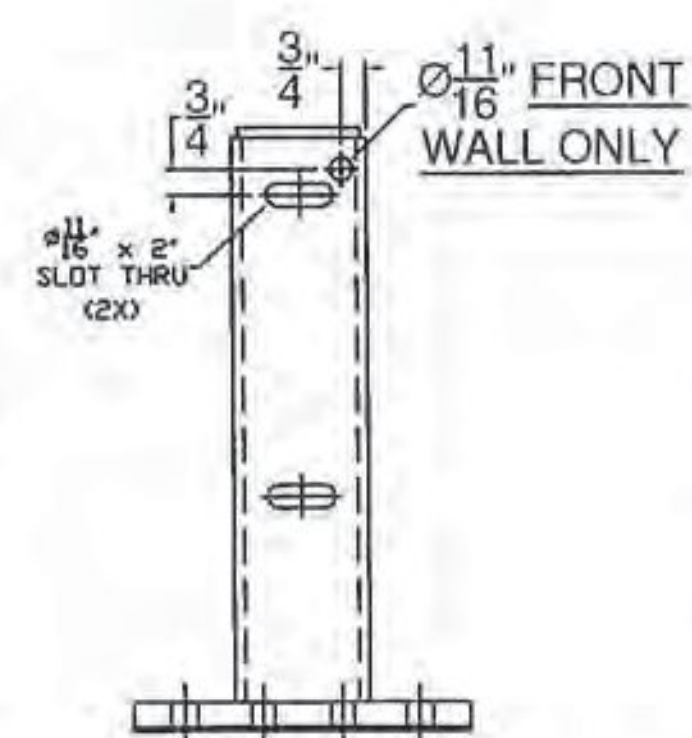
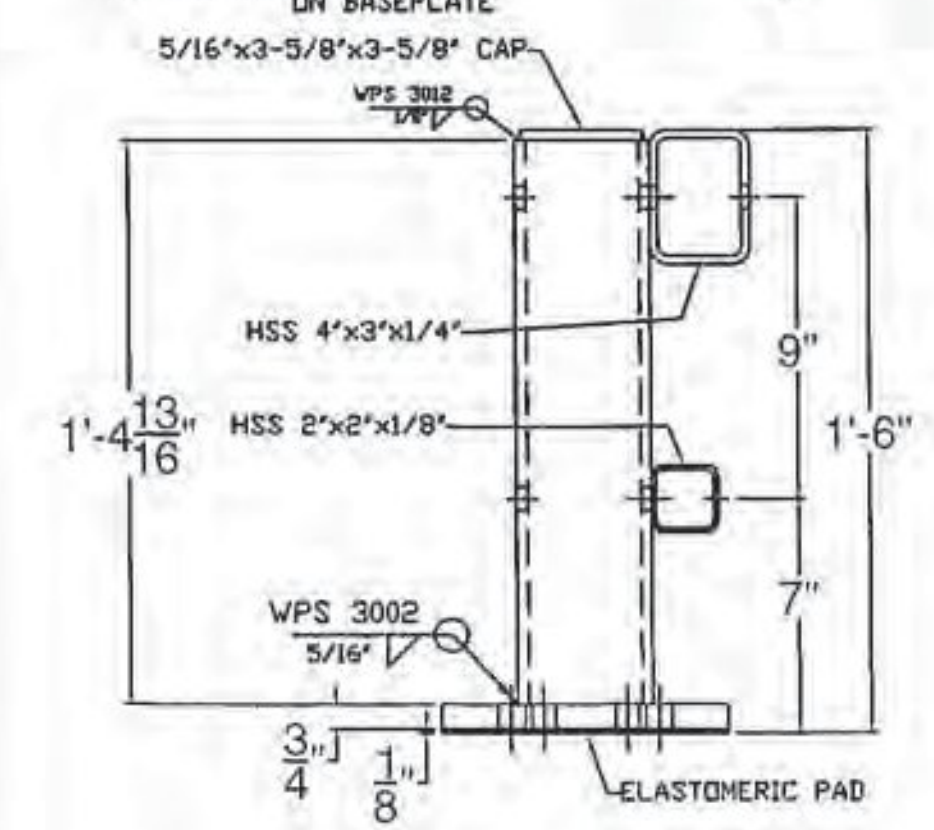
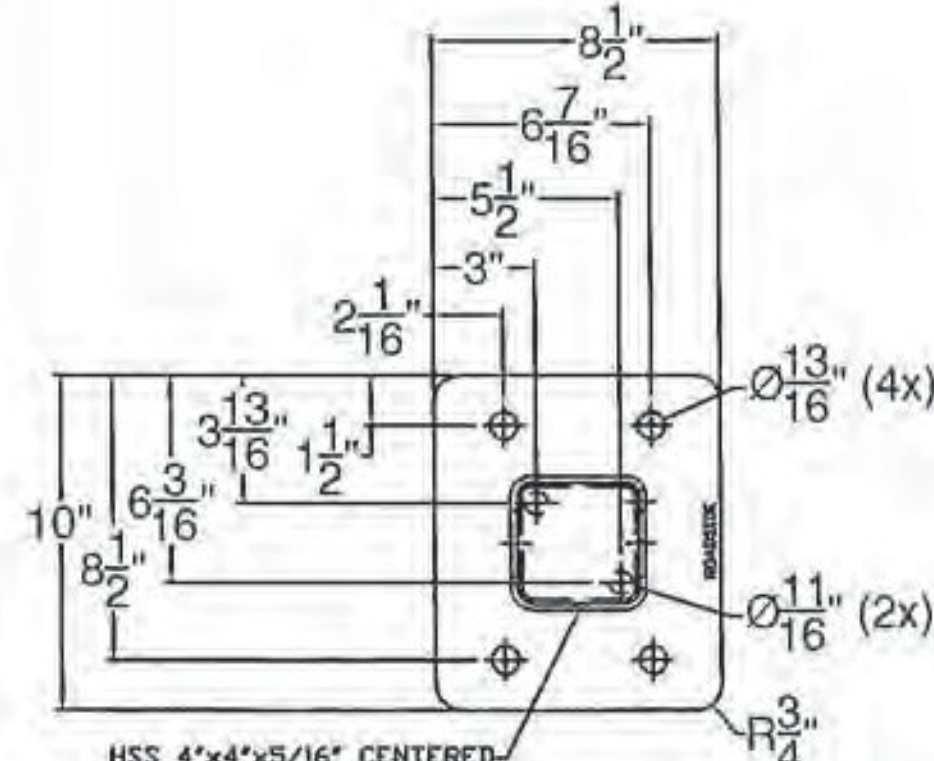
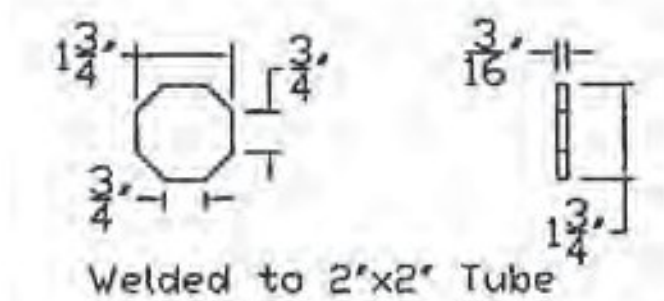
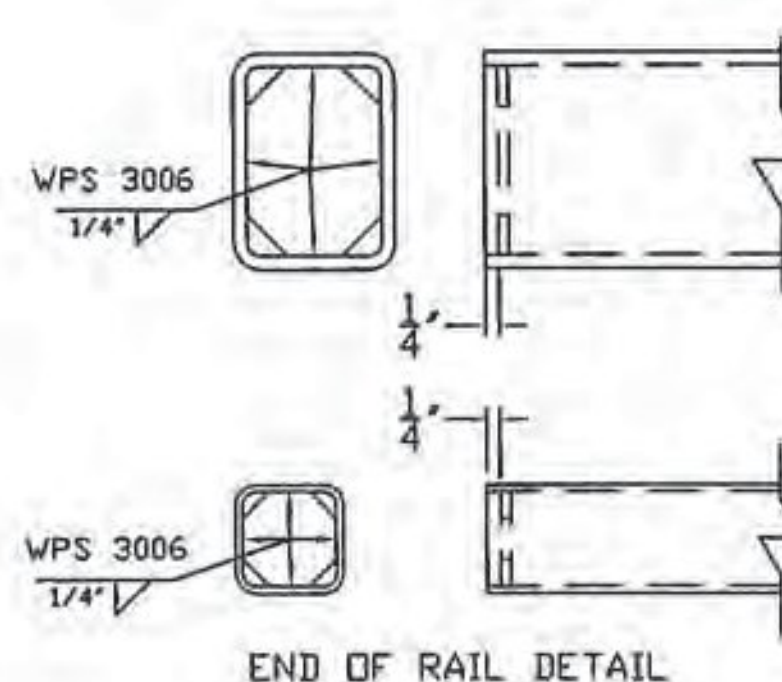
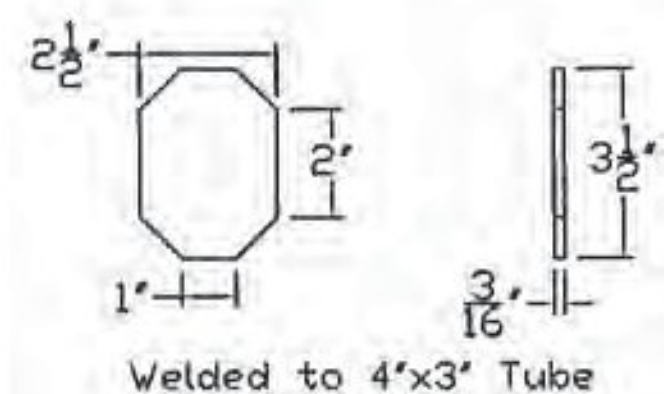
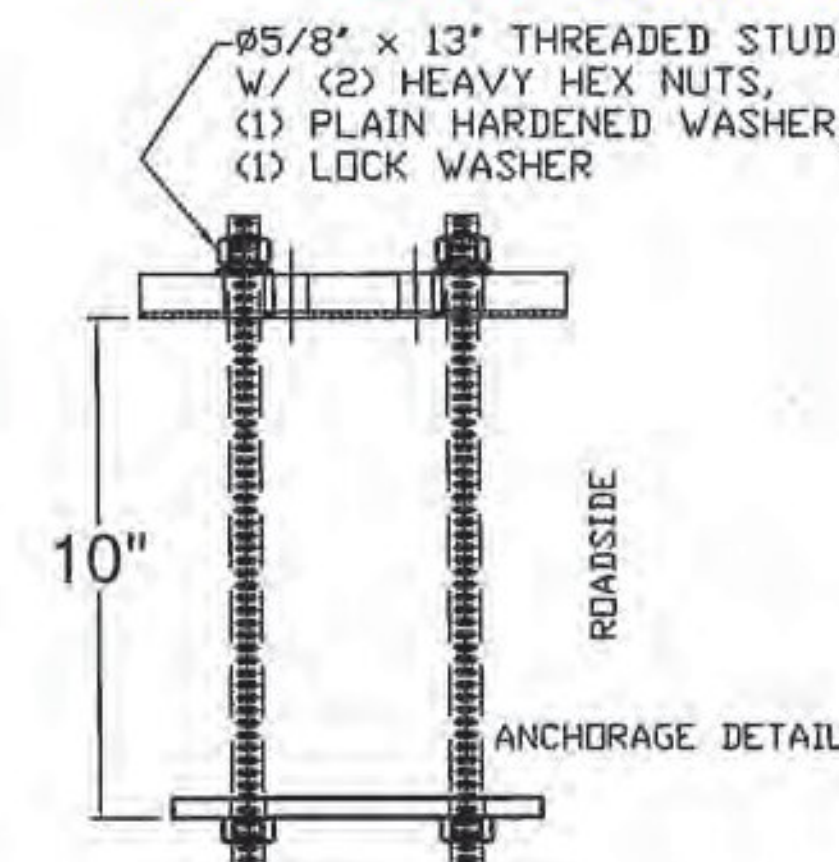
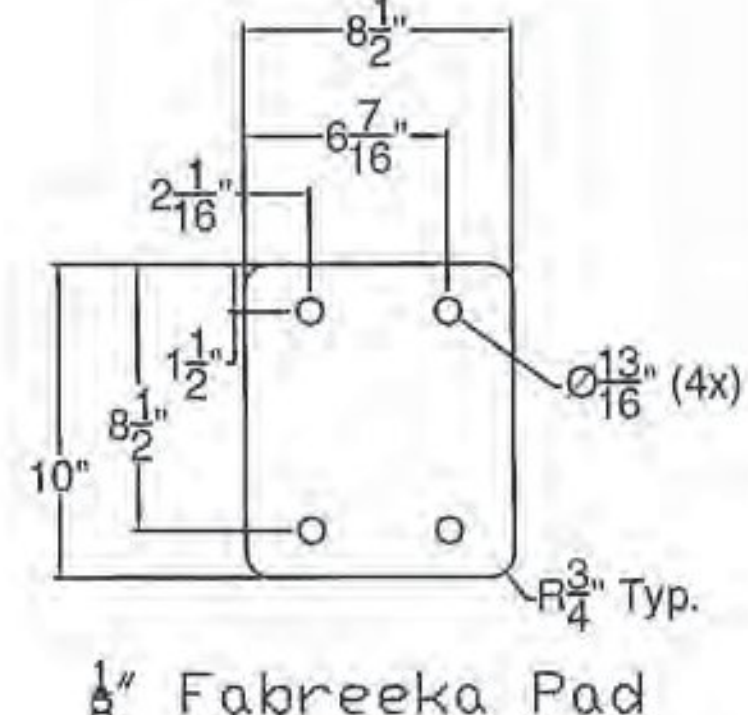
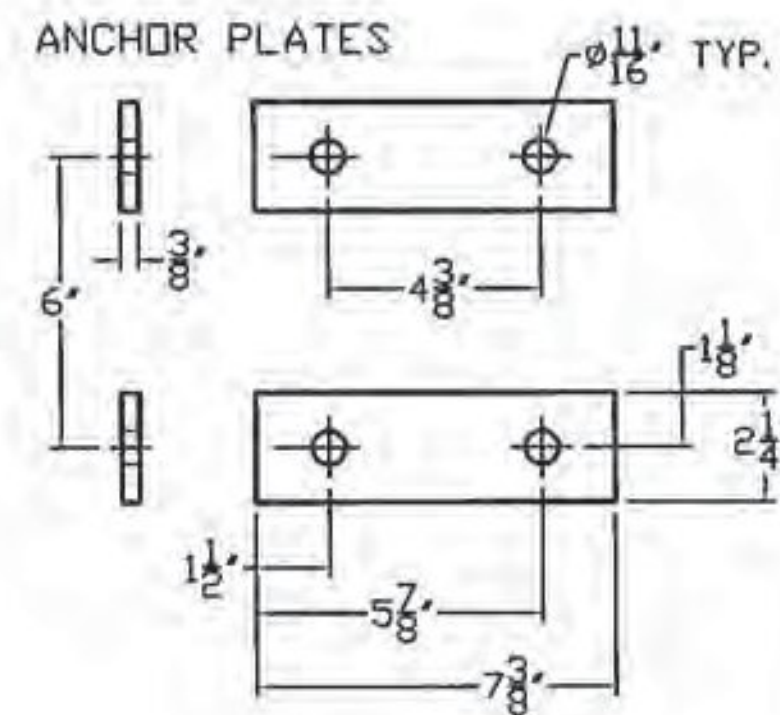


Vermont Agency of Transportation

COATED BLACK - ASTM D7803

RECEIVED
 ON: December 29, 2014
 and Checked for
CONFORMANCE
 BY: TAS DATE: 01/20/2015

BILL OF MATERIAL				
ITEM #	QTY	PART #	DESCRIPTION	ASTM DESIGNATION
1	60	0033.90402	TWO RAIL POST & BASE PLATE ASSEMBLY	A572 Gr. 50, A500 Gr. B
2	2	0033.91331	4' X 3' X 1/4" RAIL @ 23'-11 1/2' W/ END PLATES	A500 Gr. B
3	2	0033.91332	4' X 3' X 1/4" RAIL @ 19'-10"	A500 Gr. B
4	2	0033.91333	4' X 3' X 1/4" RAIL @ 17'-11 1/2"	A500 Gr. B
5	2	0033.91334	4' X 3' X 1/4" RAIL @ 19'-11 1/2"	A500 Gr. B
6	2	0033.91335	4' X 3' X 1/4" RAIL @ 27'-0"	A500 Gr. B
7	2	0033.91336	4' X 3' X 1/4" RAIL @ 18'-5 1/4"	A500 Gr. B
8	2	0033.91337	4' X 3' X 1/4" RAIL @ 20'-0"	A500 Gr. B
9	2	0033.91338	4' X 3' X 1/4" RAIL @ 19'-6"	A500 Gr. B
10	2	0033.91339	4' X 3' X 1/4" RAIL @ 23'-6" W/ END PLATES	A500 Gr. B
11	2	0033.91340	2' X 2' X 1/8" RAIL @ 23'-11 1/2' W/ END PLATES	A500 Gr. B
12	2	0033.91341	2' X 2' X 1/8" RAIL @ 19'-10"	A500 Gr. B
13	2	0033.91342	2' X 2' X 1/8" RAIL @ 17'-11 1/2"	A500 Gr. B
14	2	0033.91343	2' X 2' X 1/8" RAIL @ 19'-11 1/2"	A500 Gr. B
15	2	0033.91344	2' X 2' X 1/8" RAIL @ 27'-0"	A500 Gr. B
16	2	0033.91345	2' X 2' X 1/8" RAIL @ 18'-5 1/4"	A500 Gr. B
17	2	0033.91346	2' X 2' X 1/8" RAIL @ 20'-0"	A500 Gr. B
18	2	0033.91347	2' X 2' X 1/8" RAIL @ 19'-6"	A500 Gr. B
19	2	0033.91348	2' X 2' X 1/8" RAIL @ 23'-6" W/ END PLATES	A500 Gr. B
20	12	0033.90405	1-1/2" X 1-1/2" FIX. SPL. BAR @ 2' 4"	A572 Gr. 50
21	12	0033.90406	2-1/4" X 3-1/4" FIX. SPL. BAR @ 2' 4"	A572 Gr. 50
22	4	0033.90407	1-1/2" X 1-1/2" EXP. SPL. BAR @ 1' 5"	A572 Gr. 50
23	4	0033.90408	2-1/4" X 3-1/4" EXP. SPL. BAR @ 1' 5"	A572 Gr. 50
24	120	0033.00295	3/8" X 2 1/4" X 7 3/8" ANCHOR PLATES	A36
25	242*	0042.05813	Ø 5/8" X 13" ANCHOR STUDS	A449
26	482*	0080.15901	Ø 5/8" HEAVY HEX NUTS	A563
27	240	0080.15911	Ø 5/8" FLAT WASHERS	F436
28	240	0080.15920	Ø 5/8" LOCK WASHERS	ASME D18.2
29	60	0080.05565	Ø 5/8" X 7 1/2" SLOTTED, ROUND HEAD BOLT, NU	
30	60	0080.05585	Ø 5/8" X 8 1/2" SLOTTED, ROUND HEAD BOLT, NU	
31	64	0080.03103	Ø 3/8" X 3" HEX BOLT, NUT, F.W., & L.W.	
32	64	0080.07330	Ø 7/8" X 5 1/2" HEX BOLT, NUT, F.W., & L.W.	
33	60	0033.90068	1/8" ELASTOMERIC PAD	
34	2	0033.90403	APPROACH WALL CONNECTORS	
35	2	0033.90404	TRAILING WALL CONNECTORS	
36	14	-	DELINEATORS (SUPPLIED BY F.R. LaFAYETTE)	



- NOTES:
- ALL WORK AND MATERIALS SHALL CONFORM TO SECTION 525.
 - PRIOR TO GALVANIZING THE ASSEMBLED POST, GRIND ALL EDGES TO A MINIMUM RADIUS OF 1/16".
 - ALL POSTS SHALL BE SET NORMAL TO GRADE.
 - SECTIONS OF RAIL TUBE SHALL BE ATTACHED TO A MINIMUM OF TWO BRIDGE POSTS AND PREFERABLY TO AT LEAST 4 POSTS.
 - HOLES IN RAILS FOR TUBE ATTACHMENT, WILL BE SHOP-DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO INSTALLATION.
 - BOLTS SHALL BE TORQUED SNUG TIGHT (APPROXIMATELY 100 FT-LB).
 - RAIL TUBES SHALL BE ATTACHED USING FULL DIAMETER BODY ASTM A449 (TYPE 1) ROUND HEAD BOLTS INSERTED THROUGH THE FACE OF THE TUBE.
 - SEE STANDARD DRAWING G-1 FOR DETAILS OF DELINEATORS. A DELINEATOR SHALL BE INSTALLED AT 30 FOOT SPACING OR THE NEAREST POST. WHITE IS TO BE INSTALLED ON THE DRIVER'S RIGHT. FOR ONE WAY BRIDGES, YELLOW IS TO BE INSTALLED ON THE DRIVER'S LEFT. PAYMENT FOR DELINEATORS SHALL BE INCIDENTAL TO OTHER ITEMS.
 - AESTHETIC TREATMENT TYPE SHALL BE APPLIED AS SPECIFIED IN THE CONTRACT PLANS. IF NONE IS SPECIFIED IT SHALL NOT BE USED. AESTHETIC TREATMENT DETAILED ON THIS SHEET MAY ALSO BE APPLIED ON THE FASCIA SIDE OF THE RAIL, IF SPECIFIED IN THE CONTRACT PLANS.
 - BRIDGE RAILING SHALL HAVE A RUBBED FINISH IN ACCORDANCE WITH SECTION 501.
 - THIS RAILING MEETS THE REQUIREMENTS FOR A NCHRP REPORT 350 TL-4 SERVICE LEVEL.
 - HOLES FOR MOUNTING DELINEATORS TO BE FIELD DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO INSTALLATION.
 - ALL STEEL COMPONENTS EXCEPT HARDWARE AND ANCHORAGE CAST IN CONCRETE SHALL BE COATED BLACK IN ACCORDANCE WITH ASTM D7803 FOLLOWING GALVANIZING.

HARDWARE	
ITEM #	FL
29	BOLT BOTTOM RAIL TO POST
30	BOLT TOP RAIL TO POST (T)
31	BOLT BOTTOM SPLICE BARS
32	BOLT TOP SPLICE BARS TO TOP RAIL

T.Y. LIN INTERNATIONAL
 THE STAMPED DOCUMENTS ARE HEREBY:

APPROVED
 APPROVED AS NOTED
 REVISE AND RESUBMIT

SEE TRANSMITTAL FOR ADDITIONAL INFORMATION AS APPLICABLE

THIS REVIEW IS FOR GENERAL CONFORMANCE WITH DESIGN CONCEPT ONLY. ANY DEVIATION FROM THE PLANS OR SPECIFICATIONS NOT CLEARLY NOTED BY THE CONTRACTOR HAS NOT BEEN REVIEWED. REVIEW BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF THE CONTRACTUAL RESPONSIBILITY FOR ANY ERRORS OR DEVIATION FROM THE CONTRACT REQUIREMENTS.

RICK HEBERT 1/16/2015
 REVIEWER DATE

ITEM #: 525.45
 STRUCTURAL STEEL TO COMPLY W/ ASTM A6
 TOLERANCE UNLESS OTHERWISE NOTED:
 FRACTIONS = ± 1/16"
 ANGLES = ± 1/2"
 DIAMETERS = ± 1/32"

BRIDGE RAIL DETAILS SHEET
 VT 121 (CL 2, TH 1) RURAL MAJOR COLLECTOR, BRIDGE 11R
 ROCKINGHAM, PROJECT BR 0126(12), TOWN OF ROCKINGHAM, WINDHAM COUNTY, VT.

R	NO.	DATE	DESCRIPTION	BY	R	NO.	DATE	DESCRIPTION	BY
E					E				
V					V				

ELDERLEE, INC.
 OAKS CORNERS, NEW YORK 14518
 E-Mail: dlong@elderlee.com / epeek@elderlee.com
 Tel: 315-789-6670 Fax: 315-789-6615

CERTIFIED FABRICATOR

DRAWN	E.P.	12/19/14
CHECKED	D.L.	12/19/14
APPROVED		
SCALE	SCHMATIC	
DRAWING NO. FR-L-ROCKINGHAM		