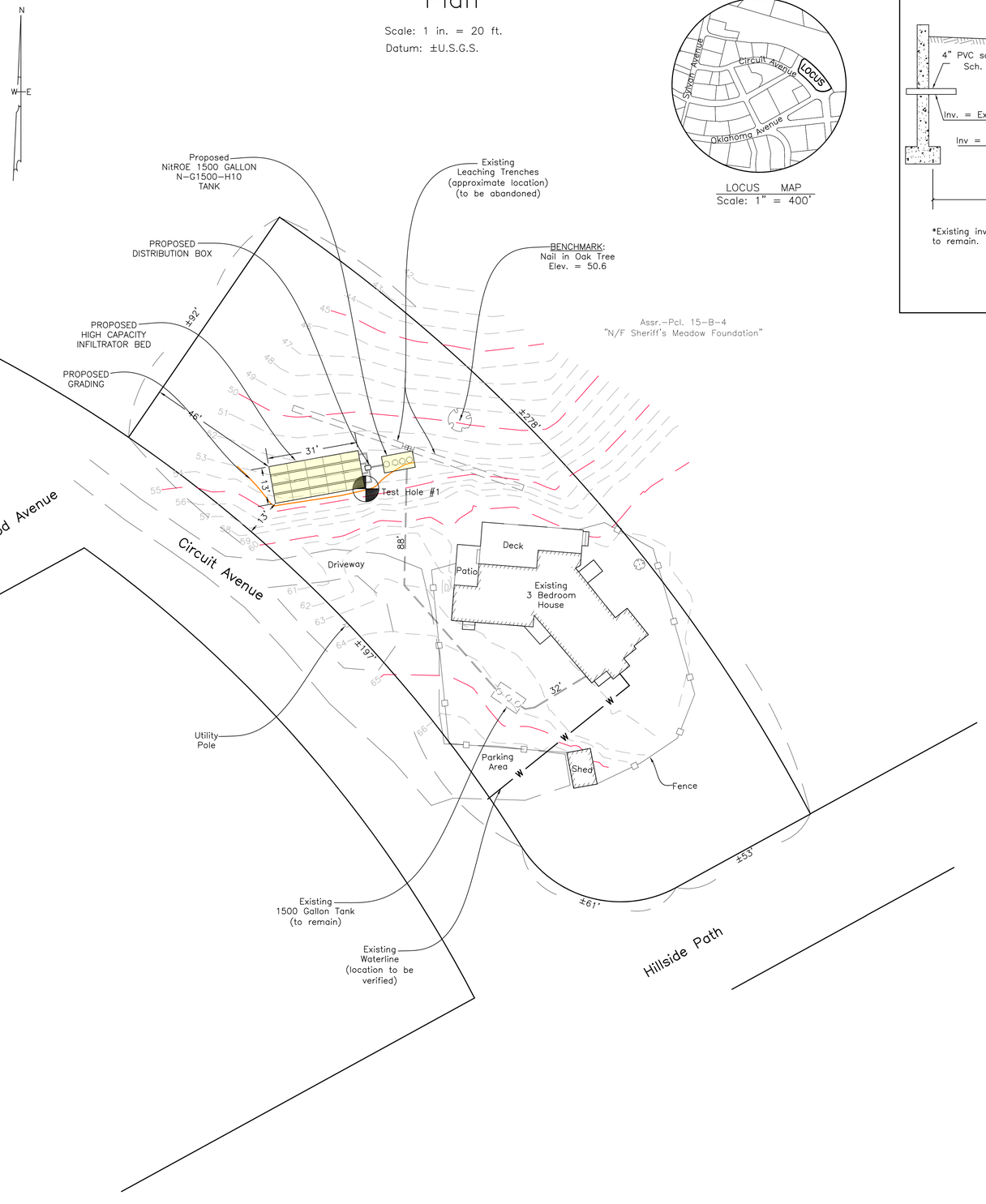
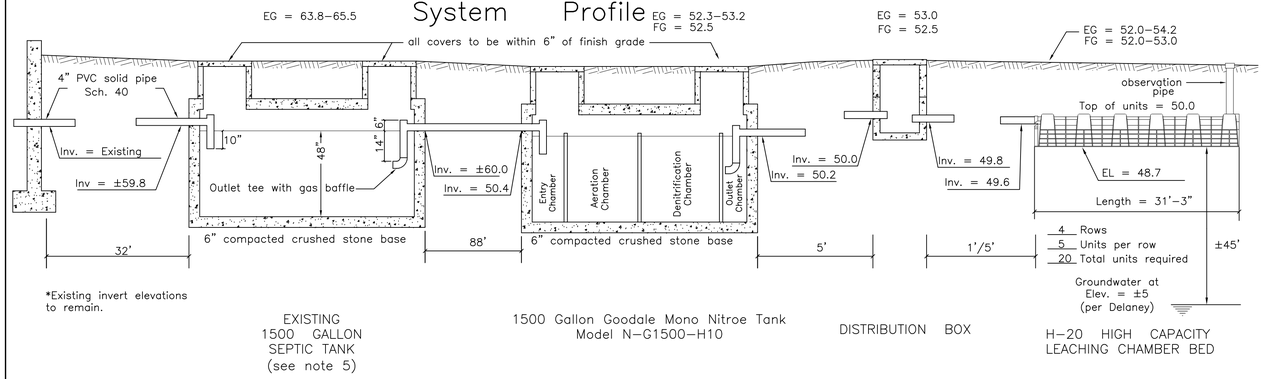
Plan

Scale: 1 in. = 20 ft.
Datum: ±U.S.G.S.



LOCUS MAP
Scale: 1" = 400'

System Profile



*Existing invert elevations to remain.

EXISTING 1500 GALLON SEPTIC TANK (see note 5)

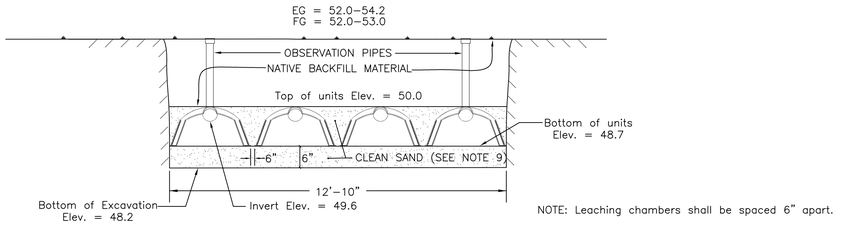
1500 Gallon Goodale Mono Nitroe Tank Model N–G1500–H10

DISTRIBUTION BOX

H–20 HIGH CAPACITY LEACHING CHAMBER BED

System Cross Section

NOTE: Not to scale



NOTE: Leaching chambers shall be spaced 6" apart.

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 Infiltrator high capacity, ADS high capacity biodiffusor 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 100' of the proposed leaching facility.
11. **The engineer (AND the local approving authority) is 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.
13. The Locus lies entirely within the Lagoon Pond watershed
14. Installation of the Nitroe tank system shall conform to Nitroe Installation Manual requirements.

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. (Existing)

Leaching Capacity Provided:
H–20 High Capacity Leaching Chamber Bed
20 Leaching Chamber Units
20 Units x 6.25 linear ft./unit x 4.72 sq.ft./linear ft. = 590 sq.ft.
590 sq.ft. x 0.74 GPD/sq.ft. = 437 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.

SOIL DATA

Soil evaluator: Reid G. Silva, P.E.
Witnessed By: Maura Valley

Deep Observation Hole 1.
Date: August 24, 2023
Surface elevation = 54.4

Depth	Horizon	Texture
0"–10"	A	Sandy loam
10"–42"	B	Loamy sand w/ 20% boulders
42"–102"	C	Medium Fine Sand

Perc. rate < 5 mpi. @42"
No groundwater found at Elev. = 45.9

Estimated depth to groundwater = 49'
(as per Groundwater Hydrology of Martha's Vineyard, Mass., Delaney, 1980)

LEGEND

XX.X .....PROPOSED CONTOUR
XX.X .....EXISTING CONTOUR
+100.7 .....EXISTING SPOT ELEVATION
W .....WATER SERVICE LINE
.....TEST HOLE LOCATION

S:\Survey\17\1703–1\Carlson 1703–1\1703–1.dwg

Proposed Septic System Upgrade on Land in Tisbury, MASS.

Designed for: Raule & Deborah Espinoza
Street Address: #76 Circuit Avenue
Assessor No.: 15–B–3
Lot Area: ±23,285 SF
Designed By: Meegan Lancaster
Checked By: R.G.S.
Date: September 1, 2023
Revised:

COMMONWEALTH OF MASSACHUSETTS
REID G. SILVA
CIVIL
No. 45205
REGISTERED PROFESSIONAL ENGINEER
September 1, 2023

VINEYARD LAND SURVEYING & ENGINEERING INC.
12 Cournoyer Road
P.O. Box 421
West Tisbury, MA 02575
P 508-693-3774 F 508-629-0440
VLSE.net

Job No. 1190–2