



"W" PANEL NOT SHOWN FOR DRAWING CLARITY

NORTH RAILING, FACING NORTH, SOUTH RAILING SIMILAR

Vermont Agency of Transportation

**RECEIVED**

All Material Needs to be Galvanized

K'D BY JC OK'D BY HIS

May 21, 2014

RESUBMIT No Approved AsNoted

BY Carolyn Carlson DATE 6/19/2014

BILL OF MATERIAL				
DET#	QTY	PART	DESCRIPTION	ASTM DESIGNATION
1	16		W6x25 FASCIA POST @ 3'-10 1/4"	ASTM A572 Gr. 50
2	2	0033.91108	HSS8x4x3/16" TUBING @ 33'-2"	ASTM A500 Gr. B
2	2		HSS8x4x3/16" TUBING @ 25'-5 1/4"	ASTM A500 Gr. B
3	40	0033.90045	HSS8x4x3/16" TUBE BLOCKOUT @ 6"	ASTM A500 Gr. B
4	20	0080.15553	5/8"x10" CARRIAGE BOLT	ASTM A307
5	20	0080.15595	5/8"x13" HEX BOLT	ASTM A307
6	48	0080.15036	5/8"x2" HEX BOLT	ASTM A307
7	20	0080.15913	3/16"x1 3/4"x3" SPECIAL WASHER	ASTM A572 Gr. 50
8	80	0080.15900	5/8" HEX NUT	ASTM A307
9	148	0080.15910	5/8" FLAT WASHER	ASTM A307
10	10	6043.00012	10 GAUGE "W" BEAM @ 12' 6"	AASHTO M180, TYPE 4
11	4		W6X25 POST @ 6'-0" O.A. (POST #1)	ASTM A572 Gr. 50
12	6	-	DELINEATOR - TO BE SUPPLIED BY FR LAFAYETTE	ALUMINUM
13	96	0080.15013	5/8"x1-1/4" SPLICE BOLT (PANEL ASS'Y)	ASTM A307
13	96	0080.15905	5/8"x1-1/4" RECESSED NUT (PANEL ASS'Y)	ASTM A307
14	64	0042.21408	1 1/4"x8" STUD	ASTM A449
15	128	0080.19922	5/16"x2 1/2"x3 1/2" FASCIA PLATE WASHERS	ASTM A572 Gr. 50
16	128	0080.19918	1 1/4" HEX NUT	AASHTO M164
17	32	0080.19921	1 1/4" x 5" COUPLER NUT W/ RT. HAND MACH. THD.	AASHTO M164
18	32	0042.21412	1 1/4" x 12" MACHINE BOLT, THREAD LEN. @ 3"	ASTM A449
19	16	0080.18980	TYPE "B" ANCHOR (FERRULE ASSEMBLY)	PER S-367A
20	2	0033.90074	C7x9.8 CHANNEL SPLICE @ 2'-6 1/2"	ASTM A36

- NOTES:
- ALL WORK AND MATERIALS SHALL CONFORM TO SECTION 525.
  - TYPE B ANCHOR INSERTS OF A DIFFERENT TYPE MAY BE PROVIDED, IF APPROVED BY THE ENGINEER.
  - GRIND ALL EDGES TO A MINIMUM RADIUS OF 1/16"
  - ALL POSTS SHALL BE SET NORMAL TO GRADE.
  - SPLICES FOR THE STEEL BEAM GUARDRAIL SHALL LAP IN THE DIRECTION OF TRAFFIC.
  - A RAILING JOINT SPLICE SHALL BE PROVIDED IN ANY RAIL BAY SPANNING THE END OF AN INTEGRAL ABUTMENT BRIDGE AND AT ALL SUPERSTRUCTURE EXPANSION JOINTS.
  - 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.
  - THE 1/2" EXPANSION JOINT SHOWN IN THE RAILING ELEVATION IS DESIGNED FOR BRIDGE LENGTHS UP TO 80 FEET, ANY LONGER SPANS WILL HAVE TO BE MODIFIED TO ACCOUNT FOR THEIR MOVEMENT.
  - FOR RADII LESS THAN 950 FEET, HSS8x4 TUBES SHALL BE SHOP BENT TO FIT THE APPLICABLE CURVE.
  - THE MINIMUM DISTANCE FROM THE LAST POST TO THE END OF SLAB IS 1'-6".
  - FERRULES SHALL BE 12L14 COLD DRAWN CARBON STEEL.
  - HOLES IN RAIL FOR RAIL TUBE ATTACHMENT WILL BE SHOP DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO INSTALLATION.
  - THIS RAILING MEETS THE REQUIREMENTS FOR A TL-2 SERVICE LEVEL.

ITEM #: 525.44

SHEET 1 OF 2

APPROVED BY:

**BRIDGE RAIL DETAILS SHEET**

MONTGOMERY, PROJECT BHO 1448(27), BIR# 36 ROUTE T.H. 10, CLASS III  
TOWN OF MONTGOMERY, COUNTY OF FRANKLIN, VERMONT

R NO.	DATE	DESCRIPTION	BY	R NO.	DATE	DESCRIPTION	BY

DRAWN E.P. 5/21/14  
CHECKED D.L. 5/21/14  
APPROVED  
SCALE SCHEMATIC  
DRAWING NO. FR LAFAYETTE-MONTGOMERY

**ELDERLEE, INC.**  
OAKS CORNERS, NEW YORK 14518  
E-Mail: dlong@elderlee.com / speck@elderlee.com  
Tel: 315-789-6870 Fax: 315-789-6615

Should be 3'-7 1/4"

Plates Not Listed In Bill Of Material

Should be 3 1/4 inches from top of slab to centerline of bolts

3'-10 1/4"

3 3/4"

11 1/4"

1'-2 1/2"

11 1/4"

Should be 8"

FASCIA POST (DETAIL #1)  
Comments with the purple circles are my comments.  
Carolyn Carlson, Project Manager 8/18/2014