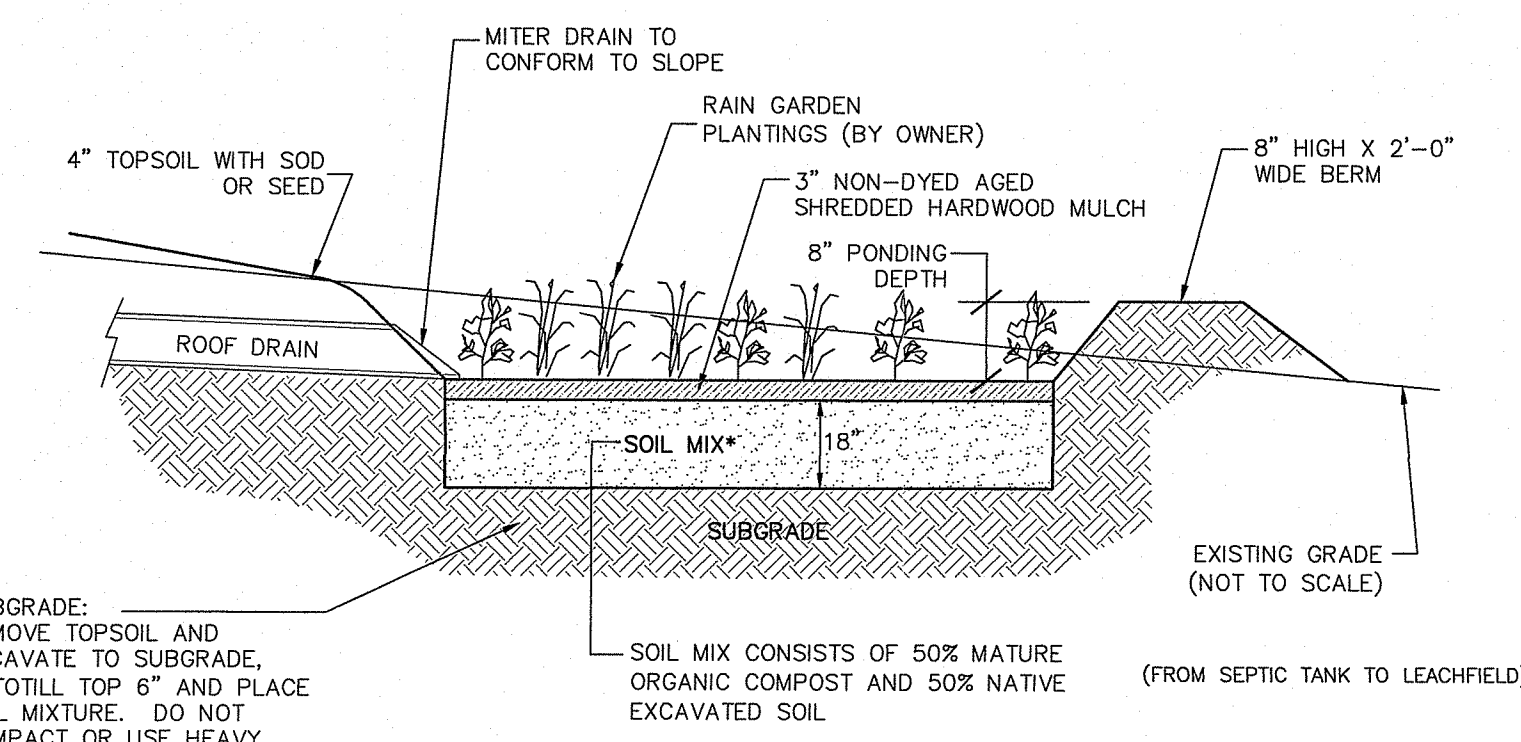


DISTRIBUTION BOX DB-5 W/ BAFFLE
H-20 RATED
NOT TO SCALE

STORMWATER TREATMENT PRACTICE				
IMPERVIOUS SURFACE	AREA	METHOD	AREA REQ'D	AREA PROVIDED
ROOF TOP	1,162 S.F.	RAIN GARDEN	28.5 S.F.	55 S.F.

* PER SOIL EVALS FSL



ROOF RAIN GARDEN SIZING CALCULATIONS

- Impervious Roof Area = 1,172 s.f.
- Soil type: Sand
- Design Coefficient of Permeability = 3.5 ft/day
- Intensity = 1-inch
- Water Quality Volume Needed: 1728 s.f. x 0.083 (1") = 144 c.f.
- Proposed Rain Garden Depth = 8-inches or 0.7-feet

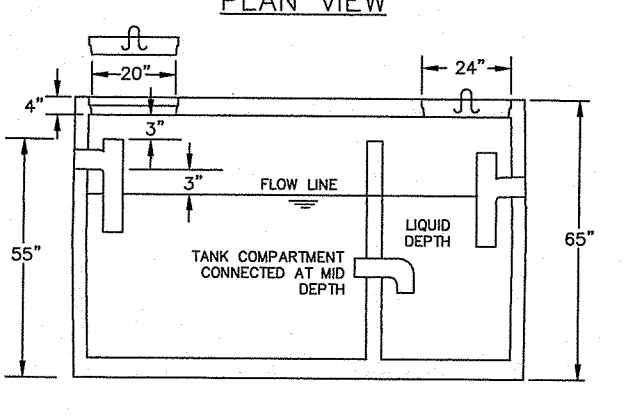
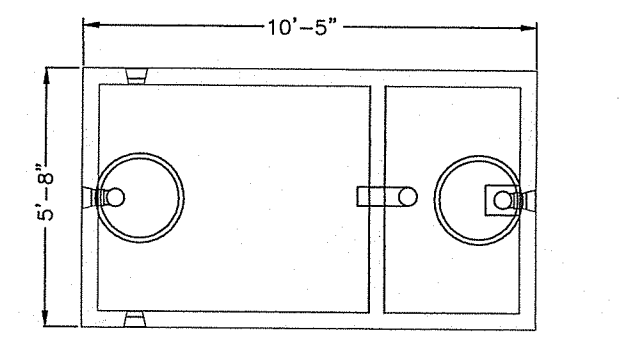
Surface Area at Bottom of the Garden:

$$A(f) = (WQv)(df) / [(k)(hf + df)(tf)]$$

Where:

- A(f) = surface area of the filter bed (ft²)
- df = Filter bed depth (ft) = 1.5 ft
- K = coefficient of permeability of the filter media (use 3.5 ft/day)
- hf(f) = Average height of water above the dry swale (ft) (use 0.7 ft)
- tf = design filter bed drain time (assume 1 day for design purposes)

$$A(f) = (144)(1.5) / [(3.5)(0.7 + 1.0)(1.0)]$$

$$A(f) = 36.3 \text{ s.f. use } 55 \text{ s.f.}$$


DESIGN NOTES:

- 1) ALL JOINTS SEALED WITH BUTYL RUBBER SEALANT
- 2) ALL INLETS AND OUTLETS HAVE STATE-APPROVED SEALS
- 3) AVAILABLE WITH 8" HEAVY DUTY TOP
- 4) MEETS ASTM C 1227-97A
- 5) CONCRETE STRENGTH 5000 PSI MIN. 28 DAYS
- 6) FIRST COMPARTMENT SHALL HAVE 75% TANK CAPACITY.

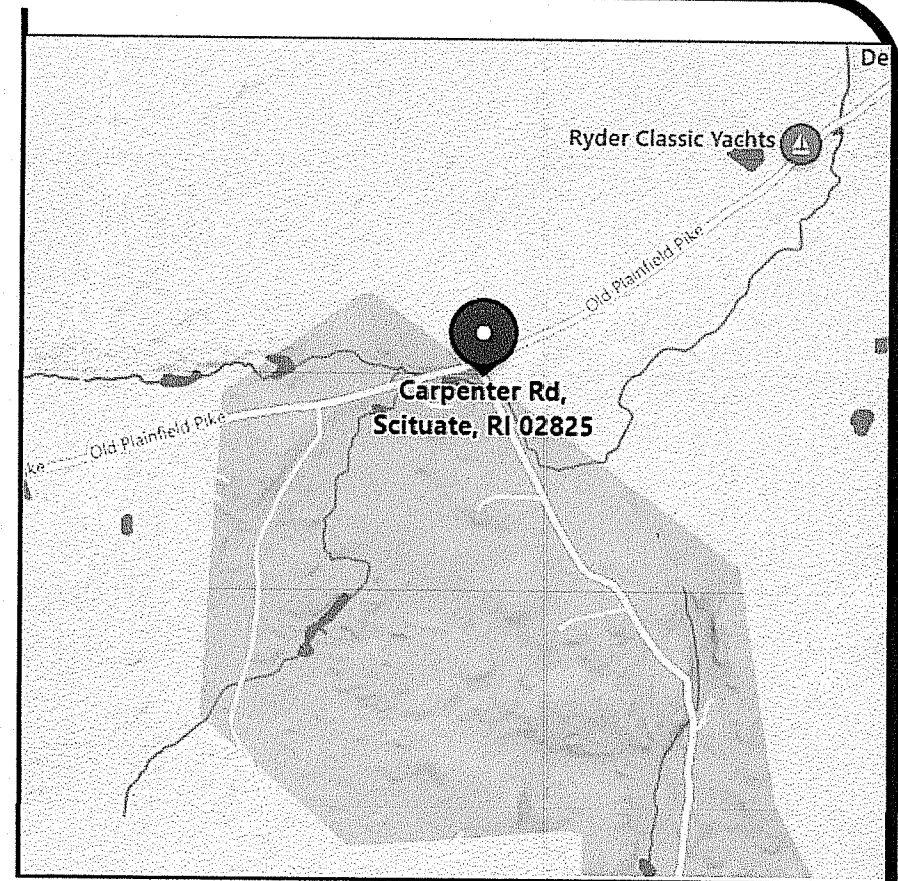
1,000 GALLON 2-COMPARTMENT SEPTIC TANK

JOLLY PRECAST OR EQUAL
NOT TO SCALE

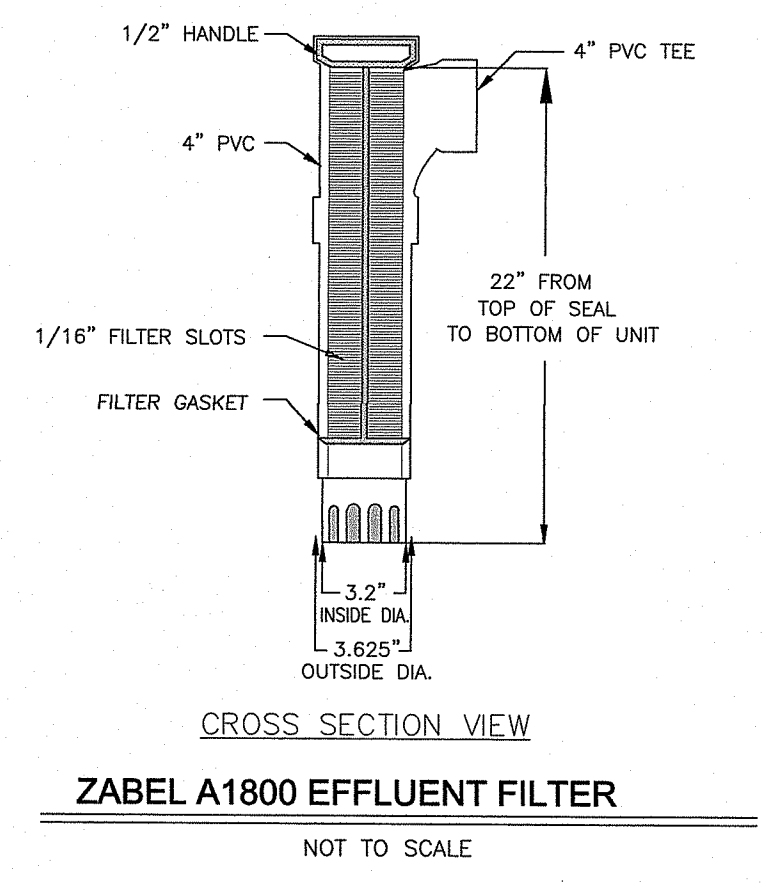
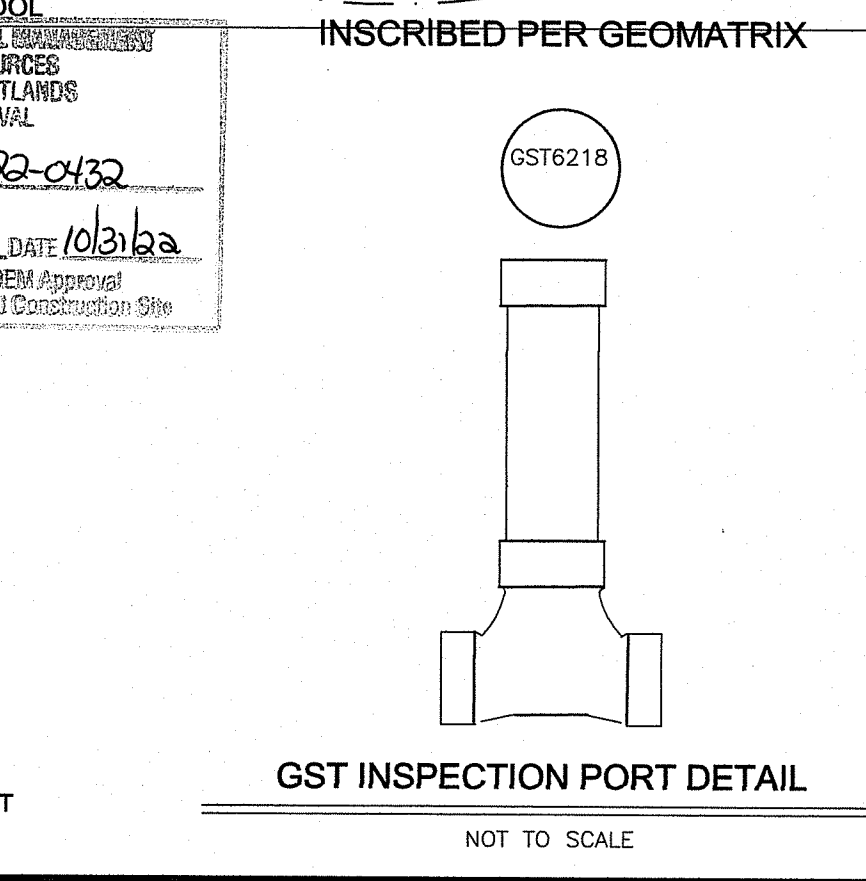
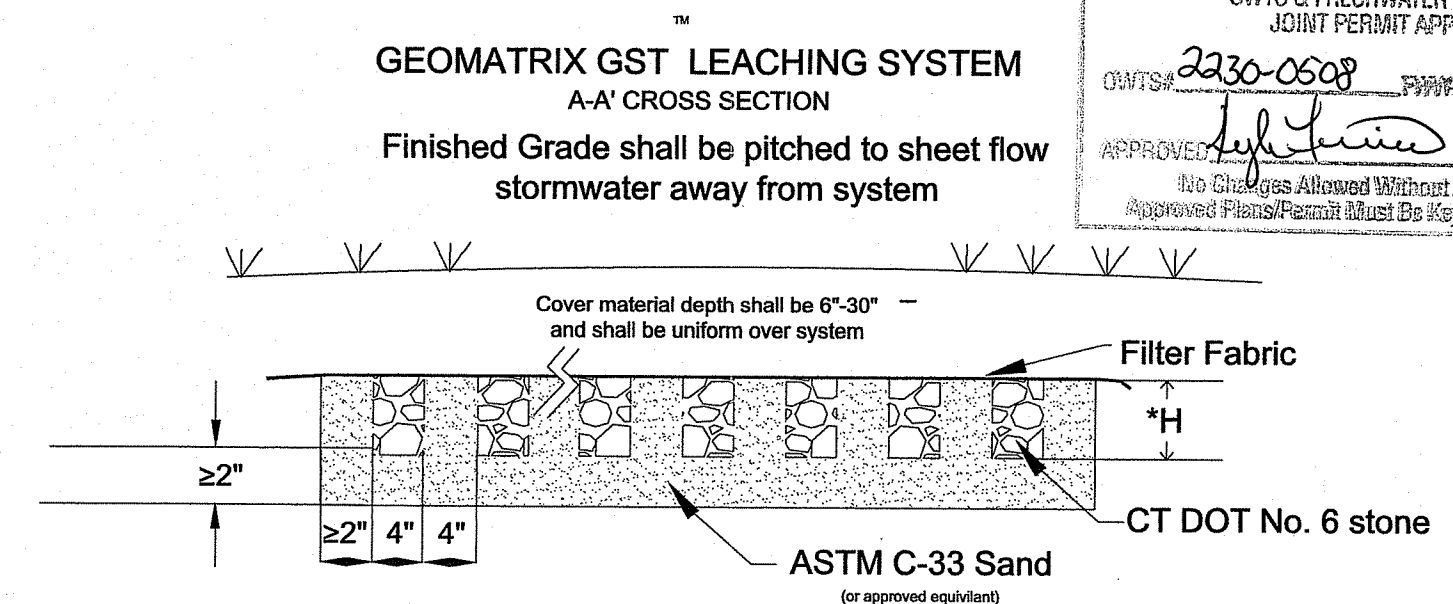
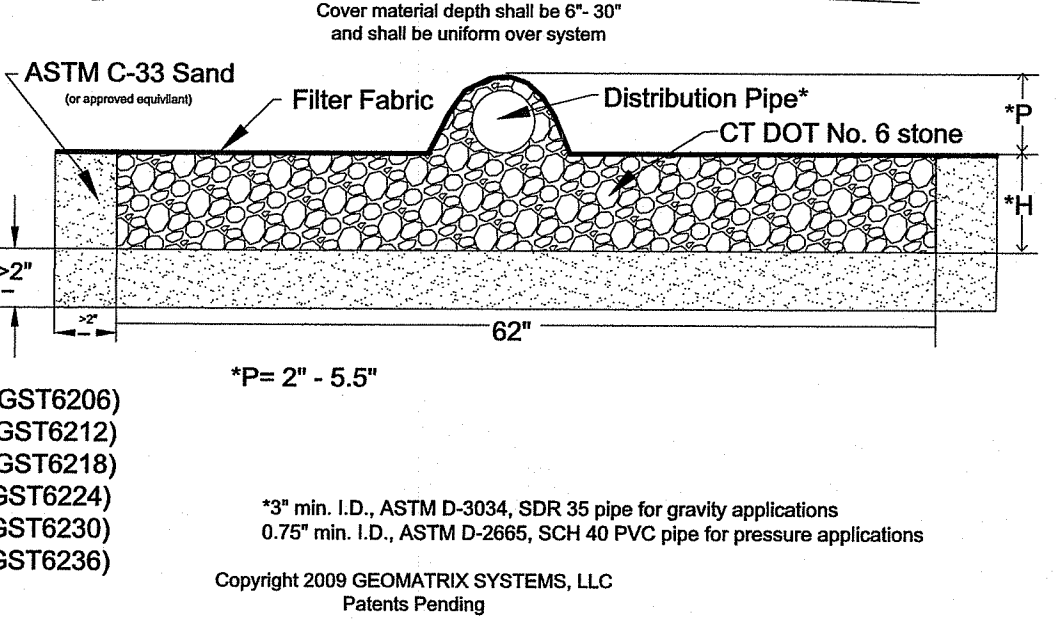
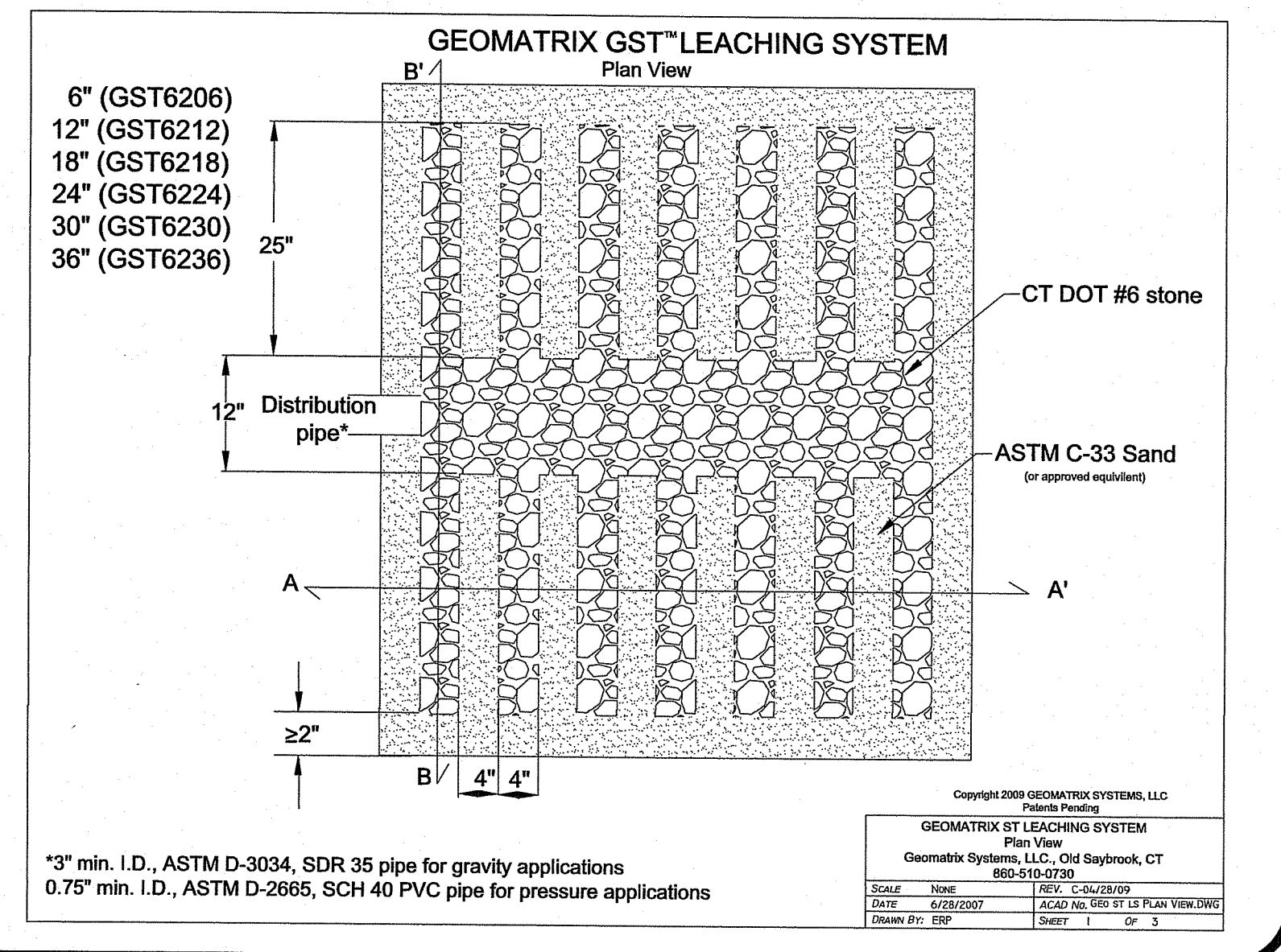
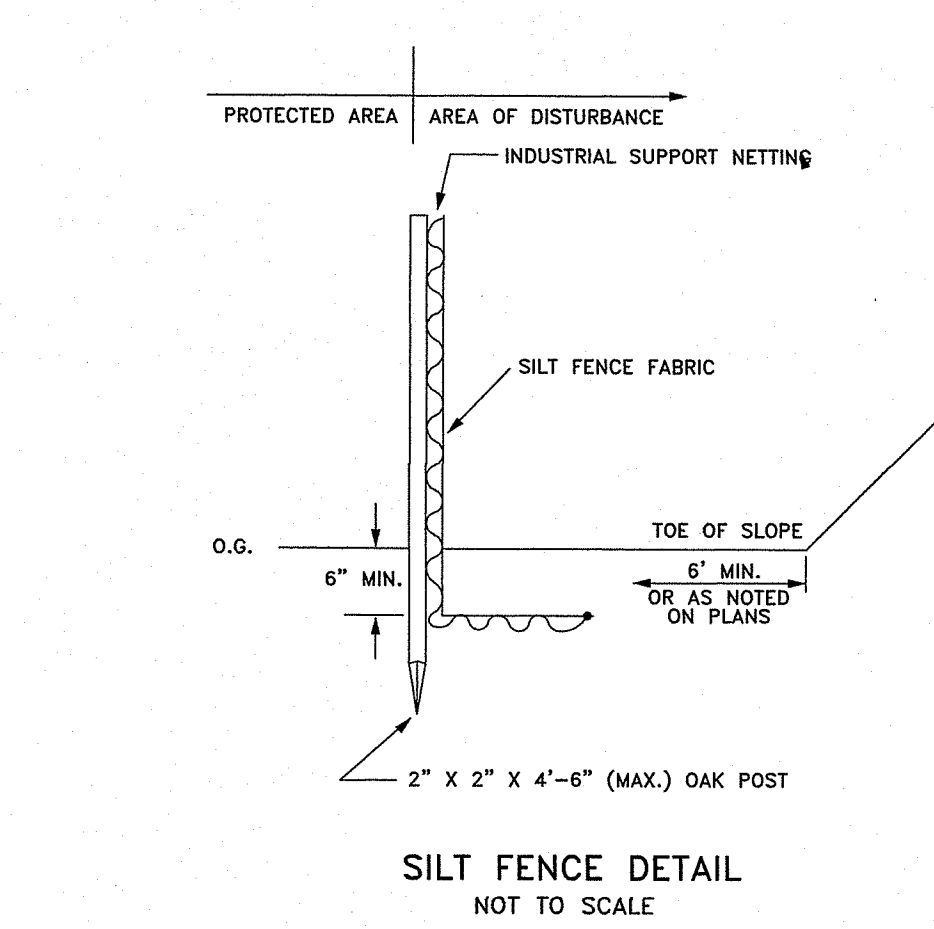
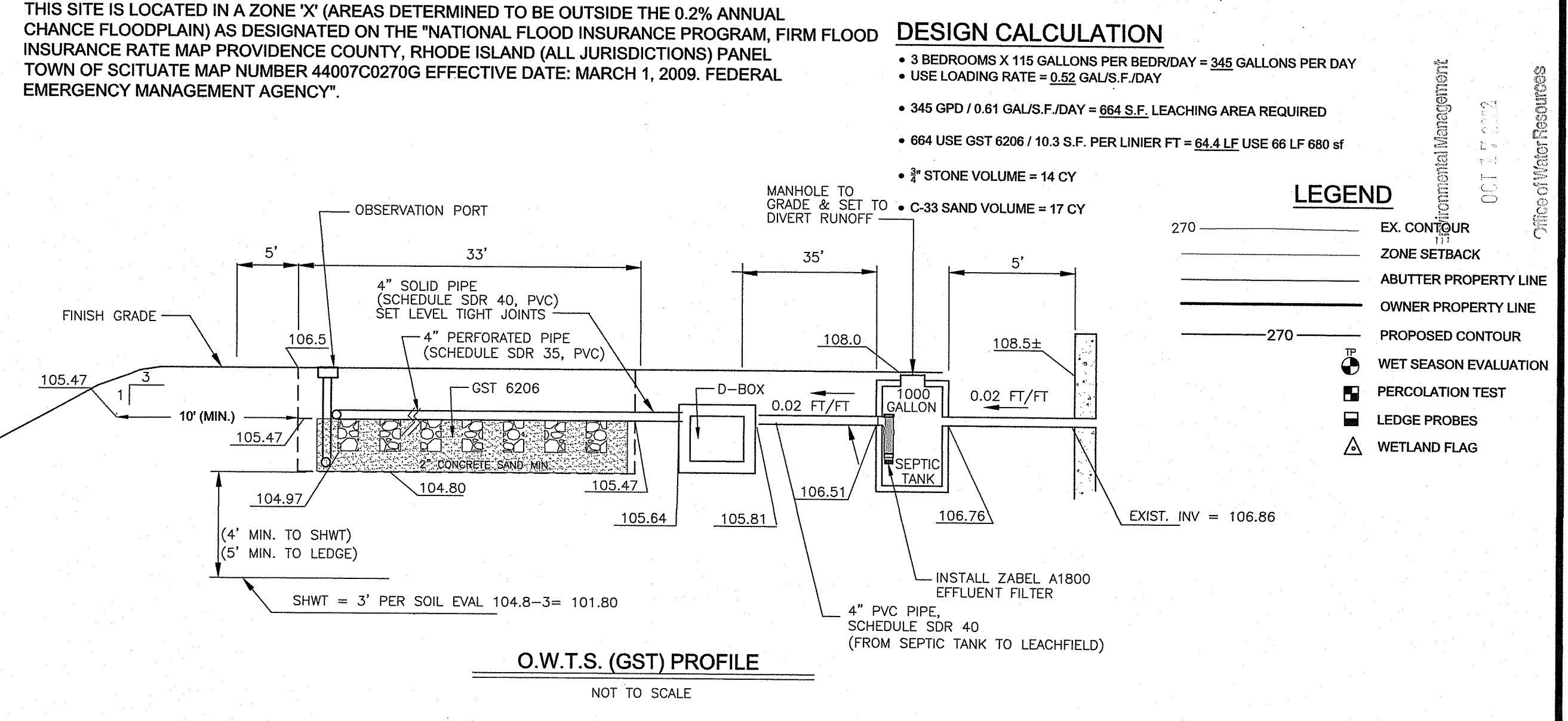
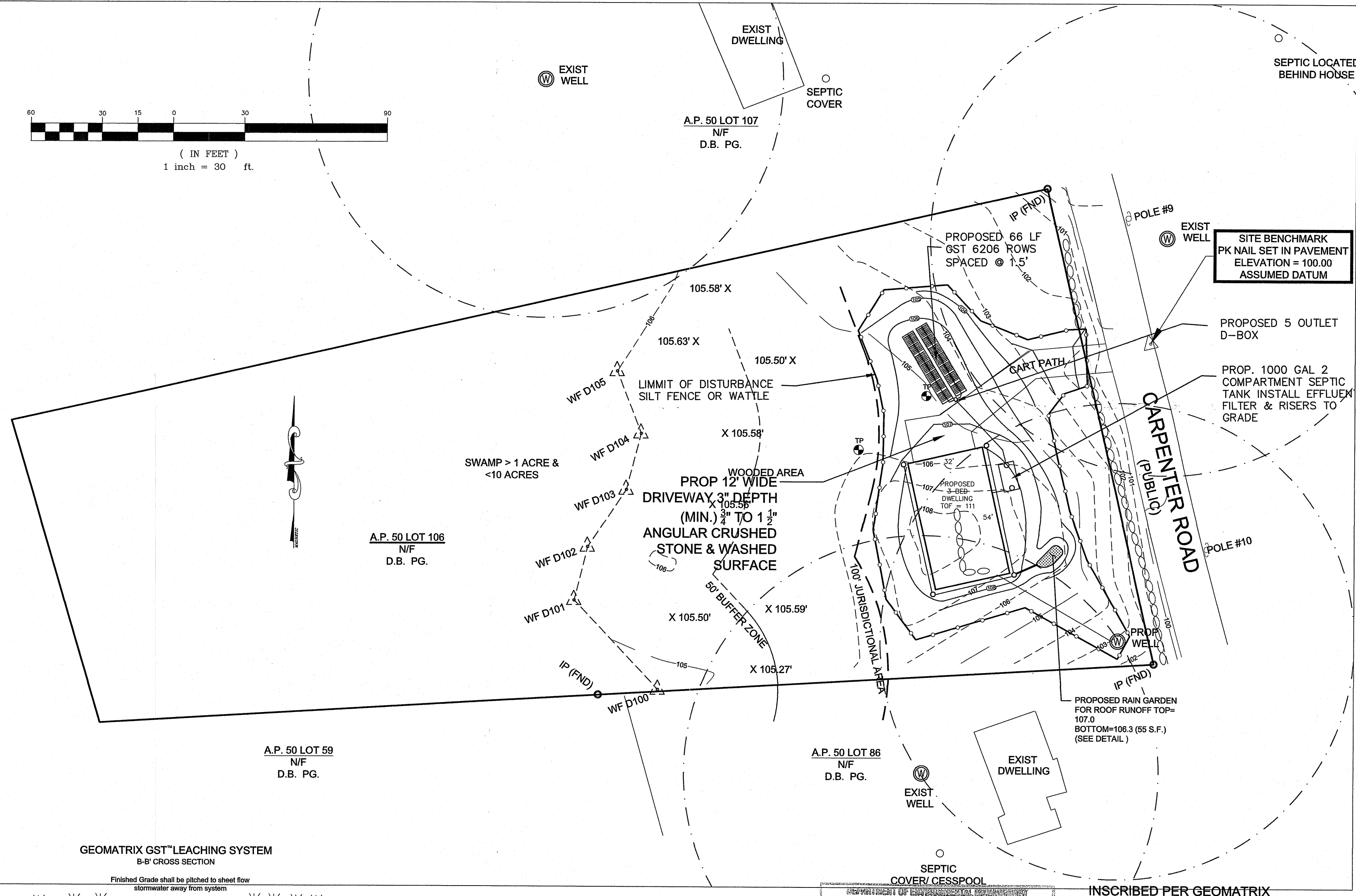
THIS SITE IS LOCATED IN A ZONE 'X' (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS DESIGNATED ON THE "NATIONAL FLOOD INSURANCE PROGRAM, FIRM FLOOD INSURANCE RATE MAP PROVIDENCE COUNTY, RHODE ISLAND (ALL JURISDICTIONS) PANEL TOWN OF SCITUATE MAP NUMBER 44007C0270G EFFECTIVE DATE: MARCH 1, 2009. FEDERAL EMERGENCY MANAGEMENT AGENCY".

OWTS 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 ONSITE WASTEWATER TREATMENT SYSTEMS*, NOVEMBER 25, 2018 AND ALL AMENDMENTS, BY THE RHODE ISLAND DEPT. OF ENVIRONMENTAL MANAGEMENT.
2. STRIP LEACHING AREA OUT TO 0 FEET AROUND ENTIRE PERIMETER AND EXCAVATE DOWN TO ELEVATION 94.50, REMOVING ALL TREES, BRUSH, TOPSOIL, SUBSOIL, UNDESIRABLE MATERIAL AND SOIL CONTAINING FINES. REPLACE WITH GRAVEL IF REQUIRED AS SPECIFIED IN RIDEM REGULATIONS.
3. INSTALLER MUST ASSURE THAT BOTTOM AND SIDES OF EXCAVATION FOR THE LEACHFIELD ARE NOT COMPACTED OR SMEARED.
4. ALL TREES, STUMPS, AND BRUSH SHALL BE REMOVED WITHIN 10 FEET OF THE SYSTEM.
5. MAINTAIN INVERT ELEVATION OF 96.17 FOR 10 FEET AROUND SYSTEM.
6. 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 ISDS.
7. THERE ARE NO KNOWN SUBSURFACE DRAINS, EXISTING OR PROPOSED, WITHIN 50 FEET OF THE PROPOSED OWTS.
8. ALL PVC PIPE SHALL BE 4" DIA. SDR 35 OR EQUIVALENT, UNLESS NOTED OTHERWISE.
9. THE DISTRIBUTION BOX SHALL HAVE A MINIMUM BOTTOM AREA OF 3 SQUARE FEET.
10. NO VEHICULAR TRAFFIC IS ALLOWED OVER THE LEACHFIELD.
11. THE SITE IS LOCATED IN THE SCITUATE RESERVOIR WATERSHED.



LOCUS MAP NOT TO SCALE



OFFICE OF WATER RESOURCES
OWTS & FRESHWATER WETLANDS
JOINT PERMIT APPROVAL

OWTS# 2330-0509
APPROVED: [Signature] DATE: 10/31/22

No Changes Allowed Without RIDEM Approval
Approved Plans/Permit Must Be Kept at Construction Site

OWTS SITE PLAN & DETAILS
OWTS DESIGN
A.P. 50 LOT 106
CARPENTER ROAD SCITUATE, RI

PREPARED FOR:
DIANE BANVILLE
62 LINCOLN DRIVE JOHNSTON, RI 02919

ADVANCED CIVIL DESIGN, INC.
CIVIL ENGINEERS

88 PEEPTOAD ROAD
SCITUATE, RI 02857

NICHOLAS J. PIAMPIANO
No. 6512
REGISTERED PROFESSIONAL ENGINEER (CIVIL)
D. 3059

NO.	DATE	DESCRIPTION
1	10/13/22	PER RIDEM

DATE: JUNE 18, 2022
SCALE: AS NOTED
DESIGN/CHECK BY: C.S.R.

SHEET NO. **1** OF 1