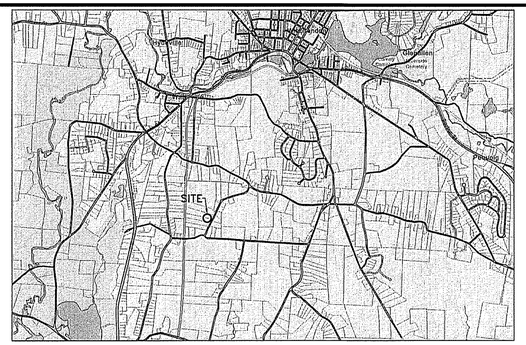
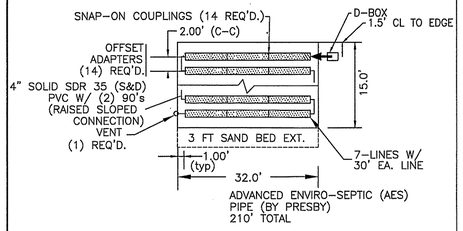
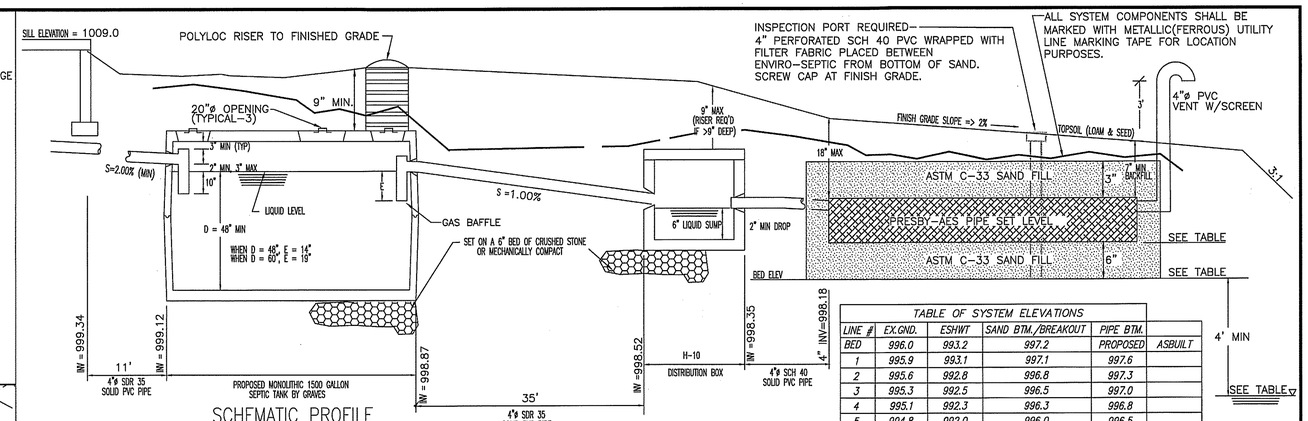


LOCUS NTS



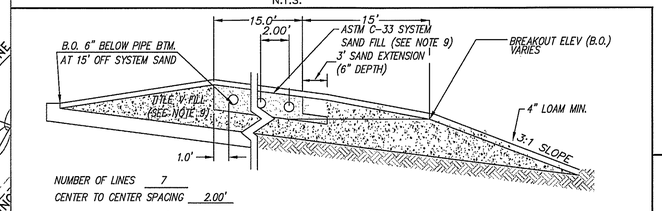
PARTIAL BED PLAN NTS.



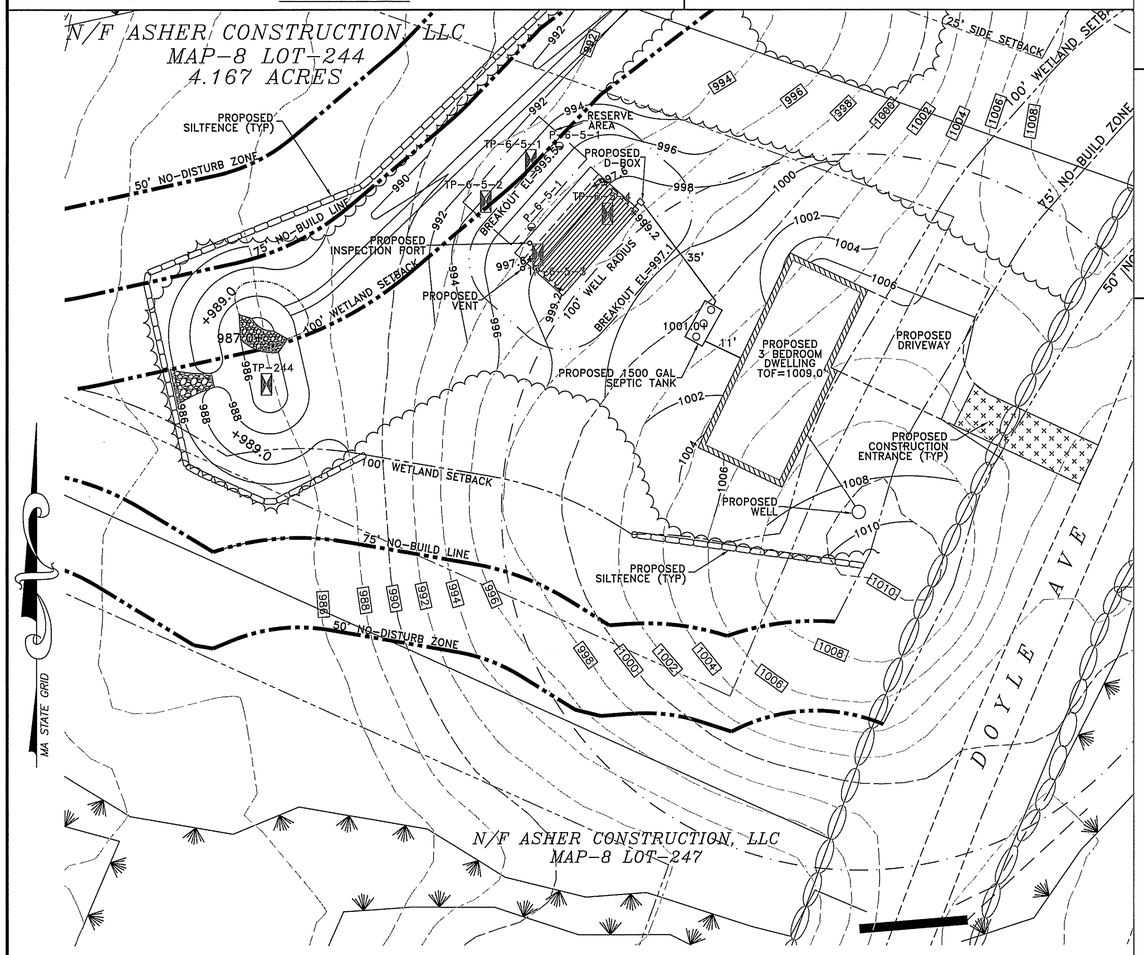
SCHEMATIC PROFILE

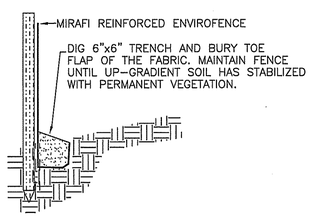
N.T.S.

TABLE OF SYSTEM ELEVATIONS					
LINE #	EX.GND.	ESHWT	SAND BTM./BREAKOUT	PIPE BTM.	
BED	996.0	993.2	997.2	PROPOSED	ASBUILT
1	985.9	993.1	997.1	997.6	
2	995.6	992.8	996.8	997.3	
3	995.3	992.5	996.5	997.0	
4	995.1	992.3	996.3	996.8	
5	994.8	992.0	996.0	996.5	
6	994.5	991.7	995.7	996.2	
7	994.3	991.5	995.5	996.0	
BED	994.2	991.4	995.4		



TYPICAL RAISED SLOPING SYSTEM SECTION (>10%) N.T.S.





SILT FENCE N.T.S.

PLAN

0 20 40 60

SCALE: 1"=20' ON ORIGINAL

NOTES

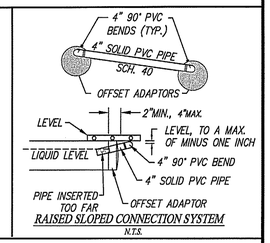
1. Unless otherwise noted, property lines shown are compiled from existing plans and/or deeds.
2. Underground utility data is plotted from visible field locations and available records. The locations are approximate only and verification must be made in the field and Dig-Safe notified.
3. All work shall be performed by a Licensed Installer and construction shall conform to the State of Massachusetts requirements as established in 310 CMR 15.00. Installation of the Presby AES leaching system shall conform to the Enviro-Septic Design and Installation Handbook. (ENVIRO-SEPTIC MASSACHUSETTS DESIGN AND INSTALLATION MANUAL)
4. The contractor shall install the system exactly as shown on this plan. If changes are necessary, the contractor must contact the Engineer in advance.
5. Heavy machinery shall not be permitted to pass over the leaching area.
6. All piping shall be polyvinyl chloride (PVC) pipe per ASTM D1785 for sch.40 and ASTM D3034 for SDR 35 where indicated on the profile, unless otherwise noted. S&D pipe shall be SDR 35 PVC.
7. Septic tank shall be a 1,500 gallon reinforced concrete tank by Graves Concrete (or equal).
8. An H-10 load-rated distribution box (D-box) is required.
9. All topsoil, roots and impervious material, if any, must be excavated and removed below and 5' beyond the soil absorption system area (and the 3:1 fill slope). The natural soil shall be hand raked. system sand (ASTM C-33) shall be used above, between, 12" beyond sides and 6" below the AES The system sand shall meet ASTM C-33. The system installer shall provide the system owner and the local approving authority with a bill of lading certifying that the sand fill meets ASTM C-33.
10. For proper performance, septic tank should be inspected at least once a year and pumped when the combined thickness of the sludge (bottom) and scum (surface) equals 1/3 or more of the tank depth.
11. Refer to Massachusetts DEP I/A Approval & Presby Operation and Maintenance documents.
12. Sand fill (except, for ASTM C-33 around Presby AES) shall be per title V, a clean granular sand, free from organic matter and deleterious substances. Mixtures and layers of different classes of soil not be used. The sand fill shall not contain any material larger than 2 inches. A sieve analysis, using a #4 sieve, shall be performed on a representative sample of the fill. Up to 45% by weight of the fill sample may be retained on the #4 sieve. Sieve analyses also shall be performed on the fraction of the fill sample passing the #4 sieve, such analyses must demonstrate that the material meets or exceeds each of the following specifications: 100% passing #4 sieve; 10%-100% passing #50 sieve; 0%-20% passing #100 sieve; 0%-5% passing #200 sieve. (11/95 DEP SPEC)
13. ENVIRO-SEPTIC DESIGN CERTIFICATE NUMBER: 2488MAES
14. The owner & designer must certify that the installation meets the DEP General Use Approval.
15. No structures shall be placed on or near the reserve area.
16. A conventional title-V system would consist of a 18' x 32' bed, resulting in 576 S.F. of leaching area.

LEGEND

242	EXISTING CONTOUR
242	PROPOSED CONTOUR
TP-1A	DEEP HOLE TEST PIT
P-1A	PERCOLATION TEST
+ 238.6	SPOT ELEVATION
IPF	IRON PIN FOUND
BND	STONE BOUND FOUND
	EXISTING STONE WALL

DESIGN CRITERIA

1. Estimated Hydraulic Loading
   3 bedrooms at 110 gals/day/bedroom = 330 gpd.
   Garbage disposal shall not be allowed with this system.
2. Septic tank size = 1,500 gallons
3. Leaching Area Design Criteria
   Percolation Rate = 10 mpi
   Required linear feet of Presby AES pipe= 210 L.F.
   Linear feet of Enviro-septic pipe provided= 210 L.F.
   Square footage required by Title V=330 GPD/0.6=550 S.F.
   Square footage provided= 576 S.F.



RAISED SLOPED CONNECTION SYSTEM N.T.S.

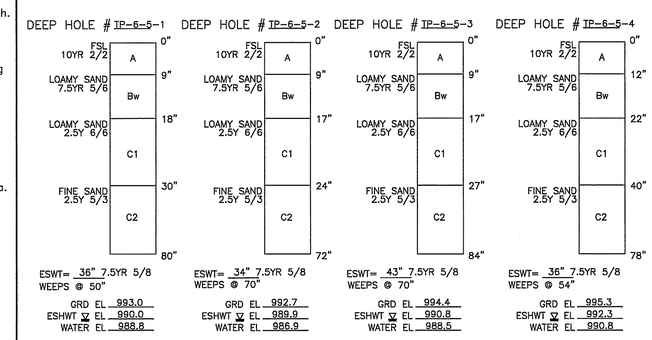
SOIL TEST DATA

DEEP HOLE & PERC TESTS

PERFORMED BY: TREVOR FLETCHER, S.E.

WITNESSED BY: JIM ABARE & STEVE CALICHMAN, B.O.H. WINCHENDON

DATE: NOVEMBER 21, 2022



PERC TEST NUMBER	DEPTH	PERC RATE	NOTES
PERC-6-5-1	32"	10 MPI	
PERC-6-5-2	34"	8 MPI	

NO.	DESCRIPTION	DATE	BY

COMMONWEALTH OF MASSACHUSETTS — TREVOR FLETCHER — CIVIL — NO. 57043 — REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY	TWF
DRAWN BY	TWF
CHECKED BY	PFG
DATE	12-12-23
SCALE	1"=20'
JOB NUMBER	21183

PROPOSED SINGLE FAMILY SEPTIC SYSTEM DESIGN PLAN
DOYLE AVE; WINCHENDON, MA
PART OF MAP-8 PARCEL-244
PREPARED FOR:
ASHER CONSTRUCTION, LLC
77 NASHUA ROAD
SHARON, NH 03458

GRAZ Engineering, LLC
WWW.GRAZENGINEERING.COM
323 WEST LAKE RD.; FITZWILLIAM, NH 03447; (603) 585-6959

FIELD BOOK NO.
PAGES