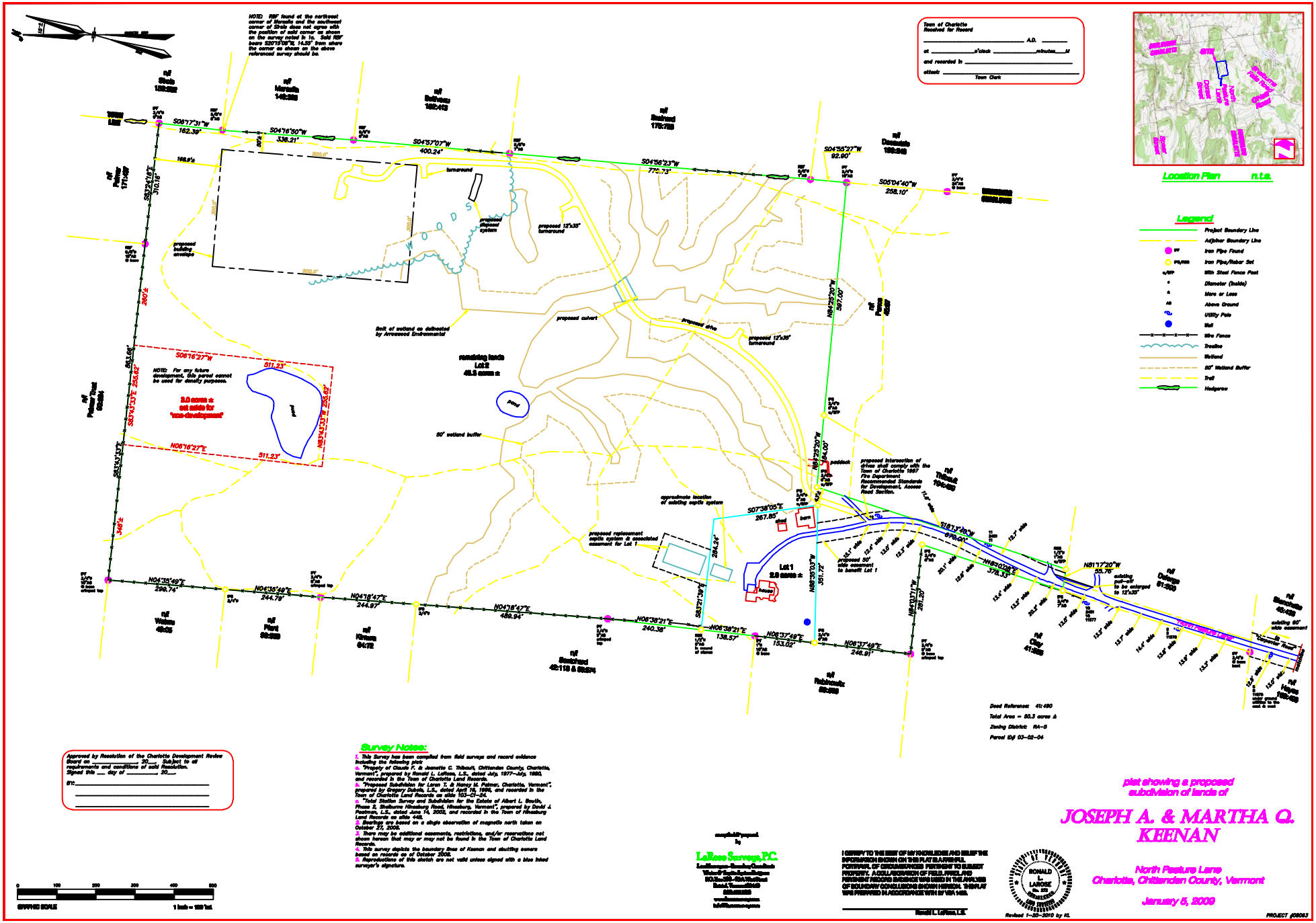

NOTE: RBF found at the northwest corner of Bonsalle and the southeast corner of Strab does not agree with the position of said corner as shown on the survey noted in to. Said RBF bears S20°16'08"E 14.45' from where the corner as shown on the above referenced survey should be.
Town of Charlotte
Received for Record
A.D.
and recorded in
Town Clerk
Location Plan n.t.s.
Legend
Project Boundary Line
Adjoiner Boundary Line
Iron Pipe Found
Iron Pipe/Rebar Set
With Steel Fence Post
Diameter (basis)
More or Less
Above Ground
Utility Pole
Well
Wire Fence
Treeline
Wetland
50' Wetland Buffer
Trail
Hedgerow
S08°17'31"W 162.39'
S04°16'50"W 336.21'
S04°57'07"W 400.24'
S04°56'23"W 772.73'
S04°55'27"W 92.90'
S05°04'40"W 258.10'
S82°24'18"E 310.16'
S06°16'27"W 511.23'
N06°16'27"E 511.23'
S83°43'33"E 255.62'
N83°43'33"W 255.62'
3.0 acres ± not suitable for "non-development"
NOTE: For any future development, this parcel cannot be used for density purposes.
remaining lands Lot 2 48.3 acres ±
Lot 1 2.0 acres ±
limit of wetland as delineated by Arrowwood Environmental
50' wetland buffer
proposed culvert
proposed drive
proposed 12'x35' turnaround
proposed building envelope
proposed disposal system
turnaround
pond
house
barn
shed
approximate location of existing septic system
proposed replacement septic system & associated easement for Lot 1
proposed intersection of drive shall comply with the Town of Charlotte 1997 Fire Department Recommended Standards for Development, Access Road Section.
proposed 50' wide easement to benefit Lot 1
existing 50' wide easement to be enlarged to 12'±30'
existing 60' wide easement to Colonial Road
Deed Reference 41:480
Total Area ± 50.3 acres ±
Zoning District R4-S
Parcel ID# 03-02-04
N04°35'49"E 299.74'
N04°35'49"E 244.79'
N04°18'47"E 244.97'
N04°18'47"E 489.94'
N06°38'21"E 240.38'
N06°38'21"E 138.57'
N06°37'49"E 153.02'
N06°37'49"E 248.97'
S07°38'05"E 267.85'
S16°17'20"W 978.00'
N16°03'21"W 281.20'
N81°17'20"W 55.76'
N82°25'20"W 64.00'
N82°25'20"W 567.00'
N83°25'03"W 351.72'
S83°21'39"E 284.24'
Approved by Resolution of the Charlotte Development Review Board on _____, 20____. Subject to all requirements and conditions of said Resolution.
Signed this ___ day of _____, 20____.
BY: _____
Survey Notes:
1. This Survey has been compiled from field surveys and record evidence including the following plats:
a. "Property of Claude F. & Jeanette C. Thibault, Chittenden County, Charlotte, Vermont", prepared by Ronald L. LaRose, L.S., dated July, 1977–July, 1980, and recorded in the Town of Charlotte Land Records.
b. "Proposed Subdivision for Leon T. & Nancy M. Palmer, Charlotte, Vermont", prepared by Gregory Dubois, L.S., dated April 19, 1996, and recorded in the Town of Charlotte Land Records as slide 103–01–04.
c. "Total Station Survey and Subdivision for the Estate of Albert L. Bouffa, Phase 2, Shelburne Hinesburg Road, Hinesburg, Vermont", prepared by David J. Pestman, L.S., dated June 14, 2002, and recorded in the Town of Hinesburg Land Records as slide 446.
2. Bearings are based on a single observation of magnetic north taken on October 27, 2008.
3. There may be additional easements, restrictions, and/or reservations not shown hereon that may or may not be found in the Town of Charlotte Land Records.
4. This survey depicts the boundary lines of Keenan and abutting owners based on records as of October 2008.
5. Reproductions of this sketch are not valid unless signed with a blue inked surveyor's signature.
LaRose Surveys, P.C.
I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THE INFORMATION SHOWN ON THIS PLAT IS A FAIR AND PORTRAYAL OF CIRCUMSTANCES PERTINENT TO SUBJECT PROPERTY. ACCELERATION OF FIELD, RADIAL AND PERIMETER ANGLING BASEDUPON THE RULES IN THE ANALYSIS OF BOUNDARY CONFLICTIONS SHOWN HEREON. THIS PLAT WAS PREPARED IN ACCORDANCE WITH 27 VSA 1403.
Ronald L. LaRose, L.S.
RONALD L. LAROSE No. 370 REGISTERED LAND SURVEYOR
Revised 1–30–2010 by RL
plat showing a proposed subdivision of lands of
JOSEPH A. & MARTHA Q. KEENAN
North Pasture Lane
Charlotte, Chittenden County, Vermont
January 6, 2009
PROJECT #08063
GRAPHIC SCALE
1 inch = 100 feet

Construction Specifications

Presby at-grade construction procedures are just as important as the at-grade design. Good design with poor construction will result in the at-grade system operating poorly and may result in failure. Proper equipment is essential. Small track type tractors work best. Wheel type tractors compact seepage areas. The following is a step-by-step procedure for at-grade construction, which has been tried and proven. Other techniques could be used as long as the basic principles of at-grade design, operation, and construction are not violated.

Note: Prior to construction, DigSafe shall be notified (1-888-DIGSAFE) and all materials, including stone shall be approved by the engineer.

Note: Utilities information shown on this plan was obtained from available sources and may or may not be either accurate or complete. The contractors shall verify exact location of existing utilities and shall be responsible for any damage to any utility, public or private, shown or not shown on this plan.

1. The outlet pipe from the septic tank to the distribution box shall be 4 inches SDR 35 PVC, at a minimum slope of 1/8 inch/FT. The pipe shall be laid on undisturbed ground or properly bedded.

2. Stake out the bed on this site so that they run perpendicular to the direction of the slope. Reference stakes are recommended in case corner stakes are disturbed. LaRose Surveys, P.C. must stakeout or verify this task.

3. Determine bottom elevation of the bed.

4. Determine where the pipe from the d-box connects to the distribution system in the bed.

5 Check the moisture content of the soil at 7 – 8 inches deep. If it is too wet, smearing and compaction will result, thus reducing the infiltration capacity of the soil. Soil moisture can be determined by rolling a soil sample between the hands. If it rolls into a ribbon, the site is too wet to prepare. If it crumbles, soil preparation can proceed.

6. Cut trees to ground level, remove excess vegetation by mowing. Prepare the site using a moldboard plow by plowing 8 – 10 inch deep furrows perpendicular to the slope. Furrow must be thrown uphill. Chisel plowing may be used if a moldboard plow is not available. Rototilling must not be done on heavy soils but can be used on non-structural soils such as sands. Alternatively, plowing can be done by using an excavator bucket to pull the soil into furrows parallel with the ground contours (the resulting surface must look as though it had been plowed with a moldboard plow, as outlined above). Immediate construction after plowing is necessary. Avoid rutting of plowed area with vehicular traffic. Inspection required at this point.

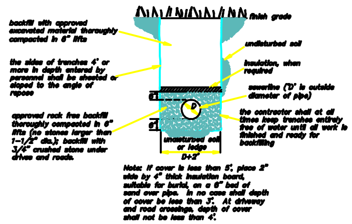
7. Construct the system by installing the mound sand. Mound the aggregate to the design depth. Keep trucks off plowed areas. Avoid traffic on the downslope side of the stone bed. Work from the ends and/or upslope side.

8. Place the distribution system on the aggregate. Lay laterals level, removing rises and dips. Inspection required at this point to assist with discharge rate and pressure testing.

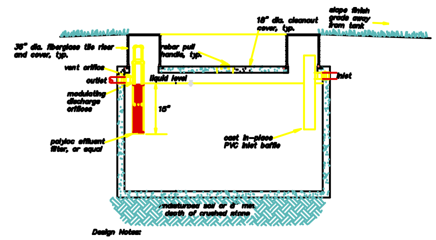
9. Landscape the at-grade system by planting grass, using the best vegetation adaptable to the area. A mixture of 90% birdsfoot trefoil and 10% timothy may be desirable if the area is not manicured. If manicuring is desired, a combination of 60% bluegrass, 30% creeping red fescue and 10% annual rye grass may be an appropriate vegetative cover. Shrubs can be planed around the base and up the sideslopes. They should be moisture tolerant since the toe of the downhill area may be somewhat damp during various times of the year.

10. All fill around the structures shall be placed in 12 inch lifts and thoroughly compacted to 95% of maximum density at optimum moisture content.

11. This design must be inspected by LaRose Surveys, P.C., Bristol, Vermont to ensure compliance with these plans. LaRose Surveys, P.C. waives any and all responsibility and liability for problems that arise from failure to follow specifications, and the design intent that the plans convey, and from failure to have been notified by the contractor for inspections.



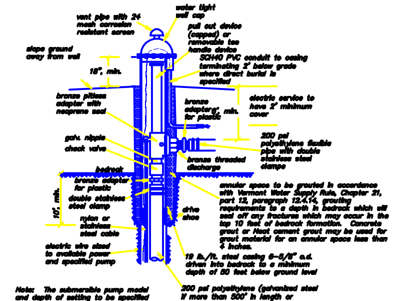
Sewerline Trench
NTS



Design Notes:

1. Concrete: 4,000 psi after 28 days. reinforcing 6x6/10x10 and fibers.
2. Heavy-duty septic tank tops reinforced with 5/8" rebar @ 12" o.c. each way.
3. Keyed joint sealed with butyl rubber.
4. Excavation must be at least 12" wider and longer than tank size.
5. Provide watertight pipe connections using pre-lok 4" plastic boots or non-shrink grout.
6. The tank shall be leak-tested for 24 hours prior to backfilling.
7. Covers shall be child-proof.

1000 Gallon Seamless Precast Concrete Septic Tank
NTS

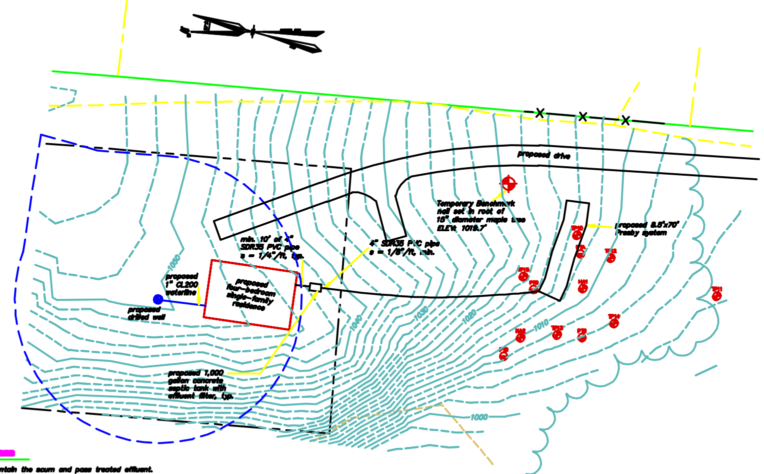


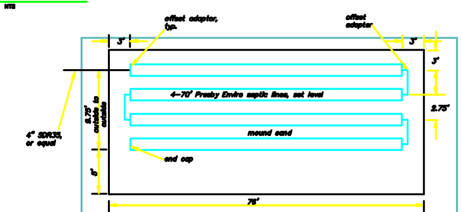
Note: The submersible pump model and depth of setting to be specified by engineer and well driller after well is drilled and yield tested (pipe and adapter size to suit also)

Typical Individual Drilled Well
NTS

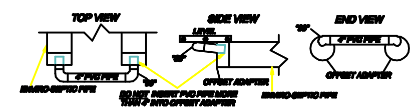
Legend

- Project Boundary Line
- Adjoiner Boundary Line
- Tree Line
- Now or Formerly
- More or Less
- Utility Pole
- Drilled Well
- Percolation Test
- Test Pit
- Bench Mark





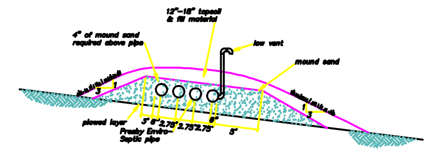
Primary Presby Enviro-Septic Sloping Mound System
NTS



Raised Connection
NTS

Construction Notes: Cut and remove all above ground vegetation with a hand mower. The existing ground shall not be graded or excavated. Construction equipment shall not be driven across the original ground or the plowed surface.

Sloping Disposal Area > 10%
Number of Enviro-Septic lines: 4
Center to Center pipe spacing: 2.75'



Presby Enviro-Septic Sloping Mound System
NTS

Operation & Maintenance Recommendations

1. The septic tank's purpose is to settle out solids, contain the scum and pass treated effluent. Bacteria within the septic tank helps decompose the solids. Should any solids pass through the septic tank into the system, premature clogging of the piping, stone or native soil beneath the system is likely to occur. Only human wastes should enter the sewage system, water use should be conservative and cleaning agents cannot enter the system, as they kill bacteria.

2. Once per year, the depth of scum and sludge in the septic tank should be measured and the tank shall be pumped if:

   a. The sludge level is within 12 inches of the bottom of the outlet.

   b. The scum layer is within 3 inches of the top of the outlet.

   c. If A or B is anticipated to occur prior to the next inspection.

   d. In any case, the tank shall be pumped at a maximum 4-year interval.

3. Once a year, the septic tanks, pump chambers, distribution box and effluent filter should be inspected by a qualified professional. The person that performs the inspection is cautioned to consult with a health professional prior to performing the above items. Any settled solids should be removed from the distribution box and the effluent filter should be cleaned.

4. Above items 1-3 are intended to prolong the life of the system, not guarantee it.

5. The Designer is not responsible for use of the system in ways that are not consistent with the design of the system such as but not limited to chemicals, septic system additives, garbage disposals, backwash from softeners or other water treatment devices, poor maintenance, or abnormal weather.

Individual Drilled Well Design Data

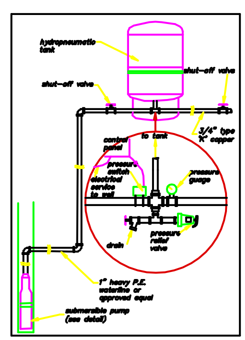
1. The drilled well(s) construction, location, disinfection, and testing shall be in accordance with the State of Vermont Water Supply Rules.

2. The basis of design for each drilled well is:

   A. Average Day Demand: 140 gpd x # of bedrooms for the first three bedrooms, and 70 gpd for each additional bedroom

   B. Maximum Daily Demand: (140 gpd X # of bedrooms)/720 min/day =
   0.58 gpm (3 bedrooms)
   0.68 gpm (4 bedrooms)

   C. Operating pressure range: 40-60 psi at pressure switch



Typical Individual Water System
NTS

State of Vermont Mound Sand Specification

Fill Material: The fill material from the natural soil plowed surface to the top of the trench or bed shall be sand texture with one of the following sieve:

b. Sieve Number / Opening (mm) / Percent Passing, by Weight

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
50	0.297	10 – 30
100	0.149	2 – 10

The material must meet specification b. Interpolation of analyses is not permitted. Fill material b is ASTM Specification C-33 and is intended for manufactured material.

Drilled Well Isolation Distances

Item	Horizontal Distance (feet) Disposal field	Septic tank	Sewer
Drilled well	a*	50	50
Lake and pond impoundment – standing water	50	25	25
River, streams	50	25	10
Drainage swales, roadway ditches	25	–	–
Main or municipal water lines	50	50	b*
Service water lines	25	25	b*
Roadways, driveways, parking lots	10	5	–
Top of embankment, or slope greater than 30%	25	10	–
Property line	25	10	10
Trees	10	10	10
Other disposal field or replacement area	10	–	–
Foundation, footing drains, curtain drains	35	10	–
Suction water line	100	50	50

* a) see presumptive isolation zone on plan
* b) see Vermont Water Supply Rule

Sewage Design Information

1. The proposed sewage disposal system shall be constructed in accordance with all applicable Town Regulations and the State of Vermont Environmental Protection Rules.

2. Basis of design:

Number of bedrooms = 4
Number of occupants = 7
Number of gallons per day = 490

Percolation Rates =	Perc Test	Depth	Rate (mpi)
	A	36"	12.3
	B	36"	33.9

Use Perc. rate of 33.9
Min. required length = 280'
Spacing shall be 2.75'
Number of lines shall be 4
System width is 8.25'
Min. sand area is 791 s.f.; avail is 72'x11.25'=810 s.f.

3. The use of garbage disposals is not recommended.

4. If a water treatment system (water softener) is going to be used, the backwash water may not be discharged into the disposal system.

compiled/prepared by

LaRose Surveys, P.C.

THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.

Deed Reference: 41:460
Total Area = 50.3 acres ±
Zoning District: RA-5
Parcel ID# 03-05-04

Revised 7-13-09

plan showing a proposed subdivision of lands of

JOSEPH A. & MARTHA Q. KEENAN

North Pasture Lane
Charlotte, Chittenden County, Vermont

January 5, 2009

GRAPHIC SCALE 0 40 80 120 160 200 — 1 inch = 40 feet

PROJECT #08063