SOILS INFORMATION
Test Pits Dug 10/23/16 By Open-Pit Backhoe

TP-1
0-14" DARK BROWN FINE SANDY LOAM
14"-25" ORANGE BROWN FINE SANDY LOAM
26"-42" BROWN LOAMY SAND
MOTTLES AT 32"

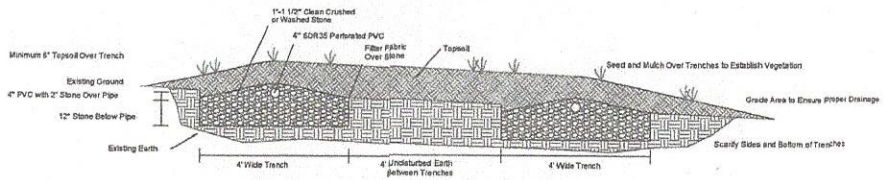
TP-2
0-10" DARK BROWN FINE SANDY LOAM
10"-28" BROWN LOAMY FINE SAND
28"-56" BROWN LOAMY SAND
MOTTLES AT 50"

TP-3
0-10" DARK BROWN FINE SANDY LOAM
10"-33" BROWN LOAMY SAND
33"-65" LIGHT BROWN LOAMY SAND
MOTTLES AT 54"

TP-4
0-15" DARK BROWN FINE SANDY LOAM
15"-30" BROWN LOAMY SAND
30"-46" LIGHT BROWN LOAMY SAND
46"-65" BROWN LOAMY SAND
MOTTLES AT 58"

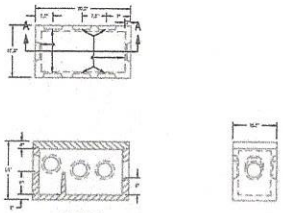
TP-5
0-15" DARK BROWN FINE SANDY LOAM
15"-36" BROWN LOAMY FINE SAND
36"-62" BROWN LOAMY SAND

Percolation Tests
PT-1 @ 24" = 8 min/in
PT-2 @ 24" = 9 min/in

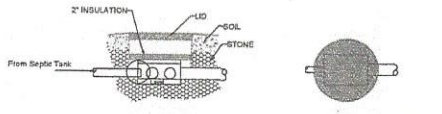



Shallow-In-Ground Trench Detail

(Not to Scale)

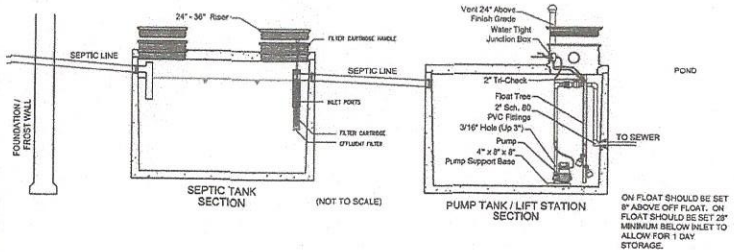



5 Hole D-Box

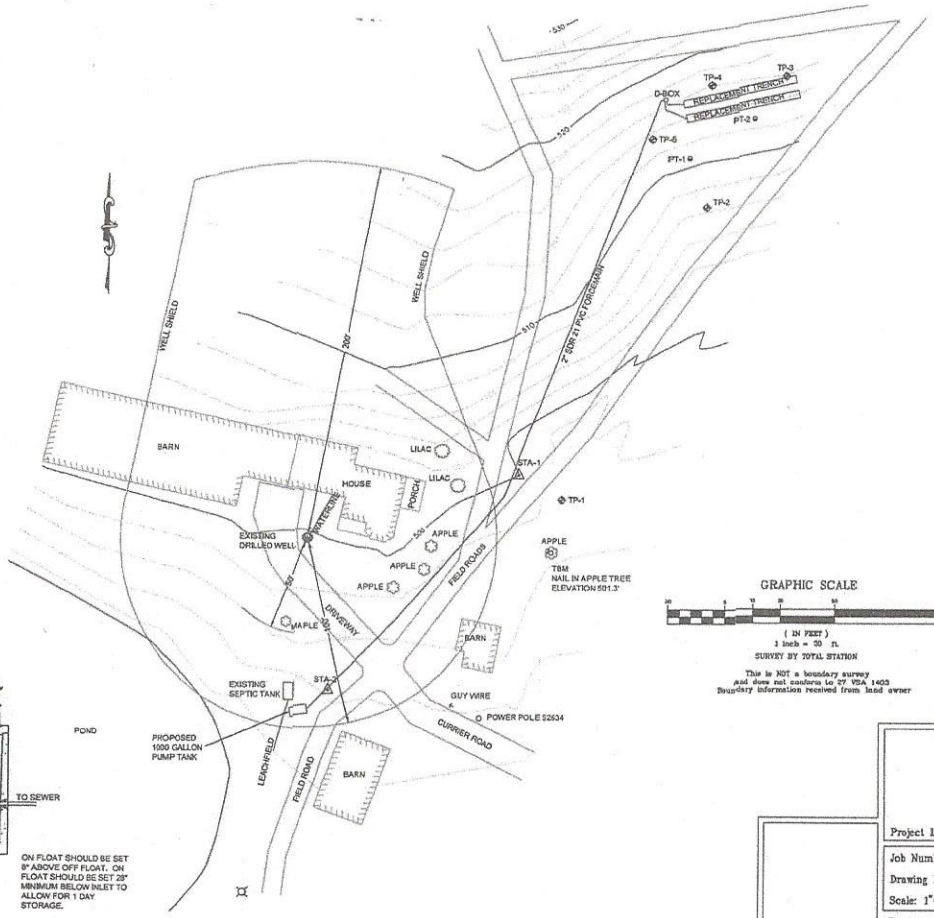



D-Box At-grade Access Detail

THE DISTRIBUTION BOX SHALL BE CONSTRUCTED WITH AN AT-GRADE ACCESS AS SHOWN COVERS SHOULD BE TIGHT FITTING AND DESIGNED TO PREVENT ENTRY BY CHILDREN USE POLYLOK RISER OR EQUAL




ON FLOAT SHOULD BE SET 8" ABOVE OFF FLOAT. ON FLOAT SHOULD BE SET 28" MINIMUM BELOW INLET TO ALLOW FOR 1 DAY STORAGE.




GRAPHIC SCALE

( IN FEET )
1 inch = 30 ft.

SURVEY BY TOTAL STATION

This is NOT a boundary survey and does not conform to 27 VSA 1403 Boundary information received from land owner

NOTES
Septic Tank (See Detail)
1) Use 1000 gallon concrete septic tank with access risers to grade.
2) Tank should contain an inlet baffle or "T".
3) Use 4" SCH 40 PVC or cast iron from the house to the tank.
4) Slope pipe at 1/4" per foot.
5) Install septic tank with access risers to grade.
6) Fit septic tank with an effluent filter to prevent passage of 1/8" and larger solids.
7) It is recommended that the septic tank be pumped every 3 years.

Pump Station (See Detail)
1) Use 1000 gallon pump station.
2) Install pump station with access risers to grade.
3) See pump calculations for each system.

Force Main
1) Use 2" SDR 21 PVC.
2) Insulate with 2" rigid insulation where burial is less than 4'.

Distribution Box (All Lots, See Detail)
1) Use 5 outlet distribution box ("D" box).
2) Install access riser to grade for regular inspection.
3) Use Orenco Flow type device to ensure even distribution.
4) Insulate "D" box with 2" rigid insulation.

Sizing Calculations
1) 4 Bedroom house at 490 gallons per day.
2) Loading rate = 3/5gal/ft = 1.0
3) Load trenches at 1.0 gallon per square foot per day.
4) 490 Square feet of trench is required.
5) 2 Trenches at 4' by 62' equals 496 square feet.

Leachfield Construction (See Detail)
1) Cut trees at ground level.
2) Scarify sides and bottom of trenches before placing stone.
3) Trench depth is 12"
4) Avoid driving equipment over leaching area.
5) Place 12" of clean, hard crushed stone under perforated PVC.
6) Cover pipe with a minimum of 2" of stone.
7) Cover stone with 4" wide filter fabric.
8) Place minimum 6" of soil over stone. (Top 2-4" must be topsoil)
9) Grade area to ensure proper drainage.
10) Seed and mulch any disturbed areas to establish vegetation.

Well/Waterline
1) Well is to be drilled in the area specified on the plan.
2) Well is not to be closer than 50' from the septic tank.
3) Maintain 20' of separation between waterline and septic components.
4) Well is to be tested to ensure drinking water standards are met.

To Be Tested And Certified By The Designer
1) Delivery to "D" Box.
2) Equal distribution of effluent to the laterals.

Additional Notes
1) Lot owner is to verify all easements and right of ways.
2) Lot owner is to ensure all other local zoning requirements are met.

REPLACEMENT LEACHFIELD - SIZING CALCULATIONS

| | |
|---|---|
| 4 Bedroom Residence | 490 GPD |
| Application Rate | 1.0 GPD/SF/Day |
| Bed Area Required | 490 SF min |
| Trench Area Provided 2 x 4 x 62 = | 496 SF |

Headlosses
Elevational
490' at Pump
518' at Laterals
= 28' Elevational Head

Friction
380' of Force Main = 0.99'
Risers and Fittings (60.4') = 0.21'
Total Friction Losses = 1.12'

Total Headlosses = (28 + 1.1 + 2.3') = 31.4'
+ 10% for safety = 34.5'

Dosing
Dose volume of Forcemain and Risers =
(380' + 8')(2/12/2)(3.14)(7.48 GAL/CF) = 63.3 GAL
Must pump 20 GAL/MIN
Set pump to deliver 160 gallons doses to the leachfield.

Pump Sizing
Pump must deliver 20 GPM at 34.5' TDH

Septic System Design for

John Currier

82 Carpenter Street
Norwich, VT 05055

Project Location: ??+/- Acres, Currier Road, Danville

Job Number: 2016-21

Drawing File: Work/2016-21 Currier

Scale: 1"=30'

TRAILHEAD DESIGNS, LLC
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Licensed Designer: Paul A. Taylor
Licensed Designer Type B* Number: 450

Date: January 2, 2017

Sheet 1 of 1