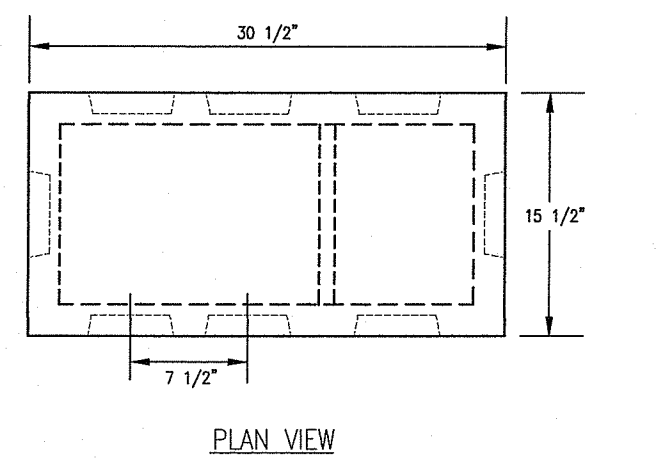
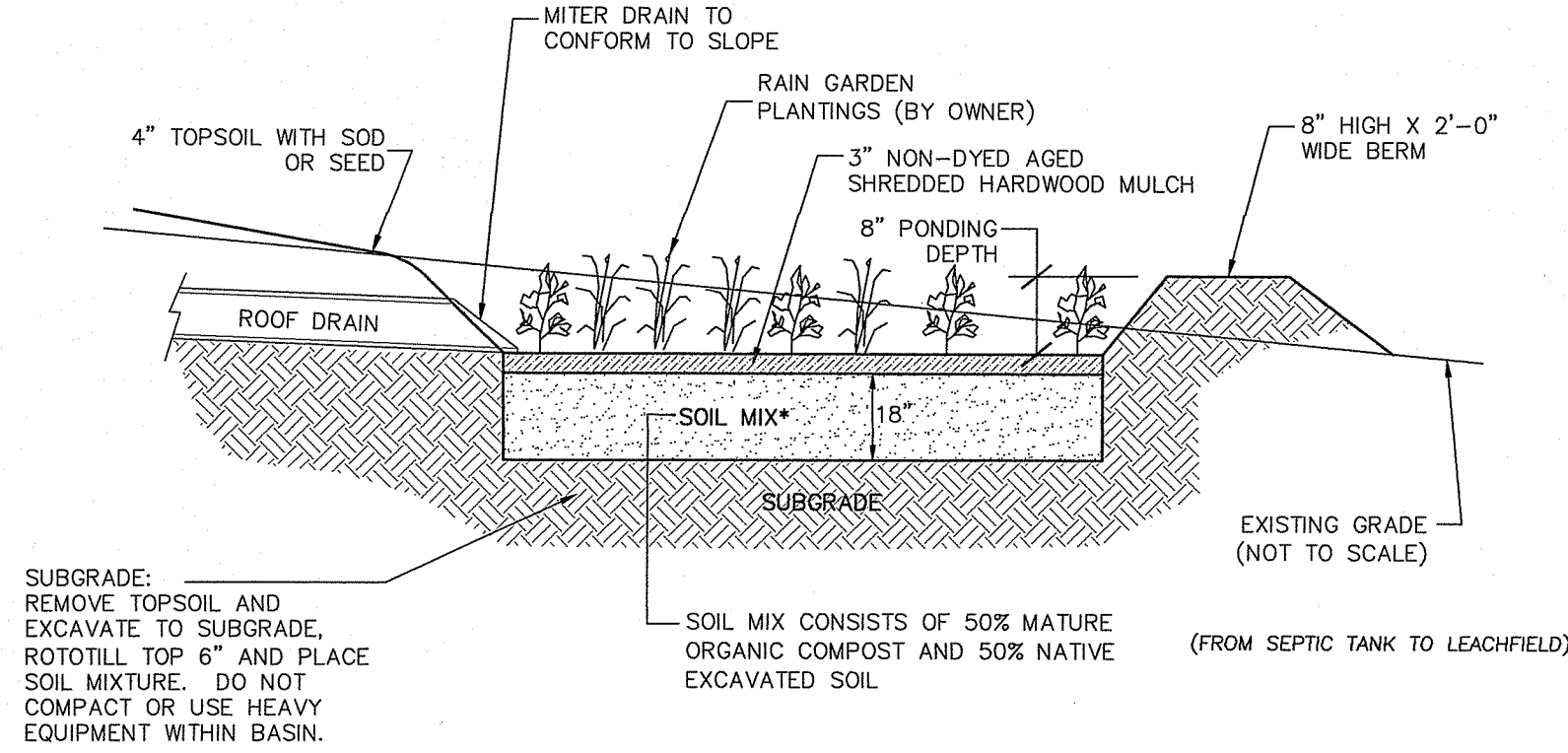


STORMWATER TREATMENT PRACTICE				
IMPERVIOUS SURFACE	AREA	METHOD	AREA REQ'D	AREA PROVIDED
ROOF TOP	1,162 S.F.	RAIN GARDEN	28.5 S.F.	55 S.F.

* PER SOIL EVALS FSL



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



MITER DRAIN TO CONFORM TO SLOPE
RAIN GARDEN PLANTINGS (BY OWNER)
3" NON-DYED AGED SHREDDED HARDWOOD MULCH
8" PONDING DEPTH
SOIL MIX*
SUBGRADE
EXISTING GRADE (NOT TO SCALE)

4" TOPSOIL WITH SOD OR SEED
RAIN GARDEN PLANTINGS (BY OWNER)
3" NON-DYED AGED SHREDDED HARDWOOD MULCH
8" PONDING DEPTH
SOIL MIX*
SUBGRADE
EXISTING GRADE (NOT TO SCALE)

SOIL MIX CONSISTS OF 50% MATURE ORGANIC COMPOST AND 50% NATIVE EXCAVATED SOIL (FROM SEPTIC TANK TO LEACHFIELD)

SUBGRADE: REMOVE TOPSOIL AND EXCAVATE TO SUBGRADE, ROTOTILL TOP 6" AND PLACE SOIL MIXTURE. DO NOT COMPACT OR USE HEAVY EQUIPMENT WITHIN BASIN.

ROOF RAIN GARDEN SIZING CALCULATIONS

- Impervious Roof Area = 1,728 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:

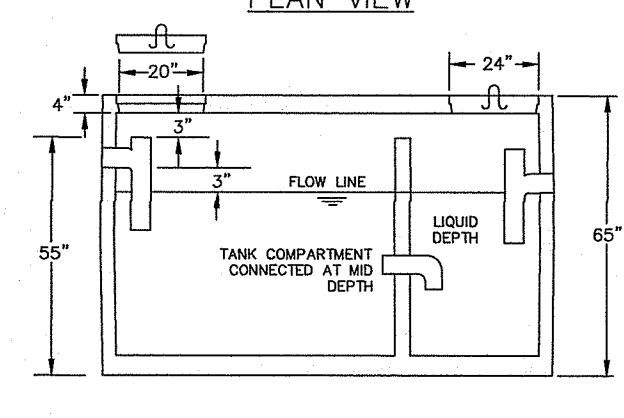
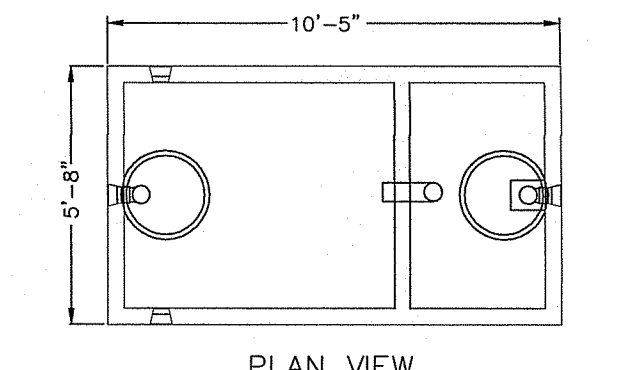
$$A(f) = (WQ_v)(d_f) / [(k)(d_f + d)] (t_f)$$

Where:

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

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

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

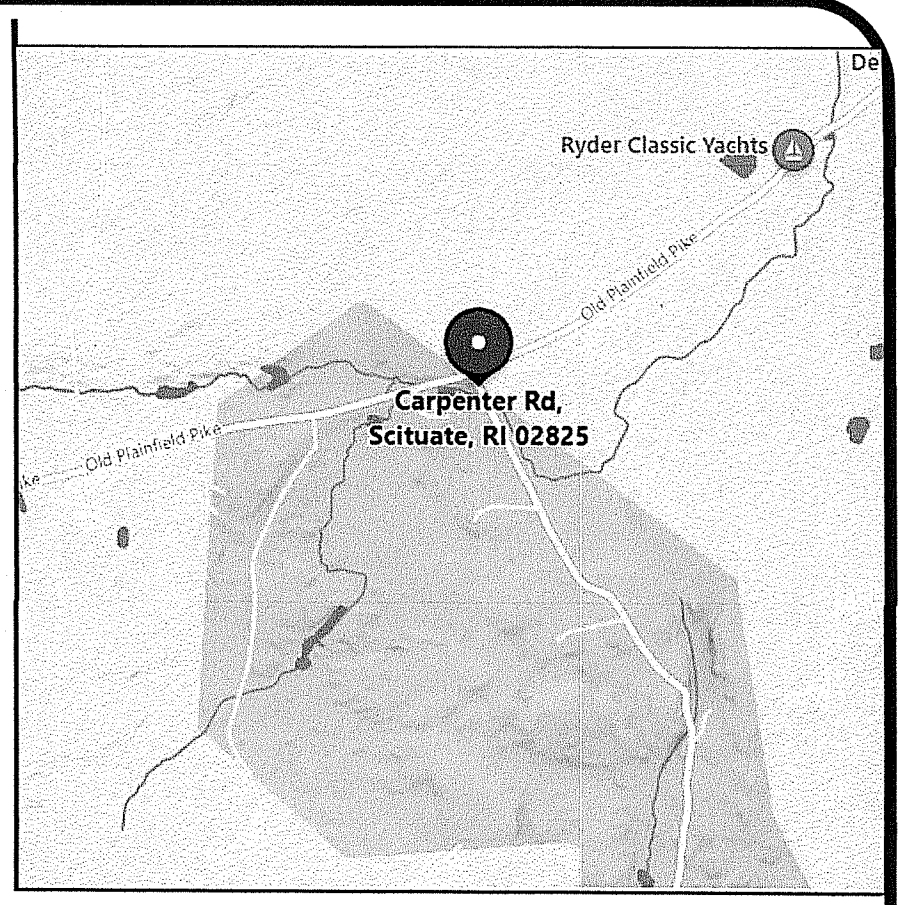


DESIGN NOTES:
1) ALL JOINTS SEALED WITH BUTYL RUBBER SEALANT
2) ALL INLETS AND OUTLETS HAVE STATE-APPROVED SEALS
3) AVAILABLE WITH 8" HEAVY DUTY TOP
4) MEETS ASTM C 1227-97A
5) CONCRETE STRENGTH 5000 PSI MIN. 28 DAYS
6) FIRST COMPARTMENT SHALL HAVE 1/2 TANK CAPACITY.

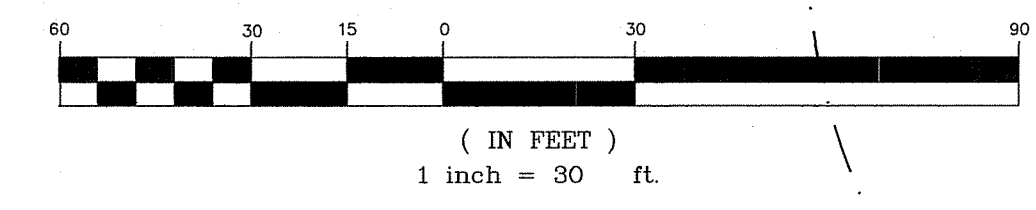
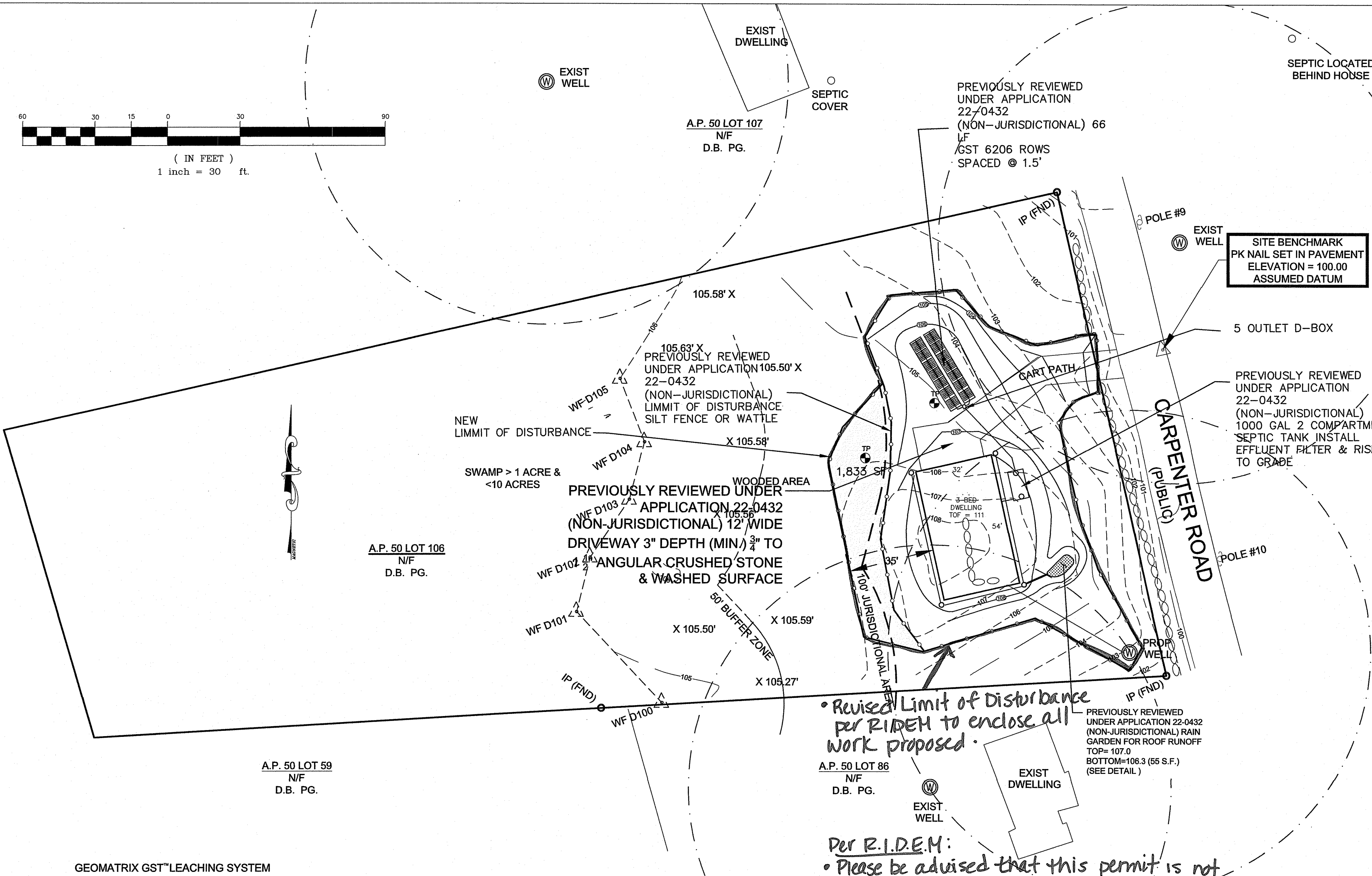
1,000 GALLON 2-COMPARTMENT SEPTIC TANK

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 98.53, 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 98.17 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

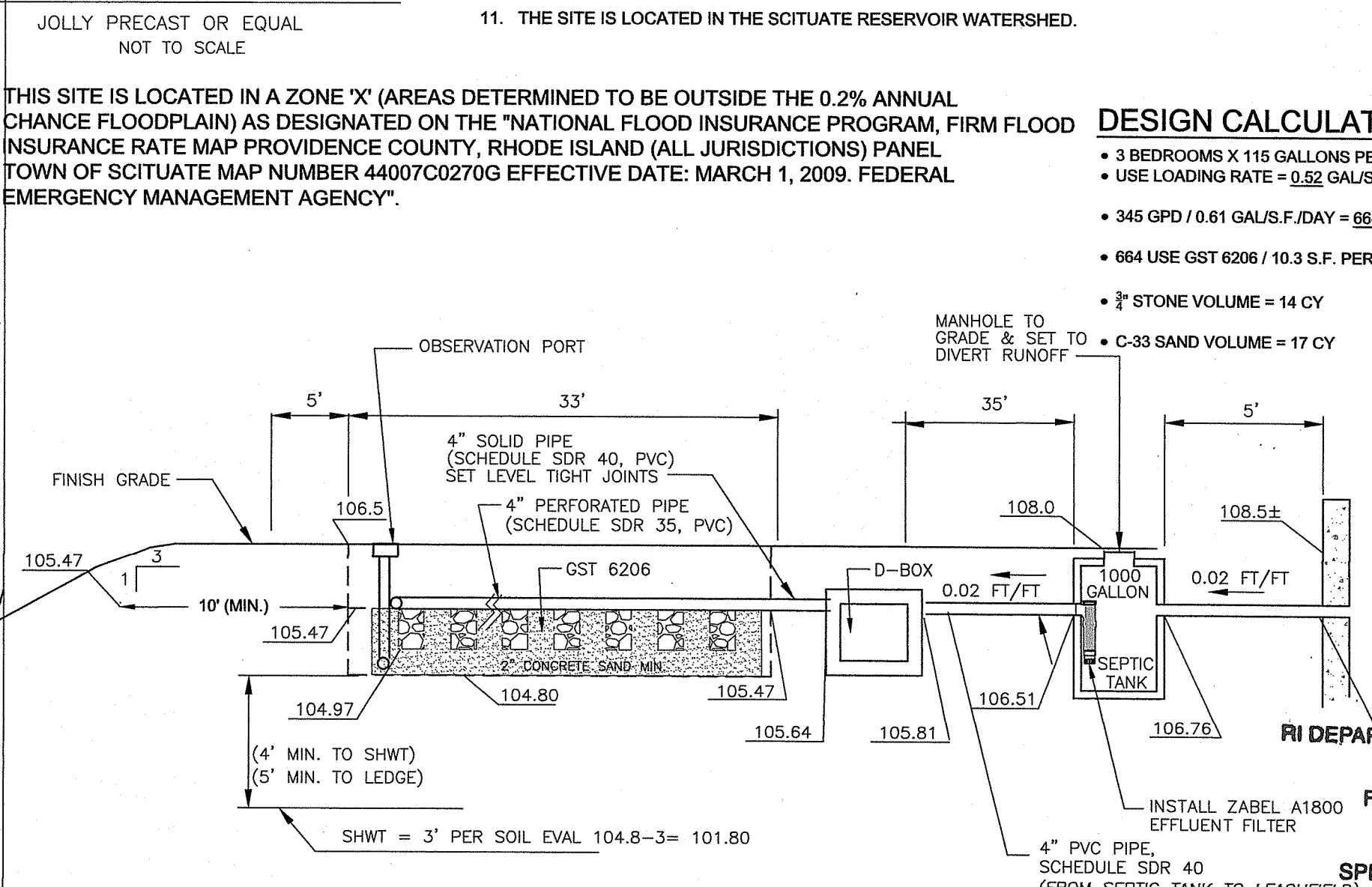
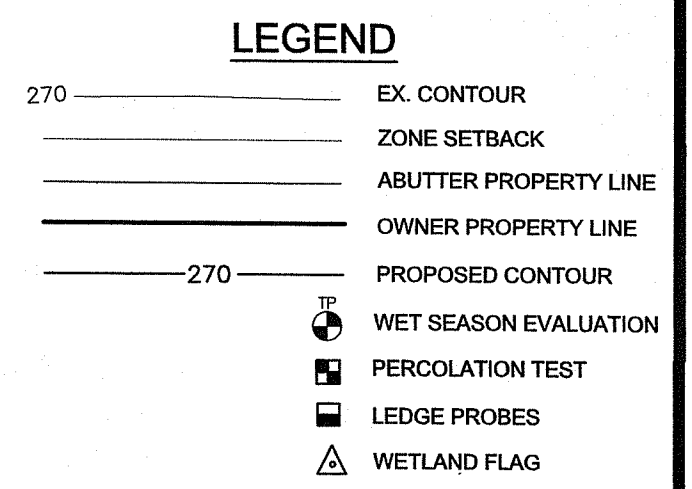


A.P. 50 LOT 107 N/F D.B. PG.
A.P. 50 LOT 106 N/F D.B. PG.
A.P. 50 LOT 86 N/F D.B. PG.
A.P. 50 LOT 59 N/F D.B. PG.

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".

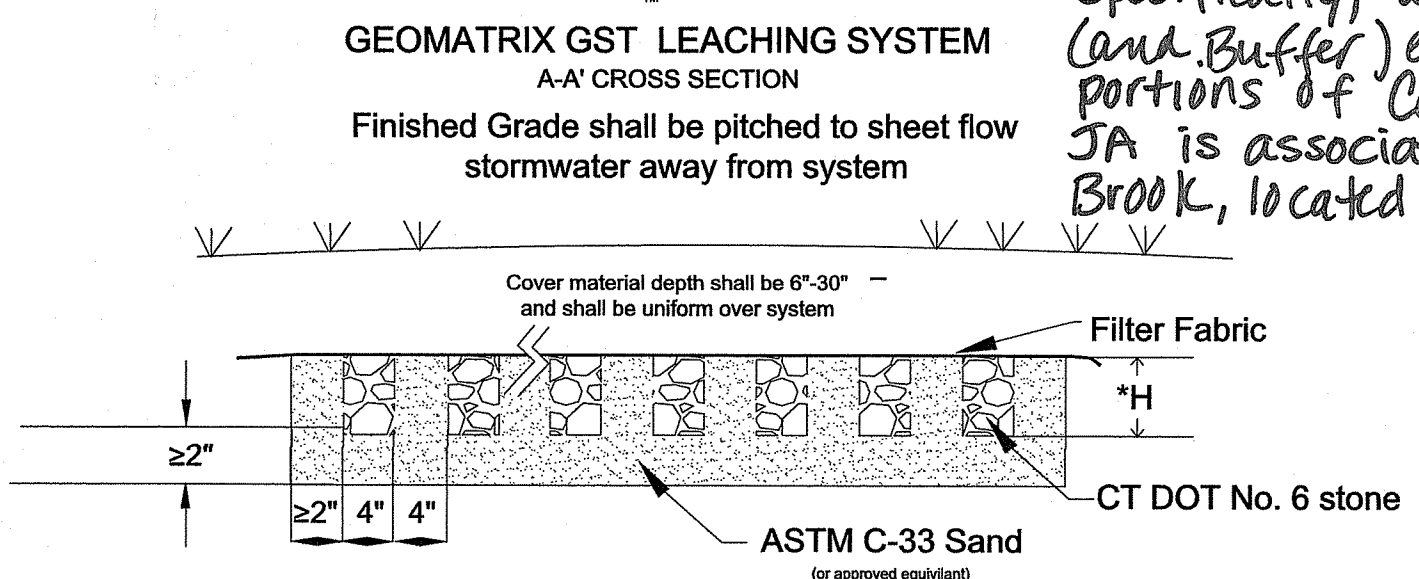
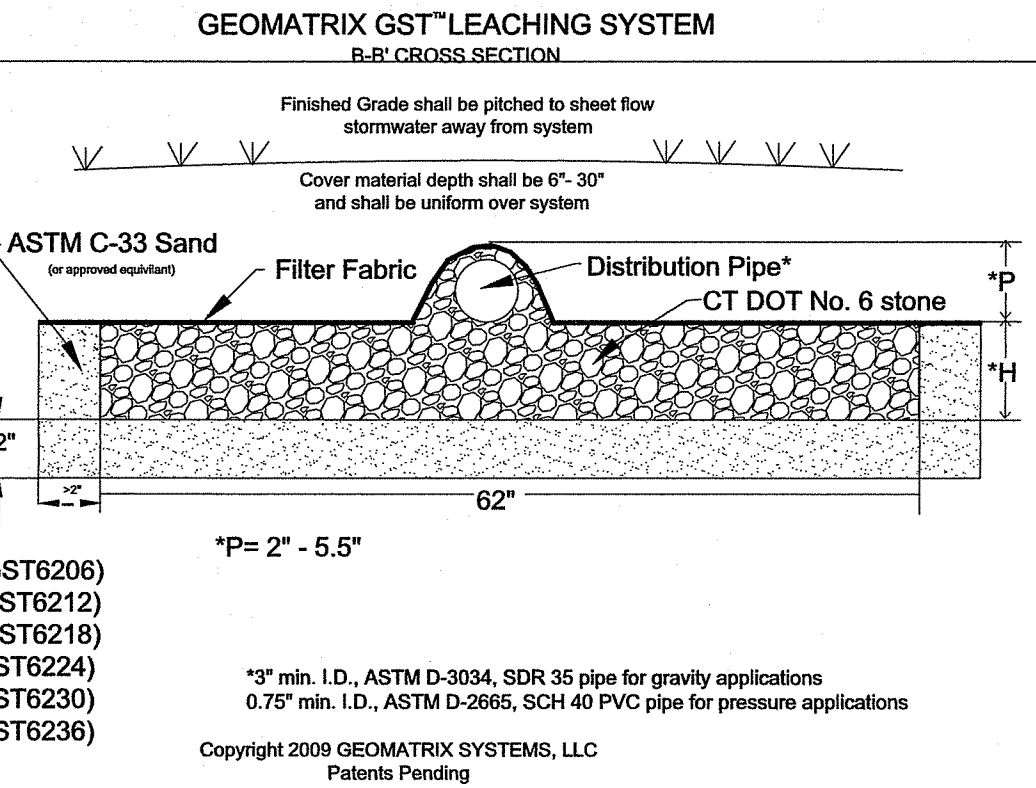
DESIGN CALCULATION

- 3 BEDROOMS X 115 GALLONS PER BED/DAY = 345 GALLONS PER DAY
- USE LOADING RATE = 0.92 GAL/S.F./DAY
- 345 GPD / 0.61 GAL/S.F./DAY = 564 S.F. LEACHING AREA REQUIRED
- 664 USE GST 6206 / 10.3 S.F. PER LINER FT = 64.4 LINER FT USE 66 FT 680 ft
- 1" STONE VOLUME = 14 CY
- C-33 SAND VOLUME = 17 CY

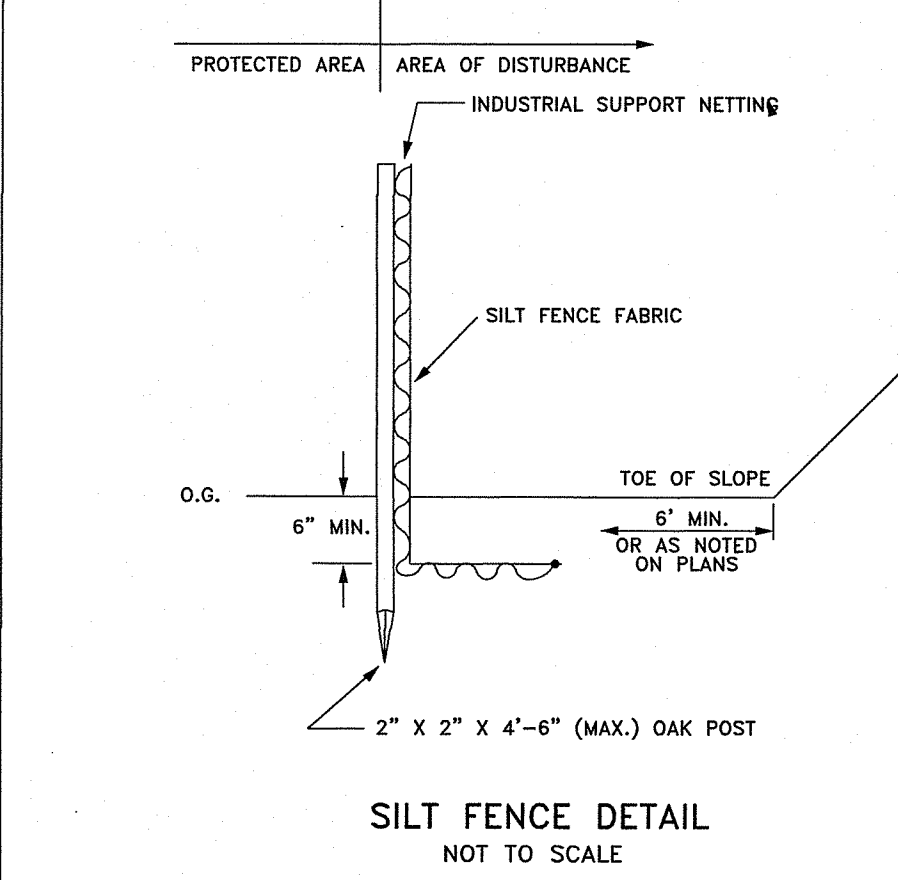


O.W.T.S. (GST) PROFILE NOT TO SCALE

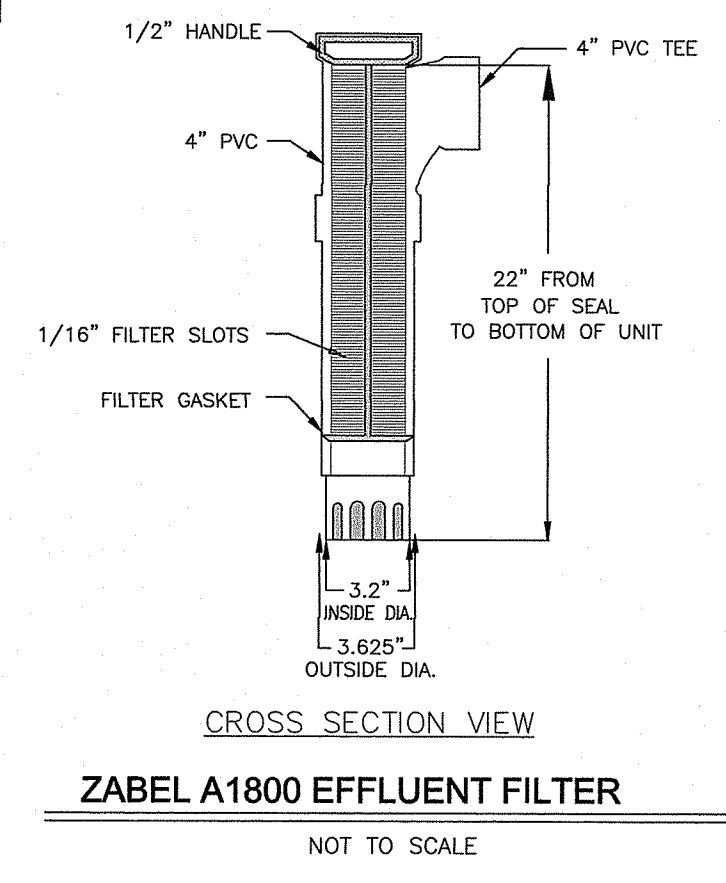
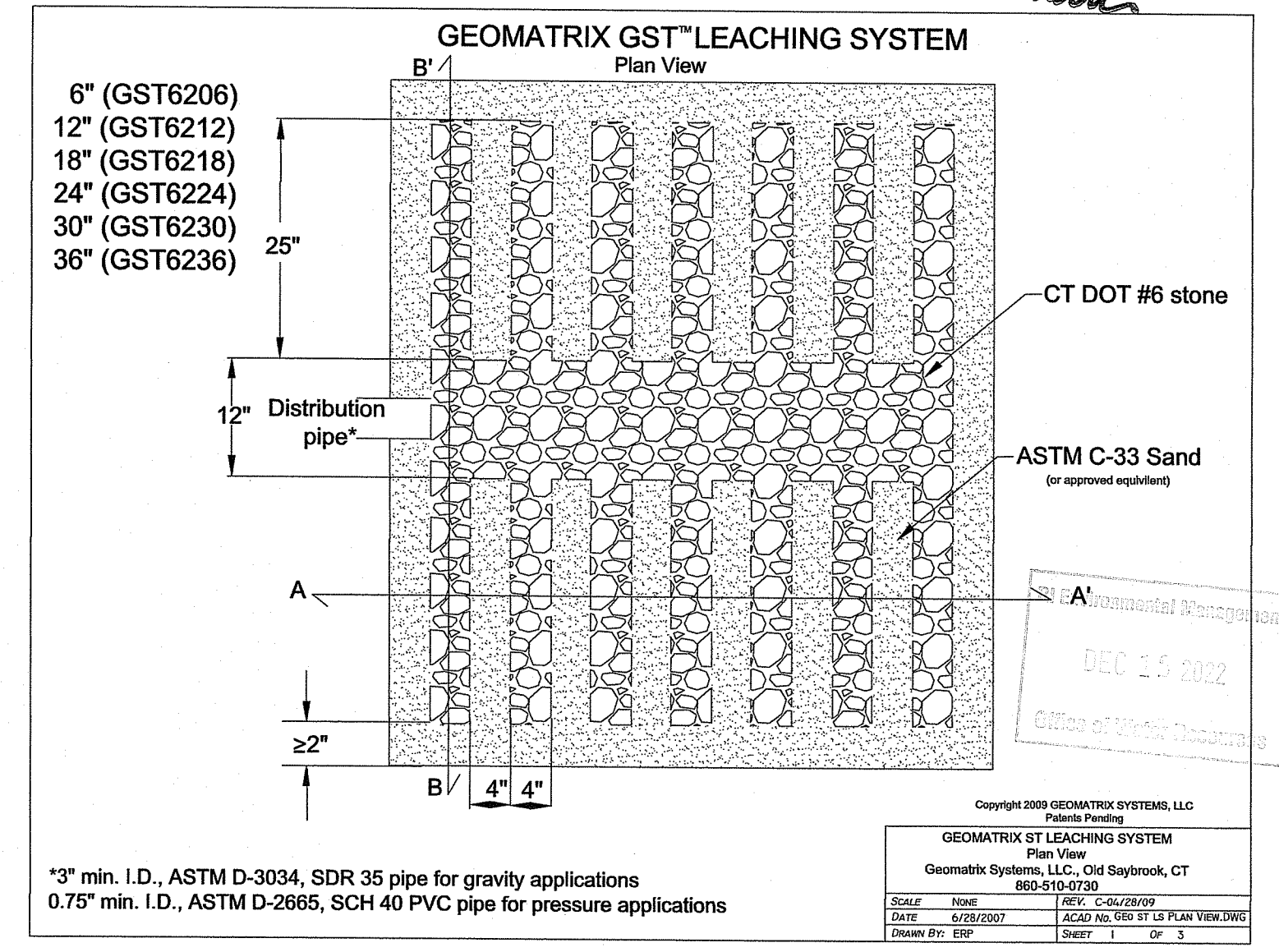
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH SPECIFIED IN THE PERMIT APPROVAL DATED: DEC 21 2022 FILE #: 22-0502
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman



• Revised Limit of Disturbance per RIDEM to enclose all work proposed.
• Please be advised that this permit is not equivalent to the type and extent of Jurisdictional Areas (JA) on site. Specifically, a 200-foot Buffer Zone (and Buffer) extends on side along portions of Carpenter Road. This JA is associated with Wilbour Hollow Brook, located east of Carpenter Road.



SILT FENCE DETAIL NOT TO SCALE



ZABEL A1800 EFFLUENT FILTER NOT TO SCALE

SITE PLAN & DETAILS
PERMIT MODIFICATION
A.P. 50 LOT 106
CARPENTER ROAD SCITUATE, RI

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

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

DATE: DECEMBER 8, 2022
SCALE: AS NOTED
DESIGN/CHECK BY: C.S.R.

ADVANCED CIVIL DESIGN, INC.
CIVIL ENGINEERS
88 PEEPTOAD ROAD
SCITUATE, RI 02857

P1: (401) 644-8656
P2: (401) 473-4404

SHEET NO. 1 OF 1