

FHWA-534 DATA 3A114  
No additional Right-of-Way required

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-BR02(393)	0000	0000-128-376, B630	1
NBIS Number: 000000000021594			UPC No. 106836		
Federal Oversight Code: NFO			FHWA Construction and Scour Code: X281-S9		

DESIGN EXCEPTION(S):  
None.

GENERAL NOTES:

The original approved sheet, including original signatures, is filed in the VDOT Central Office. Any misuse of electronic files, including scanned signatures is illegal. Violators will be prosecuted to the full extent of the applicable laws.

Widths: 5'-0" sidewalk, 28'-0" roadway, 5'-0" sidewalk. Overall width is 38'-0" face-to-face of rails.

Span layout: 52'-70'-70'-52' simple spans, prestressed concrete beams.

Capacity: H20-44 and HS15-44 loading (original).

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2007.

Design: AASHTO Standard Specifications for Highway Bridges, 1961 (original).

AASHTO Standard Specifications for Highway Bridges, 16th Edition, 1996; 1997 and 1998 Interim Specifications; and VDOT Modifications (new elements).

Standards: Virginia Department of Transportation Road and Bridge Standards, 2008.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

This project is to be constructed in accordance with the Virginia Department of Transportation Work Area Protection Manual 2011 Edition Revision - April 1, 2015 and Revision 1a - October 30, 2015.

All structural steel, in bearings, shall be ASTM A709 Grade 36 and shall be galvanized.

Concrete in substructure shall be Class A3.

All reinforcing steel shall be deformed and shall conform to ASTM A615, Grade 60 except for reinforcing steels noted as CRR (corrosion resistant reinforcing) which shall conform to applicable specifications noted in the special provisions. All reinforcing bar dimensions on the detailed drawings are to centers of bars except where otherwise noted and are subject to fabrication and construction tolerances.

Corrosion resistant reinforcing (CRR) steels shall conform to one or more of the three Classes listed in the special provision. The minimum yield strength shall be: 100 ksi for low carbon/chromium and 60 ksi for stainless clad steel or solid stainless steel. The Classes of CRR steel(s) required on this project is/are noted on the plan sheets and in the reinforcing steel schedule. Corrosion Resistant Reinforcing Steel, Class II or Class III may be substituted for Class I. Corrosion Resistant Reinforcing Steel, Class III, may be substituted for Class II. Dimensions of existing bridge are based on original plans. Contractor shall field verify all dimensions necessary to complete work.

Bridge No. of existing bridge is 8001. Plan No. is 164-06. Beams are numbered 1 to 6 from left to right looking from Abutment A to Abutment B.



COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION  
PROPOSED BRIDGE REPAIRS ON  
LIBERTY ROAD OVER RTE. 581  
CITY OF ROANOKE - 0.6 MI. N. OF RTE. 460  
PROJ. NO. 0000-128-376, B630

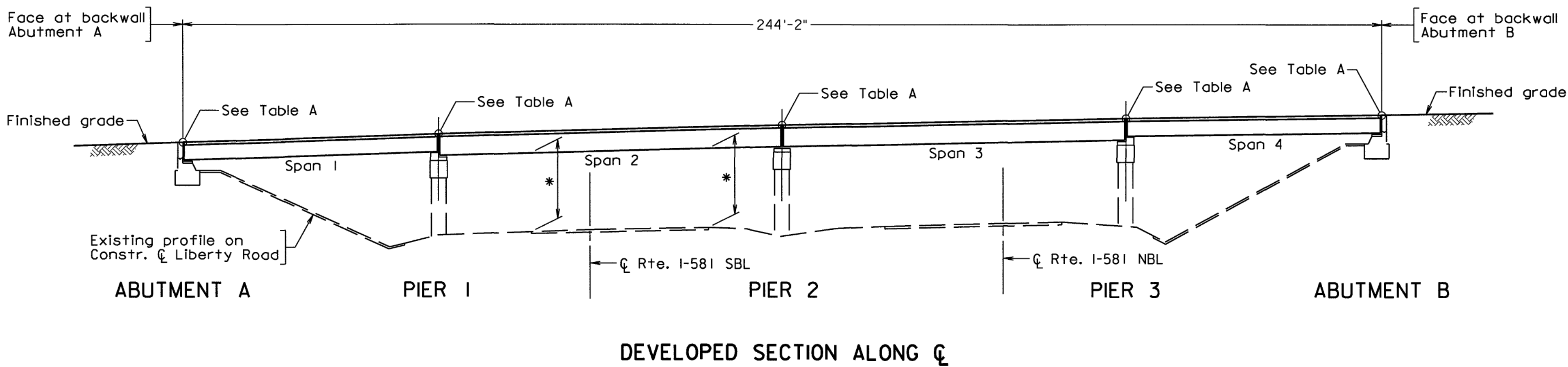
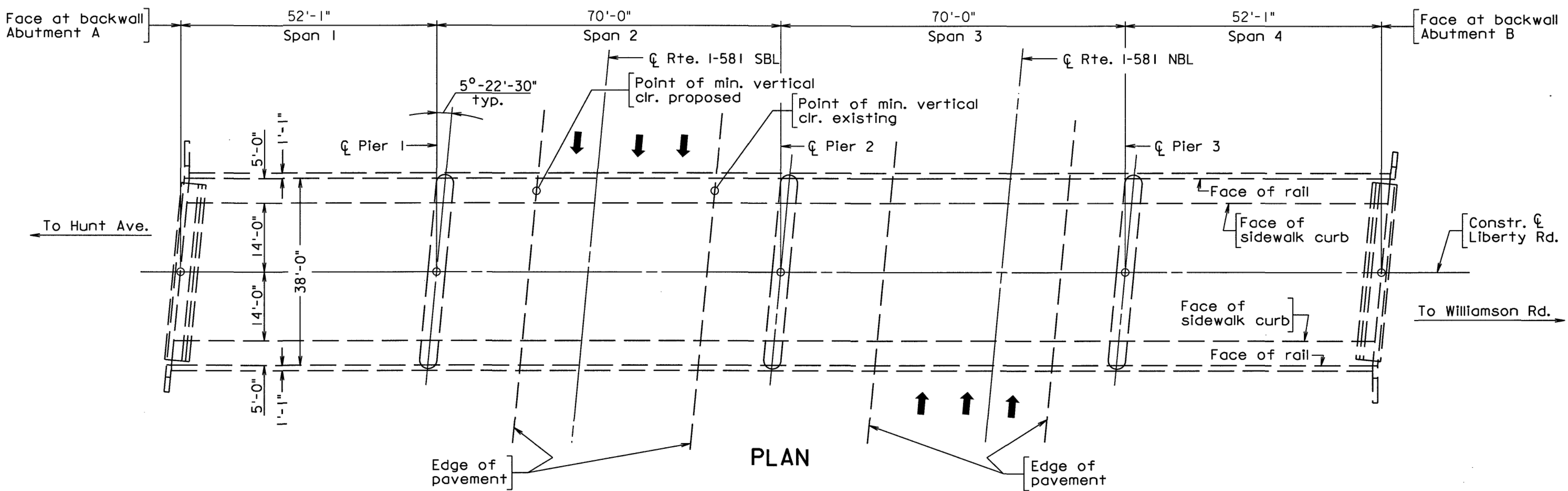
Recommended for Approval: Thelma L. Ingle 10/2/15  
District Planning and Investment Manager Date

Recommended for Approval: T.W. DiGiulian 10/2/15  
District Project Development Engineer Date

Approved: Kenneth H. King 10/2/15  
District Administrator Date

Date: July 10, 2015 © 2015, Commonwealth of Virginia Sheet 1 of 10

Liberty Rd. Bridge H<sub>2</sub>O Line



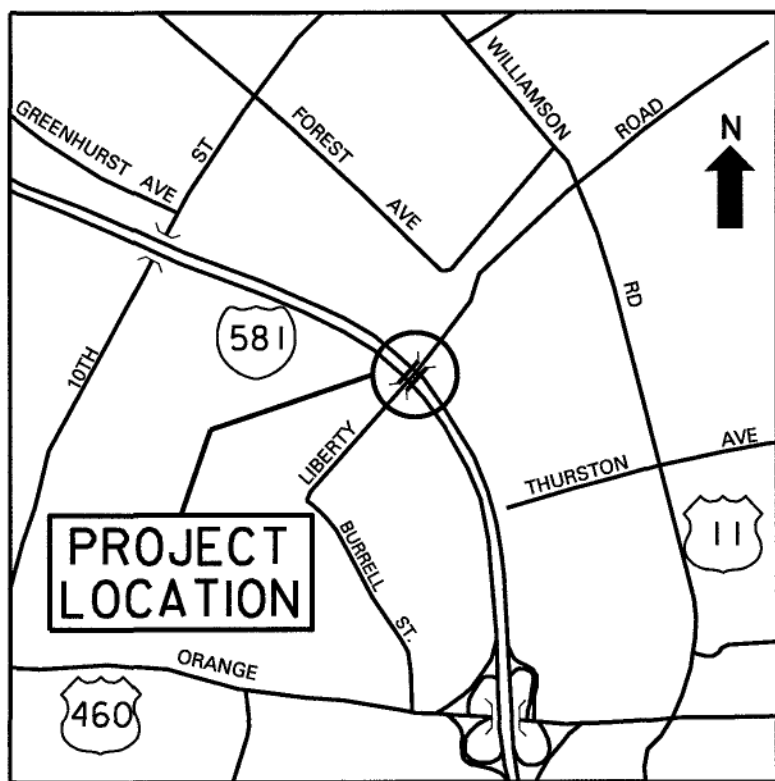
\* Existing vertical clearance documented as 14'-4".  
Jacking operations are anticipated to increase  
the vertical clearance to approximately 15'-0".

Suggested Sequence of Operations:

1. Demolish and reconstruct the concrete end diaphragms.
2. Demolish and reconstruct the pier stay blocks.
3. Complete concrete substructure surface repairs
4. Install jacks per approved jacking plan.
5. Disconnect water line, drain the line and cut the pipe.
6. Implement the detour plan and close bridge to vehicular and pedestrian traffic.
7. Remove joint seals in the deck and sidewalk at the abutments and piers.
8. Disconnect necessary elements of the fencing and aluminum railing to facilitate jacking operations.
9. Provide rail grounding wires at the locations specified in these plans.
10. Complete the superstructure jacking operations to achieve the required grade adjustment, and steel pedestal and bearing installation.
11. Remove jacking system.
12. Reconnect water line per the details specified in these plans and re-establish water service.
13. Install new joint seals in the deck and sidewalks
14. Complete the fencing and aluminum railing modifications.

Note:

The above sequence of operations is intended to provide a logical order to the anticipated work and what work is anticipated prior to the bridge being closed to vehicular and pedestrian traffic. The Contractor's sequence of construction may include re-establishing vehicular and or pedestrian traffic at intermediate times throughout the construction to satisfy the limitations on timing and duration of the bridge closure.

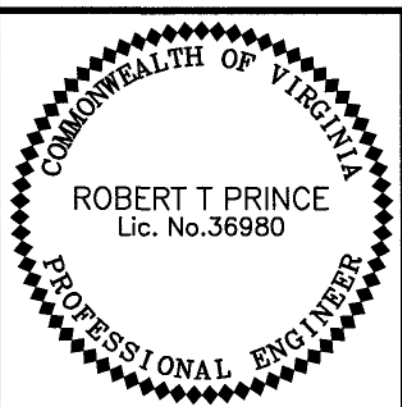


LOCATION MAP  
Not to scale

Scale: 1/16" = 1'-0"

TABLE A: GRADE ADJUSTMENT	
Location	Adjustment (in.)
Abutment A	0"
Pier 1	+8"
Pier 2	+11"
Pier 3	+5.75"
Abutment B	0"

No.	Description	Date
REVISIONS		
For Table of Revisions, see Sheet 2.		



AECOM TECH. SERV., INC.  
ROANOKE, VA  
STRUCTURAL ENGINEER

PLANS BY: Consultant  
COORDINATED: Todd Marshall  
SUPERVISED: Robert Prince  
DESIGNED: Robert Prince  
DRAWN: Kevin Laxton  
CHECKED: Rob Dean

As-Built Substantial Completion 10.13.16 K. Winslow