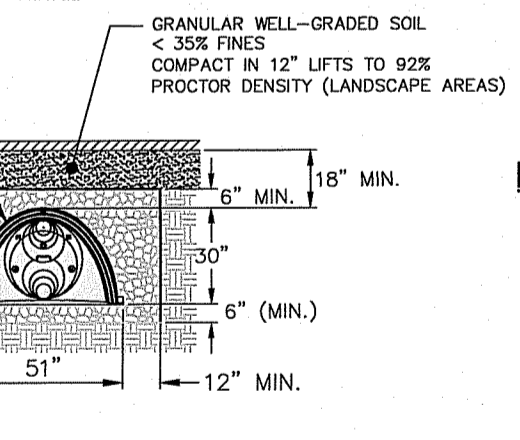
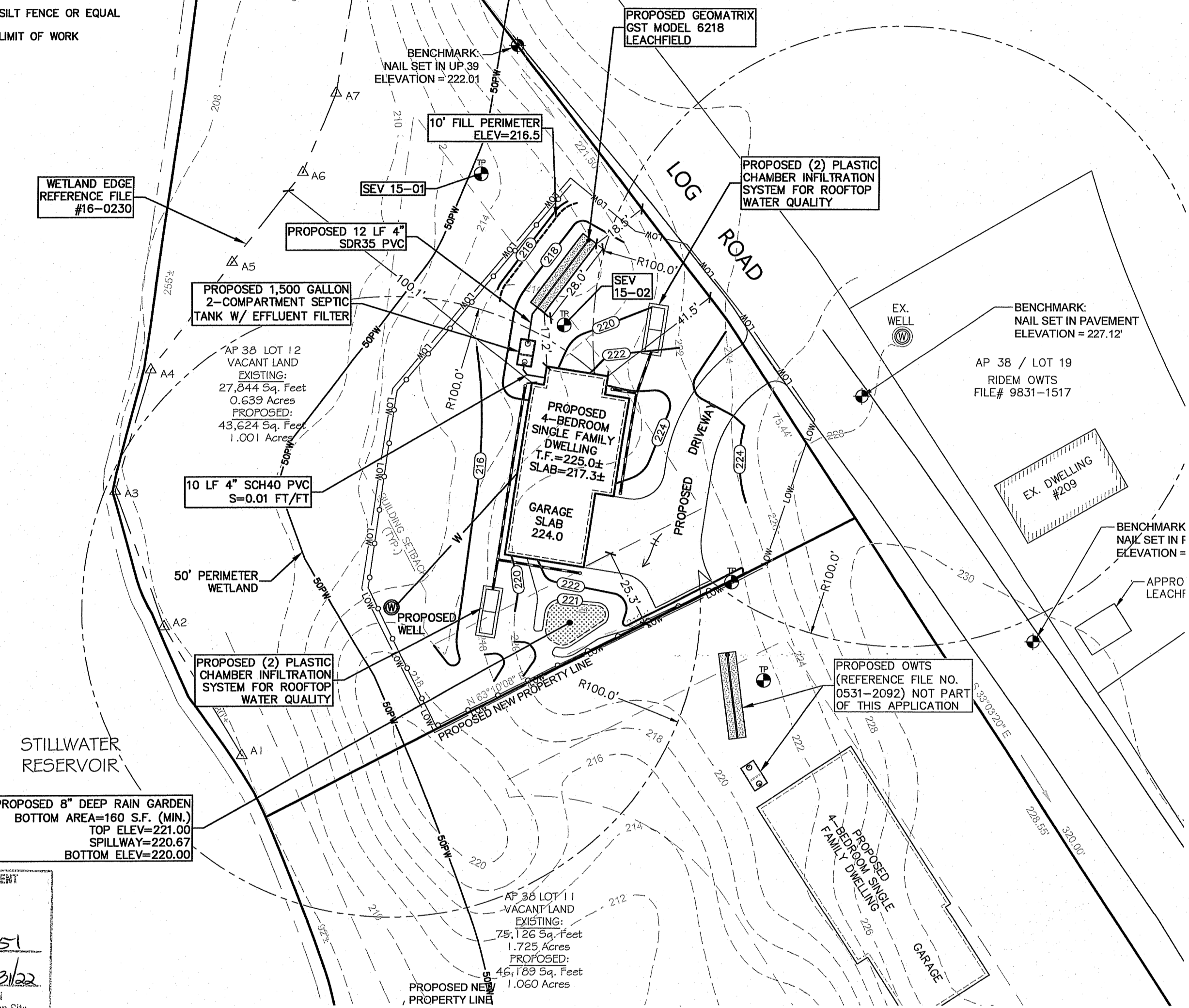


AP 36 LOT 37
N/F
STATE OF RHODE ISLAND DEPT. OF
ENVIRONMENTAL MANAGEMENT

LEGEND & SYMBOLS

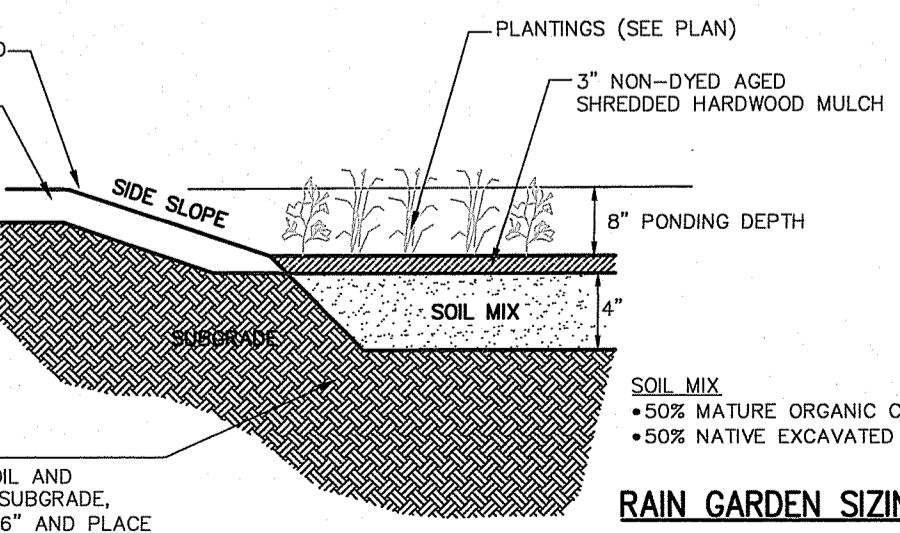
- EXISTING CONTOUR
- ⊕ TEST HOLE
- 390 --- PROPOSED CONTOUR
- T.F. --- TOP OF FOUNDATION
- SILT FENCE OR EQUAL
- LIMIT OF WORK



INFILTRATION CHAMBER SIZING:
IMPERVIOUS AREA
1,100 S.F. ROOFTOP TO EACH SYSTEM
SIZE FOR WATER QUALITY 1" STORM EVENT
1,100 S.F. X 1.2" / 12" = 110 C.F. STORAGE REQ'D
INSTALLED STORAGE CAPACITY
1 CHAMBER WITH STONE = 75 C.F. STORAGE
(PER STORMTECH SC-740 SPECIFICATIONS)
INSTALL 2 CHAMBERS PER SYSTEM
150 C.F. > 110 C.F.

PLASTIC INFILTRATION CHAMBER

CROSS SECTION IN LANDSCAPE AREAS
NOT TO SCALE



RAIN GARDEN

NOT TO SCALE

RAIN GARDEN SIZING:
IMPERVIOUS AREA
1,900 S.F. DRIVEWAY
SIZE PER RIDEM GUIDANCE MANUAL (SANDY SOILS @ 8" PONDING DEPTH)
1,900 S.F. / 12.5" = 152 S.F. BOTTOM AREA

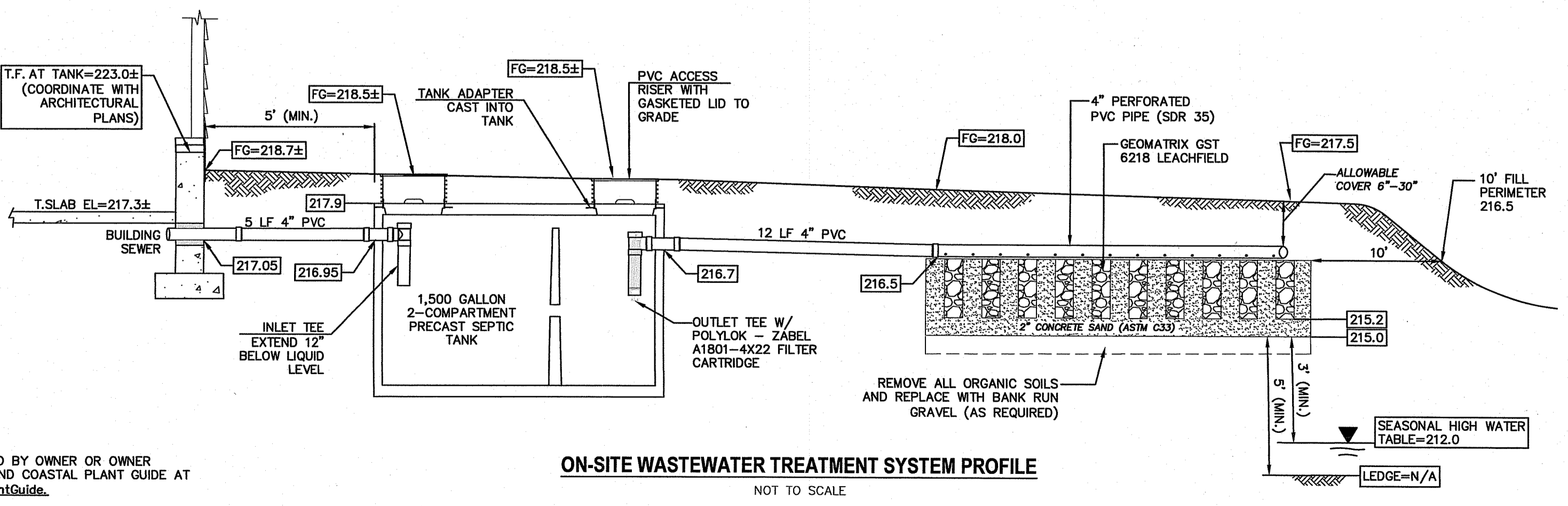
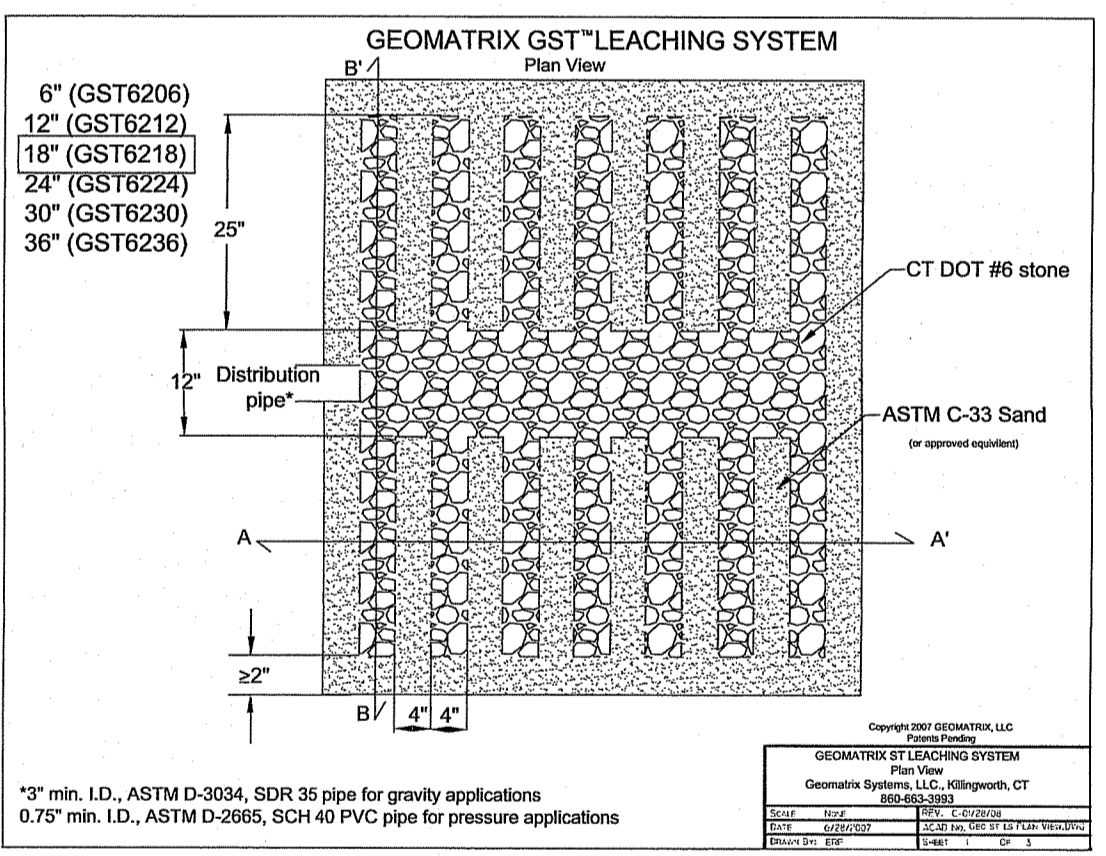
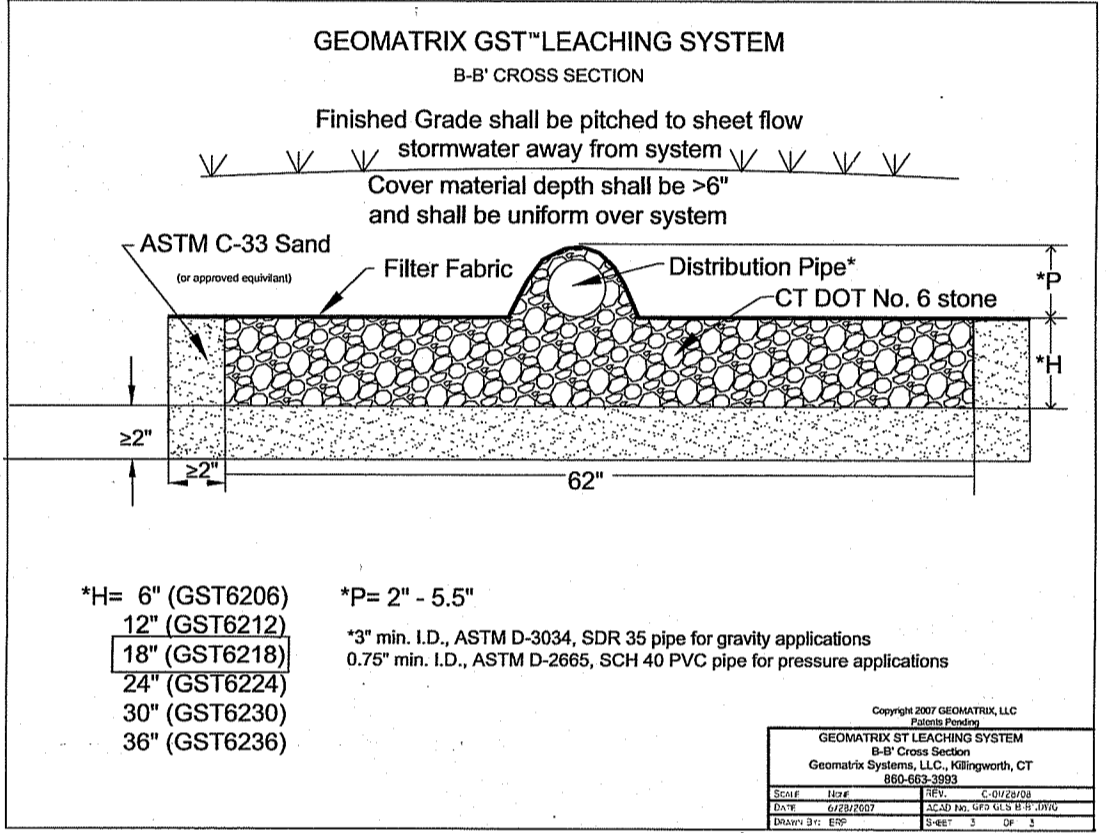
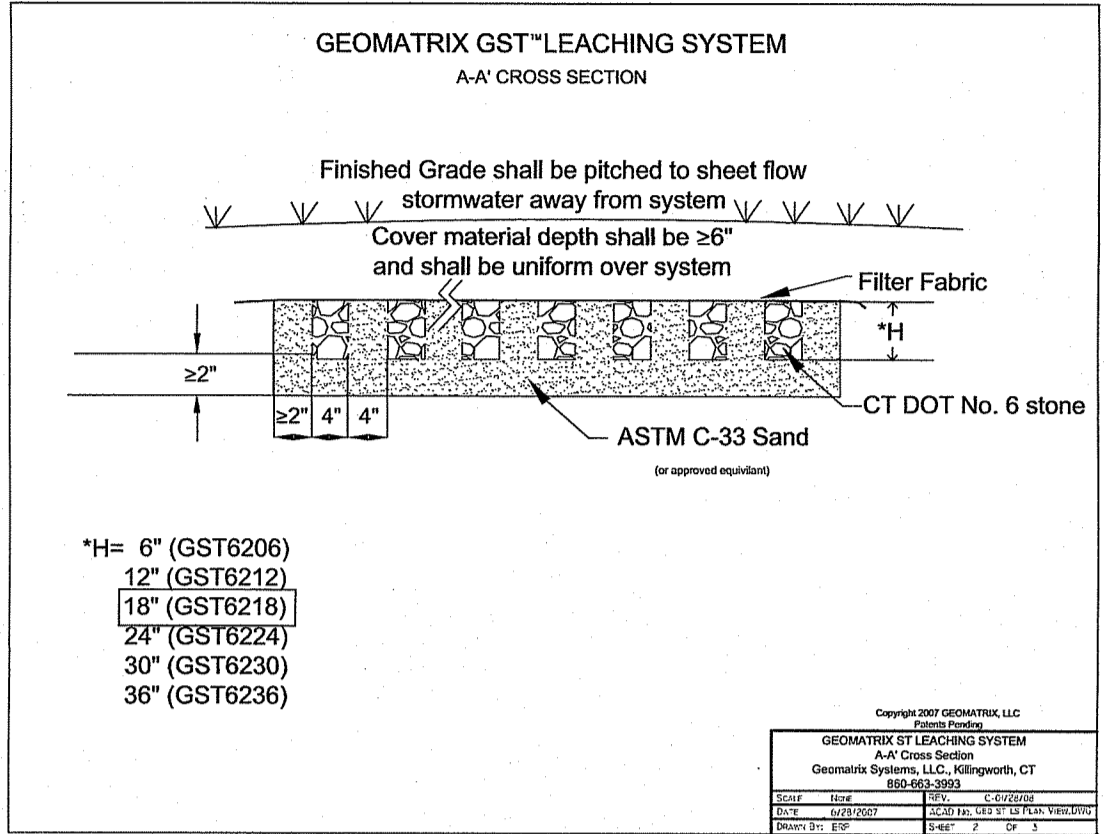
Rain Garden Plantings (Example Only):

LATIN NAME	PERENNIALS	COMMON NAME	SIZE	SPACING
FESTUCA OVINE GLAUCA	GRASSES / PERENNIALS	BLUE FESCUE	1 GAL	18" O.C.
PANICUM VIRGATUM		SWITCHGRASS	1 GAL	18" O.C.
PENNSETUM ALOPECUROIDES		FOUNTAIN GRASS	1 GAL	18" O.C.
RUDEBECKIA HIRTA		BLACK EYED SUSAN	1 GAL	18" O.C.
CEPHALANTHUS OCCIDENTALIS	SHRUBS	COMMON BUTTONBUSH		
COMPANIA PEREGRINA		SWEET FERN		
LEDUM GROENLANDICUM		LABRADOR TEA		
PHOTINIA MELANOCARPA		BLACK CHOKEBERRY		

• FINAL PLANTINGS TO BE CHOSEN AND INSTALLED BY OWNER OR OWNER REPRESENTATIVE. REFERENCE THE RHODE ISLAND COASTAL PLANT GUIDE AT www.uri.edu/cels/ceec/coastalPlants/CoastalPlantGuide.

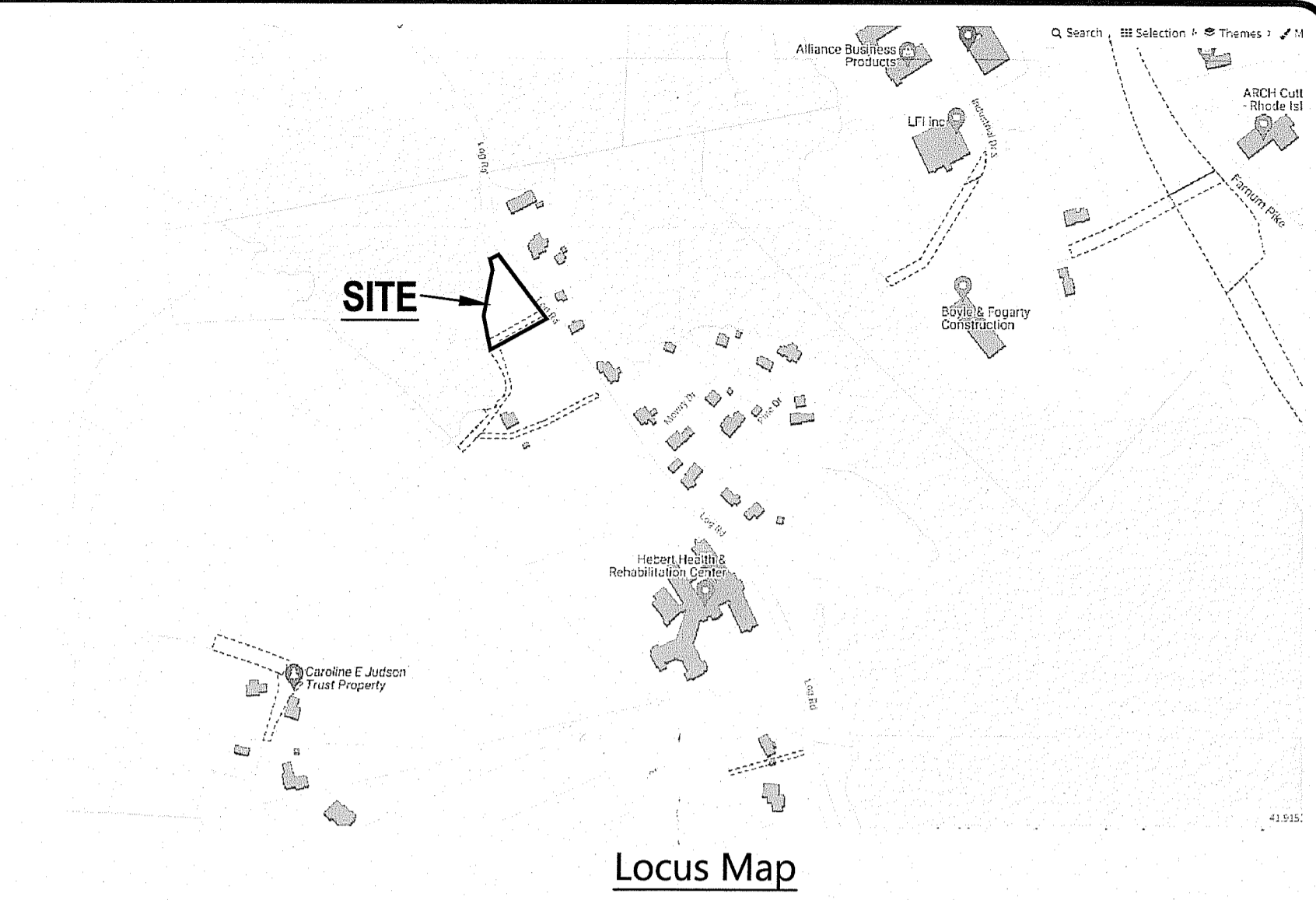
LEACHFIELD DESIGN CALCULATION

- 4 BEDROOMS X 115 GALLONS PER BEDR/DAY = 460 GALLONS PER DAY
- DESIGN LOADING RATE, SOIL CATEGORY 6m = 0.70 GAL/S.F./DAY
- 460 GPD / 0.70 GAL/S.F./DAY = 658 S.F. LEACHING AREA REQUIRED
- 658 S.F. / 24.8 S.F. PER L.F. OF GST 6218 = 27 LF REQUIRED
- 28 LF PROVIDED
- 28 X 24.8 S.F. PER L.F. = 694.4 S.F. LEACHING AREA PROVIDED
- 3/4" STONE VOLUME = 0.35 X 28 = 10 CUBIC YARDS
- ASTM C-33 CONCRETE SAND VOLUME = 0.46 X 28 = 13 CUBIC YARDS

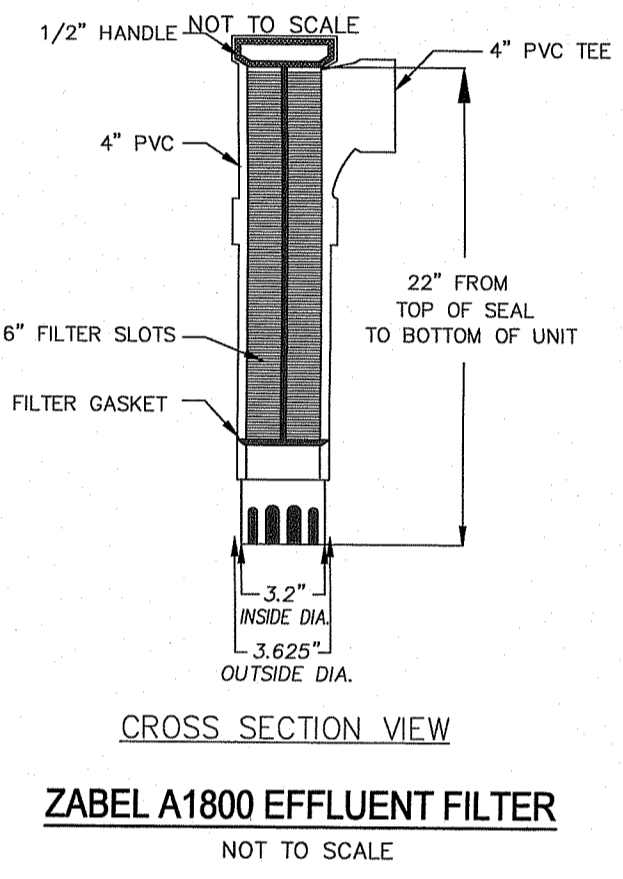
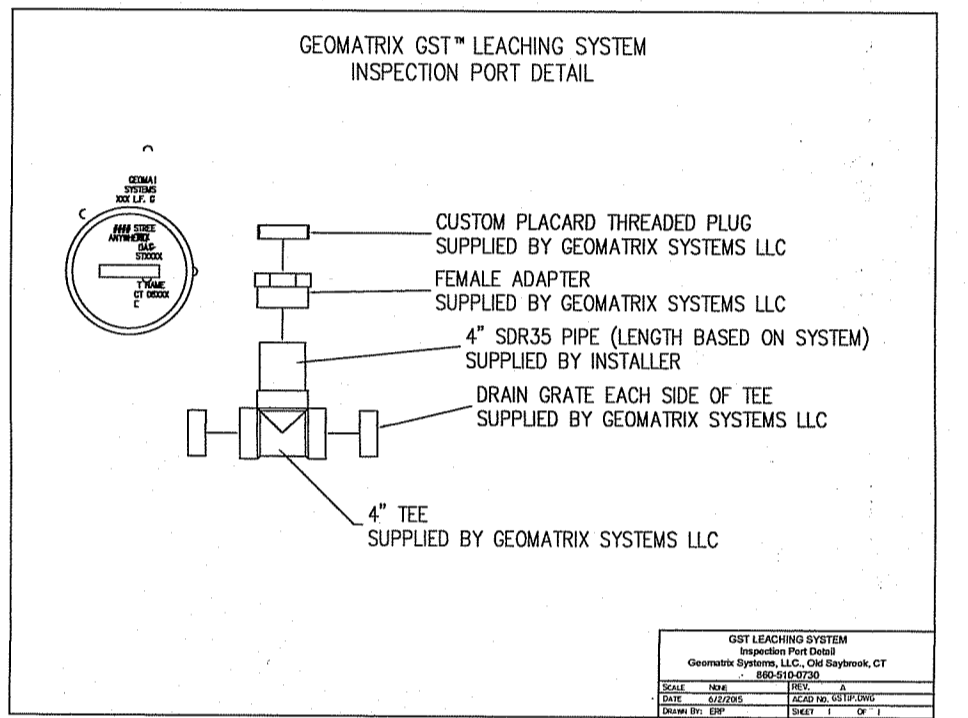


ON-SITE WASTEWATER TREATMENT SYSTEM PROFILE

NOT TO SCALE

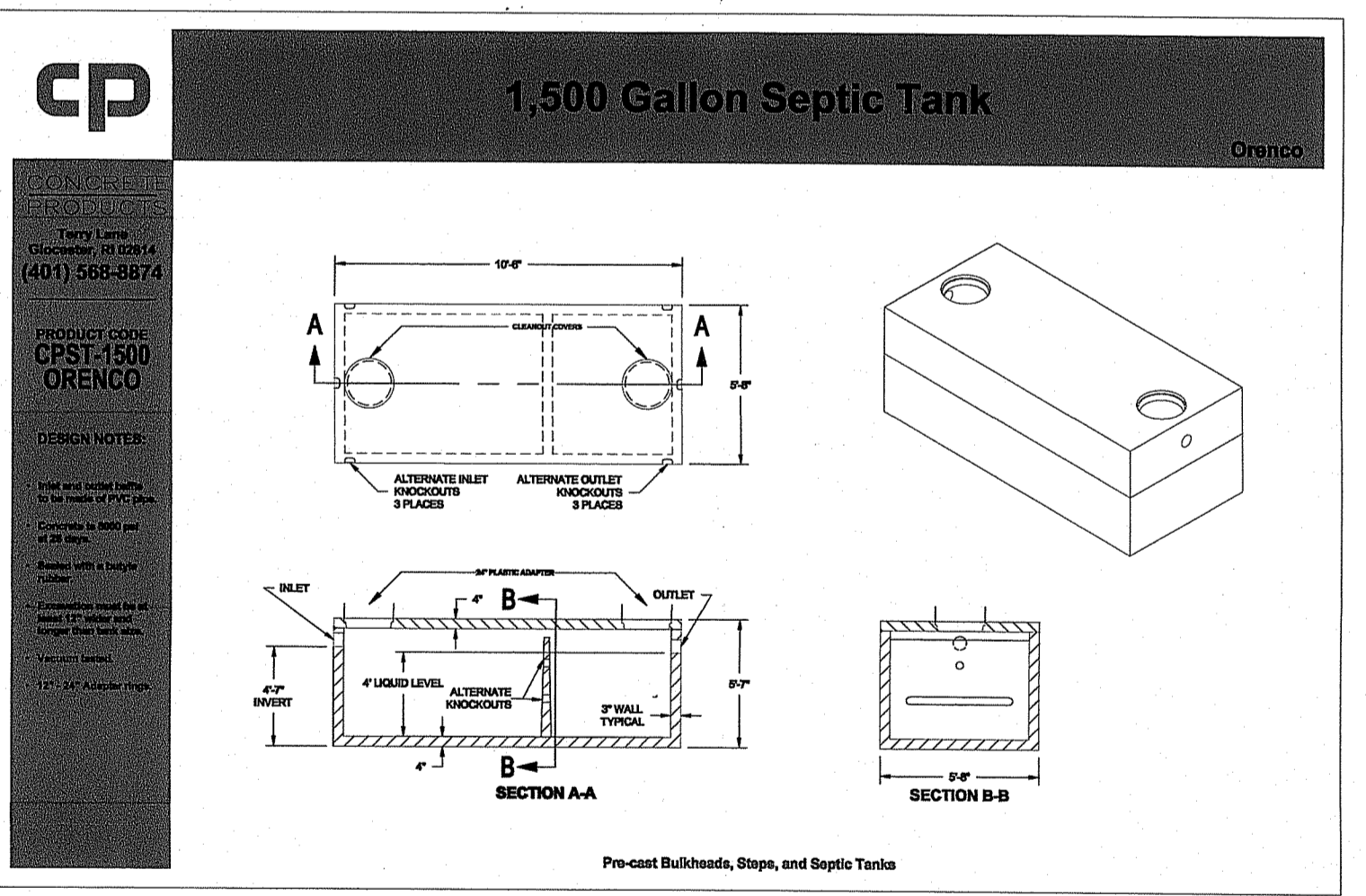


Locus Map



ZABEL A1800 EFFLUENT FILTER

NOT TO SCALE



1,500 Gallon Septic Tank

DESIGN NOTES:
1. THIS TANK SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. THE TANK SHALL BE PROTECTED FROM FREEZING AND SHALL BE INSULATED AS REQUIRED.
3. THE TANK SHALL BE INSTALLED ON A MINIMUM 4" SAND BED.
4. THE TANK SHALL BE INSTALLED ON A MINIMUM 4" SAND BED.
5. THE TANK SHALL BE INSTALLED ON A MINIMUM 4" SAND BED.

General Notes:

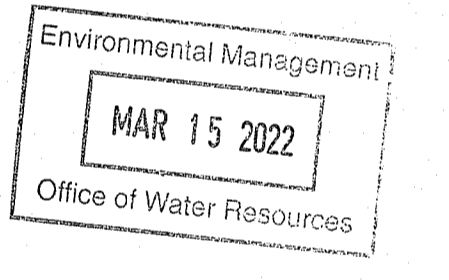
1. PROPERTY LINE, EXISTING SITE FEATURES, AND TOPOGRAPHY WAS PREPARED BY INSTE ENGINEERING SERVICES, LLC 501 GREAT ROAD UNIT 104, NORTH SMITHFIELD, RI 02896.
2. THE CONTRACTOR SHALL NOTIFY DIG-SAFE 72 HOURS PRIOR TO START OF CONSTRUCTION.
3. PROPER EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO EARTH DISTURBING ACTIVITIES.
4. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE TO COORDINATE AND OBTAIN ALL PERMITS FOR CONSTRUCTION.

OnSite Wastewater Treatment System Notes

1. ALL DESIGN, CONSTRUCTION, AND MAINTENANCE REQUIREMENTS, WHETHER NOTED HEREON OR NOT, SHALL BE IN CONFORMANCE WITH RULES AND REGULATIONS ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION, DESIGN, CONSTRUCTION AND MAINTENANCE OF ON-SITE WASTEWATER TREATMENT SYSTEMS, JANUARY 1, 2008 AND ALL AMENDMENTS, BY THE RHODE ISLAND DEPT. OF ENVIRONMENTAL MANAGEMENT.
2. STRIP LEACHING AREA EXCAVATE DOWN TO REMOVE ALL TOPSOIL AND SUBSOIL (ORGANICS).
3. OVER-EXCAVATE ALL FILL AND ORGANIC SOILS AND REPLACE WITH GRAVEL AS SPECIFIED IN RIDEM REGULATIONS.
4. INSTALLER MUST ASSURE THAT BOTTOM AND SIDES OF EXCAVATION FOR THE LEACHFIELD ARE NOT COMPACTED OR SIEAED.
5. ALL TREES, STUMPS, AND BRUSH SHALL BE REMOVED WITHIN 10 FEET OF THE SYSTEM.
6. MAINTAIN INVERT ELEVATION OF 216.50 FOR 10 FEET AROUND SYSTEM.
7. THERE ARE NO KNOWN PRIVATE WELLS OR DRAINS EXIST OR PROPOSED LOCATED WITHIN 200 FEET OF THE OWTS EXCEPT AS SHOWN AND NO KNOWN PUBLIC WELLS (EXIST. & PROP.) LOCATED WITHIN 500 FEET OF THE PROPOSED OWTS.
8. THERE ARE NO KNOWN SURFACE DRAINS, EXISTING OR PROPOSED, WITHIN 50 FEET OF THE PROPOSED OWTS.
9. ALL PVC PIPE SHALL BE 4" DIA. SDR 35 OR EQUIVALENT, UNLESS NOTED OTHERWISE.
10. THE SEPTIC TANK SHALL HAVE TEES ON BOTH THE INLET AND OUTLET AND SHALL BE A TWO (2) COMPARTMENT TANK WITH THE 1ST COMPARTMENT CONSISTING OF 2/3 TANK CAPACITY.
11. THE DISTRIBUTION BOX SHALL HAVE A MINIMUM BOTTOM AREA OF 3 SQUARE FEET.
12. NO VEHICULAR TRAFFIC IS ALLOWED OVER THE LEACHFIELD.
13. THE INSTALLER SHALL CONTACT THE DESIGNER AT LEAST 24 HOURS PRIOR TO START OF CONSTRUCTION.

ZONE: R-80

- MIN. AREA = 80,000 S.F.
- MIN. LOT WIDTH = 200 FT.
- MIN. FRONT YARD = 40 FT.
- MIN. SIDE YARD = 25 FT.
- MIN. REAR YARD = 75 FT.



Advanced Civil Design, Inc.

SITE/CIVIL ENGINEERS
88 PEEPTOAD ROAD
SQUATTA, RI 02857
PH: (401) 473-4404

NO.	DATE	REVISION
1	3/9/22	ADDRESS RIDEM COMMENTS

PROJECT TITLE:
Proposed 4-Bedroom Single Family Dwelling

A.P. 36 LOT 12
216 LOG ROAD
SMITHFIELD, RI 02917

OWNER/APPLICANT:
RI CUSTOM HOMES, LLC
49 CEDAR SWAMP RD UNIT 7
SMITHFIELD, RI 02917

SHEET TITLE:
ON-SITE WASTEWATER TREATMENT SYSTEM (OWTS) PLAN

DATE: 2/4/2022
SCALE: 1"=30'
DESIGNED BY: C.S.R.
CHECKED BY: C.S.R.

CURTIS S. RYAN
No. 8756
REGISTERED PROFESSIONAL ENGINEER (CIVIL)
DRAWING NO. 1
SHEET 1 OF 1