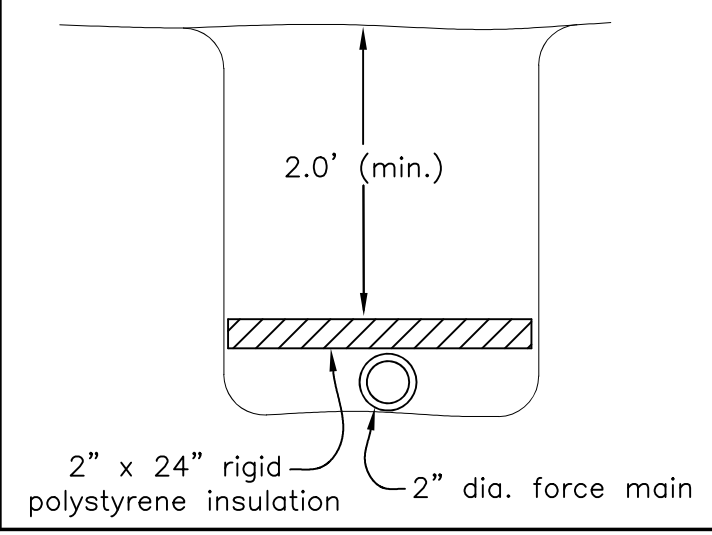


**Plan**

Scale: 1 in. = 20ft.  
Datum: N.G.V.D 29

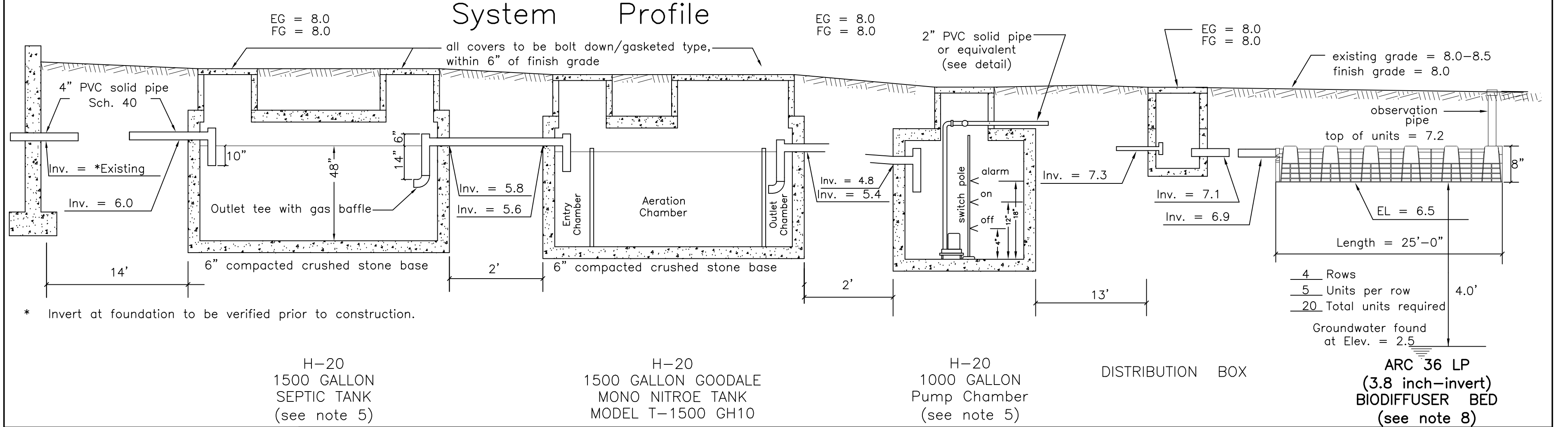
**FORCEMAIN DETAIL**



**PUMP NOTES**

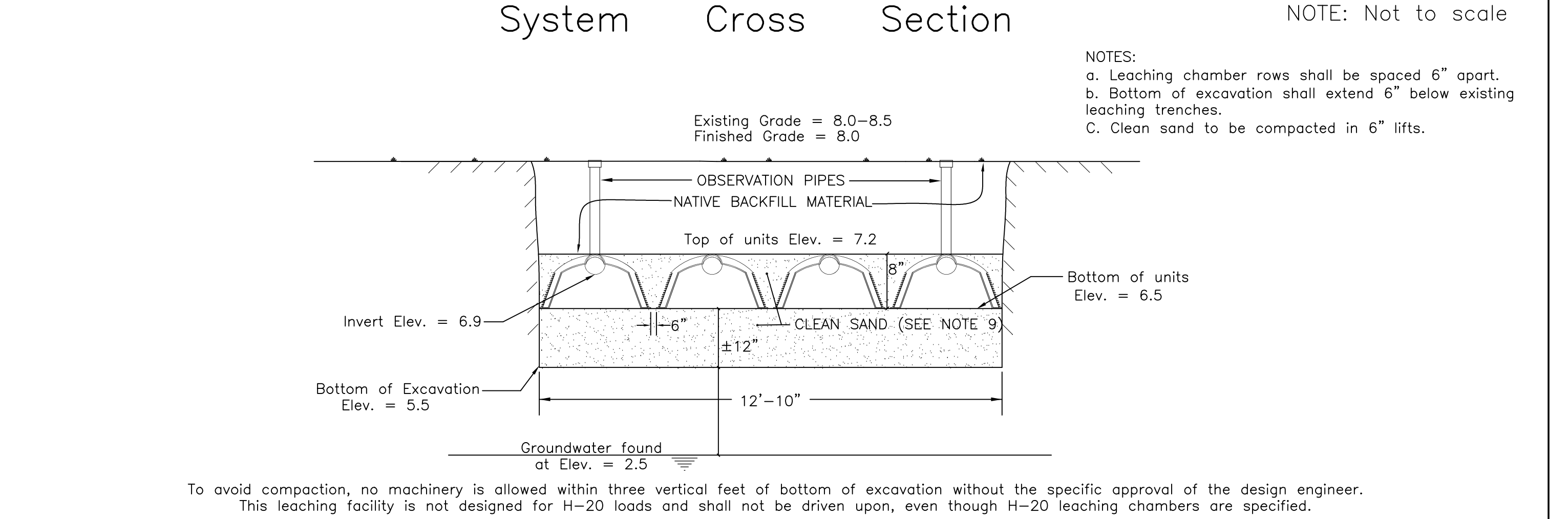
1. An alarm system shall be installed on a separate electrical circuit.
2. The pump shall be capable of pumping 10 gallons per minute at a head of 50 feet.
3. The pump shall be installed directly below the access opening and connected with unions so as to be easily removed without emptying the tank.
4. The force main shall be insulated as shown or buried a minimum of 4 ft. below grade.

**System Profile**

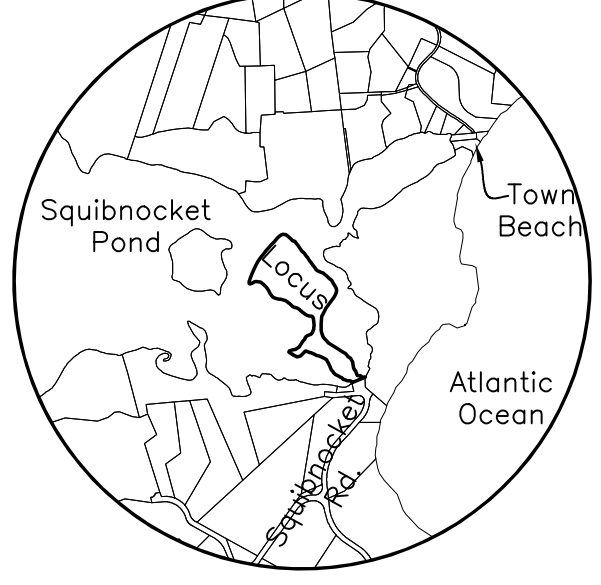


\* Invert at foundation to be verified prior to construction.

**System Cross Section**



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 leaching chambers 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. or screwed down.
8. Leaching Chambers shall consist of ADS BioDiffuser ARC 36 LP (8inch-invert) or an approved equivalent.
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 150' of the proposed leaching facility.
11. All deleterious or contaminated soil shall be removed within 5 ft. horizontally and 6 inches vertically of the proposed leaching facility (excavation and fill).
12. The engineer is to inspect and approve the leaching excavation prior to the placement of any gravel, sand or components.
13. The engineer is to inspect and approve the installation and placement of all septic components before final backfilling.
14. A letter certifying satisfactory construction of this system is to be provided to the owner and the Board of Health by the Engineer.
15. Installation of all Nitro system components shall be done in accordance with Nitro installation guidelines and requirements. The installation contractor shall consult with a Nitro representative before installation of any system component.
16. All proposed work is located within a FEMA VE Flood Zone (elev. 15)

**Design Criteria**

Design Hydraulic Loading:  
3 Bedrooms x 110 GPD/Bedroom = 330 GPD

Septic tank capacity:  
Required: 330 GPD x 200% = 660 Gal. minimum  
Septic tank provided = 1500 Gal.

Leaching Capacity Provided:  
H-20 High Capacity Leaching Chamber Bed  
20 Leaching Chamber Units  
20 Units x 5.00 linear ft./unit x 4.72 sq.ft./linear ft. = 472 sq.ft.  
472 sq.ft. x 0.74 GPD/sq.ft. = 349 GPD

\* Per modified certification for general use High capacity leaching chamber units are allowed 4.7 sq.ft. leaching area per lineal ft. in bed configuration.

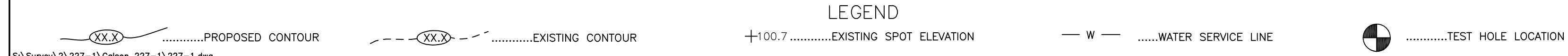
**Proposed Septic System UPGRADE on Land in Chilmark, MASS.**

Designed for: TIFFANY FOSTER  
Street Address: #49 SQUIBNOCKET FARM ROAD  
Assessor No.: 35-1.28  
Lot Area: ±8.5 Acres  
Designed By: Michael Tomkins  
Checked By: RGS  
Date: February 3, 2022  
Revised:



Title V upgrade waivers required:  
1. Leaching facility to wetland 50' required: 26' proposed

Chilmark Board of Health upgrade waivers required:  
1. Leaching facility to Squibnocket Pond separation: 500' required: 65' proposed  
2. Leaching facility to wetland 100' separation required: 26' proposed  
3. Bottom leaching facility to ground water separation: 5' required: 4' proposed  
4. Leaching facility to waterbody separation: 150' required: 65' proposed



SOIL DATA		SOIL DATA	
Deep Observation Hole 1. Date: April 27, 1993 Surface elevation = 6.5		Deep Observation Hole 2. Date: April 27, 1993 Surface elevation = 6.0	
Depth	Texture	Depth	Texture
0"-6"	Loam	0"-6"	Loam
6"-24"	Fill	6"-54"	Fine Coarse Sand
24"-48"	Brown f-m Sand		
24"-48"	F-M Sand		
Perc. rate < 2 mpi. @ 42"		Perc. rate < 5 mpi. @ 36"	
No groundwater found at 48' Elev. = 2.5		No groundwater found at 42' Elev. = 2.5	