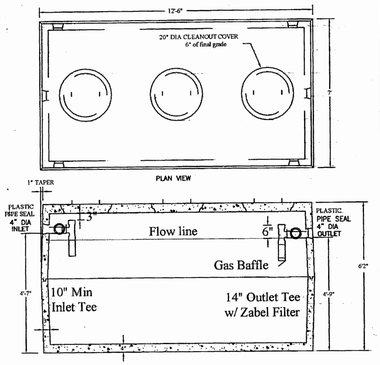
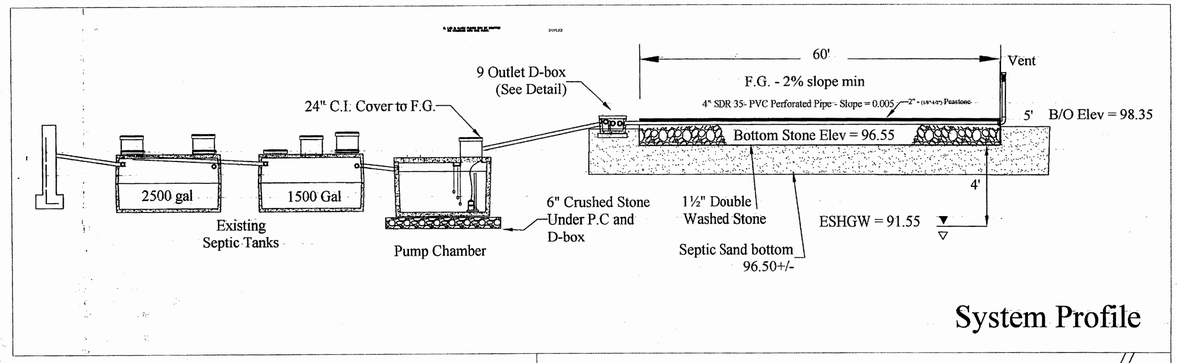
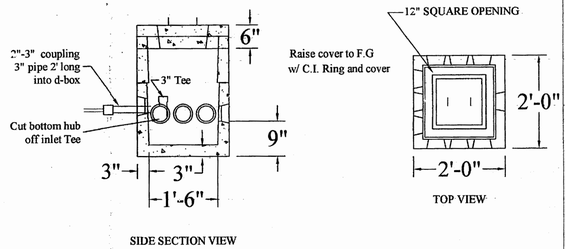


Existing 2500 Gal Septic Tank
Covert 1500 PC to S.T as Shown

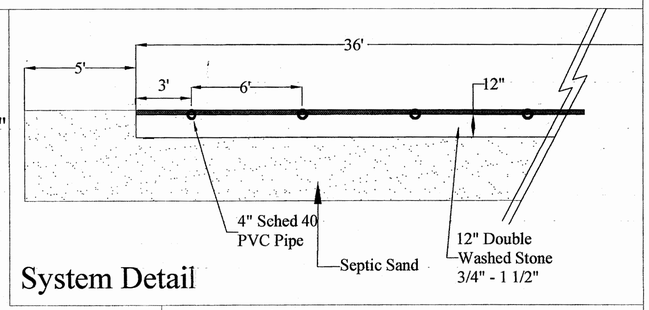


System Profile



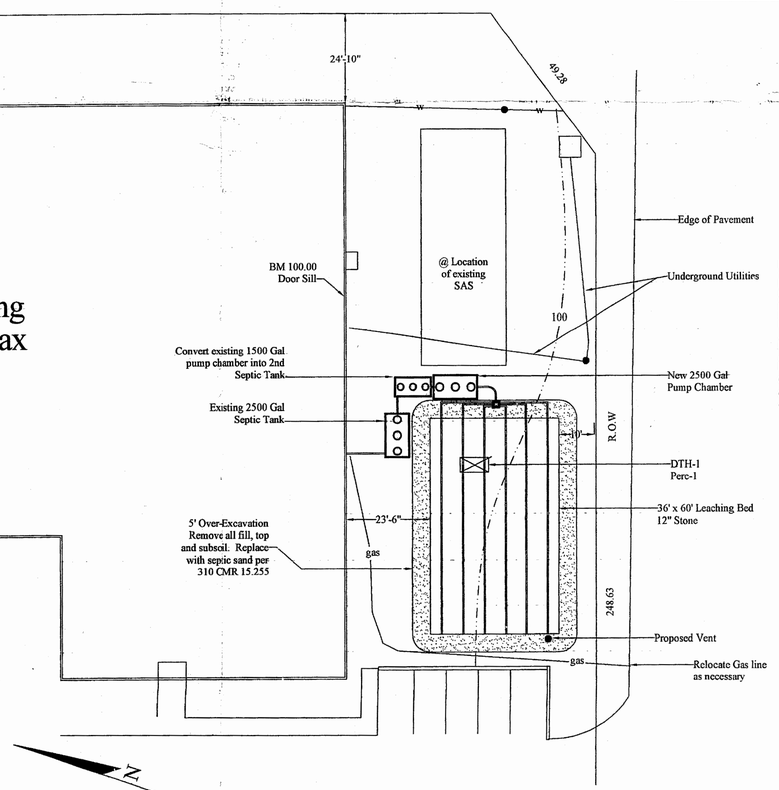
SIDE SECTION VIEW

TOP VIEW

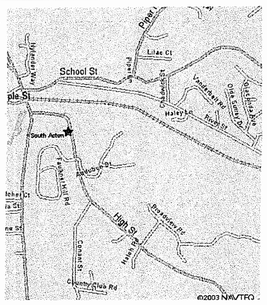


System Detail

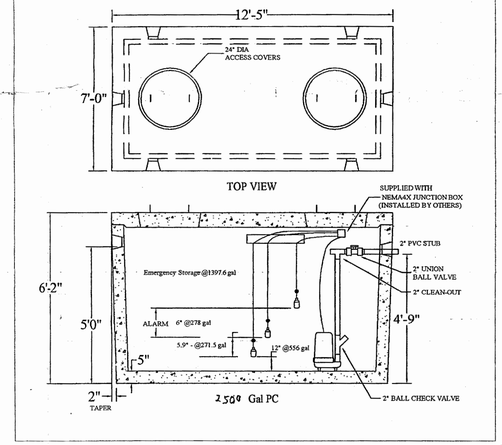
399.30



Industrial Building
72 Employees max



Locus



Pump Chamber Specifications

1. Type: Meyers SRM4 0.4hp; Submersible Sewage Pump or approved equal - >1.5" Solids Handling Capacity - Min Capacity - 66 GPM at 8' head. Two pumps are required for this design. Pumps shall alternate between cycles.

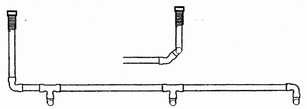
2. The pumps shall be provided with liquid float control switches and high water alarm control as illustrated in detail.

3. The control panel shall be equipped with an audible alarm placed in the basement in a readily accessible location. Alarm circuit shall be separated from pump circuit.

4. All wiring shall conform to local and state wiring codes and shall be installed by a licensed electrician.

5. Pumps must be installed in accordance with manufacturers reccom -mendations. All joints and fitting to be glued. Float switches to be set at levels shown in detail.

Vent Detail



General Notes

1. The septic tank and pump chamber shall be made of precast concrete. Tank construction materials shall comply with 310 CMR 15.226. Septic tank and pump chamber shall be waterproofed below the pipe inlet.

2. The septic tank and pump chamber shall be placed on six inches of crushed stone that has been mechanically compacted. A minimum of nine inches of cover shall be placed over the tank. A 24 inch cover with an appropriate water tight riser shall be provided over the outlet within six inches of finished grade.

3. Where not otherwise specified, piping shall be 4" schedule 40 PVC pipe with glued joints. Existing supply piping that is not 4" cast iron or schedule 40 PVC shall be replaced.

4. Final grading over the leaching area shall provide that no water will accumulate on the surface. The grade above and next to the leaching facility shall have a minimum 2% slope.

5. Cover material shall be free of large stones, stumps, frozen clumps of earth, masonry or construction waste material. Machinery that may crush or disturb the alignment of pipe in the disposal system area shall not be allowed on any part of the disposal area.

6. All stone shall be free or iron, fines and dust, and must have less thatn 0.2% material finer than a #200 sieve as determined by AASHTO test methods T-11 and T-27.

7. Fill material for systems constructed in fill shall consist of select on-site or imported soil material. The fill shall be comprised of clean granular sand, free from organic matter and deleterious substances. Mixtures and layers of different classes of soil shall not be used. The fill shall not contain any material larger than 2 inches. A sieve analysis report must be obtained by the installer to demonstrate that the fill material complies with 310 CMR 15.255(3). The Board of Health may require a minimum of one representative sample be taken from the in place fill and tested for compliance with the grain size distribution specifications.

8. Should conditions be encounter onsite which require modification to the approved plan, the installer shall contact the Designer for instructions.

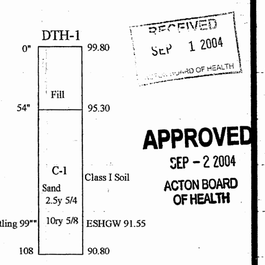
9. The installer may make minor changes in orientation to avoid large obstacles that include but are not limited to boulders, trees, walls, fences, sheds, and pavement. It is the intent of this design to locate the leaching facility in the general area of the test holes. Minimum offsets from foundations, property lines, wells, and wetlands shall be maintained at all times.

10. The owner shall be responsible for ascertaining the location of all property lines. The plan was made from survey information provided on a plan of land dated 9/10/92 by Acton survey & Engineering Inc.. A professional instrument survey was not performed. If proximity of the system to property lines are critial or if the location of a property line is in question, an instrument survey should be performed by a Professional Land Surveyor. This plan is designed for the purpose of installing a septic sytem only. The Designer is not responsible for any subsurface structures not depicted on the plan.

11. All existing elevations must be verified prior to installing any system components.

12 The system IS NOT SIZED according to Title 5 to accommodate a GARBAGE DISPOSAL.

13. All construction shall conform to 310 CMR 15.000 and Local Board of Health Regulations.



RECEIVED
SEP 1 2004
BOARD OF HEALTH

APPROVED
SEP – 2 2004
ACTON BOARD
OF HEALTH

Date:8/2/04
Witnessed by: Brent Reagor, R.S., Acton BoH

Percolation Test			
Test #	Depth	Elevation	Rate
1	66"	94.30	<2 mpi

I certify that I have passed the examination approved by DEP and that the soil analysis has been performed by me consistent with the required training, expertise, and experience described in 310 CMR 15.018(2).

Richard Dolan
Soil Evaluator

Design Calculations

Type of Establishment Industrial Plant
System Required

Number of Employees: 72
Design Flow: 1080GPD
Septic Tank: 2500/2500Gallons
System Area: 2160[Table 2]

System Provided

Number of Employees: 72
Septic Tank Capacity: 2500/1500 gal
System Area: 2160sqft
System Capacity: 1080 GPD
Soil Classification: I
LTAR: 0.5 GPD/sqft [Table 2]

Proposed Elevations

Bench Mark:	100.00 Door Sill
Building Sewer:	94.70
Septic Tank Inlet:	94.50
Outlet:	94.25
2nd Septic Tank Inlet:	93.75
Outlet:	93.50
Pump Chamber Inlet:	93.40
Outlet:	97.40
D-Box In:	98.12
D-Box Out:	97.95
Beg Pipe:	97.85
End Pipe:	97.55
Bottom Stone:	96.55
ESHGW:	91.55
F.G. over SAS:	100.00+/-

1. There are no wetlands within 100' of the proposed leaching facility.

2. There are no private/public wells within 200' of the proposed leaching facility.

3. The proposed system will be located in Acton's Aquifer Protection Zone 3. A 5' separation to ESHGW has been provided.

COMMONWEALTH OF MASSACHUSETTS
STEVEN CALIGIURI
No. 6431
REGISTERED SANITARIAN
9/1/04

No.	Revision/Issue	Date
2		
1		

ABC Cesspool Inc

292 High Street
Acton, MA 01720

Proposed Septic System

898 Main Street
Acton, MA 01720

Project: 898main_act	Sheet: 1
Date: 8/18/04	
Scale: 1" = 20'	