NOTE:
ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED.
(310 CMR 15.221(12))

EXISTING SEPTIC TANK SHALL BE PUMPED, CRUSHED & REMOVED, REPLACE WITH NEW 1500 GAL SEPTIC TANK (MONOLITHIC)(H-20 LOAD)(2 COMPARTMENT)

Ⓐ W/ 6" STONE BENEATH 3/4"- 1-1/2" CRUSHED STONE
9"MIN. COVER 36"MAX. COVER
PROP. ACCESS MANHOLE TO FINISHED GRADE WITH WATERTIGHT JOINTS.
MANHOLES BROUGHT TO FINAL GRADE SHALL BE SECURED TO PREVENT UNAUTHORIZED ACCESS.
(310 CMR 15.228(2))
TANKS SHALL HAVE A MIN. COVER OF 9", TANKS BURIED GREATER THAN 9" SHALL BE EQUIPPED WITH RISERS ON ALL TANK TOP OPENINGS. (310 CMR 15.228(1))

Ⓑ PROP 1000 GALLON PUMP CHAMBER (MONOLITHIC) (H-20 LOAD)
W/ 6" STONE BENEATH 3/4"- 1-1/2" CRUSHED STONE
9"MIN. COVER 36"MAX. COVER
PROP. ACCESS MANHOLE TO FINISHED GRADE WITH WATERTIGHT JOINTS.
MANHOLES BROUGHT TO FINAL GRADE SHALL BE SECURED TO PREVENT UNAUTHORIZED ACCESS.
(310 CMR 15.228(2))
TANKS SHALL HAVE A MIN. COVER OF 9", TANKS BURIED GREATER THAN 9" SHALL BE EQUIPPED WITH RISERS ON ALL TANK TOP OPENINGS. (310 CMR 15.228(1))

Ⓒ PROPOSED
D-BOX/INLET TEE ( 6 OUTLET )
W/ 6" STONE BENEATH 3/4"- 1-1/2" CRUSHED STONE
OUTLET LINES SHALL BE LEVEL FOR A MINIMUM OF THE FIRST TWO FEET OF THEIR LENGTH.
PROVIDE 9" OF COVER OVER D-BOX COVER
IF EXCESS OF 9" THEN PROP A RISER TO WITHIN 6" OF FINISHED GRADE
(310CMR SEC 15.232(3)(F))

Ⓓ PROP. PRESBY ENVIRO-SEPTIC PIPES ( 2 CELLS )
8 LINES - 60.0'L - 12ø ( 480'L.F. PIPE PROPOSED )
( 2.42' O.C. SPACING )( SAND BED SIZE: 20.0'W x 62.0'L )

Ⓔ PROP. 4"PVC PERF SCH40 INSPECTION PORT TO BOTTOM OF SYS. SAND AND THREADED CAP WITHIN 3" OF FIN. GRADE. WRAP PIPE WITH PERMEABLE GEOTEXTILE FABRIC.

Ⓕ PROP SYSTEM VENT/SCREENED (4"PVC SCH40)
LOW VENT - 3' MIN ABOVE FINAL GRADE.
( SEE REMOTE VENT PIPING SLOPE DETAIL )

CERTIFICATIONS:

NO PART OF THIS SYSTEM IS WITHIN AN AREA NOTED BY D.E.P. AS AN ESTIMATED SETBACK AREA FOR TITLE 5.
NO PART OF THIS SYSTEM IS WITHIN 400 FEET OF PUBLIC AND SURFACE WATER SUPPLIES.
NO PART OF THIS SYSTEM IS WITHIN 200 FEET OF TRIBUTARIES TO PUBLIC AND SURFACE WATER SUPPLIES.
NO PART OF THIS SYSTEM IS WITHIN 100 FEET TO A PRIVATE WATER SUPPLY (WELL).
NO PART OF THIS SYSTEM IS WITHIN A NITROGEN SENSITIVE AREA AS DELINEATED BY D.E.P..
THIS PROPOSED SYSTEM IS WITHIN 100' FEET OF A WETLAND RESOURCE AREA AS DEFINED BY 310 CMR 10.0, THE WETLAND PROTECTION ACT, AND CONFORM TO THE REQUIREMENTS OF TITLE 5.

NOTE:
1. SEPTIC TANK AND PUMP CHAMBER SHALL BE MONOLITHIC AND TESTED FOR WATER-TIGHTNESS.

## GENERAL NOTES

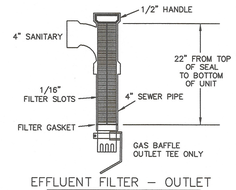
1. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR HORIZONTAL AND VERTICAL CONTROL OF ALL SYSTEM COMPONENTS.
2. THIS PLAN IS TO SHOW THE DESIGN OF THE SUBSURFACE SEWAGE DISPOSAL SYSTEM ONLY. THE SYSTEM IS DESIGNED FOR FLOWS ESTIMATED UNDER DESIGN CRITERIA.
3. SYSTEM IS DESIGNED TO ACCOMIDATE ONLY SANITARY SEWAGE ASSOCIATED WITH NORMAL DOMESTIC USAGE AND CONSISTING OF WATER-CARRIED PUTRESCIBLE WASTE.
4. THIS SYSTEM IS NOT DESIGNED FOR GARBAGE GRINDERS.
5. THE SYSTEM SHALL BE VENTED THROUGH BUILDING PLUMBING AS REQUIRED BY BUILDING CODE.
6. PROPERTY LINES AND BUILDING LOCATION ARE GRAPHIC ONLY. PROPERTY LINES NOT HAVING BEEN VERIFIED. NO REPRESENTATION OR CERTIFICATION AS TO THE ACCURACY OF THOSE SHOWN IS IMPLIED OR INTENDED. A BOUNDARY SURVEY BY A PROF. LAND SURVEYOR TO ESTABLISH LOT LINES ON THE GROUND MAY BE REQUIRED BY THE B.O.H. PRIOR TO CONSTRUCTION OF THE PROPOSED FACILITIES.
7. PURSUANT TO LOCAL REGULATIONS, ALL PROPOSED BUILDING LOTS, BUILDINGS OR ADDITIONS SHALL COMPLY WITH THE ZONING BYLAWS.
8. THE PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON DATE OF TOPOGRAPHY AND THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. IS NOT INTENDED OR IMPLIED.
9. THE INSTALLER OF THIS SYSTEM MUST BE LICENSED BY THE LOCAL BOARD OF HEALTH.
10. THERE ARE NO EXISTING WELLS WITHIN 100' OF THE PROPOSED SEWAGE DISPOSAL SYSTEM. SYSTEM TO BE STAKED IF WELLS LESS THAN 125'.
11. DISPOSAL SYSTEM AREAS ARE TO BE RAKED (SCARIFIED) BEFORE INSTALLATION OF STONE. ALL STONES EXCEEDING 2 INCHES IN DIAMETER, ALL LOAM, OR FOREIGN MATERIAL ENCOUNTERED DURING EXCAVATION ARE TO BE REMOVED FROM THE LEACHING AREA SURFACES.
12. FINISHED SURFACE OF THE LEACHING AREA SHALL BE GRADED TO ASSURE WATER RUNOFF (2% MINIMUM SLOPE).
13. ALL DISTURBED AREAS TO BE LOAMED, SEEDED, AND MAINTAINED TO PREVENT EROSION.
14. THE SEPTIC TANK SHOULD BE PERIODICALLY INSPECTED AND MAINTAINED AND SHOULD BE PUMPED WHEN SLUDGE IN THE BOTTOM OF THE TANK EXCEEDS 1/4 OF THE DEPTH.
15. ALTERNATE MANUFACTURERS FOR CONCRETE STRUCTURES AND EQUIPMENT SHOWN ON THESE PLANS MAY BE USED UPON THE WRITTEN APPROVAL OF THE DESIGN ENGINEER. ALTERNATE MANUFACTURERS WILL NOT BE USED IF THE USE OF THEIR EQUIPMENT REQUIRES DESIGN CHANGES.
16. IF ANY PART OF THIS DESIGN IS TO BE ALTERED IN ANY WAY, THE DESIGN ENGINEER AS WELL AS THE APPROVING AUTHORITIES SHALL BE NOTIFIED IN WRITING BEFORE CONSTRUCTION.
17. THE LOCAL BOARD OF HEALTH AGENT OR STATE INSPECTOR WILL CONDUCT PERIODIC INSPECTIONS AS NEEDED.
18. A RESIDENT INSPECTOR FROM E.L.S., LLC SHALL BE ON SITE TO (A) INSPECT THE INSTALLATION OF ALL CONCRETE STRUCTURES PRIOR TO BEING BACKFILLED, (B) INSPECT THE BOTTOM OF THE LEACH AREA AT THE TIME IT IS SCARIFIED, AND (C) INSPECT THE LEACH AREA PRIOR TO BEING BACKFILLED. E.L.S., LLC SHALL BE GIVEN AT LEAST 48 HOURS NOTICE BY THE GENERAL CONTRACTOR PRIOR TO THE COMMENCEMENT OF THE ABOVE CONSTRUCTION OPERATIONS.
19. THESE PLANS AN SPECIFICATIONS ARE INTENDED TO BE EXPLANATORY OF THE WORK TO BE DONE AND OF EACH OTHER, BUT SHOULD ANY OMISSION, ERRORS, OR DISCREPANCIES APPEAR, THEY SHALL BE SUBJECT TO CORRECTION AND INTERPRETATION BY THE DESIGN ENGINEER THEREBY DEFINING AND FULFILLING THE INTENT OF THE PLANS.
20. ALL UNSUITABLE MATERIAL UNDER AREA OF LEACHING SYSTEM AND 5' BEYOND SHALL BE REMOVED AND REPLACED WITH CLEAN FILL MEETING THE SPECIFICATIONS OF TITLE 5, 310 CMR 15.255(3).
21. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS IN THE FIELD. IF ANY DISCREPANCIES ARE FOUND BETWEEN EXISTING DIMENSIONS AND PLAN DIMENSIONS, CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY BEFORE PROCEEDING WITH ANY WORK.

SEPTIC TANK NOTE:

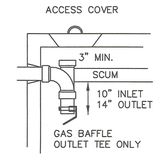
A GAS BAFFLE SHALL BE INSTALLED AT THE FIRST TANK COMPARTMENT OUTLET TEE AND A FILTER SHALL BE INSTALLED AT THE LAST TANK COMPARTMENT OUTLET TEE.

ALL INLETS AND OUTLETS OF THE PROPOSED TANKS SHALL BE RUBBER BOOTED.

MIN. SEPTIC TANK CAPACITY REQUIRED:
660 x 200% = 1320 GALLONS
PROPOSE 1500 GALLON SEPTIC TANK
PROPOSE 1000 GALLON PUMP CHAMBER



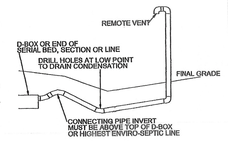

EFFLUENT FILTER - OUTLET
ZABEL MODEL A1800-HIP



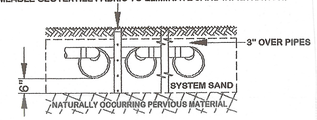

SANITARY TEE INLET/OUTLET
N.T.S.

**Remote vent piping slope**

Remote vent piping should slope downward toward the system to prevent moisture from collecting in the piping and blocking air passage. If site conditions do not allow the pipe to the vent to slope back toward the system, the low point of the connecting pipe should be drilled to allow drainage provided that the connecting pipe invert is above the highest point of the D-box and all of the ES lines.




4"Ø PERFORATED INSPECTION PORT TO BOTTOM OF SYSTEM SAND AND THREADED CAP WITHIN 3" OF FINAL GRADE. WRAP PIPE WITH PERMEABLE GEOTEXTILE FABRIC TO ELIMINATE SAND INFILTRATION.




LEGEND:

| | |
|---|---|
| 100x0 | SPOT ELEVATION |
| | EXIST. CONTOUR |
| | PROP. CONTOUR |
| | EXISTING SOIL TEST LOCATION |
| | EXISTING PERC. TEST LOCATION |
| —W——W— | EXIST WATER-SERVICE |
| | EXIST SHRUB |
| | EXIST TREE |

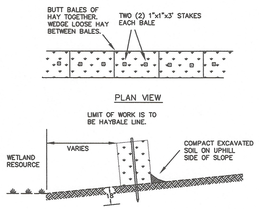
T.B.M.#1
FIRST STEP
EL=101.37'
(ASSUMED DATUM)

T.B.M.#2
TOP STEP
EL=102.66'
(ASSUMED DATUM)

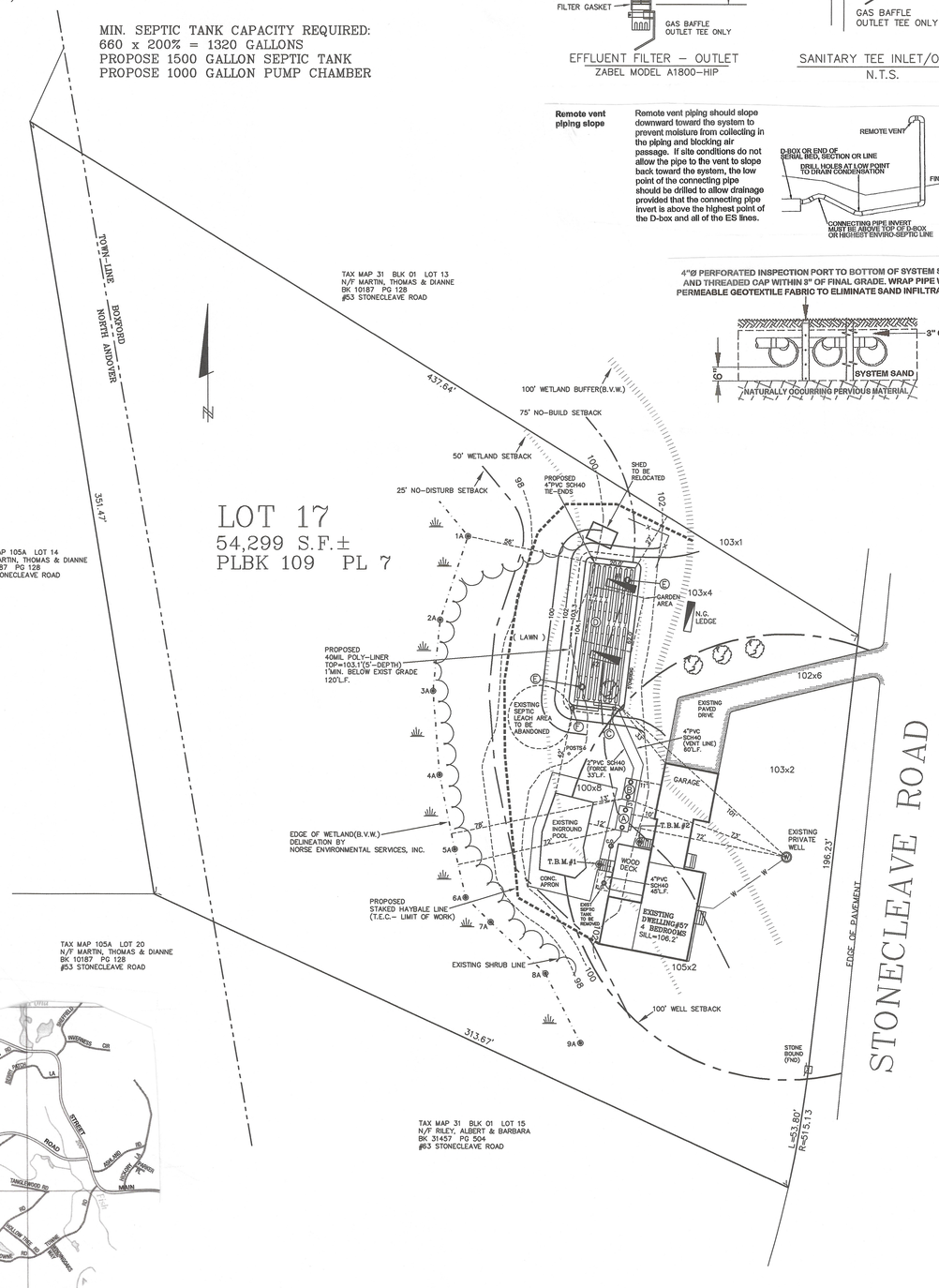
THE INTENT OF THIS PLAN IS TO PROVIDE FULL COMPLIANCE WITH TITLE 5 OF THE STATE ENVIRONMENTAL CODE, AS AMENDED BY THE BOARD OF HEALTH, EXCEPT WHERE NOT POSSIBLE, AND NOTED IN THE FOLLOWING VARIANCE REQUESTS TO ACHIEVE MAXIMUM FEASIBLE COMPLIANCE.

VARIANCE REQUEST:

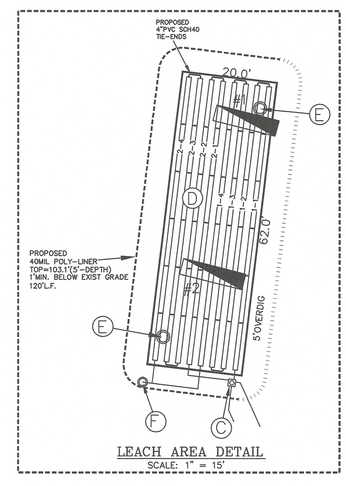
1 - S.A.S. SETBACK FROM WETLAND RESOURCE AREA FROM 100' REQUIRED TO 56' PROVIDED WITH 40MIL POLY-LINER AND PRESBY ENVIRO TREATMENT SYSTEM.
( LOCAL 201-9(E) )



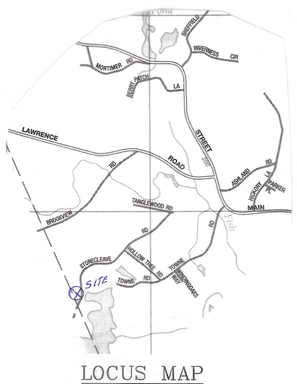

STAKED HAYBALES T.E.C.
N.T.S.




SYSTEM PLOT PLAN
SCALE 1" = 30'




LEACH AREA DETAIL
SCALE: 1" = 15'




LOCUS MAP
N.T.S.

CONDITIONS APPLICABLE TO THE SYSTEM OWNER:

1 - THE SYSTEM IS APPROVED FOR THE TREATMENT AND DISPOSAL OF SANITARY SEWAGE ONLY. ANY WASTES THAT ARE NON-SANITARY SEWAGE GENERATED OR USED AT THE FACILITY SERVED BY THE SYSTEM SHALL NOT BE INTRODUCED INTO THE ON-SITE SEWAGE DISPOSAL SYSTEN AND SHALL BE LAWFULLY DISPOSED OF.

2 - THE OWNER OF THE SYSTEM SHALL AT ALL TIMES PROPERLY OPERATE AND MAINTAIN THE ON-SITE SEWAGE DISPOSAL SYSTEM.

3 - THE OWNER SHALL FURNISH THE DEPARTMENT ANY INFORMATION THAT THE DEPARTMENT REQUESTS REGARDING THE OPERATION AND PERFORMANCE OF THE SYSTEM, WITHIN 21 DAYS OF THE DATE OF RECEIPT OF THAT REQUEST.

4 - NO OWNER SHALL AUTHORIZE OR ALLOW THE INSTALLATION OF THE SYSTEM OTHER THAN BY A PERSON TRAINED BY THE COMPANY TO INSTALL THE SYSTEM.

NOTE:
I HEREBY CERTIFY THAT THIS SYSTEM IS DESIGNED UNDER THE MA D.E.P. "STANDARD CONDITIONS FOR ALTERNATIVE SOIL ABSORPTION SYSTEMS FOR GENERAL USE/REMEDIAL USE REVISED MARCH 05, 2018 CERTIFICATION PURSUANT TO TITLE 5, 310 CMR 15.00 AND MODIFIED CERTIFICATION FOR REMEDIAL USE OCTOBER 30, 2019 FOR PRESBY ENVIRO-SEPTIC LEACHING SYSTEM.
TRANSMITTAL NUMBER: X283867

6-15-21
BRIAN J. FARMER, R.S. DATE

REVISIONS:

SHEET No.1 OF 3

DRAWN: RMG
CHECKED: BJF
SCALE: 1"=30'
DATE: 06-15-2021
DWG No. V:\CAD\BOP\BOX\SYSTONECLEAVE

MASSACHUSETTS BRIAN J FARMER SANITARIAN #1312 6.15.21 DATE

COMMONWEALTH OF MASSACHUSETTS ROBERT M. GRASSO NO. 40215 PROFESSIONAL LAND SURVEYOR 6.14.21

OWNER: CHRISTINE HOXHA
TAX MAP 31 BLK 01 LOT 14
LOCUS DEED: BK 37623 PG 36

LOCATION: 57 STONECLEAVE ROAD
BOXFORD, MA 01921


Engineering Land Services, LLC
P.O.BOX 41
WEST NEWBURY, MA 01985
TEL: 978-815-6744 & FAX: 978-462-6800
EMAIL: MASSPLSRG@AOL.COM


# SANITARY DISPOSAL SYSTEM UPGRADE PLAN ( REPAIR )