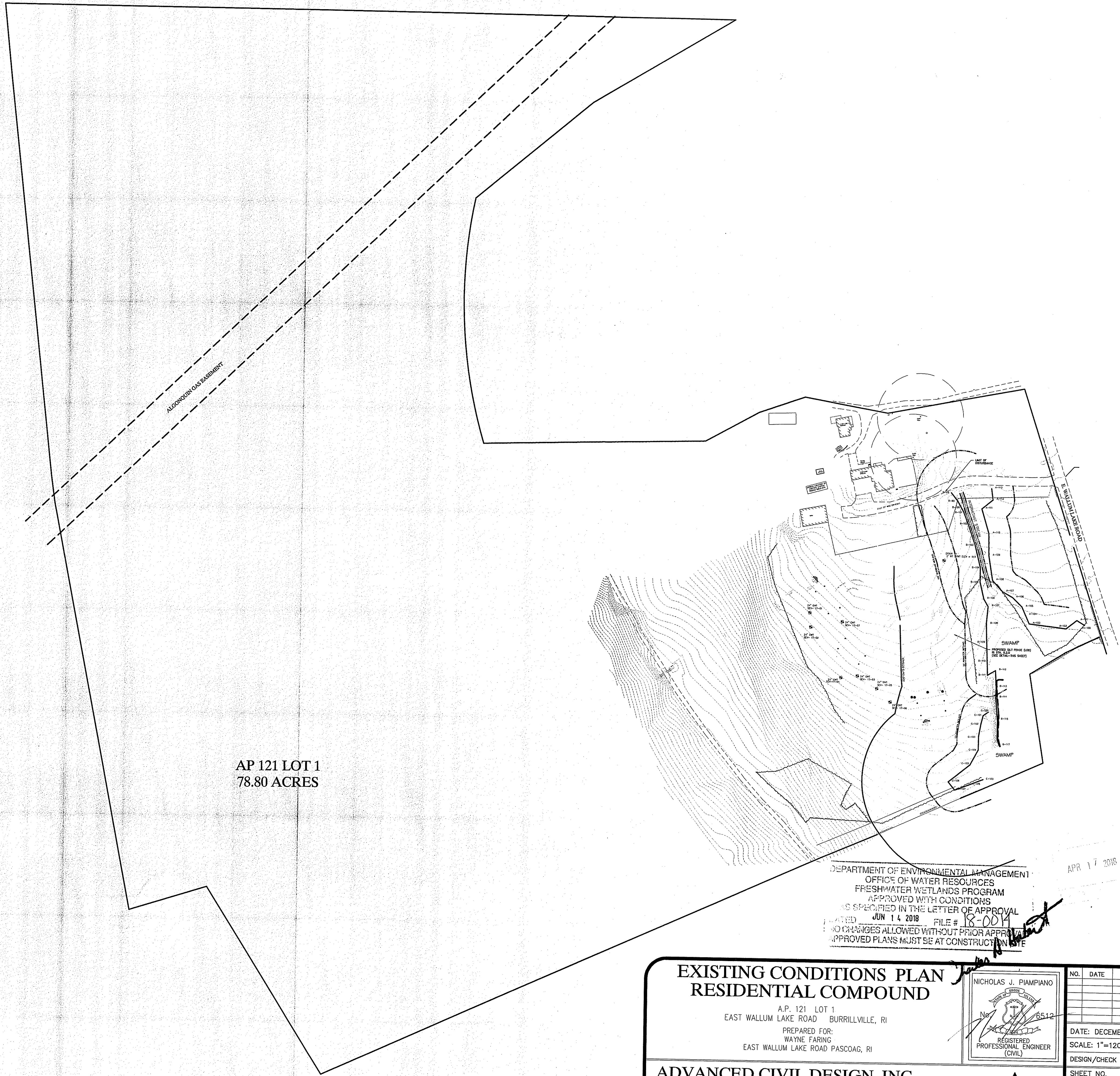
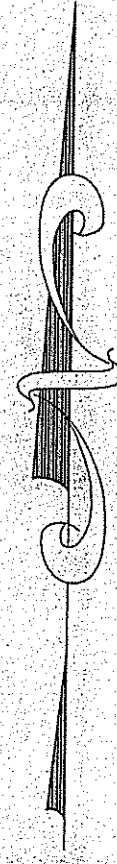


LOCUS MAP NOT TO SCALE

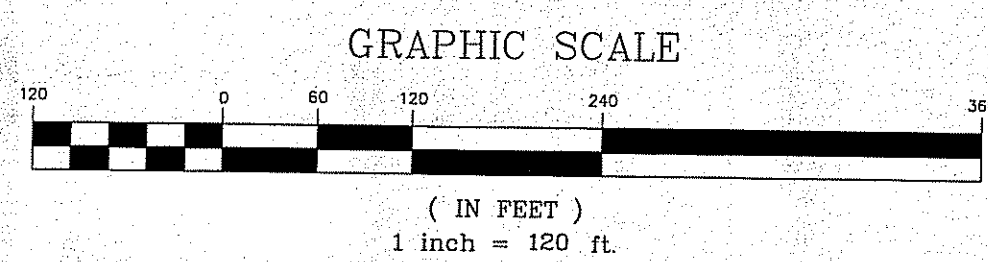


AP 121 LOT 1  
78.80 ACRES

ZONE: F-5  
 MINIMUM AREA 5 ACRES  
 LOT FRONTAGE 450 FT.  
 FRONT SETBACK 40 FT.  
 SIDE SETBACK 15 FT.  
 REAR SETBACK 40 FT.  
 COVERAGE 20%  
 BUILDING HEIGHT 50 FT.

GENERAL NOTES:

1. PLAN REFERENCE: SURVEY OF LAND IN BURRILLVILLE, RI FOR JOSEPH SMITH BY LOUIS FEDERICI ASSOCIATES \* 2/6/84
2. WETLAND EDGES BY ECOTONES INC.



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED JUN 14 2018 FILE # 18-0014  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

EXISTING CONDITIONS PLAN  
 RESIDENTIAL COMPOUND

A.P. 121 LOT 1  
 EAST WALLUM LAKE ROAD BURRILLVILLE, RI  
 PREPARED FOR:  
 WAYNE FARINC  
 EAST WALLUM LAKE ROAD PASCOAG, RI

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

NO.	DATE	DESCRIPTION

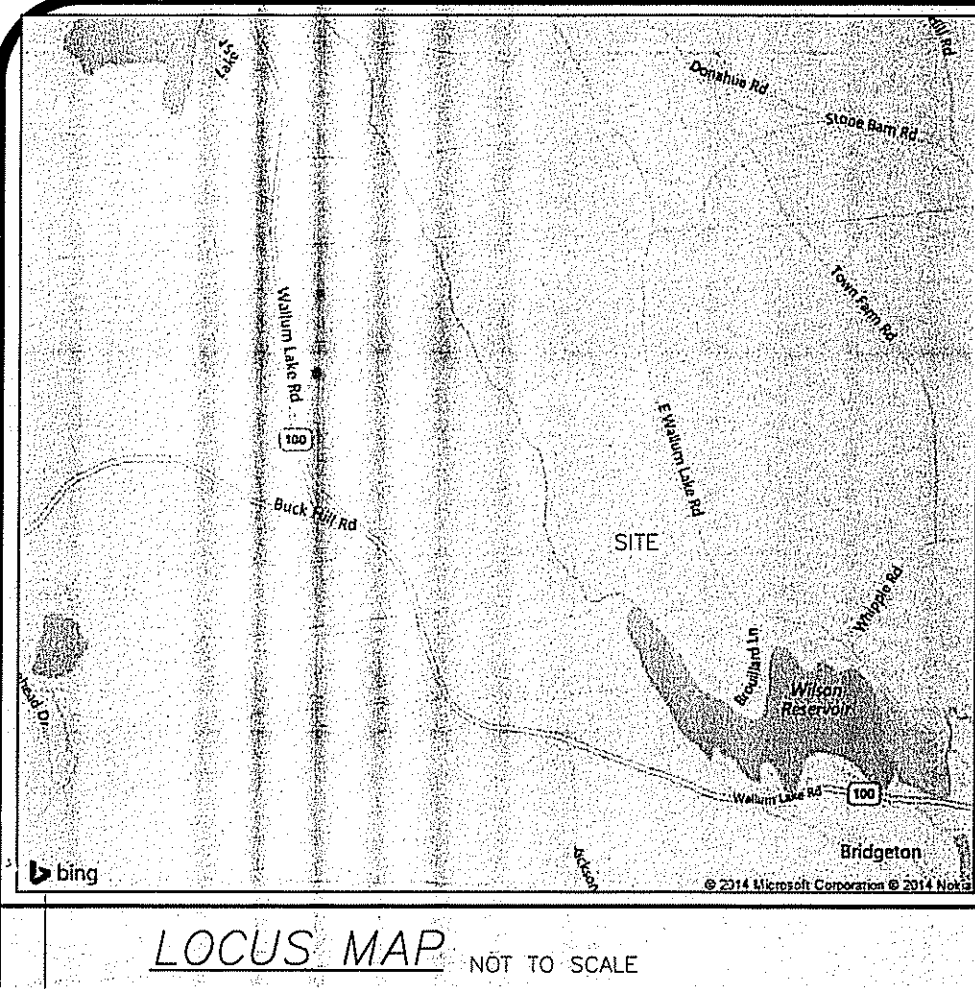
ADVANCED CIVIL DESIGN, INC.  
 CIVIL ENGINEERS



7 COUNTRYSIDE LANE  
 SCITUATE, RI 02857

PH 1: (401) 644-8656  
 PH 2: (401) 473-4404

DATE: DECEMBER 15, 2017  
 SCALE: 1"=120'  
 DESIGN/CHECK BY: C.S.R./N.J.P.  
 SHEET NO.  
 1  
 1 OF 3



LOCUS MAP NOT TO SCALE

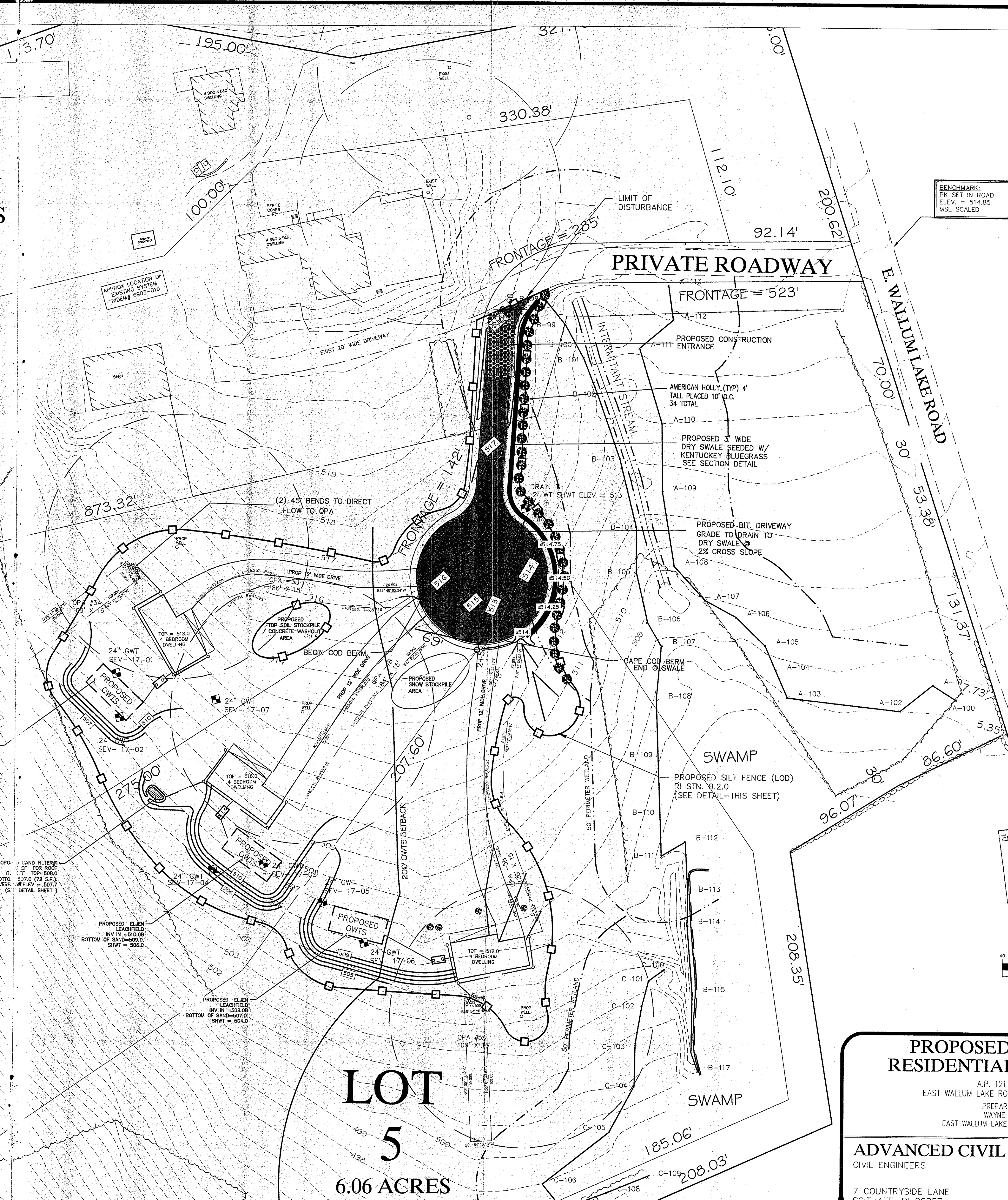
**LOT 1**  
4.56 ACRES

**LOT 2**  
5.49 ACRES

**LOT 3**  
5.46 ACRES

**LOT 4**  
6.64 ACRES

**LOT 5**  
6.06 ACRES



DEVELOPMENT DATA	
TOTAL NUMBER OF LOTS	5
LENGTH OF ROADWAY	500 FT.
WIDTH OF ROADWAY	20 FT.
WIDTH OF RIGHT OF WAY	30 FT.
PROJECT SITE AREA	86.5 ACRES
SUITABLE LAND AREA	78.8 ACRES
TOTAL DISTURBED AREA	3.0 ACRES

BENCHMARK:  
PK SET IN ROAD  
ELEV. = 514.85  
WSL SCALED

- 100 YEAR FLOOD PLAIN IMPACT:**
- THE INTERMITTENT STREAM LOCATED ON THE LAND DEDICATED TO OPEN SPACE ON THIS PARCEL ADJACENT TO THE PROPOSED ROADWAY AS SHOWN ON THIS PLAN, THAT IS UNDER PROGRAM JURISDICTION AND THAT AS DEFINED BY PROGRAM'S "RULES" THAT IT HAS A 100 YR FLOOD PLAIN LINE & ELEVATION ASSOCIATED WITH IT.
  - THE SUBJECT SITE IS LOCATED IN A FEMA ZONE X COMMUNITY PANEL #4400700245G EFFECTIVE DATE MARCH 2 2009. THERE IS NO PUBLISHED DATA FOR THE INTERMITTENT STREAM ON SITE.
  - THE REFERENCE LOCATION FOR THE REQUESTED "STUDY NARRATIVE" IS THE DRAINAGE REPORT FOR RESIDENTIAL COMPOUND EAST WALLUM LAKE ROAD DATED JANUARY 2018 & REVISED APRIL 2018.
  - PER THE CALCULATIONS BASED IN THE ABOVE REFERENCED REPORT THE PROPOSED DEVELOPMENT WILL HAVE NO ADVERSE IMPACT ON THE INTERMITTENT STREAM'S 100-YR FLOOD PLAIN LINE & ELEVATION.

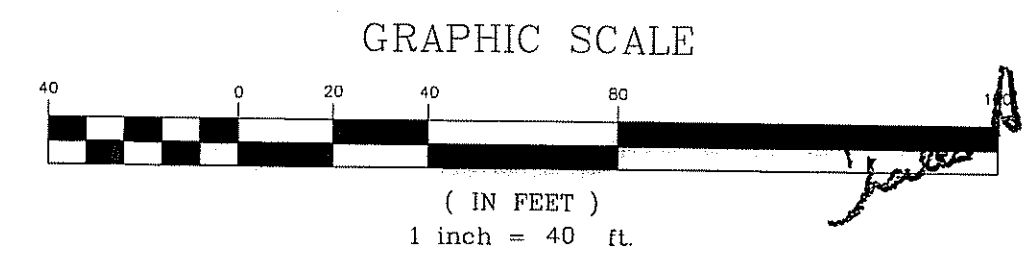
**ZONE: F-5**

MINIMUM AREA	5 ACRES
LOT FRONTAGE	450 FT.
FRONT SETBACK	40 FT.
SIDE SETBACK	15 FT.
REAR SETBACK	40 FT.
COVERAGE	20%
BUILDING HEIGHT	50 FT.

- GENERAL NOTES:**
- PLAN REFERENCE "SURVEY OF LAND IN BURRILLVILLE RI FOR JOSEPH SMITH BY LOUIS FEDERICI ASSOCIATES" 2/6/84
  - WETLAND EDGES BY ECOTONES INC.

Environmental Management  
APR 17 2018  
Office of Water Resources

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
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**PROPOSED SITE PLAN  
RESIDENTIAL COMPOUND**

A.P. 121 LOT 1  
EAST WALLUM LAKE ROAD BURRILLVILLE, RI  
PREPARED FOR:  
WAYNE FARING  
EAST WALLUM LAKE ROAD PASCOAG, RI

**ADVANCED CIVIL DESIGN, INC.**  
CIVIL ENGINEERS

7 COUNTRYSIDE LANE  
SCHUATTE, RI 02857

PH 1: (401) 644-8656  
PH 2: (401) 473-4404

NICHOLAS J. PIAMPANO  
REGISTERED PROFESSIONAL ENGINEER (CIVIL)

NO.	DATE	DESCRIPTION
1	4/5/18	PER RIDEM

DATE: DECEMBER 15, 2017  
SCALE: 1"=40'  
DESIGN/CHECK BY: C.S.R./N.J.P.  
SHEET NO. **2** OF 3

**QPA DESIGN DATA TABLE**

QPA #	GRADE ELEV.	SOIL EVAL #	SHWT ELEV
#3A	513-509	17-01	511-507
#3B	516-514	17-01	514-512
#4B	516-510	17-03	514-508
#5A	505-501	17-06	503-499
#5B	514-507	17-06	512-505

\* ALL SHWT MEASURED FROM O.C.

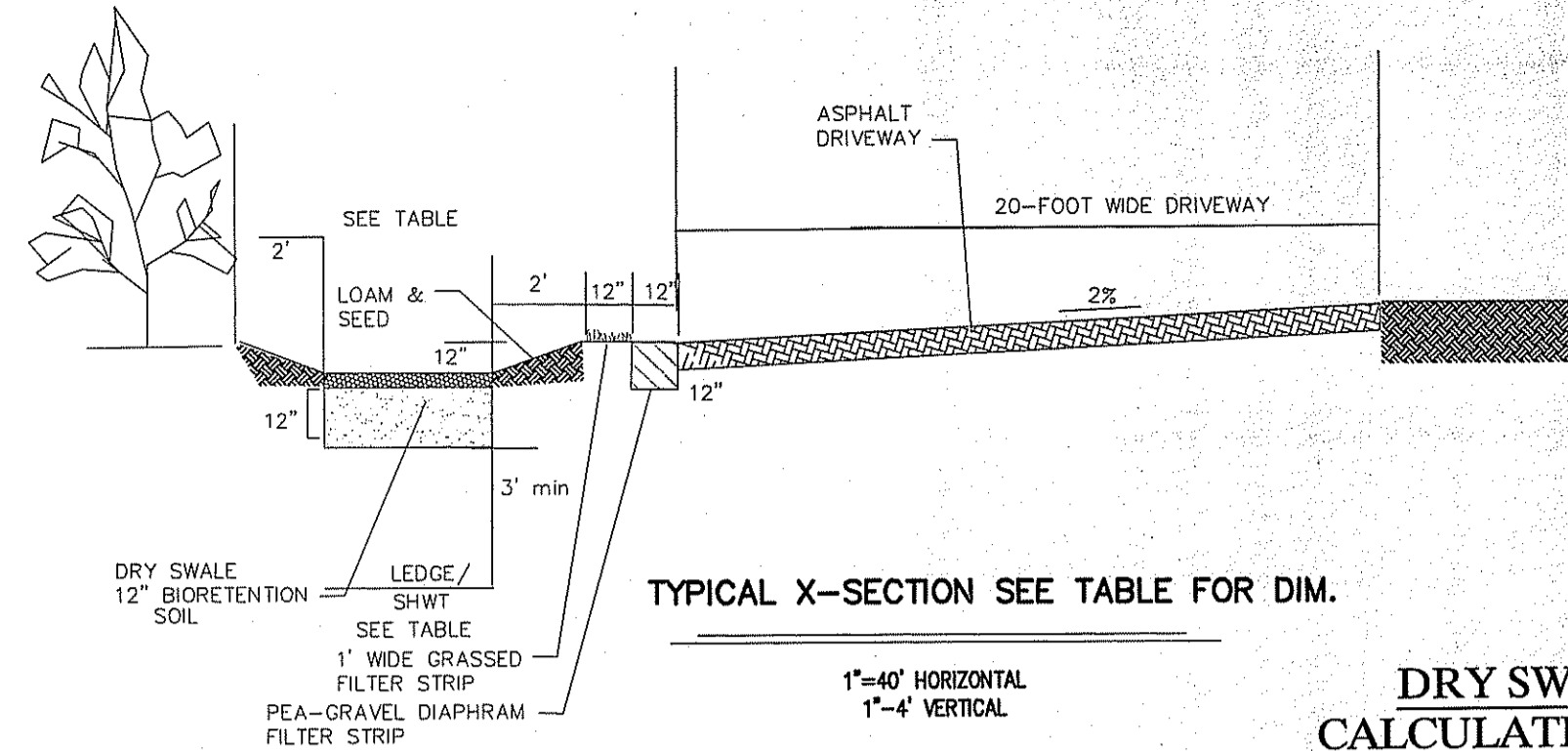
**QPA SIZING CALCULATIONS**

**ROOF TOPS**  
 LENGTH - OPA-#3A = 1450 SF / 13.3 = 109' LONG  
 WIDTH - OPA -#3A = ROOF LENGTH = 16'  
 LENGTH - OPA-#5A = 1450 SF / 13.3 = 109' LONG  
 WIDTH - OPA -#5A = ROOF LENGTH = 16'

**DRIVEWAYS**  
 OPA-#3B = 180' LONG X 15' WIDE  
 OPA-#4B = 184' LONG X 15' WIDE  
 OPA-#5B = 228' LONG X 15' WIDE

**QPA DRAINAGE Maintenance Notes:**

- QPA'S ARE TO REMAIN IN NATURAL VEGETATION OR ARE TO BE VEGETATED WITH LOW MAINTENANCE GRASSES.



**DRY SWALE SIZING TABLE**

DRIVEWAY STA	LENGTH	BOTTOM WIDTH	BOTTOM ELEV	EXIST GROUND ELEV	SHWT ELEV	DEPTH
0+00-2+60	260'	3'	517-515	517-514		~2.0'

**DRY SWALE SIZING CALCULATIONS STA 0-2+60**

- Impervious driveway area = 11,100 s.f.
- Soil type: Sandy Loam
- Design Infiltration Rate = 1.02 in./hr.
- Intensity = 1-inch
- Water Quality Volume Needed: 11,100s.f. x 0.083 (1") = 921 c.f. Say 925 c.f.
- Proposed Dry Swale Depth = 12-inches or 1.0-feet

Surface Area at Bottom of the Trench:

$$A(f) = (WQv)(df) / [(K)(hf + df)(t)]$$

Where:  
 A(f) = surface area of the filter bed (ft<sup>2</sup>)  
 df = Filter bed depth (ft) = 1.0 ft  
 K = coefficient of permeability of the filter media (use 1.0 ft/day)  
 hf = Average height of water above the dry swale (ft) (use 0.5 ft)  
 t = design filter bed drain time (assume 1 day for design purposes)

$$A(p) = (925)(1.0) / [(1.0)(0.5 + 1.0)(1.0)]$$

A(f) = 617 s.f. use a 3' WIDE X 250' LONG DRY SWALE.

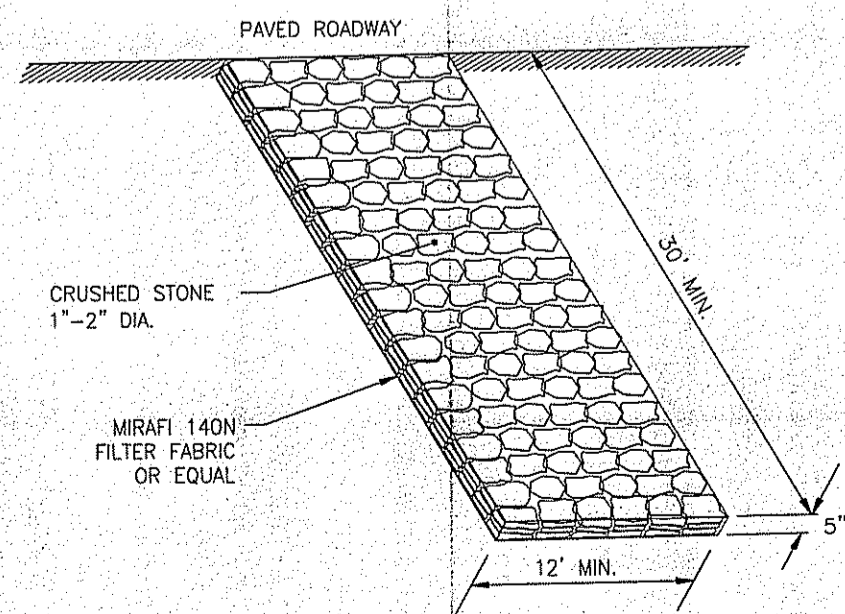
**RE: PARTY(S) RESPONSIBILITIES FOR MAINTENANCE**

THE NOTES LISTED UNDER THIS HEADING ADDRESS THE FACT THAT "COMPOUND HOMEOWNERS ASSOCIATION" WILL BE THE RESPONSIBLE PARTY TO FUND AND PERFORM LONG-TERM MAINTENANCE OF THE STORMWATER SYSTEM ASSOCIATED WITH THE DRIVEWAY CUL DE SAC.

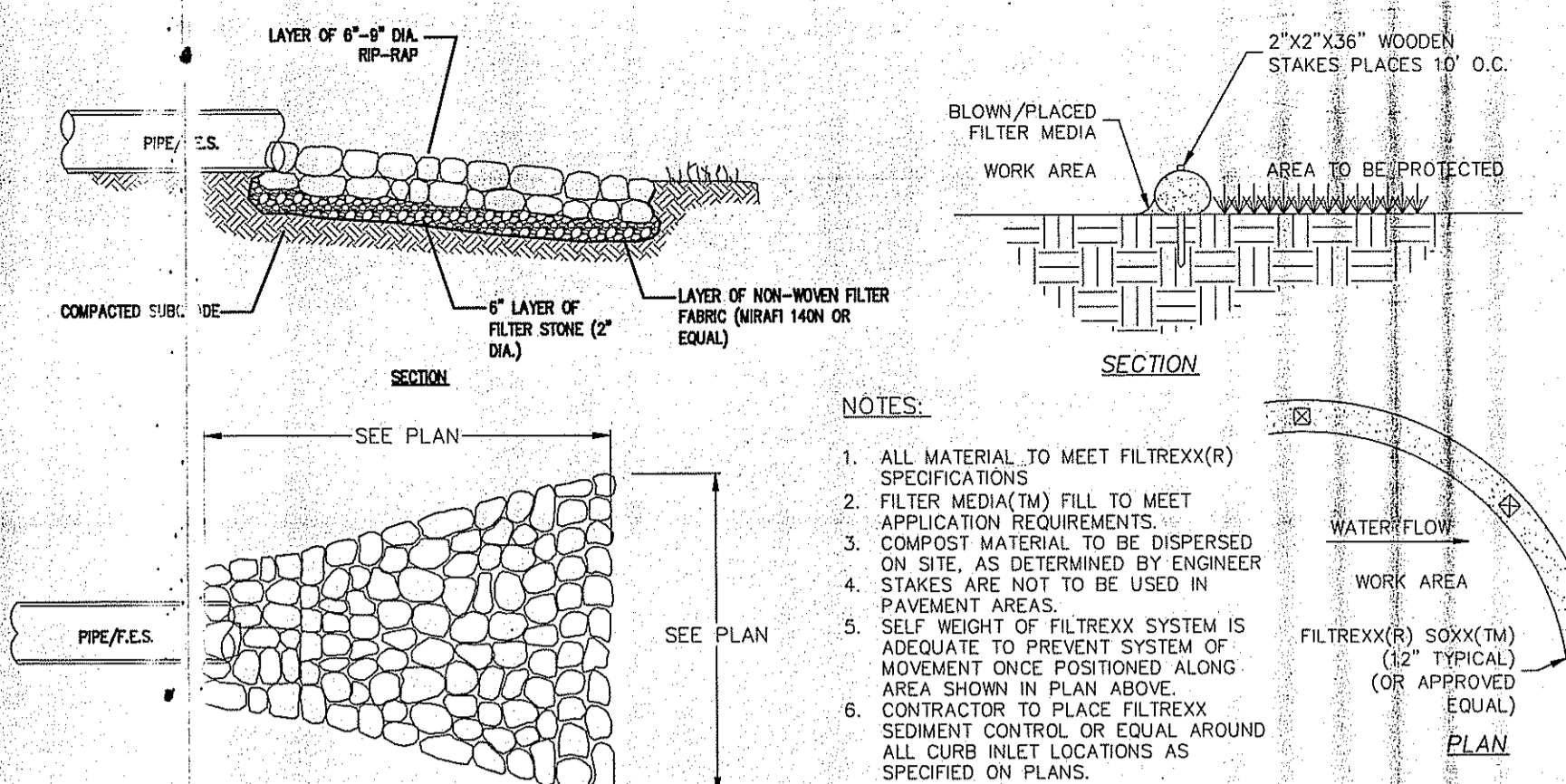
- STORMWATER TREATMENT BMPs AND DRAINAGE SYSTEMS WILL BE MAINTAINED AS SPECIFIED IN THE OPERATION AND MAINTENANCE PLAN.

**SITework CONTRACTOR NOTES**

- CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
- ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).
- AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE LOAM AND SEED. SEE LANDSCAPE PLANS.
- ALL CONSTRUCTION WITHIN THE STATE RIGHT-OF-WAY SHALL CONFORM TO PROCEDURES AND SPECIFICATIONS DELINEATED IN THE "STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND STANDARD DETAILS" INCLUDING ALL REVISIONS AS APPROVED BY THE DEPARTMENT AT THE TIME OF THE PHYSICAL ALTERATION PERMIT SUBMISSION.
- TRAFFIC CONTROL, SIGNAGE, AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) 2003 INCLUDING ALL REVISIONS.
- UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
- AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
- CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
- DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
- CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.



**STONE CONSTRUCTION ENTRANCE**



- NOTES:**
- ALL MATERIAL TO MEET FILTERXX(R) SPECIFICATIONS
  - FILTER MEDIA (TM) FILL TO MEET APPLICATION REQUIREMENTS
  - COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER. STAKES ARE NOT TO BE USED IN PAVEMENT AREAS.
  - SELF WEIGHT OF FILTERXX SYSTEM IS ADEQUATE TO PREVENT SYSTEM OF MOVEMENT ONCE POSITIONED ALONG AREA SHOWN IN PLAN ABOVE.
  - CONTRACTOR TO PLACE FILTERXX SEDIMENT CONTROL OR EQUAL AROUND ALL CURB INLET LOCATIONS AS SPECIFIED ON PLANS.

**STRaw WATTLE or Approved Equal**

**SAND FILTERS FOR ROOF DRAINAGE Maintenance Notes:**

- THE SAND FILTER SHALL BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO PRECIPITATION EVENTS OF AT LEAST 1.0 INCH TO ENSURE THAT THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER, THE SAND FILTER SHALL BE MONITORED AND MAINTAINED TO ASSURE PROPER FUNCTIONING, GRASS GROWTH AND SURVIVAL.
- SILT/SEDIMENT SHALL BE REMOVED FROM THE SAND FILTER WHEN THE ACCUMULATION EXCEEDS ONE INCH, OR WHEN WATER POUNDS ON THE SURFACE OF THE SAND FILTER FOR MORE THAN 48 HOURS. THE TOP FEW INCHES OF MATERIAL SHALL BE REMOVED AND SHALL BE REPLACED WITH FRESH SOIL MIXTURE AND MULCH.
- GULLIES SHALL BE REPAIRED WHEN THEY OCCUR.
- FERTILIZER OR PESTICIDES SHALL NOT BE APPLIED TO PLANTS WITHIN THE SAND FILTERS.
- ERODED SIDE SLOPES AND CHANNEL BOTTOMS SHALL BE STABILIZED AS NECESSARY.

**ROOF & DRIVEWAY SAND FILTER SIZING CALCULATIONS**

- SAND FILTER #1**
- Impervious Roof Area = 1,450 s.f.
  - Soil type: Sand
  - Design Coefficient of Permeability = 3.5 ft/day
  - Intensity = 1-inch
  - Water Quality Volume Needed: 1,450 s.f. x 0.083 (1") = 120.35 c.f.
  - Proposed SAND FILTER Depth = 8-inches or 0.7-feet

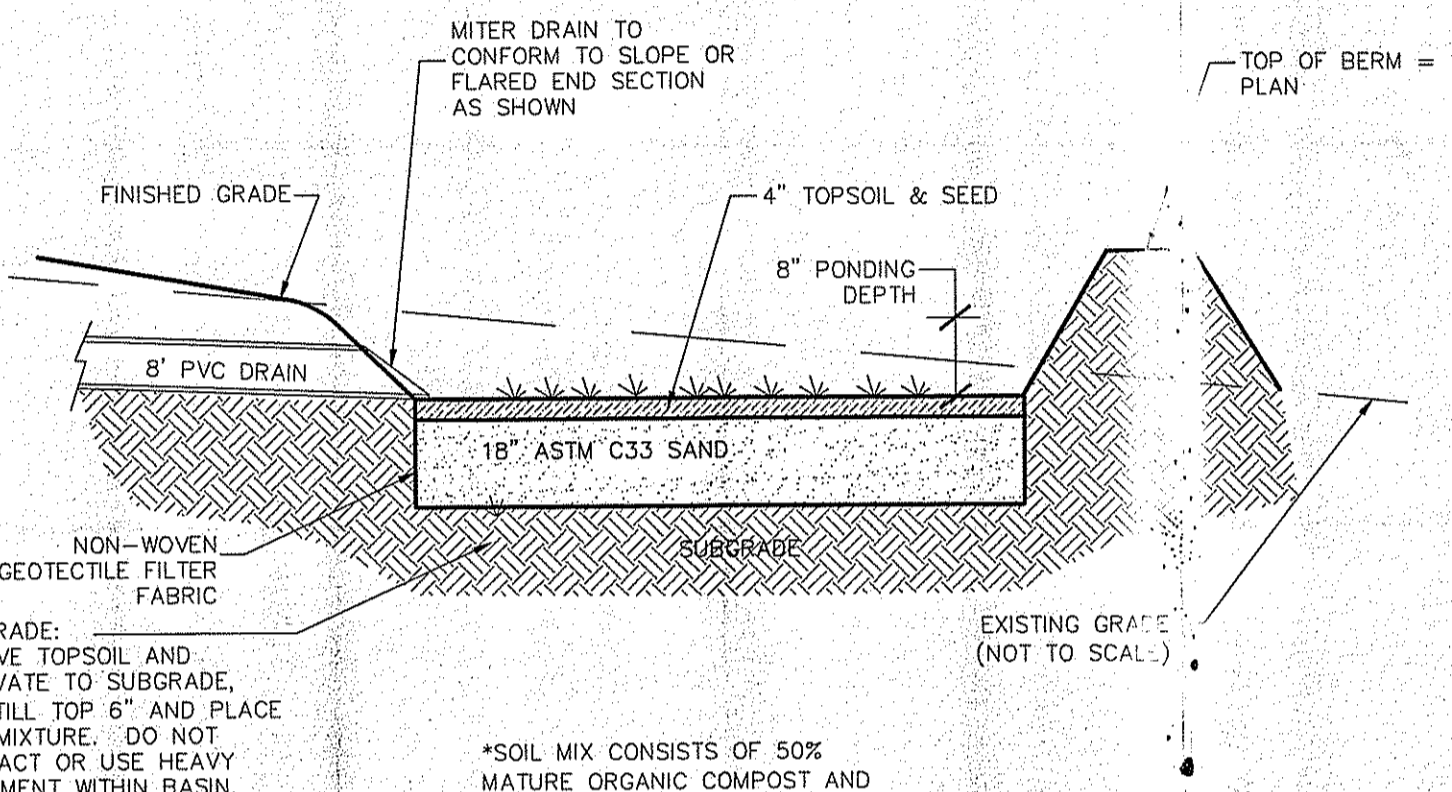
Surface Area at Bottom of the FILTER:

$$A(f) = (WQv)(df) / [(K)(hf + df)(t)]$$

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)  
 hf = Average height of water above the dry swale (ft) (use 0.7 ft)  
 t = design filter bed drain time (assume 1 day for design purposes)

$$A(f) = (120.35)(1.5) / [(3.5)(0.7 + 1.5)(1.0)]$$

A(f) = 23.5 s.f. USE 72 s.f.



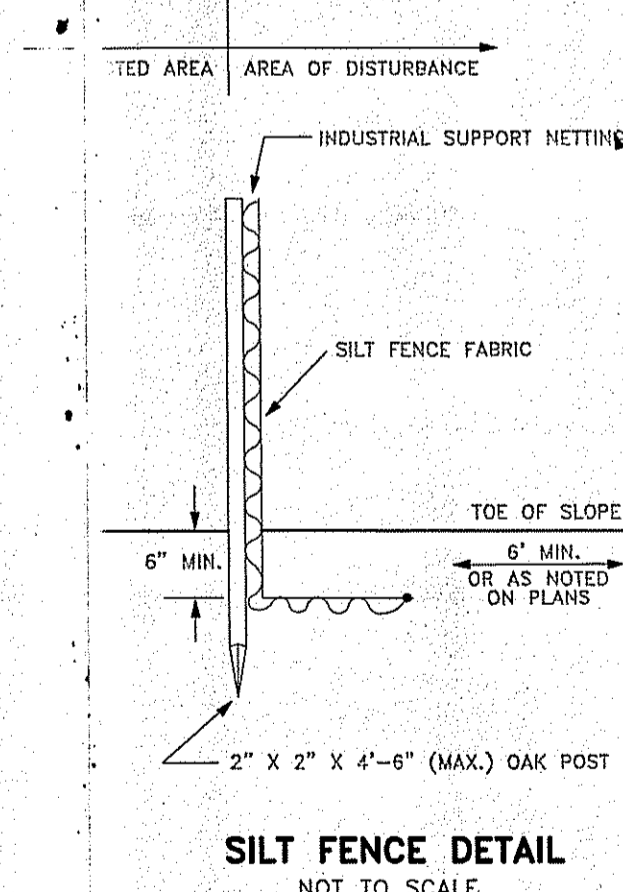
**TYPICAL SAND FILTER DETAIL FOR ROOF DRAINS**

**SHWT TABLE FOR ROOF SAND FILTERS**

SAND FILTER #	BOTTOM ELEV	SHWT ELEV	AREA	LENGTH	WIDTH
1	507.0	505.0	20 SF	12'	6'

**SOIL EROSION AND SEDIMENT CONTROL NOTES:**

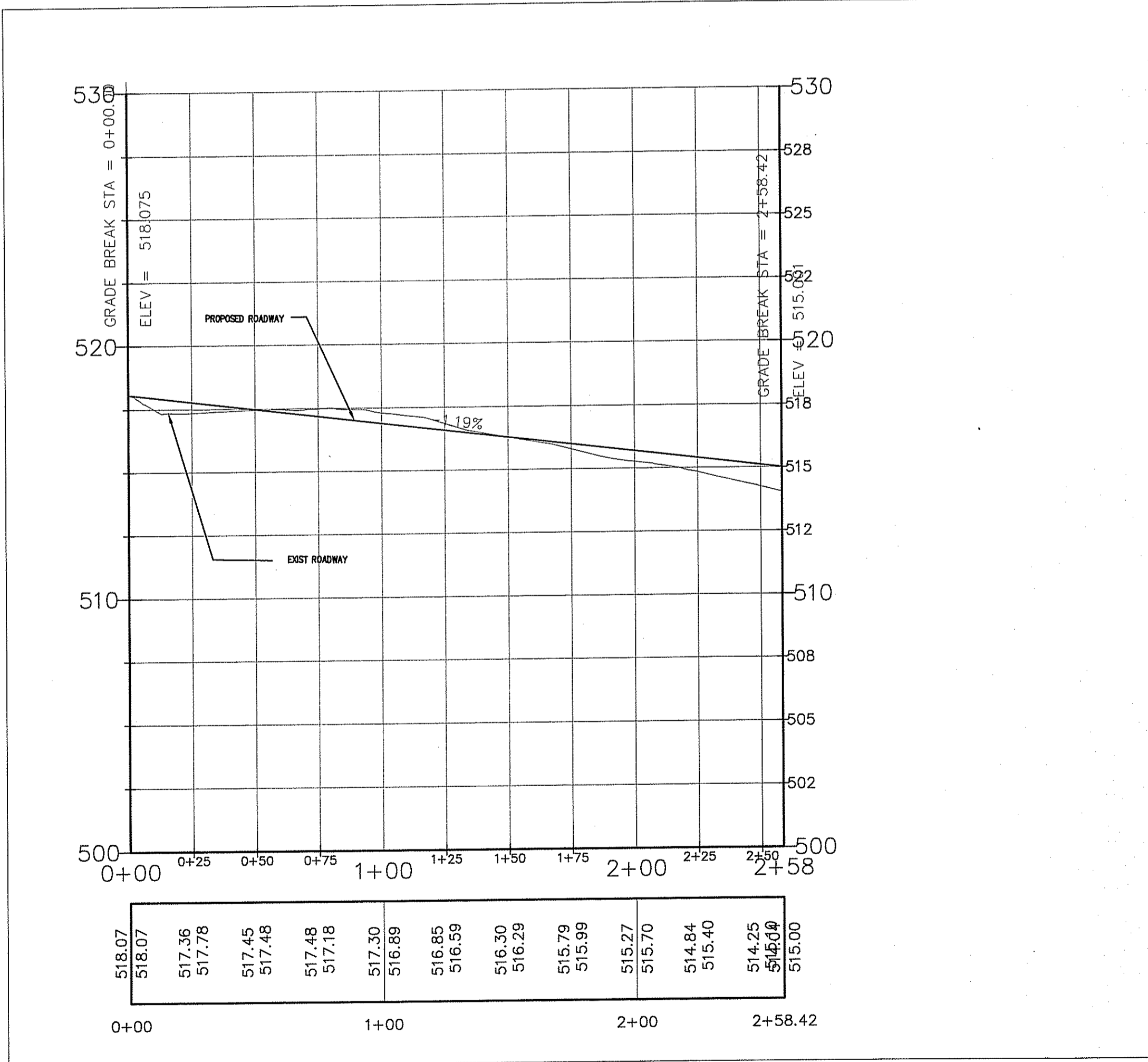
- SLOPES SHALL NOT BE LEFT UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON.
- ALL DISTURBED SLOPES EITHER NEWLY CREATED OR CURRENTLY EXPOSED SHALL BE SEEDED OR PROTECTED.
- PLANTABLE SOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS, AND SHALL CONFORM WITH RHODE ISLAND'S STANDARD SPECIFICATIONS, AS AMENDED.
- THE DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWING:  
 TYPE: CREeping RED FESCUE 75 LBS/ACRE  
 KENTUCKY BLUE GRASS 15  
 COLONIAL BENT GRASS 5  
 PERENNIAL RYE GRASS 5
- EARLY SPRING OR LATE SUMMER SEEDING IS RECOMMENDED. LIME AND FERTILIZER AS REQUIRED BY SOIL TESTING TO COMPLEMENT OR UPGRADE EXISTING CONDITIONS. THE SEED MIX SHALL BE INOCULATED WITHIN 24 HOURS BEFORE MOING AND PLANTING WITH APPROPRIATE INOCULUM FOR EACH VARIETY. THE RECOMMENDED SEEDING DATES ARE APRIL 1ST THROUGH JUNE 15TH AND AUGUST 15TH THROUGH SEPTEMBER 30TH.
- TEMPORARY TREATMENTS SHALL CONSIST OF NORTH AMERICAN GREEN SIS0 EROSION CONTROL BLANKET OR EQUAL. THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.
- ALL TEMPORARY EROSION PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
- ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH THE RHODE ISLAND STANDARD SPECIFICATION'S FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
- STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR ANY WATERWAYS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 2:1 AND SHALL BE TEMPORARILY SEEDED OR STABILIZED.
- 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.
- MAXIMUM GRADED SLOPE TO BE 3:1 UNLESS NOTED OTHERWISE ON THE PLANS.
- REFERENCE THE "RHODE ISLAND EROSION AND SEDIMENTATION CONTROL HANDBOOK" PREPARED BY USDA SOIL CONSERVATION SERVICE AS A GUIDE.



**SILT FENCE DETAIL**

Environmental Management  
 APR 17 2018  
 Office of Water Resources

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
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**PROPOSED DRIVEWAY PROFILE**

SCALE: VET = 1"=4' HORZ 1"=40'

**DETAIL SHEET RESIDENTIAL COMPOUND**

A.P. 121 LOT 1  
 EAST WALLUM LAKE ROAD BURRILLVILLE, RI  
 PREPARED FOR: WAYNE FARING  
 EAST WALLUM LAKE ROAD PASCOAG, RI

NICHOLAS J. PIAMPANI  
 No. 6512  
 REGISTERED PROFESSIONAL ENGINEER (CIVIL)

DATE: DECEMBER 15, 2017  
 SCALE: AS NOTED  
 DESIGN/CHECK BY: C.S.R./N.J.P.

ADVANCED CIVIL DESIGN, INC.  
 CIVIL ENGINEERS  
 7 COUNTRYSIDE LANE  
 SCITUATE, RI 02857

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SHEET NO. **3** OF 3