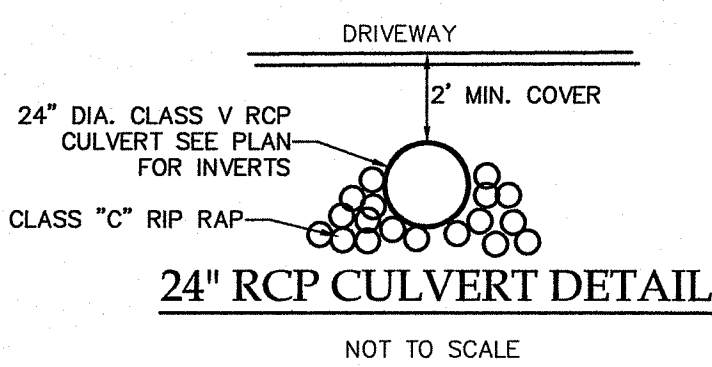


**LEGEND**

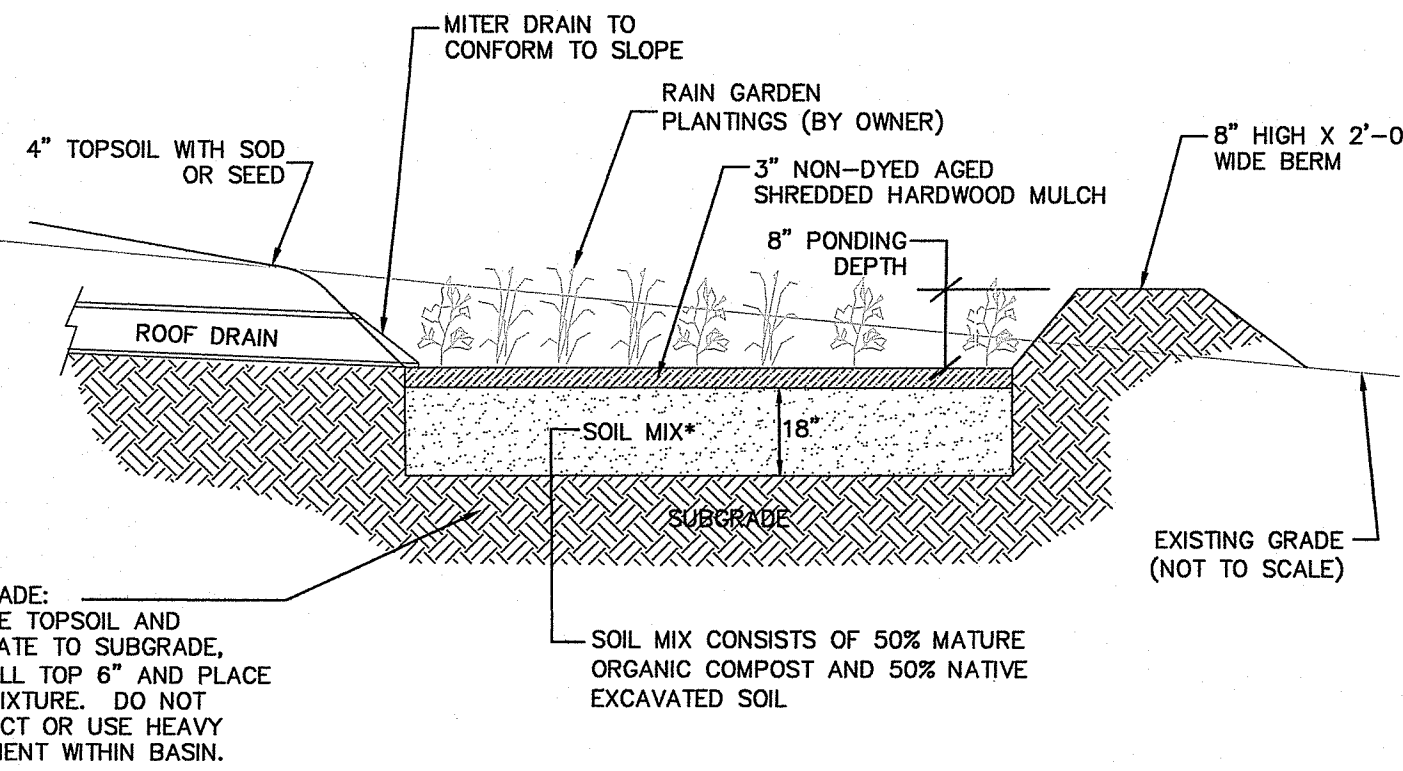
- EX. CONTOUR
- ZONE SETBACK
- ABUTTER PROPERTY LINE
- OWNER PROPERTY LINE
- PROPOSED CONTOUR
- WET SEASON EVALUATION PERCOLATION TEST
- LEDGE PROBES
- WETLAND FLAG



**Rain Garden Plantings:**

LATIN NAME	COMMON NAME	SIZE	SPACING
<b>GRASSES / PERENNIALS</b>			
FESTUCA OVINE GLAUCA	BLUE FESCUE	1 GAL	18" O.C.
PANICUM VIRGATUM	SWITCHGRASS	1 GAL	18" O.C.
PENNISETUM ALOPECUROIDES	FOUNTAIN GRASS	1 GAL	18" O.C.
RUDECKIA HIRTA	BLACK E'D SUSAN	1 GAL	18" O.C.
<b>SHRUBS</b>			
CEPHALANTHUS OCCIDENTALIS	COMMON BUTTONBUSH	24" O.C.	
COMPTONIA PEREGRINA	SWEET FERN	24" O.C.	
LEDUM GROENLANDICUM	LABRADOR TEA	24" O.C.	
PHOTINIA MELANOCARPA	BLACK CHOCHEBERRY	24" O.C.	

FINAL PLANTINGS TO BE CHOSEN AND INSTALLED BY OWNER OR OWNER REPRESENTATIVE. REFERENCE THE RHODE ISLAND COASTAL PLANT GUIDE AT [www.uri.edu/~cells/cesos/coastalPlants/CoastalPlantGuide](http://www.uri.edu/~cells/cesos/coastalPlants/CoastalPlantGuide).



**ROOF RAIN GARDEN SIZING CALCULATIONS**

- Impervious Roof = 1,500 s.f.
- Soil type: Sand
- Design Coefficient of Permeability = 3.5 ft/day
- Intensity = 1-inch
- Water Quality Volume Needed: 1,500 s.f. x 0.083 (1") = 125 c.f.
- Proposed Rain Garden Depth = 8-inches or 0.7-feet

Surface Area at Bottom of the Garden:

$$A(f) = (WQ)/(d) / [(k)(hf + d) (f)]$$

- Where:
- A(f) = surface area of the filter bed (ft<sup>2</sup>)
  - df = 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)
  - tf = design filter bed drain time (assume 1 day for design purposes)

$$A(f) = (125)(1.5) / [(3.5)(0.7 + 1.0) (1.0)]$$

$$A(f) = 31.51 \text{ s.f. use } 228 \text{ s.f.}$$

**RAIN GARDEN SECTION DETAIL**

NOT TO SCALE

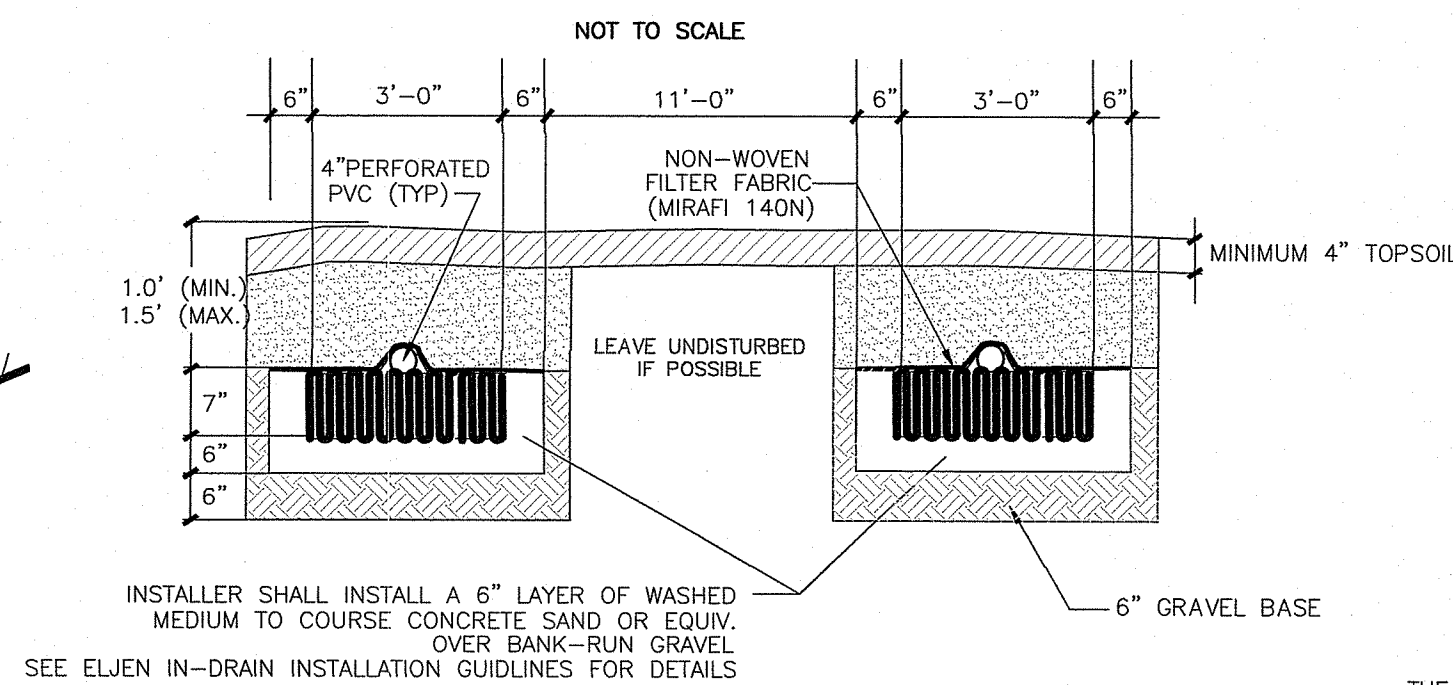
**STORMWATER TREATMENT PRACTICE**

IMPERVIOUS SURFACE	AREA	METHOD	AREA REQ'D	AREA PROVIDED
ROOF TOP	1,500 S.F.	RAIN GARDEN	32 S.F.	228 S.F.

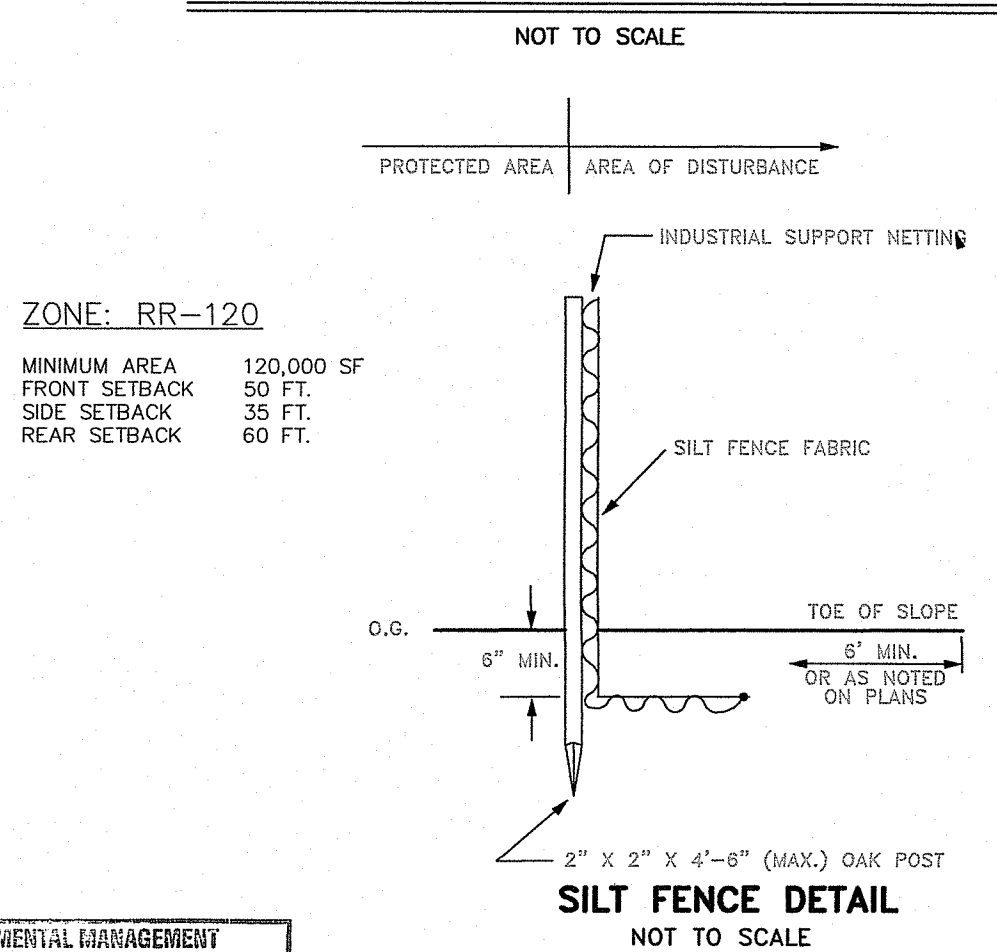
\* PER SOIL EVALS FSL

**DESIGN CALCULATION**

- 3 BEDROOM X 115 GALLONS PER BEDR/DAY = 345 GALLONS PER DAY
- PERC. RATE = SOIL CAT 6 = 0.61 GAL/S.F./DAY
- 345 GPD / 0.61 GAL/S.F./DAY = 566 S.F. LEACHING AREA REQUIRED
- 566 S.F. / 28 S.F. PER ELJEN UNIT = 20 ELJENS REQ'D
- TOTAL AREA PROVIDED = 588 S.F. > 566 S.F.



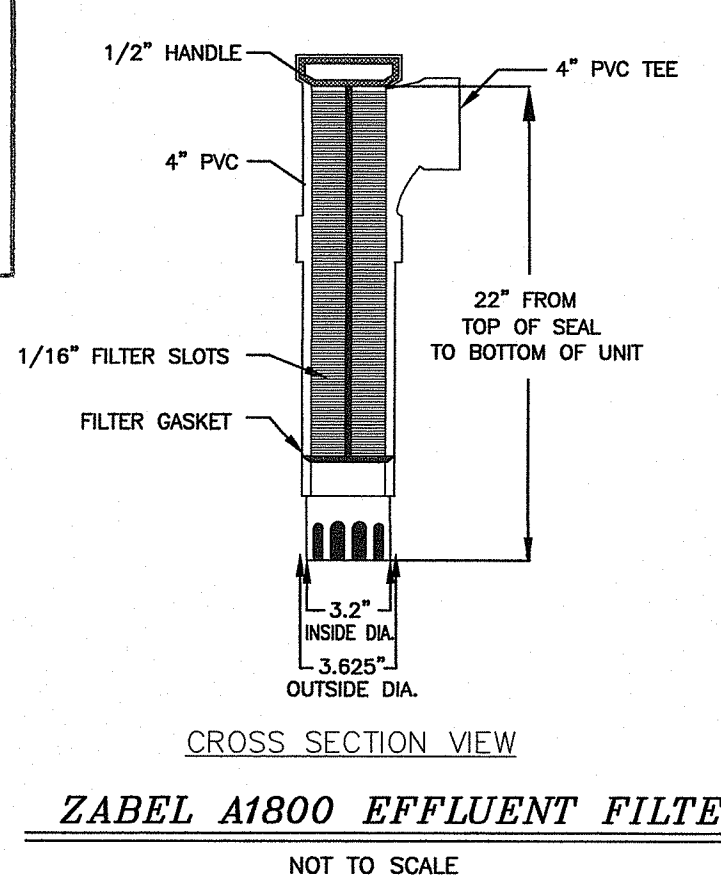
**ELJEN \"IN-DRAIN\" CROSS SECTION**



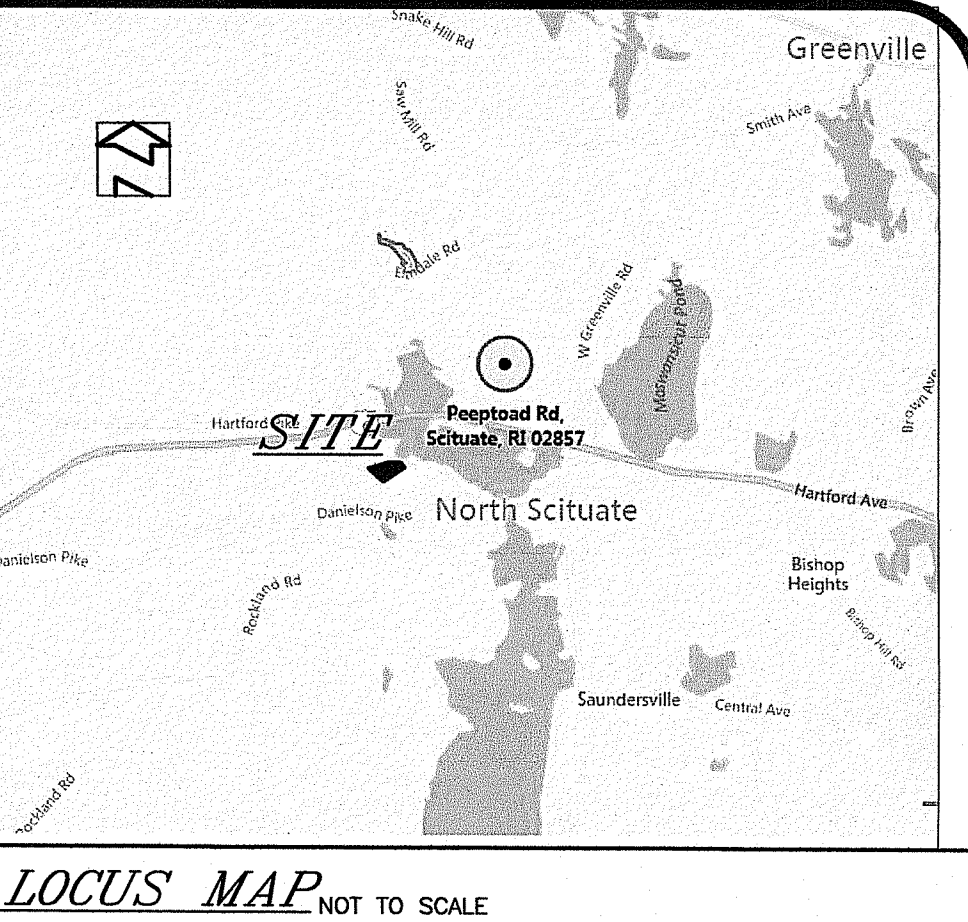
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
OWTS & FRESHWATER WETLANDS  
JOINT PERMIT APPROVAL

OWTS# 20-30-0076.PWWS 20-0083  
APPROVED: *[Signature]* DATE 5/18/20  
No Changes Allowed Without RIDEM Approval  
Approved Plans/Permit Must Be Kept at Construction Site

**DISTRIBUTION BOX DB-5 W/ BAFFLE**



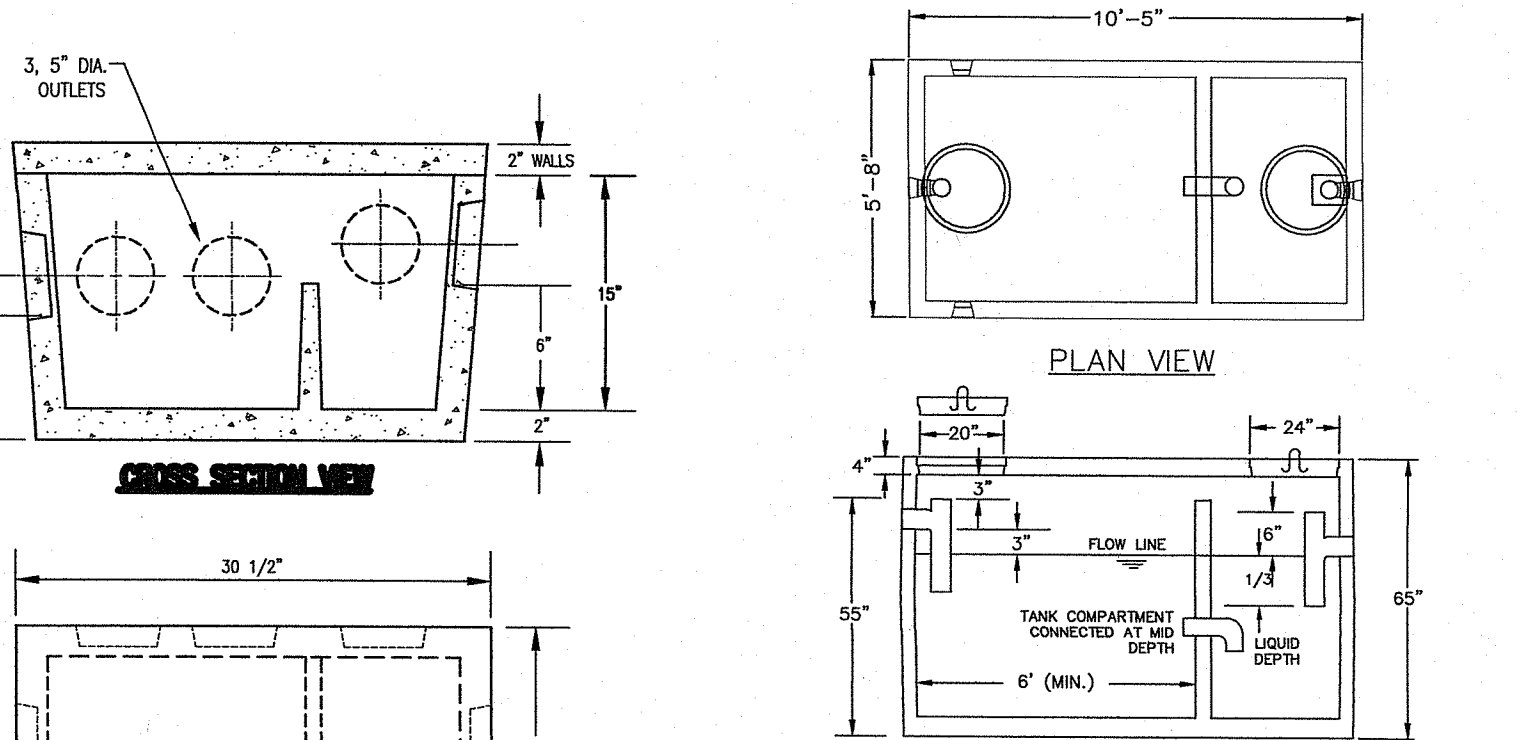
**OWTS SITE PLAN & DETAILS**  
**OWTS DESIGN**  
A.P. 18 LOT 29  
PEEPTOAD ROAD SCITUATE, RI  
PREPARED FOR:  
STEVEN SHOLA  
233 PEEPTOAD ROAD SCITUATE, RI 02857



**SOIL EROSION AND SEDIMENT CONTROL NOTES:**

1. SLOPES SHALL NOT BE LEFT UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON.
2. ALL DISTURBED SLOPES EITHER NEWLY CREATED OR CURRENTLY EXPOSED SHALL BE STABILIZED OR PROTECTED.
3. PLANTABLE SOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LIMBS OF SOIL TREE LIMBS, FRASH OR CONSTRUCTION DEBRIS, AND SHALL CONFORM WITH RHODE ISLAND'S STANDARD SPECIFICATIONS, AS AMENDED.
4. THE DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWING:  
TYPE: LBS./ACR  
CREATING AND PAVING: 75  
KENTUCKY BLUE GRASS: 15  
COLOMBIA BENT GRASS: 5  
PERENNIAL RYE GRASS: 5
5. EARLY SPRING OR LATE SUMMER SEEDING IS RECOMMENDED. LIME AND FERTILIZER AS REQUIRED BY SOIL TESTING TO COMPLIANT OR EXCEEDING EXISTING CONDITIONS. THE SEED MIX SHALL BE INCORPORATED WITHIN 24 HOURS OF SEEDING. MULCHING AND PLANTING WITH APPROPRIATE INOCULUM FOR EACH VARIETY. THE RECOMMENDED SEEDING DATES ARE APRIL 1ST THROUGH JUNE 15TH AND AUGUST 15TH THROUGH SEPTEMBER 30TH.
6. SILT/SEDIMENT SHALL BE REMOVED FROM THE RAIN GARDEN WHEN THE ACCUMULATION EXCEEDS ONE INCH, OR WHEN WATER PONDS ON THE SURFACE OF THE RAIN GARDEN FOR MORE THAN 48 HOURS. THE TOP FEW INCHES OF MATERIAL SHALL BE REMOVED AND SHALL BE REPLACED WITH FRESH SOIL MIXTURE AND MULCH.
7. ALL TEMPORARY EROSION PROTECTION SHALL REMAIN IN PLACE UNTIL ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
8. ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
9. STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR ANY WATERWAYS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 2:1 AND SHALL BE TEMPORARILY SEEDING OR STABILIZED.
10. THE CONSTRUCTION SUPERINTENDENT SHALL HAVE THE OVERALL RESPONSIBILITY FOR PLAN IMPLEMENTATION AND FOR SEEING THAT THE APPROPRIATE WORKERS ARE AWARE OF THE PROVISIONS OF THE PLAN. THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN A PERIOD OF SIX (6) MONTHS AND SHALL DO SO AT NO ADDITIONAL EXPENSE.
11. MAXIMUM GRADED SLOPE TO BE 3:1 UNLESS NOTED OTHERWISE ON THE PLANS.
12. REFERENCE THE "RHODE ISLAND EROSION AND SEDIMENTATION CONTROL HANDBOOK" PREPARED BY USDA SOIL CONSERVATION SERVICE AS A GUIDE.

THE SUBJECT PARCEL DOES NOT LIE WITHIN A FLOOD HAZARD AREA AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP NUMBER 44007C0280G, EFFECTIVE DATE MARCH 1, 2009.



**1000 GALLON 2-COMPARTMENT SEPTIC TANK**

JOLLY PRECAST OR EQUAL  
NOT TO SCALE

DESIGN NOTES:  
1) ALL JOINTS SEALED WITH BUTYL RUBBER SEALANT  
2) ALL INLETS AND OUTLETS HAVE STATE-APPROVED SEALS  
3) AVAILABLE WITH 8\"/>

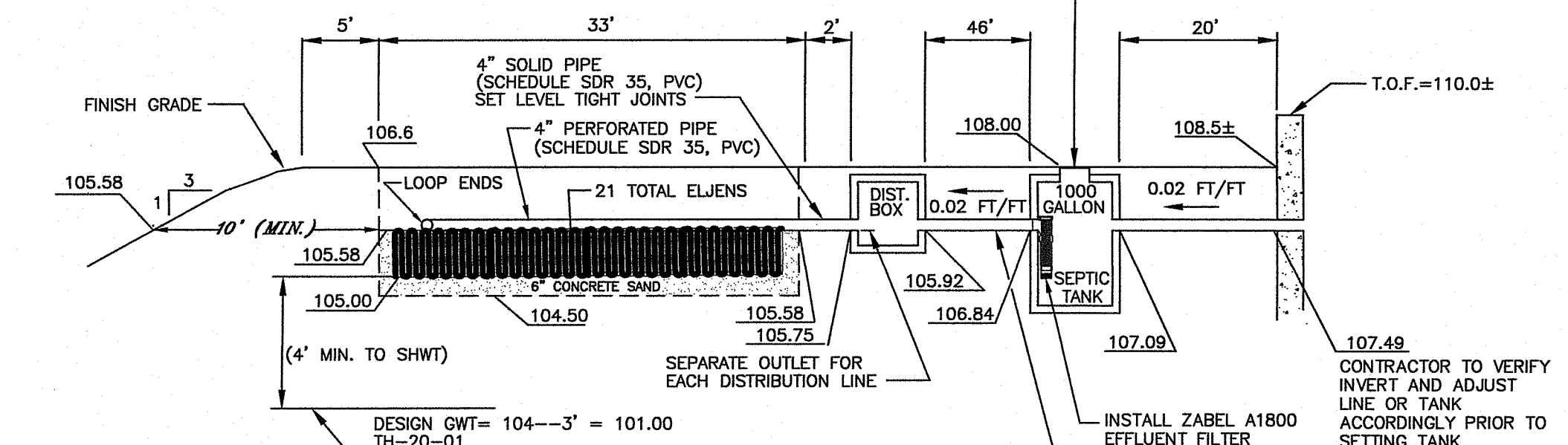
NICHOLAS J. PIAMPIANO  
No. 6512  
REGISTERED PROFESSIONAL ENGINEER (CIVIL)  
D. 3059

NO. DATE DESCRIPTION  
1 4/27/20 PER RIDEM

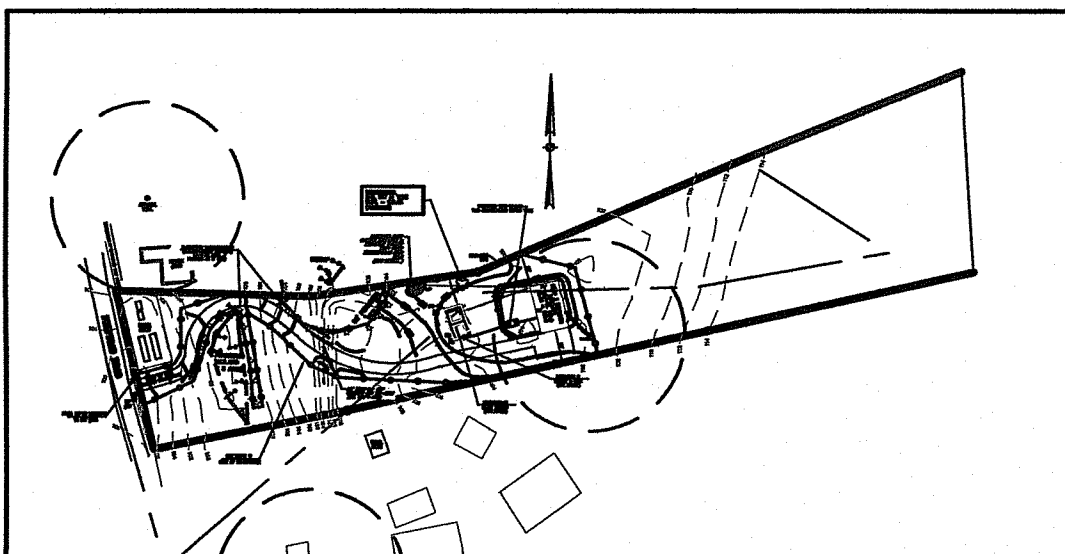
DATE: MARCH 27, 2020  
SCALE: AS NOTED  
DESIGN/CHECK BY: C.S.R.

SHEET NO. **1**

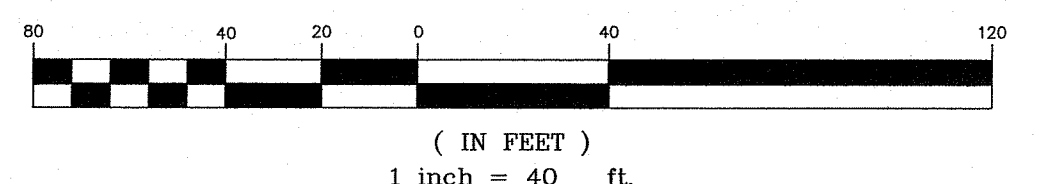
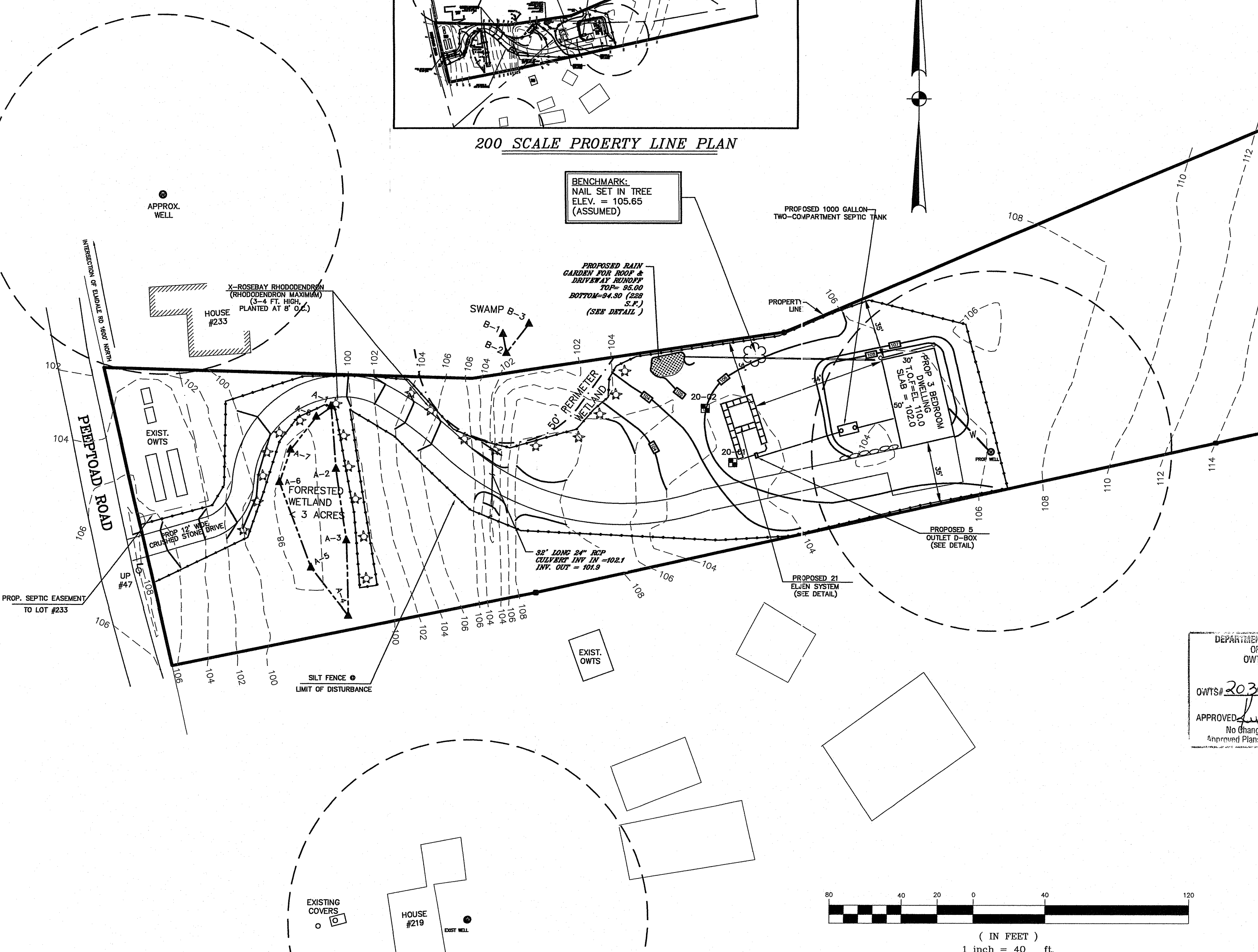
**ADVANCED CIVIL DESIGN, INC.**  
CIVIL ENGINEERS  
88 PEEPTOAD ROAD  
SCITUATE, RI 02857  
P1: (401) 644-8656  
P2: (401) 473-4404



**O.W.T.S. (ELJEN) PROFILE**



**200 SCALE PROPERTY LINE PLAN**



**ZABEL A1800 EFFLUENT FILTER**

NOT TO SCALE