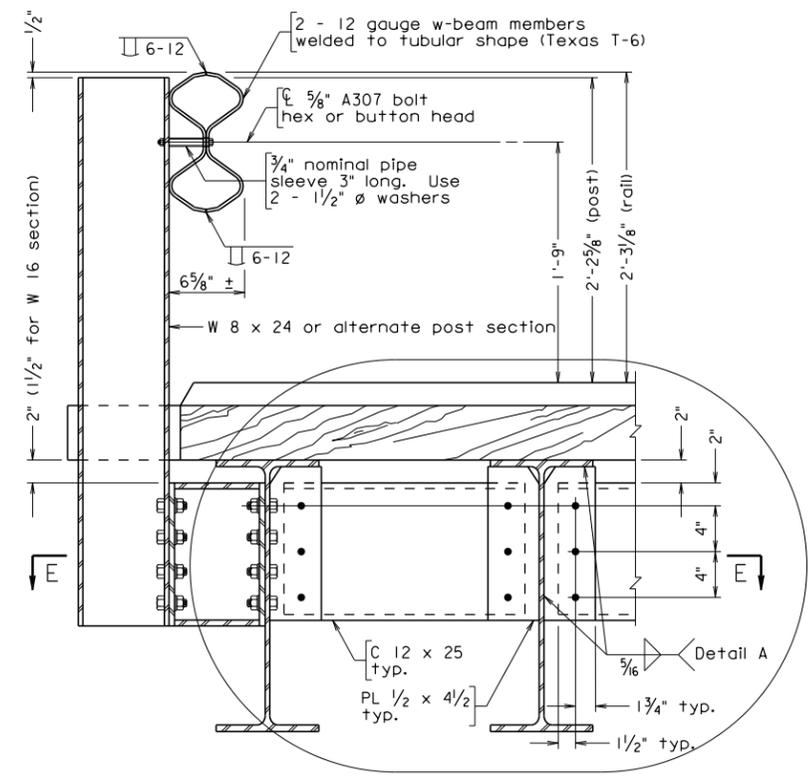
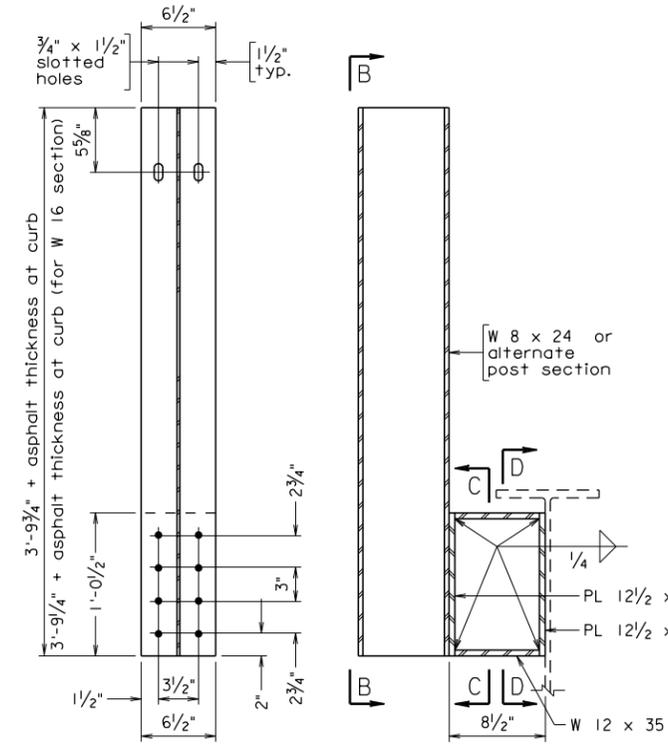


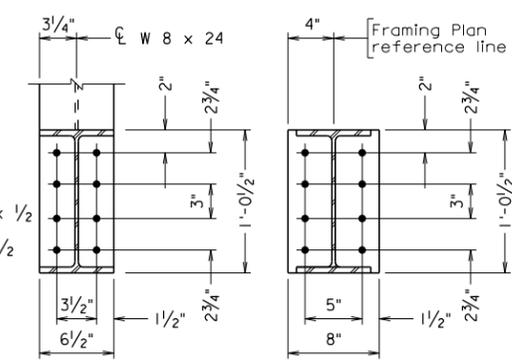
STATE	FEDERAL AID	STATE	SHEET
ROUTE	PROJECT	ROUTE	NO.
VA.			



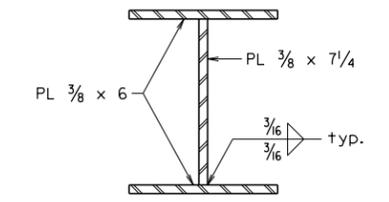
RAILING AND DIAPHRAGM CONNECTION DETAILS
 For beam section = W 16 or > W 24, see Alternate Diaphragm Detail.
 Use PL 1/2 x 6 on end diaphragms on bridges with skew angles greater than 20°.



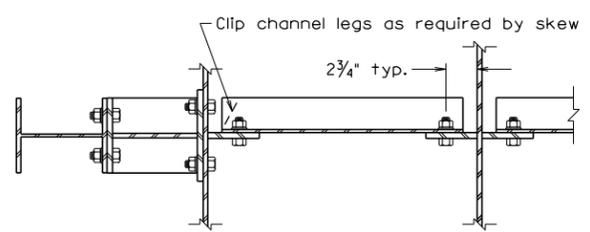
SECTION B-B TRANSVERSE ELEVATION



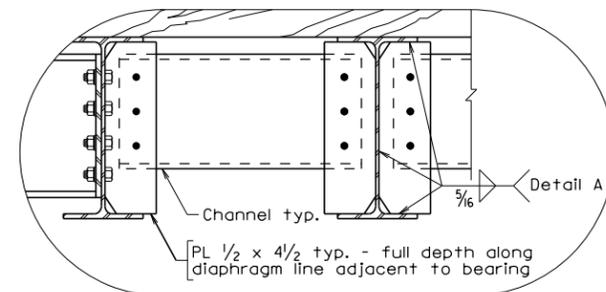
SECTION C-C SECTION D-D



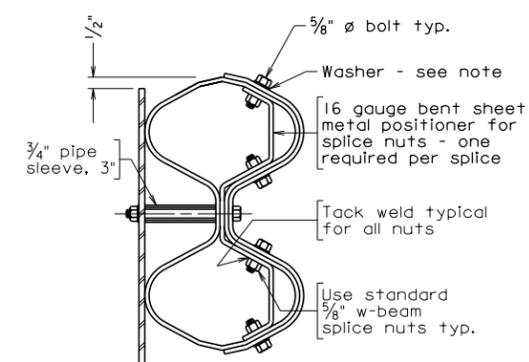
ALTERNATE POST SECTION



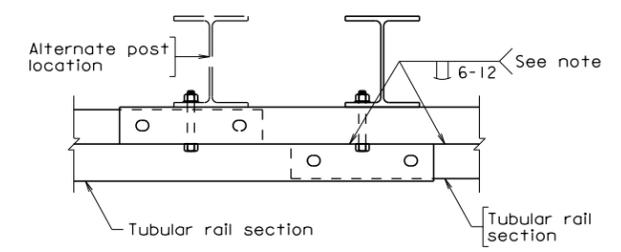
SECTION E-E



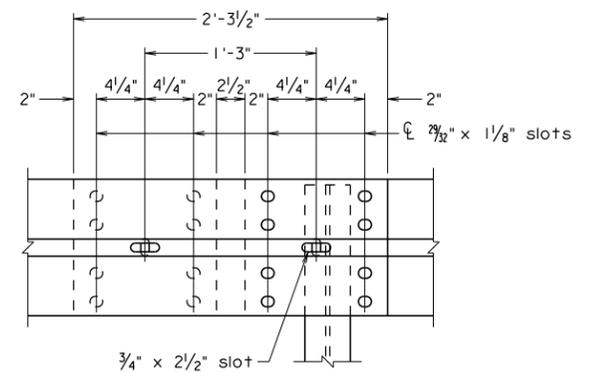
DETAIL FOR DIAPHRAGM LINE ADJACENT TO BEARING
 Shown for beam depths = 16", generic to all depths. Use PL 1/2 x 6 on end diaphragms on bridges with skew angles greater than 20°.



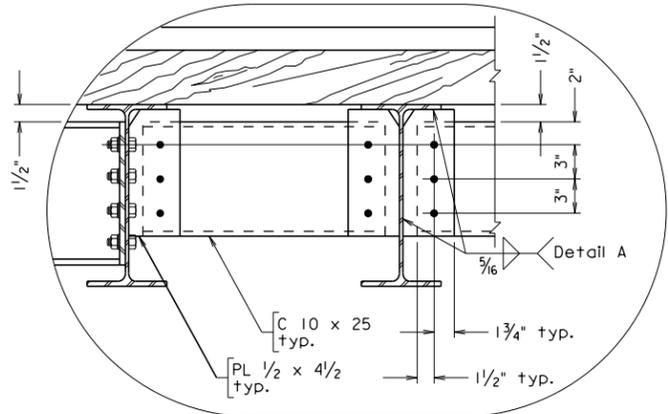
SPLICE DETAIL



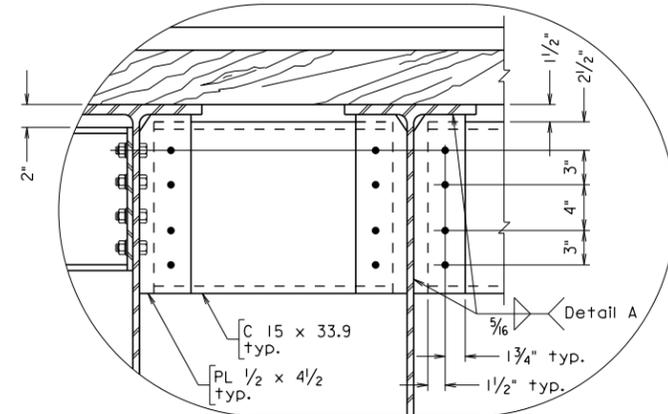
PLAN



ELEVATION TUBULAR RAIL SPLICE DETAILS

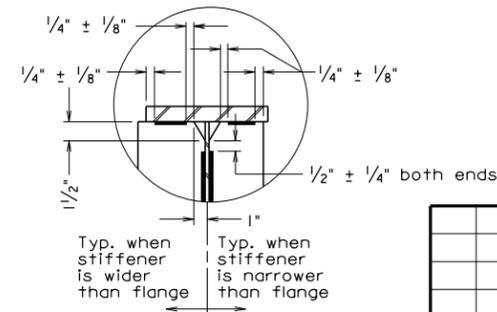


DIAPHRAGM DETAIL FOR W 16 BEAM SECTION



DIAPHRAGM DETAIL FOR BEAM SECTION DEPTH > W 24

ALTERNATE DIAPHRAGM DETAILS



DETAIL A

Notes:
 All connections shall be made with 7/8" diameter high strength ASTM A325 bolts unless otherwise specified.
 Tubular w-beam rail member is to be fabricated from standard 25" nominal w-beam sections. Top and bottom seams shall be butt welded 6" at 12" spacing. Continuous seam welding is also acceptable. Welds shall be chipped and cleaned and the complete 25" tubular member shall be galvanized after fabrication. For tubular rail splice additional post mounting slots are to be made in each member 1'-3" from the standard slots at 6'-3" centers.
 8 - 5/8" splice nuts shall be tack welded to a bent sheet metal positioner as shown. Other suitable positioning methods or devices may be substituted. The completed splice shall have 16 bolts. Each bolt will include a 1 3/4" x 3" x 3/16" plate washer or a 2" diameter washer.
 All connector PL's along diaphragm line immediately adjacent to each bearing shall be full depth and welded to bottom flange as shown.

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION		STRUCTURE AND BRIDGE DIVISION	
STEEL BEAM WITH TIMBER DECK SUPERSTRUCTURE RAILING AND DIAPHRAGM DETAILS			
No.	Description	Date	Sheet No.
			SS8-3C

SS8-3C
03-10-2015
SS803C.dgn

Sealed and Signed by:
 Prasad L. Nallapareni
 Lic. No. 033003
 On the date of
 March 10, 2015

A copy of the original sealed and signed standard drawing is on file in the Central Office.

VDOT S&B DIVISION
 RICHMOND, VA
 STRUCTURAL ENGINEER

Not to scale

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**SS-8 STEEL BEAM WITH TIMBER DECK SUPERSTRUCTURE STANDARD
RAILING AND DIAPHRAGM CONNECTION DETAILS (WITHOUT CURB – WP)**

NOTES TO DESIGNER:

Use this standard when using railing without curb and welded plates connect the diaphragm channels to the beam webs.

Include standards SS8-1, SS8-2, SS8-4 and SS8-5B in the plans when using this standard. Include standard SS8-5D where skew is greater than 28° and end posts in obtuse corners would conflict with the abutment, backwall and/or lagging.

The designer shall ensure that the depth of the beam used is sufficient to make the railing and diaphragm connections. The railing connection to the beam web will fit between the flanges of all W16 sections.

ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:

OTHER DETAILS REQUIRED:

Add the additional detail(s) described in File No. SS8-2-5 that will not fit on standard sheet SS8-2 by removing Diaphragm Detail(s) for beam depths not used. Follow the instructions found in File No. SS8INSTR-1 for a standard sheet modified by the designer. If there is insufficient space for all the additional details, leave this sheet unmodified and place the additional details on a separate sheet.