



**VTrans Fall 2023 Transportation Alternatives (TAP)  
and  
Municipal Highway and Stormwater Mitigation Program Grant (MHSMP)  
Combined Application**

Thoroughly read the TAP and MHSMP application guidebooks before you begin your application. It includes important program information and step-by-step instructions. Pay particular attention to the application process requirements. **Applications are due by e-mail by December 8, 2023.** Please e-mail the completed application to: [Ross.gouin@vermont.gov](mailto:Ross.gouin@vermont.gov) and [Scott.robertson@vermont.gov](mailto:Scott.robertson@vermont.gov).

Doolittle Road Culvert Replacement  
(Project Name/Title)

802-989-6145  
(Phone)

Jason Paquette  
(Municipality contact person responsible  
for the management of this project)

shorehamroads@shoreham.net  
(e-mail address)

Shoreham  
(Town)

\$ 531,532  
Amount of **Federal Funds requested** (no more  
than 80% of the project cost estimate).

05770  
(Zip Code)

\$132,883  
Amount of Local Match. Example:  
Federal Award = \$600,000 (80% of total)  
Local Match = \$150,000 (20% of total)  
Total Project Cost = \$750,000 (100% of the total)

297 Main Street  
(Mailing Address)

County: Addison

Town/Village/City: Shoreham

Specific location, street, or road: Doolittle Road

Regional Planning Commission: Addison County Regional Planning Commission

If a linear project, what is the length in feet? [Click here to enter text.](#)

Is the project on or intersecting to a State maintained highway? Yes  No

- Note: If yes, be sure to include documentation that you have notified the VTrans District Transportation Administrator of the intent to apply for TA funding and have provided them with a brief (one paragraph) description of the proposed project.*

Project type being applied for:  Scoping  Design/Construction

The municipality understands that a typical construction project utilizing TAP or MHSMP Program funds will take roughly three years (min.) in the Design and ROW phases prior to going to construction (as pointed out in the TAP and MHSMP Application Guides)? Yes  No

Does this project have a previously completed scoping or feasibility study? Yes  No

**Note:**

Attach a map(s) of the project area and clearly show the limits of the project as well as surrounding benefits from the proposed improvement. If the project is within or adjacent to a designated downtown, village or growth center, clearly indicate the relationship of the proposed project to the boundary of the designated area. Color photos of the area are also recommended.

**Fiscal Information:**

Accounting System Automated  Manual  Combination

SAM Unique Identifier # FYE4HKULTFH5

Fiscal Year End Month December

**Property Ownership:**

If the proposed project is on private property that will need to be acquired by the Municipality through purchase, easement, or eminent domain (includes temporary construction rights) in accordance with the "Uniform Act", then the municipality is committed to exercising its right of **eminent domain** to acquire the rights to construct the project if necessary. Yes  No

**Funding:**

Does this project already have existing funding? If so, please describe. Yes  No

Please note that existing projects will not be considered for additional funding without a current NEPA clearance and ROW clearance. Please provide date of clearances below:

[Click here to enter text.](#)

Will you accept an award less than you applied for? Yes  No

- If yes, please indicate whether local funds will be used to make up the shortfall, or if the project scope will be reduced. If the project scope is to be reduced, describe what part of the project (please be specific) you would accept partial funding for.

[Click here to enter text.](#)

**A support letter from the governing body of the applicant municipality or organization** and an acknowledgement and source of the local match and commitment to future maintenance responsibility for construction projects is required (must be dated within 1 year of the application). Is a letter of support attached?

Yes  No

**Regional Planning Commission Letter of Support:**

In order to apply, the project must have a letter of support from the regional planning commission. Is a letter of support attached?

Yes  No

***PLEASE NOTE:*** If this application is for salt or sand shed funding, the applicant must read and understand the **Municipal Assistance Section Salt Shed Application Guide**. All of the following scoring questions below must thoroughly convey an understanding of the salt and sand guidance provided.

**Application Scoring Criteria:**

- 1. Please give a brief description of the project (be sure to indicate the primary facility type being applied for and be concise).**

**(10 points max.)**

Shoreham seeks to replace an undersized failing structure on Doolittle Rd. that carries Prickly Ash Brook. Per DEC recommendations, the new structure would be a concrete box culvert with an opening span of 15 feet and a minimum height of 8.5 feet. The structure would be buried 2 feet in the streambed giving a clear height of 6.5 feet above the streambed. Sills will be added to the box with 12inch height at the edges and 6 inches in the center to aid in bed retention. Sills will be no more than 8 feet apart throughout the structure with one at both the inlet and outlet. The structure will be filled level to the stream bed with E stone, Type II, to aid in aquatic organism passage. The new structure will have flared wingwalls matched into channel banks at the inlet and outlet to smoothly transition flow and protect the structure and roadway approaches from erosion. The new structure will assist Prickly Ash Brook in achieving stream geomorphic equilibrium and will improve aquatic organism passage.

- 2. What is the feasibility of this project? Feasibility (or Scoping) study applications will not be scored on this criterion. Also, please describe the extent of project development to date.**

**(10 points max.)**

The project has been reviewed by DEC river engineers and consulting engineers that have deemed it as feasible. Those reviews have been included in this application. The project replaces an existing structure.

- 3. Does this project address a need identified in a local or regional planning document? If so, please describe.**

**(5 points max.)**

This project area is listed on the MRGP as deficient and in need of repair to be made compliant.

- 4. Does this project:**

- A. Benefit a State Designated Center per the link below (i.e., downtowns, villages, or neighborhood growth centers recognized by the Vermont Department of Economic, Housing and Community Development?)

*Not applicable for Environmental Mitigation Categories* (5 points max.)

<http://maps.vermont.gov/ACCD/PlanningAtlas/index.html?viewer=PlanningAtlas>

Click here to enter text.

- B. Benefit mobility for disadvantaged populations to include elderly, disabled, minorities, and low-income residents. Please describe this impact (if applicable) in detail. Supporting documentation, including recent data must be included.

*Not applicable for Environmental Mitigation Categories* (10 points max.)

Click here to enter text.

5. Provide a project cost estimate below (project costs below include both federal dollars and local dollars). Projects will be scored based on whether the cost appears realistic for the size and scope of the project. For scoping studies, use PE and Local Project Management lines only.

Note: If you are applying for additional funds for an existing project, show the amount being requested for this grant in the PE, ROW, Construction, Construction Engineering, and Municipal Project Management rows below. Also, be clear regarding total project cost and other funding amounts and sources in the additional funding comments box below.

(10 points max.)

Right-of-way / Acquisition (ROW) (appraisals, land acquisition and legal fees)	\$ \$5000.00
Construction (construction costs with reasonable contingency)	\$473,000.00
Construction Engineering (cost to provide inspection during construction)	\$47,300
Municipal Project Management Costs (minimum of 10% of total PE, ROW and Construction Phases).	\$139,115.00
<b>Total Project Cost</b>	<b>\$ \$664,415.00</b>

**Addition Funding Comments: (ex. Total and additional funding for existing projects)**

6. Select the eligibility category below (A, B, C or D) that best fits your project and answer the corresponding questions for that category (choose only one category). 10 bonus points will be awarded to projects that are primarily Bicycle or Pedestrian facilities.

- A. Bicycle and Pedestrian Facilities (includes Safe Routes for Non-Drivers and Conversion of abandoned railroad corridors.

**C. Environmental Mitigation Activity Related to Stormwater and Highways  
(Including Salt and Sand Sheds)**

- i. Please describe how this application provides environmental mitigation relating to stormwater and highways. **(10 points max.)**

The environmental mitigation, as related to highways are, the existing structure is undersized and does not meet the standard for bank full width as described in the Vermont Stream Alterations Rule. The addition of wing walls will help with channeling the water and prevent erosion and scour at the inlet and outlet ends of the structure.

- ii. What information or data is provided to substantiate the current stormwater problem and associated environmental impacts? **(10 points max.)**

Attached to this application please find a report from VTrans Structures and Hydraulics Section confirming that this structure is undersized and identifying the environmental implications of it being undersized. In addition, we have attached an email from DEC's river engineer agreeing with the conclusions in the report

- iii. What substantiating data or information is provided to show that the proposed application is an effective and maintainable solution to the problem? **(10 points max.)**

The proposed project conforms with all recommendations contained in the VTrans Structures and Hydraulics engineers report. In addition will allow for proper maintenance of roadway surface and make this hydrologically connect road segment compliant with the MRGP

**D. Environmental Mitigation Activity Related to Wildlife**

- i. Please describe how this application will reduce vehicle-caused wildlife mortality or will restore and maintain connectivity among terrestrial or aquatic habitats. **(10 points max.)**

[Click here to enter text.](#)

- ii. What information or data is provided to substantiate the current problem and associated environmental impacts? **(10 points max.)**

[Click here to enter text.](#)

- iii. What substantiating data or information is provided to show that the proposed application is an effective and manageable solution to the problem? **(10 points max.)**

[Click here to enter text.](#)

# Doolittle Road Culvert Replacement Shoreham, VT

## Existing Structure Data:

Span:	14 ft	Condition:	Failed
Rise:	7.25 ft	Type:	Corrugated Metal Pipe Arch
Length:	45 ft	Detour:	Available
Cover:	2 ft	Utilities:	Overhead Wire

## Proposed Structure Data:

Span:	16 ft	Temp. Bridge:	No - Assume Full Road Closure
Rise:	7 ft	Approx Vert Ht:	12 ft Stream to Finished Rd
Phased Const:	No	Approaches:	100' total length
Pedestrian Facilities:	No	Rail Face/Edge:	30 ft

## Bridge Replacement:

Bridge Cost:	[16'+3(12')]*30'*\$250/sf	=	\$390,000
Stream Diversion:	\$25,000 Est.	=	\$25,000
Wetlands Factor:	\$15,000 Est.	=	\$15,000
Contingencies	10%	=	\$43,000
		SubTotal =	\$473,000

Engineering (approx - based on MAB Fed Funded Project):	=	\$125,000
Construction Engineering (10% of Construction Value):	=	\$47,300
Right-of-Way Costs (Simple Easements Assumed):	=	\$5,000
Town Project Management Costs:	=	\$5,000
Design Contingency	5%	\$9,115
	SubTotal =	\$191,415

**Total Project Budgetary Cost Estimate = \$664,415**

Town of Shoreham

297 Main Street, Shoreham, VT 05770

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shorehamtown@shoreham.net

voice 802-897-5841 fax 802-897-2545

10 October 2023

Ross Gouin  
Vermont Agency of Transportation  
219 North Main Street  
Barre, VT 05641

Dear Mr. Gouin,

We on the Select Board for the Town of Shoreham would like to express our whole hearted support for a Storm Water Mitigation grant being submitted by our Road Forman, Jason Paquette. Addressing culvert replacement on Doolittle Road is timely and much needed, especially given the prospects of increasingly heavy rains over the next few decades. It is also part of a long-range vision, already in progress in its implementation, for highway infrastructure improvements throughout the town.

The Select Board is committed to meeting our 20% funding obligation should this grant be successful.

Thank you for your careful consideration of this proposal.

Very best regards



Peter Lynch  
Select Board Secretary  
Town of Shoreham

# Addison County Regional Planning Commission

14 Seminary Street Middlebury, VT 05753 • [www.acrpc.org](http://www.acrpc.org) • Phone: 802.388.3141

October 27, 2023

Ross Gouin  
VTrans - Municipal Assistance Section  
[ross.gouin@vermont.gov](mailto:ross.gouin@vermont.gov)

Dear Ross,

I am writing to express Addison County Regional Planning Commission's support for the Town of Shoreham's application to the SFY 2024 Environmental Mitigation Grant Program. Shoreham has demonstrated a commitment to upgrading its transportation infrastructure and I have no doubt that this project will aid in building a safer, more resilient transportation system.

Shoreham seeks to replace a structure on Doolittle Rd. that spans Prickly Ash Brook, a tributary to the Lemon Fair River. According to a recent traffic study, Doolittle Road sees 306 vehicles on an average day. The road is often used as a shortcut between VT74 and VT22A.

The current structure is undersized according to estimates from VT DEC, VTrans, and consulting engineers, and is failing. The structure does not meet current standards of the VTrans Hydraulic Model. Logs build up at the inlet restricting inflow, and the downstream channel has narrowed. A new structure would improve stream geomorphology and assist in returning Prickly Ash Brook to equilibrium conditions.

The Town of Shoreham clearly understands the importance of infrastructure asset management and it has the full support of ACRPC in these efforts. Please do not hesitate to contact me if you have any questions regarding this letter or if I may offer you any further assistance. I can be reached at [mwinslow@acrpc.org](mailto:mwinslow@acrpc.org).

Sincerely,



Mike Winslow  
Transportation Planner

Addison	Bridport	Bristol	Cornwall	Ferrisburgh	Goshen	Leicester
Lincoln	Middlebury	Monkton	New Haven	Orwell	Panton	Ripton
Salisbury	Shoreham	Starksboro	Vergennes	Waltham	Weybridge	Whiting





State of Vermont  
Structures and Hydraulics Section  
One National Life Drive  
Montpelier, Vermont 05633-5001  
vtrans.vermont.gov

[phone] 802-371-7326  
[fax] 802-828-3566  
[ttd] 800-253-0191

Agency of Transportation

**TO:** Ashley Bishop, District 5 Project Manager

**CC:** Jaron Borg, ANR River Management Engineer

**FROM:** Jeff DeGraff, Hydraulics Project Engineer

**DATE:** August 20, 2021

**SUBJECT:** Shoreham TH-15, Doolittle Road, over Prickly Ash Brook tributary to Lemon Fair River  
Site location: 1850 feet East of 22A  
Coordinates: [43.936699, -73.303912](#)

We have completed our hydraulic study for the above referenced site and offer the following for your use.

#### Hydrology

The following physical characteristics are descriptive of this drainage basin:

Drainage Area	7.34 square miles
Water Bodies and Wetlands (NLCD 2006)	18.6 %

Using the USGS hydrologic method, the following design flow rates were selected:

Annual Exceedance Probability (AEP)	Flow Rate in Cubic Feet per Second (cfs)
43 %	120
10 %	210
4 %	270 Design Flow – Local Road
2 %	320
1 %	380 Check Flow

#### Channel Morphology

The channel for this perennial stream is sinuous with an estimated local channel slope of 0.5%. Field measurements of bankfull width varied from 10 to 15 feet at a bankfull depth of 0.5 to 1.5 feet downstream of the structure.

#### Existing Conditions

The existing structure is an open bottom corrugated metal arch with a clear span of 15 feet and a clear height of 4.6 feet, providing a waterway opening of 50 square feet.

This structure results in a headwater depth of approximately 5.1 feet at 4% AEP and 7.0 feet at 1% AEP.

This structure does not meet current standards of the VTrans Hydraulic Manual (1 foot of freeboard for open bottom structures

## Replacement Recommendations

In sizing a new structure, we attempt to select structures that meet both the current VTrans hydraulic standards, state environmental standards with regard to span length and opening height, and allow for roadway grade and other site constraints.

Ledge outcrops are found immediately downstream of the crossing. If ledge is encountered, a 4-sided buried structure may be difficult to install and an open bottom structure may be desirable for constructability. Based on the above considerations and the information available, we recommend any of the following structures as a replacement at this site:

- A concrete box with an inside opening span of 15 feet and minimum height of 8.5 feet. The box invert should be buried 2 feet. This will result in a clear height of 6.5 feet above streambed, providing 97.5 square feet of waterway area. Bed retention sills should be added in the bottom of the structure. Sills should be 12 inches high at the edges of the box and 6 inches high in the center, creating a V-shape across the full width of the box. Sills should be spaced no more than 8 feet apart throughout the structure with one sill placed at both the inlet and the outlet. The structure should be filled level to the streambed with E-Stone, Type II, allowing flow to be kept above the surface, providing the conditions necessary for aquatic organism passage. This structure results in a headwater depth of 4.5 feet at 4% AEP and 5.5 feet at 1% AEP.

*Note: Any similar structure that fits the site conditions could be considered.*

To match the approximate local stream slope, the structures recommended above have been modeled with a culvert slope of 0.5%. With this slope, the channel at the outlet will need to be built up to connect E-Stone through the culvert to the upstream end. When complete, there should be no drop at the outlet.

Stone Fill, Type II should be used to protect any disturbed channel banks or roadway slopes at the structure's inlet and outlet, up to a height of at least one-foot above the top of the opening. The stone fill should not constrict the channel or structure opening. Stone fill should not constrict the channel or structure opening.

Prior to any action toward the implementation of any recommendations received from VTrans, stream type and structure size must be confirmed, and may be modified, by the VT ANR River Management Engineer to ensure compliance with state environmental standards for stream crossing structures. Regulatory authorities including the US Army Corps of Engineers may have additional concerns or requirements regarding this structure.

## General Comments

It is always desirable for a new structure to have flared wingwalls, matched into the channel banks at the inlet and outlet, to smoothly transition flow and protect the structure and roadway approaches from erosion. It is also recommended that full height concrete headwalls be constructed at the inlet and outlet. Any closed bottom structure should also be equipped with cutoff walls, extending to a depth equal to the culvert rise, up to 4 feet, or to ledge, to serve as undermining prevention. If a 3-sided structure is installed, the bottom of abutment footings should be at least 6 feet below the channel bottom, or to ledge, to prevent undermining. Abutments on piles should be designed to be free standing for a scour depth at least 6 feet below channel bottom. Any new structure should be properly aligned with the channel, span the natural channel width, and be constructed on a grade that matches the channel.

The structures recommended above have been sized with respect to hydraulic and environmental standards and do not consider debris blockage complications. To minimize maintenance and ensure constructability, it is recommended that the structure height be adequate for installation of E-Stone and passage of debris.

**The channel found just downstream of the crossing appears to be constricting flow and impeding debris passage. From a serviceability standpoint, this crossing may benefit if this channel is widened.**

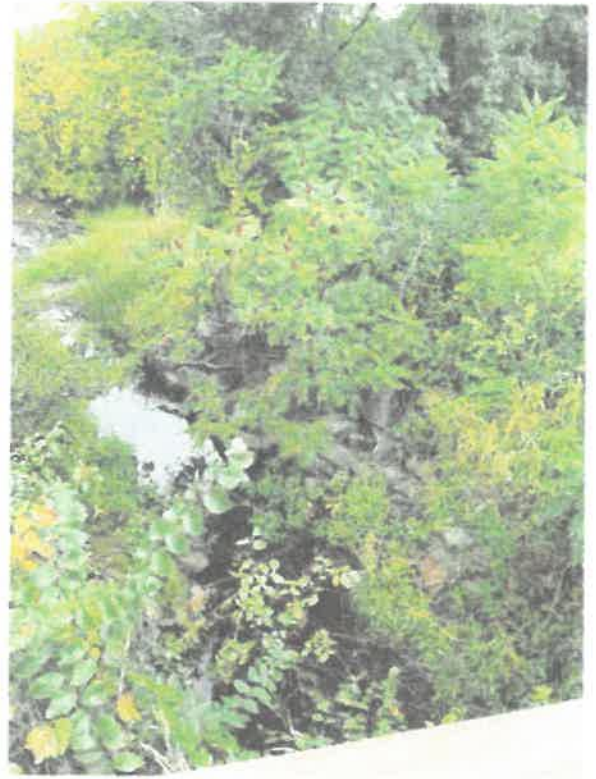
Please note that while a site visit was made, these recommendations were made without the benefit of a survey and are based on limited information. The final decision regarding replacement of this structure must comply with state regulatory standards, and should take into consideration matching natural channel conditions, roadway grade, environmental concerns, safety, and other requirements.

Please contact us if you have any questions or if we may be of further assistance.

**Town of Shoreham  
Doolittle Road  
Project Photos**



**Road Looking East**



**Looking Downstream**



**Looking Upstream**



**Upstream Culvert Inlet**

## Tyler Barney

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**From:** Borg, Jaron <Jaron.Borg@vermont.gov>  
**Sent:** Friday, September 24, 2021 3:34 PM  
**To:** Tyler Barney  
**Subject:** Re: Doolittle Road Culvert

Tyler,

Thank you for the follow up, I was out there this morning. I concur with the Vtrans memo that 15ft is the appropriate width for the crossing at this location.

Sincerely,

Jaron

Get [Outlook for Android](#)

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**From:** Tyler Barney <Barney@ottercrk.com>  
**Sent:** Friday, September 24, 2021 10:37:43 AM  
**To:** Borg, Jaron <Jaron.Borg@vermont.gov>  
**Subject:** RE: Doolittle Road Culvert

**EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.**

Jaron,

Just following up on the Doolittle Road Culvert. Did you have a chance to visit the site and confirm the bank flow width? Please let me know if you need anything else from my end.

Best Regards,

Tyler Barney, E.I.  
Staff Engineer

Otter Creek Engineering, Inc.  
P.O. Box 712  
404 East Main Street  
East Middlebury, VT 05740

Cell: (401) 835-7800  
[barney@ottercrk.com](mailto:barney@ottercrk.com)

**From:** Borg, Jaron <Jaron.Borg@vermont.gov>  
**Sent:** Tuesday, September 14, 2021 8:00 AM  
**To:** Tyler Barney <Barney@ottercrk.com>  
**Subject:** RE: Doolittle Road Culvert

Tyler,

I am not sure if you had planned on attending this afternoon but wanted to let you know that I may need to delay my visit as my vehicle repairs took longer than expected yesterday and they had to keep it over night.



Due to the coronavirus (COVID-19) we are taking additional safety measures to protect our employees and customers and are now working remotely while focusing on keeping our normal business processes fully functional. Please communicate with our staff electronically or via phone to the greatest extent possible since our processing of postal mail may be slowed during this period. **Stream Alteration Permit Applications are available here:**

<https://dec.vermont.gov/watershed/rivers/river-management#rules>

Division staff contact information can be found online here: <https://dec.vermont.gov/watershed/contacts>.

Thank you for your patience during this challenging time. We wish you and your family the best.

Jaron Borg, River Management Engineer

Watershed Management Division, Rivers Program

Vermont Department of Environmental Conservation

1 National Life Drive, Main 2

Montpelier, VT 05620-3522

802-371-8342 / [Jaron.Borg@vermont.gov](mailto:Jaron.Borg@vermont.gov)

On the Web @ <https://dec.vermont.gov/watershed/rivers>

**From:** Tyler Barney <[Barney@ottercrk.com](mailto:Barney@ottercrk.com)>

**Sent:** Monday, September 13, 2021 7:17 AM

**To:** Borg, Jaron <[Jaron.Borg@vermont.gov](mailto:Jaron.Borg@vermont.gov)>

**Subject:** RE: Doolittle Road Culvert

**EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.**

Sounds great

-Tyler

**From:** Borg, Jaron <[Jaron.Borg@vermont.gov](mailto:Jaron.Borg@vermont.gov)>

**Sent:** Friday, September 10, 2021 4:32 PM

**To:** Tyler Barney <[Barney@ottercrk.com](mailto:Barney@ottercrk.com)>

**Cc:** Brent Rakowski <[rakowski@ottercrk.com](mailto:rakowski@ottercrk.com)>

**Subject:** RE: Doolittle Road Culvert

Tyler,

Thank you for reaching out. Upon first read and an initial review the structure recommendation provided on the Hydraulics Memo seems appropriate. To confirm the sizing I have scheduled a site visit for 1:00 pm next Tuesday the 14<sup>th</sup>.

Sincerely,

Jaron

Due to the coronavirus (COVID-19) we are taking additional safety measures to protect our employees and customers and are now working remotely while focusing on keeping our normal business processes fully functional. Please communicate with our staff electronically or via phone to the greatest extent possible since our processing of postal mail may be slowed during this period. **Stream Alteration Permit Applications are available here:**

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Division staff contact information can be found online here: <https://dec.vermont.gov/watershed/contacts>.

Thank you for your patience during this challenging time. We wish you and your family the best.

Jaron Borg, River Management Engineer

Watershed Management Division, Rivers Program

Vermont Department of Environmental Conservation  
1 National Life Drive, Main 2  
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802-371-8342 / [Jaron.Borg@vermont.gov](mailto:Jaron.Borg@vermont.gov)  
On the Web @ <https://dec.vermont.gov/watershed/rivers>

**From:** Tyler Barney <[barney@ottercrk.com](mailto:barney@ottercrk.com)>  
**Sent:** Thursday, September 9, 2021 2:38 PM  
**To:** Borg, Jaron <[Jaron.Borg@vermont.gov](mailto:Jaron.Borg@vermont.gov)>  
**Cc:** Brent Rakowski <[rakowski@ottercrk.com](mailto:rakowski@ottercrk.com)>  
**Subject:** Doolittle Road Culvert

**EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.**

Jaron,

We are working on a potential project at this location and are looking for a recommendation for a bank flow width. I have attached the hydraulic report along with some photos taken at the site. Please let me know if you need anything else from my end.

Regards,

Tyler Barney E.I.  
Staff Engineer

Otter Creek Engineering, Inc.  
P.O. Box 712  
404 East Main Street  
East Middlebury, VT 05740

Cell: (401) 835-7800  
[barney@ottercrk.com](mailto:barney@ottercrk.com)



# Natural Resources Atlas

Vermont Agency of Natural Resources

vermont.gov



1: 1,626

November 28, 2023



83.0 0 42.00 83.0 Meters  
 1" = 136 Ft. 1cm = 16 Meters  
 THIS MAP IS NOT TO BE USED FOR NAVIGATION

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

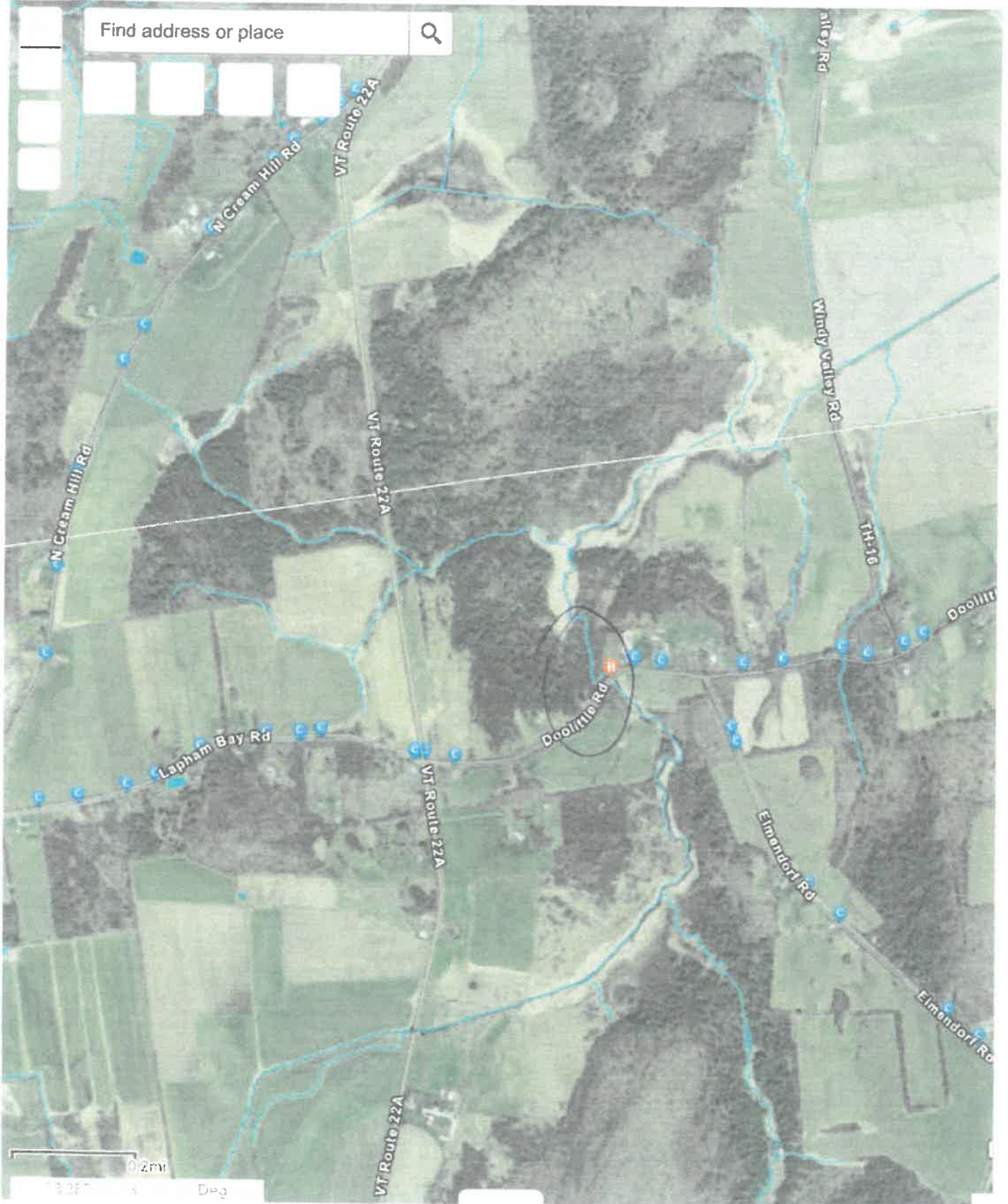
## LEGEND

- Existing stormwater point
  - Pipe Cross (not connected)
  - Catchbasin
  - Dry Well
  - Drop Inlet
  - Grate/Curb Inlet
  - Yard drain
  - Junction Box
  - Stormwater Manhole
  - Outfall
  - Culvert inlet
  - Culvert outlet
  - Pond outlet structure
  - Treatment feature (see notes)
  - Retrofit
  - Unknown Point
  - Information Point
  - <all other values>
- Existing stormwater line
  - Storm line
  - Storm line (old Sanitary line)
  - Tunnel (storm)
  - Swale
  - Footing drain
  - Under drain
  - Roof drain
  - Infiltration pipe

## NOTES

Map created using ANR's Natural Resources Atlas





DISCLAIMER: The majority of data fields in VOBCIT are optional. Use this data with caution.

Bridge Inventory Form

\*Owner Town: SHOREHAM  
 Maint Town: SHOREHAM  
 \*Date of Inspection: 7/1/2011 12:00:00 AM  
 Local ID: 03-DOOLITTLE RD  
 E911 Road Code: 18581  
 \*TH Number: 15

Last Updated: 9/28/2011  
 \*Struct Num: 990015001201181  
 Inv Town: SHOREHAM  
 \*Inspector: JTurner  
 \*Owner: Town Highwa  
 \*E911 Road Name: DOOLITTLE RD  
 Class: Class 3 Town Highwa

Bridge ID & Road Info.

\*Covered: Yes No  
 Location Description: R070213B  
 \*X Coord: 435448.063 \*Y Coord: 159915.297  
 GPS Condition: \_\_\_\_\_ Offset Dist: \_\_\_\_\_ Offset Dir: \_\_\_\_\_  
 Structure Order: \_\_\_\_\_ GPS Date: \_\_\_\_\_ GPS Hour: \_\_\_\_\_  
 Map Label: B22 E911 Address: \_\_\_\_\_  
 Location Method: Digitized from 1:5000 orthos Symbol Angle: 45  
 Feature Crossed: Type: \_\_\_\_\_ Source Org: VCGI  
 Assumed Flow: From Dir: \_\_\_\_\_ Name: \_\_\_\_\_ To Dir: \_\_\_\_\_ Flow Angle: \_\_\_\_\_

Comments: Type: Concrete footers with corrugated metal arch; outflow end mitered. Inflow: Log/debris build up restricting inflow (water seeping under and through blackage); No footer for last 30"; top of footer which anchors arch is breaking off; easterly end o

Type, Geometry & Material

*Type:	Other	Slab	Stringer/Multi-Beam/Girder	Girder/Floorbeam
	Tee Beam	Box Beam	Frame	Arch
	Stayed Girder	Mixed Types	Channel Beam	Unknown
*Material:	Other	Concrete Poured	Steel	Prestressed concrete & post-tensioned
	Timber	Masonry/arches) & Slabs	Aluminum, wrought iron, or cast iron	
	Steel Corrugated	Mixed	Unknown	

Bridge Type Comment: 12 ft arch bridge

Material Comments: \_\_\_\_\_

Dimensions: \*Span: 39 \*Height Under: \_\_\_\_\_ \*Vertical Clearance: \_\_\_\_\_  
 \*Overall Width: 14 \*Clear Width: \_\_\_\_\_ Wt. Limit: \_\_\_\_\_

Multiple Structures: No

Overall Condition

Amount Bridge Open:	*Inches: _____	*Percent Open: _____						
*Overall Condition:	Excellent	Good	Fair	Poor	Critical	Urgent	Closed	Unknown
Sub-Rating:	-1	0	1					
End Marker:	Good	Fair	Poor	N/A	Viewed			
Advance Sign Warning:	Good	Fair	Poor	N/A	Viewed			
Bridge Railing:	Good	Fair	Poor	N/A	Viewed			
Approach Railing:	Good	Fair	Poor	N/A	Viewed			
Deck:	Good	Fair	Poor	N/A	Viewed			
Beam:	Good	Fair	Poor	N/A	Viewed			
Footers:	Good	Fair	Poor	N/A	Viewed			
Retaining Wall/Pier:	Good	Fair	Poor	N/A	Viewed			
Importance:	Critical	Very Important	Somewhat	Not Important	Un-necessary			
Alignment of Stream Flow:	Sharp Bend	Mild Bend	Nat. Straight	Channelized	N/A			
Does Bridge limit road width?	Yes	No						
Effect network?	Yes	No		Is there evidence of overtopping?	Yes	No		
Condition Comments:	2 logs across inlet							

Erosion Condition:

Upstream:	Excellent	Good	Fair	Poor	Critical/Closed	Urgent	Unknown	N/A
Inches Open (inlet):	_____							
Downstream:	Excellent	Good	Fair	Poor	Critical/Closed	Urgent	Unknown	N/A
Inches Open (outlet):	_____							
Erosion Comments:	_____							

Construction Dates & Costs

Year Built/Installed: \_\_\_\_\_ Orig. Cost: \_\_\_\_\_ Repl. Cost: \_\_\_\_\_ Repair Cost: \_\_\_\_\_  
 Current Value: \_\_\_\_\_ Service Date: \_\_\_\_\_ Type of Service: \_\_\_\_\_  
 Construction Comments: \_\_\_\_\_















