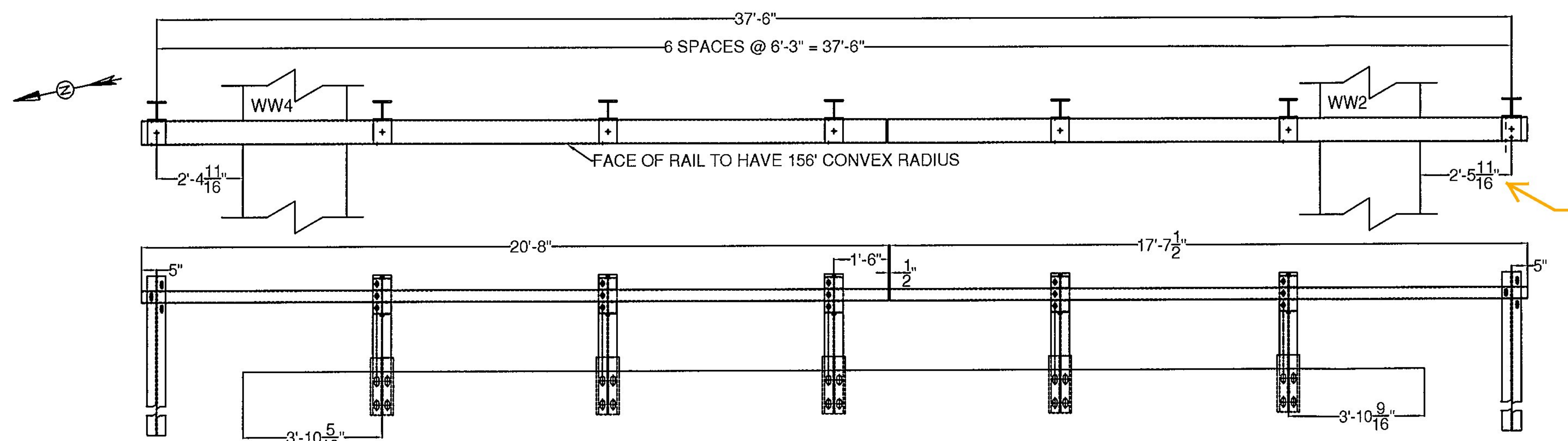
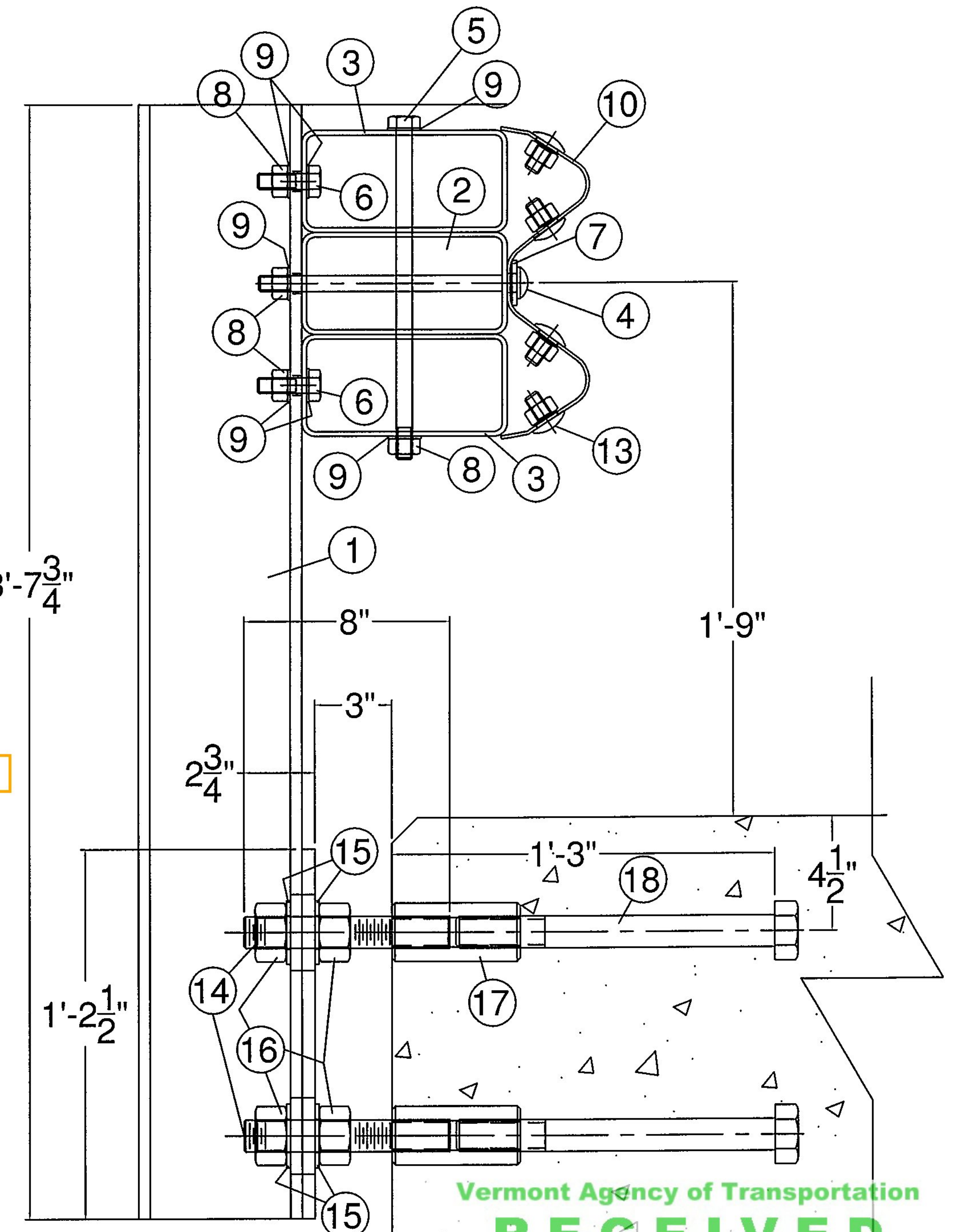


WEST RAILING, FACING WEST



EAST RAILING, FACING EAST



Vermont Agency of Transportation  
**RECEIVED**

CK'D BY FDB OK'D BY HS

April 29, 2016

RESUBMIT no Approved AsNoted  
BY Carolyn Carlson DATE 05/03/2016

BILL OF MATERIAL				
DET#	QTY	PART		ASTM DESIGNATION
1	10	TBD	W6x25, TYPE 1, FASCIA POST @ 3'-7 3/4"	ASTM A572 Gr. 50
2	1	TBD	HSS8x4x3/16" TUBING @ 20'-8" W/ 174' CONCAVE RAD.	ASTM A500 Gr. B
2	1	TBD	HSS8x4x3/16" TUBING @ 17'-7 1/2" W/ 174' CONCAVE RAD.	ASTM A500 Gr. B
2	1	TBD	HSS8x4x3/16" TUBING @ 20'-8" W/ 156' CONVEX RAD.	ASTM A500 Gr. B
2	1	TBD	HSS8x4x3/16" TUBING @ 17'-7 1/2" W/ 156' CONVEX RAD.	ASTM A500 Gr. B
3	28	0033.90045	HSS8x4x3/16" TUBE BLOCKOUT @ 6"	ASTM A500 Gr. B
4	14	0080.05710	5/8"x10" POST BOLT, NUT, & F.W.	ASTM A307
5	14	0080.15595	5/8"x13" HEX BOLT	ASTM A307
6	36	0080.15036	5/8"x2" HEX BOLT	ASTM A307
7	14	0080.15913	3/16"x1 3/4"x3" SPECIAL WASHER	ASTM A36
8	56	0080.15901	5/8" HEX NUT	ASTM A307
9	106	0080.15911	5/8" FLAT WASHER	ASTM A307
10	3	6043.62174	10 GAUGE "W" BEAM @ 12'-6" C.-C. W/174' CONCAVE RAD.	AASHTO M180, CLASS B, TYPE II
10	3	6043.52155	10 GAUGE "W" BEAM @ 12'-6" C.-C. W/156' CONVEX RAD.	AASHTO M180, CLASS B, TYPE II
11	4	0033.90301	W6x25 POST @ 6'-0" O.A. (POST #1)	ASTM A572 Gr. 50
* 12	6	-	DELINATOR - TO BE SUPPLIED BY FR LAFAYETTE	ALUMINUM
13	56	0080.15013	5/8"x1-1/4" SPLICE BOLT (PANEL ASS'Y)	ASTM A307
13	56	0080.15905	5/8"x1-1/4" RECESSED NUT (PANEL ASS'Y)	ASTM A307
** 14	42	0042.21408	1 1/4"x8" STUD	ASTM A449
** 15	84	0080.19922	5/16"x2 1/2"x3 1/2" FASCIA PLATE WASHERS	ASTM A572 Gr. 50
** 16	84	0080.19918	1 1/4" HEX NUT	ASTM A563
** 17	42	0080.19921	1 1/4" x 5" COUPLER NUT W/ RT. HAND MACH. THD.	ASTM A563
** 18	42	0042.21412	1 1/4" x 12" MACHINE BOLT, THREAD LEN. @ 3'	ASTM A449
19	2	0033.90074	C7x9.8 CHANNEL SPLICE @ 2'-6 1/2"	ASTM A36

\* - SUPPLIED BY OTHERS \*\* - TWO ADDITIONAL SETS FOR Vtrans QA TESTING

NOTES:

- ALL WORK AND MATERIALS SHALL CONFORM TO SECTION 525.
- GRIND ALL EDGES TO A MINIMUM RADIUS OF 1/16", PRIOR TO GALVANIZING.
- 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

STRUCTURAL STEEL TO COMPLY W/ ASTM A6

GALVANIZING TO BE PER ASTM A123, UNLESS OTHERWISE SPECIFIED.

TOLERANCE UNLESS OTHERWISE NOTED:  
HOLES - ± 1/32"  
FRACTIONS - ± 1/16"  
ANGLES - ± 1/2"

**BRIDGE RAIL DETAILS SHEET**  
ROUTE NO: TOWN HIGHWAY 14, CLASS 3 BRIDGE NO : 26  
TOWN OF STAMFORD, COUNTY OF BENNINGTON, VERMONT

R NO.	DATE	DESCRIPTION	BY	R NO.	DATE	DESCRIPTION	BY
E 1	4/27/16	REVISED WITH NEW LENGTHS	D.K.				

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

CERTIFIED FABRICATOR  
ORTHOGONAL PROJECTION

DRAWN	D.K.	04/05/16
CHECKED	E.P.	04/05/16
APPROVED	D.L.	04/05/16
SCALE	SCHEMATIC	

DRAWING NO. FR LAFAYETTE-STAMFORD