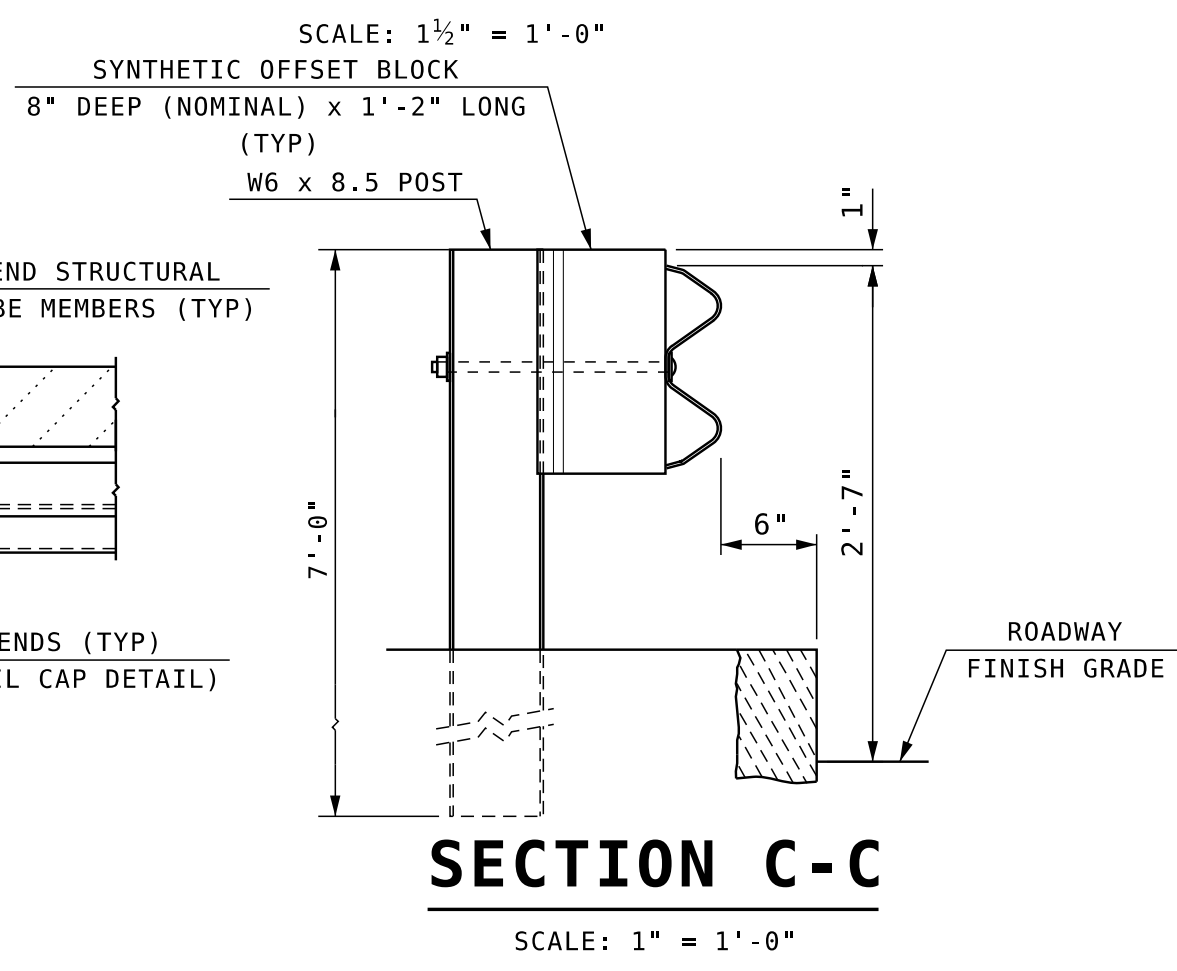


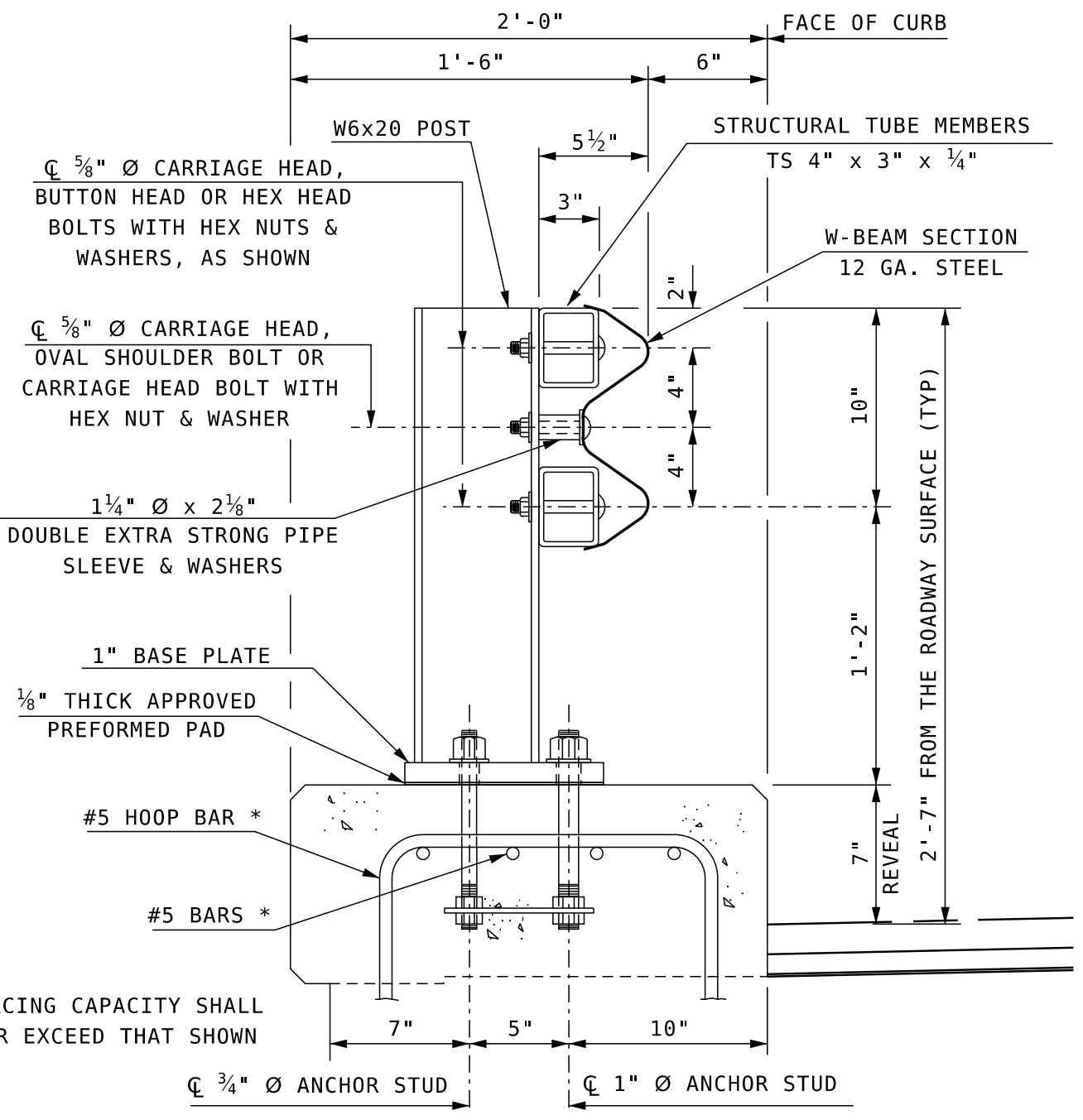
END POST DETAIL



SECTION C-C

NHDOT Bridge Design
7/31/2023

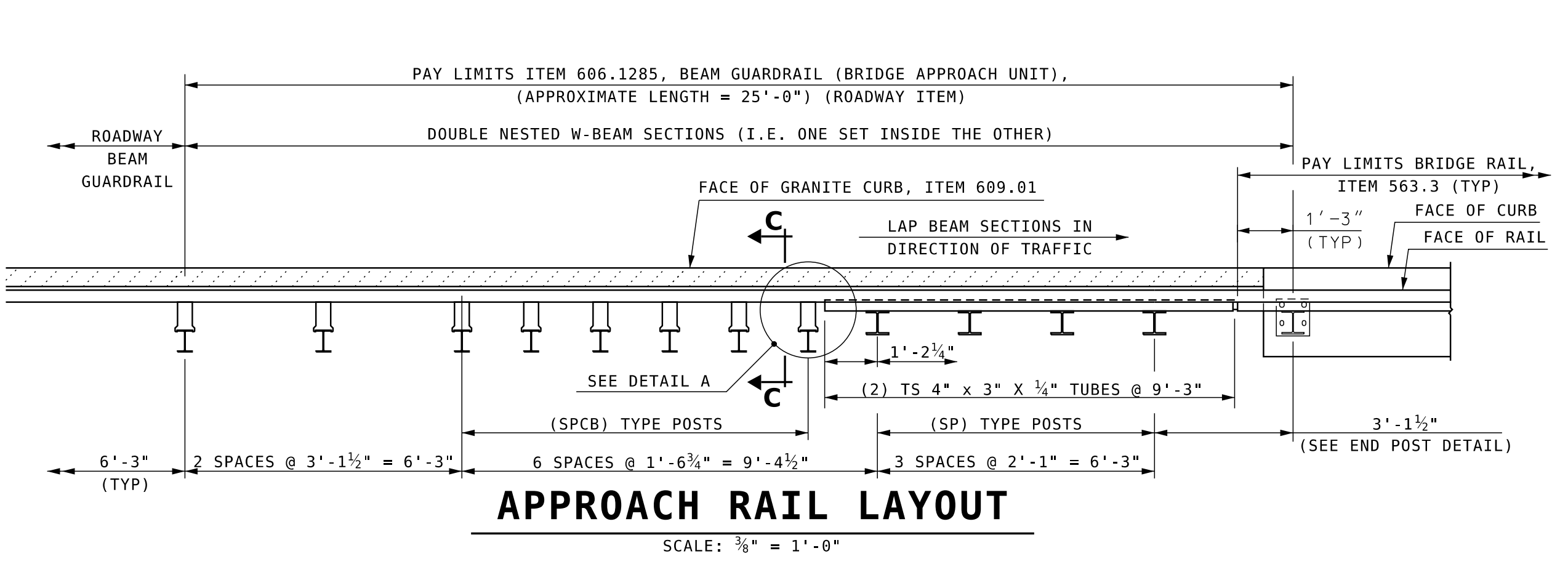
Revisions made to Bridge Detail Sheet are highlighted.
Go to website for current Detail Sheet.



BRIDGE RAIL DETAIL

SCALE: 1 1/2" = 1'-0"

* REINFORCING CAPACITY SHALL MEET OR EXCEED THAT SHOWN



APPROACH RAIL LAYOUT

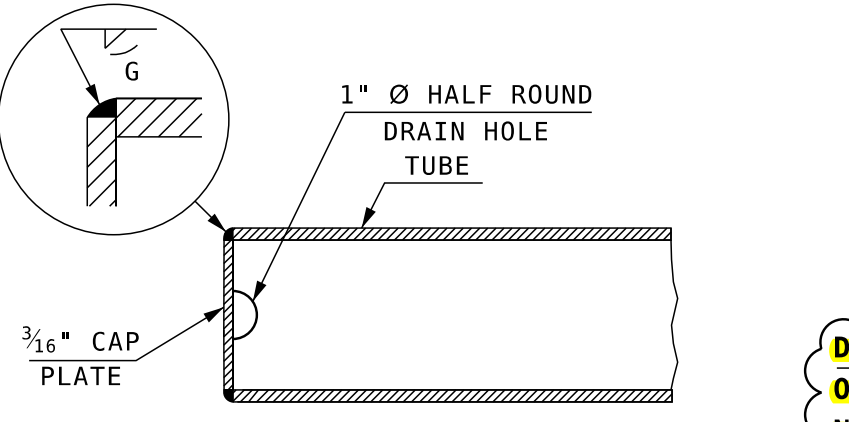
SCALE: 3/8" = 1'-0"

NO MODIFICATIONS SHALL BE MADE TO THIS SHEET EXCEPT CROSSING OUT COATING NOTE.

GENERAL NOTES

- FOR USE ON LOCAL CONNECTORS AND LOCAL ROADS WITH POSTED SPEEDS < 45 MPH. DO NOT USE ON NATIONAL HIGHWAY SYSTEMS (NHS) OR WHEN STEEL BRIDGE AND APPROACH RAIL CAN BE USED.
- ITEM 563.3, BRIDGE RAIL T101, SHALL INCLUDE POSTS, BASE PLATES, ANCHOR PLATES, ANCHOR STUDS, PREFORMED PADS, RAIL ASSEMBLY BOLTS, NUTS, WASHERS, STRUCTURAL TUBING, SPLICE BARS, PIPE SLEEVES AND W-BEAM SECTIONS.
 - (GALVANIZED)
 - ASTM A572 GRADE 50 : POSTS AND BASE PLATES
 - ASTM A500 GRADE B : STRUCTURAL TUBING
 - ASTM A36 : PIPE SLEEVES, RAIL SPLICE BARS AND ANCHOR PLATES
 - ASTM A449 : ANCHOR STUDS WITH STANDARD NUTS AND HARDENED STEEL COMMERCIAL TYPE A PLAIN WIDE WASHERS
 - A307 : RAIL BOLTS, NUTS, AND WASHERS
 - AASHTO M180 TYPE II : W-BEAM SECTIONS
 - (BROWN)
 - ASTM A588 : POSTS AND BASE PLATES
 - ASTM A500 GRADE B (PAINTED) OR ASTM A588 (UNPAINTED) OR ASTM A847 (UNPAINTED) : STRUCTURAL TUBING
 - ASTM A36 : PIPE SLEEVES AND RAIL SPLICE BARS (PAINTED) AND ANCHOR PLATES (GALVANIZED)
 - ASTM A449 (GALV) : ANCHOR STUDS WITH STANDARD NUTS AND HARDENED STEEL COMMERCIAL TYPE A PLAIN WIDE WASHERS
 - A325 TYPE 3 : RAIL BOLTS, NUTS AND WASHERS
 - AASHTO M180 TYPE IV : W-BEAM SECTIONS
- ALL STEEL COMPONENTS SHALL BE GALVANIZED AFTER FABRICATION IN CONFORMANCE WITH AASHTO M232 (ASTM A153) AND AASHTO M111 (ASTM A123). GALVANIZED SURFACES SHALL HAVE A UNIFORM APPEARANCE AND GALVANIZED MATERIAL SHALL BE PROPERLY STORED.
- STRUCTURAL TUBING SHALL BE SUPPLIED AS ONE PIECE FOR BRIDGE RAIL 40 FEET OR LESS IN LENGTH. IN OTHER CASES, TUBING SHALL BE SPLICED WITH A SPLICE BAR (SEE SPLICE BAR DETAILS). NO TRANSVERSE BUTT WELDS ARE PERMITTED ON RAIL TUBING WITHIN A CONTINUOUS LENGTH.
- EACH PIECE OF RAIL TUBING SHALL BE ATTACHED TO A MINIMUM OF THREE POSTS.
- FOR BRIDGE RAIL POST SPACING, SEE BRIDGE RAIL LAYOUT. THE MAXIMUM BRIDGE RAIL POST SPACING SHALL BE 8'-4". POST SPACING OF 8'-4" OR 6'-3" IS RECOMMENDED WHENEVER POSSIBLE FOR USE WITH 25' SECTIONS OF STANDARD W-BEAM RAIL.
- PREFORMED BEARING PADS SHALL CONFORM TO AASHTO M251.
- NUTS FOR THREADED ANCHOR STUDS CONNECTING THE BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.
- OTHER TYPES OF OFFSET BLOCKS MAY BE SUBSTITUTED FOR THOSE SHOWN. SEE NOTES IN STANDARD PLAN GR-2 (BEAM GUARDRAIL STANDARD SECTION - STEEL POSTS & HARDWARE DETAILS) OF THE HIGHWAY DESIGN STANDARD PLANS FOR ROAD CONSTRUCTION.
- MEMBERS TO BE PAINTED SHALL FIRST BE GALVANIZED AFTER FABRICATION IN CONFORMANCE WITH AASHTO M111 (ASTM A123) AND THEN OUTSIDE SURFACES SHALL BE SHOP PAINTED WITH ONE COAT OF 708 NH 3:81, ALIPHATIC POLYURETHANE (1.5 TO 2.5 MILS DFT), DARK BROWN (REFER TO SPECIAL PROVISIONS FOR SECTION 550 FOR PAINT SPECIFICATIONS). EXPOSED ANCHOR BOLTS, NUTS, WASHERS & RAIL BOLTS SHALL BE PAINTED DARK BROWN IN THE FIELD WITH NH 3:81.

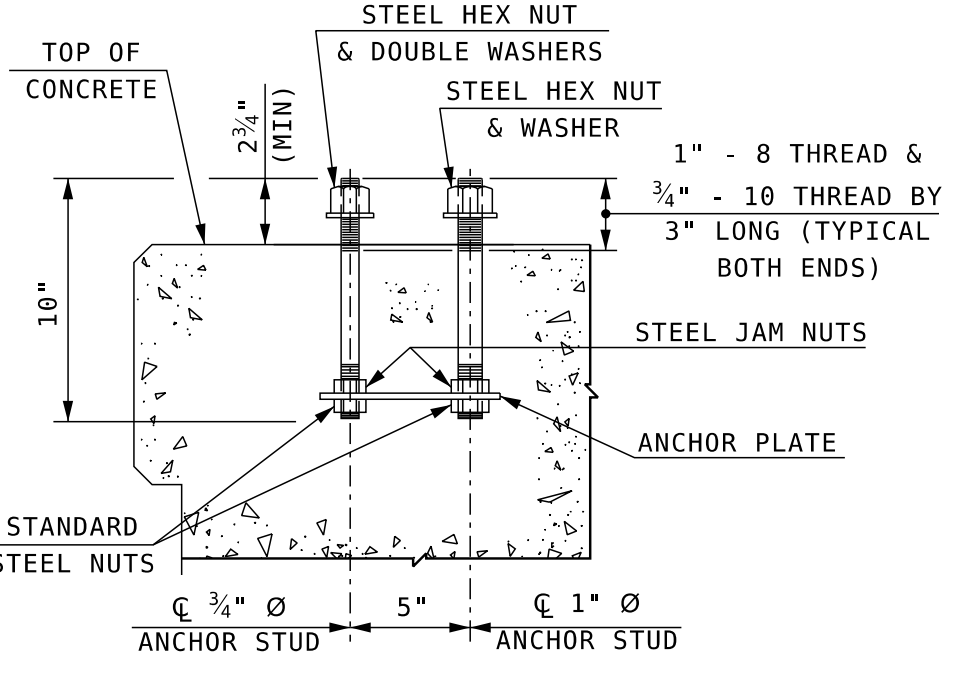
(GALVANIZED OR BROWN - 7" CURB REVEAL)



RAIL CAP DETAIL (BOTTOM VIEW)

SCALE: 3" = 1'-0"

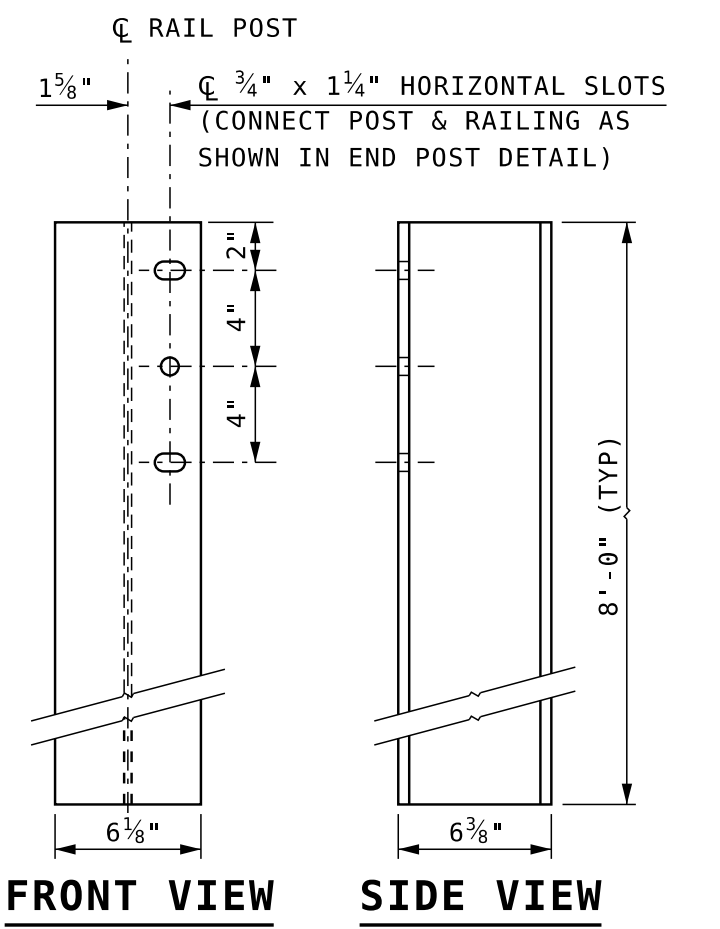
DESIGNER TO CROSS OUT COATING TYPE NOT USED



POST ANCHOR ASSEMBLY

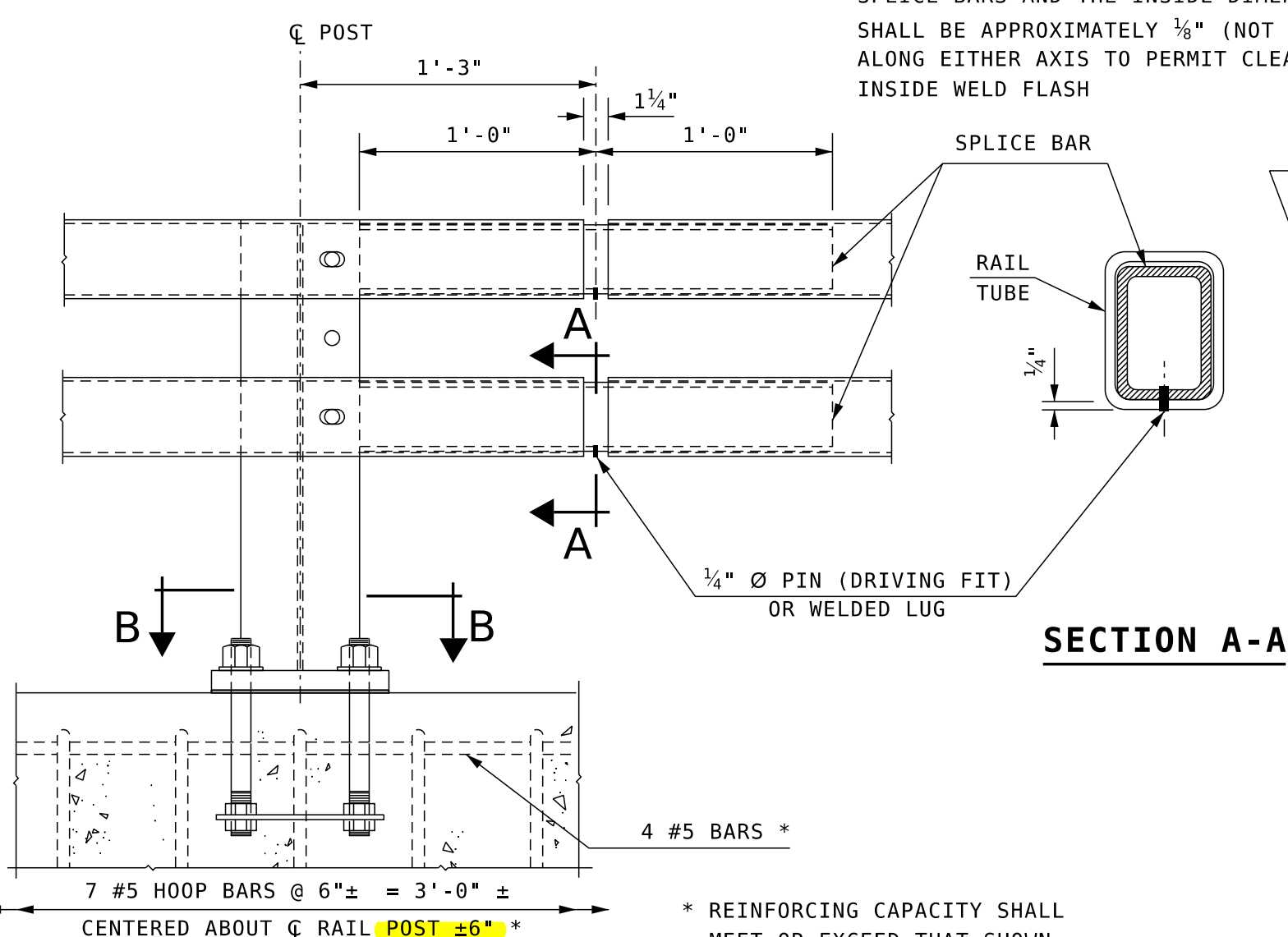
SCALE: 1 1/2" = 1'-0"

NOTE: THE DIFFERENCE BETWEEN THE OUTSIDE DIMENSIONS OF SPLICE BARS AND THE INSIDE DIMENSIONS OF THE RAIL SHALL BE APPROXIMATELY 1/8" (NOT TO EXCEED 3/16") ALONG EITHER AXIS TO PERMIT CLEARANCE FOR INSIDE WELD FLASH



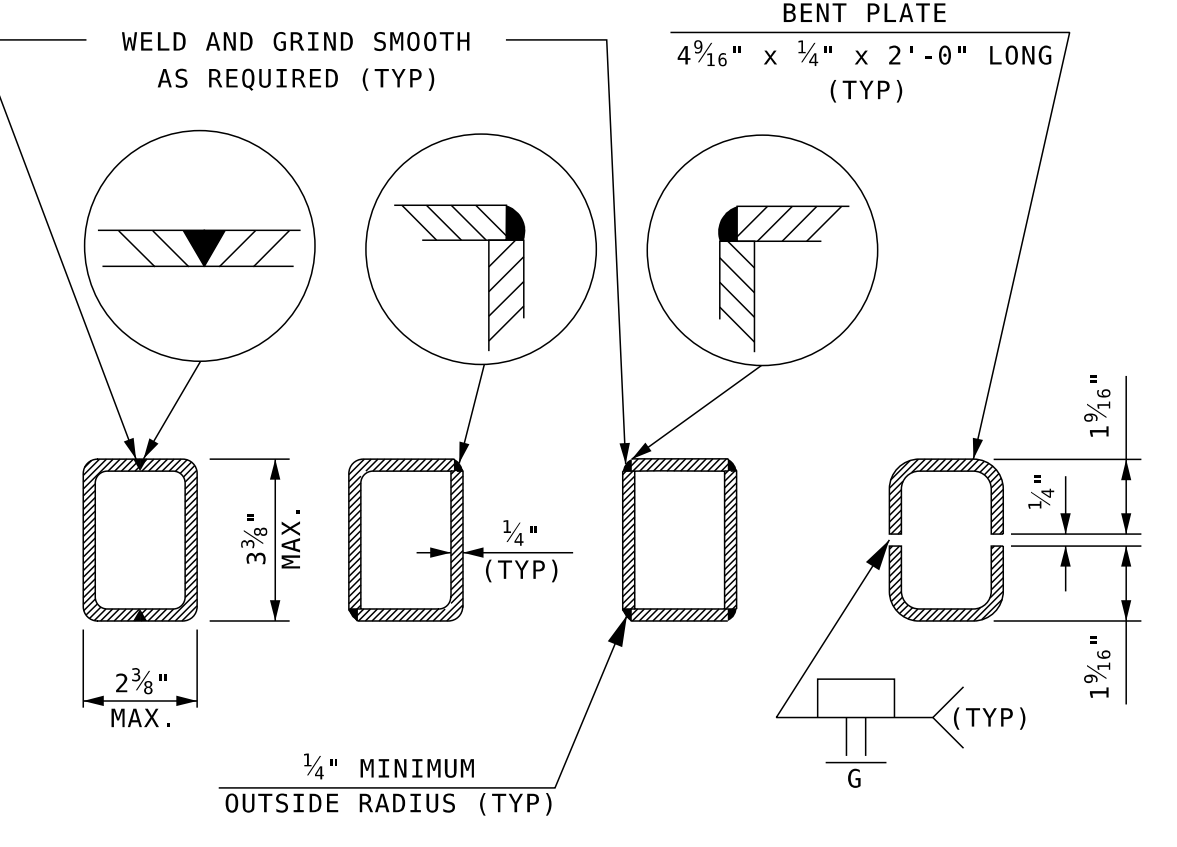
W6 x 25 STEEL POST

(BRIDGE APPROACH RAIL)
SCALE: 1 1/2" = 1'-0"



TYPICAL SPLICE

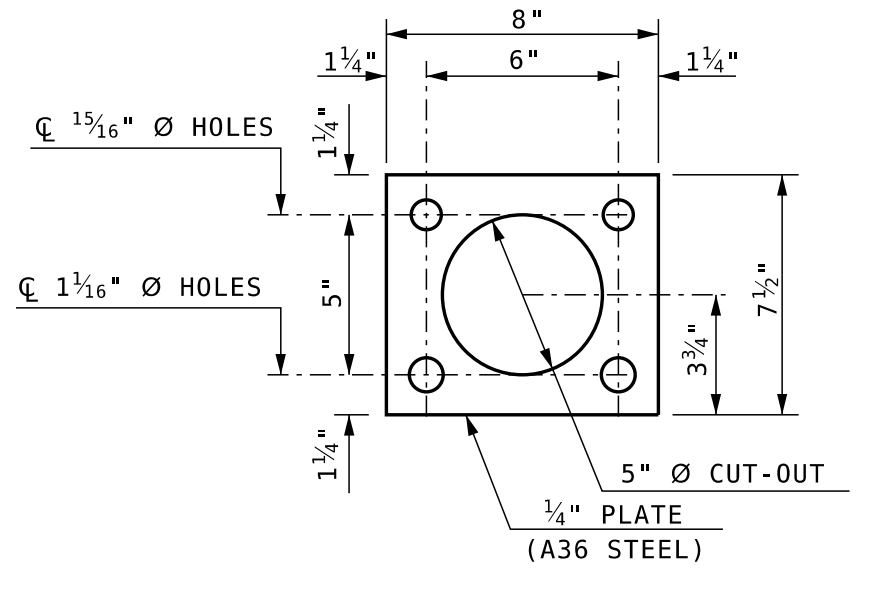
* REINFORCING CAPACITY SHALL MEET OR EXCEED THAT SHOWN



SPLICE BAR FABRICATION OPTIONS

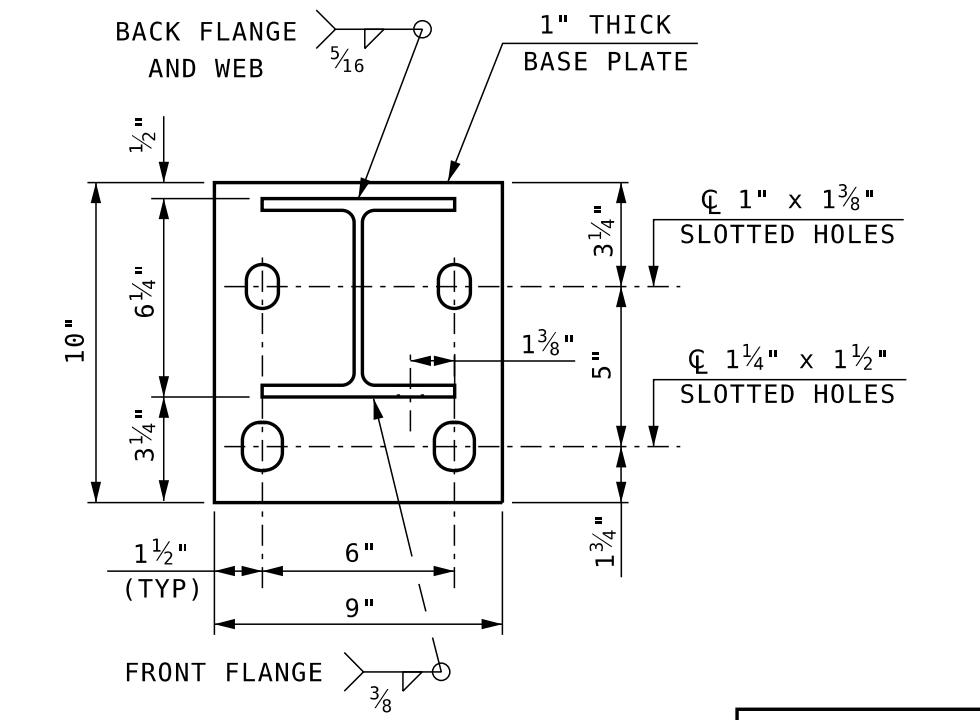
NOTE: OTHER SECTIONS OF EQUAL OR GREATER STRENGTH ARE ACCEPTABLE FOR SPLICE BARS

NOT TO SCALE



ANCHOR PLATE DETAIL

SCALE: 2" = 1'-0"



BASE PLATE DETAIL (SECTION B-B)

SCALE: 2" = 1'-0"

STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	BRIDGE NO.			STATE PROJECT					
LOCATION									
T101 BRIDGE AND APP RAIL (STEEL POSTS)									
REVISIONS AFTER PROPOSAL		BY	DATE	BY	DATE	BRIDGE SHEET			
		DESIGNED	TEXAS/JSZ	3/90	CHECKED	NHDOT	1/10	XX OF	
		DRAWN	PJP	1/10	CHECKED	NHDOT	1/10	FILE NUMBER	
		QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX		
		ISSUE DATE	1/20/10	FEDERAL PROJECT NO.		SHEET NO.		TOTAL SHEETS	
		REV. DATE	7/31/23						

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
TEXAS T101 RAIL	T101-Galv	AS NOTED