

**B-606-10R MASH**

(Use with rehab modifications of B-606-10MASH A&B, A-S, C&D, or C-S&D)

**NOTES:**

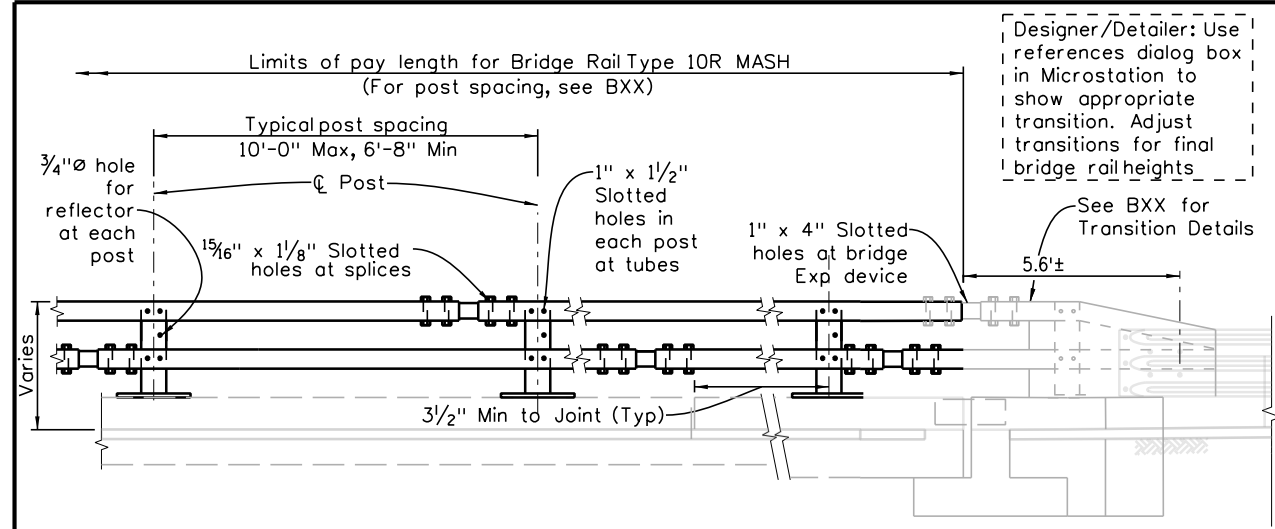
- All tubes shall be ASTM A1085. All posts, base plates, and splice tubes fabricated by welding shall be ASTM572 Grade 50. All other steel shall be Grade 36 unless otherwise noted.
- The above material and all anchor bolts and miscellaneous bolts, nuts, and washers shall be galvanized after fabrication in accordance with AASHTO M111. Structural steel elements shall conform to the requirements of Section 509.
- The tubes shall be shop bent or fabricated to fit horizontal curve when radius is less than 1,800 feet.
- Tubes shall be continuous over not less than two posts, preferably 4 posts except at approach slab end joint. No welded butt splices will be allowed in the tube sections.
- The centerline of the tube splice shall be 1'-8" minimum and 2'-6" maximum from the centerline of the posts.
- All bolts that have lock washers shall be tightened to snug tight only.
- Posts shall be perpendicular to the longitudinal roadway grade.
- One or more 10'-0" post spaces may be reduced (6'-8" Min) in order to maintain dimensions from the end of the rail and expansion joints or concrete transition.
- Payment will be made under item 606, Bridge Rail Type 10R MASH, for all posts, base plates, anchor bolts, miscellaneous bolts, nuts, washers, tubes, tube expansion devices, tube splices, end plates and reflector tabs.
- Prior to fabrication of this item, an electronic PDF which complies with the requirements of Section 105, shall be submitted to the Engineer for information only (Working Drawing).

**DESIGN DATA**

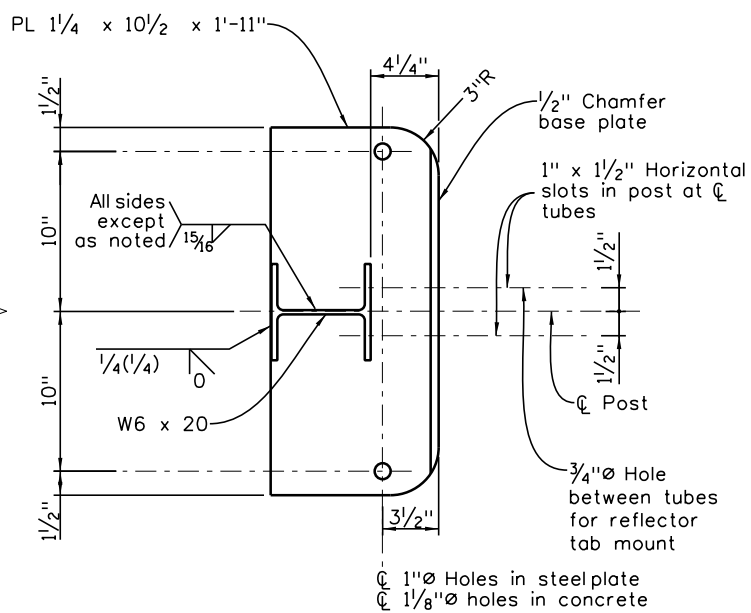
Design: AASHTO MASH 2016 TL-4 (a) for overlay thickness over 1" (by calculation), with assumed existing curb stirrup of #4 @ 18" (fy=60ksi).  
 AASHTO MASH 2016 TL-3 for overlay thickness over 1" (by calculation), with assumed existing curb stirrup of #4 @ 12" (fy=40ksi).

Structural Steel:  
 AASHTO M270 Gr 36 (ASTM A709 Gr 36)  
 AASHTO M270 Gr 50 (ASTM A992/A572 Gr 50)  
 ASTM A1085

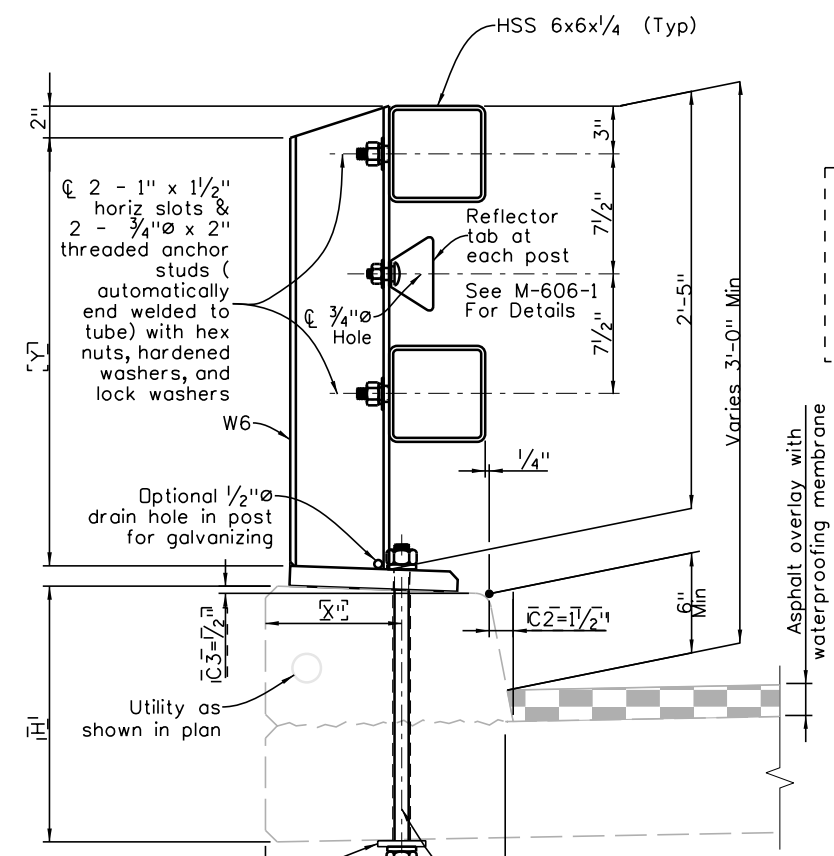
fy = 36 ksi  
 fy = 50 ksi  
 fy = 50 ksi



**BRIDGE RAIL ELEVATION**

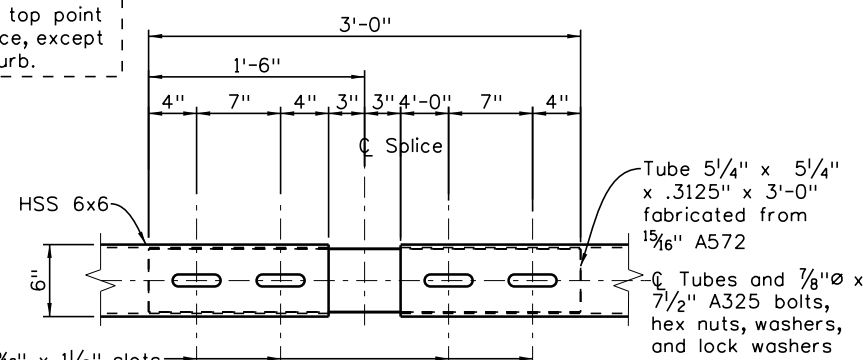


**POST DETAIL PLAN**



**BRIDGE TYPICAL SECTION**

Designer/Detailer: Use reference dialog box in Microstation to select appropriate curb width. Set tubes 1/4" behind top point of curb face, except with 12" Curb.



**PLAN - TUBE SPLICE**

Structure No.	Y	X	C1	C2	C3	H

Designer/Detailer: Use only for multiple structures.

**FOR INFORMATION ONLY**

For 26" Anchor Bolt and 10'-0" Post Spacing

DESCRIPTION	UNIT	PER LF
Structural Steel (Galvanized)	LB	57.4

Revision	Date
2/24	9/24

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE

All seals for this set of drawings are applied to the cover page(s)	Print Date: \$DATE\$	<b>Sheet Revisions</b>			Colorado Department of Transportation	As Constructed	<b>BRIDGE RAIL TYPE 10R MASH</b>			Project No./Code
	File Name: sheet_B-606-10R MASH.dgn	Date:	Comments	Init.			<b>15" CURB</b>			
	Horiz. Scale: None Vert. Scale: As Noted				2829 West Howard Place, 3rd Floor Denver, CO 80204 Phone: 303-512-4079 FAX: 303-757-9197	No Revisions:	Designer: XXXXXXXX	Structure Numbers: X-XX-XX	Code	
	Unit Information Unit Leader Initials									
					Staff Bridge Branch	Revised:	Detailer: XXXXXXXX	Subset Sheets: BXX of XXX	Sheet Number	
					Initials	Void:	Sheet Subset: BRIDGE			