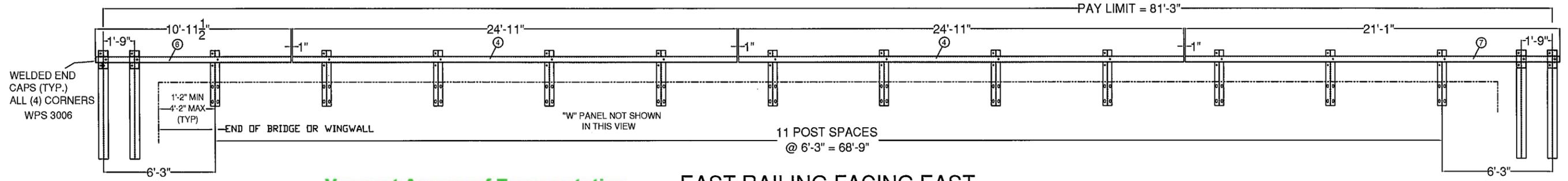


WEST RAILING FACING WEST



EAST RAILING FACING EAST

Vermont Agency of Transportation  
**RECEIVED**  
 Brattleboro BRD 1442(35) Bridge Rail Resubmittal Review (R and R).pdf  
 CK'D BY MJC OK'D BY TAS  
 May 30, 2014  
 RESUBMIT Yes  
 BY M. J. Chenette DATE 06/17/2014

BILL OF MATERIALS

ITEM NUMBER	DET. #	QTY	DESCRIPTION	MATERIAL
0033.90043	1	30	W6x20 FASCIA MOUNTED POST, GALVANIZED, @ 3' 1"	ASTM A572 Gr 345
0033.90044	2	8	W8x24 TRANSITION POST, GALVANIZED, @ 6' 0"	ASTM A572 Gr 345
0033.91112	3	1	TS8x4x3/16" TUBING @ 4'-8-1/2" w/WELDED CAP	ASTM A500 Gr B
0033.91113	4	6	TS8x4x3/16" TUBING @ 24'-11"	ASTM A500 Gr B
0033.91114	5	1	TS8x4x3/16" TUBING @ 14'-10" w/WELDED CAP	ASTM A500 Gr B
0033.91115	6	1	TS8x4x3/16" TUBING @ 10'-11-1/2" w/WELDED CAP	ASTM A500 Gr B
0033.91116	7	1	TS8x4x3/16" TUBING @ 21'-1" w/WELDED CAP	ASTM A500 Gr B
0033.90045	8	76	TS8x4x3/16" TUBING @ 6"	ASTM A500 Gr B
0033.90046	9	8	C7x12.25 CHANNEL @ 2' 7" (SPLICE)	ASTM A572 Gr 345
0080.15550	10	38	5/8"x10" HEX BOLT	ASTM A325
0080.15595	11	38	5/8"x13" HEX BOLT	ASTM A325
0080.15036	12	108	5/8"x2" HEX BOLT	ASTM A325
0080.15990	13	38	3/16"x1 3/4"x3" SPECIAL WASHER	ASTM A572 Gr 345
0080.15901	14	152	5/8" HEX NUT	ASTM A563
0080.15911	15	336	5/8" FLAT WASHER	ASTM A436
0080.18960	16	120	1/4"x2"x5" PLATE WASHER	ASTM A572 Gr 345
6043.00012	17	17	10 GAUGE 'W' BEAM @ 12' 6"	AASHTO M180-CI B, TYPE II
0080.05020	18	144	5/8"x1-1/4" SPLICE BOLT/RECESSED NUT (PANEL ASS'Y)	ASTM A307
0080.18851	19	60	Ø 1", 10" x 12" 'U' ANCHORS	ASTM A449
0080.18901	20	240	1" HEX NUT	ASTM A563
0080.18911	21	120	1" FLAT WASHER	ASTM F436
XXX	22	9	DELINEATOR	ALUMINUM

- NOTES:
- ALL WORK AND MATERIAL PRIOR TO GALVANIZING T
  - ALL POSTS SHALL BE SET
  - SPLICES FOR STEEL BEAM
  - A RAILING JOINT SPLICE & ABUTMENT BRIDGE AND /
  - SEE STANDARD DRAWING AT EVERY FIFTH POST. W BRIDGES, YELLOW IS TO E
  - FOR RADII LESS THAN 95C
  - HOLES IN RAIL FOR RAIL T WITH AN APPROVED ZINC
  - SEE STANDARDS G-1 AND

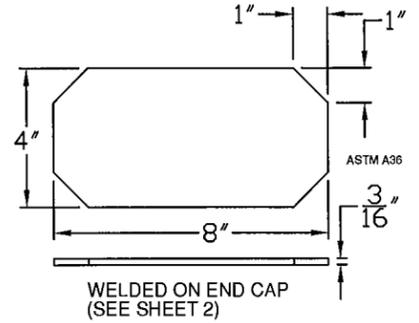
### SHOP DRAWING REVIEW

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 REJECTED       REVISE AND RESUBMIT       FURNISH AS CORRECTED

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**Vanasse Hangen Brustlin, Inc.**  
 7056 US Route 7  
 North Ferrisburgh, VT 05473  
 802.425.7788

Job Number: 57428.00  
 Reviewed By: E.A. FIALA  
 Date: 6/12/2014



ITEM #: 900.640      SOLD TO: F.R. LAFAYETTE (PO#28720)      SHEET 1 OF 2

APPROVED BY: \_\_\_\_\_

**SPECIAL PROVISION BRIDGE RAIL, GALV. HDSB/FM/ST**  
 BRATTLEBORO BRD 1442 (35) TH 12, CLASS III (LOCAL ROAD), BRIDGE NO. 7  
 TOWN OF BRATTLEBORO, COUNTY OF WINDHAM, VERMONT

R NO.	DATE	DESCRIPTION	BY	R NO.	DATE	DESCRIPTION	BY
1	5/25/14	REVISED PER 5/22/14 MARK-UP	EP				

**ELDERLEE, INC.**  
 OAKS CORNERS, NEW YORK 14518  
 E-Mail: [dlong@elderlee.com](mailto:dlong@elderlee.com)  
 Tel: 315-789-6670 Fax: 315-789-6615

CERTIFIED FABRICATOR  
 DRAWN: D.L. 05/07/2014  
 CHECKED: E.P. 05/07/2014  
 APPROVED: \_\_\_\_\_  
 SCALE: SCHEMATIC  
 DRAWING NO.: FRL BRATTLEBORO

## SHOP DRAWING REVIEW

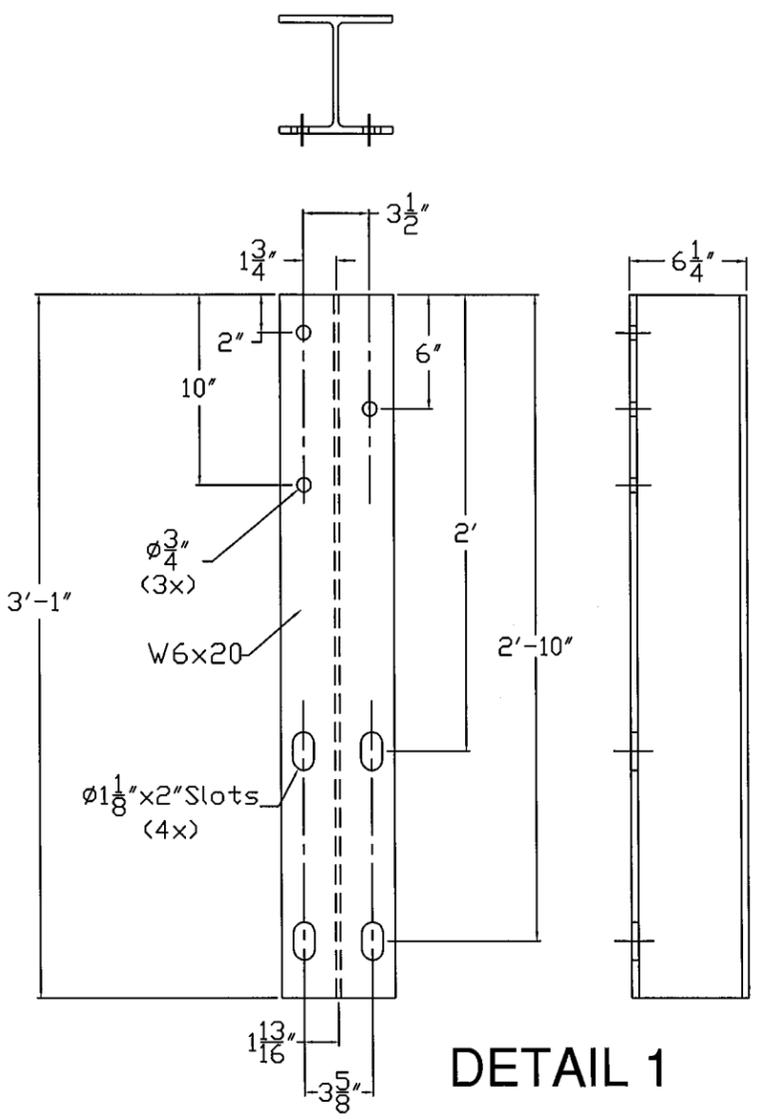
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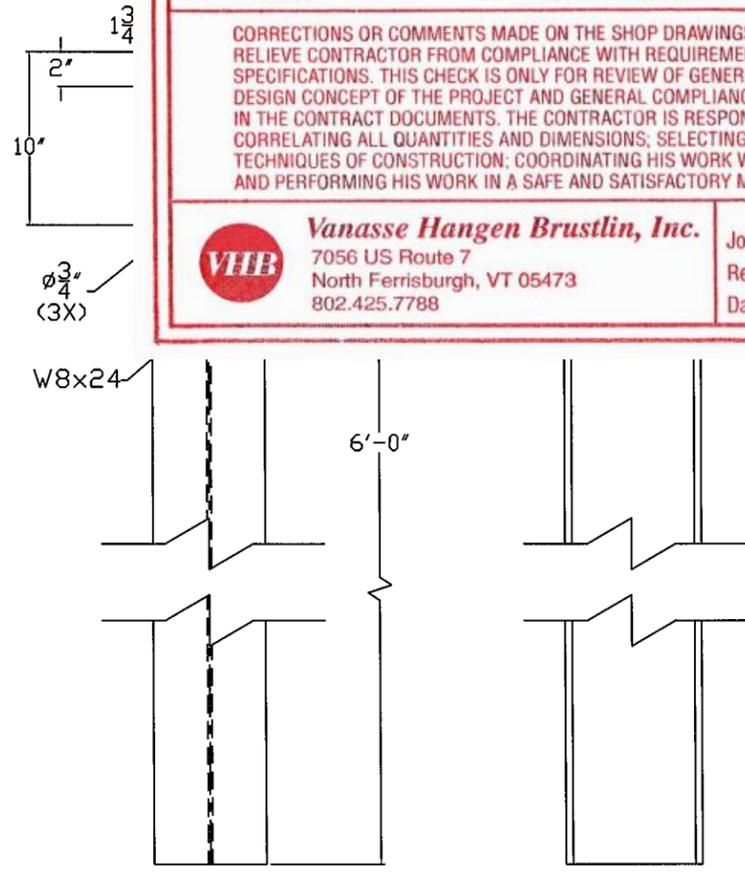


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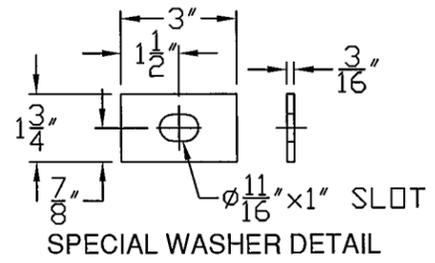
Job Number: 57428.00  
Reviewed By: E.A. FIALA  
Date: 6/12/2014



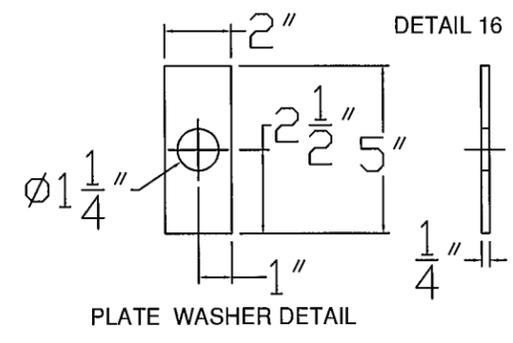
**DETAIL 1**



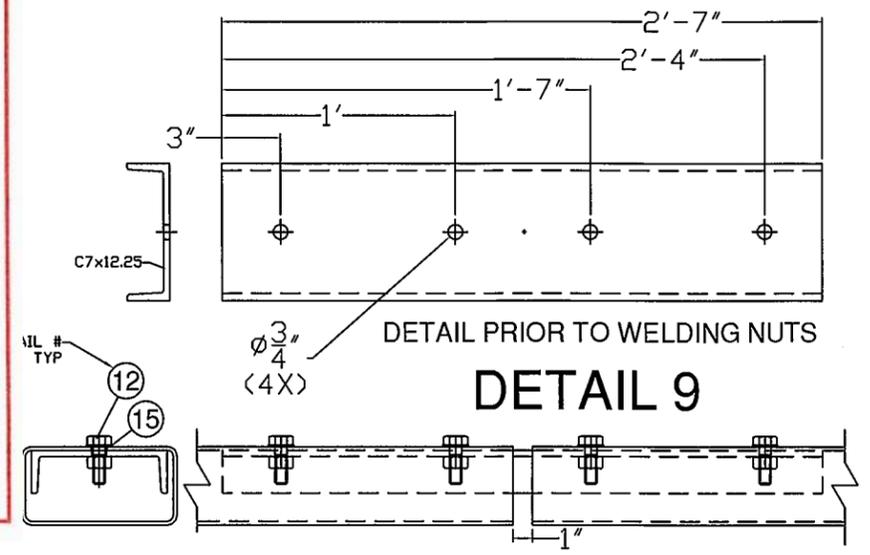
**DETAIL 13**



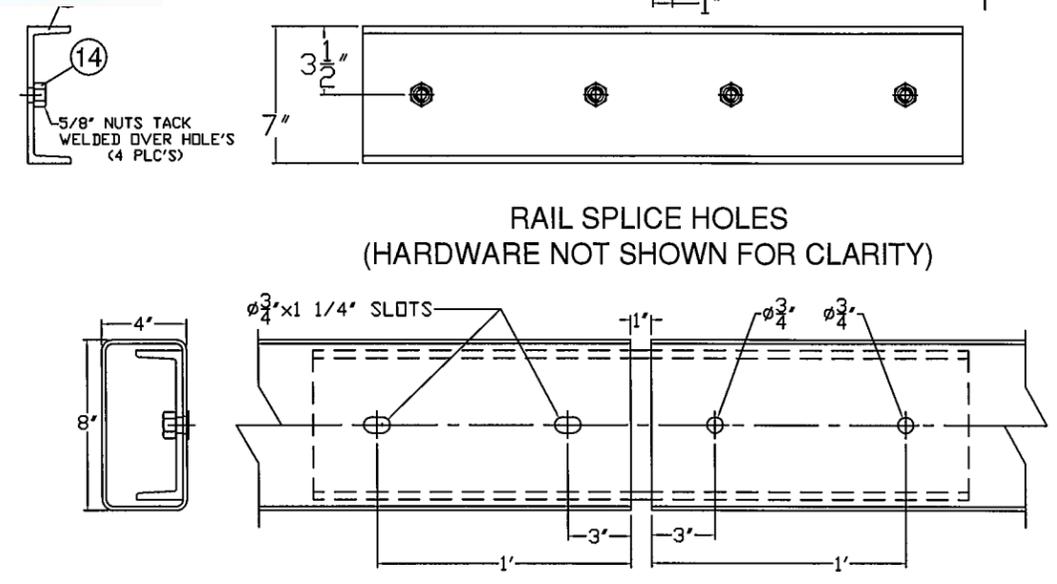
**SPECIAL WASHER DETAIL**



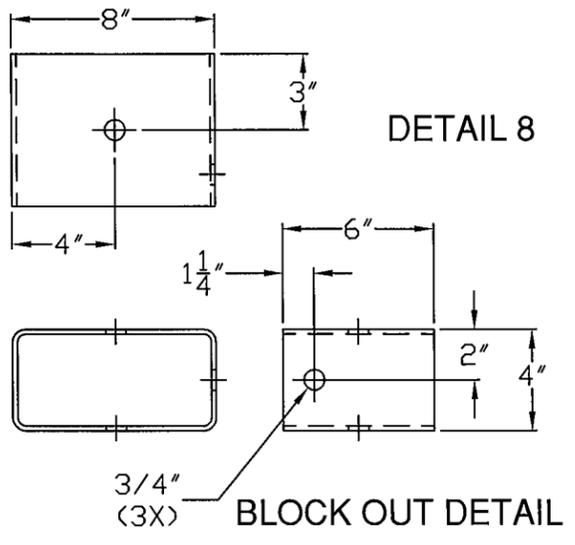
**PLATE WASHER DETAIL**



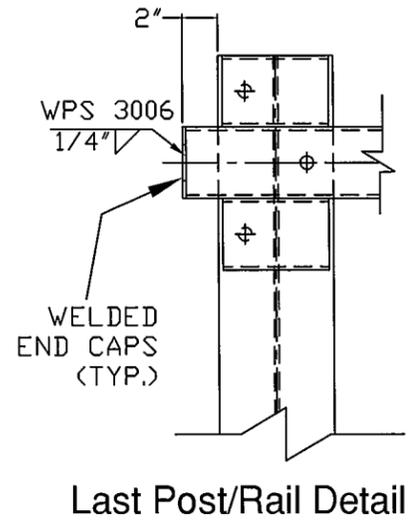
**DETAIL 9**



**RAIL SPLICE HOLES  
(HARDWARE NOT SHOWN FOR CLARITY)**

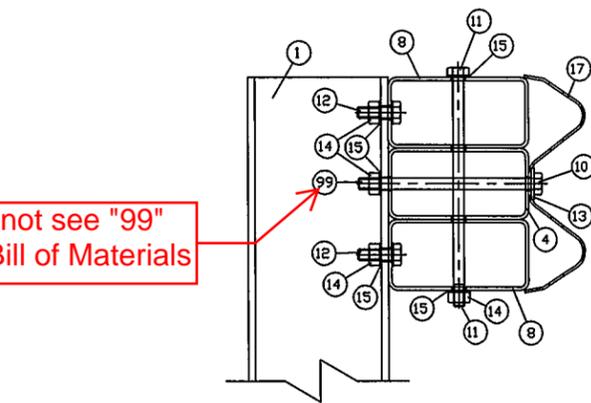


**DETAIL 8**



**Last Post/Rail Detail**

Do not see "99" in Bill of Materials



Vermont Agency of Transportation  
**RECEIVED**

CK'D BY MJC      OK'D BY TAS  
 May 30, 2014  
 RESUBMIT Yes      DATE 06/17/14  
 BY M. J. Chenette

ITEM #: 900.640		SOLD TO: F.R. LAFAYETTE (PO#28720)		SHEET 2 OF 2			
APPROVED BY:		<b>SPECIAL PROVISION BRIDGE RAIL, GALV. HDSB/FM/ST</b> BRATTLEBORO BRO 1442 (35) TH 12, CLASS III (LOCAL ROAD), BRIDGE NO. 7 TOWN OF BRATTLEBORO, COUNTY OF WINDHAM, VERMONT					
R NO.	DATE	DESCRIPTION	BY	R NO.	DATE	DESCRIPTION	BY
E 1	5/23/14	REVISED PER 5/22/14 MARK-UP	EP	E 1	5/23/14	REVISED PER 5/22/14 MARK-UP	EP
DRAWN		D.L.		05/07/2014			
CHECKED		E.P.		05/07/2014			
APPROVED							
SCALE		SCHEMATIC					
DRAWING NO.		FRL BRATTLEBORO					
 <b>ELDERLEE, INC.</b> OAKS CORNERS, NEW YORK 14518 E-Mail: dlong@elderlee.com Tel: 315-789-6670 Fax: 315-789-6615							

**WELDING PROCEDURE SPECIFICATION**

Material Specification	A36 A500
Welding Process	FCAW
Manual or Machine	SEMAUTOMATIC
Position of Welding	FLAT
Filler Metal Specification	A5.20 - 95
Filler Metal Classification	E71T-1H8 E71T-9H8 LINCOLN ULTRACORE
Flux	N/A
Shielding Gas	CO 2 Dew Point -40DEG F Flow Rate 50CFH
Single or Multiple Pass	SINGLE
Single or Multiple Arc	SINGLE
Welding Current	DC
Polarity	REVERSE ELECTRODE POSITIVE
Welding Progression	STRINGER
Root Treatment	PER D1.5
Preheat and Interpass Temperature	PER D1.5
Postheat Temperature	NONE
Heat Input	Min _____ Max _____

**WELDING PROCEDURE**

Pass no.	Electrode size	Welding Current		Travel speed	Joint detail
		Amperes	Volts		
1	1/16	300	26	14	
Variable	LIMITS	270	24	12.6	
		TO 330	TO 28	TO 15.4	

WPS 3006 is for a 1/4 inch fillet weld in the flat position. It appears that the end caps will be attached using a partial penetration groove weld. Please clarify.

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in Section 5.

Procedure No. 3006 Contractor Elderlee, Inc.  
 Revision No. \_\_\_\_\_ Authorized By RANDY SCOTT  
 Date 5/29/2013

Form III-2

Vermont Agency of Transportation

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