



# Colchester

## TH 27 (Mill Pond Road) Bridge 12

### Colchester Bridge 12 – STP 5600(12)

**Project Location: Town of Colchester in Chittenden County on TH 27 over the Indian Brook adjacent to the Mill Pond Dam. The bridge is located approximately 0.24 miles south of the intersection of VT 2A and TH 27.**

#### PROJECT MILESTONES

##### Preliminary Plans

October 18, 2011

##### Permitting

February 2, 2012

##### Final Design

February 28, 2014

##### Right-of-Way Complete

December 12, 2014

##### Bid Advertisement

February 27, 2015

##### Contract Award

March 23, 2015

##### Target Construction Schedule

April 2015 - September 2015

The Colchester TH 27 (Mill Pond Road) Bridge 12 project will replace the existing bridge, which has a substandard width and is in poor condition, with a new bridge that meets current design standards. The existing Colchester TH 27 Bridge 12 is a two span, two lane structure which was constructed in 1940. The bridge is 26-feet in length and 29.4-feet wide. The bridge superstructure (deck and beams) are composed of a solid concrete deck supported by varying sized steel beams and are in poor condition. There are areas of spalling and chipping on the bridge deck and fascias, resulting in significant leaking. In addition the steel beams on the exterior of the deck have substantial section loss.

VTrans has evaluated various alternatives for the replacement of Colchester TH 27 Bridge 12. The criteria that was assessed for the proposed bridge design included roadway alignment, right of way impacts, hydraulics, wetland and archaeological resources, and impacts to the adjacent Mill Pond Dam. Several alternatives were considered including no action, repair and rehabilitation, superstructure replacement, and full bridge replacement. Given the poor condition of both the superstructure and substructure components, it was recommended that a full bridge replacement be undertaken with a full-bridge closure and off-site detour.

The new bridge superstructure will have a Concrete Deck Wearing Surface supported by four Curved Steel Plate Girders. The new bridge will be 74-feet in length and approximately 35.5-feet wide including two 11-foot travel lanes, two 3-foot shoulders, and a 5.5-foot bituminous concrete sidewalk on the downstream side of the structure. The new bridge will feature a combination concrete and steel bridge guardrail. The substructure will be composed of concrete abutments on spread footings. The existing pier and abutment #2 will be removed prior to construction, but the existing abutment #1 will remain in place since it is in direct contact with the Mill Pond Dam and needs to remain undisturbed.

Due to the location of the bridge and multiple alternative routes, the bridge will be closed to all traffic during the construction period. VTrans will not be providing a signed detour around the location; it will be the responsibility of the Town to provide any necessary signage and detour information during the closure period.



*Deterioration Beneath the Deck*



**Target Construction Schedule:** Construction activities will take place during the summer of 2015. The bridge closure period is expected to last the majority of the construction season since reasonable alternative routes exist and reopening the bridge does not need to be accelerated.

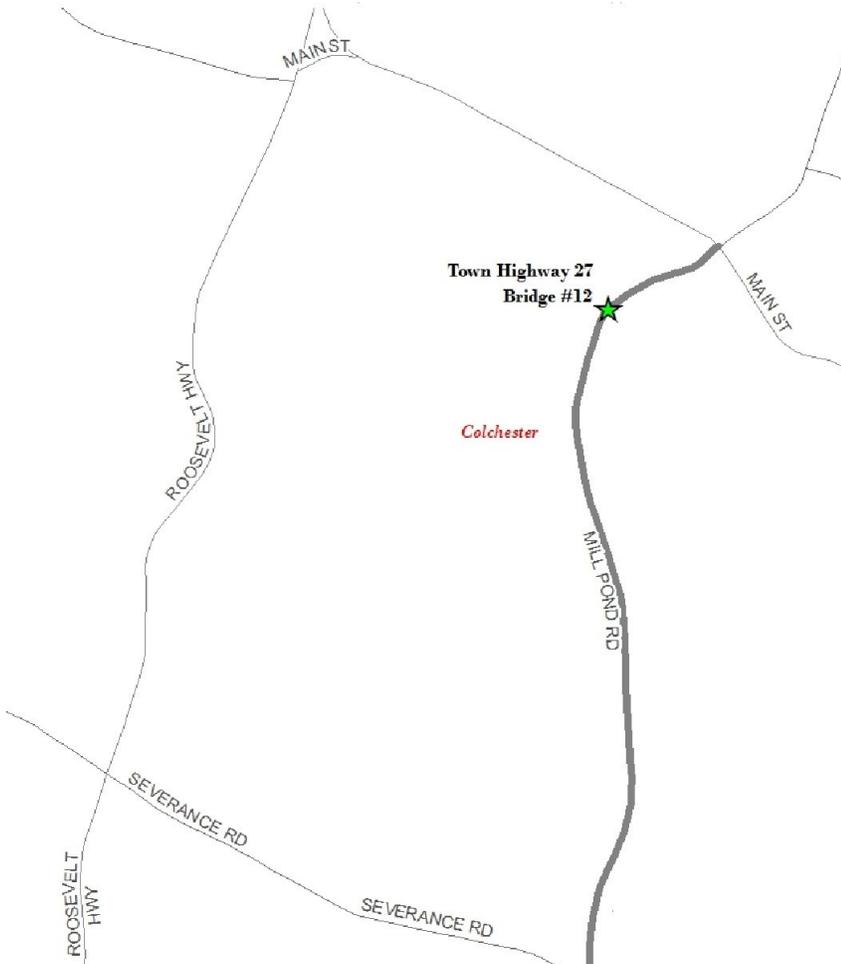
**Contractor:** A.L. St. Onge Contractor, Inc.

**Cost:** \$988,641.09

**VTrans Resident Engineer:** Joshua Hulett

**VTrans Project Manager:** Carolyn W. Carlson, P.E.

**Detour Route:** During construction the bridge will be closed. All traffic will be rerouted on an off site detour. It will be the responsibility of the Town to provide the signage and any additional information to the traveling public regarding the alternative route(s).



Bridge Location Map

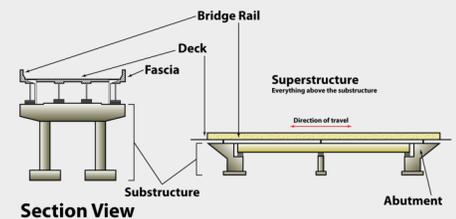
For more details, click here.



Looking Upstream Existing Structure



Adjacent Mill Pond Dam



<https://www.facebook.com>



<https://twitter.com/511VT>

