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AGENCY OF TRANSPORTATION

Andover

VT 11 Bridge 41

Andover Bridge 41 – BHF 016-1(29)

Project Location: Town of Andover in Windsor County on VT 11 over the Middle Branch of the Williams River. The bridge is located approximately 4.0 miles east of the intersection of VT 11 and VT 121.

The Andover VT 11 Bridge 41 project will replace the existing bridge superstructure, which has a sub-standard horizontal alignment, width, and bridge rail, and is in poor condition, with a new bridge superstructure. The new bridge width and railing will be brought up to current design standards, however the existing horizontal alignment will remain. The existing Andover VT 11 Bridge 41 is a single span, two lane structure constructed in 1927 and widened in 1963. The bridge is 44-feet in length and 35-feet wide. The bridge superstructure (deck and beams) components are in poor condition. The deck is at risk for full depth holes and a scour and undermining issue exists along a portion of the eastern abutment.

VTrans evaluated alternatives for replacement of the Andover VT 11 Bridge 41 in an engineering study completed in December 2012. The study assessed the proposed design criteria for bridge and roadway alignment, right of way impacts, resources and hydraulic impacts. Several alternatives were considered including no action, superstructure replacement and full bridge replacement. Given the satisfactory condition of the substructure, the engineering study recommended superstructure replacement, with minor substructure repairs, using Accelerated Bridge Construction (ABC) methods with an offsite detour.

The new bridge will be a Precast Prestressed Concrete Beam Bridge, which has a relatively short construction period and comparatively low construction and maintenance costs. The new structure will be 45-feet in length and 35-feet wide including two 11-foot travel lanes and two 5-foot shoulders. The new bridge will feature a galvanized 2 rail box beam with the accompanying approach rail that meets all current standards for bridge railing. The substructure undermining and scour issue will be mitigated by placing grout filled bags under the existing abutment to help stabilize the footing and to reduce any future undermining problems. The abutments will then be lined with stone fill for protection.

The bridge will be constructed with ABC methods, which will expedite construction and reduce disturbance to the public. There will be an allowable 10 day road closure with temporary single lane closures two weeks prior to and following the bridge closure period.

PROJECT MILESTONES

Preliminary Plans
April 2014

Permitting
August 2014

Final Design
May 2014

Right-of-Way Complete
October 2014

Bid Advertisement
February 2015

Contract Award
April 2015

Target Construction Schedule
April 2015 - September 2015

Spalling and Exposed Rebar

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Target Construction Schedule: Construction activities will take place beginning in April 2015. The allowable bridge closure period is one consecutive 10 day period after the July 4th 2015 holiday. The exact date will be left up to the contractor, with a 7 day notification period before the closure. The contract is scheduled to be completed by September 4, 2015.

Contractor: Renaud Brothers, Inc.

Cost: $909,587.50

VTrans Project Manager: Carolyn Carlson, P.E.

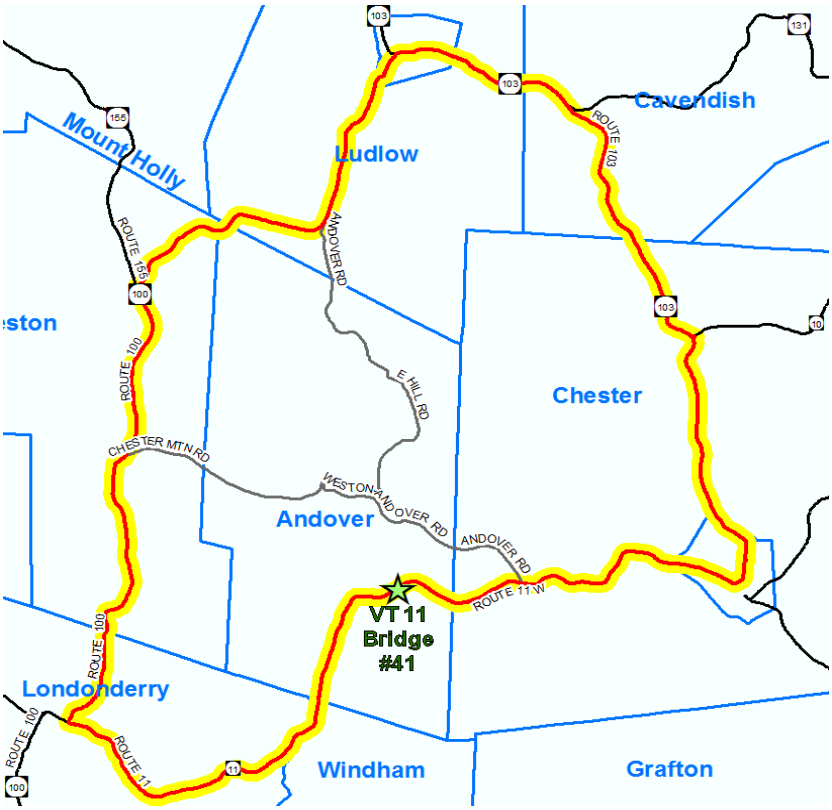
VTrans Resident Engineer: Daryl Bassett

Public Relations: Cindy Cook - Email: ccook@adamantaccord.com
Phone: 802-272-2829

Detour Route: During construction, traffic will be rerouted on VT 103 and VT 100 from Chester to Londonderry.

From the East: In Chester, turn right on to VT 103 North, toward Ludlow. In Ludlow turn left onto VT 100 South. Continue on VT 100 South to Londonderry. Turn right onto VT 11 West in Londonderry.

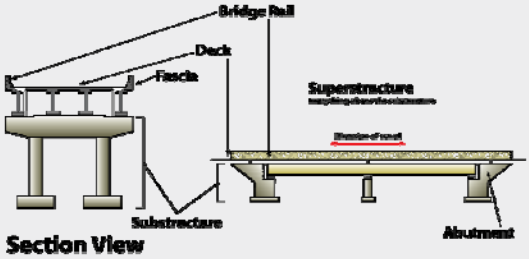
From the West: Turn onto VT 100 North in Londonderry. Continue on VT 100 towards Ludlow. Keep right onto VT 100 to Ludlow. In Ludlow, turn right onto Main Street/VT 103 South towards Chester. Continue on VT 103 South to Chester. In Chester, turn left onto VT 11 East.



For more details, click here.

Location of Abutment Undermining

Exposed Rebar



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