



Land Surveyors – Boundary Consultants  
Water & Wastewater System Designers  
P.O. Box 388 – 25A West Street  
Bristol, Vermont 05443

Ronald L. LaRose, L.S.

Kevin R. LaRose, L.S.

September 30, 2009

Town of Charlotte  
Attn: Mr. Tom Mansfield  
PO Box 119  
Charlotte, Vermont 05445

RE: Johnson Parcel, Lewis Creek Road

Dear Tom:

We are writing on behalf of Lawrence Johnson in regard to his proposed two lot subdivision on his land on Lewis Creek Road.

Specifically, Mr. Johnson wishes to subdivide a 2.5 acre lot (Lot 2) off his 17 acre parcel. Currently, the 17 acres is occupied by three three-bedroom single-family residences. The proposal is to have one of the single-family residences on its own lot (Lot 2) with the remaining two single-family residences to continue to be on the same lot (Lot 1). As such, we have identified three designated replacement areas on the lot. Currently, all three residences share the same well.. Spencer Harris of the Town of Charlotte witnessed the soils evaluation on June 8, 2009.

For your review, we have included the following:

1. Wastewater System & Potable Water Supply Permit Application;
2. Permit fee of \$500.00;
3. Subdivision Plat & Site Plan (two copies each);
4. Performance Based Calculations;
5. Test Pit logs.

Mr. Johnson is looking forward to your review of his application and subsequent issuance of a permit. If you have any questions, please do not hesitate to give me a call.

Sincerely,

Kevin R. LaRose, L.S.  
Licensed Class B Designer

Cc: Lawrence Johnson

Land Surveying ♦ Topographical Surveys ♦ State & Local Permitting ♦ Septic Design ♦ Land Use Planning

p.802.453.3818  
f.802.329.2138

www.larosesurveys.com  
info@larosesurveys.com

# Wastewater Management Division - Permit Application Wastewater System & Potable Water Supply



**For Office Use Only:**

Application#	P#/#	Date Complete Application Received
<input type="text"/>	<input type="text"/>	<input type="text"/>

**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 Johnson		2 First Name (and Middle Initial if appropriate) Lawrence F.	
3 Mailing Address Line 1 1129 Lewis Creek Road		4 Mailing Address Line 2	
5 Town/City Charlotte	6 State/Province Vermont	7 Country United States	8 Zip/Postal Code 05445
9 Email Address			10 Telephone 425-2092
<input type="button" value="Remove This Applicant"/>			
<input type="button" value="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 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. A copy of the document authorizing this person to act as a signatory authority must be attached to this application.

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
<input type="button" value="Remove This Applicant"/>			
<input type="button" value="Add Another Applicant"/>			

**Section C - Primary Contact Information (If other than Applicant)**

1 Last Name		2 First Name (and Middle Initial if appropriate)	
<input type="text"/>		<input type="text"/>	
3 Mailing Address Line 1		4 Mailing Address Line 2	
<input type="text"/>		<input type="text"/>	
5 Town/City	6 State/Province	7 Country	8 Zip/Postal Code
<input type="text"/>	<input type="text"/>	United States	<input type="text"/>
9 Email Address			10 Telephone
<input type="text"/>			<input type="text"/>

**Section D - Building/Business Owner Information**

1 Last Name		2 First Name (and Middle Initial if appropriate)	
<input type="text"/>		<input type="text"/>	
3 Mailing Address Line 1		4 Mailing Address Line 2	
<input type="text"/>		<input type="text"/>	
5 Town/City	6 State/Province	7 Country	8 Zip/Postal Code
<input type="text"/>	<input type="text"/>	United States	<input type="text"/>
9 Email Address			10 Telephone
<input type="text"/>			<input type="text"/>

**Part II Certifying Designer(s) Information**

1 Designer Last Name		2 Designer First Name (and Middle Initial if appropriate)	
LaRose		Kevin R.	
3 Designer License#	4 Company Name		
00443	LaRose Surveys, P.C.		
5 Mailing Address Line 1		6 Mailing Address Line 2	
PO Box 388		<input type="text"/>	
7 Town/City	8 State/Province	9 Country	10 Zip/Postal Code
Bristol	Vermont	United States	05443
11 Email Address			12 Telephone
larosesurveys@gmail.com			453-3818
13 Designer Role(s) (check all that apply)			
<input type="checkbox"/> Water Supply Designer <input checked="" type="checkbox"/> Wastewater Disposal System Designer			
<input type="button" value="Remove This Designer"/>			
<input type="button" value="Add Another Designer"/>			

**Part III Property Location Information**

**Section A - Property Parcel ID#(s) and Location(s)**

1 Please provide the property location information including Town or City Parcel ID#, Town/City, and Street or Road location in the table below:

	(a) Town/City Parcel ID#	(b) Town or City	(c) Street or Road Location
X	10-02-33	Charlotte	Lewis Creek Road
<input type="button" value="Add Another Property"/>			

**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

Two lot subdivision involving three existing three-bedroom single-family residences on one lot

5 Were all buildings or structures, campgrounds, and their associated potable water supplies and wastewater systems substantially completed before January 1, 2007 and all 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 Wastewater Management 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

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 Water Quality Division at (802) 241-3770.

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 Water Quality 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 Water Quality 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"/>

Add Another Town/Lot

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, Book, and Page reference for the current landowner's deed(s) to this property in the table below:

	(a) Town	(b) Book	(c) Page(s)
X	Charlotte	40	133

Add Another Deed Reference

**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	1	plat showing a subdivision of lands of Lawrence F. Johnson	07-21-2009	
X	2	a site plan showing a subdivision of lands of Lawrence F. Johnson	07-21-2009	

Add Another Plan Reference

**Section D - Existing Project Lot/BuildingDetails**

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
1	17	three three-bedroom single-family re

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	1	Residential	pre-2005		<input checked="" type="radio"/> Yes <input type="radio"/> No
X	2	Residential	pre-2005		<input checked="" type="radio"/> Yes <input type="radio"/> No
X	3	Residential	pre-2005		<input checked="" type="radio"/> Yes <input type="radio"/> No

Add Another Building

Remove This Lot

Add Another Lot

**Section E - Proposed Project Lot/BuildingDetails**

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
1	14.5	two three-bedroom SFR

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	1		<input type="checkbox"/>	ex. SFRs

<b>X</b>	<input type="text" value="2"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text" value="ex. SFRs"/>
<b>Add Another Building</b>				
<b>Remove This Lot</b>				
1 Lot#	2 Lot Size (acres)	3 Proposed Use of the Lot		
<input type="text" value="2"/>	<input type="text" value="2.5"/>	<input type="text" value="ex. SFR"/>		
4 Is the lot being created as part of a subdivision? <span style="float:right"><input checked="" type="radio"/> Yes <input type="radio"/> No</span>				
5 Are you requesting that the Blood, Marriage, or Civil Union special fee be applied to this lot? <span style="float:right"><input checked="" type="radio"/> Yes <input type="radio"/> No</span>				
6 If the lot is exempt, please indicate the specific exemption from the Wastewater System and Potable Water Supply Rules? <input type="text"/>				
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	
<b>X</b>	<input type="text" value="3"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text" value="ex. SFR"/>
<b>Add Another Building</b>				
<b>Remove This Lot</b>				
<b>Add Another Lot</b>				

**Part V Water Supply Information**

**Section A - Water Supply Screening Questions**

- 1 Are you proposing a new water supply for this project?  Yes  No
  - 2 Are you proposing changes to an existing water supply for this project?  Yes  No
  - 3 Is there a connection to an existing water supply for the project?  Yes  No
- If you answered No to all three of the above questions, skip to Part VI. Otherwise, proceed with Part V.*

**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 Water Supply Division at (802) 241-3400 for source, construction and operating*
- 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 Water Supply 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 Water Supply 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 Water Supply Division?  Yes  No  
*If in areas of known interference issues, please contact the Water Supply 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 ex well	2 Water Supply Owner (if not Applicant)
3 Water Source Type Non-Public Drilled Bedrock Well	4 Type of Change to Supply 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	(d) Existing	(e) Increase	(f) Total	(g) Rule or Meter Based Flows
X	1	1	No Change	420	0	420	Rule-based
X	1	2	No Change	420	0	420	Rule-based
X	2	3	No Change	420	0	420	Rule-based
<b>Add Another Lot/Building Served by this Supply</b>				6	7	8	
				1,260	0	1,260	

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	(b) Existing	(c) Increase	(d) Total
X	ex well	1,260	0	1,260
<b>Add Another Water Supply</b>		2	3	4
		1,260	0	1,260

**Part VI Wastewater Disposal System Information**

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

1 Are you proposing a new wastewater disposal system or replacement area for this project?  Yes  No  
 2 Are you proposing changes to an existing wastewater disposal system for this project?  Yes  No  
 3 Is there a connection to an existing wastewater disposal system for the project?  Yes  No

*If you answered No to all three of the above questions, skip to Part VII. Otherwise, proceed with Part VI.*

**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 If the project has a soil-based wastewater disposal system with design flows that exceed 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 Wastewater Management 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 Water Supply Division?  Yes  No

If Yes, contact the Water Supply Division at (802) 241-3400.

**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 ex system #1	2 Wastewater Disposal System Owner (if not Applicant)
3 Wastewater Disposal System Type In-ground	4 Type of Change to System No Change

5 Lots/Buildings Served by this Wastewater Disposal System

	(a) Lot#	(b) Building ID	(c) Type of Change to the Building's System	(d) Existing	(e) Increase	(f) Infiltration	(g) Total	(h) Rule or Meter Based Flows
X	1	1	No Change	420	0	0	420	Rule-based
Add Another Lot/Building Served by this System				6	7	8	9	
				420	0	0	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.

- Storage and Dose     Filtrate

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

**Remove This Wastewater System**

1 Wastewater Disposal System Name/Identifier

ex system #2

2 Wastewater Disposal System Owner (if not Applicant)

3 Wastewater Disposal System Type

In-ground

4 Type of Change to System

No Change

5 Lots/Buildings Served by this Wastewater Disposal System

	(a) Lot#	(b) Building ID	(c) Type of Change to the Building's System	(d) Existing	(e) Increase	(f) Infiltration	(g) Total	(h) Rule or Meter Based Flows
X	1	2	No Change	420	0	0	420	Rule-based
<b>Add Another Lot/Building Served by this System</b>				6	7	8	9	
				420	0	0	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.

Storage and Dose     Filtrate

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

Inncvative/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

**Remove This Wastewater System**

1 Wastewater Disposal System Name/Identifier

2 Wastewater Disposal System Owner (if not Applicant)

3 Wastewater Disposal System Type

4 Type of Change to System

5 Lots/Buildings Served by this Wastewater Disposal System

	(a) Lot#	(b) Building ID	(c) Type of Change to the Building's System	(d) Existing	(e) Increase	(f) Infiltration	(g) Total	(h) Rule or Meter Based Flows
X	2	3	No Change	420	0	0	420	Rule-based
<b>Add Another Lot/Building Served by this System</b>				6	7	8	9	
				420	0	0	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.

Storage and Dose     Filtrate

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

Remove This Wastewater System

1 Wastewater Disposal System Name/Identifier

proposed replacement #1

2 Wastewater Disposal System Owner (if not Applicant)

3 Wastewater Disposal System Type

Mound

4 Type of Change to System

Replacement Area Designation

5 Lots/Buildings Served by this Wastewater Disposal System

	(a) Lot#	(b) Building ID	(c) Type of Change to the Building's System	(d) Existing	(e) Increase	(f) Infiltration	(g) Total	(h) Rule or Meter Based Flows
X	1	1	No Change	420	0	0	420	Rule-based
<input type="button" value="Add Another Lot/Building Served by this System"/>				6	7	8	9	
				420	0	0	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

Performance Based

16 For soil-based systems, please check all that apply

Storage and Dose  Filtrate

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

Remove This Wastewater System

1 Wastewater Disposal System Name/Identifier

proposed replacement #2

2 Wastewater Disposal System Owner (if not Applicant)

3 Wastewater Disposal System Type

Mound

4 Type of Change to System

Replacement Area Designation

5 Lots/Buildings Served by this Wastewater Disposal System

	(a) Lot#	(b) Building ID	(c) Type of Change to the Building's System	(d) Existing	(e) Increase	(f) Infiltration	(g) Total	(h) Rule or Meter Based Flows
X	1	2	No Change	420	0	0	420	Rule-based
Add Another Lot/Building Served by this System				6	7	8	9	
				420	0	0	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

Performance Based

16 For soil-based systems, please check all that apply.

Storage and Dose  Filtrate

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

Remove This Wastewater System



1 Wastewater Disposal System Name/Identifier <input style="width:95%;" type="text" value="proposed replacement #3"/>	2 Wastewater Disposal System Owner (if not Applicant) <input style="width:95%;" type="text"/>
3 Wastewater Disposal System Type <input style="width:95%;" type="text" value="Mound"/>	4 Type of Change to System <input style="width:95%;" type="text" value="Replacement Area Designation"/>

5 Lots/Buildings Served by this Wastewater Disposal System

(a) Lot#	(b) Building ID	(c) Type of Change to the Building's System	(d) Existing	(e) Increase	(f) Infiltration	(g) Total	(h) Rule or Meter Based Flows	
<b>X</b>	2	3	No Change	420	0	0	420	Rule-based
<b>Add Another Lot/Building Served by this System</b>								
			6	7	8	9		
			420	0	0	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:  
 Storage and Dose     Filtrate

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 do not include systems that were identified in this Part on Section C, Line 4 as a "Replacement Area Designation" in this summary table.

	(a) Wastewater Disposal System Name/Identifier	(b) Existing	(c) Increase	(d) Infiltration	(e) Total
X	ex system #1	420	0	0	420
X	ex system #2	420	0	0	420
X	ex system #3	420	0	0	420
	<b>Add Another Wastewater System</b>	2	3	4	5
		1,260	0	0	1,260

**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."

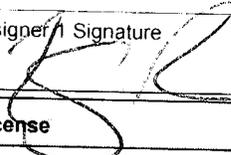
1 Check the design(s) you are certifying. This should be the same as the Designer Role(s) you selected in Part II, Section A, Line 13.

- Water Supply Designer
- Wastewater Disposal System Designer

1 Designer 1 Name

Kevin R LaRose

2 Designer 1 Signature



3 Signature Date

10/11/09

**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

2 Designer 2 Signature

3 Signature Date

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

*In order to insure compliance with the requirements of the regulations administered by the Department of Environmental Conservation, Wastewater Management 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 Wastewater Management 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 "*

<b>X</b>	<b>2 Print Applicant Name</b> Lawrence F Johnson	<b>3 Applicant Signature</b>	<b>4 Signature Date</b>
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**Add Applicant Signature Block**

LaRose Surveys, P.C.

Performance Based Calculations

Client: Johnson Project#: Johnson Date: September 29, 2009  
 Site Address: Lewis Creek Road, Charlotte

	SYSTEM	SYSTEM	SYSTEM
	Lot 1 replacement A	Lot 1 replacement B	Lot 2 replacement
<b>Simplified Desktop Mounding Analysis</b>			
Wastewater flow (gpd)	420	420	420
Slope (%)	3.8%	4.2%	9.9%
Soil texture	fine sandy loam	fine sandy loam	v.f. sandy loam
Linear loading rate factor (f)	4.4	7.5	13.5
Depth to seasonal high water table (in)	12	12	9
Depth to seasonal high water table (ft)	1.0	1.0	0.8
Max. soil thickness available for groundwater mounding (ft) (SHWT-0.5')	0.5	0.5	0.3
Linear loading rate (LLR)	2.2	3.8	3.4
Calculated minimum length of seepage bed (ft)	190.9	112.0	124.4
Calculated maximum width of seepage bed (ft)	2.2	3.8	3.4
Is calculated length to width ratio = or > 3:1?	Yes	Yes	Yes
Required sand thickness beneath seepage bed (ft)	2.5'	2.5'	2.5'
<b>Proposed System Parameters</b>			
Length of seepage bed (ft)	200	120	130
Width of seepage bed (ft)	2.1	3.5	3.3
Total seepage area (ft)	420	420	429
Linear loading rate factor (f)	4.4	7.5	13.5
Calculated induced groundwater mound thickness (ft)	0.48	0.47	0.24
Calculated linear loading rate (LLR)	2.10	3.50	3.23
Calculated depth to seasonal high groundwater & induced mound (ft)	0.52	0.53	0.51
Minimum sand thickness required beneath seepage bed (ft)	2.48	2.47	2.49
<b>Confirm Design Parameters Comply with Simplified Mounding Analysis</b>			
Proposed LLR < / = Simplified LLR	Yes	Yes	Yes
Proposed seepage bed length > / = Simplified minimum bed length	Yes	Yes	Yes
Proposed seepage bed width < / = Simplified maximum bed width	Yes	Yes	Yes
Calculated length to width ratio = / > 3:1	Yes	Yes	Yes
Depth to proposed induced groundwater mound > / = 0.5'	Yes	Yes	Yes
Thickness of "dry" soil from induced groundwater mound & seepage bed > / = 3"	Yes	Yes	Yes

**LaRose Surveys, P.C.  
Test Pit Evaluation**

Client: Johnson Project #:                      Date: June 8, 2009 Site Address: Bentley Lane, Jericho  
 Project Description: Two-lot subdivision  
 Logged By: Kevin LaRose Witnessed By: Spencer Harris  
 Topographical Description: woods Slope: 5-18% Vegetation: mix of hard wood  
 Weather: sunny 75 Method of Excavation: tracked excavator Excavating Company: Preston

Test Pit #	Horizon	Depth (inches)	Texture	Color	Consistency	Structure	Redoximorphic Features	Comments
101		0-6"	sandy loam	dark brown	friable	subang. Blocky	none	
		6-12"	loam	dark brown	friable	subang. Blocky	none	
		12-29"	clay loam	med. Brown	friable	blocky	conc.	
102		0-6"	fine sandy loam	dark brown	friable	subang. Blocky	none	
		6-12"	fine sandy loam	dark brown	friable	subang. Blocky	none	
		12-28"	fine sandy loam	med. Brown	friable	blocky	conc.	
103		0-8"	fine sandy loam	dark brown	friable	subang. Blocky	none	
		8-12"	fine sandy loam	dark brown	friable	subang. Blocky	none	
		12-34"	fine sandy loam	med. Brown	friable	blocky	conc.	
104		0-9"	fine sandy loam	dark brown	friable	subang. Blocky	none	depl @ 15"
		9-18"	fine sandy loam	yellow brown	friable	subang. Blocky	none	
		18-32"	fine sandy loam	gray brown	friable	blocky	depletions	
105		0-6"	fine sandy loam	dark brown	friable	subang. Blocky	none	
		6-10"	v.f. sandy loam	brown	friable	subang. Blocky	none	
		10-16"	v.f. sandy loam	yellow brown	friable	subang. Blocky	depletions @ 12	
		16-32"	v.f. sandy loam	olive gray	friable	blocky		

**LaRose Surveys, P.C.  
Test Pit Evaluation**

Client: Johnson Project#: \_\_\_\_\_ Date: June 8, 2009 Site Address: Bentley Lane, Jericho  
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 Topographical Description: woods Slope: 5-18% Vegetation: mix of hard wood  
 Weather: sunny 75 Method of Excavation: tracked excavator Excavating Company: Preston

Test Pit #	Horizon	Depth (inches)	Texture	Color	Consistency	Structure	Redoximorphic Features	Comments
106		0-5"	v.f. sandy loam	dark brown;	friable	subang. Blocky	none	
		5-10"	v.f. sandy loam	dark brown	friable	subang. Blocky	none	
		10-22"	v.f. sandy loam	med. Brown	friable	subang. Blocky	conc @ 14"	
		22-41"	v.f. sandy loam	olive gray	friable	blocky	depletions	
107		0-5"	sandy loam	dark brown	friable	subang. Blocky	none	
		5-12"	loam	dark brown	friable	subang. Blocky	none	
		12-21"	clay loam	med. Brown	friable	blocky	conc.	
108		0-6"	fine sandy loam	dark brown	friable	subang. Blocky	none	
		6-17"	fine sandy loam	dark brown	friable	subang. Blocky	none	
		17-39"	fine sandy loam	med. Brown	friable	blocky	conc.	
109		0-9"	v.f. sandy loam	dark brown	friable	subang. Blocky	none	
		9-36"	v.f. sandy loam	olive gray	friable	blocky	conc.	
110		0-11"	v.f. sandy loam	dark brown	friable	subang. Blocky	none	
		11-35"	v.f. sandy loam	olive gray	friable	blocky	conc.	
HA-1		0-10"	v.f. sandy loam	dark brown	friable	subang. Blocky	none	
		10-28"	v.f. sandy loam	olive gray	friable	blocky	depletions	