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|-------|-------------|-------|-----------|
| STATE | FEDERAL AID | STATE | SHEET NO. |
| ROUTE | PROJECT | ROUTE | PROJECT |
| VA. | | | |

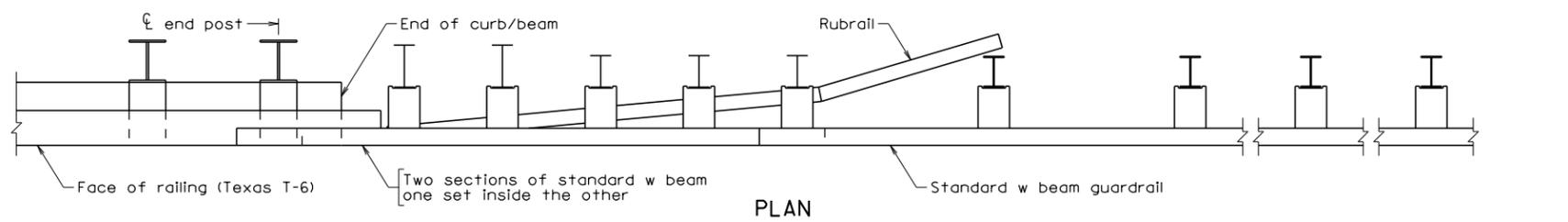
Notes:

Tubular w-beam rail member is to be fabricated from standard 25' nominal w-beam sections. Top and bottom seams shall be butt welded 6" at 12" spacing. Continuous seam welding is also acceptable. Welds shall be chipped and cleaned and the complete 25' tubular member shall be galvanized after fabrication. For tubular rail splice additional post mounting slots are to be made in each member 1'-3" from the standard slots at 6'-3" centers.

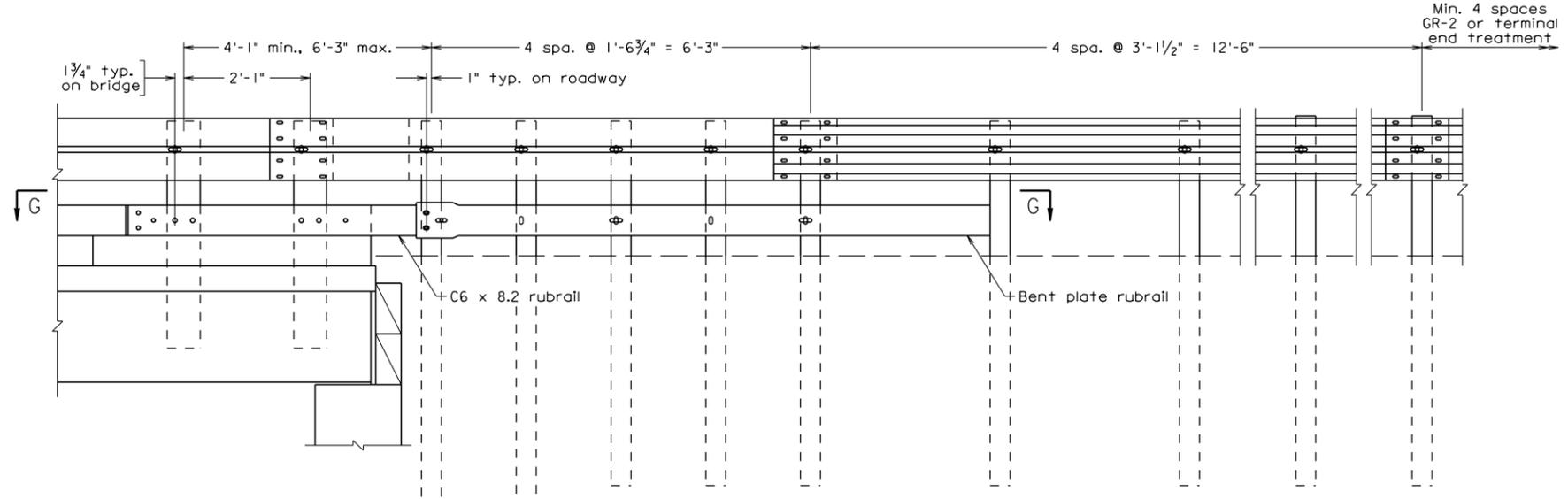
8 - 5/8" splice nuts shall be tack welded to a bent sheet metal positioner as shown. Other suitable positioning methods or devices may be substituted. The completed splice shall have 16 bolts. Each bolt will include a 1 3/4" x 3" x 3/8" plate washer or a 2" diameter washer.

Refer to Road and Bridge Standards, Section 500, for all details not shown. When railing cannot be terminated as per the Road and Bridge Standards, contact the Location and Design Special Design Section to obtain recommendations. Do not notch timber curb for rubrail when railing will not be carried beyond bridge length.

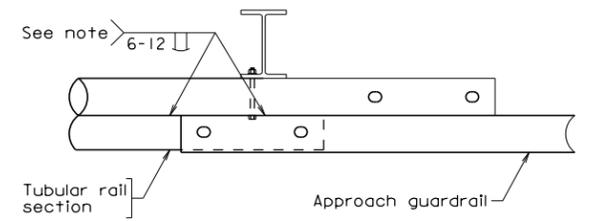
[The TERMINATION DETAIL and C 6 X 8.2 RUBRAIL DETAIL are shown at acute bridge corners. For details at obtuse bridge corners, see applicable details on sheet .



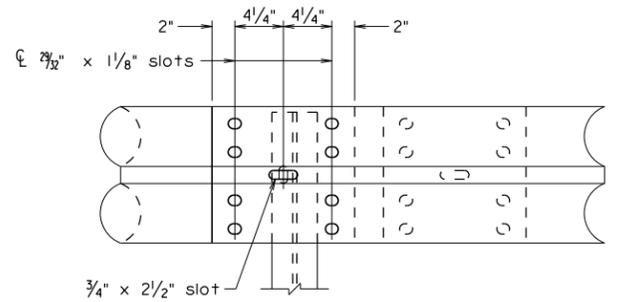
PLAN



ELEVATION
TERMINATION DETAIL



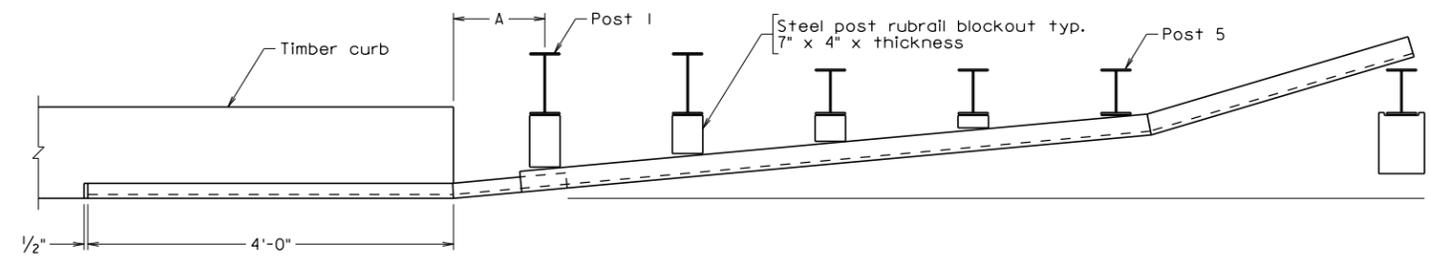
PLAN



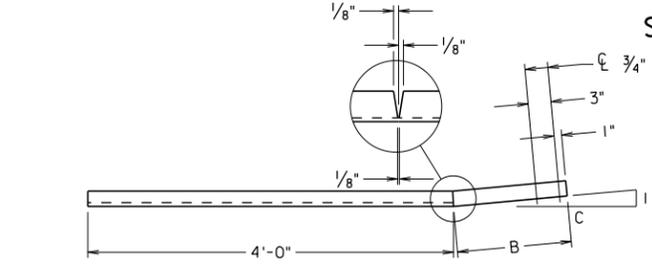
ELEVATION
GUARDRAIL - TUBULAR RAIL SPLICE

VARIABLE DIMENSIONS BASED ON POST OFFSET

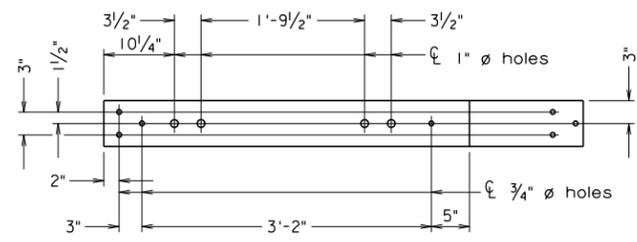
| Location | A | C 6 x 8.2 | | | | Rubrail Blockout Thickness | | | |
|----------|---|-----------|---|--------|--------|----------------------------|--------|--|--|
| | | B | C | Post 1 | Post 2 | Post 3 | Post 4 | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |



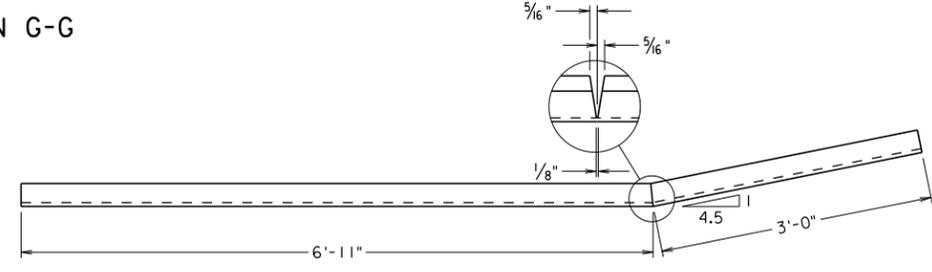
SECTION G-G



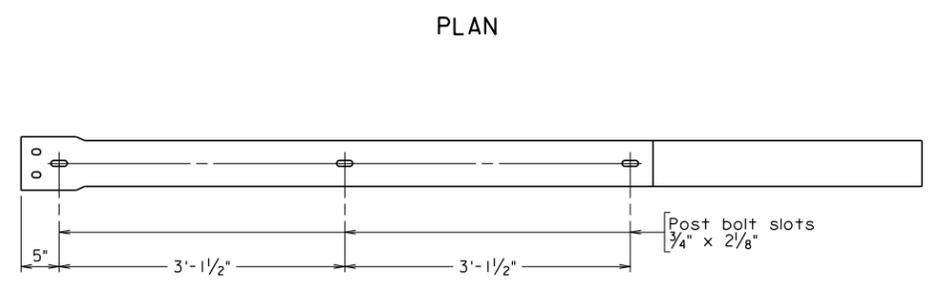
PLAN



ELEVATION
C 6 x 8.2 RUBRAIL DETAIL



PLAN



ELEVATION
BENT PLATE RUBRAIL DETAIL

Not to scale

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SS805A.dgn

03-10-2015

SS8-5A

Sealed and Signed by:
Prosod L. Nallaponteni
Lic. No. 033003
On the date of
March 10, 2015

A copy of the original
sealed and signed
drawing is on file in the
Central Office.

VDOT S&B DIVISION
RICHMOND, VA
STRUCTURAL ENGINEER

| | | | | |
|--|-------------|------|-------------------|-----------|
| COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION | | | | |
| STRUCTURE AND BRIDGE DIVISION | | | | |
| STEEL BEAM WITH TIMBER DECK SUPERSTRUCTURE TERMINATION DETAILS | | | | |
| No. | Description | Date | Designed: S&B DIV | Sheet No. |
| | | | Drawn: S&B DIV | SS8-5A |
| | | | Checked: S&B DIV | |

**SS-8 STEEL BEAM WITH TIMBER DECK SUPERSTRUCTURE STANDARD
RAILING TERMINATION DETAILS**

NOTES TO DESIGNER:

Include standards SS8-1, SS8-2, SS8-3A, SS8-4 and SS8-6A in the plans when using this standard. Include standard SS8-5C where skew is greater than 22° and end posts in obtuse corners would conflict with the abutment, backwall and/or lagging.

Substitute standard SS8-3B for SS8-3A in the plans when bolted angles are used in lieu of welded plates to connect the diaphragm channels to the beam webs.

Substitute standard SS8-6B for SS8-6A where beam flange width would interfere with curb attachment plates.

ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:

NOTES:

Where skew $\leq 22^\circ$ or skew $> 22^\circ$ and end posts in obtuse corners **do not conflict** with the abutment, backwall and/or lagging, remove the bracketed note from the standard.

Where skew $> 22^\circ$ degrees and end posts in obtuse corners **conflict** with the abutment, backwall and/or lagging, remove the brackets from the note and add the sheet number to "For details at obtuse bridge corners, see applicable details on sheet ."

VARIABLE DIMENSIONS BASED ON POST OFFSET:

Fill in the table based on the actual distance between the end of curb/beam and the first roadway post, dimension "A", using the chart below. Interpolate between values. Use $\frac{1}{8}$ " increments. If dimension "A" varies depending on location, use multiple lines indicating each location (eg., Abut. A - LOCL). If dimension does not vary, indicate "All".

| VARIABLE DIMENSIONS BASED ON POST OFFSET | | | | | | |
|--|-----------|------|----------------------------|-------------------|-------------------|-------------------|
| A | C 6 x 8.2 | | Rubrail Blockout Thickness | | | |
| | B | C | Post 1 | Post 2 | Post 3 | Post 4 |
| 12" | 1'-3" | 11 | 6 $\frac{3}{4}$ " | 5 $\frac{1}{8}$ " | 3 $\frac{3}{8}$ " | 1 $\frac{3}{4}$ " |
| 1'-6" | 1'-9" | 12 | 6 $\frac{3}{8}$ " | 4 $\frac{7}{8}$ " | 3 $\frac{1}{4}$ " | 1 $\frac{3}{4}$ " |
| 2'-0" | 2'-3" | 13 | 6" | 4 $\frac{5}{8}$ " | 3 $\frac{1}{8}$ " | 1 $\frac{3}{4}$ " |
| 2'-6" | 2'-9" | 13.5 | 5 $\frac{5}{8}$ " | 4 $\frac{1}{4}$ " | 2 $\frac{7}{8}$ " | 1 $\frac{1}{2}$ " |
| 3'-0" | 3'-3" | 14.5 | 5 $\frac{3}{8}$ " | 4 $\frac{1}{8}$ " | 2 $\frac{7}{8}$ " | 1 $\frac{1}{2}$ " |
| 3'-6" | 3'-9" | 15 | 5 $\frac{1}{8}$ " | 3 $\frac{7}{8}$ " | 2 $\frac{5}{8}$ " | 1 $\frac{3}{8}$ " |
| 4'-0" | 4'-3" | 16 | 4 $\frac{7}{8}$ " | 3 $\frac{3}{4}$ " | 2 $\frac{5}{8}$ " | 1 $\frac{3}{8}$ " |

STANDARD SS8-5A: NOTES TO DESIGNER

PART 8
DATE: 10Mar2015
SHEET 2 of 2
FILE NO. SS8-5A-2