



FY17 Vermont Better Roads Grant Application

Please complete this page ONCE and return with your Grant Category Application(s)

Town/Organization: Shelburne, Vermont Contact Person(s): Joe Colangelo

Address: 5420 Shelburne Road Shelburne 05482
Street Address Town Zip

Email: jcolangelo@shelburnevt.org Phone: (802) 985 - 5111

DUNS #: 99681488 Fiscal Year End Month (MM): 6

Accounting System: Automated Manual Combination

Please use the suggested documentation checklist below to ensure that all of the relevant items regarding your application have been included.

- Grant application cover sheet (Only submit one)
- Grant application form (One per category/project)
- Itemized Cost estimate for labor, equipment, and materials (see enclosed Cost Estimate Worksheet). If applicable, please break down funding by source (i.e. different grant sources)
- Project Location Map (please show location of affected water)
- Sketch of proposed erosion control measures or other management practices, including distances in feet
Also show approximate location of town/other right-of-way and/or property lines
- Photo(s) of the project area
- Letters of Support (RPC, VTTrans District Technical Staff, ANR Rivers and Streams Engineers, etc.)
- If Category C River/Road Conflict or Category D River/Stream Structure or Culvert, you must attach ANR/ACOE consultation



Vermont Better Roads Grant Program Application

Please complete one application per category and/or project you are applying for. You may make copies of the application for multiple applications per category and/or multiple categories.

Please check the Category you are applying for:

- B. Correction of a Road Related Erosion Problem and/or Stormwater Mitigation Retrofit for both gravel and paved roads
- C. Correction of a Stream Bank or Slope Related Problem
- D. Structure/culvert upgrades

Town/Organization: Shelburne, Vermont

Project Name: Brook Lane Stormwater Mitigation

Road Name: Brook Lane TH #: 35 Structure # (if applicable): _____

Road Type: Paved Uncurbed

Class 3

Watershed: Munroe Brook Watershed

Please provide a thorough description of the problem (ex. Roadway has steep slope with no ditch which is causing roadway erosion):

Eroding swale is causing excess runoff into Hullcrest Park stormwater treatment system. Efforts are needed to reduce/eliminate further erosion in the stormwater-impaired Munroe Brook Watershed.

Description of Project and how you plan to complete the work (ex. Stone line 500' of ditch by reshaping ditch and stone lining, working from the top of the project down to the bottom):

Convert 360' of eroding swale to perforated pipe with stone lining with slight swale overtop and 2 catch basins and a rain garden. This is a cost effective innovative combination of hard and soft techniques.

Expected Effects (+ & -) on water quality (ex. Erosion will be eliminated by placing the stone ditch):

Utilizing Shelburne stormwater mitigation best management practices matrix, project will lead to significant reductions in sediment and phosphorus. [The matrix decision tree is an innovative tool for determining stormwater mitigation practices and was designed to be transferable to other towns. It was produced with funding and support by Vermont Agency of Natural Resources.]



Distance from end of project to nearest water (stream, lake, or stormwater system that outlets directly to water). 50-250'

Progress to Date:

Project meeting with Lewis Creek Association (see attached meeting notes)

Is there an emergency reason this project must be completed quickly? If yes, please explain:

The project is in a residential neighborhood and adjacent to a recreational park. There is a safety issue with deep, narrow ditch leading to a culvert.

Has this project been identified through a municipal road inventory, capital budget plan, tactical basin plan, culvert inventory, or other management plan? If yes, please list which.

Yes: Lewis Creek Association has grant funding for 100' of this project

No

Please list any professionals you may have contacted for assistance with this project (ANR River

Management Engineer, Army Corps of Engineers, VTTrans District Technical staff, Basin Planner etc.):

Marty Illick, Lewis Creek Association and Jim Pease, Vermont Agency of Natural Resources coordinated and funded the swale study that identified the project and created the concept design. Milone and MacBroom completed the technical work for the swale study and the concept design. Karen Bates, Vermont Agency of Natural Resources Planner, included the project on Tactical Basin Plan Implementation List

+

Is the project located in the town "Right of Way?" Yes, No, Both (if "Both" please explain further).

Yes

Will the town road crew complete this work? Yes, No, Some (if "some" please explain further).

No. A contractor will be hired.



Describe how the grant funds will be spent and/or attach a project budget:

Actual installation with limited engineering

How do you plan to meet the required 20% match on this grant?:

by combining project with Lewis Creek Association LCBP grant-funded project

Requested Grant Amount (\$20,000 max Category B, \$40,000 max Categories C & D): \$ 24,260.00

Estimated Total Project Cost (including 20% local match): \$ 36,680.00

Estimated Completion Date: 09/30/2016

REQUIRED ATTACHMENTS:

- Itemized Cost Estimate (labor, equipment, materials)
(For assistance, call Better Backroads at 802-828-4585)
- Project Location Map
(Please show location of affected water; 1:12,000 USGS map, if possible)
- Sketch of proposed erosion control measures, including: (partial)
 - Distances (ft.)
 - Estimate of waste & borrow quantities
 - Approx. location of town/other right-of-way and/or property lines
- Photo(s) of the project area.
- Agreement for Entry and/or Deed of Easement (if project is outside Town ROW).
- If project involves stream or river/road conflict, include documentation of consultation with a River Management Engineer.
- Other appropriate supporting documents.

By signing this application I certify that all the information provided is accurate to the best of my knowledge. We will comply with all the requirements of the grant including making our books available for audit if required.

SIGNATURE OF APPLICANT: (Must be Town Administrator/Manager or Select Board Chair)

Name: Joe Colangelo

Title: Town Manager
09-11-2016



Photo 1: Looking up the Brook Lane Swale.



Photo 2: Looking down the Brook Lane swale toward Hullcrest Park.



**Lake Champlain Basin Program, LCA Pollution Prevention Grant, Start Date Feb 2016
Pre Project Planning Meeting, February 16, 2016, Shelburne Town Office**

MEETING NOTES

Attending:

Susan Moegenburg, LCA
Marty Illick, LCA
Ann Janda, Town of Shelburne
Chris Robinson, Town of Shelburne
Paul Goodrich, Town of Shelburne
Jessica Louisos, Milone & MacBroom
Roy Schiff, Milone & MacBroom

1. Related Town Fundraising (BBR)

- The Town is interested in submitting for a Better Back Roads grant to extend the piped stormwater conveyance from the end of the LCA project up to the end of Brook Lane, where it turns into Woodbine Road. Runoff is collected from Woodbine Road, Locally on Brook Lane, and drainage down from Juniper Ridge which is picked up in a swale that runs to the top of Brook Lane from the West.
 - Total Length of Brook Lane = 360'
 - LCA project Length = 100' (Federal LCBP grant in hand)
 - Better Back Roads = 260' (State Grant Due April 15)
- Town is interested in having the pipe system, with a slight swale overtop for local drainage that is shallow enough to be mowed. They also want to put in catch basins to intercept water from the back yards (think 2 would be needed) and home perimeter drains.
- Paul Goodrich got an estimate from Island Excavating
 - \$75 / LF to install only
 - \$13/ LF for Town to provide the pipe
 - \$88 / LF total for materials and installation
 - Full Length = \$31,680 + 2 catch basins at \$2,000 + hauling + topsoil + plants/ seed
- Discussed location of water line. Chris had talked to their water person who thinks it is located under our project area. We need to coordinate with Rick Lewis to get this on the plants. He thinks it is 6-7 feet deep.
- Looked at Swale Screening results on map. Brook Lane is both "red" and "yellow". Gave Paul a full size map of the town for his future reference. Jessica and Roy to check the "Stormwater Grass-Lined Channel versus Pipe Screening Matrix" for the upper part of Brook Lane.
- Town suggested starting the project at the existing manhole at the corner of Pinehurst Drive. Existing plans show the project tying into the solid pipe that extends out of the manhole already. This would extend the LCA project by 30 feet. There was general agreement that this is a good idea. This could possibly happen within the existing grant depending on the outcome of bids, otherwise would need to be covered by Better Back Roads.
- Ann is the best contact for the project at the Town. We should just continue to cc the whole list with updates. Chris will pass on information to Paul.

2. Planting Plan

- General interest in keeping maintenance low.
- The shallow swales over the infiltration pipes can have lawn planted that can be mowed.
- The raingarden portion of the project is ~ 30 feet long.
- There is no capacity at the Town to maintain this as an ornamental garden.
- Discussed possibly using grasses and wildflowers that would need to be cut down (brushhogged or string-trimmed) one time per year in the fall. At that time the cut plants and accumulated leaves could be raked out and check the inlet for blockages. Paul suggested that this is something that the Highway Department could do.
- Roy and Jessica to check with adjacent landowner Sally Thomas about the plantings after meeting (see notes below from this visit).

3. Maintenance Plan

Include notes on care for first year, including no cutting to allow plants to establish.

4. Contractor Qualifications

- The Town will hire a contractor. It is most efficient to do the entire street at once, so the Town will wait until they hear about the Better Back Roads grants before reaching out to potential contractors.
- At that point, the Town will put out to bid with a selected list.
- Target July construction.

5. Project Schedule (see tasks below)

- Addressed in previous discussion.

6. Plan to Identify Future Project Sites including schedule for Site Visits

- Jessica, Paul, Chris will coordinate a trip to happen during construction at Brook Lane to look at other sites.
- We will use screen results map as a guide.
- Paul provided initial list of problem sites: Hullcrest, Brook Lane, Woodbine, Spear Street South end, Mt. Philo Road, School Street neighborhood.

Following Meeting with Group, Jessica and Roy visited the project site:

- Looked at the entire length of Brook Lane to apply the screening matrix to the site. See attached results on screen matrix sheet. Results indicate that an extension of the infiltration trench along the length of Brook Lane is appropriate.
- During the proposed extension of the project, what does the Town plan to do at the driveway crossings?
- Met with Sally Thomas the adjacent landowner.
 - She is pleased the project is going forward. She has concerns about the safety of the existing ditch and the amount of erosion occurring.
 - She cannot take on more maintenance herself.
 - She is ok with the raingarden area being “messy” and having a mix of grasses, wildflowers, and weeds.
 - She likes the option of having the Town brushhog and rake out the area once per year.

Project Description as provided in the Agenda for the Meeting in the Shelburne Town Office:

Title: Stormwater Mitigation in the Munroe Brook Watershed

Project Manager: Susan Moegenburg

Project Location: The installation project will occur at a Brook Lane location in the Munroe Brook watershed in Shelburne Vermont.

Project Summary: This project will install a stormwater best management practice with maintenance plan (convert an eroding swale to a perforated pipe with an infiltration trench and a rain garden) for pollution prevention and flood resiliency in the Brook Lane right of way in Shelburne, Vermont, a strategic mitigation location in the stormwater-impaired Munroe Brook watershed (VT ANR Tactical Basin Plan). It will further use an existing screening matrix to identify additional priority sites in Shelburne for similar stormwater BMP installations. This project outcome will be the installation of a stormwater BMP with maintenance plan at Brook Lane in Shelburne for improved pollution prevention and flood resilience, designed by Milone & MacBroom that has been endorsed by the VT DEC, LCA's Flood Resiliency Project "Ahead of the Storm", and Shelburne's Road Manager, Town Manager and Water Resources Manager.

The LCBP Opportunities for Action states a high priority for implementing projects that "focus on phosphorus reduction." Major sources of phosphorus include urban stormwater (18%) and stream instability (20%). The badly eroding grass swale that will be replaced in this project is a source of both particulate and dissolved phosphorus, due to the sediment that originates on the local eroding swale banks and passes through from upstream runoff. While many non-point sources of phosphorus are difficult to address, this project offers the opportunity to do so in a relatively easy and cost-effective manner. Moreover, the installation of a rain garden will provide habitat for plants, pollinators and other wildlife and enhance the aesthetic quality of the roadside.

The measurable outcome from this project will be 100 feet of a new perforated pipe and infiltration trench, and a 30 x 10 ft rain garden and a maintenance plan. A further outcome will be a list of other appropriate sites at which to implement similar stormwater BMPs.

Tasks:

Task 1. Admin and Publicity. Hold meeting to coordinate project and agree on plan to identify additional installation sites; Press release. By Dec. 2016

Task 2. Preconstruction planning and organization. Coordinate with Town, adjacent landowners, and hire contractor. Prepare pre-project meeting notes with maintenance plan and final planting plan. By May 2016

Task 3. Installation of the AOTS demonstration practice that addresses eroding swale, upstream drainage area condition and new weather patterns. June- Oct. 2016

Task 4. Identification of future project sites and evaluation of transferability of installed practice with village staff. Prepare a summary report with confirmed list of possible future project sites. By Nov. 2016

Task 5. Final report. Report all project results including documentation of possible future projects. By Dec 2016

Budget:

<i>Line Item</i>	Task 1	Task 2	Task 3	Task 4	Task 5	<i>Line Item Totals for All LCBP funded Tasks</i>	Non-Federal Match Town Staff LCA Director
Travel	\$0	\$20	\$30	\$10	\$0	\$60	
Professional Services	\$440	\$1,332	\$14,228	\$419	\$1,923	\$18,342	\$707
Total Direct	\$440	\$1,352	\$14,258	\$429	\$1,923	\$18,402	\$707

Travel:

MMI- 32 miles @ .575 = ~\$20 (Task 2), 48 miles @ .575 = ~\$30 (Task 3), 16 miles @ .575 = ~\$10 (Task 4)

Professional Services:

Up to 2 meetings with Town staff to plan project (Task 1) – MI 4 hrs @ \$50, SM 6 hrs @ \$40/hr. Coordinate with Town and hire contractor (Task 2) - SM 4 hrs @ \$40, RS 2 hrs @ \$134, JL 8 @ \$113.

Contractor install BMP (Task 3) \$12,420 for materials and labor, JL 16 hrs @ \$113.

Identification of future project sites (Task 4) – SM 2 hrs @ \$40, JL 3 hrs @ \$113.

Final report (Task 5) 8 hrs @ \$40, RS 1 hr @ \$134, JL 13 hrs @ \$113.

In-kind:

Town staff – Project planning - \$459.75 (Task 1,2,4) 1 hr @ \$58.73, 1 hr @ \$47.42, 1 hr @ \$47.12.

Construction oversight (Task 3) 3 hrs @ \$47.12.

LCA Director- Project planning- 4hrs@\$50=\$200 (Task 1)

1866 - LCBP Section -

Stormwater Grass-Lined Channel versus Pipe Screening Matrix
 Developed as part of the Shelburne Stormwater Mitigation BMP Design and Implementation Project
 11/2/2012

	Best Management Practice (BMP) Spectrum									
	Grass-Lined Channel							Pipe		
TOPOGRAPHY	1	2	3	4	5	6	7	8	9	10
Ground slope (%)*	0.5-1		3	2	4	3	4	5		
DA (Acres)	0-2				4		5	10	15	
SOILS	A,B			C				D		
Texture	Gravel	Sand	Silty Gravel		Silty Sand		Clayey Sand or Gravel		Silt or Clay	
Permeability	High				Moderate				Low	
Depth to water table (ft)	>2		2			1.5		1	<1	<1
Infiltration (in/hr)	3		2		1					<1
SITE CHARACTERISTICS										
Space for side slopes (H:1)	≥ 5	4	3		2				< 2	
Space for Bottom Width (ft)	4-8	2-4				1.5		≤ 1		
Vegetation / Root Mass†	Dense				Moderate				Sparse or Eroded	
HYDRAULICS‡										
Flow Capacity	CPV		WCQV							
Flow Depth (feet)	1		1.5			2				> 3
Flow velocity (fps)	0-1		2-3		4-5					> 5
Retention time (min)€	>10	10			8					< 8
	1	2	3	4	5	6	7	8	9	10

Infiltration / Perforated pipe is used in the design

- Notes**
- * Evaluate effective slope that considers presence of check dams. Check dams recommended in grass-lined channels for slopes larger than 2%.
 - † Soil amendments can be used to improve permeability of slow-draining soils.
 - ‡ Evaluate existing and potential vegetative cover and root mass density in grass-lined channel.
 - § Assess by field observations or hydraulic calculations (i.e., Manning's equation, nomographs, or modeling) needed to design grass-lined channel.
 - € Time of localized ponding prior to infiltration or downstream flow.
- (See back of page for references.)

** GIS screen was done also*

1929 - upper section of Brook Lane

Stormwater Grass-Lined Channel versus Pipe Screening Matrix
 Developed as part of the Shelburne Stormwater Mitigation BMP Design and Implementation Project
 11/2/2012

	Best Management Practice (BMP) Spectrum									
	Grass-Lined Channel							Pipe		
	1	2	3	4	5	6	7	8	9	10
TOPOGRAPHY	1	2	3	4	5	6	7	8	9	10
Ground slope (%)*	0.5-1			2						
DA (Acres)	0-2		3		4		4	5	10	15
SOILST										
HSG	A,B					C			D	
Texture	Gravel	Sand	Silty Gravel		Silty Sand		Clayey Sand or Gravel			Silt or Clay
Permeability	High				Moderate					Low
Depth to water table (ft)	>2		2			1.5		1		<1
Infiltration (in/hr)	3		2		1					<1
SITE CHARACTERISTICS										
Space for Side slopes (H:1)	≥ 5	4	3		2				< 2	
Space for Bottom Width (ft)	4-8	2-4								
Vegetation / Root Mass†	Dense				Moderate					Sparse or Eroded
HYDRAULICS‡										
Flow Capacity	CPV		WQV							
Flow Depth (feet)	1		1.5			2				>3
Flow velocity (fps)	0-1		2-3	4-5						>5
Retention time (min)€	>10	10			8					<8

OK to extend
 infiltration trench/perforated pipe

- Notes
- * Evaluate effective slope that considers presence of check dams. Check dams recommended in grass-lined channels for slopes larger than 2%.
 - † Soil amendments can be used to improve permeability of slow-draining soils.
 - ‡ Evaluate existing and potential vegetative cover and root mass density in grass-lined channel.
 - § Assess by field observations or hydraulic calculations (i.e., Manning's equation, nomographs, or modeling) needed to design grass-lined channel.
 - € Time of localized ponding prior to infiltration or downstream flow.
- (See back of page for references.)

1809 - middle section of Brook Lane

Stormwater Grass-lined Channel versus Pipe Screening Matrix Developed as part of the Shelburne Stormwater Mitigation BMP Design and Implementation Project 11/2/2012

	Best Management Practice (BMP) Spectrum									
	Grass-lined Channel							Pipe		
	1	2	3	4	5	6	7	8	9	10
TOPOGRAPHY	0.5-1			2						
Ground slope (%)*	2.1%									
DA (Acres)	0-2		3		4	3	4	5	10	15
SOILS†	A, B					C				
HSG	Gravel	Sand	Silty Gravel		Silty Sand		Clayey Sand or Gravel		D	
Texture	High			Moderate					Silt or Clay	Low
Permeability	>2		2		Moderate	1.5		1	<1	<1
Depth to water table (ft)	3		2		1					<1
Infiltration (in/hr)										
SITE CHARACTERISTICS										
Space for Side slopes (H:1)	≥5	4	3		2				<2	
Space for Bottom Width (ft)	4-8	2-4				1.5			≤1	
Vegetation / Root Mass‡	Dense				Moderate					Sparse or Eroded
HYDRAULICS‡										
Flow Capacity	CPV		WOV							
Flow Depth (feet)	1		1.5			2				>3
Flow velocity (fps)	0-1		2-3	4-5						>5
Retention time (min)€	>10	10		8						<8
	1	2	3	4	5	6	7	8	9	10

Op to extend infiltration trench/perforated pipe

- Notes**
- *Evaluate effective slope that considers presence of check dams. Check dams recommended in grass-lined channels for slopes larger than 2%.
 - †Soil amendments can be used to improve permeability of slow-draining soils.
 - ‡Evaluate existing and potential vegetative cover and root mass density in grass-lined channel.
 - §Assess by field observations or hydraulic calculations (i.e., Manning's equation, nomographs, or modeling) needed to design grass-lined channel.
 - €Time of localized ponding prior to infiltration or downstream flow.
- (See back of page for references.)





Vermont Department of Environmental Conservation

Watershed Management Division
1 National Life Drive, Main 2
Montpelier VT 05620-3522
www.watershedmanagement.vt.gov

Agency of Natural Resources

[phone] 802-828-1535

[fax] 802-828-1544

March 9, 2016

Ann Janda
Town of Shelburne
P.O. Box 88
5420 Shelburne Road
Shelburne, VT 05482

Ann:

The Vermont Department of Environmental Conservation Clean Water Initiative Program fully supports the Town's proposal to install the proposed grass swale/infiltration gallery at Brook Lane in the Munroe Brook watershed of Shelburne. This project would be an excellent demonstration to the residents of the town and other Lake Champlain basin communities of a water quality friendly alternative to traditional curb and catchbasin stormwater management. In Chittenden County alone we know that there are thousands of feet of roadside ditches, little of which has any type of stormwater treatment, and many of these ditches discharge to waters that do not meet Vermont water quality standards for sediment, phosphorus and bacteria.

Sincerely,

A handwritten signature in black ink that reads "James Pease". The signature is written in a cursive, slightly slanted style.

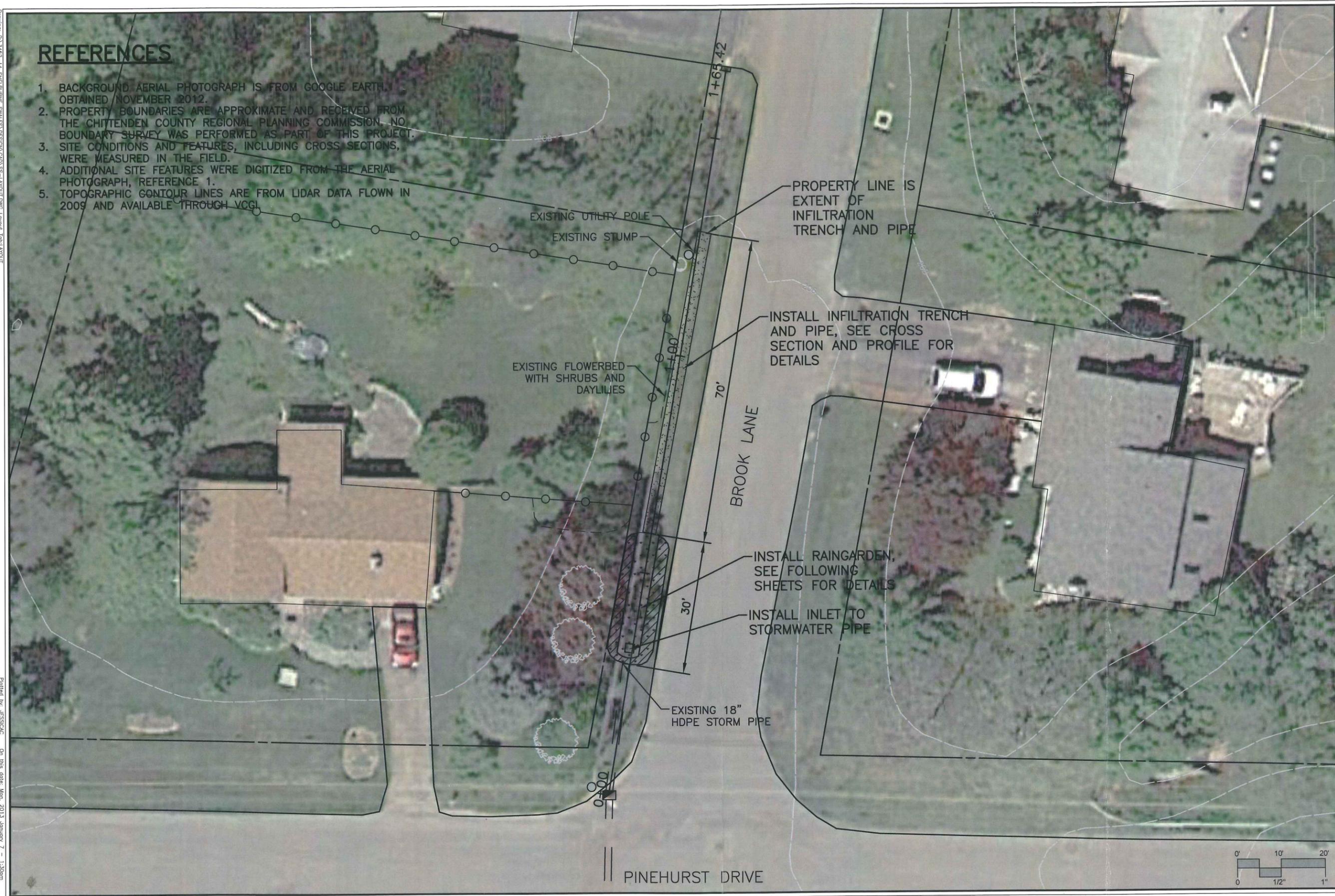
James Pease
Vermont Department of Environmental Conservation
Watershed Management Division
1 National Life Drive
Main Building, 2nd Floor
Montpelier, VT 05620-3522

Jim.Pease@vermont.gov
(802) 490-6116

Drawing: P:\3452-14_SHELBURNE_SMAILES\DESIGN\CD\SS-LAYOUT\DWG_LAYOUT_TAS\LAYOUT

REFERENCES

1. BACKGROUND AERIAL PHOTOGRAPH IS FROM GOOGLE EARTH, OBTAINED NOVEMBER 2012.
2. PROPERTY BOUNDARIES ARE APPROXIMATE AND RECEIVED FROM THE CHITTENDEN COUNTY REGIONAL PLANNING COMMISSION. NO BOUNDARY SURVEY WAS PERFORMED AS PART OF THIS PROJECT.
3. SITE CONDITIONS AND FEATURES, INCLUDING CROSS SECTIONS, WERE MEASURED IN THE FIELD.
4. ADDITIONAL SITE FEATURES WERE DIGITIZED FROM THE AERIAL PHOTOGRAPH, REFERENCE 1.
5. TOPOGRAPHIC CONTOUR LINES ARE FROM LIDAR DATA FLOWN IN 2009 AND AVAILABLE THROUGH VCGI.



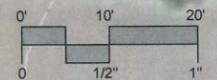
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 1 South Main Street, 2nd Floor
 Waterbury, Vermont 05676
 (802) 882-8335 Fax (802) 882-8346
 www.miloneandmacbroom.com

REVISIONS

PROPOSED LAYOUT
 SHELBURNE STORMWATER MITIGATION BMP
 DESIGN AND IMPLEMENTATION PROJECT
 BROOK LANE
 SHELBURNE, VERMONT
 PRELIMINARY DESIGN

JCL DESIGNED
 JCL DRAWN
 RKS CHECKED
 SCALE 1"=20'
 DATE JAN. 2013
 PROJECT NO 3452-14

SHEET NO	02
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Printed by: JESSICA On this date: Mon, 2013 January 7 - 1:30pm

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Vermont Better Roads Grant Program Application

Please complete one application per category and/or project you are applying for. You may make copies of the application for multiple applications per category and/or multiple categories.

Please check the Category you are applying for:

- B. Correction of a Road Related Erosion Problem and/or Stormwater Mitigation Retrofit for both gravel and paved roads
- C. Correction of a Stream Bank or Slope Related Problem
- D. Structure/culvert upgrades

Town/Organization: Shelburne, Vermont

Project Name: Juniper Ridge Culvert Replacement

Road Name: Juniper Ridge TH #: 34 Structure # (if applicable): _____

Road Type: Paved Uncurbed
Class 3

Watershed: Monroe Brook Watershed

Please provide a thorough description of the problem (ex. Roadway has steep slope with no ditch which is causing roadway erosion):

Storm drainage on Juniper Ridge is failing and overflowing. This failure is contributing to problems at Brook Lane and should be mitigated.

Description of Project and how you plan to complete the work (ex. Stone line 500' of ditch by reshaping ditch and stone lining, working from the top of the project down to the bottom):

Replace 485' of culverts. Switch from 15" steel to 18" plastic pipe.

Expected Effects (+ & -) on water quality (ex. Erosion will be eliminated by placing the stone ditch):

Erosion will be mitigated by fully functioning culverts. We believe this will help solve the issue at Brook Lane and will lead to moderate reductions in sediment going to state stormwater pond near Kinney Drug Store on Executive Drive.



Distance from end of project to nearest water (stream, lake, or stormwater system that outlets directly to water). 50-250'

Progress to Date:

Identified location as priority issue

Is there an emergency reason this project must be completed quickly? If yes, please explain:

Some stormwater is backing up into homeowners' cellars.

Has this project been identified through a municipal road inventory, capital budget plan, tactical basin plan, culvert inventory, or other management plan? If yes, please list which.

Yes: Culvert inventory

No

Please list any professionals you may have contacted for assistance with this project (ANR River Management Engineer, Army Corps of Engineers, VTrans District Technical staff, Basin Planner etc.):

Is the project located in the town "Right of Way?" Yes, No, Both (if "Both" please explain further).

Yes

Will the town road crew complete this work? Yes, No, Some (if "some" please explain further).

No



Describe how the grant funds will be spent and/or attach a project budget:
Actual installation

How do you plan to meet the required 20% match on this grant?:
Highway budget

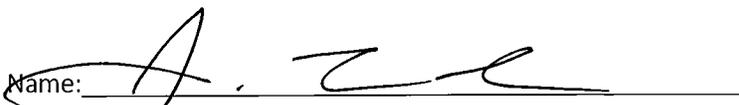
Requested Grant Amount (\$20,000 max Category B, \$40,000 max Categories C & D): \$ 40,000.00
Estimated Total Project Cost (including 20% local match): \$ 52,607.00
Estimated Completion Date: 09/30/2016

REQUIRED ATTACHMENTS:

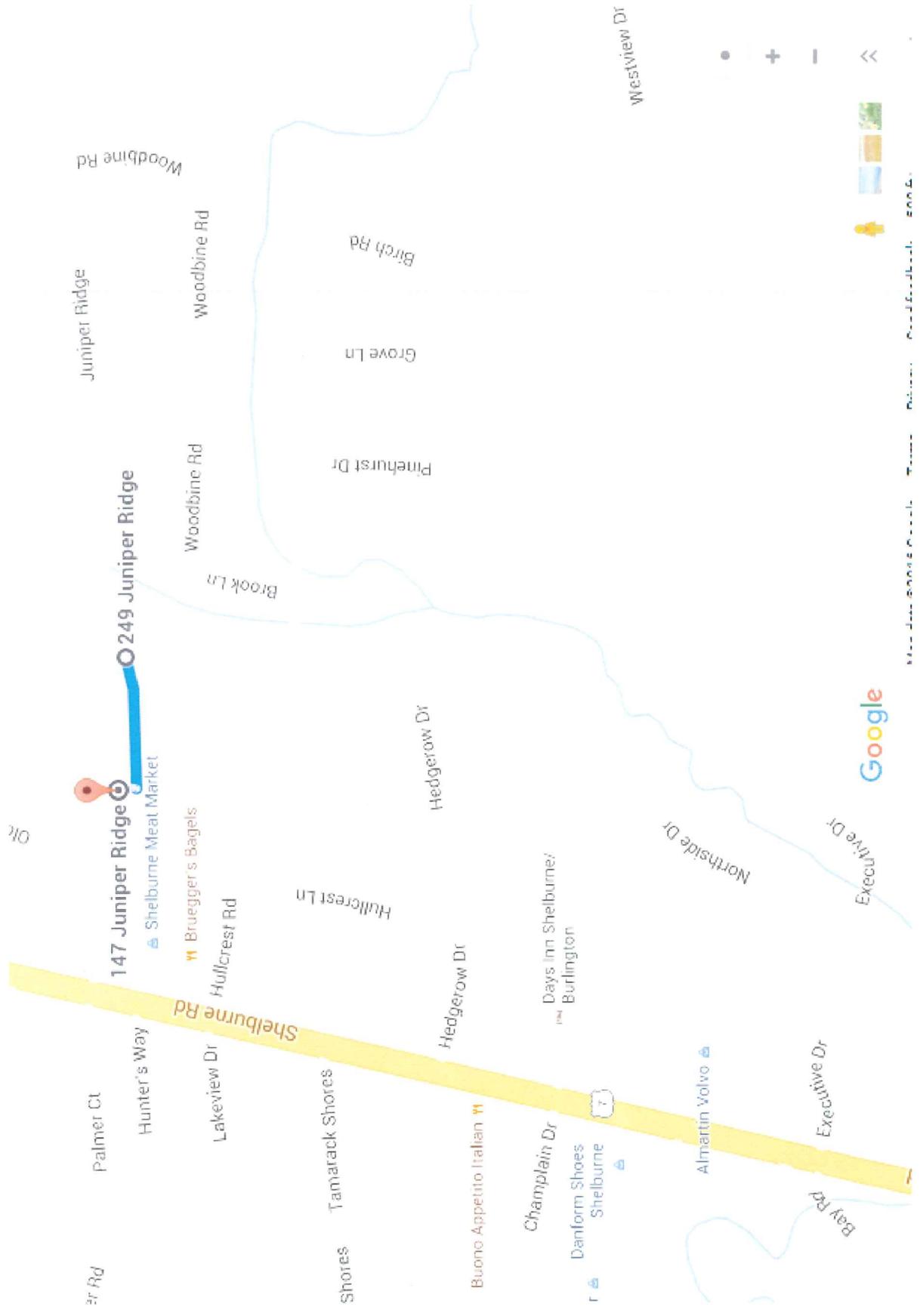
- Itemized Cost Estimate (labor, equipment, materials)
(For assistance, call Better Backroads at 802-828-4585)
- Project Location Map
(Please show location of affected water; 1:12,000 USGS map, if possible)
- Sketch of proposed erosion control measures, including:
 - Distances (ft.)
 - Estimate of waste & borrow quantities
 - Approx. location of town/other right-of-way and/or property lines
- Photo(s) of the project area.
- Agreement for Entry and/or Deed of Easement (if project is outside Town ROW).
- If project involves stream or river/road conflict, include documentation of consultation with a River Management Engineer.
- Other appropriate supporting documents.

By signing this application I certify that all the information provided is accurate to the best of my knowledge. We will comply with all the requirements of the grant including making our books available for audit if required.

SIGNATURE OF APPLICANT: (Must be Town Administrator/Manager or Select Board Chair)

Name: 
JOE COLANGELO

Title: Town Manager



147 Juniper Ridge

249 Juniper Ridge

Shelburne Meat Market

Bruegger's Bagels

Days Inn Shelburne/Burlington

Danform Shoes Shelburne

Almartin Volvo

Palmer Ct

Hunter's Way

Lakeview Dr

Hullcrest Rd

Tamatack Shores

Hedgerow Dr

Shores

Buono Appetito Italian

Champlain Dr

Danform Shoes Shelburne

Almartin Volvo

Executive Dr

Bay Rd

Executive Dr

Palmer Ct

Hunter's Way

Lakeview Dr

Hullcrest Rd

Tamatack Shores

Shores

Buono Appetito Italian

Champlain Dr

Danform Shoes Shelburne

Almartin Volvo

Executive Dr

Bay Rd

Executive Dr

Palmer Ct

Hunter's Way

Lakeview Dr

Hullcrest Rd

Tamatack Shores

Shores

Buono Appetito Italian

Champlain Dr

Danform Shoes Shelburne

Almartin Volvo

Executive Dr

Bay Rd

Executive Dr

Palmer Ct

Hunter's Way

Lakeview Dr

Hullcrest Rd

Tamatack Shores

Shores

Buono Appetito Italian

Champlain Dr

Danform Shoes Shelburne

Almartin Volvo

Executive Dr

Bay Rd

Executive Dr

Palmer Ct

Hunter's Way

Lakeview Dr

Hullcrest Rd

Tamatack Shores

Shores

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Champlain Dr

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Hullcrest Rd

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Champlain Dr

Danform Shoes Shelburne

Almartin Volvo

Executive Dr

Bay Rd

Executive Dr

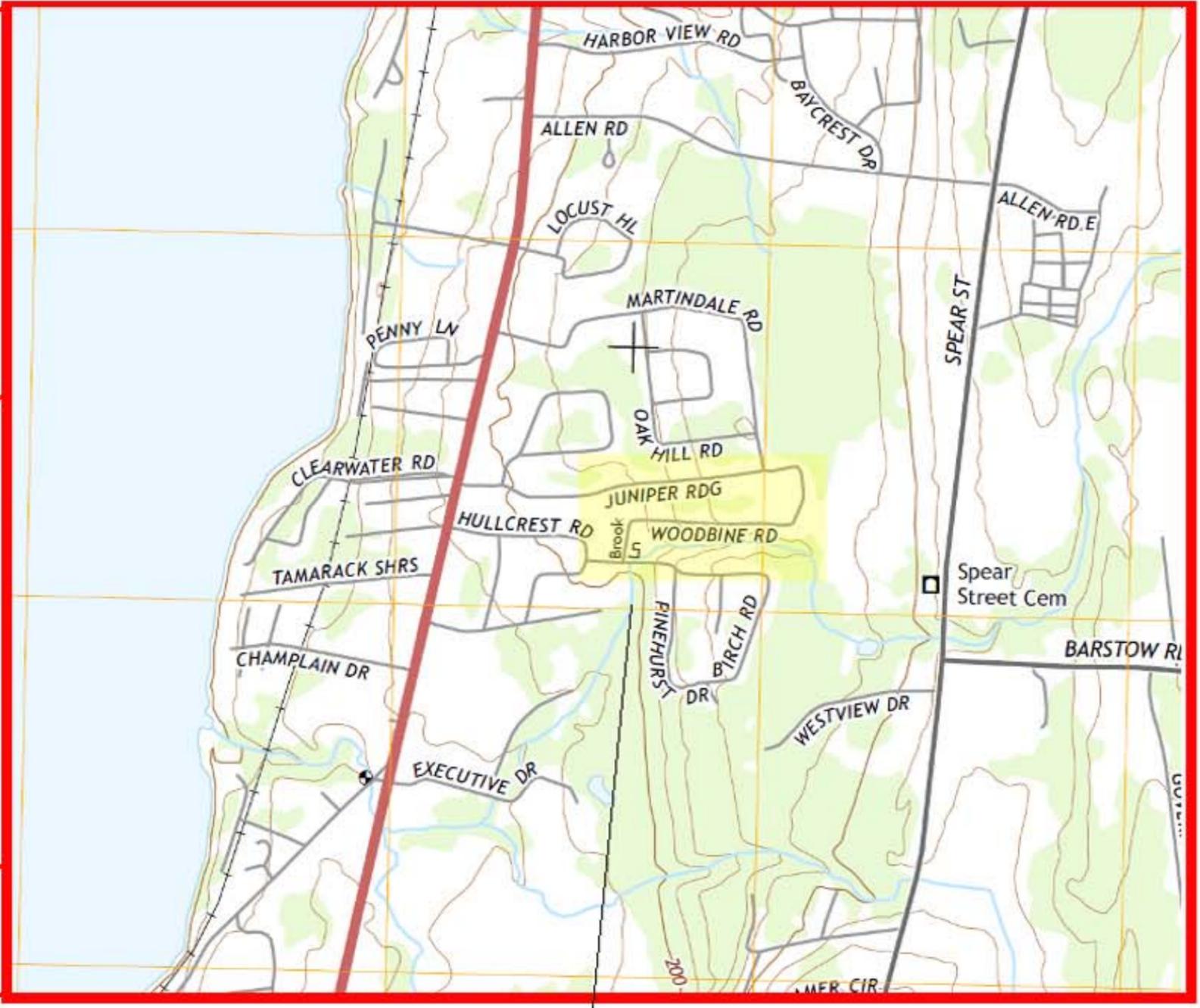
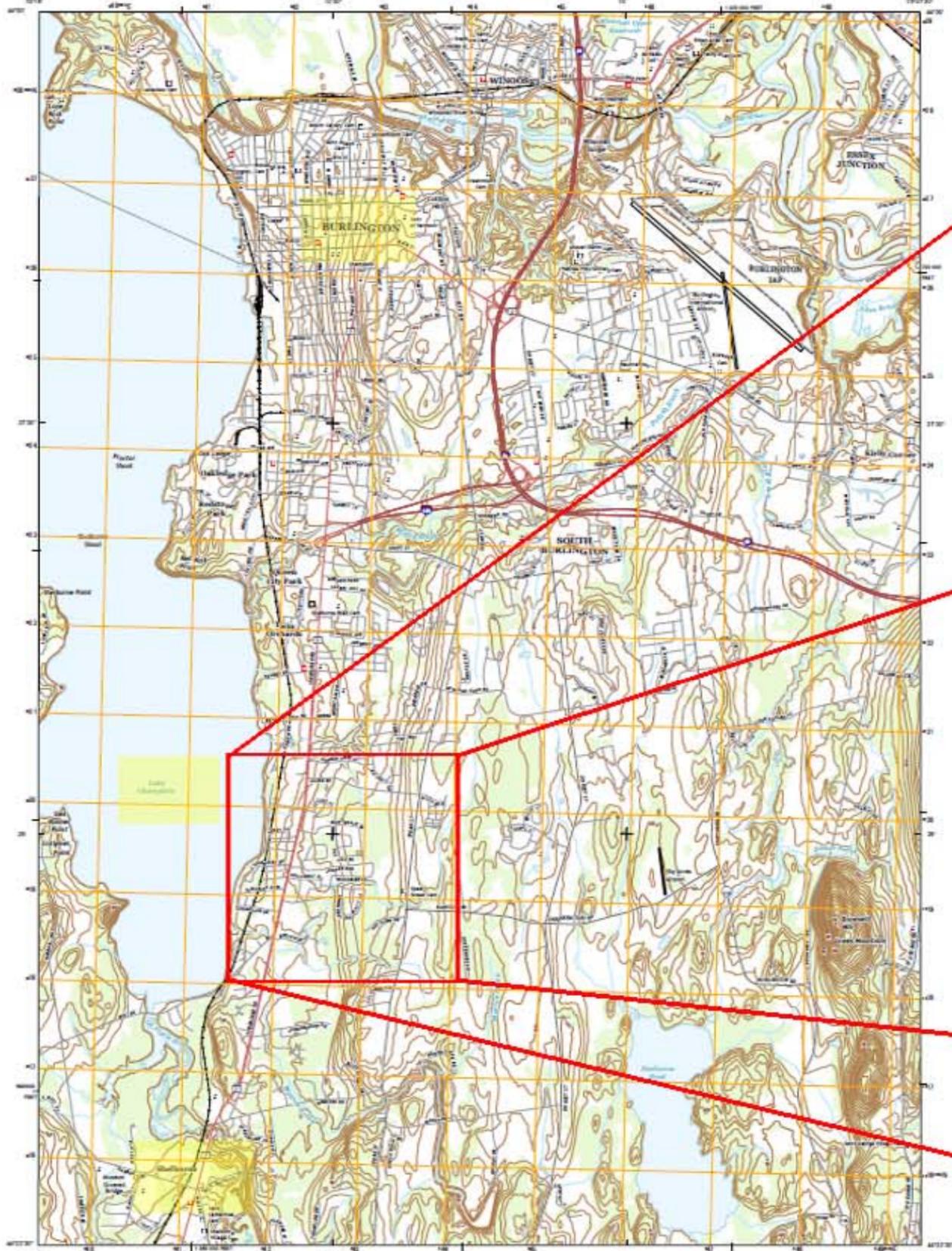
Palmer Ct

Hunter's Way

Lakeview Dr

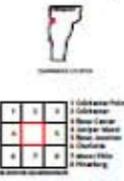
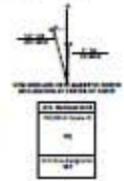
Hullcrest Rd





Monroe (Munroe) Brook, North Branch

Produced by the United States Geological Survey
 North American Datum of 1983 (NAD83)
 North Carolina System of 1983 (NCS83)
 1:250,000 Scale
 7.5-Minute Series
 The map is a legal document. Accuracy may be
 guaranteed for use, therefore, please consult the
 accompanying information for more details.



ROAD CLASSIFICATION
 Primary Road
 Secondary Road
 Tertiary Road
 Local Road
 Private Road
 Unimproved Road
 Railroad
 Pipeline
 Canal
 Ditch
 Stream
 Brook
 Lake
 Pond
 Reservoir
 Bay
 Sound
 Strait
 Inlet
 Shoal
 Reef
 Bank
 Spit
 Point
 Headland
 Peninsula
 Island
 Shoal
 Reef
 Bank
 Spit
 Point
 Headland
 Peninsula
 Island