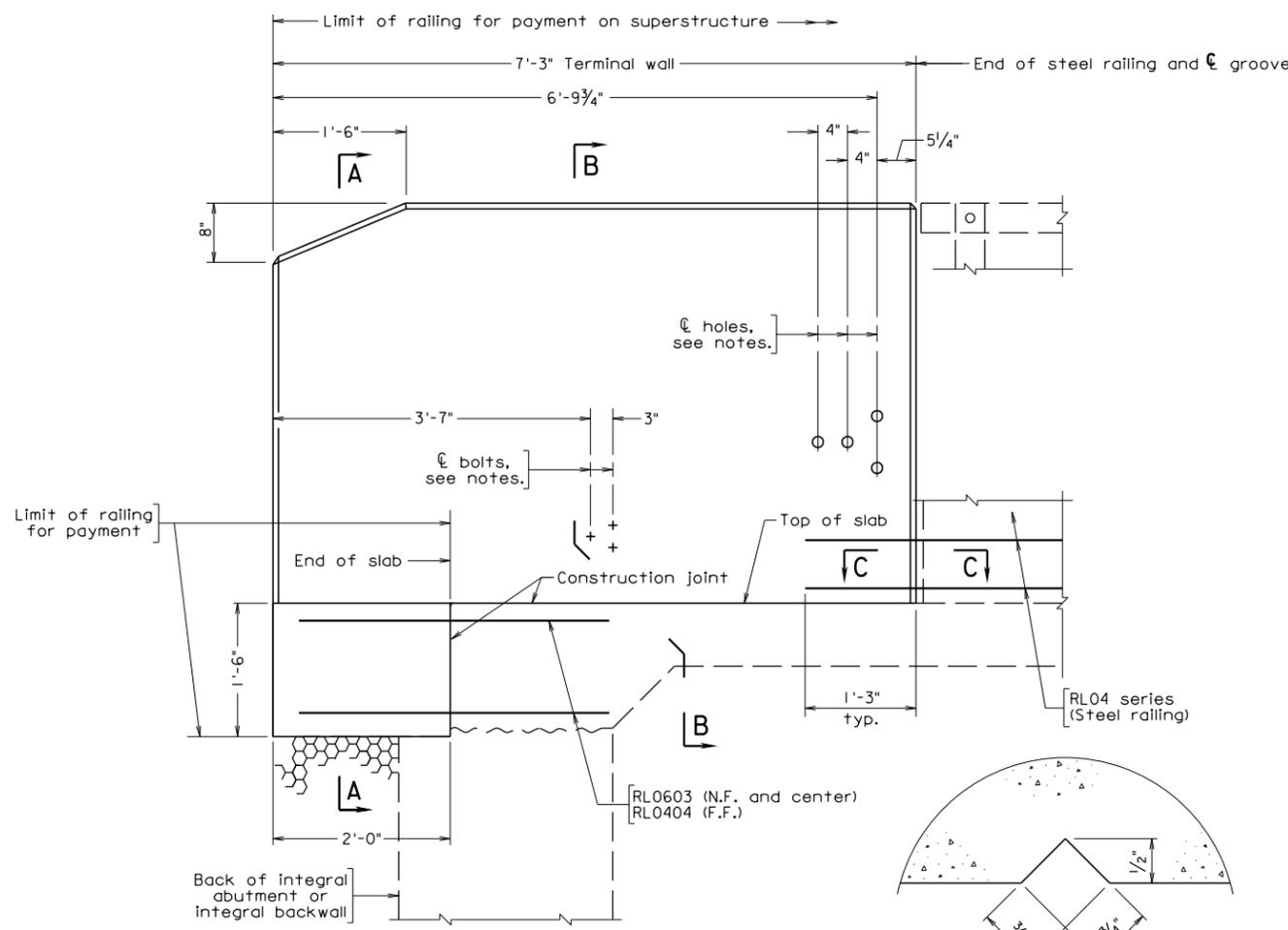
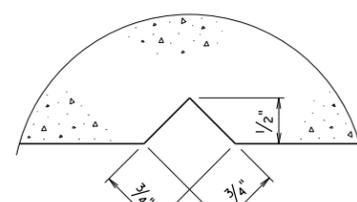


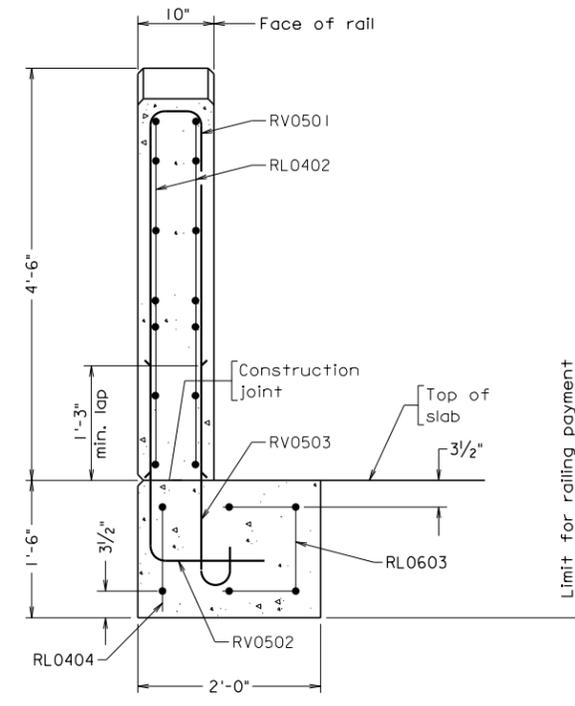
STATE	FEDERAL AID	STATE	SHEET NO.
VA.	PROJECT	PROJECT	



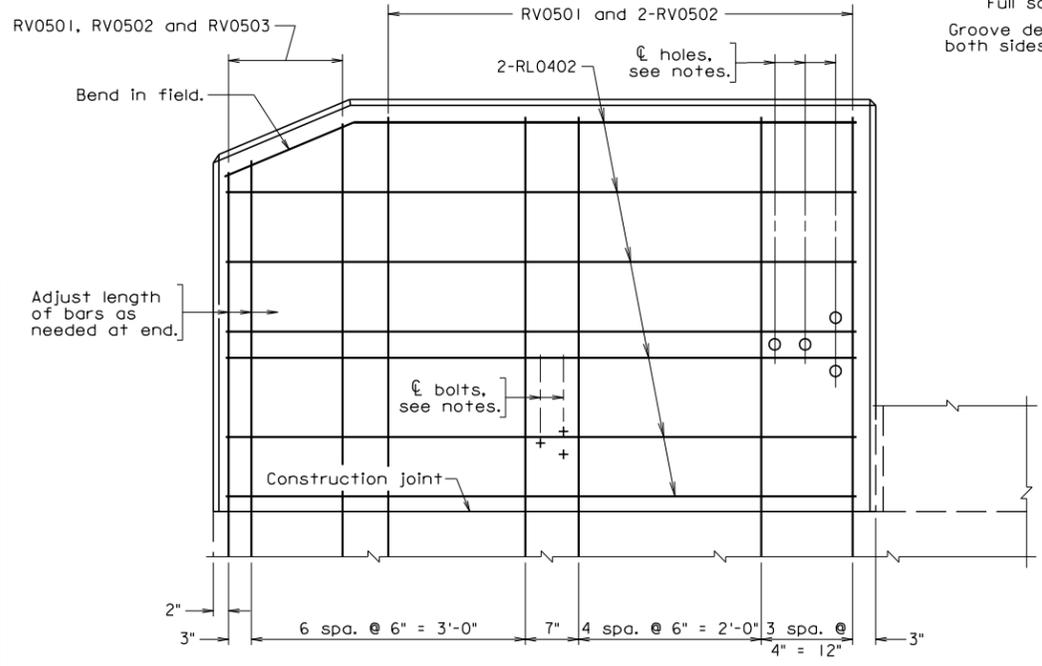
FULL INTEGRAL OR SEMI-INTEGRAL ABUTMENT



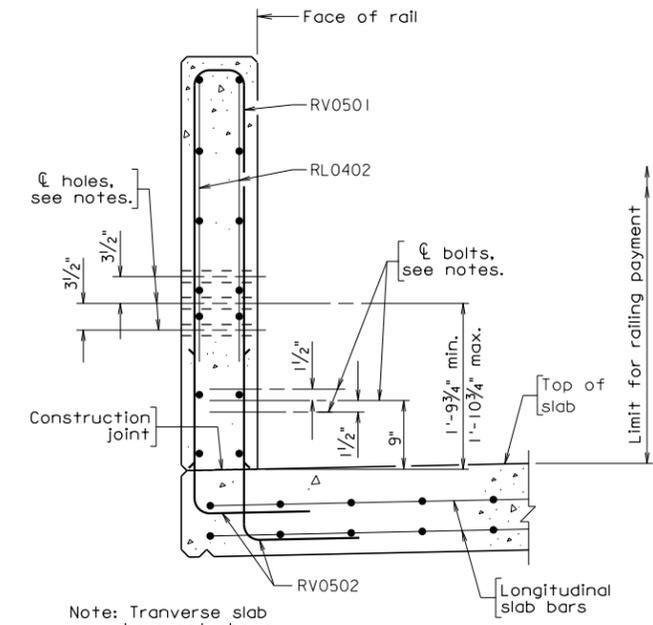
SECTION C-C  
Full scale  
Groove detail for both sides of rail



SECTION A-A



TERMINAL WALL



SECTION B-B

Note: Transverse slab bars not shown.

Notes:

- All bevels for concrete on this sheet shall be 3/4". Rounded edges with 1" radius may be used in lieu of bevels along top of rail.
- All reinforcing bars shall be Corrosion Resistant Reinforcing Steel, Class ...
- Each terminal wall shall be cast as one piece.
- The Contractor shall determine all details necessary for installation.
- All concrete shall be Class A4.
- For details of wingwall below construction joint, see abutment sheets.
- Terminal walls are detailed to take guardrail attachment GR-FOA-1.
- Holes, where shown, shall be formed with sleeves of 1/2" diameter nominal pipe.
- Bolts for guardrail attachment where shown shall be 5/8" diameter expansion anchor bolts 6" long to be drilled and installed when rub rail is attached.
- For details and reinforcing steel schedule of steel railing, see sheet ...
- Bid item for terminal wall shall include concrete noted in plans and reinforcing steel indicated in Reinforcing Steel Schedule.

REINFORCING STEEL SCHEDULE

Mark	Size	No.	Pin ø	Length	Location
RV0501	#5	3	3 3/4"	9'-0"	Terminal wall
RV0502	#5	3	3 3/4"	3'-0"	Terminal wall
RV0503	#5	3	3 3/4"	3'-2"	Terminal wall
RL0402	#4	1	—	6'-11"	Terminal wall
RL0603	#6	1	—	4'-0"	Terminal wall end support
RL0404	#4	1	—	4'-0"	Terminal wall end support

Dimensions in bending diagram are out-to-out of bars, except as shown.

BR27T-7 12-14-2012 br27t7.dgn

Sealed and Signed by:  
Julius F.J. Volgyi Jr.  
Lic. No. 010487  
On the date of  
December 14, 2012

A copy of the original sealed and signed standard 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					
54" BR27C/BR27D TERMINAL WALL					
No.	Description	Date	Designed: S&B...DIV	Date	Plan No.
			Drawn: ...S&B...DIV		BR27T-7
			Checked: S&B...DIV		

## 54"-BR27\_ STEEL RAILING

### BR27T-SERIES

#### TERMINAL WALL ON SUPERSTRUCTURE WITH FULL INTEGRAL OR SEMI-INTEGRAL ABUTMENT

##### NOTES TO DESIGNER:

The BR27\_steel railing uses the BR27T-series for concrete terminal walls in conjunction with the BR27C or BR27D series.

This concrete terminal wall standard has a height of 4'-6" from the roadway surface.

Include this standard when using standard BR27C series (B27C-13 thru BR27C-15) or BR27D series (BR27D-9 and BR27D-10) with terminal wall on superstructure with integral abutment.

Terminal wall is detailed on the deck slab of a superstructure with full integral or semi-integral abutment. A 2'-0" wide section on inside of superstructure (for BR27C-13 and BR27D-9) or at the edge of superstructure (for BR27C-14, BR27C-15 and BR27D-10) is extended 2'-0" from the end of deck slab to support the end of the terminal wall. This concrete section and the terminal wall shall be part of the steel railing for payment. The superstructure plan would need to be adjusted to reflect the location of the slab extension at the end of the deck slab. This standard may be modified by omitting the details and notes for guardrail attachment when used as an on outside of structure in conjunction with an inside traffic barrier for the shared use path (SUP). For geometrics of SUP, see Office Practice, Vol. V-Part 2, Chapter 6, sheets 4-10 to 4-16.

It is the Contractor's responsibility to determine the number of reinforcing bars required as well as any details or dimensions. Therefore, these items are to be left blank in the Reinforcing Steel Schedule.

Transverse bars and longitudinal bars of the deck slab or slab span are included in the Superstructure Reinforcing Steel Schedule.

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

###### SECTION A-A:

For projects with bituminous overlay, modify 4'-6" height of terminal wall so that this dimension will be established from top of overlay surface.

###### SECTION B-B:

For projects with bituminous overlay, modify vertical dimension 9" and the range (1'-9¾" min. – 1'- 10¾" max.) for location of bolts so that these dimensions will be established from top of overlay surface.

**STANDARD BR27T-7: NOTES TO DESIGNER**

VOL. V - PART 3  
DATE: 14Dec2012  
SHEET 2 of 3  
FILE NO. BR27T-7-2

**54"-BR27\_ STEEL RAILING**

**BR27T-SERIES**

**TERMINAL WALL ON SUPERSTRUCTURE WITH FULL INTEGRAL  
OR SEMI-INTEGRAL ABUTMENT**

**ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD: (cont'd)**

NOTES:

Complete first note by adding the Class I, II or III of corrosion resistant reinforcing steel required. For additional information on corrosion resistant reinforcing steels (CRR), see Structure and Bridge Division Memorandum (current IIM-S&B-81).

Complete sheet no. for details of integral abutment.

Complete sheet no. for details and reinforcing steel schedule of steel railing.

TITLE BLOCK:

Replace standard designation with Plan No.

**STANDARD BR27T-7: NOTES TO DESIGNER**

VOL. V - PART 3  
DATE: 07Aug2012  
SHEET 3 of 3  
FILE NO. BR27T-7-3