



Vermont Department of Environmental Conservation

Agency of Natural Resources

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

[phone] 802-828-1535
[fax] 802-828-1544

AUTHORIZATION TO CONDUCT STREAM ALTERATION ACTIVITIES

Pursuant to Section C.2.2 of the VT Stream Alteration General Permit (Reporting activities not requiring an application)

Project Number: SA-06- 09 -2015

Applicant Name: Bristol Fire Department

Mailing Address: P.O. Box 249, Bristol, VT 05606 Phone: (802) 989-4330

Project Location Lower Hatch Rd, Bristol ; 441040, -730752 Email: Kevinlarose@gmail.com

The Secretary of the Vermont Agency of Natural Resources (VT ANR) has determined that:

1. This project authorizes installation of a dry hydrant on a small on-line private pond. To include up to 40 yd³ of sediment excavation
2. The proposed activity is eligible for coverage under the VT ANR Stream Alteration General Permit.
3. The proposed activity will meet the terms and conditions of the General Permit provided:
 - a) The project will be completed and approved as shown on the plan dated 07/08/2014, prepared by Tray Dore, and approved by the Vermont Agency of Natural Resources.
 - b) The project will not adversely affect the public safety by increasing flood hazards.
 - c) The project will not significantly damage fish life or wildlife.
 - d) The project will not significantly damage the rights of riparian owners.
 - e) The project will not obstruct the movement of aquatic life indigenous to the waterbody beyond the actual duration of construction.
 - f) The project is conducted in a manner which minimizes or avoids any discharge of sediment or other pollutants to surface waters in violation of the VT Water Quality Standards.
 - g) The ANR River Management Engineer is notified by phone or email when construction begins and when the project is complete.
 - h) In-stream working dates for all GP activities are from July 1st through October 1st; any in-stream work outside these dates will require an Individual Stream Alteration Permit authorization by the River Management Engineer.
 - i) This authorization has been posted for three days public comment. This authorization constitutes final approval.

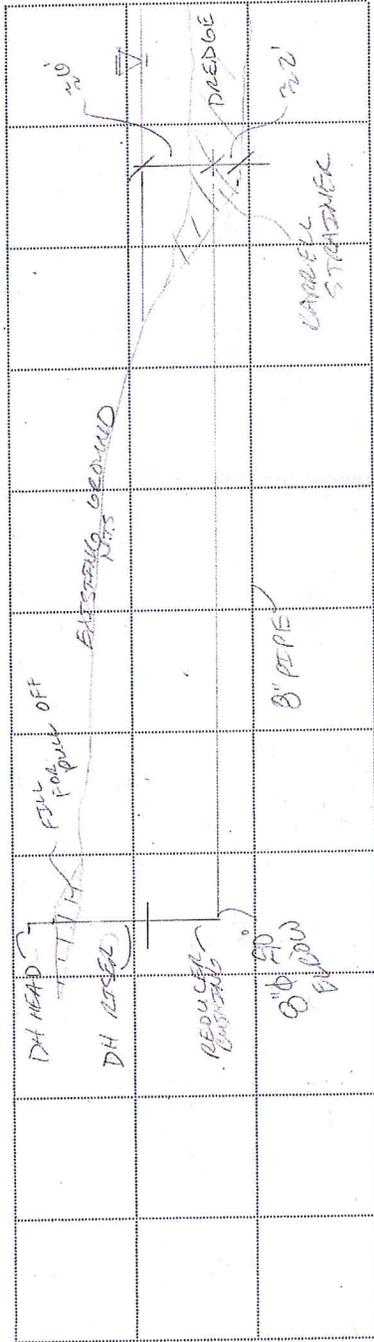
If there are any changes in the project plan or deviation in construction from the plan, the Permittee must notify the River Management Engineer immediately.

If the project is constructed as you have described, as shown on the above referenced approved plans and according to the above conditions, there is no reason to expect any violation of Vermont Water Quality Standards.

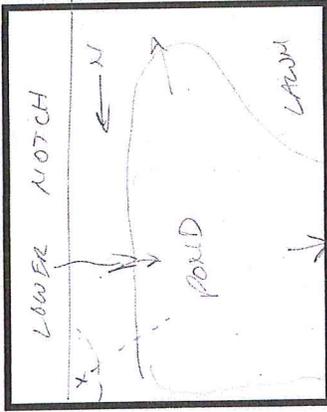
Signed this 29th day of April, 2015
David K. Mears, Commissioner
Department of Environmental Conservation

This permit expires October 1, 2015.

by: 
Jaron Borg, River Management Engineer



Scale: 1" = 10'



Site Map
Not To Scale

Design Flow (GPM): 1200

Approx. Water Volume:

Summer: 86,000

Winter: 43,000

See Attached Location/GIS Map

Dry hydrant installations on a river or stream should ALWAYS: 1) Make sure the construction work is clean & neat. 2) If needed only use clean stone fill. 3) All exposed soil shall be seeded and mulched immediately upon project completion. 4) While working in shallow streams use a hay bale or sand bag cofferdam system. 5) In-stream construction is generally limited to June 1st to October 1st (and maybe more restrictive in specific streams). 6) Permitting is required for any in-stream work. Municipalities shall apply for the appropriate permit by contacting the Vermont ANR River Management Stream Alteration Engineer in your area.

Bill Of Materials

#	Description	No.	Unit	Unit Cost	Total
	SEE ATTACHED				
	Miscellaneous Excavation				\$5,998.10
	Total				\$5,998.10

Notes

- This design does NOT certify your rural water supply site for a 2% (50 year return period) drought condition. For the Insurance Services Office to give credit for this water supply it must meet the Suction Supply requirements of the Fire Suppression Rating Schedule as to accessibility, availability, needed fire flow, duration, pumper capacity and distances. The 2% drought volume must be determined by a Vermont registered /licensed professional engineer, hydrologist, or similarly qualified person.

APPROVAL
WATERSHED MANAGEMENT DIVISION
DATE: 04/29/2015
BY: [Signature]
THIS APPROVAL IS SUBJECT TO THE TERMS AND CONDITIONS OF STREAM ALTERATION PERMIT # 51-05-09-2015 ISSUED HEREWITH

CRISTAL 2014 RFP NEW
VINCELETTE
VERMONT RURAL FIRE PROTECTION TASK FORCE
Vermont Association of Conservation Districts (VACD)
Rural Fire Protection Program - Randolph, VT 05060
Drawn by: TROY DARE
Reviewed by:
Date: 10/23/14 Sheet 1/5

Rural Water Supply (RWS) Site Assessment Form

(Revised 5/9/14)

Date: 7/8/14 Town: Bristol County: ADD Fire Department: BRISTOL
 Site Name: VANCELETTE Site ID Number: BRISTOL2014NEW
 Approx. Access/Standpipe Location: LOWER NOTCH RD Long: 73°4'30" W Lat: 44°0'15" N
 Property Owner/Address: VANCELETTE - 26 SOUTH MOUNTAIN DR.
 Largest Fire Load/Flow within 1000ft: RES HOMES 1.5mi radius: RES HOMES
 Site Assessment Completed by: TROY DANCE Project: 2014 RFP GRANT
 Needed Fire Flow (if known): 1000 gpm Existing RWS Repair Out of service Date: _____
 Town/FD Agreements Needed (if applicable): Landowner Grant Other

Water Source: PRIVATE Lake Pond Wetland River Stream Brook
 Recommended System: Dry Hydrant Basin Pressure (Wet) Drafting
 Type of Recharge: stream seep spring groundwater river
 Rate of Recharge: Poor Fair Good Excellent
 Site Accessibility: Asphalt Dirt Parking Area Driveway Other: _____
 Depth (if known): Minimum: _____ ft Maximum: 8 ft drill log ≥ 8'
 State Fish & Wildlife Access **NOTE:** RWS Technician must be present for all F&W installations.

Lift @ NWL: 8-10 ft Horizontal Distance: 60 ft Elevation (approx.): 650 ft
 Connection Information: Hose: 4.5" 5" 6" Thread Size: 4.5" 5" 6" » Male Female Storz
 Estimated Flow Rate of System (from New Hydrant Flow Spreadsheet): 1200 gpm

Water Source Information & Calculations for fire purposes (estimate):

Volume (static water bodies) = Surface Area x intake depth x 7.48gal/cf x (2/3)
 Surface Area: _____ ft x _____ ft = 4,300 sf (From GIS Software)
 Volume: Area 4,300 sf x (Intake depth 6 ft - 2ft) x 7.5gcf x (0.67) ≈ 86,430 gal
 Volume in Winter months ≈ 43,215 gal

Note: Thickness of ice must be deducted from the intake depth value for winter months volume. If not known at time of survey use 2ft.

Flow (flowing water bodies)(at time of survey) = Q = Area x Velocity ~~attach survey and~~
 Cross sectional Area (0.5)(3) sf x Velocity 0.5 f/s x (60sec/min) x (7.5gal/cf) = 3340 gpm

Permitting/Signoff Needed: Permitting Applications and Contact Information: www.vtwaterquality.org

Stream Alteration/ Water Quality (State) Lakes and Ponds (State) Wetlands (State) Army Corps (Federal)
 Cultural Resources (Federal) F&W Access (State)

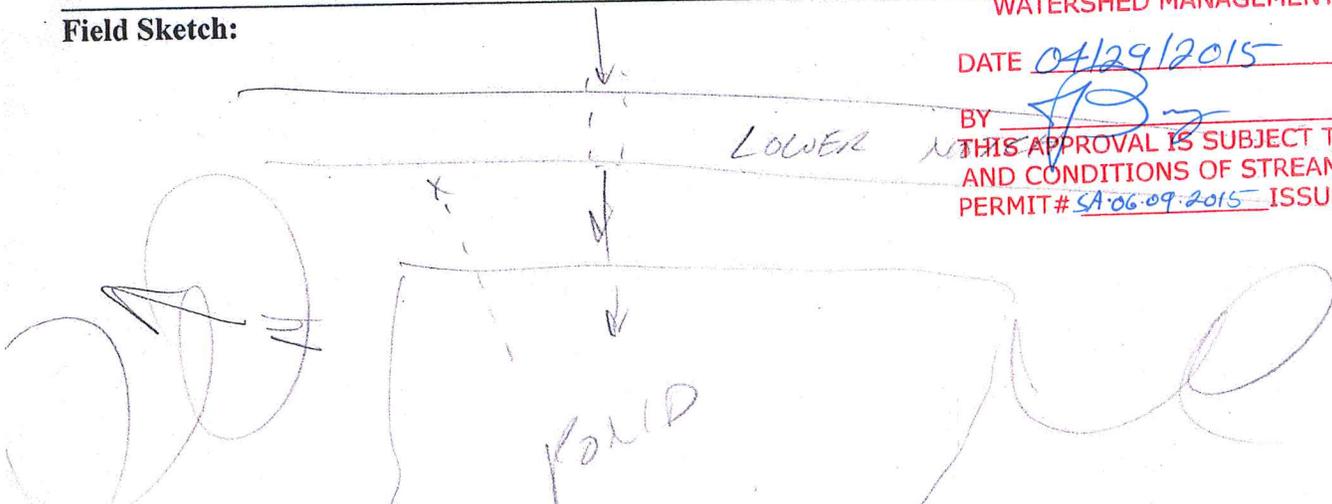
Integrity: Dist Intact Unknown Landform Slope: ≈ 2%

Date Cultural Resources Review Completed (if applicable): _____

Notes: _____

Field Notes: _____

Field Sketch:



APPROVAL
 WATERSHED MANAGEMENT DIVISION
 DATE 04/29/2015
 BY [Signature]
 THIS APPROVAL IS SUBJECT TO THE TERMS AND CONDITIONS OF STREAM ALTERATION PERMIT # SA-06-09-2015 ISSUED HERewith



Bristol Fire Department

PO Box 249 • 32 North Street • Bristol, VT 05443

Phone: 802.453.3201 • Fax 802.453.7142 • Website: www.bristolfiredepartment.org



October 7, 2014

Brett LaRose, Chief
Bristol Fire Department
P.O. Box 249
Bristol, VT 05443

Vermont Rural Fire Protection Task Force
C/O Vermont Association of Conservation Districts
14 Crab Apple Ridge
Randolph, VT 05060

Troy Dare,

Enclosed please find a signed Land Owner Agreement from Tyler and Lindsay Vincelette authorizing installation of a Dry-Hydrant on their property. Tyler and Lindsay's address is 26 South Mountain Drive which is a private drive. The dry-hydrant will be installed at mile marker 1350 Lower Notch Road, Bristol, VT which fronts the Vincelette property. As stated in the letter dated May 2, 2014 that accompanied the grant application, this is a new project that will involve the utilization of a privately owned pond fed by naturally by a stream. Following site visit summer 2014 by the VT Rural Fire Protection Task Force, you determined this site was an appropriate site to install a new dry-hydrant for the Town of Bristol Fire Department.

Following a site visit to this location October 6, 2014 by Assistant Fire Chief Kevin LaRose who I designated Local Project Manager, Site Coordinator Joel Bouvier, and Excavating Contractor John "Peeker" Heffernan, it was determined that this project will be completed by the October 2014 deadline.

Kevin LaRose will remain your primary point of contact for this project to ensure any information and requests received by your office are addressed in a timely manner and all parties involved can maintain a common operating picture.

Kevin LaRose • kevinrlarose@gmail.com • (802) 989-4330

Attachment 1: Land Owner Agreement – Tyler & Lindsay Vincelette
Attachment 2: Updated site map showing location of new dry-hydrant

Regards,

Brett LaRose, Chief

APPROVAL

WATERSHED MANAGEMENT DIVISION

DATE 04/29/2015

BY [Signature]
THIS APPROVAL IS SUBJECT TO THE TERMS
AND CONDITIONS OF STREAM ALTERATION
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Proposed Dry-Hydrant Location
Approximately 1350 Lower Notch Road
Bristol, VT 05443

Image shows proposed location of new dry-hydrant
(in red) and proposed water source (in blue).

APPROVAL
WATERSHED MANAGEMENT DIVISION

DATE 07/29/2015

BY [Signature]
THIS APPROVAL IS SUBJECT TO THE TERMS
AND CONDITIONS OF STREAM ALTERATION
PERMIT # SA-06-09-2015 ISSUED HEREWITH

Developed Water Supply for Rural Fire Protection Landowner Agreement

To: Kevin LaRose, Asst. Chief Date: May 1, 2014
(Town or Fire Department Representative)

Town of: Bristol

Fire Department: Bristol Fire Department

From: Tyler & Lindsay Vincelette
(Property Owner or Manager)

APPROVAL
WATERSHED MANAGEMENT DIVISION

DATE 04/29/2015

BY [Signature]
THIS APPROVAL IS SUBJECT TO THE TERMS
AND CONDITIONS OF STREAM ALTERATION
PERMIT # SA 06 09 2015 ISSUED HEREWITH

I hereby authorize the Town of Bristol (hereinafter referred to as Town)

to develop a refill site at (address) 26 South Mountain Drive, Bristol, VT 05443 for the purpose of providing water to extinguish fires in my community and for other uses with my permission.

I further give the Town permission to erect a dry hydrant or other developed rural water supply system at this location. I understand that the Town will install the rural water supply system and provide materials.

The Town will complete all excavation work so that the surrounding areas and the surface of the ground will be smooth, and present a pleasing appearance. Vegetation will be reestablished.

The Town may use, test, and maintain the dry hydrant or other rural water supply system at any time they deem necessary for continuity of hydrant operations.

All facets of the purpose, installation, operation and maintenance of the dry hydrant or other rural water supply have been explained to me. I fully understand and agree with the explanations provided.

NOTE: The role and/or duties of the Town and Landowner in this agreement may be reversed or split between the parties as necessary. A sub-agreement shall be drafted if necessary.

[Signature]

Signature of Land Owner or Property Manager

May 1, 2014

Date

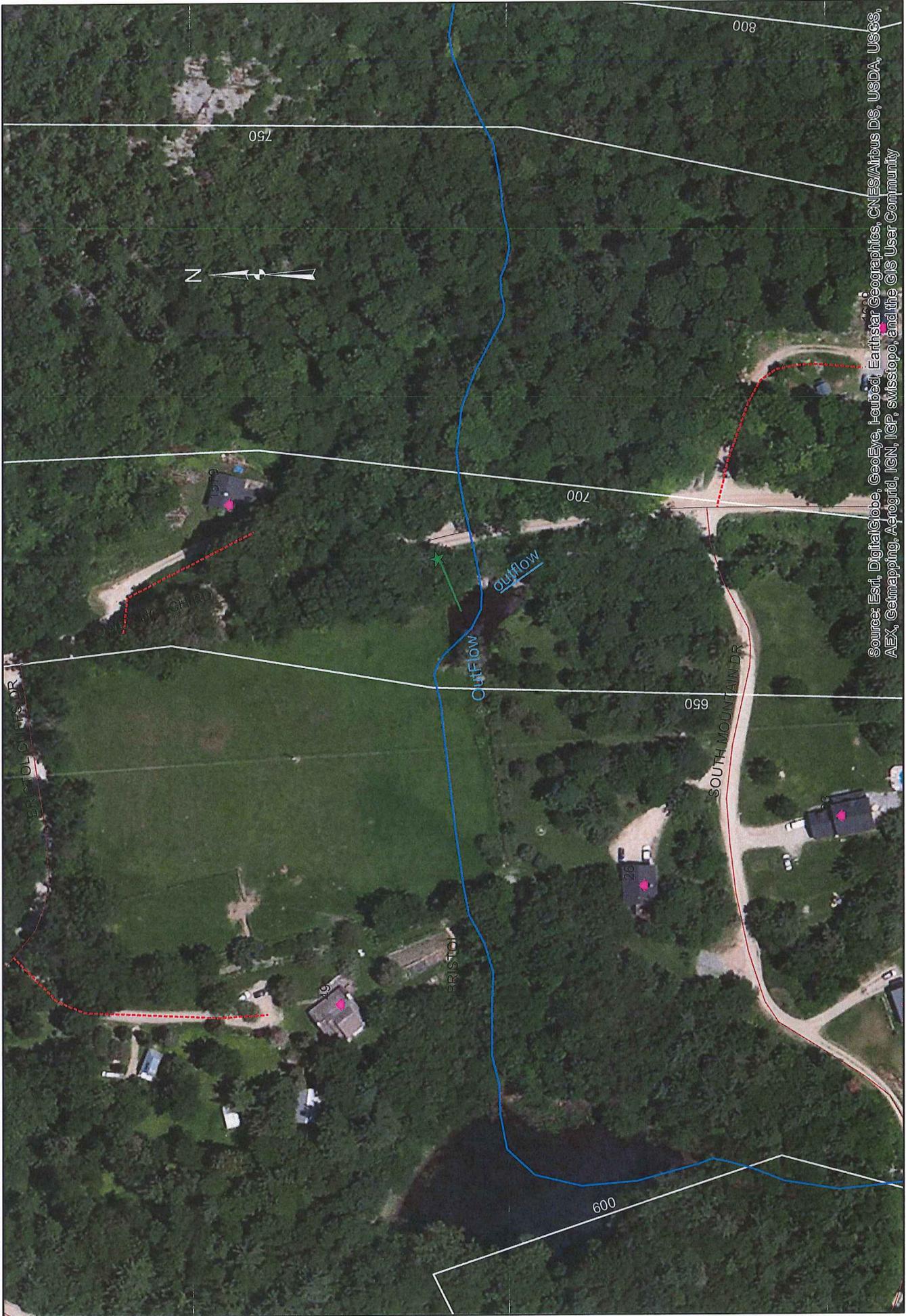
I have fully advised the landowner of the purpose, installation, operation and maintenance of the dry hydrant or other rural water supply system.

[Signature]

Signature of Town or Fire Department Representative

May 1, 2014

Date



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Bristol 2014 RFP New
 73°4'30.052"W 44°6'15.016"N
 Vincelette

