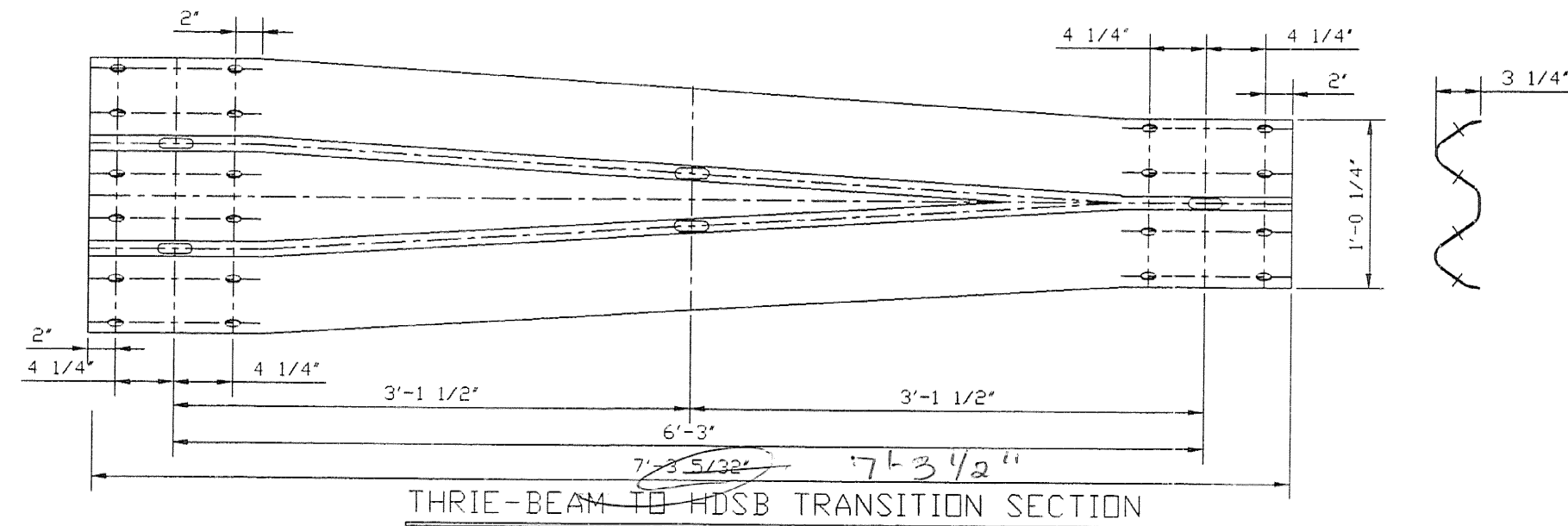




BILL OF MATERIAL				
Mk.	Qty.	Description	Material	Total wgt.
1/4"	12	TUBE 4" x 4" x 24'-11"	A500 GR B	
	4	TUBE 8" x 4" 5/16" x 24'-11"	A500 GR B	
	4	12GA THREE TRANSITION PANEL 7'-3 1/2"	M180 A2	
	4	THREE TERMINAL CONNECTOR 2'-6"	M180 A2	
	4	CONNECTOR PLATE	A36	
	12	END CAP FOR 4" x 4" RAIL	A36	
	4	END CAP FOR 8" x 4" RAIL	A36	
	12	ANGLE SPICE TUBE FOR 4" x 4" RAIL	A500 GR B	
	4	ANGLE SPICE TUBE FOR 8" x 4" RAIL	A500 GR B	
	32	POST W6X25 X 8'-8"	A572 GR 50	
	12	WOOD POST 6" X8" X 7'-0"		
	12	WOOD BLOCK 6" x 8" x 1'-10 1/2"		
	80	5/8" PANEL SPICE BOLT WITH NUT	A307	
	36	3/4" x 8" CARRIAGE BOLT WITH NUT & FW	A307	
24	3/4" x 18 HEX BOLT WITH NUT & FW	A307		
256	3/4" x 6 SLOTTED HD BOLT WITH FW & LN	A325		
64	5/8" x 1.75 TUBE SPICE BOLT WITH FW	A325		

GENERAL ERECTION NOTES

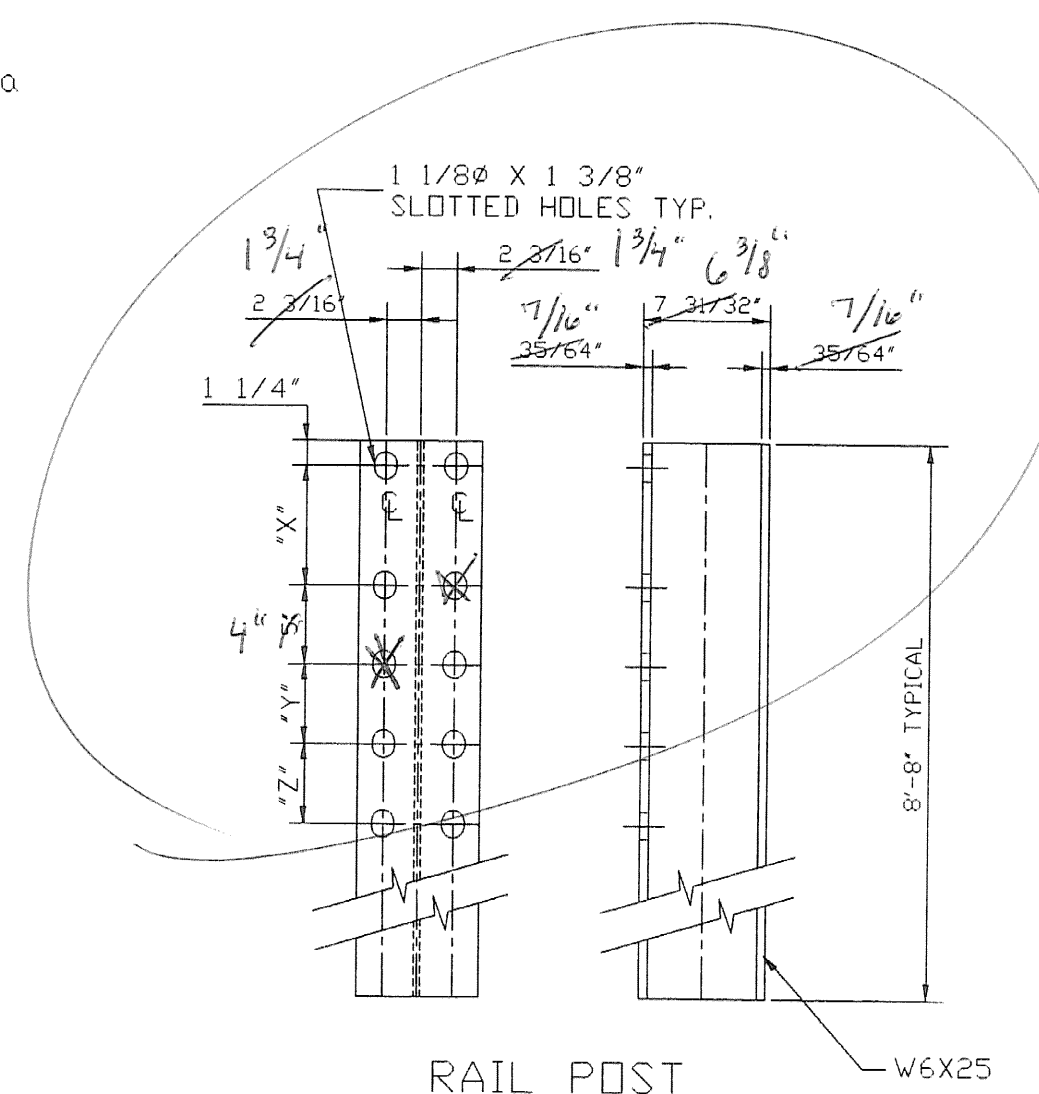
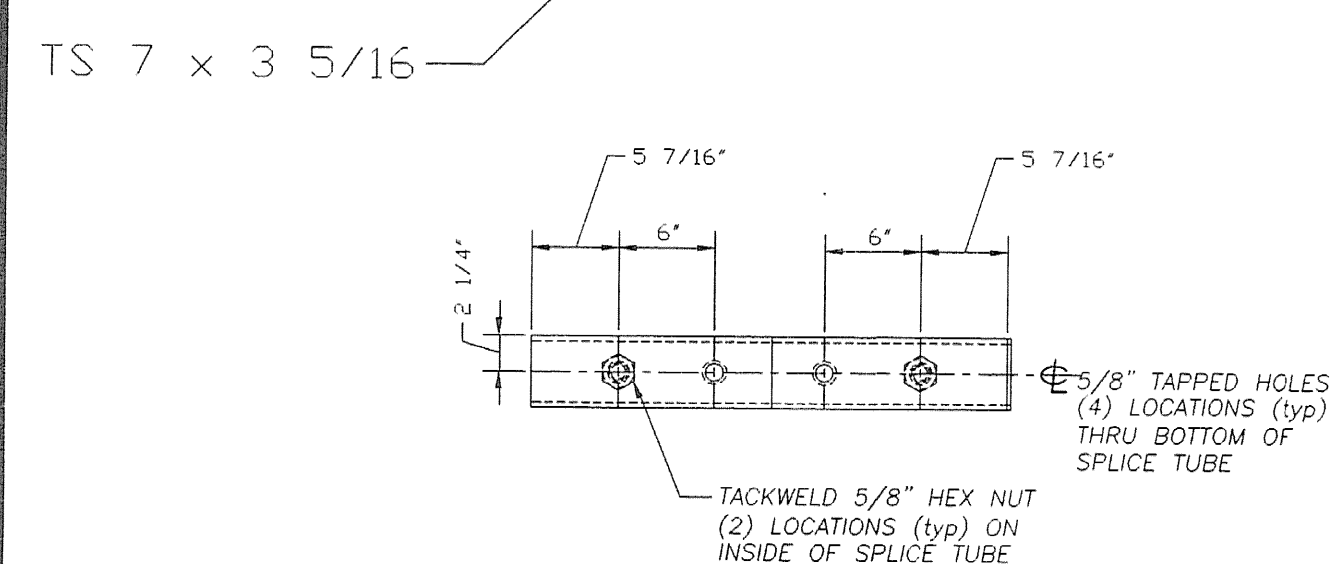
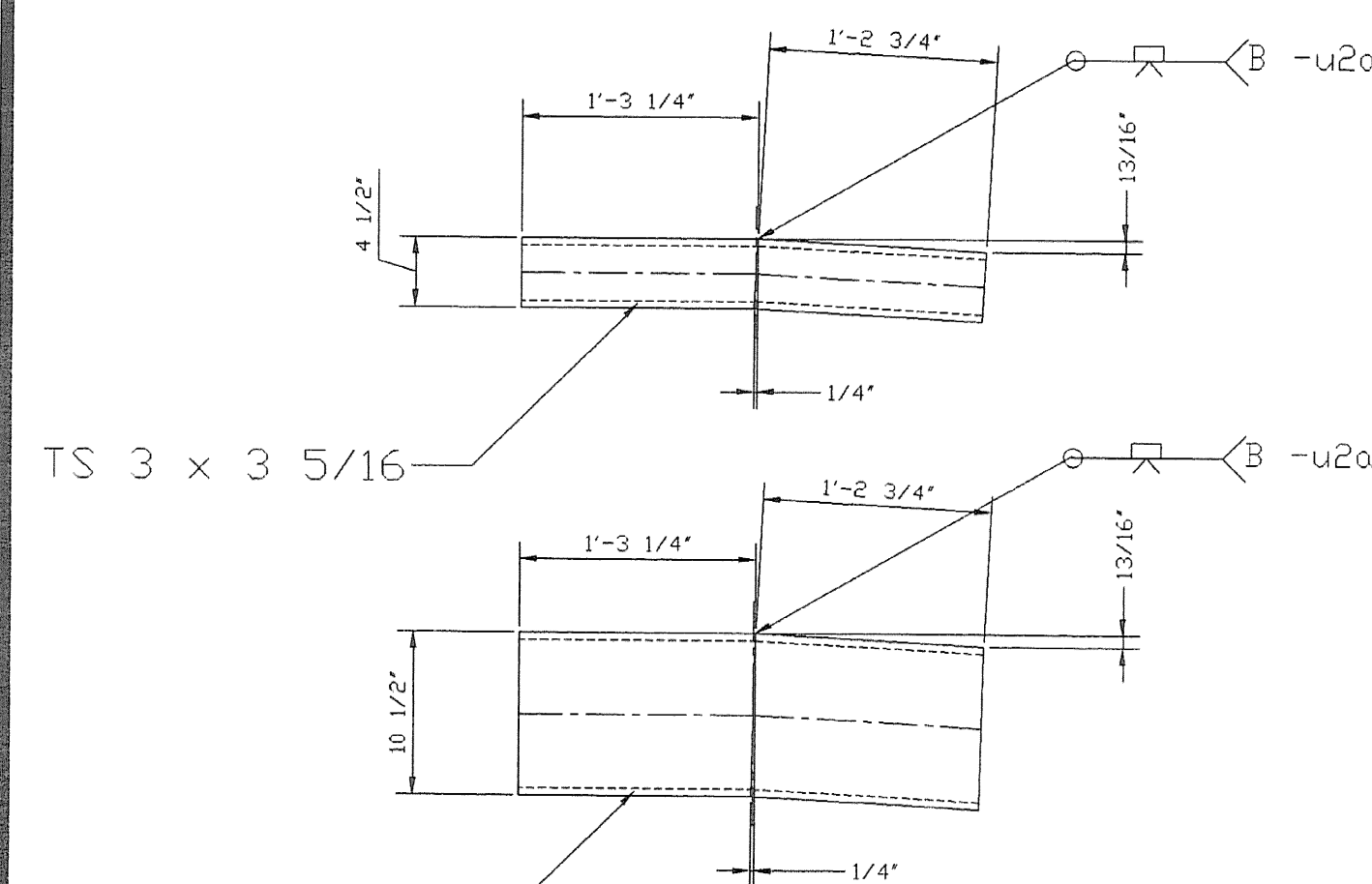
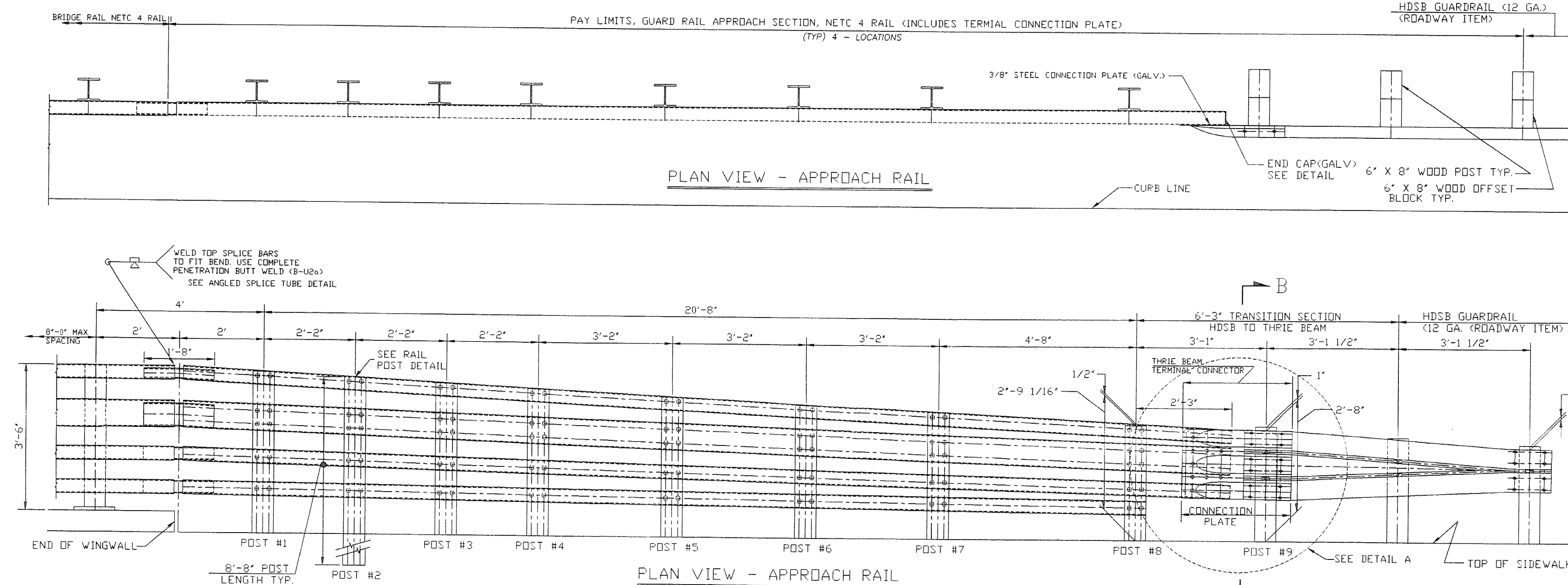
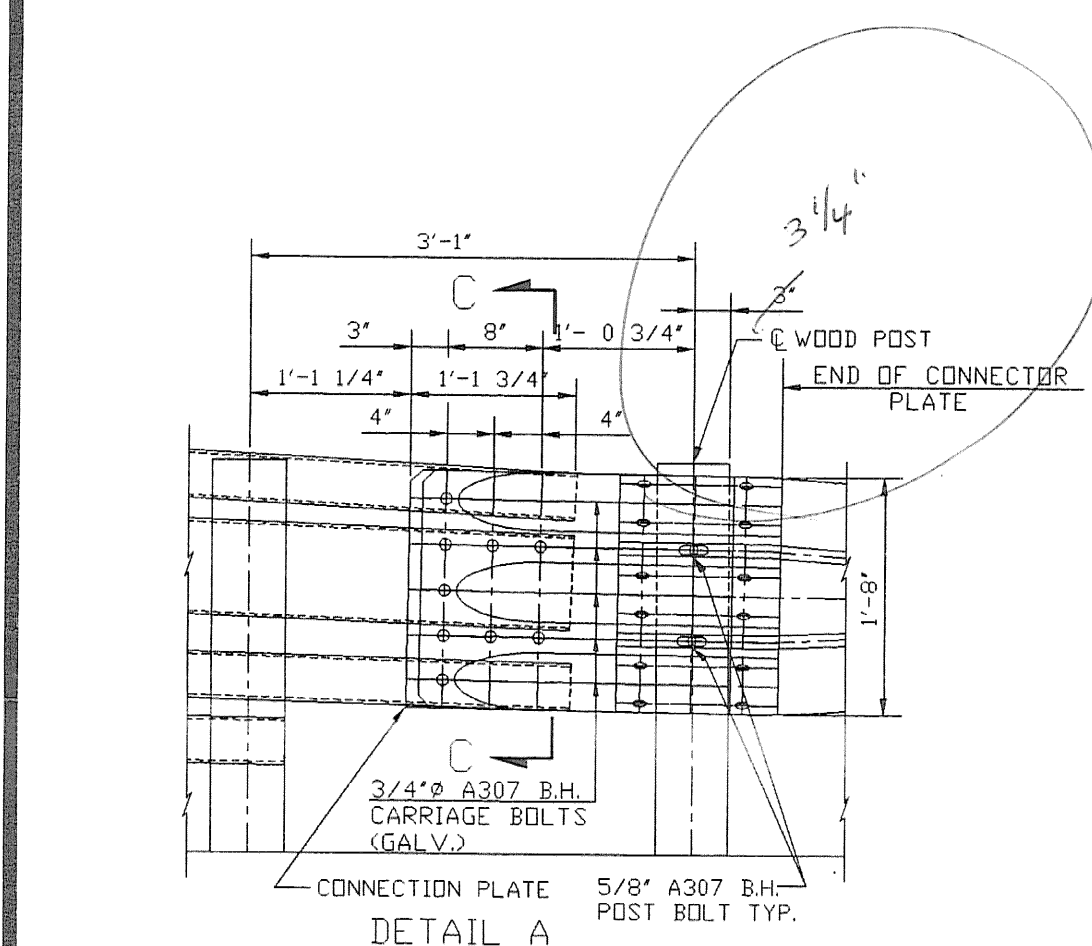
1. All work and materials shall conform to the provisions of Section 732 - Railings of the Vermont Standard Specifications for Construction.
2. Tubing & posts shall meet the requirements of Section 732 - Railing materials of the Vermont Standard Specifications for Construction.
3. All exposed cut or sheared edges shall be ground to a 1/16" radius & be free of burrs.
4. Rail posts shall be set normal to grade.
5. Sections of rail bar shall be attached to a minimum of two (2) posts and preferably to at least four (4) posts.
6. Rail bar expansion joints shall be provided in any rail bay spanning a superstructure expansion joint. Expansion joint width shall be "X" at 45° F and will be adjusted in the field by the engineer.
7. All ports shall be galvanized after fabrication in accordance with AASHTO M111, except that hardware shall meet the requirements of AASHTO M232.
8. Rail posts anchoring nuts shall be tightened to a snug-tight fit and given an additional 1/8 turn.
9. Rail bars shall be attached using 3/4"Ø full diameter body head bolts AASHTO M164 (Type-I) inserted through the face of the bar. Holes in post shall be 1/16" larger than the bolt size.
10. Holes in rails for attachment to posts will be field-drilled. Holes shall be coated with an approved zinc-rich paint prior to erection.
11. Radiused rails (if required) will be shop-curved. No field-bending of rail tubes
12. The drop-weight tear test in section 732 shall not apply to the structure tubing on this standard.

MATERIALS

Rail bars.....	ASTM A500 GR B or ASTM A501
Rail posts.....	ASTM A709 GR 50
All other shapes & plates.....	ASTM A709 GR 36
Anchor studs.....	ASTM A449
All other bolts [unless noted].....	AASHTO M164, TYPE I

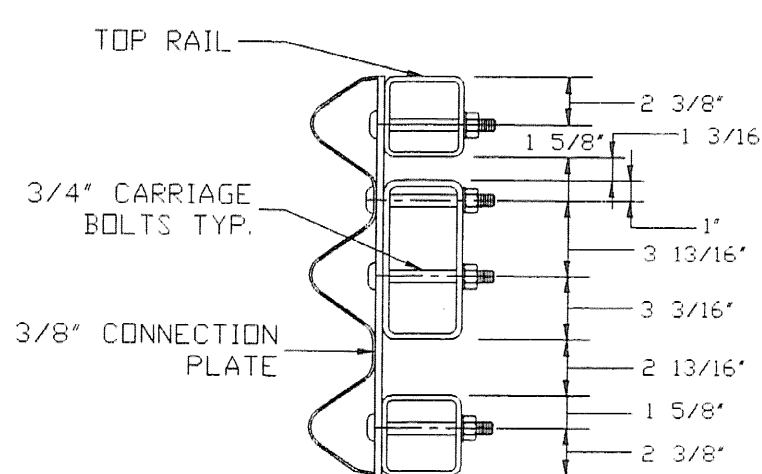
Nuts for ASTM A307 bolts & AASHTO M164 bolts shall comply with AASHTO M291. Nuts for anchor studs shall comply with ASTM A563.

1/8" pad shall comply with standard specification subsection 731.01 or 731.02 of Vermont Standard Specifications.

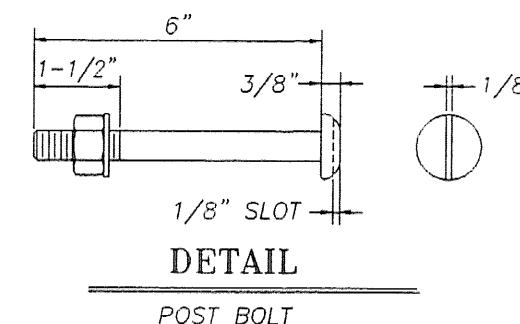
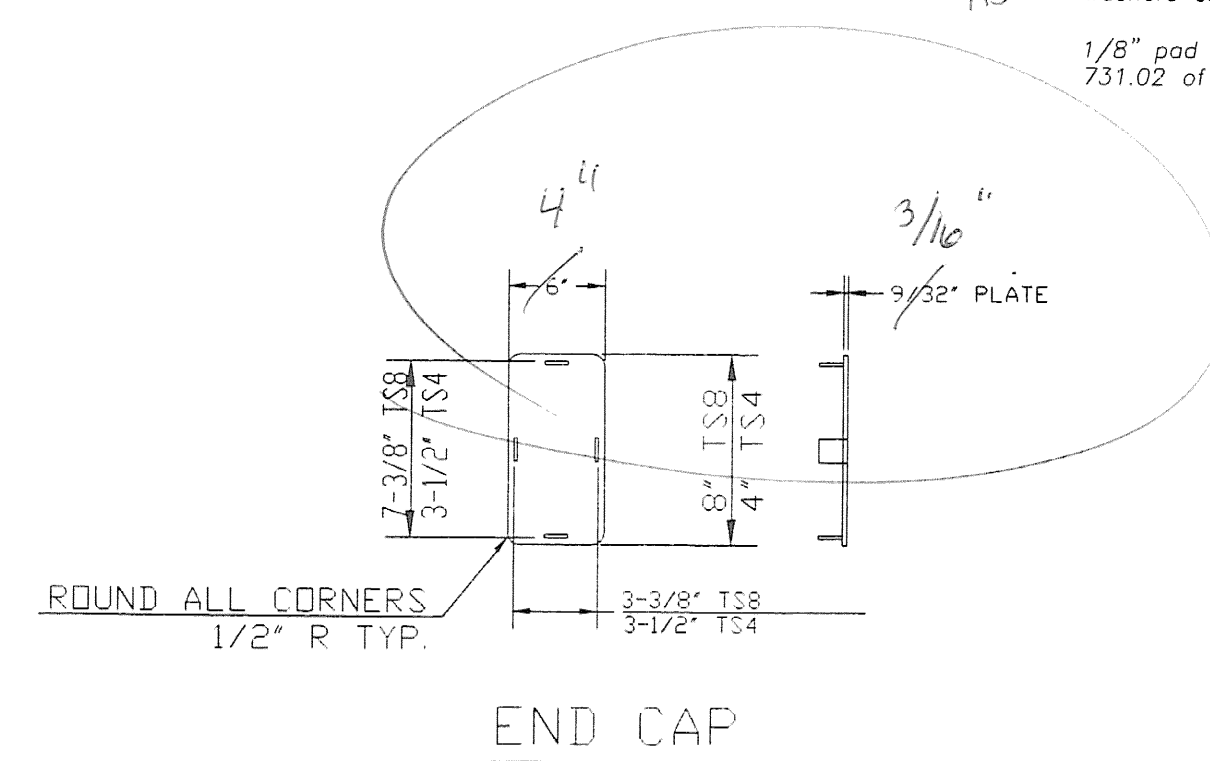


HOLE PATTERN DIMENSIONS IN RAIL POSTS			
POST #	"X"	"Y"	"Z"
POST # 1	10 1/8"	9 9/16"	8 15/16"
POST # 2	9 3/4"	9 5/16"	8 9/16"
POST # 3	9 5/16"	9 1/8"	8 3/16"
POST # 4	8 15/16"	8 7/8"	7 13/16"
POST # 5	8 5/16"	8 1/2"	7 1/4"
POST # 6	7 11/16"	8 3/16"	6 11/16"
POST # 7	7 1/16"	7 13/16"	6 3/16"
POST # 8	6 3/16"	7 5/16"	5 5/16"

Verify ~~these~~ these dimensions with
in detail



SECTION C-C (CONNECTION PLATE)



SHOP DRAWING REVIEW

- ☐ REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

CORRECTIONS OR COMMENTS MADE ON THE SHOP DRAWINGS DURING THIS REVIEW DO NOT RELIEVE CONTRACTOR FROM COMPLIANCE WITH REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. THIS REVIEW IS ONLY FOR REVIEW OF GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR: CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; SELECTING FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATING HIS WORK WITH THAT OF ALL OTHER TRADES; REPRESENTING HIS WORK IN A SAFE AND SATISFACTORY MANNER.

Job Number: 50929
Reviewed By: ASR
Date: 9-21-00

HIGHWAY SAFETY CORP.

GLASTONBURY, CT

ITEM 621.73 - BRIDGE RAILING - NETC 4 RAIL

CITY OF SOUTH BURLINGTON
US ROUTE 2 OVER I-89 @ EXIT 14
IM DECK(36) BRIDGE #68

GENERAL CONTRACTOR	
SUB CONTRACTOR	F.R. LAFAYETTE, INC.

DRAWN		P. VUKAS	
CHECKED		<i>P.R.</i>	
DATE		09-05-00	
SCALE		NONE	
HSC REFERENCE NO.			
1225			
SIZE		REVISION	
D		0	
SHEET NO.			
1 of 1			

REVISIONS		
No.	Remarks	Date
0	Initial submittal	9/1/00