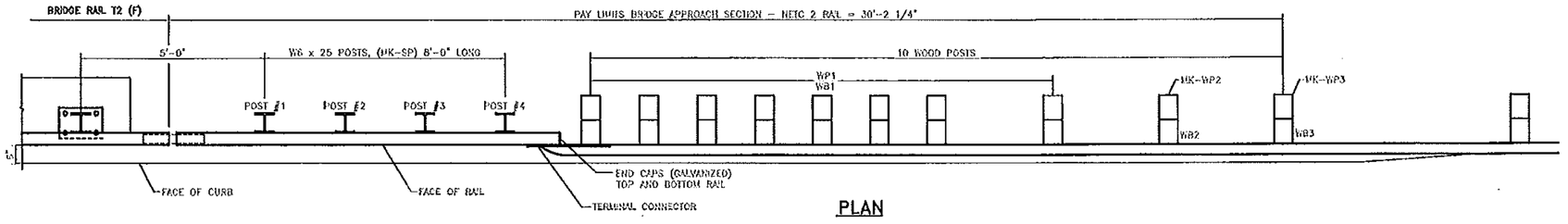
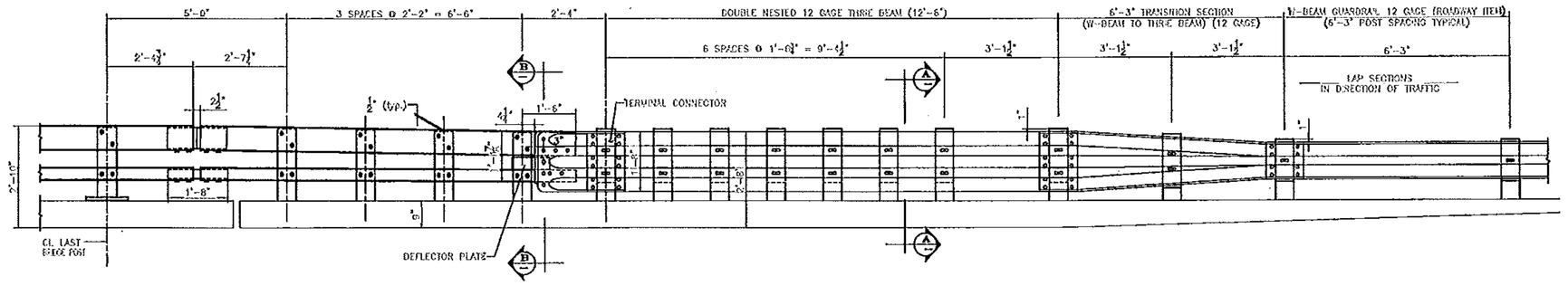


PLAN



APPROACH RAIL ELEVATION

BILL OF MATERIAL (2 APPROACHES)					
MK.	Qty.	Description	Size/Shape	Length	Material
	2	UPPER APPROACH RAIL	TS 8x4x0.313"	10'-4.750"	A500 Gr. B
	2	LOWER APPROACH RAIL	TS 4x4x0.25"	10'-4.750"	A500 Gr. B
SP	8	STEEL POST	W6 x 25	8'-0"	A992 Gr. 50
WP1	16	WOOD POST	6" x 8"	7'-0"	TIMBER
WP2	2	WOOD POST	6" x 8"	7'-0"	TIMBER
WP3	2	WOOD POST	6" x 8"	7'-0"	TIMBER
WB1	16	WOOD BLOCK	6" x 8"	1'-6"	TIMBER
WB2	2	WOOD BLOCK	6" x 8"	1'-6"	TIMBER
WB3	2	WOOD BLOCK	6" x 8"	1'-2"	TIMBER
	2	ANGLED SPLICE TUBE FOR TS 8x4x0.313"			
	2	TUBE	TS 7x3.5x0.313"	1'-8"	A500 Gr. B
	4	WELDED LOCK NUTS	0.625"ø	----	A563 Gr. A
	2	SPLICE TUBE FOR TS 4x4x0.250"			
	2	TUBE	TS 3.5x3.5x0.313"	1'-8"	A500 Gr. B
	4	WELDED LOCK NUTS	0.625"ø	----	A563 Gr. A
	2	TERMINAL CONNECTOR	10 Ga.	2'-6"	M180
	2	CONNECTION PLATE	0.375" x 1'-3"	2'-3"	A709 Gr. 36
	2	END CAP FOR TS 8x4 RAIL TUBE			
	2	PLATE	0.188" x 4"	6"	A709 Gr. 36
	8	PLATE	0.125" x 1"	1"	A709 Gr. 36
	2	END CAP FOR TS 4x4 RAIL TUBE			
	2	PLATE	0.188" x 4"	4"	A709 Gr. 36
	8	PLATE	0.125" x 1"	1"	A709 Gr. 36
	1	DEFLECTOR PLATE (LEFT)	0.3125"ø	125"	A709 Gr. 36
	1	DEFLECTOR PLATE (RIGHT)	0.3125"ø	125"	A709 Gr. 36
	2	0.75"ø x 2" LG. ROUND HEAD BOLT W/NUT			A307
	2	THRIE TRANSITION PANEL	12 Ga.	7'-3.50"	M180 A2
	4	THRIE BEAM	12 Ga.	12'-6"	M180 A2
	16	0.75"ø x 6" ROUND HEAD BOLT W/NUT & ROUND WASHER			A307
	4	0.625"ø x 10" LG. POST BOLT W/CSL RECESSED NUT, PLATE & ROUND WASHER			A307
	34	0.625"ø x 18" LG. POST BOLT W/CSL RECESSED NUT, PLATE & ROUND WASHER			A307
	16	0.625"ø x 1.75" LG. CAP SCREW W/WASHER			A325
	64	0.625"ø x 1.25" LG. PANEL SPLICE BOLT W/DSL RECESSED NUT			A307
	16	0.75" x 0.5" LG. (SCH 40) SPACER PIPE			A53

NOTES:

1. PAYMENT FOR GUARDRAIL APPROACH SECTION – GALVANIZED NETC 2 RAIL SHALL INCLUDE THE TERMINAL CONNECTOR, THE CONNECTION PLATE, THE DEFLECTOR PLATE, RAIL, POSTS, BLOCKS AND ATTACHMENT HARDWARE.

2. REFLECTIVE MATERIAL SHALL MEET REQUIREMENTS OF SUBSECTION 759.03 AND SHALL BE A 0.063" ALUMINUM BACKING WHITE OR YELLOW REFLECTOR. WHITE IS TO BE INSTALLED ON THE DRIVER'S RIGHT. FOR ONE-WAY BRIDGES, YELLOW IS TO BE INSTALLED ON THE DRIVER'S LEFT.

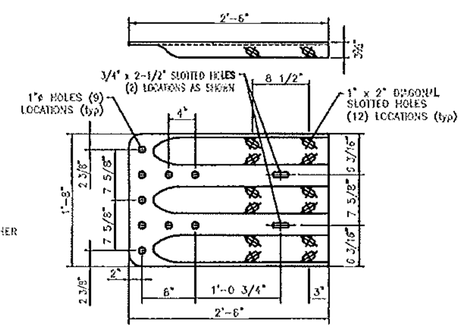
3. ALL APPROACH RAIL SPLICES SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW.

4. ALL APPROACH RAIL MATERIALS, DIMENSION SIZES AND NOTES SHALL BE THE SAME AS THOSE OF THE BRIDGE RAIL, UNLESS OTHERWISE NOTED.

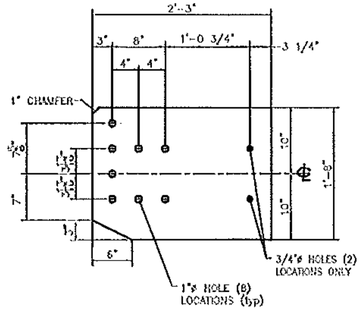
5. APPROACH RAIL BOLTS SHALL BE ASTM A307 GRADE A AND NUTS SHALL BE AASHTO M291 (ASTM 563 GRADE A OR BETTER (GALVANIZED). WASHERS SHALL BE ASTM F844.

6. WELD TOP SPLICE BAR TO FIT BEND. USE COMPLETE PENETRATION WELD (B-U2).

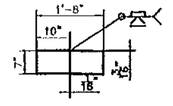
SECTION A–A



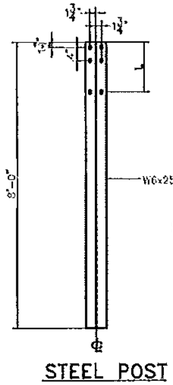
TERMINAL CONNECTOR
10 GAUGE (AASHTO M180 B2)



CONNECTION PLATE
3/8" x 1'-8" x 2'-3" (A709 gr 36)



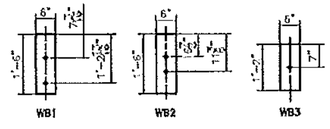
ANGLED RAIL TUBE SPLICE DETAIL



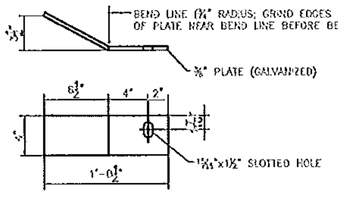
STEEL POST

STEEL POST CHART

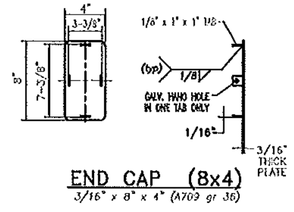
No.	L
#1	1'-3.125"
#2	1'-2.875"
#3	1'-2.625"
#4	1'-2.437"



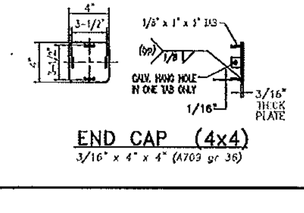
WOOD BLOCK DETAILS



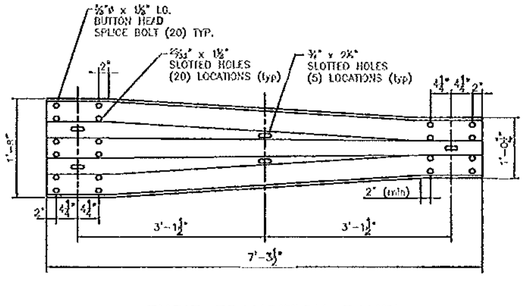
DEFLECTOR PLATE



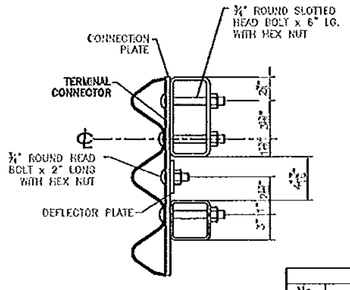
END CAP (8x4)
3/16" x 8" x 4" (A709 gr 36)



END CAP (4x4)
3/16" x 4" x 4" (A709 gr 36)



THRIE TRANSITION PANEL
12 GAUGE (AASHTO M180 A2)



SECTION B–B

REVISIONS		
No.	Remarks	Date
0	Initial submittal	

Vermont Agency of Transportation

RECEIVED

CK'D BY GFR OK'D BY CAM

05/31/2012

RESUBMIT APPROVED X

BY C. CARLSON DATE 07/02/2012

HIGHWAY SAFETY CORP
GLASTONBURY, CT
860-633-9445

ITEM 621.72 NETC 2 RAIL BRIDGE APPROACH
VT RT 9 BRIDGE NO. 11
TOWN OF WOODFORD
COUNTY OF BENNINGTON, VERMONT
PROJECT NO. ER BHF 010-1(44)

CERTIFIED FABRICATOR

ISO JOB NO. 1881

SHEET NO. 4 of 4

GENERAL CONTRACTOR

SUB CONTRACTOR T BUCK CONSTRUCTION

DRAWN	CHECKED	DATE	SCALE	SIZE
MHM	PAR	05-31-12	NONE	D