

**Town of New Haven
Application to Development Review Board**

Parcel # 0670 Map # 11 Applicant: I own this property: YES NO

Name: Chris + Paula Roeloffs

Email: paula.roeloffs@gmail.com Phone: 802-989-0909

Address 2425 Quaker Village Rd, Weybridge, VT 05753

Landowner: I Chris + Paula Roeloffs am the legal owner of the property located at _____ Described in Book _____ Page _____

of the New Haven Land Records. I acquired the property on January 1, 1989

Type of Application: **Application for:**

- Sketch Plan
- Variance Conditional Use Permit Site Plan Review Boundary Line Adjustment
- Minor Subdivision (<3) Major Subdivision (> 3)

Appeal for interpretation of zoning ordinance or map.
Appeal from decision of the administrative officer.
A copy of this appeal must be filed with the administrative officer.
Application for a change of nonconforming use

Other: _____

Provision of zoning ordinance in question _____

Previous Use: farm land _____

Current Use: farm land _____

Signature of land owner Paula Roeloffs Date 8-4-2021

Signature of Applicant (in addition to owner) _____

Fee Paid _____

Date of Hearing by Board _____ Application# _____

Approved _____ Denied _____ Decision _____

Conditions _____

Date of notice given to applicant _____



Neighboring residents:

Edward Jarvis
1330 Twitch Hill Rd.
New Haven, VT 05472

Jerry Atkins
303 Field Days Rd.
Weybridge, VT 05753

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JEFF KELLEY
CERTIFIED VT SITE TECHNICIAN
285 MEAD LANE
MIDDLEBURY, VT 05753
PHONE/FAX: 802-349-5463
kellygeology@yahoo.com

February 22, 2019

Chris Roeloffs
2425 Field Days Road
Weybridge, VT 05753

RE: SITE DESIGN, FIELD DAYS ROAD, NEW HAVEN

Hi Chris,

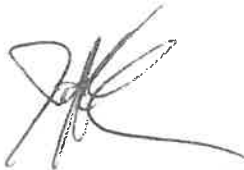
Enclosed are a couple copies of the site design for your property on Field Days Road in New Haven for your records. I have not yet submitted the application to the state as I need to wait 7 days for a response from the adjacent landowner (Ed Gervais). That date is Feb 26.

Sorry for the colors on the site map...something is happening with the toner on my printer.

Once I submit the application I will keep you informed of its progress. We should receive your permit sometime in mid-March.

Call anytime with questions. Jeff

Sincerely,



Jeff Kelley
VT Site Tech #425-BW

Mound Sand Specifications:

The fill material from natural soil plowed surface to the top of the trench shall be sand meeting one of the following above requirements:

(1)

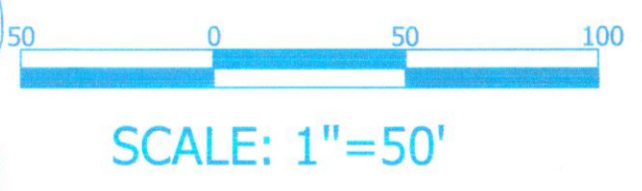
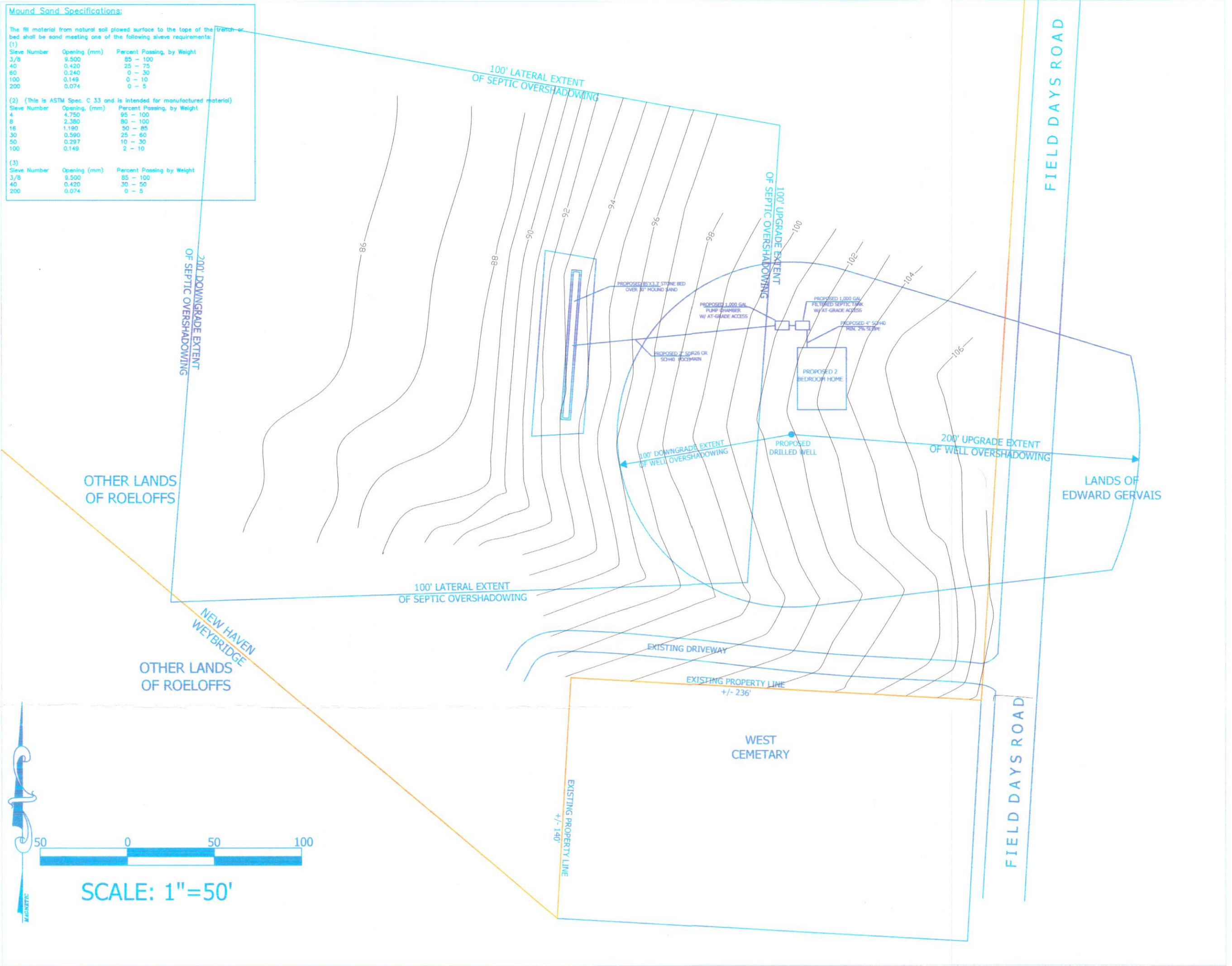
Sieve Number	Opening (mm)	Percent Passing, by Weight
2/8	3.500	85 - 100
4/20	0.420	25 - 75
60	0.250	0 - 30
100	0.149	0 - 10
200	0.074	0 - 5

(2) (This is ASTM Spec. C 33 and is intended for manufactured material)

Sieve Number	Opening (mm)	Percent Passing, by Weight
4	4.750	95 - 100
8	2.380	80 - 100
16	1.190	50 - 85
30	0.590	25 - 60
60	0.297	10 - 30
100	0.149	2 - 10

(3)

Sieve Number	Opening (mm)	Percent Passing, by Weight
3/8	9.500	85 - 100
40	0.420	30 - 50
200	0.074	0 - 5



MOUND DESIGN PROGRAM

TOWN..... NEW HAVEN
 APPLICANT'S NAME..... ROELOFFS
 DATE: 2/4/19 SPECIALIST: Jeff Kelley

SAND HEIGHT AT UPPER END OF LEVEL AREA..... 3.3 FEET
 MOUND WIDTH (short dimension of level area)..... 5.5 FEET
 MOUND LENGTH (long dimension of level area)..... 87 FEET
 NATURAL GROUND SLOPE..... 9 PERCENT
 MOUND FRONT SLOPE..... 33 PERCENT
 MOUND SIDE AND BACK SLOPE (IF DIFFERENT)..... 33 PERCENT
 DEPTH OF STONE..... 6 INCHES
 AREA OF THE DISPOSAL FIELD..... 298 SQUARE FT
 SOIL COVER AT END OF LEVEL AREA (IF NOT 12")..... 12 INCHES
 3.795 feet sand depth at lower end of level area
 15.8 feet from level area to downhill sand toe
 7 yards of stone (with safety factor)
 361.6 yards of sand (with safety factor)

PRESSURE DISTRIBUTION SYSTEM with symmetrical laterals

NUMBER OF LATERALS..... 2
 LENGTH OF EACH LATERAL..... 40 FEET
 NUMBER OF ORIFICES PER LATERAL..... 10
 NUMBER OF ORIFICES IN MANFOLD..... 2
 DISTANCE BETWEEN ORIFICES (ON CENTER)..... 4 FEET
 DISTANCE BETWEEN MANFOLD AND FIRST ORIFICE..... 4 FEET

DESIGN PRESSURE HEAD (IF NOT 2.31)..... 2.5 FEET
 DIAMETER OF ORIFICES (ENTER AS A FRACTION)..... 0.2500 INCHES

ELEVATION FROM PUMP TO LATERALS (0 IF SIPHON)..... 8 FEET
 DIAMETER OF DELIVERY PIPE..... 2 INCHES
 LENGTH OF DELIVERY PIPE..... 75 FEET
 MANFOLD LENGTH FROM DELIVERY PIPE TO LATERAL..... 4 FEET
 DIAMETER OF MANFOLD PIPE..... 2 INCH
 DIAMETER OF LATERAL PIPES..... 1.5 INCH

25.624011707606
 FRICTION LOSS THROUGH SEGMENT 1.... 0.04666666667
 FRICTION LOSS ENTIRE LATERAL..... 0.17986666667
 DISCHARGE RATE FIRST ORIFICE..... 1.16472780489
 DISCHARGE RATE LAST ORIFICE..... 1.13332264857

PERCENT DIFFERENCE FIRST TO LAST ORIFICE..... 2.6964%
 TOTAL HEAD LOSS (EL+DELIV+MANFOLD+LATERALS)..... 11.878
 (AND ELEVATION IF NOT ENTERED ABOVE)

TOTAL DELIVERY PIPE FLOW..... 25.620 GALLONS PER MINUTE
 VOID VOLUME OF DELIVERY PIPE..... 12.24 GALLONS
 PUMP MUST BE CAPABLE OF 25.62 G.P.M. AGAINST 11.9 FEET OF HEAD

DIMENSIONS OF SAND BED

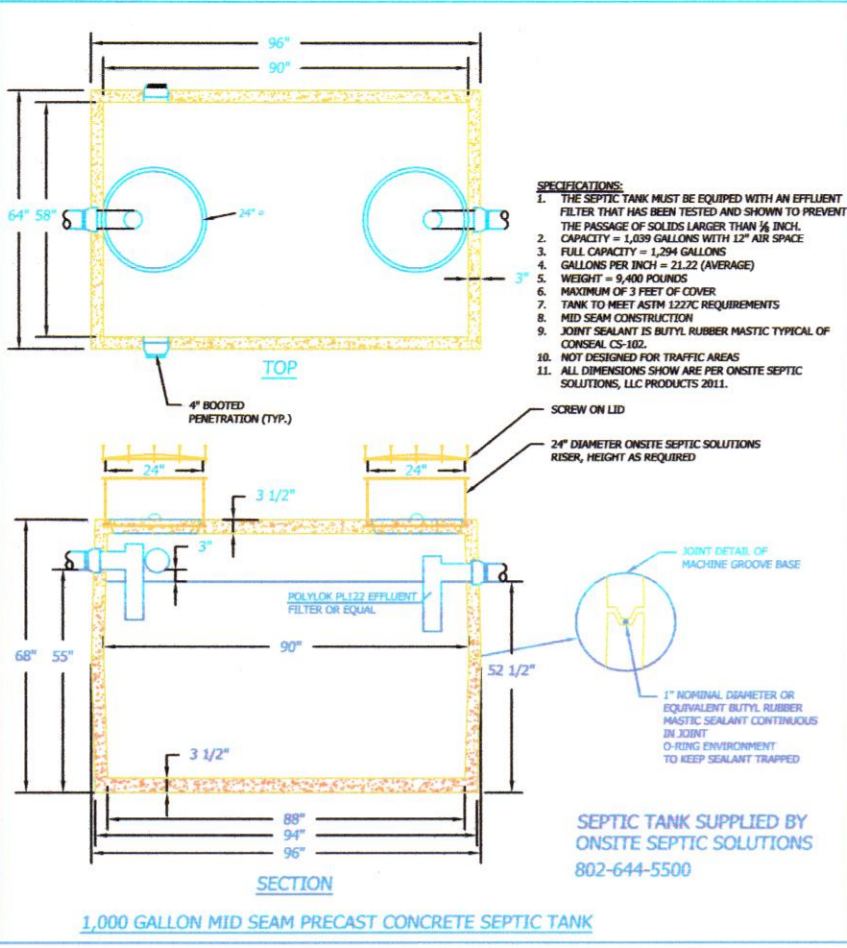
TOP BASE= 102.7 ft BOTTOM BASE= 118.6 ft

7.9 feet from level area to uphill sand toe
 10.0 upper to side toe
 5.5 ft wide level area
 87 ft long level area
 11.5 lower to side toe
 15.8 feet from level area to downhill sand toe

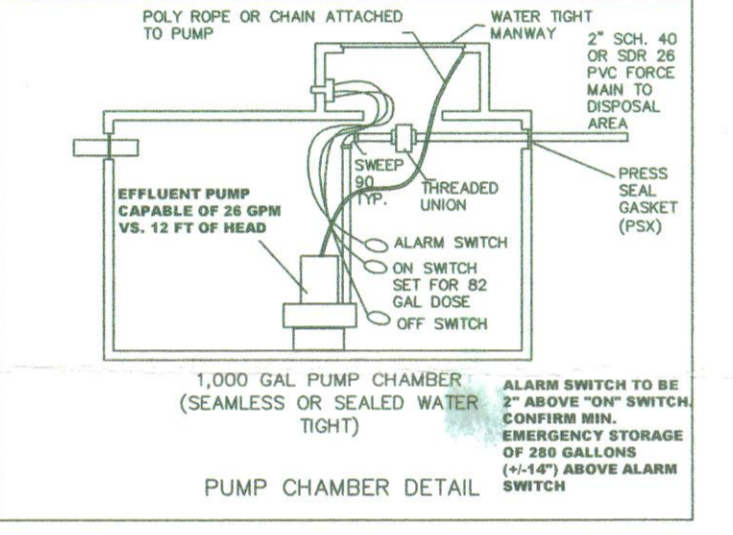
DIMENSIONS OF FINAL GRADED MOUND

TOP BASE= 107.5 ft BOTTOM BASE= 127.0 ft

10.2 feet from level area to uphill sand toe
 13.0 upper to side toe
 5.5 ft wide level area
 87 ft long level area
 14.5 lower to side toe
 20.0 feet from level area to downhill sand toe



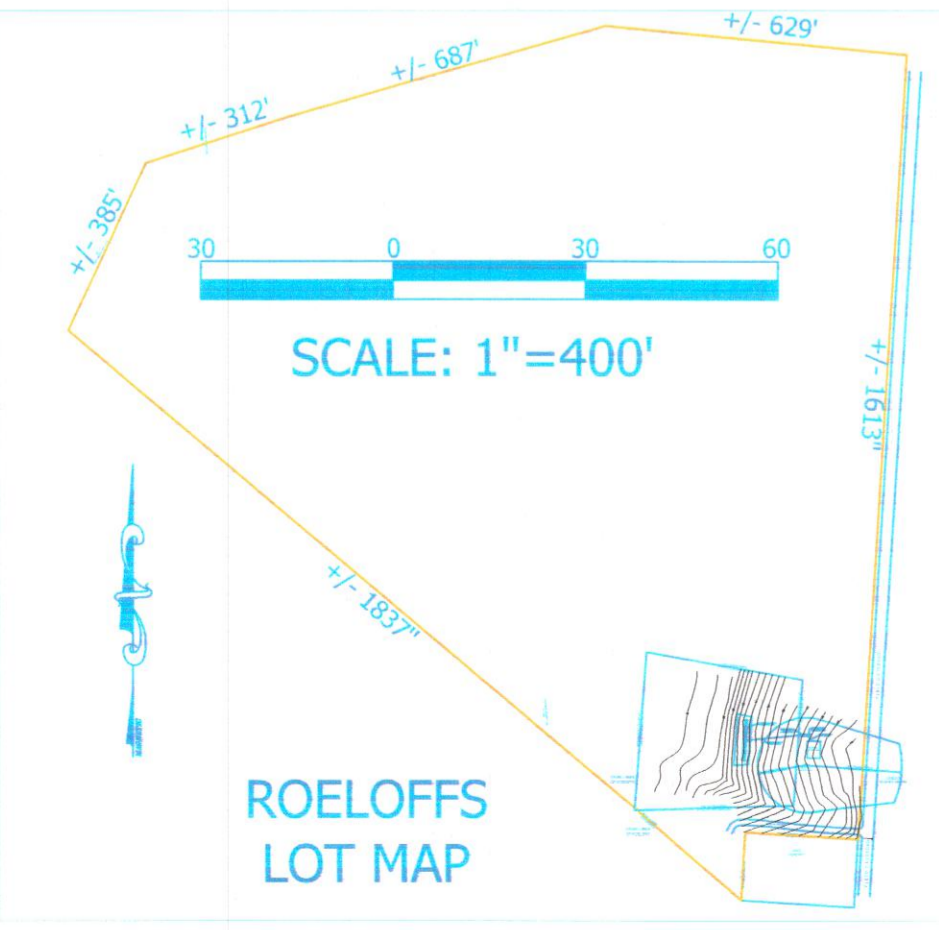
PUMP CHAMBER SPECS
 DOSING SPECIFICATIONS:
 280 GPD / 4 DOSES = 70 GALLONS
 VOID VOLUME = 12 GALLONS
 TOTAL DOSE = 82 GALLONS



DISPOSAL SYSTEM BASIS OF DESIGN:
 2 BEDROOM HOME FLOW: 280 GPD
 SOILS: LOAM
 SEASONAL HIGH WATER TABLE (SHWT) = 12"
 AVERAGE EXISTING SLOPE = 9%

DESKTOP HYDRO REQUIREMENTS:
 LLR - (h)(f)
 f = 10.1 (FROM TABLE 1)
 h = 12" - 6" = 6" (0.5')
 LLR = 10.1 * 0.33 = 3.3
 280 / 3.3 = 85' MIN. SYSTEM LENGTH

PROPOSED SYSTEM:
 (1) 85' X 3.5' STONE BED OVER 30" MOUND SAND
 STONE BED IS 298 SQ FT



TEST PIT LOSS: 09NOV2018
 JEFF KELLEY, CHRIS ROELOFFS (EXCAVATOR)

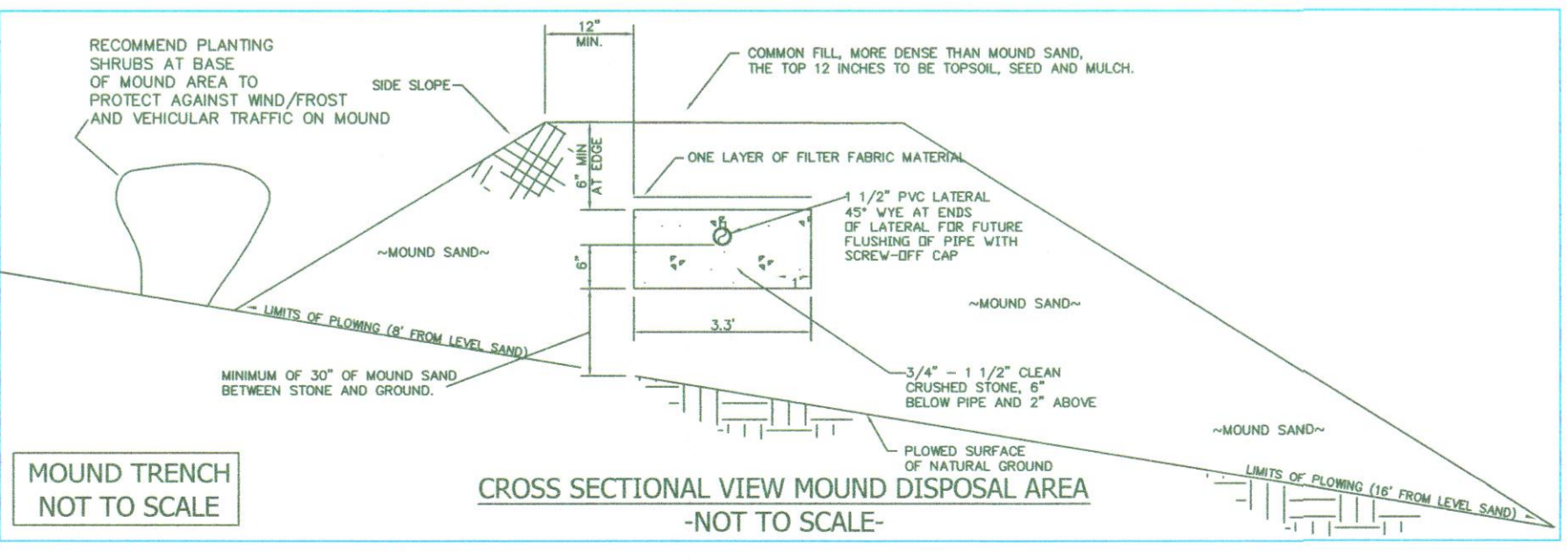
TP-1 (NOT USED IN SEPTIC DESIGN)
 0-4" V. FINE SANDY LOAM, GRANULAR, BROWN
 4-12" LOAM, LT BROWN, FRIABLE, GRANULAR
 12-18" SILT LOAM, GRAN, SOMEWHAT FIRM, MOTTLED
 18 - 36" CLAY LOAM, FIRM, PLATY, MOTTLED
 NO GROUNDWATER IN PIT, SHWT @12"

TP-2 (NOT USED IN SEPTIC DESIGN)
 0-4" V. FINE SANDY LOAM, GRANULAR, BROWN
 4-12" LOAM, LT BROWN, FRIABLE, GRANULAR
 12-18" SILT LOAM, GRAN, SOMEWHAT FIRM, MOTTLED
 18 - 36" CLAY LOAM, FIRM, PLATY, MOTTLED
 NO GROUNDWATER IN PIT, SHWT @12"

TP-3 (USED IN SEPTIC DESIGN, HIGHER SLOPE)
 0-4" LOAM, GRAN, BROWN
 4-12" LOAM, LT BROWN, FRIABLE
 12 - 18" SILT LOAM, SOMEWHAT FIRM, MOTTLED
 18 - 32" CLAY LOAM, FIRM, PLATY, MOTTLED
 NO GROUNDWATER IN PIT, SHWT @12"

TP-4 (USED IN SEPTIC DESIGN, HIGHER SLOPE)
 0-4" LOAM, GRAN, BROWN
 4 - 12" LOAM, LT BROWN, FRIABLE
 12 - 18" SILT LOAM, SOMEWHAT FIRM, MOTTLED
 18 - 32" CLAY LOAM, FIRM, PLATY, MOTTLED
 NO GROUNDWATER IN PIT, SHWT @12"

TP-5 (USED IN SEPTIC DESIGN, HIGHER SLOPE)
 0-4" LOAM, GRAN, BROWN
 4 - 12" LOAM, LT BROWN, FRIABLE
 12 - 18" SILT LOAM, SOMEWHAT FIRM, MOTTLED
 18 - 32" CLAY LOAM, FIRM, PLATY, MOTTLED
 NO GROUNDWATER IN PIT, SHWT @12"



PROPOSED SITE DESIGN
 ROELOFFS PROPERTY
 +/- 44.9 ACRES, FIELD DAYS ROAD, NEW HAVEN

JEFF KELLEY 802-349-5463
 VT SITE TECH #425-BW
 MIDDLEBURY, VT

SCALE: AS NOTED PAGE 1/1 DATE: 04 FEB 2019

State of Vermont
Department of Environmental Conservation
Drinking Water and Groundwater Protection Division
Rutland Regional Office
88 Merchants Row, 450 Asa Bloomer State Office Building
Rutland, VT 05701-5903
<http://dec.vermont.gov/water/ww-systems>

[phone] (802) 786-5900
[fax] (802) 786-5915

March 26, 2019

Christopher and Paula Roeloffs
2425 Field Days Road
Weybridge VT 05753

Subject: Wastewater System and Potable Water Supply Permit # WW-9-2646 for a project located in New Haven, Vermont.

Dear Ladies & Gentlemen:

Enclosed you will find:

1. a copy of the WW-9-2646 Permit document marked "Documents For Recording".
2. a copy of permit document for your records.

You are required to file this permit with your town clerk within 30 days of issuance of the permit. Please take the document stamped "Documents For Recording" to your town clerk. You will be required to pay a recording fee to your town clerk at that time.

Approved Plans: You may either contact your consultant for copies of the approved plan(s) or you may obtain a copy of them by accessing our website <http://dec.vermont.gov/water/ww-systems> and using the document search option. You may print out any documents or plans that you view.

Please read your permit thoroughly and be sure you understand all the requirements. Please be aware your permit may include a condition for the submission of installation certifications, annual inspections or other reporting requirements.

Failure to file the permit with your town clerk or to submit any permit-required certifications, inspections or other reporting requirements will render your permit invalid and will cause problems during future title searches done on this property.

Thank you for your cooperation. Please contact me at the above address if you have any questions.

Sincerely,


Alicia Owen
Environmental Technician III

Enclosures



WASTEWATER SYSTEM AND POTABLE WATER SUPPLY PERMIT**LAWS/REGULATIONS INVOLVED**

10 V.S.A. Chapter 64, Potable Water Supply and Wastewater System Permit
Wastewater System and Potable Water Supply Rules, Effective September 29, 2007
Chapter 21, Water Supply Rules, Effective December 1, 2010

Landowners: Christopher & Paula Roeloffs
2425 Field Days Road
Weybridge, VT 05753

Permit Number: WW-9-2646

This permit affects the following property in New Haven, Vermont:

<i>Lot</i>	<i>Parcel</i>	<i>SPAN</i>	<i>Acres</i>	<i>Deed Book / Page</i>
<i>1</i>	<i>670</i>	<i>432-135-11485</i>	<i>44.90</i>	<i>Book:46 / Page:242</i>

This project, consisting of the proposed construction of a two (2) bedroom single-family residence, served by a new on-site potable water supply well and a mound-type wastewater disposal system, situated on an unimproved 44.9 +/- acre parcel, located on Field Days Road in New Haven, Vermont is hereby approved under the requirements of the regulations named above and subject to the following conditions.

1. GENERAL

- 1.1 This project shall be completed as shown on the application, plan and/or documents prepared by Jeff Kelley of Kelley Environmental Geology with the plan stamped by the Drinking Water and Groundwater Protection Division listed as follows:

<i>Sheet Number</i>	<i>Title</i>	<i>Plan Date</i>	<i>Revision Date</i>
<i>1/1</i>	<i>Proposed Site Design</i>	<i>02/04/2019</i>	<i>03/25/2019</i>

- 1.2 This permit does not relieve the landowners from obtaining all other approvals and permits **PRIOR** to construction including, but not limited to, those that may be required from the Act 250 Environmental Commission; the Drinking Water and Groundwater Protection Division; the Watershed Management Division; the Division of Fire Safety; the Vermont Department of Health; the Family Services Division; or other State departments and local officials.
- 1.3 The conditions of this permit shall run with the land and will be binding upon and enforceable against the landowners and all assigns and successors in interest. The landowners shall record and index this permit in the New Haven Land Records within thirty (30) days of issuance of this permit and prior to the conveyance of any lot subject to the jurisdiction of this permit.
- 1.4 The landowners shall record and index all required installation certifications and other documents that are required to be filed under these Rules or under a specific permit condition in the New Haven Land Records and ensure that copies of all certifications are sent to the Secretary.
- 1.5 No permit issued by the Secretary shall be valid for a substantially completed potable water supply and wastewater disposal system until the Secretary receives a signed and dated certification from a qualified Vermont Licensed Class 1 or Class B Designer that states:

"I hereby certify that, in the exercise of my reasonable professional judgment, the installation-related information submitted is true and correct and the potable water supply and wastewater disposal systems were installed in accordance with the permitted design and all the permit conditions, were inspected, were properly tested, and have successfully met those performance tests",

or which otherwise satisfies the requirements of §1-308 and §1-911 of the referenced rules.



- 1.6 This project is approved for the construction of a two (2) bedroom single-family residence on an unimproved 44.9 +/- acre parcel. Construction of additional nonexempt buildings including commercial and residential buildings is not allowed without prior permitting by the Drinking Water and Groundwater Protection Division and such permit may not be granted unless the proposal conforms to the applicable laws and regulations. No construction is allowed that will cause non-compliance with an existing permit.
- 1.7 The Division relied upon the Vermont Licensed Designer's certification that the design-related information submitted is true and correct and complies with the Wastewater System and Potable Water Supply Rules and the Vermont Water Supply Rules. This permit may be revoked if it is determined that the project does not comply with these rules.
- 1.8 Each purchaser of any portion of this project shall be shown a copy of the Wastewater System and Potable Water Supply Permit and the stamped plans, if applicable, prior to conveyance of any portion of this project to that purchaser.
- 1.9 By acceptance of this permit, the landowners agree to allow representatives of the State of Vermont access to the property covered by the permit, at reasonable times, for the purpose of ascertaining compliance with the Vermont environmental and health statutes and regulations, and permit conditions.
- 1.10 Any person aggrieved by this permit may appeal to the Environmental Court within thirty (30) days of the date of issuance of this permit in accordance with 10 V.S.A. Chapter 220 and the Vermont Rules of Environmental Court Proceedings.

2. WATER SUPPLY

- 2.1 This project is approved for a potable water supply using a drilled or percussion bedrock well for a design flow of **280 gallons** of water per day provided the supply is located as shown on the stamped plans and meets or exceeds the isolation distances, construction standards, and water quality standards required in the Water Supply Rule. The landowners shall operate the potable water supply in a manner that keeps the supply free from contamination. The landowners shall immediately notify the Division if the water supply system fails to function properly and becomes a "failed supply".
- 2.2 The components of the potable water supply herein approved shall be routinely and reliably inspected during construction by a qualified Vermont Licensed Designer who shall, upon completion and prior to occupancy of the associated building, report in writing to the Drinking Water and Groundwater Protection Division that the installation was accomplished in accordance with the referenced plans and permit conditions, as specifically directed in Condition 1.5 herein.
- 2.3 The potable water source location as shown on the stamped plans shall be staked out and flagged by a qualified Vermont Licensed Designer prior to any construction on this project with the flagging being maintained until construction is complete.

3. WASTEWATER DISPOSAL

- 3.1 This project is approved for the disposal of wastewater in accordance with the mound-type system design depicted on the stamped plans for a design flow of **280 gallons** of wastewater per day. The system shall be operated at all times in a manner that will not permit the discharge of effluent onto the surface of the ground or into the waters of the State. Should the system fail and not qualify for the minor repair or replacement exemption, the current landowners shall engage a qualified Vermont Licensed Class 1 or Class B Designer to evaluate the cause of the failure and to submit an amendment application to this office and receive written approval prior to correcting the failure.
- 3.2 The components of the wastewater disposal system herein approved shall be routinely and reliably inspected during construction by a qualified Vermont Licensed Class 1 or Class B Designer who shall, upon completion and prior to occupancy of the associated building, report in writing to the Drinking Water and Groundwater Protection Division that the installation was accomplished in accordance with the referenced plans and permit conditions, as specifically directed in Condition 1.5 herein.
- 3.3 This project is approved for a mound-type wastewater disposal system provided the mound is constructed in strict accordance with the following conditions:
 - a. The mound system is to be located and constructed as depicted on the plans that have been stamped by the Drinking Water and Groundwater Protection Division;

- b. A qualified Vermont Licensed Class 1 or Class B Designer shall inspect the mound system during critical stages of construction. This shall include the staking of the location of the mound, ensuring the site has been properly plowed prior to placement of the appropriate sand fill material, the installation and testing of the distribution piping, final grading of the mound including side slopes, and pump station installation; and
 - c. The construction of the mound shall adhere to the guidelines set forth in Section 1-913(f) of the above referenced rules.
- 3.4 The wastewater disposal system for this project is approved for domestic type wastewater only except as allowed for water treatment discharges. No discharge of other type process wastewater is permitted unless prior written approval is obtained from the Drinking Water and Groundwater Protection Division.
- 3.5 No buildings, roads, water lines, earthwork, re-grading, excavation or other construction that might interfere with the installation or operation of the wastewater disposal system is allowed on or near the site-specific wastewater disposal area depicted on the stamped plans. All isolation distances that are set forth in the Wastewater System and Potable Water Supply Rules shall be maintained and will be incorporated into the construction and installation of the wastewater disposal field.

Emily Boedecker, Commissioner
Department of Environmental Conservation

By _____

Dated March 26, 2019

Elias J. Erwin, Assistant Regional Engineer
Rutland Regional Office
Drinking Water and Groundwater Protection Division

cc: Jeffrey Kelley
New Haven Planning Commission

Susan Eckhardt
 GMP Distribution Designer
 121 Cady Rd
 Midd. VT 05753



Wednesday, March 29, 2017

Billing Calculation

353-0129 cell
 352-8720 office

Job Title	Roeloffs	Project Num	Description
Estimator	Seckhar	#	# 25141

Construction Units:

Charges (Overheads and rules applied)

Application Fee

1 Pole Secondary Less Than 150 FT

Qty = 1 \$200.00

Flat Rate Fee/Credit

Service Drop Credit

Qty = 1 (\$375.00)

Overhead Single Phase

Secondary Line

Pole

Qty = 1 \$748.58

Secondary Service - Overhead

Single-Phase

O/H 1-Phase #1/0 Triplex

Qty = 1 \$407.36

Pole Risers

Pole Riser Secondary 3 Inch. Customer Supplied

Qty = 1 \$294.14

\$1,275.08

	<u>Installed Cost</u>	<u>Tax Assessed</u>	Bill Summary:	
Trimming, Drilling:	\$0.00	\$0.00	Trimming, Drilling (Inc. Tax):	\$0.00 143-29-00
Other GMP Installed:	\$1,275.08		Installed Cost:	\$1,275.08 252-22-00
Credits:	\$0.00		Tax Assessment:	\$410.44 252-23-00
Customer Installed:	\$0.00		Conduit Credit:	\$0.00 252-25-00
Subtotal	\$1,275.08	\$410.44	Loop Credit:	\$0.00 252-26-00
Tax Assessable Plant Value	\$1,275.08	\$410.44	Temp Services:	\$0.00 253-70-00
			Cost Sharing:	\$0.00
			Total Cost:	<u>\$1,685.52</u>

JEFF KELLEY
CERTIFIED VT SITE TECHNICIAN
285 MEAD LANE
MIDDLEBURY, VT 05753
PHONE/FAX: 802-349-5463
kellygeology@yahoo.com

February 4, 2019

Chris Roeloffs
2425 Field Days Road
Weybridge, VT 05753

RE: INVOICE FOR SEPTIC PERMIT APPLICATION, FIELD DAYS ROAD, NEW HAVEN

Soil Assessment, Site Survey, Layout, Design.....	\$2000
State Permit Application Fee.....	\$306.25
Down Payment, November 2018.....	\$500

TOTAL DUE: \$1806.25

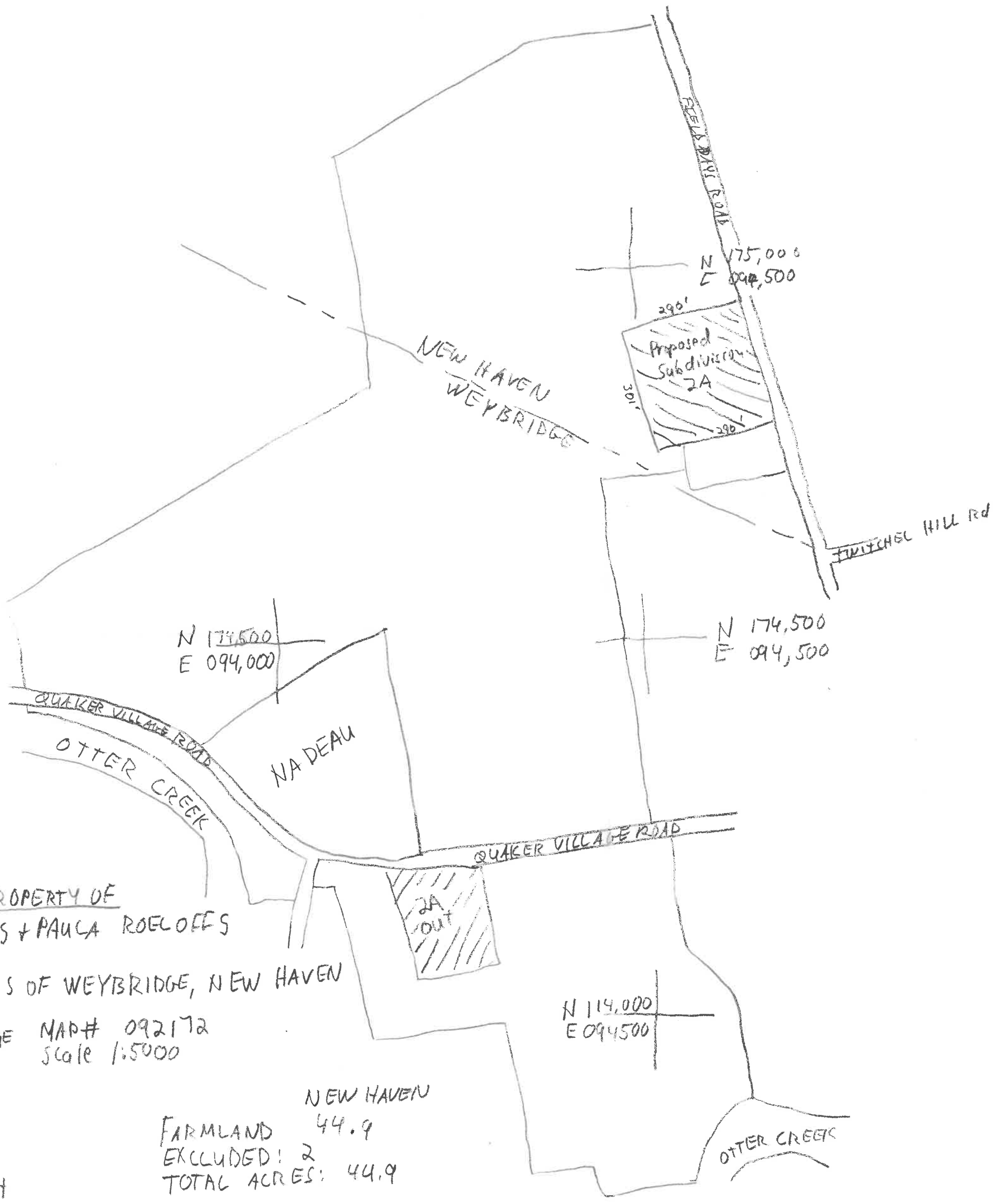
Please make checks payable to **Jeff Kelley**.

Sincerely,



Jeff Kelley
VT Site Tech #425-BW

*Payment full
check # 1806.25
JK (JK)*



PROPERTY OF
 IS + PAULA ROELOFFS
 VS OF WEYBRIDGE, NEW HAVEN

MAP# 092172
 Scale 1:5000

NEW HAVEN
 FARMLAND 44.9
 EXCLUDED: 2
 TOTAL ACRES: 44.9

111