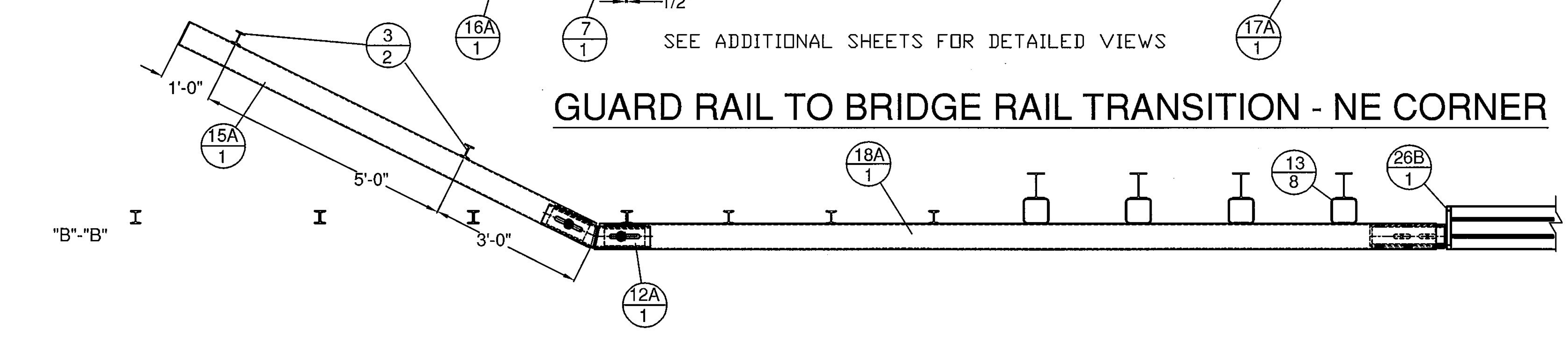
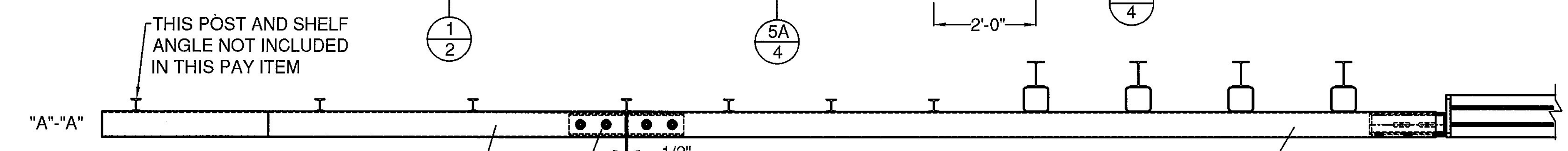
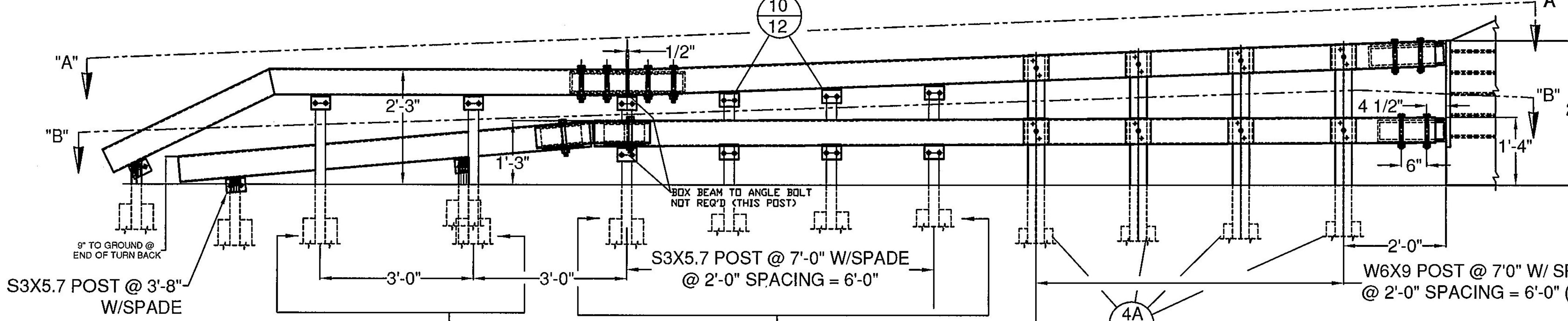
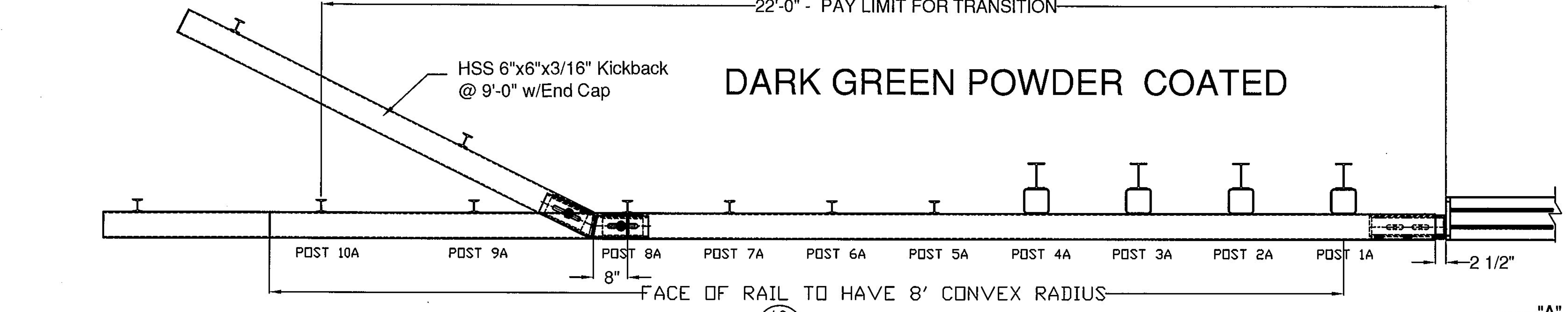


22'-0" - PAY LIMIT FOR TRANSITION

DARK GREEN POWDER COATED



- 1) ALL RAILING IS TO BE FABRICATED AND ERECTED ACCORDING TO SECTION 621 OF THE STANDARD SPECIFICATIONS.
- 2) BOLTS SHALL BE TORQUED SNUG TIGHT (APPROXIMATELY 100 FT-LB).
- 3) PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE ADJOINING SURFACES OF THE BOX BEAM RAILS, SPLICE TUBES AND FILL PLATES.
- 4) ANY BENDING OF RAIL SHALL BE DONE AT THE FABRICATION PLANT. RADII GREATER THAN 16' TO BE CURVED ON A TUBE BENDING MACHINE, RADII LESS THAN 16' TO BE "PIE CUT" AND WELDED. CURVED RAILING WILL HAVE AN 18" LENGTH ON EACH END STRAIGHT TO ACCOMMODATE SPLICES. "PIE CUTS ARE LOCATED SO AS TO NOT CONFLICT WITH POST FASTENING HOLES. PIE CUTS WILL BE WELDED ACCORDING TO PROCEDURE WPS-8003.
- 5) STEEL COMPONENTS TO BE POWDER COATED DARK GREEN, CLOSELY MATCHING FEDERAL COLOR CHIP NUMBER 14062, IN ACCORDANCE WITH ASTM D7803 FOLLOWING GALVANIZING.

BILL OF MATERIALS, (PER TRANSITION- NW, SW, & SE CORNERS)

ITEM #	QTY.	COMPONENT #	DESCRIPTION	MATERIAL (ASTM)
1	3	0013.57021	3" I-POST, PUNCH 8" W/SPD @ 63" LG	ASTM A572 Gr. 50
2	1	0013.57025	3" I-POST, PUNCH 8", & 20" W/SPD @ 63" LG	ASTM A572 Gr. 50
3	2	0013.57060	3" I-END POST W/SPD @ 3'-8" LG	ASTM A572 Gr. 50
4	4	-	W6X9 POST @ 7' W/SPD & 5/8" HOLES @ VARIOUS	ASTM A572 Gr. 50
5	4	-	3" I-POST, PUNCH 8" & VARIOUS, W/8X32" SPADE @ 7'-0"	ASTM A572 Gr. 50
6	4	-	3" I-POST, PUNCH 8" & VARIOUS, W/8X31" SPADE @ 6'-3"	ASTM A572 Gr. 50
7	1	0033.00640	HSS 5X5 TUBE SPLICE @ 27" LG W/ 1/4" SHIMS	A500 Gr. B / A572 Gr. 50
10	19	0054.00050	REG BB SHELF ANGLES @ 4-1/2"	ASTM A36
12	1	0054.00074	HSS 5X5 DBL BEND TUBE SPL @ 27" LG & 26" ANGLE	A500 Gr. B / A572 Gr. 50
13	8	0054.00563	8X6x1/4" TRANS. TUBE B/O @ 6" LG	A500 Gr. B
15	1	0054.09000	6X6" BB @ 9'-0" KICKBACK, W/ CAP & 13" ANGLE	A500 Gr. B / A36
16	1	0054.00009	6X6" BB @ 9'-0", DRILL 3" CC.	A500 Gr. B
17	1	-	6X6" BB TOP TRANS @ 24'-9" 3/4" LG	A500 Gr. B
18	1	-	6X6" BB BTM TRANS @ 25'-5" 3/16" LG & 13" ANGLE	A500 Gr. B
19	17	0080.03355	3/8" X 7 1/2" BOLT, NUT, & 2 FW	A307, A563, F436
20	19	0080.04100	1/2" x 1-1/2" BOLT, NUT, & FW	A307, A563, F436
21	16	0080.04120	1/2" x 1-1/2" BOLT, NUT, 2 FW & LW	A307, A563, F436
23	10	0080.06340	3/4" X 7-1/2" BOLT, NUT, 2 FW	A325, A563, F436
24	8	0080.06370	3/4" X 8" CARR BOLT, NUT, FW & LW	A307, A563, F436
26	1	-	PARAPET WALL CONNECTIONS, LEFT / RIGHT	INCLUDED W/ PAY ITEM #900.640

BILL OF MATERIALS, (NE TRANSITION ONLY)

ITEM #	QTY.	COMPONENT #	DESCRIPTION	MATERIAL (ASTM)
1	2	0013.57021	3" I-POST, PUNCH 8" W/SPD @ 63" LG	ASTM A572 Gr. 50
3	2	0013.57060	3" I-END POST W/SPD @ 3'-8" LG	ASTM A572 Gr. 50
4A	4	-	W6X9 POST @ 7' W/SPD & 5/8" HOLES @ VARIOUS	ASTM A572 Gr. 50
5A	4	-	3" I-POST, PUNCH 8" & VARIOUS, W/8X32" SPADE @ 7'-0"	ASTM A572 Gr. 50
7	1	0033.00640	HSS 5X5 TUBE SPLICE @ 27" LG W/ 1/4" SHIMS	A500 Gr. B / A572 Gr. 50
10	12	0054.00050	REG BB SHELF ANGLES @ 4-1/2"	ASTM A36
12A	1	-	HSS 5X5 DBL BEND TUBE SPL @ 27" LG & 45" ANGLE	A500 Gr. B / A572 Gr. 50
13	8	0054.00563	8X6x1/4" TRANS. TUBE B/O @ 6" LG	A500 Gr. B
15A	1	-	6X6" BB @ 9'-0" KICKBACK, W/ CAP & 22.5" ANGLE	A500 Gr. B / A36
16A	1	-	6X6" BB @ 9'-0" (THIS ITEM), DRILL 3" CC W/ TURNDOWN	A500 Gr. B
17A	1	-	6X6" BB TOP TRANS @ 15'-9" 3/16" LG W/ 8'-0" CONVEX RAD.	A500 Gr. B
18A	1	-	6X6" BB BTM TRANS @ 25'-5" 3/16" LG W/ 8'-0" CONVEX RAD. & 22.5"	A500 Gr. B
19	12	0080.03355	3/8" X 7 1/2" BOLT, NUT, & 2 FW	A307, A563, F436
20	12	0080.04100	1/2" x 1-1/2" BOLT, NUT, & FW	A307, A563, F436
21	16	0080.04120	1/2" x 1-1/2" BOLT, NUT, 2 FW & LW	A307, A563, F436
23	10	0080.06340	3/4" X 7-1/2" BOLT, NUT, 2 FW	A325, A563, F436
24	8	0080.06370	3/4" X 8" CARR BOLT, NUT, FW & LW	A307, A563, F436
26	1	-	PARAPET WALL CONNECTIONS, LEFT / RIGHT	INCLUDED W/ PAY ITEM #900.640

HARDWARE NOTES

ITEM #	FUNCTION
19	BOLT RAIL TO SHELF ANGLE (ITEM #10)
20	BOLT SHELF ANGLE (ITEM # 10) TO POST
21	BOLT BLOCK-OUTS (ITEM # 13) TO HEAVY POST (ITEM # 4)
23	SPLICE TUBING (ITEM #'S 7 & 12), & (4) PER PARAPET WALL CONNECTION (ITEM # 26)
24	BOLT RAIL (ITEMS #'S 17, & 18 TO BLOCK-OUTS (ITEM # 13)

Vermont Agency of Transportation
RECEIVED
 CK'D BY TYLin OK'D BY TYLin
 February 13, 2017
 RESUBMIT No Approved
 BY Kristin Higgins DATE 2/15/2017

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.
 JOSH OLUND February 15, 2017
 REVIEWER DATE

ITEM #: 900.620 SHEET 2 OF 6

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

TRANSITION - CONCRETE PARAPET TO HIGHWAY GUIDE RAIL
 PROJECT 148 CHELSEA BHF 0169(9), VT ROUTE 110, RURAL MAJOR COLLECTOR BRIDGE 9
 TOWN OF CHELSEA, COUNTY OF ORANGE, VERMONT

R NO.	DATE	DESCRIPTION	BY	R NO.	DATE	DESCRIPTION	BY
E 1	2/7/17	REVISED PER 2/3/17 DWG REVIEW	D.K.	E 1			

DRAWN D.K. 1/3/17
 CHECKED E.P. 1/3/17
 APPROVED D.L. 1/12/17
 SCALE SCHEMATIC
 DRAWING NO. F.R. LAFAYETTE - CHELSEA (9) - 1

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