



# Orwell

Route 73 (TH-3), FAS 0156  
Bridge 4 over North Fork Creek

## Orwell STP Deck (41)

**Project Location: Town of Orwell in Addison County on Route 73 over the North Fork Creek. The bridge is located approximately 2 miles west of the intersection with VT 22A.**

Bridge 4 is a Rolled Beam steel girder bridge with a cast-in-place deck. It features concrete parapets with steel cable barrier and was constructed in 1946.

Bridge 4 has several substandard features which include bridge railing, approach railing, bridge width, and approach width. These features are substandard in accordance with the Vermont State Standards. The intent of this project is to extend the serviceable life of this bridge as much as possible with the lowest cost investment. In order to achieve the objective some features will remain substandard even though they will be improved from their current condition. An example is the bridge width, the new deck will be wider than the existing deck however due to the location of the existing steel beams the bridge could not be brought up to current standards without a significantly larger investment.

Since the existing bridge has a deck rating of 5 (fair) and a superstructure/substructure ratings of 6 (satisfactory) this bridge was identified for the Bridge Deck Replacement Program. All projects included in this program received an abbreviated scoping effort that examined the feasibility of a deck replacement as opposed to a larger scope that could include either a superstructure or full bridge replacement. Bridge 4 was deemed as a good candidate for this deck program due to its current condition and remaining life expectancy of the steel beams and abutments.

The new deck will be wider, feature updated bridge and approach railing, and provide a greater load carrying capacity. Upon completion of the deck replacement, Bridge 4 is expected to remain in service for another 40 years.

It is anticipated that the work will be completed during the summer of 2017 with a chance that construction could occur in 2016. The scope suggests a complete closure of the bridge and approaches for an 8 week period for the work. Per Act 153, by closing the road as opposed to installing a temporary bridge, the town share is reduced by 50%. Periodic, temporary single lane closures may be used prior to and following the bridge closure period. The most likely detour for this project location would have an end-to-end distance of 5.75 miles.

## PROJECT MILESTONES

Permitting

Fall 2015

Final Design Complete

Fall 2015

Right-of-Way Complete

Not Applicable

Bid Advertisement

Winter 2016

Contract Award

Spring 2016

Target Construction Schedule

Summer 2017



Looking South East Over Bridge

**Target Construction Schedule:** It is anticipated that this project will take place in 2017. The allowable bridge closure period is 8 weeks to be determined at a later date.

**Contractor:** TBD

**Estimated Total Project Cost:** N/A

**VTrans Project Manager:** Jennifer Fitch, P.E.

**VTrans Resident Engineer:** TBD

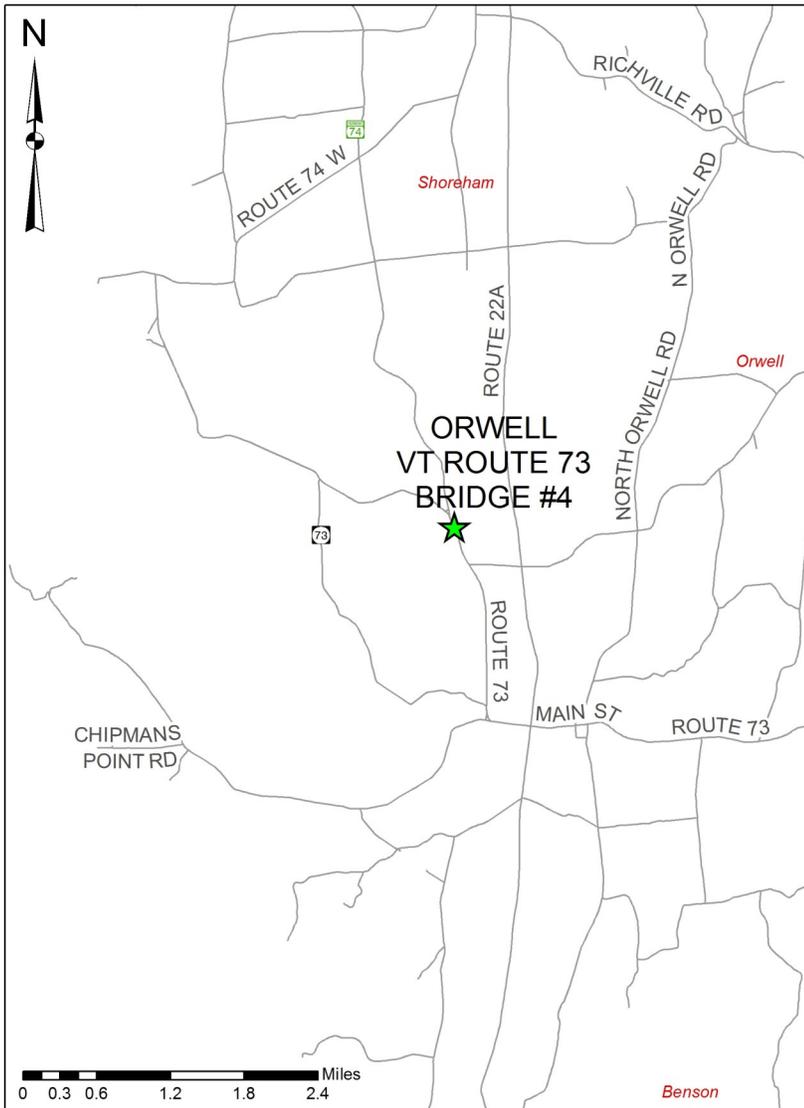
**Maintenance of Traffic:** The bridge will be closed for 8 weeks, and traffic will be maintained on an offsite detour. The town is responsible for choosing and signing the detour route.



*Deterioration in Bridge deck 2014*



*Most significant deterioration*



*Bridge Location Map*



<https://www.facebook.com>



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