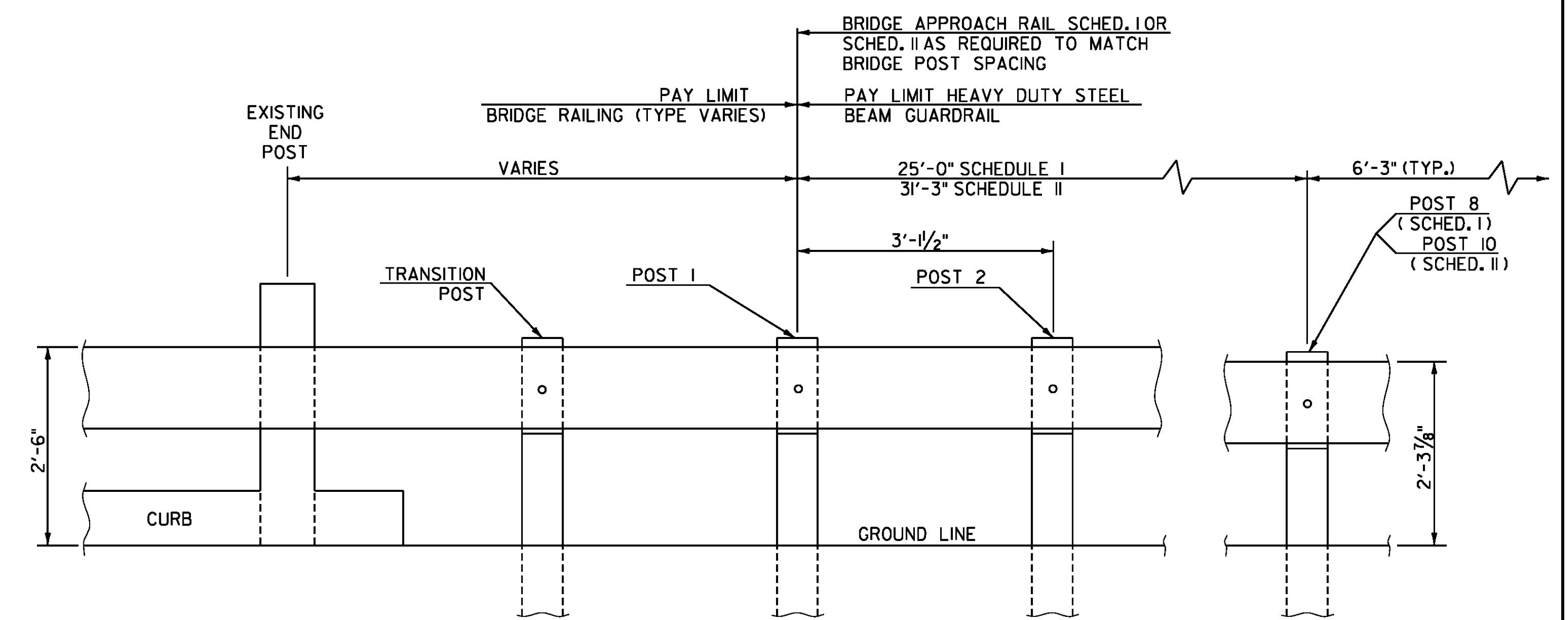


BRIDGE RAIL QUANTITY SHEET							
STATION	POS.	BRIDGE NUMBER	OFFSET BLOCK	525.10 REMOVAL OF EXISTING BRIDGE RAILING (LF)	525.55 BRIDGE RAILING REPAIR, TYPE II (LF)	580.20 RAPID SETTING CONC. REPAIR MAT'L W/COARSE AGG. (CF)	REMARKS
LOCATION:							
NORTHFIELD							
117+19.0 - 117+56.5	RT	32	8"	37.5	37.5	16.6	
117+31.7 - 117+69.2	LT	32	8"	37.5	37.5	16.6	
160+67.9 - 161+05.4	RT	35	8"	37.5	37.5	16.7	
160+67.9 - 161+05.4	LT	35	8"	37.5	37.5	16.7	
191+87.0 - 192+24.5	LT	36	8"	37.5	37.5	16.7	
191+94.0 - 192+31.5	RT	36	8"	37.5	37.5	16.7	
SUBTOTALS				225.0	225.0	100.0	
ROUNDING				-	-	0.0	
TOTAL				225.0	225.0	100.0	

GENERAL NOTES

- SEE VAOT STANDARDS G-1, G-1d AND SD-516.10 FOR ADDITIONAL DETAILS.
- BRIDGE RAIL SHALL BE HEAVY DUTY STEEL BEAM GUARDRAIL, GALVANIZED.
- BRIDGE APPROACH RAIL HEIGHT SHALL BE TRANSITIONED TO NORMAL ROADWAY RAIL HEIGHT IN 25' INCREMENTS.
- APPROACH RAILING SHALL BE HEAVY DUTY STEEL BEAM GUARDRAIL, GALVANIZED FOR 25' FROM THE ENDS OF THE BRIDGE UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE ENGINEER.
- FOR BRIDGE RAILING, THE TRANSITION POST SHALL HAVE AN OFFSET BLOCK AND BE LOCATED AS CLOSE AS PRACTICABLE TO THE MIDPOINT BETWEEN THE BRIDGE END POST AND APPROACH RAIL POST 1.
- SPLICES SHALL LAP IN DIRECTION OF TRAFFIC FLOW.
- SEE STANDARD SHEET G-1 FOR CONNECTION OF STEEL BEAM TO OFFSET BLOCK AND OFFSET BLOCK TO BRIDGE POST.
- SEE STANDARD SHEET G-1 FOR DELINEATION DETAILS AND PLACEMENT.
- ERECT DELINEATORS ON EVERY FIFTH POST OR APPROXIMATELY 31'-3" APART. PAYMENT WILL BE CONSIDERED INCIDENTAL TO OTHER ITEMS.
- ALL HEAVY DUTY STEEL BEAM BRIDGE RAIL, OFFSET BLOCKS AND RELATED HARDWARE WILL BE PAID FOR UNDER THE APPROPRIATE BRIDGE RAILING ITEMS AS DENOTED IN THE PLANS.
- ALL STEEL POSTS, PLATES, OFFSET BLOCKS AND FIXTURES SHALL BE PROVIDED IN ACCORDANCE WITH SUBSECTION 732.04, UNLESS OTHERWISE NOTED, AND SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH SUBSECTION 726.08. PAYMENT FOR GALVANIZING IS INCLUDED IN THE BID PRICE FOR GUARDRAIL ITEMS.
- ALL WELDING SHALL CONFORM TO THE PROVISIONS OF SUBSECTION 506.10.



SCHEDULE I		
POST NO.	SPACING	PAYMENT FACTOR
1	3'-1/2"	1.4 x 12'-6"
2	3'-1/2"	
3	3'-1/2"	
4	3'-1/2"	
5	4'-2"	1.2 x 12'-6"
6	4'-2"	
7	4'-2"	
8	4'-2"	
9	6'-3" (TYP.)	1.0 (TYP.)
TOTAL PAY LENGTH = 32' - 6"		

SCHEDULE II		
POST NO.	SPACING	PAYMENT FACTOR
1	3'-1/2"	1.4 x 18'-9"
2	3'-1/2"	
3	3'-1/2"	
4	3'-1/2"	
5	3'-1/2"	1.2 x 12'-6"
6	3'-1/2"	
7	4'-2"	
8	4'-2"	
9	4'-2"	1.0 (TYP.)
10	4'-2"	
11	6'-3" (TYP.)	1.0 (TYP.)
TOTAL PAY LENGTH = 41' - 3"		

SCHEDULE I APPROACH RAILING SHALL BE USED WHEN A RAIL PANEL SPLICE OCCURS AT POST NO. 1. SCHEDULE II APPROACH RAILING SHALL BE USED WHEN A RAIL PANEL SPLICE OCCURS AT THE BRIDGE END POST.

BRIDGE APPROACH RAILING

LONG SPAN LOCATIONS (SEE STD DETAIL S-366)			
SPANNED OBJECT	SPAN LENGTH	LOCATION	PAY LENGTH (NESTED GUARDRAIL)
ROXBURY			
BOX CULVERT BR#18	12' - 6"	88+47.3 - 89+34.8, RT.	87' - 6"
BOX CULVERT BR#18	12' - 6"	88+62.0 - 89+49.5, LT.	87' - 6"
BOX CULVERT BR#19	12' - 6"	116+56.0 - 117+43.5, LT.	87' - 6"
BOX CULVERT BR#19	12' - 6"	116+56.0 - 117+43.5, RT.	87' - 6"
BOX CULVERT BR#25	12' - 6"	206+66.5 - 207+54.0, LT.	87' - 6"
BOX CULVERT BR#25	12' - 6"	206+93.0 - 207+54.0, RT.	75' - 0"
BOX CULVERT BR#26	18' - 9"	230+11.4 - 231+05.2, LT.	93' - 9"
BOX CULVERT BR#26	18' - 9"	230+22.4 - 231+16.2, RT.	93' - 9"
BOX CULVERT BR#27	25' - 0"	294+07.5 - 295+07.5, LT.	100' - 0"
BOX CULVERT BR#27	25' - 0"	294+09.5 - 295+09.5, RT.	100' - 0"
BOX CULVERT BR#28	25' - 0"	303+25.5 - 304+25.5, RT.	100' - 0"
BOX CULVERT BR#28	25' - 0"	303+43.0 - 304+43.0, LT.	100' - 0"
NORTHFIELD			
ELLIPTICAL CMP CULVERT BR#31	18' - 9"	61+60.5 - 62+54.3, RT.	93' - 9"
ELLIPTICAL CMP CULVERT BR#31	18' - 9"	61+65.5 - 62+59.3, LT.	93' - 9"

PROJECT NAME: ROXBURY-NORTHFIELD	PLOT DATE: 5/25/2016
PROJECT NUMBER: ER STP 0187(13)	DRAWN BY: I. MAYNARD
FILE NAME: z13cl84typ.dgn	CHECKED BY: G. EDWARDS
DESIGNED BY: I. MAYNARD	SHEET 32 OF 476
GUARDRAIL DETAIL SHEET 1	

