

# Drinking Water & Groundwater Protection Division - Permit Application Wastewater System & Potable Water Supply



**For Office Use Only:**

|                             |      |   |
|-----------------------------|------|---|
| Application#<br>ww-138-1402 | PIN# | Date Complete Application Received<br>1/27/14 |
|-----------------------------|------|---|

**Authority:**  
10 V.S.A. Chapter 64, the Environmental Protection Rules, Chapter 1, Wastewater System & Potable Water Supply Rules, and Chapter 21, Water Supply Rules, Appendix A. Part 11 - Small Scale Water Systems.

**General Information:**  
The organization and/or content of this form may not be altered, however, the form is designed to expand to allow additional information to be entered. Changes in the organization and/or content of the form may result in an invalid application or permit.  
In most cases a licensed designer will be required for your project and to help complete this application form. There are also line-by-line instructions available to assist with completing this form.  
**NOTE: We strongly suggest referring to the application instructions while completing this application form.**

## Part I Applicant (Landowner) & Project Contact Information

### Section A - Applicant Details (if Landowner is an Individual or Individuals)

|   |                        |  |                            |
|---|------------------------|--|----------------------------|
| 1 Last Name<br>Daley                            |                        | 2 First Name (and Middle Initial if appropriate)<br>Matthew & Lauren |                            |
| 3 Mailing Address Line 1<br>2255 Greenbush Road |                        | 4 Mailing Address Line 2   |                            |
| 5 Town/City<br>Charlotte                        | 6 State/Province<br>VT | 7 Country<br>United States   | 8 Zip/Postal Code<br>05445 |
| 9 Email Address<br>laurenandmatt@comcast.net    |                        | 10 Telephone<br>802-279-8145   |                            |

Remove This Applicant

Add Another Applicant

### Section B - Applicant Details (if Landowner is other than an Individual or Individuals, e.g. Corporations, Homeowner's Associations, etc.)

|  |                  |                            |                   |
|--|------------------|----------------------------|-------------------|
| 1 Registered Legal Entity or Organization Name |                  | 2 Telephone                |                   |
| 3 Mailing Address Line 1                       |                  | 4 Mailing Address Line 2   |                   |
| 5 Town/City                                    | 6 State/Province | 7 Country<br>United States | 8 Zip/Postal Code |

**Certifying Official**  
The Certifying Official must be a person who has signatory authority for the legal entity or organization that is the Applicant.

|                                      |  |   |  |
|--------------------------------------|--|---|--|
| 9 Certifying Official Last Name      |  | 10 Certifying Official First Name (and MI if appropriate) |  |
| 11 Certifying Official Title         |  |   |  |
| 12 Certifying Official Email Address |  | 13 Telephone  |  |

Remove This Applicant

Add Another Applicant

| Section C - Primary Contact Information (If other than Applicant) |                  |  |                   |
|---|------------------|--|-------------------|
| 1 Last Name   |                  | 2 First Name (and Middle Initial if appropriate) |                   |
| 3 Mailing Address Line 1  |                  | 4 Mailing Address Line 2                         |                   |
| 5 Town/City   | 6 State/Province | 7 Country  | 8 Zip/Postal Code |
|   |                  | United States                                    |                   |
| 9 Email Address   |                  |  | 10 Telephone      |

| Section D - Building/Business Owner Information |                  |  |                   |
|---|------------------|--|-------------------|
| 1 Last Name                                     |                  | 2 First Name (and Middle Initial if appropriate) |                   |
| 3 Mailing Address Line 1                        |                  | 4 Mailing Address Line 2                         |                   |
| 5 Town/City                                     | 6 State/Province | 7 Country  | 8 Zip/Postal Code |
|   |                  | United States                                    |                   |
| 9 Email Address                                 |                  |  | 10 Telephone      |

| Part II Certifying Designer(s) Information  |  |   |                    |
|---|--|---|--------------------|
| 1 Designer Last Name  |  | 2 Designer First Name (and Middle Initial if appropriate) |                    |
| Tremback  |  | Brian   |                    |
| 3 Designer License#   | 4 Company Name                                   |   |                    |
| 329   | Lamoureux & Dickinson Consulting Engineers, Inc. |   |                    |
| 5 Mailing Address Line 1  |  | 6 Mailing Address Line 2                                  |                    |
| 14 Morse Drive  |  |   |                    |
| 7 Town/City   | 8 State/Province                                 | 9 Country   | 10 Zip/Postal Code |
| Essex Junction  | VT   | United States   | 05452              |
| 11 Email Address  |  |   | 12 Telephone       |
| brian@LDengineering.com   |  |   | 802-878-4450       |
| 13 Designer Role(s) (check all that apply)  |  |   |                    |
| <input type="checkbox"/> Water Supply Designer<br><input checked="" type="checkbox"/> Wastewater Disposal System Designer |  |   |                    |
| Remove This Designer  |  |   |                    |

Add Another Designer

| Part III Property Location Information  |                             |
|---|-----------------------------|
| Section A - Property Location   |                             |
| 1 Please provide the property Town and the property address or a brief description of the location. |                             |
| (a) Town or City  | (b) Street or Road Location |
| Charlotte   | 2255 Greenbush Road         |

**Section B - Center of Property GPS Coordinates**

1 Enter the approximate center of property coordinates using GPS set for NAD83 or as derived from a map (map must be based on NAD83).

(a) Latitude  
(in decimal degrees to five decimal places, ex. 44.38181°)

(b) Longitude  
(in decimal degrees to five decimal places, ex. -72.31392 °)

N  °      W (-)  °

**Part IV Project Information**

**Section A - General Project Information & Questions**

1 Project Name (if applicable)

2 Total Acreage of Property

3 Business Name (if applicable)

4 Detailed Project Description

The purpose of this project is to provide a new wastewater absorption system to replace one that exhibiting signs of failure.

5 (a) Were all existing buildings or structures, campgrounds, and their associated potable water supplies and wastewater systems substantially completed before January 1, 2007? .....  Yes  No

(b) Were all existing improved and unimproved lots in existence before January 1, 2007? .....  Yes  No

6 Does this application include subdividing the property? .....  Yes  No

7 Has anyone from the Drinking Water & Groundwater Protection Division's Regional Office been to the property?.....  Yes  No

If Yes, enter the staff person's name and the date of the visit.

(a) Name of Staff Person  (b) Date of Visit (m/d/yyyy)

8 Will any construction occur within 50 feet of a wetland boundary, mapped or designated? .....  Yes  No

If Yes, contact the Wetlands Program of the Watershed Management Division at (802) 338-4835.

9 Will more than one acre be disturbed during the entire course of construction, including all lots and phases? .....  Yes  No

If Yes, contact the Stormwater Program of the Watershed Management Division at (802) 241-4320.

10 Will there be any stream crossings by roads, utilities, or other construction? .....  Yes  No

If Yes, contact the River Corridor Mgmt. Program of the Watershed Management Division at:

Central & Northwest Vermont ..... (802) 879-5631  
 Southern Vermont ..... (802) 786-5906  
 Northeastern Vermont ..... (802) 751-0129

11 Is the project located in a special flood hazard area as designated on the flood insurance maps prepared for a municipality by the Federal Emergency Management Agency? .....  Yes  No

If Yes, show the special flood hazard area limits on the site plan.

12 Act 250: Has the Applicant (Landowner) subdivided any other lots of any size within a five mile radius of this subdivision, or within the environmental district within the last five years ? .....  Yes  No

If Yes, enter the town(s) and the associated number of lots in the table below:

| (a) Town               | (b) Number of Lots   |
|------------------------|----------------------|
| X <input type="text"/> | <input type="text"/> |

13 Is there any prior Act 250 jurisdiction on the tract of land?.....  Yes  No

If Yes, enter the Act 250 permit number:

(a) Act 250 Permit Number

**Section B - Project Deed Reference**

1 Please provide the Town, Parcel ID, Book, and Page reference for the current landowner's deed(s) to this property:

|   | (a) Town  | (b) Parcel ID | (c) Book | (d) Page(s) |
|---|-----------|---------------|----------|-------------|
| X | Charlotte | 00004-2255    | 193      | 513-514     |

**Section C - Project Plan Reference**

1 Please provide the following information for all water supply and wastewater disposal system plans being submitted.

|   | (a) Sheet# | (b) Title                                    | (c) Plan Date | (d) Plan Revision Date |
|---|------------|--|---------------|------------------------|
| X | S1         | Replacement Wastewater System Design         | 12/12/2013    |                        |
| X | D1         | Wastewater System Details and Specifications | 12/12/2013    |                        |

**Section D - Existing Project Lot/Building Details**

Please provide the existing project details. This section is used to describe what is existing for the project. For example, if you are subdividing an undeveloped 21-acre parcel, you would list the existing parcel. If you are revising the boundary lines of two commercial lots in an industrial park, and constructing an addition to an existing building you would list the existing lot numbers, existing acres, existing buildings, existing uses, construction date(s), prior permits, and answer the compliance questions.

| 1 Lot# | 2 Lot Size (acres) | 3 Existing Use of the Lot |
|--------|--------------------|---------------------------|
|        | 0.29               | Residential               |

4 Provide the following information for each building on the lot:

| (a) Building ID | (b) Existing Use | (c) Date Construction of Building Substantially Complete | (d) Prior Permits | (e) In compliance with existing permits?                      |
|-----------------|------------------|--|-------------------|---|
| X 3-bdrm house  | Residential      | before1900   |                   | <input type="radio"/> Yes <input checked="" type="radio"/> No |

**Section E - Proposed Project Lot/Building Details**

This section is used to describe what you are proposing to do in this project. For example, if you were going to create 4 lots for construction of single family residences, you would list each lot, proposed acreage, proposed buildings, and proposed use.

| 1 Lot# | 2 Lot Size (acres) | 3 Proposed Use of the Lot |
|--------|--------------------|---------------------------|
|        | 0.29               | Residential               |

4 Is the lot being created as part of a subdivision? .....  Yes  No

5 Are you requesting that the Blood, Marriage, or Civil Union special fee be applied to this lot? .....  Yes  No

6 If the lot is exempt, please indicate the specific exemption from the Wastewater System and Potable Water Supply Rules? .....

7 Provide the following information for each building on the lot:

| (a) Building ID | (b) If building is exempt, indicate exemption | (c) Construction or increased flow? | (d) Proposed Use |
|-----------------|---|-------------------------------------|------------------|
| X 3-bdrm house  | §1-304(a)(1)                                  | <input checked="" type="checkbox"/> | Residential      |

**Part V Water Supply Information**

**Section A - Water Supply Screening Questions**

- 1 Are you proposing a new water supply or water service line or changes to a permitted but not constructed water supply or water service line for this project? .....  Yes  No
- 2 Are you proposing changes to an existing water supply or water service for this project (including changes to location, design flows, or operational change)? .....  Yes  No
- 3 Is there an existing connection to a water supply or water service line for this project? .....  Yes  No

*Complete Part V if you answered Yes to any of the above questions. A project with no existing or proposed water supply may skip to Part VI.*

**Section B - General Water Supply Questions**

- 1 Does this project involve a failed water supply? .....  Yes  No
- 2 Will any of the proposed water sources serve 25 or more people or have 15 or more service connections? .....  Yes  No  
*If Yes, the applicant must contact the Drinking Water & Groundwater Protection Division at (802) 241-3400 for source, construction and an operating permit.*
- 3 Are any of the existing or proposed water sources located within a special flood hazard area? .....  Yes  No
- 4 Are any of the existing or proposed water sources located within a floodway? .....  Yes  No
- 5 Are any of the proposed water sources located within 1 mile of a hazardous waste site as designated by the Waste Management Division and identified on the Agency mapping website? .....  Yes  No  
*If Yes, please submit additional information on the site. The Waste Management Division can be reached at (802) 241-3888.*
- 6 Does this project require an approval letter from the Drinking Water & Groundwater Protection Division for the construction of a public water system, municipal water line extension over 500 feet, or hydrants or sprinkler systems? .....  Yes  No  
*If Yes, please submit a copy of the approval letter from the Drinking Water & Groundwater Protection Division.*
- 7 Does the proposed or existing water supply(ies) use a water treatment device to obtain compliance with the quality requirements in the Water Supply Rule? .....  Yes  No  
*If Yes, please submit additional information regarding the constituent(s) that exceeds the standards and plans, details, and specifications of the treatment device.*
- 8 Is any portion of the proposed water supply located in or near a Water Source Protection Area as designated by the Drinking Water & Groundwater Protection Division? .....  Yes  No  
*If in areas of known interference issues, contact the Drinking Water & Groundwater Protection Division at (802) 241-3400.*

**Section C - Individual Water Supply Details**

Please provide the following information for each of the existing and proposed water supply(ies) serving a building or structure, or campground on the property.

|   |  |
|---|--|
| 1 Water Supply Name/Identifier<br><input style="width: 95%;" type="text" value="Shared well"/>          | 2 Water Supply Owner (if not Applicant)<br><input style="width: 95%;" type="text" value="George Lavalette"/> |
| 3 Water Source Type<br><input style="width: 95%;" type="text" value="Non-Public Drilled Bedrock Well"/> | 4 Type of Change to Supply<br><input style="width: 95%;" type="text" value="No Change"/>                     |

5 Lots/Buildings Served by this Water Supply System

|   | (a) Lot#                                  | (b) Building ID | (c) Type of Change to the Building's Supply | Design Flows (Gallons Per Day)                        |   |   | (g) Rule or Meter Based Flows |
|---|---|-----------------|---|---|---|---|-------------------------------|
|   |   |                 |   | (d) Existing  | (e) Change  | (f) Total   |                               |
| X   | <input style="width: 40px;" type="text"/> | 3-bdrm house    | No Change                                   | 420   | 0   | 420   | Rule-based                    |
| X   | <input style="width: 40px;" type="text"/> | 3-bdrm house    | No Change                                   | 420   | 0   | 420   | Rule-based                    |
| <b>Add Another Lot/Building Served by this Supply</b> |   |                 |   | 6   | 7   | 8   |                               |
|   |   |                 |   | <input style="width: 40px;" type="text" value="840"/> | <input style="width: 40px;" type="text" value="0"/> | <input style="width: 40px;" type="text" value="840"/> |                               |

9 Is this water supply located off-lot? .....  Yes  No

10 Is this water supply shared? .....  Yes  No

*If the water supply is located off-lot or shared, submit a copy of the agreement to provide an easement prior to construction.*

11 Is a variance being requested for this water supply? .....  Yes  No

*If Yes, please submit additional details related to the variance request.*

**Section D - Water Supply Design Flows Summary Table**

1 If the project includes more than one water supply, please list each water supply system and provide the total water supply design flows for the project. **IMPORTANT:** Please don't include systems that were identified in this Part on Section C, Line 4 as a "Replacement Area Designation" in this summary table.

| (a) Water Supply Name/Identifier                        | Design Flows (Gallons Per Day) |            |           |
|---|--------------------------------|------------|-----------|
|   | (b) Existing                   | (c) Change | (d) Total |
| X <input type="text"/>                                  | 0                              | 0          | 0         |
| <input type="button" value="Add Another Water Supply"/> | 2                              | 3          | 4         |
| <input type="text"/>                                    | 0                              | 0          | 0         |

**Part VI Wastewater Disposal System Information**

**Section A - Wastewater Disposal System Screening Questions**

1 Are you proposing a new or replacement wastewater disposal system, a new wastewater service line, or changes to a permitted but not constructed wastewater disposal system or wastewater service line for this project? .....  Yes  No

2 Are you proposing changes to an existing wastewater disposal system, replacement wastewater disposal system, replacement area, or wastewater service line for this project (including changes to location, design flows, or operational change)? .....  Yes  No

3 Is there an existing connection to a wastewater disposal system or wastewater service line for this project? .....  Yes  No

*Complete Part VI if you answered Yes to any of the above questions.  
A project with no existing or proposed wastewater disposal systems may skip to Part VII.*

**Section B - General Wastewater Disposal System Questions**

1 Does this project involve a failed wastewater disposal system? .....  Yes  No

2 Do any of the systems require a curtain or dewatering drain as part of the design? .....  Yes  No

3 Is a hydrogeologic study required for this project? .....  Yes  No

4 For projects using soil-based wastewater systems having a total design flow that exceeds 1,000 gpd, is this project located in a Class A Watershed? .....  Yes  No  NA

If Yes, indicate the Class A Watershed in which the system(s) is located:

(a) Class A Watershed Name

5 Are there any existing or proposed floor drains as part of this project? .....  Yes  No

If Yes, indicate where the floor drains will discharge:

(a) Floor Drain Discharge Point

6 If the project utilizes an Innovative/Alternative System or Product, has the applicant received a copy of the Drinking Water & Groundwater Protection Division's approval letter? .....  Yes  No  NA

7 Is any portion of the proposed wastewater disposal system located in or near a Water Source Protection Area as designated by the Drinking Water & Groundwater Protection Division? .....  Yes  No

**Section C - Individual Wastewater Disposal System Details**

Please provide the following information for each of the existing and proposed wastewater disposal systems serving a building or structure, or campground on the property.

|  |   |
|--|---|
| 1 Wastewater Disposal System Name/Identifier<br><input type="text" value="Existing system"/> | 2 Wastewater Disposal System Owner (If not Applicant)<br><input type="text"/>           |
| 3 Wastewater Disposal System Type<br><input type="text" value="In-ground"/>                  | 4 Type of Change to System<br><input type="text" value="Replacement of Failed System"/> |

5 Lots/Buildings Served by this Wastewater Disposal System

|   | (a) Lot#             | (b) Building ID                           | (c) Type of Change to the Building's System               | Design Flows (Gallons Per Day)        |                                     |                                     | (g) Total                             | (h) Rule or Meter Based Flows           |
|---|----------------------|---|---|---------------------------------------|-------------------------------------|-------------------------------------|---------------------------------------|---|
|   |                      |   |   | (d) Existing                          | (e) Change                          | (f) Infiltration                    |                                       |   |
| <b>X</b>  | <input type="text"/> | <input type="text" value="3-bdrm house"/> | <input type="text" value="Replacement of Failed System"/> | 420                                   | 0                                   | 0                                   | 420                                   | <input type="text" value="Rule-based"/> |
| <input type="button" value="Add Another Lot/Building Served by this System"/> |                      |   |   | 6<br><input type="text" value="420"/> | 7<br><input type="text" value="0"/> | 8<br><input type="text" value="0"/> | 9<br><input type="text" value="420"/> |   |

10 Is this wastewater disposal system located off-lot? .....  Yes  No

11 Is this wastewater disposal system shared? .....  Yes  No  
*If the wastewater disposal system is located off-lot or shared, submit a copy of the agreement to provide an easement prior to initiation of construction.*

12 Is a variance being requested for this wastewater disposal system? .....  Yes  No  
*If Yes, please submit additional details related to the variance request.*

13 If this wastewater disposal system type is a connection to an Indirect Discharge System, please provide the Indirect Discharge System ID number.  
Indirect Discharge System ID Number

14 If this wastewater disposal system type is a connection to a municipal system, please select the town.  
Town

15 If this wastewater disposal system is a soil-based system, please select the design approach used.  
Design Approach Used

16 For soil-based systems, please check all that apply (Note: Store and dose does not apply to standard pump/pump chamber systems).  
 Storage and Dose     Filtrate     Constructed Wetlands

17 If this is an Innovative/Alternative soil-based system, please select the system use type.  
Innovative/Alternative System Use Type

18 If this is an Innovative/Alternative soil-based system, please select the Innovative/Alternative system or product.  
Innovative/Alternative System or Product

**Section D - Wastewater Disposal Systems Design Flows Summary Table**

1 If the project includes more than one wastewater disposal system, please list each system on this page and provide the total wastewater disposal design flows for the project. **IMPORTANT:** Please don't include systems that were identified in this Part on Section C, Line 4 as a "Replacement Area Designation" in this summary table.

|   | Design Flows (Gallons Per Day)                 |              |            |                  |           |
|---|--|--------------|------------|------------------|-----------|
|   | (a) Wastewater Disposal System Name/Identifier | (b) Existing | (c) Change | (d) Infiltration | (e) Total |
| X |  | 0            | 0          | 0                | 0         |
|   | Add Another Wastewater System                  | 2            | 3          | 4                | 5         |
|   |  | 0            | 0          | 0                | 0         |

**Part VII Application Fees**

1 Fee Amount

2 Fee Calculation Details

**Part VIII Designer Certification & Copyright License**

**Section A - Certifying Designer 1 Certification & Copyright License**

"I hereby certify that in the exercise of my reasonable professional judgment, the design-related information submitted with this application is true and correct, and that the design included in this application for a permit complies with the Vermont Wastewater System and Potable Water Supply Rules and the Vermont Water Supply Rules.

As the individual who prepared this application, including all documents that are marked as copyrighted, I hereby grant a non-exclusive, limited license to the State to allow the documents to be made available for public review and copying in order to properly implement and operate the permitting programs for Wastewater Systems and Potable Water Supplies, and for no other purposes. As a condition to this license, the State agrees that it will not make any changes to such documents, nor will the State delete any copyright notices on such documents."

1 Check the design(s) you are certifying. This should be the same as the Designer Role(s) you selected in Part II, Section A, Line 13.  
 Water Supply Designer  
 Wastewater Disposal System Designer

|  |  |  |
|--|--|--|
| 1 Designer 1 Name<br><input type="text" value="Brian Tremback"/> | 2 Designer 1 Signature<br> | 3 Signature Date<br><input type="text" value="1-15-2014"/> |
|--|--|--|

**Section B - Certifying Designer 2 Certification & Copyright License**

"I hereby certify that in the exercise of my reasonable professional judgment, the design-related information submitted with this application is true and correct, and that the design included in this application for a permit complies with the Vermont Wastewater System and Potable Water Supply Rules and the Vermont Water Supply Rules.

As the individual who prepared this application, including all documents that are marked as copyrighted, I hereby grant a non-exclusive, limited license to the State to allow the documents to be made available for public review and copying in order to properly implement and operate the permitting programs for Wastewater Systems and Potable Water Supplies, and for no other purposes. As a condition to this license, the State agrees that it will not make any changes to such documents, nor will the State delete any copyright notices on such documents."

1 Check the design(s) you are certifying. This should be the same as the Designer Role(s) you selected in Part II, Section B, Line 13.  
 Water Supply Designer  
 Wastewater Disposal System Designer

|   |  |  |
|---|--|--|
| 1 Designer 2 Name<br><input type="text"/> | 2 Designer 2 Signature<br><input type="text"/> | 3 Signature Date<br><input type="text"/> |
|---|--|--|

**Part IX Applicant(s) Signature & Acknowledgements**

In order to insure compliance with the requirements of the regulations administered by the Department of Environmental Conservation, Drinking Water & Groundwater Protection Division, it may be necessary to visit the property. As this would involve a Department employee entering private property, we request your approval to do so.

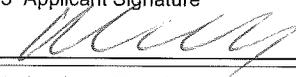
1 If we do visit your property, do you have any special instructions?

"As landowner of the property for which I am requesting a permit from the Department of Environmental Conservation, I understand that by signing this application I am granting permission for the Department employees to enter the property, during normal working hours, to insure compliance of the property with the applicable rules of the Department.

I also understand that I am not allowed to commence any site work or construction on this project without written approval from the Department of Environmental Conservation.

If my project utilizes an Innovative/Alternative System or Product, I have received a copy of the Drinking Water & Groundwater Protection Division's approval letter and agree to abide by the conditions of the approval.

I also certify that to the best of my knowledge and belief the information submitted above is true, accurate and complete."

|  |   |   |                             |
|--|---|---|-----------------------------|
| <input checked="" type="checkbox"/>                          | 2 Print Applicant Name<br>Matthew Daley | 3 Applicant Signature<br> | 4 Signature Date<br>1/13/14 |
| <input checked="" type="checkbox"/>                          | 2 Print Applicant Name<br>Lauren Daley  | 3 Applicant Signature<br> | 4 Signature Date<br>1/13/14 |
| <input type="button" value="Add Applicant Signature Block"/> |   |   |                             |

**RECEIVED**  
JAN 27 2014  
CHARLOTTE  
PLANNING & ZONING

**ANR Form 5: Certification Statement for Wastewater System and Potable Water  
Supply Permits when there is no Required Notification of Overshadowed Property  
Owner(s)**

A person submitting an application to the Secretary for a Wastewater System and Potable Water Supply Permit shall use this statement whenever overshadowing notification of affected landowners is not required (see guidance and instructions for examples).

Note: When the property subject to the permit application is owned by more than one person, only one of the landowners must sign this certification statement even though all landowners must sign the permit application itself.

**I hereby certify that "overshadowing" notification is not required either because there is an exemption to the notification requirement or there are no landowners whose property may be affected by the proposed water and wastewater systems.**

Signature Lauren Daley and Matthew Daley

Name (Printed) Lauren Daley and Matthew Daley

Property Address or Property Tax ID # 2255 Greenbush Rd Charlotte VT 05715

Date of this certification 1/13/14

(To Comply with Act 145 and Act 117 - 8-24-12 Last Revised 9-11-12)

# SOIL PROFILE LOG

PROJECT: DALY/GREENBUSH RD PROJECT NO.: 13055 DATE: 6-13-2013

LOCATION: NEAR DECK

LOGGED BY: BJT PRESENT: \_\_\_\_\_

EQUIPMENT OPERATOR: \_\_\_\_\_ TEST PIT  AUGER BORING  PROFILE NO.: AB-1

| HORIZON   | DEPTH (FT) | MOIST COLOR     |                     | PERCENT COARSE FRAGS. | TEXTURE     | STRUCTURE    | MOIST CONSISTENCE | COMMENTS |
|-----------|------------|-----------------|---------------------|-----------------------|-------------|--------------|-------------------|----------|
|           |            | MATRIX          | REDOX FEATURES      |                       |             |              |                   |          |
| <u>Ap</u> | <u>1.1</u> | <u>10YR 4/3</u> | <u>—</u>            | <u>5</u>              | <u>SIL</u>  | <u>2FGR</u>  | <u>FR</u>         |          |
| <u>Bw</u> | <u>1.7</u> | <u>10YR 5/6</u> | <u>—</u>            | <u>10</u>             | <u>SIL</u>  | <u>2MSBK</u> | <u>FR</u>         |          |
| <u>BC</u> | <u>2.5</u> | <u>2.5Y 4/3</u> | <u>C2P 10YR 5/6</u> | <u>15</u>             | <u>GSIL</u> | <u>1MSBK</u> | <u>FR</u>         |          |
|           |            |                 |                     |                       |             |              |                   |          |
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|           |            |                 |                     |                       |             |              |                   |          |

|                |                                       |                      |                |        |  |  |
|----------------|---------------------------------------|----------------------|----------------|--------|--|--|
| DEPTH (FT) TO: | EVIDENCE OF SEASONAL HIGH GROUNDWATER | EXISTING GROUNDWATER | BEDROCK        | ASPECT | WEATHER CONDITIONS   |  |
|                | <u>1.7</u>                            | <u>2.3</u>           | <u>&gt;2.5</u> |        | <input type="checkbox"/> CLEAR <input type="checkbox"/> RAIN      TEMP: <u>62</u> °F<br><input type="checkbox"/> PARTLY CLOUDY      SNOW: _____ INCHES<br><input checked="" type="checkbox"/> OVERCAST      SOIL FROST: _____ INCHES |  |

|  |   |  |  |                         |                        |                                       |
|--|---|--|--|-------------------------|------------------------|---------------------------------------|
| SLOPE<br><input type="checkbox"/> 0-2%<br><input checked="" type="checkbox"/> 2-4%<br><input type="checkbox"/> 4-6%<br><input type="checkbox"/> 6-8%<br><input type="checkbox"/> 8-10%<br><input type="checkbox"/> 10-15%<br><input type="checkbox"/> 15-20%<br><input type="checkbox"/> 20-30%<br><input type="checkbox"/> >30% | SLOPE FORM  |  |  | GEOMORPHIC POSITION<br> | GEOGRAPHIC COORDINATES |                                       |
|  | <input type="checkbox"/> LL<br><input type="checkbox"/> LV<br><input type="checkbox"/> LC<br><input type="checkbox"/> VL<br><input type="checkbox"/> WV<br><input type="checkbox"/> VC<br><input type="checkbox"/> CL<br><input type="checkbox"/> CV<br><input type="checkbox"/> CC |  |  |                         | LAT                    | ° ' "                                 |
|  |   |  |  | LONG                    | ° ' "                  | <input type="checkbox"/> NO RECEPTION |

|  |  |               |
|--|--|---------------|
| PARENT MATERIAL  | LAND COVER   | PLANT SPECIES |
| ALLUVIUM <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3<br>GLACIOFLUV. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br>GLACIOLAC./MARINE <input type="checkbox"/> <input type="checkbox"/><br>GLACIAL TILL <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br>RESIDUUM <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> ARTIFICIAL<br><input type="checkbox"/> BARREN<br><input type="checkbox"/> CROP<br><input checked="" type="checkbox"/> HERBACEOUS<br><input type="checkbox"/> SHRUB<br><input type="checkbox"/> TREE |               |

# SOIL PROFILE LOG

PROJECT: DALY/GREENBUSH RD PROJECT NO.: 13055 DATE: 6-13-2013

LOCATION: NEAR S PROP. LINE

LOGGED BY: BUT PRESENT: \_\_\_\_\_

EQUIPMENT OPERATOR: \_\_\_\_\_ TEST PIT  AUGER BORING  PROFILE NO.: AB-2

| HORIZON    | DEPTH (FT) | MOIST COLOR     |                               | PERCENT COARSE FRAGS. | TEXTURE     | STRUCTURE    | MOIST CONSISTENCE | COMMENTS |
|------------|------------|-----------------|-------------------------------|-----------------------|-------------|--------------|-------------------|----------|
|            |            | MATRIX          | REDOX FEATURES                |                       |             |              |                   |          |
| <u>Ap1</u> | <u>1.4</u> | <u>10YR 3/2</u> | <u>—</u>                      | <u>5</u>              | <u>SIL</u>  | <u>ZFGR</u>  | <u>FR</u>         |          |
| <u>Ap2</u> | <u>2.0</u> | <u>10YR 3/3</u> | <u>FZF</u><br><u>10YR 4/4</u> | <u>10</u>             | <u>SIL</u>  | <u>1MSBK</u> | <u>FR</u>         |          |
| <u>Bq</u>  | <u>2.4</u> | <u>2.5Y 1/1</u> | <u>C2P</u><br><u>10YR 5/6</u> | <u>+</u>              | <u>SICL</u> | <u>1MSBK</u> | <u>F1</u>         |          |
|            |            |                 |                               |                       |             |              |                   |          |
|            |            |                 |                               |                       |             |              |                   |          |
|            |            |                 |                               |                       |             |              |                   |          |
|            |            |                 |                               |                       |             |              |                   |          |
|            |            |                 |                               |                       |             |              |                   |          |
|            |            |                 |                               |                       |             |              |                   |          |
|            |            |                 |                               |                       |             |              |                   |          |
|            |            |                 |                               |                       |             |              |                   |          |
|            |            |                 |                               |                       |             |              |                   |          |

|                |                                       |                      |                |        |  |
|----------------|---------------------------------------|----------------------|----------------|--------|--|
| DEPTH (FT) TO: | EVIDENCE OF SEASONAL HIGH GROUNDWATER | EXISTING GROUNDWATER | BEDROCK        | ASPECT | WEATHER CONDITIONS   |
|                | <u>1.4</u>                            | <u>2.1</u>           | <u>&gt;2.4</u> |        | <input type="checkbox"/> CLEAR <input type="checkbox"/> RAIN      TEMP: <u>66</u> °F<br><input type="checkbox"/> PARTLY CLOUDY      SNOW: _____ INCHES<br><input checked="" type="checkbox"/> OVERCAST      SOIL FROST: _____ INCHES |

|       |   |  |  |                     |   |  |
|-------|---|--|--|---------------------|---|--|
| SLOPE | SLOPE FORM  |  |  | GEOGRAPHIC POSITION | GEOGRAPHIC COORDINATES  |  |
|       | <input type="checkbox"/> 0-2%<br><input checked="" type="checkbox"/> 2-4%<br><input type="checkbox"/> 4-6%<br><input type="checkbox"/> 6-8%<br><input type="checkbox"/> 8-10%<br><input type="checkbox"/> 10-15%<br><input type="checkbox"/> 15-20%<br><input type="checkbox"/> 20-30%<br><input type="checkbox"/> >30% | <input checked="" type="checkbox"/> LL<br><input type="checkbox"/> LV<br><input type="checkbox"/> LC<br><input type="checkbox"/> VL<br><input type="checkbox"/> WV<br><input type="checkbox"/> VC<br><input type="checkbox"/> CL<br><input type="checkbox"/> CV<br><input type="checkbox"/> CC |  |                     | LAT:      °      '      "      ACCU-RACY:<br>LONG:      °      '      " <input type="checkbox"/> NO RECEPTION |  |

REMARKS:

|  |  |               |
|--|--|---------------|
| PARENT MATERIAL  | LAND COVER   | PLANT SPECIES |
| ALLUVIUM <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3<br>GLACIOFLUV. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br>GLACIOLAC./MARINE <input type="checkbox"/> <input type="checkbox"/><br>GLACIAL TILL <input type="checkbox"/> <input type="checkbox"/><br>RESIDUUM <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> ARTIFICIAL<br><input type="checkbox"/> BARREN<br><input type="checkbox"/> CROP<br><input checked="" type="checkbox"/> HERBACEOUS<br><input type="checkbox"/> SHRUB<br><input type="checkbox"/> TREE |               |





January 23, 2014

Spencer Harris  
Town of Charlotte  
P.O. Box 119  
Charlotte, VT 05445

RE: Daley property, 2255 Greenbush Road, Charlotte, Vermont  
Wastewater System and Potable Water Supply application

Dear Spencer:

On behalf of the property owners, Matthew & Lauren Daley, we are submitting a Wastewater System and Potable Water Supply application for the construction of a replacement wastewater system. The property currently uses a system that has begun to experience elevated liquid levels in the septic tank and absorption bed. The system has not yet failed but the owners would like to be prepared to replace it during the coming summer.

To replace this system, we are proposing the use of a mound system. Because of space limitations and soil properties, minimum site conditions cannot be met. The wastewater system will require the following variances:

1. Setback from the absorption system to property line – 20 ft instead of 25 ft
2. Setback from downslope mound system toe to property line – 16 ft instead of 25 ft
3. Shallow depth to evidence of seasonal high groundwater downslope of the mound system

For this 'best fix' replacement system, we have designed a mound system that we feel will provide adequate treatment and dispersal of wastewater and be a considerable improvement over the existing system.

As noted in the application, the property shares a drilled well on the Lavalette property that abuts the parcel to the south. No changes are proposed to design flows or to the water supply.

We have enclosed the application, a check for the \$250 fee, the soil logs, the Act 145 certification statement, and two sets of the project plans. If you have any questions or need additional information, please don't hesitate to contact me.

Sincerely,

Brian Tremback  
Certified Professional Soil Scientist  
Licensed Designer Class B  
Wetland Scientist

RECEIVED  
JAN 27 2014  
CHARLOTTE  
PLANNING & ZONING

Enclosures