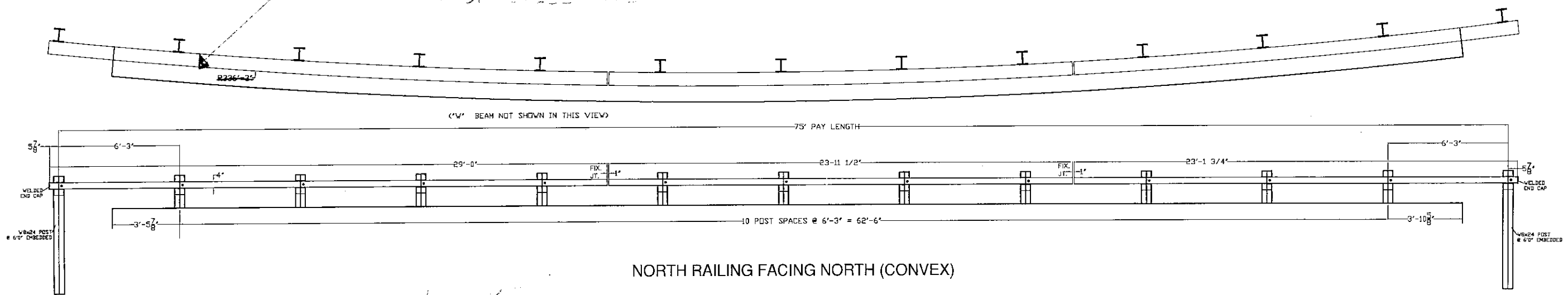
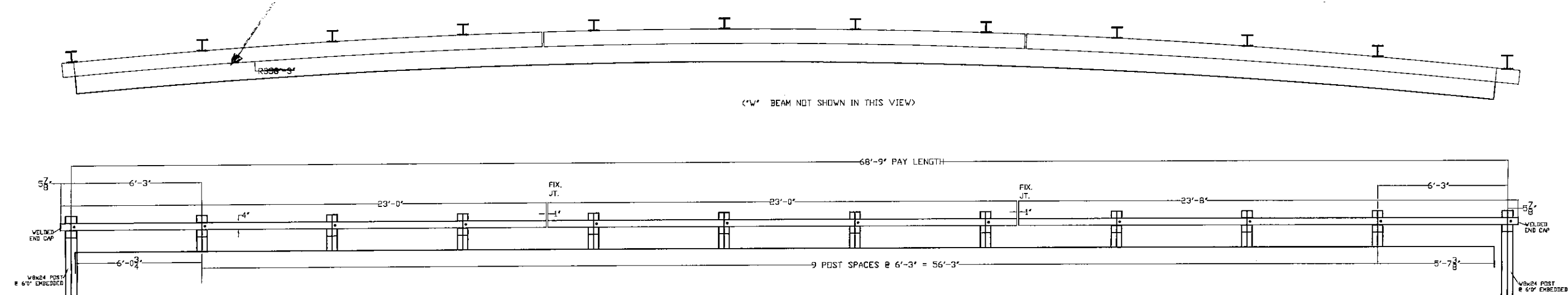


$R = 225' - 11 1/2"$   
TO FRONT FACE OF STEEL TUBING



NORTH RAILING FACING NORTH (CONVEX)

$R = 358' - 10 1/4"$   
TO FRONT FACE OF STEEL TUBING



SOUTH RAILING FACING SOUTH (CONCAVE)

RECEIVED

CK'D BY \_\_\_\_\_ OK'D BY ELC

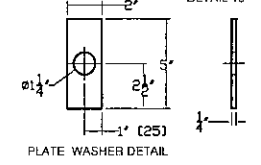
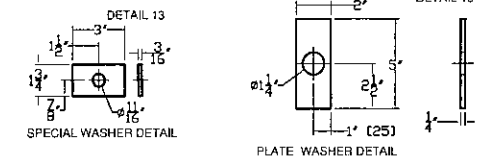
JUN 29 2010

RESUBMIT \_\_\_\_\_ APPROVED As Noted

BY CPW DATE 6/30/10

BILL OF MATERIALS			
DET. #	QTY	DESCRIPTION	MATERIAL
1	21	W6x20 FASCIA MOUNTED POST @ 3' 1"	ASTM A572 Gr. 345
2	4	W8x24 TRANSITION POST @ 6' 0"	ASTM A572 Gr. 345
3	1	TS8x4x3/16" TUBING @ 29' 0" (CONVEX-NORTH)	ASTM A500 Gr. B
4	1	TS8x4x3/16" TUBING @ 23' 11/2" (CONVEX-NORTH)	ASTM A500 Gr. B
5	1	TS8x4x3/16" TUBING @ 23' 1 3/4" (CONVEX-NORTH)	ASTM A500 Gr. B
6	2	TS8x4x3/16" TUBING @ 23' 0" (CONCAVE-SOUTH)	ASTM A500 Gr. B
7	1	TS8x4x3/16" TUBING @ 23' 8" (CONCAVE-SOUTH)	ASTM A500 Gr. B
8	50	TS8x4x3/16" TUBING @ 2'	ASTM A500 Gr. B
9	4	C7x12.25 CHANNEL @ 2' 7"	ASTM A572 Gr. 345
10	25	5/8"x10" HEX BOLT	ASTM A325
11	25	5/8"x13" HEX BOLT	ASTM A325
12	66	5/8"x2" HEX BOLT	ASTM A325
13	25	3/16"x1 3/4"x3" SPECIAL WASHER	ASTM A572 Gr. 345
14	116	5/8" HEX NUT	ASTM A563
15	232	5/8" FLAT WASHER	ASTM A436
16	84	1/4"x2"x5" PLATE WASHER	ASTM A572 Gr. 345
17	12	10 GAUGE "W" BEAM @ 12' 6" (SUPPLIED BY OTHERS)	AASHTO M180-CL B, TYPE II
18	96	5/8"x1-1/4" SPLICE BOLT/RECESSED NUT (PANEL ASSY - SUPPLIED BY OTHERS)	ASTM A307
19	80	"U" ANCHORS (SUPPLIED BY OTHERS)	ASTM A449
20	84	1" HEX NUT (SUPPLIED BY OTHERS)	ASTM A563
21	84	1" FLAT WASHER (SUPPLIED BY OTHERS)	ASTM F436

- NOTES:
- HEAVY DUTY STEEL BEAM GUARD RAIL SHALL CONFORM TO VAOT STD SPECIFICATION 732.
  - STRUCTURAL STEEL TUBING SHALL CONFORM TO VAOT STD. SPECIFICATION 732 AND SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123.
  - ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 AND SHALL CONFORM TO VAOT STD SPECIFICATION 714 UNLESS OTHERWISE NOTED.
  - BRIDGE RAIL POST, SPECIAL WASHERS, PLATE WASHERS AND SPLICE BARS SHALL CONFORM TO ASTM A572 GRADE 345 AND SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M III.
  - ALL BOLTS AND RELATED HARDWARE SHALL CONFORM TO ASTM A325. BOLTS SHALL BE HOT DIPPED OR MECHANICALLY GALVANIZED PER SPECIFICATION.
  - ALL POST SHALL BE SET NORMAL TO GRADE.
  - SPLICES FOR THE STEEL BEAM GUARD RAIL SHALL LAP IN THE DIRECTION OF TRAFFIC.
  - A DELINEATOR SHALL BE LOCATED AT EVERY FIFTH POST.
  - A RAILING JOINT SPLICE SHALL BE PROVIDED AT EACH SUPERSTRUCTURE EXPANSION JOINT.
  - ALL FIELD CUT OR DRILLED AREAS SHALL BE COATED WITH ZINC RICH PAINT.
  - FOR RADII LESS THAN 950 FEET THE STEEL TUBING SHALL BE SHOP BENT TO FIT THE APPLICABLE CURVE.
  - THE DROP-WEIGHT TEAR TEST IN SECTION 732 SHALL NOT APPLY TO THE STRUCTURAL TUBING ON THIS STANDARD.



ITEM #: 525.44 BRIDGE RAILING GEN CONTR: F R LaFayette SHEET 1 OF 2

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

**BRIDGE RAIL DETAILS SHEET**  
WARDSBORO, PROJECT # BHF 0114 (5), BRIDGE #11  
TOWN OF WARDSBORO, WINDHAM COUNTY, STATE OF VERMONT

R	NO.	DATE	DESCRIPTION	BY	R	NO.	DATE	DESCRIPTION	BY
E	A	6/25/10	REVISED PER 6/24/10 UPDATES	EP	E				
V					V				

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

DRAWN: E.P. 4/6/10  
CHECKED: D.L. 4/6/10  
APPROVED: \_\_\_\_\_  
SCALE: SCHEMATIC  
DRAWING NO. F R LAFAYETTE EM10-004