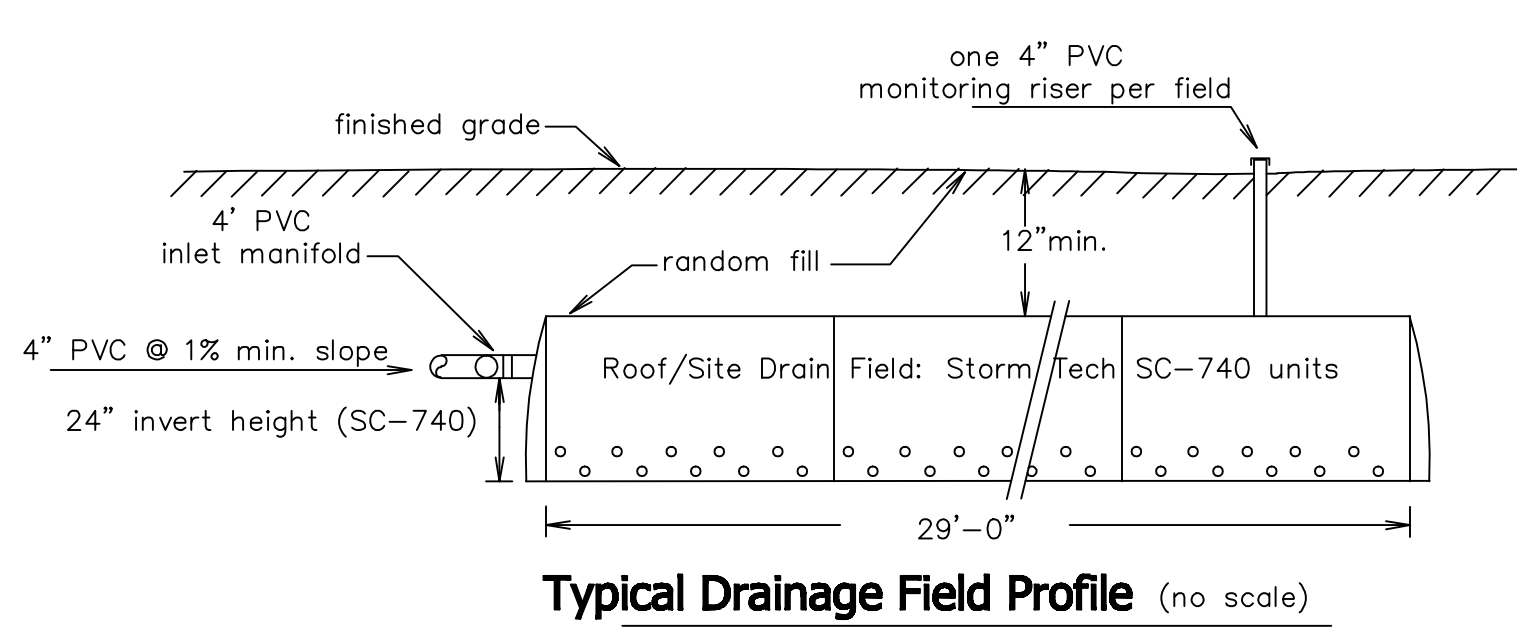


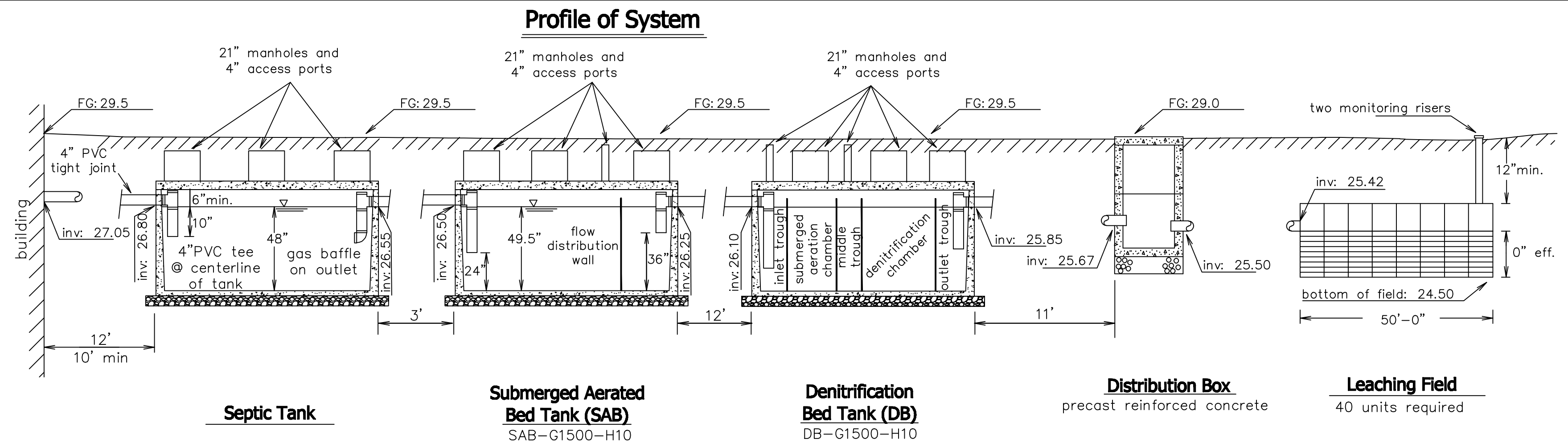
Catch Basin
(scale: none)

Drainage Notes

- A. Stormtech SC-740 units to be set on excavated grade at a minimum of 5' below grade
- B. Engineer to inspect excavation of drainage fields prior to placement of units
- C. Downspouts to discharge to drainage fields through 4" PVC or ADS pipe laid at 1% minimum slope toward field
- D. A tee extending 10" below the flow line shall be provided at the catch basin outlet
- E. Catch basin to be designed and constructed to handle H-20 loading



Typical Drainage Field Profile (no scale)



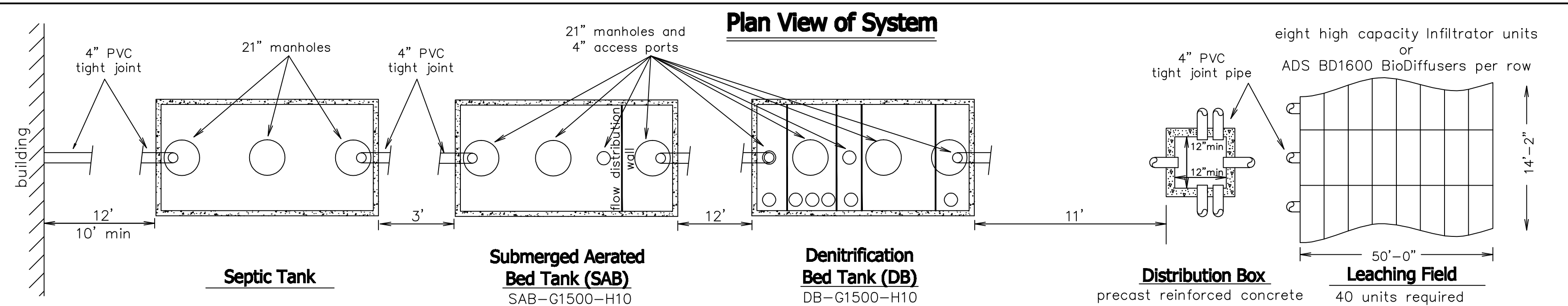
Septic Tank

Submerged Aerated Bed Tank (SAB)
SAB-G1500-H10

Denitrification Bed Tank (DB)
DB-G1500-H10

Distribution Box
precast reinforced concrete

Leaching Field
40 units required



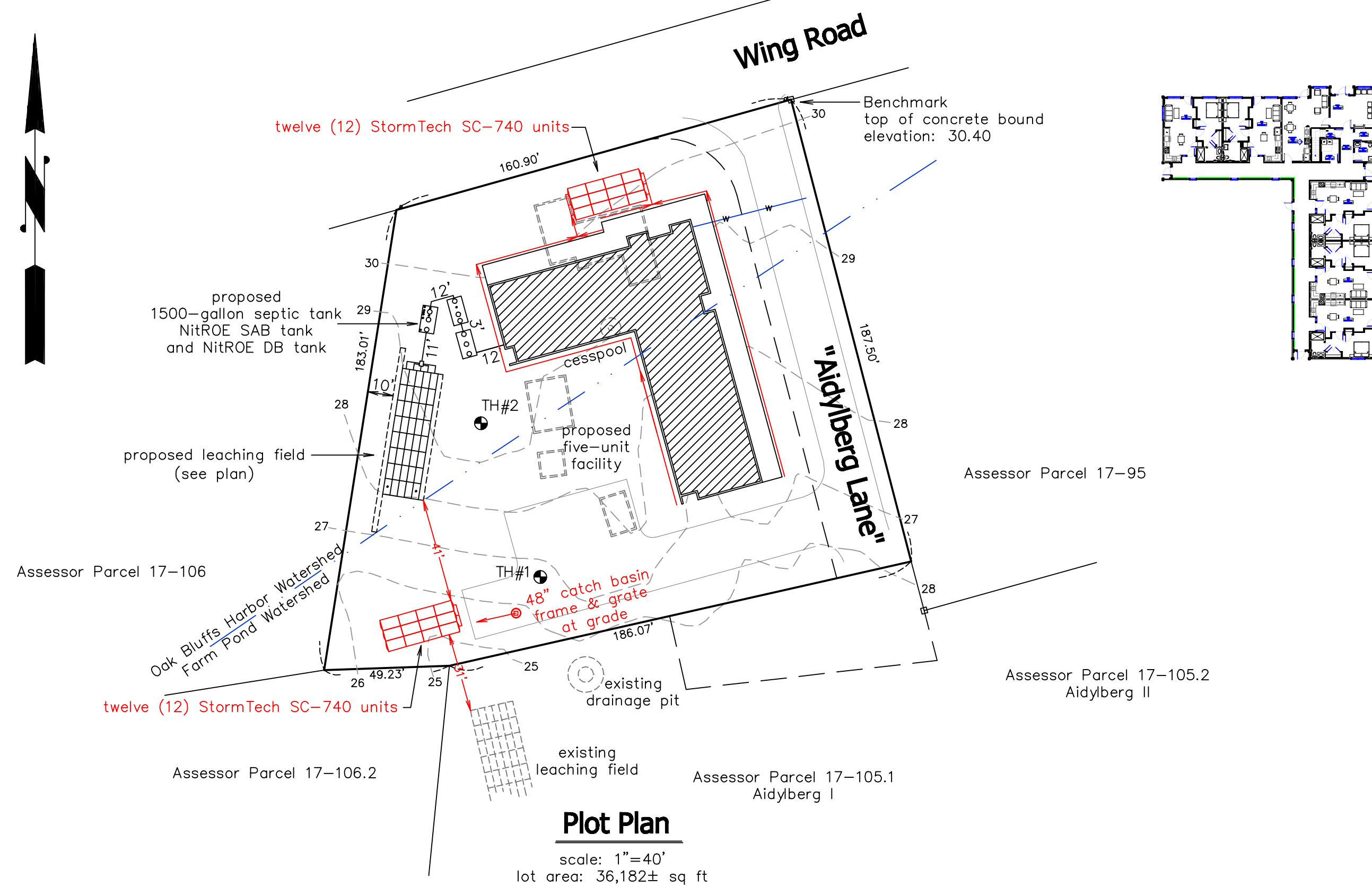
Septic Tank

Submerged Aerated Bed Tank (SAB)
SAB-G1500-H10

Denitrification Bed Tank (DB)
DB-G1500-H10

Distribution Box
precast reinforced concrete

Leaching Field
40 units required

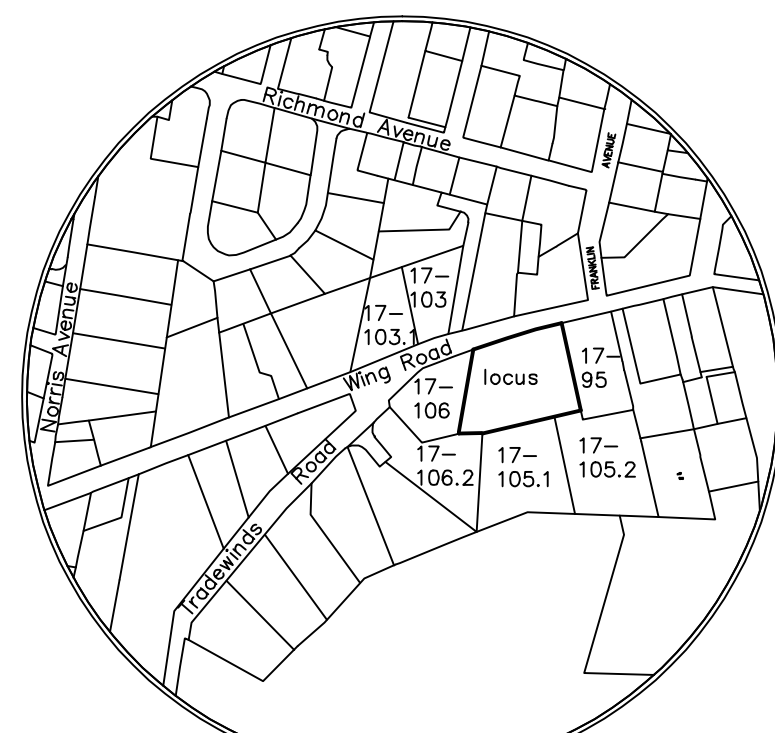


Plot Plan
scale: 1"=40'
lot area: 36,182± sq ft

Project Notes

- A. No wells were found within 100' of the proposed leaching facility
- B. Existing cesspool to be abandoned, crushed and backfilled with compacted structural fill
- C. Underground utilities to be located at start of construction and relocated as required

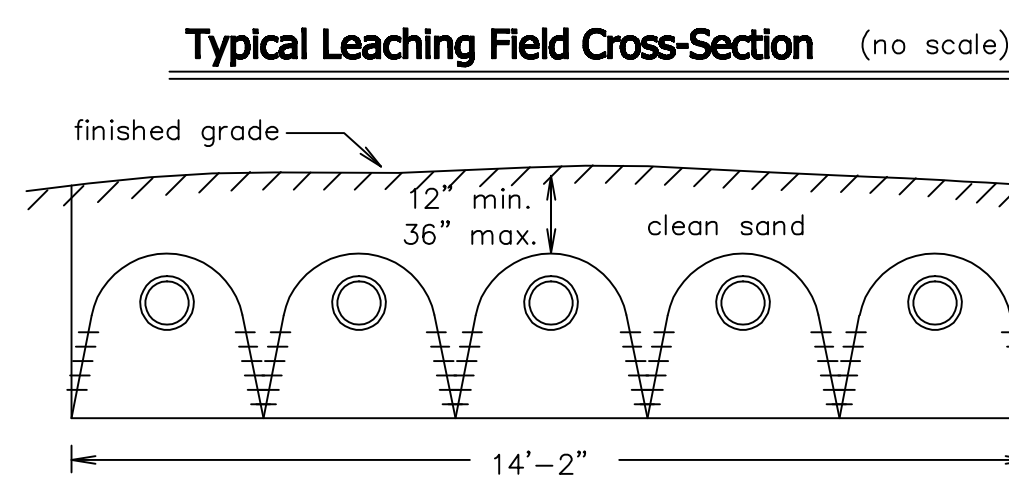
Zone II Notes:
Locus lies within Zone II of the Farm Neck municipal well
Lot area: 36,182 sf
Allowable flow with advanced treatment:
660 GPD x (36,182 sf/40,000 sf) = 597 GPD > 550 GPD **OK**



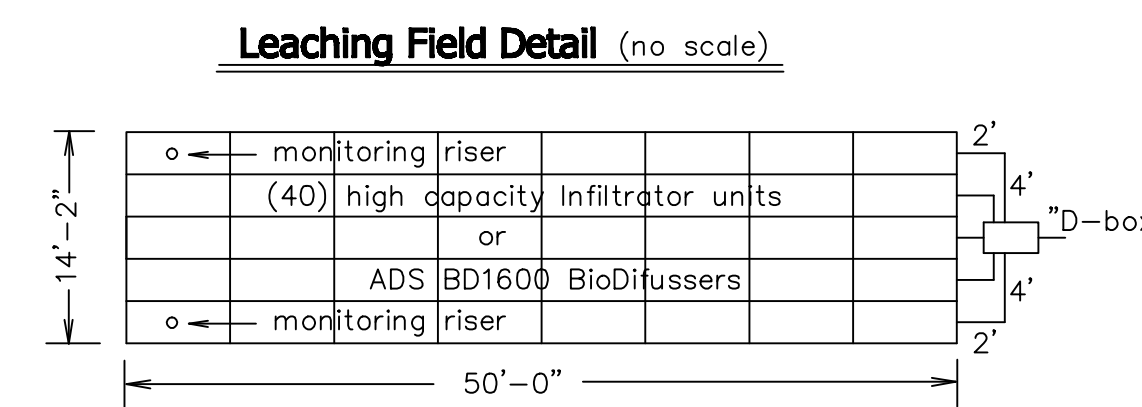
Locus Map (no scale)

General Notes

- 1. Elevations refer to approximate mean sea level datum. See benchmark on plot plan located on top of concrete bound (elevation: 30.40)
- 2. Finished grading to be done in accordance with plot plan.
- 3. Percolation tests to be performed in accordance with the instructions of Title V of the Massachusetts State Environmental Code.
- 4. All construction to conform to Title V and Board of Health requirements.
- 5. Septic tank and distribution box shall be watertight after construction, including covers.
- 6. No driveway, parking or turning area or other impervious areas shall be located above the soil absorption system.
- 7. No permanent structure may be constructed over the 100% expansion area.
- 8. Schofield, Barbini & Hoehn Inc. will not be responsible for the performance of the system unless constructed as shown. Any alterations must be approved in writing by Schofield, Barbini & Hoehn Inc.
- 9. The Board of Health shall require inspection of all construction by the design engineer and by the agent of the Board of Health.
- 10. The design engineer and the system installer shall certify in writing to the approving authority that the system has been constructed in compliance with the approved plans.
- 11. For proper performance, the septic tank should be inspected at least once a year and when the total depth of scum and solids exceed 1/3 the liquid depth of the tank, the tank should be pumped.
- 12. Distribution box cover to be brought to finish grade.



Typical Leaching Field Cross-Section (no scale)



Leaching Field Detail (no scale)

Schedule of Elevations

| | finished grade above structure | finished grade above structure |
|------------------------------------|--------------------------------|--------------------------------|
| Top of foundation: | 30.50 (verify w/ arch's) | |
| Basement floor: | n/a (slab) | |
| Inverts at foundation: | 27.05 | 29.5 |
| Invert at septic tank inlet: | 26.80 | |
| Invert at septic tank outlet: | 26.55 | 29.5 |
| Invert at NitROE SAB tank inlet: | 26.50 | |
| Invert at NitROE SAB tank: | 26.25 | 29.5 |
| Invert at NitROE DB tank inlet: | 26.10 | |
| Invert at NitROE DB tank outlet: | 25.85 | 29.5 |
| Invert at distribution box inlet: | 25.67 | |
| Invert at distribution box outlet: | 25.50 | 29.0 |
| Invert at infiltrator inlet: | 25.42 | |
| Elevation of field bottom: | 24.50 | |

| Deep Test Pit 1 (Surface Elevation: 26.7) | | | Deep Test Pit 2 (Surface Elevation: 29.5) | | | Percolation Test Data | | | | |
|--|----------|------------------|--|----------|------------------|-----------------------|--------|---|-----------|-------------|
| Date of Test: | Depth | Soil Description | Date of Test: | Depth | Soil Description | test pit # | date | top of 12" of water depth from top of pit | elevation | rate: (mpi) |
| March 6, 2019 | 0"-11" | A Loamy SAND | March 6, 2019 | 0"-7" | A Loamy SAND | 1 | 3/6/19 | 36" | 23.7 | <2 |
| | 11"-34" | B Loamy SAND | | 7"-33" | B Loamy SAND | 2 | 3/6/19 | 36" | 26.5 | <2 |
| | 34"-132" | C SAND | | 33"-120" | C SAND | | | | | |
| Groundwater was not encountered at a depth of 138" (elevation: 15.2) | | | Groundwater was not encountered at a depth of 120" (elevation: 19.5) | | | | | | | |

Design Data

- 1. Estimated Hydraulic Loading:
Five units at 110 gallons per day per bedroom = 550 GPD
Garbage disposal is not allowed with this design.
- 2. Septic Tank Size:
Required tank capacity: 550 x 200% = 1100 (minimum)
Septic tank provided: 1500 gallon MicroFASST 0.9 tank
- 3. Design percolation rate: 2 MPI
Soil textural class: I
Loading rate: 0.74 GPD/SF
- 4. Leaching Area:
Total leaching area provided: 708 SF
- 5. Maximum Allowable Loading:
708 SF x 1.67 (chamber general permits) x 0.74 GPD/SF = 874 GPD
Actual hydraulic loading: 550 GPD

Legend

- XX---
 - F.G. = XX.X
 - XX
 - ⊙
 - P.V.C.
 - ⊞
 - E.H.C.I.
 - W —
 - P —
 - O.W. —
 - D —
- Denotes proposed contour
Denotes proposed finished grade
Denotes existing contour
Denotes test hole location
Denotes polyvinyl chloride pipe, Sch. 40, unless noted
Denotes catch basin
Denotes extra heavy cast iron
Denotes water service
Denotes approximate property line
Denotes overhead wires
Denotes storm drain pipe

Proposed Sewage Disposal System

To Serve a Proposed Five-Unit Elderly Housing Facility
38 Wing Road - Assessor Parcel 17-105
Oak Bluffs, Massachusetts

Applicant: Island Elderly Housing Phone: (508) 693-2781 (SB&H)
60B Village Road
Oak Bluffs, MA 02557

Date: November 6, 2021

Rev: Jan 31, 2022 (drainage); Feb 8, 2022 (parking)

designed by: CPA drawn by: CPA checked by: CDH

Schofield, Barbini & Hoehn, Inc.
Land Surveying Civil Engineering

12 Surveyor's Lane, Box 339
Vineyard Haven, Mass. 02568
508-693-2781
www.sbhinc.net

MV 799