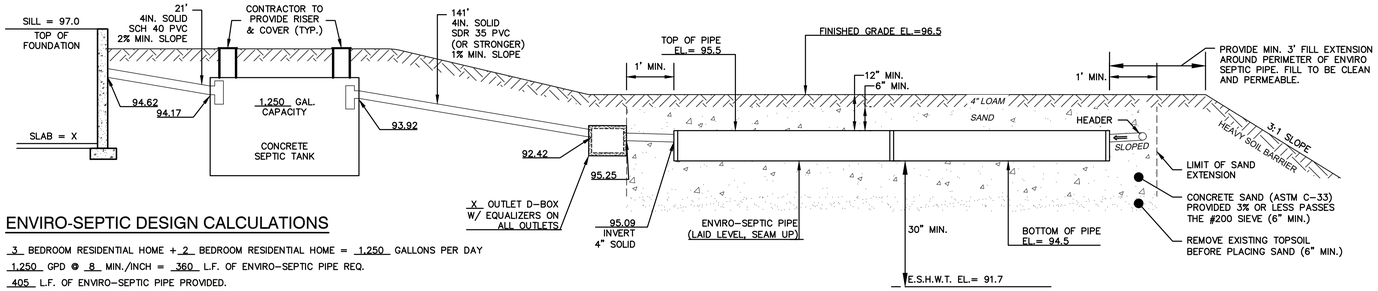
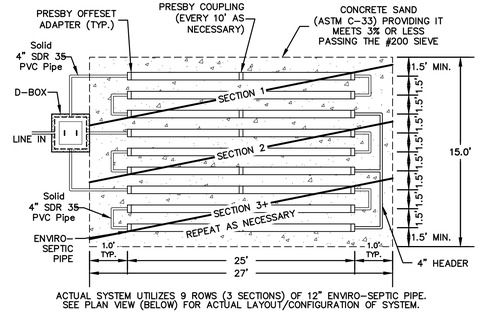


CROSS SECTION - DISPOSAL SYSTEM

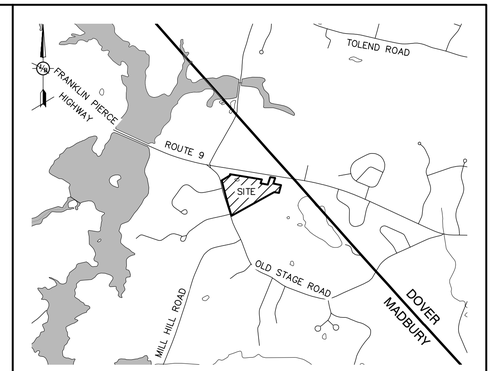
N.T.S.



ACTUAL SYSTEM UTILIZES 9 ROWS (3 SECTIONS) OF 12" ENVIRO-SEPTIC PIPE. SEE PLAN VIEW (BELOW) FOR ACTUAL LAYOUT/CONFIGURATION OF SYSTEM.

TYP. PLAN VIEW - DISPOSAL SYSTEM

N.T.S.



LOCUS

SCALE: 1"=2000'

ENVIRO-SEPTIC DESIGN CALCULATIONS

3 BEDROOM RESIDENTIAL HOME + 2 BEDROOM RESIDENTIAL HOME = 1,250 GALLONS PER DAY

1,250 GPD @ 8 MIN./INCH = 360 L.F. OF ENVIRO-SEPTIC PIPE REQ.

405 L.F. OF ENVIRO-SEPTIC PIPE PROVIDED.

9 ROWS OF ENVIRO-SEPTIC PIPE x 45' LONG. 3 SERIES OF 3 ROWS.

BED DIMENSIONS 45 x 15 .

DESIGN INTENT

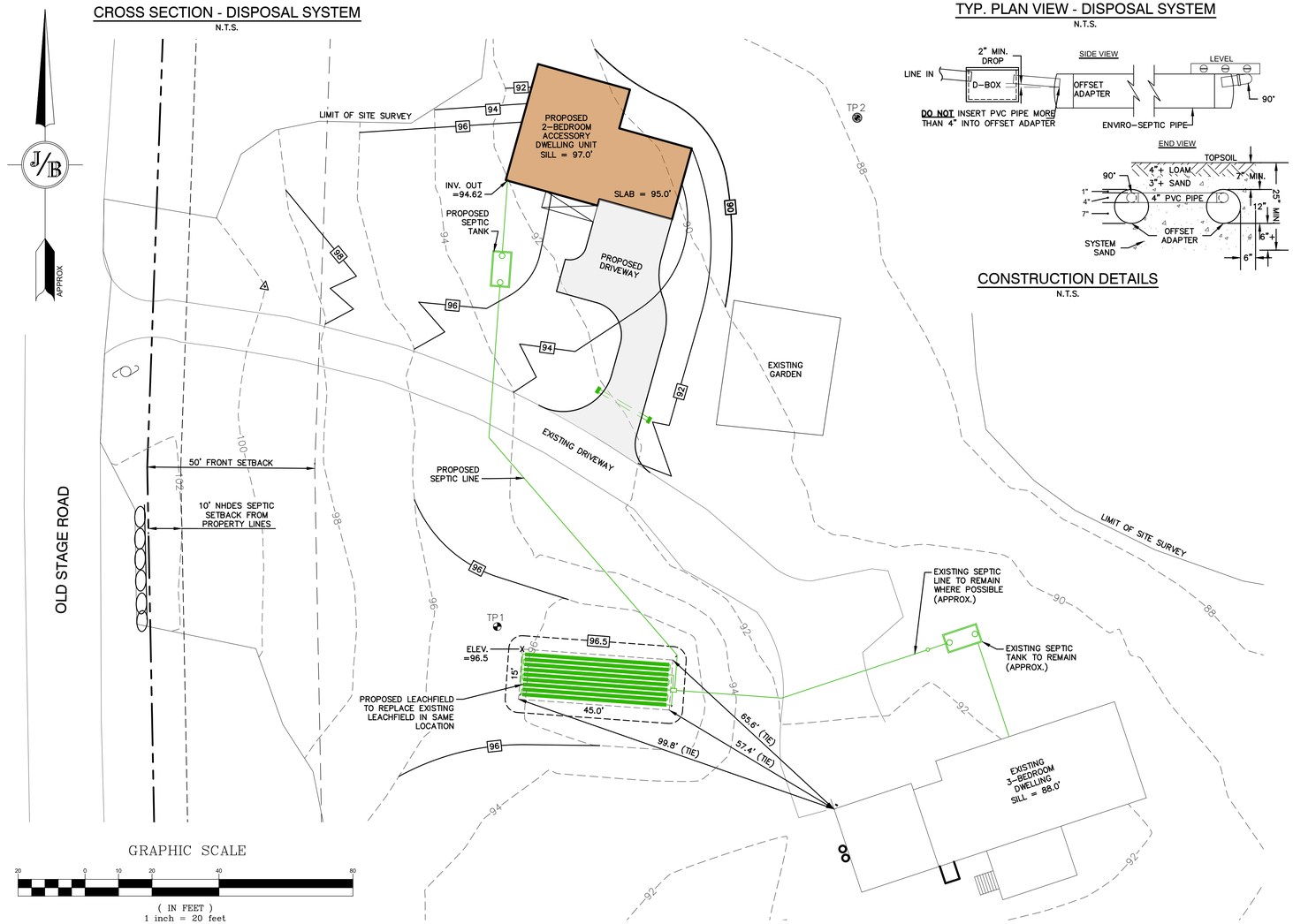
THE BOTTOM OF THE EFFLUENT DISPOSAL SYSTEM (E.D.S.) SHALL BE CONSTRUCTED AT ELEVATION 94.5 . THIS IS APPROXIMATELY 1.5 FEET BELOW ORIGINAL GROUND ON THE HIGH CONTOUR (96) OF THE DESIGNED E.D.S. (ENV-WQ-1003.13(aa))

TEST PIT LOGS

PERFORMED BY: ANTHONY JONE, JONES & BEACH ENGINEERS, INC. SSD# 1900
WITNESSED BY: MICHAEL CUOMO
DATE: 2/12/2025

TEST PIT #1		TEST PIT #2 (FAILED)	
	GRASS MAT		GRASS MAT
0"–12" 10YR	FINE SANDY LOAM GRANULAR, FRIABLE	0"–6" 10YR	FINE SANDY LOAM GRANULAR, FRIABLE COMMON ROOTS
12"–28" 10YR	LOAMY SAND GRANULAR, FRIABLE COMMON ROOTS	6"–13" 10YR	LOAMY SAND MASSIVE, FRIABLE COMMON ROOTS
28"–36" 2.5Y	LOAMY SAND, BLOCKY, FRIABLE COMMON ROOTS	13"–24" 2.5Y	SILTY CLAY LOAM ANGULAR BLOCKY, VERY FIRM MANY DISTINCT REDOX
36"–72" 2.5Y	LOAMY SAND BLOCKY, FRIABLE COMMON DISTINCT REDOX		

SHWT = 36"
ROOTS TO 36"
NO H_2O
REFUSAL @ 72"
PERC. RATE = 8 MIN/IN.



DO NOT INSERT PVC PIPE MORE THAN 4" INTO OFFSET ADAPTER

CONSTRUCTION DETAILS

N.T.S.

EFFLUENT DISPOSAL SYSTEM NOTES

1. THIS DESIGN HAS THE FOLLOWING CONTINGENT APPROVALS:
   1.1. PUBLIC WATER SYSTEM: PWS#_____
   1.2. SHORELAND IMPACT: #_____ ISSUED: _____ REVISED: _____
   1.3. PREV. CONSTRUCTION: #_____ ISSUED: _____
   1.4. SUBDIVISION: #_____ ISSUED: _____
2. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING THE SEPTIC SYSTEM FROM THE NHDES APPROVED PLAN. FIELD ALTERATIONS MAY REQUIRE AMENDED PLANS TO BE PREPARED.
3. CONTRACTOR TO VERIFY ALL ELEVATIONS IN FIELD PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY DESIGNER OF ANY ABNORMAL CONDITIONS (HARDPAN OR SATURATED SOILS, LEDGE, ETC.) FOUND WHEN EXCAVATING PRIOR TO INSTILLATION OF THE SYSTEM.
4. PER ENV-WQ 1016.03, CONTRACTOR IS TO PROTECT THE NATURAL ABSORPTION QUALITIES OF THE SOIL. DO NOT COMPACT OR DRIVE OVER THE AREA WITH EQUIPMENT AND PROTECT OPEN EXCAVATION TO PREVENT THE ENTRANCE OF SILT AND DEBRIS.
5. THE BUILDER/SITE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE ZONING DIMENSIONAL REQUIREMENTS AND SETBACK LINE REQUIREMENTS PRIOR TO INITIATING CONSTRUCTION OF THE PROPOSED HOUSE AND SEPTIC SYSTEM. THE ZONING ORDINANCE OF THE MUNICIPALITY IS TO BE COMPLIED WITH. THE BUILDER/SITE CONTRACTOR IS ALSO RESPONSIBLE TO CONTACT THE MUNICIPALITY REGARDING INSPECTIONS PRIOR TO AND DURING CONSTRUCTION, I.E. LOCATION AND BED-BOTTOM INSPECTIONS. PER ENV-WQ 1004.10, SYSTEMS OVER 2,500 GPD ARE TO BE INSPECTED BY DESIGNER PRIOR TO REQUESTING A STATE INSPECTION.
6. APPROVAL FOR CONSTRUCTION IS VALID FOR 4 YEARS FROM DATE OF ISSUE, EXCEPT APPROVAL IS ONLY VALID FOR 90 DAYS FOR FAILED SYSTEM REPLACEMENTS.
7. ENVIROSEPTIC TO BE SUPPLIED BY: ELIMINATOR SYSTEMS INC. (603-868-2242) OR EQUAL.
8. SEPTIC TANK & D-BOX TO BE SUPPLIED BY: SHEA CONCRETE (800-696-7432) OR EQUAL.
9. ROCKINGHAM COUNTY SOIL CONSERVATION SERVICE SOIL TYPE: TABULAR
10. LEACH BED COMPRISED OF ENVIRO-SEPTIC LEACHING PIPE. FOR DETAILED INSTALLATION INFORMATION REFER TO "DESIGN AND INSTALLATION MANUAL FOR A.E.S. AND E.S. WASTEWATER TREATMENT SYSTEMS", 2019 EDITION (OR MOST CURRENT EDITION). CONTACT PRESBY ENVIRONMENTAL AT PHONE (800) 473-5298 OR WWW.PRESBYENVIRONMENTAL.COM
11. FILL TO BE MEDIUM TO COURSE-TEXTURED SAND (0.5mm-2.0mm).
12. REMOVE TOPSOIL BEFORE PLACING FILL.
13. 4 INCH THICK LOAM & SEED AROUND PERIMETER OF FILL.
14. CONTRACTOR TO INSTALL A VENT WHEN PROVIDING MORE THAN 18" OF COVER OR AN EFFLUENT FILTER IS INSTALLED AT THE OUTLET OF THE SETPIC TANK. VENTING IS REQUIRED IF SYSTEM IS DESIGNED FOR H20 LOADING, OR ADVANCED ENVIRO-SEPTIC IS USED.
15. CROWN SYSTEM TO SHED RAINWATER; SLOPE SYSTEM AWAY FROM HOUSE.
16. SYSTEM WILL BE REPLACED IN SAME LOCATION IN CASE OF FAILURE.
17. PER ENV-WQ 1010.11, THE FIRST COMPARTMENT IN MULTI-COMPARTMENT SEPTIC TANKS MUST EQUAL AT LEAST 2/3 OF THE REQUIRED VOLUME.
18. PER ENV-WQ 1010.10, EXCEPTING LEDGE TANKS, THE LIQUID DEPTH OF THE SEPTIC TANK IS TO BE AT LEAST 40".
19. THE OUTLET BAFFLE SHALL BE A VENTED TEE WHICH SHALL EXTEND TO A DISTANCE BELOW THE SURFACE EQUAL TO 40% OF THE LIQUID DEPTH AND SHALL EXTEND ABOVE THE LIQUID LINE TO NOT LESS THAN ONE INCH FROM THE TOP OF THE TANK.
20. JOINTS ARE TO BE BELLED PVC OR STANDARD SLIP COLLARS.
21. ALL CONNECTIONS BETWEEN A SEPTIC TANK AND THE PIPES LEADING TO AND EXITING FROM THE SEPTIC TANK SHALL BE SEALED WITH A WATERTIGHT, FLEXIBLE JOINT CONNECTOR MEETING THE REQUIREMENTS OF ENV-WQ 1010.05.
22. CONTRACTOR TO PROVIDE RISERS FOR TANKS WITH MORE THAN 12" OF COVER.
23. WATER TREATMENT BACKWASH DISCHARGED INTO THE LEACHFIELD IS PROHIBITED.
24. IF GARBAGE GRINDERS ARE DESIRED, SEPTIC TANK SHALL BE 50% LARGER. IF A BASEMENT EJECTOR PUMP IS DESIRED, SEPTIC TANK SHALL BE INCREASED BY 250 GALLONS.
25. PER ENV-WQ 1003.14(a)(1) THERE ARE NO KNOWN BURIAL SITES OR CEMETERIES ON THE LOT WITHIN 100' OF ANY COMPONENT OF THE ISDS.
26. 50' SETBACK FROM POORLY DRAINED (PD) SOILS.
27. DISTANCE FROM SEPTIC TANK TO SURFACE WATER, OPEN DRAINAGE, VERY POORLY DRAINED SOIL, AN OPEN LOOP GEOTHERMAL WELL, OR A PRIVATE ON-SITE WELL SHALL BE 75 FT. THIS MAY BE REDUCED TO 50 FT IF PIPE HAVING AN SDR OF 26 OR STRONGER IS USED, AND THE SEPTIC TANK IS EITHER MADE FROM PLASTIC OR COATED WITH A SEALANT TO PREVENT INFILTRATION AND EXFILTRATION IN ACCORDANCE WITH ENV-WQ 1008.04(c).
28. KNOW THE LOCATION OF YOUR SEPTIC TANK AND LEACHING AREA.
29. INSPECT YOUR SEPTIC TANK YEARLY. HAVE THE SEPTIC TANK PUMPED AS NEEDED BUT AT LEAST ONCE EVERY THREE YEARS.
30. DO NOT FLUSH BULKY ITEMS SUCH AS DIAPERS, SANITARY PADS OR BABY WIPES.
31. DO NOT FLUSH TOXIC CHEMICALS SUCH AS PAINT THINNERS, DRANO, PESTICIDES, OR CHLORINE, AS THEY MAY KILL THE NECESSARY BACTERIA IN THE SEPTIC TANK.
32. REPAIR LEAKING FIXTURES IN THE BUILDING PROMPTLY.
33. BE CONSERVATIVE WITH WATER USE, SPREAD OUT USE OVER TIME, AND USE WATER-REDUCING FIXTURES WHENEVER AND WHEREVER POSSIBLE. TOO MUCH USE IN A SHORT TIME CAN OVERLOAD THE SYSTEM, WHICH MAY LEAD TO FAILURE.
34. MOW YOUR LEACHING AREA REGULARLY. PREVENT DEEP-ROOTED TREES AND SHRUBS FROM GROWING ON AND ADJACENT TO YOUR LEACHING AREA.
35. NO VEHICULAR TRAVEL, LIVESTOCK TRAVEL, OR SNOW REMOVAL IN AREA OF SYSTEM, UNLESS SPECIFICALLY DESIGNED FOR H20 LOADING.

36. WELL INSTALLATION SHALL COMPLY WITH "We 602.05' WELL LOCATION RULES.
37. THE WELL SHALL BE INSTALLED AT THE LOCATION SHOWN ON THIS PLAN. DESIGNER TO BE NOTIFIED IF THE WELL LOCATION MUST DEVIATE FROM THIS DESIGN FOR ANY REASON.
38. IF THE WELL IS LOCATED LESS THAN 50' FROM THE STATE HIGHWAY RIGHT-OF-WAY AND/ OR LESS THAN 75' FROM THE PROPERTY LINE WITH DESIGN FLOWS FOR STRUCTURES UP TO 5 BEDROOMS, "SPECIAL METHODS OF CONSTRUCTION" SHALL BE USED. THESE SHALL INCLUDE BUT NOT BE LIMITED TO:
   - INSTALL NO LESS THAN 40' OF CASING INTO COMPETENT BEDROCK WHERE BEDROCK IS LESS THAN 20' FROM GROUND SURFACE.
   - GROUTING THE CASING.

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PROJECT PARCEL
TOWN OF MADBURY
TAX MAP 3, LOT 15

TOTAL LOT AREA
±22 ACRES

LOCAL APPROVAL STAMP

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.	Date: 03/20/2025
	Proj. No.: 25011
	Scale: AS SHOWN
	Draft: KDR
	Checked: PSL
Dwg. Name: 25011-SEPTIC.DWG	

REV.	DATE	REVISION	BY
0	03/19/25	SEPTIC SYSTEM DESIGN	KDR

Designed and Produced in NH
Jones & Beach Engineers, Inc.
Civil Engineering Services
85 Portsmouth Ave.
PO Box 219, Stratham, NH 03885
603-772-4746
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	EFFLUENT DISPOSAL SYSTEM DESIGN REPLACEMENT SYSTEM (EXPANSION)
Project:	81 OLD STAGE ROAD MADBURY, NH 03823
Owner of Record:	GARY SONNENSCHEIN 81 OLD STAGE ROAD, MADBURY, NH 03823

DRAWING No.
S1
SHEET NO. 1 OF 1
JBE PROJECT NO. 25011