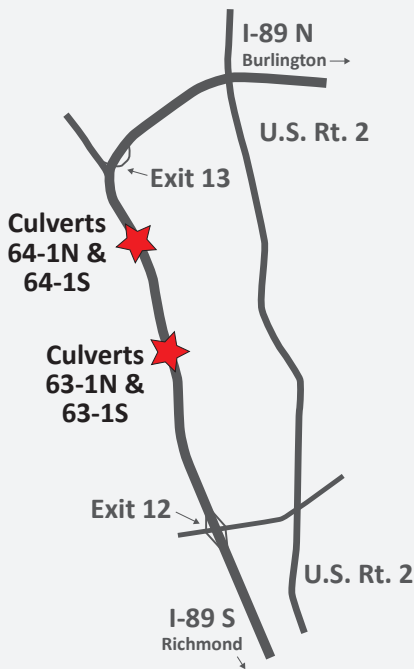




Interior of existing culvert 63-1S

PROJECT LOCATION



I-89 Culvert Replacement SOUTH BURLINGTON

SOUTH BURLINGTON IM CULV(24)

Project Location: This project is in the Town of South Burlington along I-89. Culverts 63-1 North (N) & South (S) are located 1.7 miles north of Exit 12. Culverts 64-1 North (N) & South (S) are located .9 miles south of Exit 13.

Project Description: This project will replace two pairs of existing culverts which are located about a mile apart and pass under Interstate 89 between Exits 12 and 13. These culverts are over 50 years old and are starting to deteriorate. In addition, the size of these culverts is now insufficient to allow water flow, causing back-up. The replacement culverts will be larger to resolve this issue.

The culverts vary in size and condition.

- **Culverts 63-1 N & S** carry the Potash Brook under I-89. The existing culverts are 7 feet wide and are 86 and 84 feet long, respectively. The culvert under the northbound lane is rated in “Serious Condition,” while the culvert under the southbound lane is rated in “Poor Condition.” Both are inspected yearly as part of the State of Vermont’s Asset Management Program.
- **Culverts 64-1 N & S** carry a tributary of the Potash Brook under I-89. The existing culverts are 9 feet wide and are 94 and 104 feet long, respectively. The culvert under Northbound I-89 is rated in “Poor Condition,” while the culvert under the southbound lanes is rated in “Fair Condition.” Both are inspected every five years.

All four culverts will be replaced with new precast concrete box culverts. The existing structures will remain in place and operational until the new culverts are installed. Once the new culverts are installed and Potash Brook is directed to flow through the new structures, the old culverts will be abandoned and backfilled.

The Vermont Agency of Transportation has hired a design-build team of J. A. McDonald of Lyndon Center, Vermont and Stantec of South Burlington to design and construct the project.

Construction of the culverts will begin in the spring of 2017 and is scheduled to be completed in the fall of 2017. See Project Milestones for more information.

PROJECT MILESTONES

- Design/Build team selected**
Spring 2015
- Project Design Completed**
January 2017
- Northbound Construction**
April – June 2017
- Southbound Construction**
July – November 2017



Exterior view of existing culvert



Interior of existing culvert 64-1N

TRAVEL IMPACTS

The project has been designed to minimize disruption to the traveling public.

The contractor will construct the two culverts under the northbound lanes first, building a two-lane temporary roadway within the I-89 median at both culvert locations to maintain traffic flow while the culverts are being built.

Once both precast concrete box culverts have been installed, the existing I-89 northbound travel lanes will be reopened. The temporary roadway in the median will then be reconstructed (re-using fill material) to provide a detour for southbound motorists while the culverts under southbound I-89 travel lanes are replaced. The work zone will be posted for a 55 mph speed limit throughout construction.

Limited traffic restrictions on I-89 may occur at night (8 PM to 6 AM) to allow construction of detour lanes, temporary extension of the existing culvert,

construction access to the work zone, and during final paving through the work zone. Local roadways will not be affected by this project.

“Smart work zone” technologies will be used to help monitor traffic operations in the work zone.

Smart work zone technologies use computers, sensors and various communications methods, such as variable message signs, to alert motorists in real time about traffic conditions in highway construction work zones. When informed, motorists can take alternate routes if necessary, driver frustration can be reduced, and roadway congestion managed or eliminated. Real-time information is especially helpful to motorists when there are traffic accidents, temporary closures, hazardous weather or any unexpected conditions.

PROJECT DETAILS

Project ID: South Burlington IM CULV(24)

Contractor: J.A. McDonald/Stantec

VTrans Project Managers:

Mahendra Thilliyar
mahendra.thilliyar@vermont.gov

Project Outreach Coordinator:

Jill Barrett
jbarrett@fhiplan.com

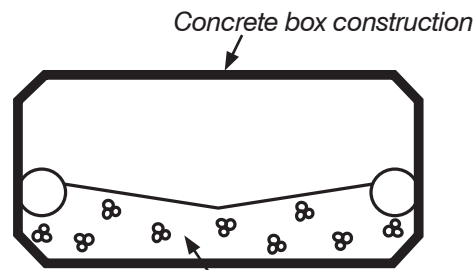
Project telephone: (802) 272-1248

24-hour traffic info:
www.newengland511.org

Project website:
www.i89sbgculverts.vtransprojects.vermont.gov

Construction Cost: \$8,083,000

CULVERT STRUCTURE



Natural bottom of culvert will be graded to remain stable during high stream flows.



Example of pre-cast box culvert