Design Criteria

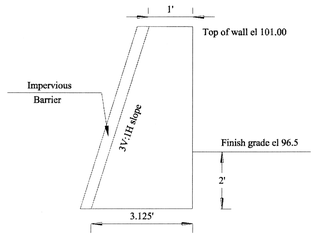
2 Bedrooms x 110 gals/day/bedroom = 220 gals/day
A deed restriction will be placed on the property restricting the use to two bedrooms
Soil is a Type I soil w/ percolation rate of < 2 min/inch (by sieve analysis)
Effluent loading rate = 0.74 gals/day/sf
Required Area = 220 gpd/0.74 gpd/sf = 297 sf

Area Provided

2 trenches 38' long w/ 6" of stone below each trench
Bottom Area = 2 trenches x 38'/trench x 3' wide = 228 sf
Sidewall area = 2 trenches x 2 sidewalls/trench x 38' x 0.5' = 76 sf
Total Area = 228 sf + 76 sf = 304 sf
Area provided (304 sf) > Area required (297 sf)

Note: A deed rerstriction will be placed on the property limiting the

Retaining Wall



1. 4,000 psi cement concrete to be used
2. Construction joints placed at 24 ft O.C. maximum
3. All concrete dimensions are provided

Test Pit #1	exst grade 100.00
A 12" el 99.00	Sandy Loam 10YR3/3
46" el 96.17	Fill
B 71" el 94.08	Loamy Sand 10YR5/8
C 119" 90.08	Fine Sand/Loamy Sand 2.5Y7/2
Groundwater @ 63" el 94.75	

Test Pit #2	exst grade el 96.25
A 12" el 95.25	Sandy Loam 10YR3/3
B 24" el 94.25	Loamy Sand 10YR5/8
C 42" el 92.75	Fine sand 10YR4/6
Groundwater @ 18" el 94.75	

Test Pit #3	exst grade el 99.75
A 12" el 98.75	Sandy Loam 10YR3/3
60" el 94.75	Fill
B 71" el 93.83	Loamy Sand 10YR5/8
C 119" el 89.83	Fine Sand/Loamy Sand
Groundwater @ 60" el 94.75	

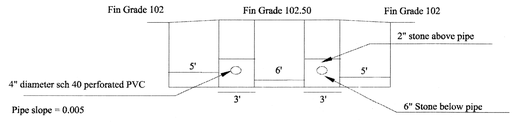
Test Pit #4	exst grade el 99.75
A 12" el 98.75	Sandy Loam 10YR3/3
60" el 94.75	Fill
B 71" el 93.83	Loamy Sand 10YR5/8
C 119" el 89.83	Fine Sand/Loamy Sand
Groundwater @ 60" el 94.75	

Soil Evaluator: Steven Cadorette, P. E. SE-2865

Test pits excavated April 13, 2010

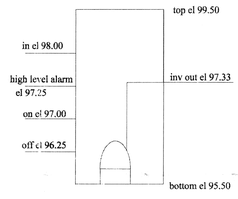
Seekonk Board of Health Represcntative: Beth Hallal

Soil Adsorption System Crosss-Section
(Not to Scale)

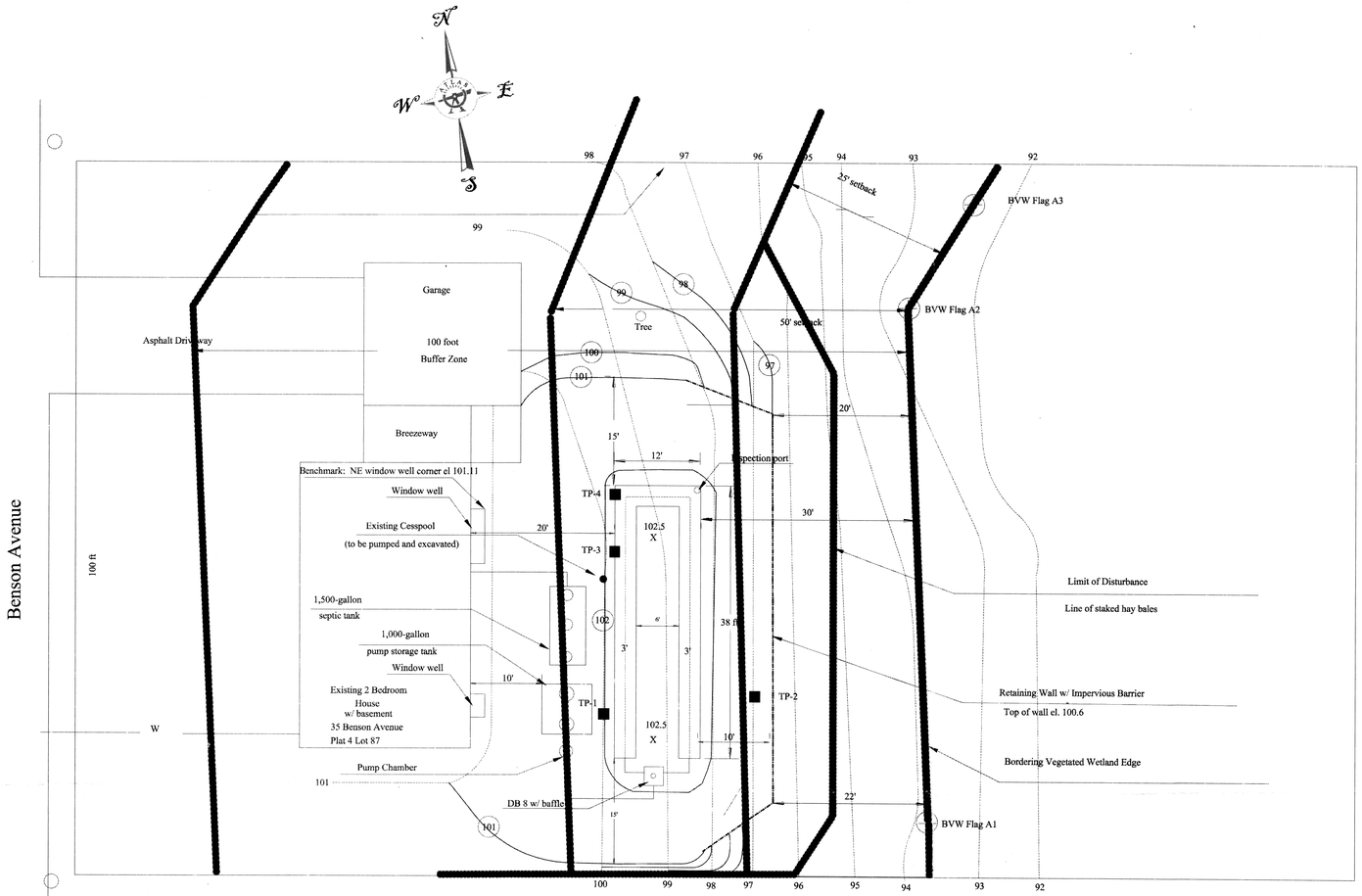


Unsuitable material and impervious soil in and within 5' of the soil adsorption system shall be excavated to el 93.83 as required by 310 CMR 15.240 and replaced with fill material meeting the specifications of 310 CMR 15.255(3). Suitable fill material sall be placed to el 99.75.

Pump Basin and Pump



Goulds simplex pump SIMRGSKT
and Basin Kit S2NGRD48
Indoor control panel is S10020N1



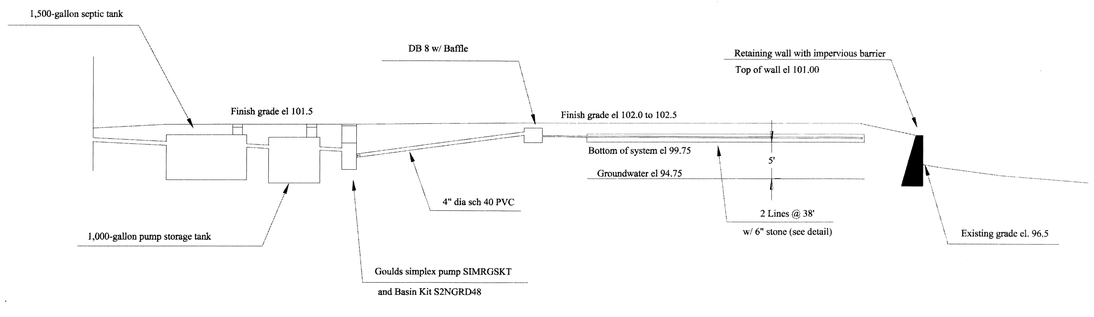
Scale: 1" = 10'

Construction Notes

1. All work must conform to 310 CMR 15.000 The State Environmental Code Title 5: Standard Requirements for the Siting Construction, Inspection, Upgrade, and Expansion of On-Site Sewage Treatment and Disposal Systems and for the Transport and Disposal of Septage as of the Latest Amendment and with the Regulations of the Seekonk Board of Health
2. There are no known wells within 150' of proposed soil adsorption system
3. The installer shall verify all elevations and dimensions prior to starting work. The installer shall notify the enginer of any deviations from the plans in writing a minimum of 10 days prior to starting the work.
4. The minimum distance fromthe proposed from systems components to a pressure water distribution line shall be 10'
5. The minimum distance from the septic tank, pump chamber, and distribution box to a private well shall be 50'. The minimum distance from the soil adsorption system to a private water supply well shall be 100'.
6. The building sewer shall be sch 40 PVC with watertight joints with a minimum slope of 0.01 ft/ft.
7. All building sewers shall be constructed in accordance with the State Plumbing Code, 248 CMR 2.00
8. Septic tank shall comply to 310 CMR 15.223 throgh 15.228 requirements. One acces port shall be accessible within 6" of final grade.
9. A MADEP approved outlet filter shall be installed on the septic tank outlet. Access cover over outlet tee shall be brought to grade.
10. Dosing chamber shall comply to 310 CMR 15.231 Dosing Chambers and Pumps requirements. The pump chamber shall have a riser and cover that are watertight. The cover shall be located at final grade.
11. The distribution box shall comply to 310 CMR 15.232. An inlet baffle shall be provided. Outlet distribution lines shall be level for a minimum of the first 2' of their length.
12. Soil adsorption system shall compoly with 310 CMR 15.240. A minimum of 9" of cover, excluding topsoil, clean and free of stones and boulders greater than 6" shall be placed in lifts and sufficiently compacted to prevent depressions.
13. Finish grade above the soil adsorption syatem shall have a minimum slope of 0.002 ft/ft.
14. One inspection port accessible within 3" of finish grade shall be provided in the soiladsorption system.
15. Excavation and flagging of the soil adsorption system shall comply to 310 CMR 15.246 requirements. The bottom and sidewalls of the system shall be level and scarified.
16. Reserve area not required for system repairs.
17. Trenches shall comply to 310 CMR 15.251 requiements. Effluent lines shall have a minimum slope of 0.005 ft/ft and shall be with unperforated pipe.
18. All pipe shall be sch 40 PVC unless otherwise noted.
19. A variance is requested to locate the system within the 50' Bordering Vegetated Wetland setback. No ther variances are requested.
20. The system is not designed for use with a garbage grinder.
21. The septic tank effluent tee shall be inspected and cleaned at least on an annual basis.

System Invert Elevations

Out of house	99.33 (exst)
1,500-gal septic tank inv in	98.83
1,500-gal septic tank inv out	98.58
1,000-gal pump storage tank inv in	98.40
1,000-gal pump storage tank inv out	98.15
Pump basin inv in	98.00
Pump basin inv out	97.33
D-Box inv in	100.72
D-Box inv out	100.55
Trench pipe inv in	100.43
Trench pipe inv el @ end on line (s=0.005)	100.25
Bottom of system	99.75



System Profile
Scale: 1" = 10'

Note: Septic tank outlet, pump storage tank outlet, and pump chamber acces shall be brought to grade with watertight riser. Covers at grade shall be watertight.

Notes

Site is identifed as Notice of Wetlands Protection Act File # SE069-0685
MADEP file number shall be posted on-site prior to construction.
Work shall not begin prior to the Seekonk Coservation Commission issuing an Order of Conditions.
Line of staked hay bales will be installed prior to starting work
No work shall take place beyond the limit of disturbance/line of staked hay bales shown on the plan
Proposed work will be completed in existing grassed areas
Distrubed area will be backfilled with loam and reseeded
Line of staked hay bales shall be maintained until disturbed upland area is revegetated
Wetland delineation completed by Natural resource Services, Inc. in accordance with the Massachusetts Wetlands Protection Act.
Bordering Vegetated Wetland flagging located by survey.
Mean Annual High Water line flagging located by survey.
BVW 25-foot, 50-foot, and 100-foot setbacks shown on the plan.
All proposed work will occur outsode the MAHW 200-foot riverfront area.
Proposed system repair is subject to Seekonk Board of Health approval

Legend

- Test Pit
- Wetland Flag
- 99 — Existing Grade
- (99) — Proposed Grade

COMMONWEALTH OF MASSACHUSETTS
STEVEN D. CADORETTE
ENVIRONMENTAL
NO. 48394
REGISTERED
PROFESSIONAL ENGINEER

SE69-685

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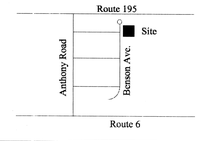

System Repair Grading Plan
35 Benson Avenue, Seekonk, MA
Plat 4 Lot 87
Property Owner: Alice Young
Prepared May 28, 2010
Revision and Date
Prepared by Steven Cadorette, P.E.
35 Bodwell Street, Somerset, MA