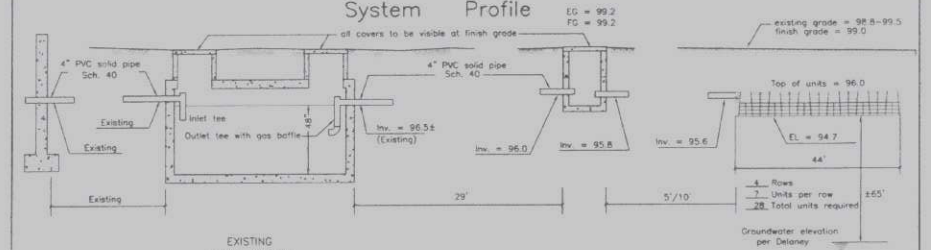
Plan

Scale: 1 in. = 20 ft.
Datum: Assumed

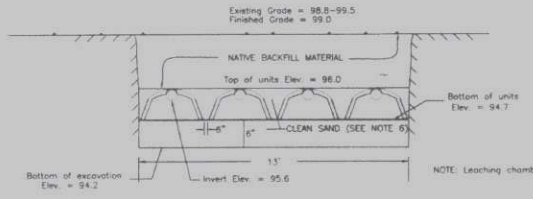
LOCUS MAP
Scale: 1:25000

System Profile



System Cross Section

NOTE: Not to scale



To avoid compaction, no machinery is allowed within three vertical feet of bottom of excavation without the specific approval of the design engineer.
This leaching facility is not designed for H-20 loads and shall not be driven upon, even though H-20 infiltrators are specified.

Notes

1. This plan is to be used only for the approval and installation of a sewage disposal system and is not to be used for any other purpose.
2. All construction and components shall conform to Massachusetts State Environmental Code TITLE V and Local Board of Health Requirements.
3. This design does not warrant the location of underground pipes, wires, utilities or other underground structures. The installer shall be responsible for locating and relocating these objects as necessary.
4. No garbage grinder is allowed with this system.
5. Any portion of this system subject to vehicular traffic shall be capable of H-20 loading.
6. An observation pipe shall be placed as shown and capped at grade so as to allow monitoring of liquid level in the leaching system. Place re-rod flush at each to aid in relocating with metal detector.
7. All access covers are to weigh at least 150 lbs. and are to be brought to grade by adding risers as necessary. The covers are to be visible at the surface.
8. The inlet tee of the septic tank shall be easily removable (not glued) so as to allow the use of a plumbers snake if necessary.
9. Any clean sand fill required by this design is to have less than 4% passing the No. 100 sieve.
10. No wells could be found within 100' of the proposed leaching facility.
11. The engineer AND the local approving authority are to inspect and approve the installation and placement of all septic components before final backfilling.
12. A letter certifying satisfactory construction of this system is to be provided to the owner and the Board of Health by the Engineer and the installer.

Design Criteria

Design Hydraulic Loading
5 Bedrooms x 110 GPD/Bedroom = 550 GPD

Septic tank capacity:
Required: 550 GPD x 200% = 1100 Gal. minimum
Provided: 1000 Gal. (Existing)

Leaching Capacity Provided:
H-20 High Capacity Infiltrator Leaching Bed
28 Infiltrator Units
28 Units x 6.25 linear ft./unit x 4.72 sq.ft./linear ft. = 826 sq.ft.
826 sq.ft. x 0.74 GPD/sq.ft. = 611 GPD

* Per modified certification for general use to "Infiltrator Systems, Inc." issued 2-21-03 Sec. II, B. High capacity units are allowed 4.72 sq.ft. leaching area per lineal ft.

SOIL DATA

Soil evaluator: Reid G. Silva, P.E.
Witnessed By: Shirley Fouteux

Deep Observation Hole 1
Date: October 3, 2006
Surface elevation = 99.0

Depth	Horizon	Texture
0-18"	A	Sandy Loam
18"-36"	B	Loamy sand w/gravel
36"-120"	C	Med/coarse loamy sand

Perc. rate < 5 mpi. 36"
No groundwater found at 120" (Elev. = 89.0)

Estimated depth to groundwater = 65'
(as per Groundwater Hydrology of Martha's Vineyard, Mass., Delaney, 1980)

Proposed Septic System UPGRADE on Land in OAK BLUFFS, MASS.

Designed for: WILLIAM HIGHAM
Street Address: #23 SCHOOL HOUSE VILLAGE
Assessor No.: 50-20
Lot Area: ±16,047 S.F.
Deed Reference: Bk:428, Pg:382
Designed By: Reid G. Silva, P.E.
Checked By:
Date: OCTOBER 4, 2006
Revised:

REID G. SILVA
No. 9047
CIVIL
10/4/06

Vineyard Land Surveying & Engineering, Inc.
P.O. Box 421 12 Cournoyer Road
West Tisbury, MA 02575
Phone: (508) 693-3774
Fax: (508) 693-8575

Job No. 217

LEGEND
EXISTING CONTOUR — PROPOSED CONTOUR — EXISTING SPOT ELEVATION — WATER SERVICE LINE — TEST HOLE LOCATION

FILE COPY