

MAINTENANCE CONTRACT NOTE

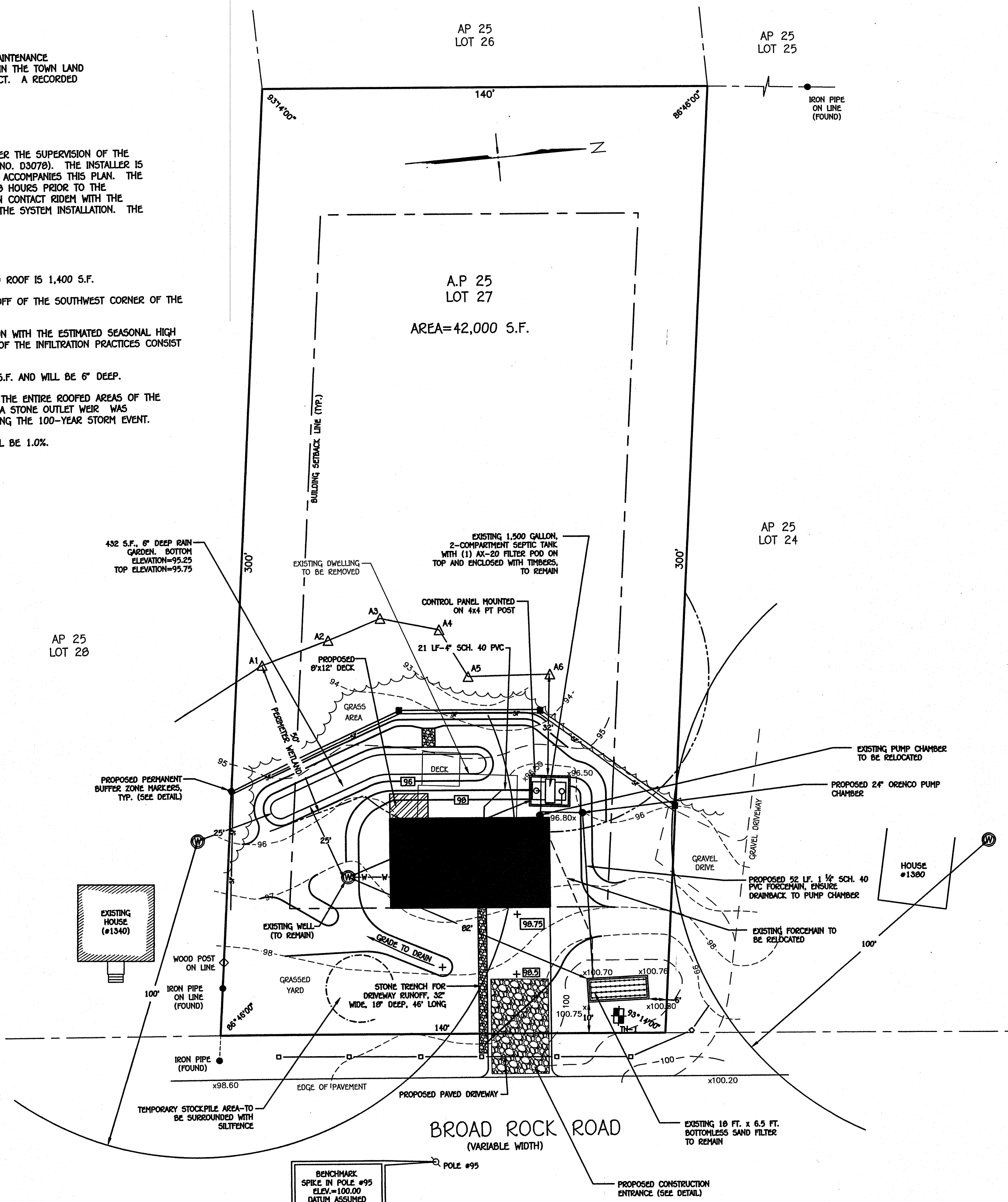
IT IS THE RESPONSIBILITY OF THE OWNER TO SIGN A MAINTENANCE CONTRACT FOR THE ADVANTEK SYSTEM AND RECORD IT IN THE TOWN LAND EVIDENCE RECORDS AT THE COMPLETION OF THE PROJECT. A RECORDED COPY SHALL BE FORWARDED TO THE DESIGN ENGINEER.

INSTALLATION NOTE

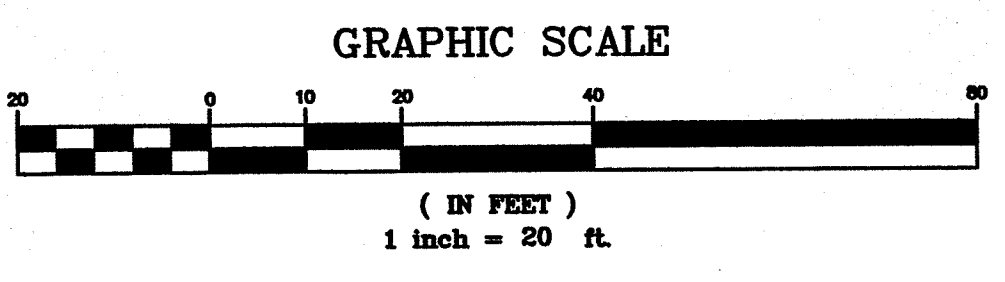
THE SEWAGE DISPOSAL SYSTEM MUST BE INSTALLED UNDER THE SUPERVISION OF THE DESIGNER, ANTHONY A. NENNA, P.E. (DESIGNER LICENSE NO. D3078). THE INSTALLER IS RESPONSIBLE FOR READING THE APPLICATION FORM THAT ACCOMPANIES THIS PLAN. THE INSTALLER MUST NOTIFY THE DESIGNER A MINIMUM OF 48 HOURS PRIOR TO THE INSTALLATION OF THE SYSTEM. THE DESIGNER WILL THEN CONTACT RIDEM WITH THE INSTALLATION DATE A MINIMUM OF 24 HOURS PRIOR TO THE SYSTEM INSTALLATION. THE DESIGNER CAN BE CONTACTED AT (401) 348-6831.

STORMWATER CALCULATIONS

TOTAL IMPERVIOUS AREA ASSOCIATED WITH THE PROPOSED ROOF IS 1,400 S.F.
 DRAINAGE SYSTEM INVOLVES INSTALLING A RAIN GARDEN OFF OF THE SOUTHWEST CORNER OF THE PROPOSED HOUSE.
 THE WATER TABLE WAS DETERMINED BY A SOIL EVALUATION WITH THE ESTIMATED SEASONAL HIGH WATER TABLE TO BE 2'. THE SOILS WITHIN THE AREA OF THE INFILTRATION PRACTICES CONSIST OF SILT LOAM.
 THE RAIN GARDEN WILL HAVE A SURFACE AREA OF 370 S.F. AND WILL BE 6" DEEP.
 DRAINAGE CALCULATIONS WERE CONDUCTED BASED UPON THE ENTIRE ROOFED AREAS OF THE PROPOSED DWELLING. DURING EXCESSIVE RAIN EVENTS, A STONE OUTLET WEIR WAS INCORPORATED INTO THE DESIGN, WHICH WILL FLOW DURING THE 100-YEAR STORM EVENT.
 THE MINIMUM SLOPE OF ALL 6-INCH ROOF DRAINS SHALL BE 1.0%.



- LEGEND**
- 100- EXISTING CONTOUR
 - WF-A1 Δ WETLAND FLAG
 - WETLAND BUFFER (50 FT.)
 - EXISTING TREE LINE
 - PROPERTY LINE
 - BUILDING SETBACK
 - EXISTING/PROPOSED WELL
 - TH-1 TEST HOLE
 - UTILITY POLE
 - PROPOSED WATER SERVICE
 - PROPOSED CONTOUR
 - PROPOSED SPOT ELEVATION
 - PROPOSED PERMANENT BUFFER ZONE MARKERS
 - SF-SF PROPOSED LIMIT OF DISTURBANCE/SILTENCE



INSPECTION SCHEDULE

THE SEWAGE DISPOSAL SYSTEM MUST BE INSTALLED UNDER THE SUPERVISION OF THE DESIGNER, ANTHONY A. NENNA, P.E. (DESIGNER LICENSE NO. D3078). THE INSTALLER IS RESPONSIBLE FOR READING THE APPLICATION FORM THAT ACCOMPANIES THIS PLAN. THE INSTALLER MUST NOTIFY THE DESIGNER A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

THE FOLLOWING INSPECTIONS ARE REQUIRED BY ON-SITE ENGINEERING, INC.:

1. BOTTOM OF EXCAVATION FOR LEACHFIELD.
2. PRIOR TO COVERING ANY COMPONENT OR PIPING (INCLUDING BSF LATERALS)
3. FINAL GRADING, INCLUDING THE FILL PERIMETER
4. AT THE EQUIPMENT START-UP WHICH IS CONDUCTED BY ORENCO MANUFACTURER'S REPRESENTATIVE.

CONTRACTOR SUBMITTAL REQUIREMENTS

NOTE: IF THE CONTRACTOR USES ANY MATERIAL DIFFERENT THAN AS SPECIFIED ON THE PLANS, THE CONTRACTOR IS RESPONSIBLE FOR SUPPLYING THE APPROPRIATE MATERIAL DATA SHEETS PRIOR TO THE START OF CONSTRUCTION SO THAT THE DESIGN ENGINEER CAN REVIEW THE DATA.

THE FOLLOWING SHALL BE SUPPLIED TO ON-SITE ENGINEERING, INC.:

1. COPY OF ALL MATERIAL DELIVERY SHEETS WHICH INCLUDE ALL SYSTEM AND PIPING COMPONENTS.
2. COPY OF CURRENT SIEVE ANALYSIS FOR THE BSF SAND. THE SAND MEDIA SHALL MEET THE REQUIREMENTS OF ASTM C-33 SAND WITH AN EFFECTIVE SIZE (D10) OF 0.3MM & A UNIFORMITY COEFFICIENT (D60/D10) OF 3-4. THE MAXIMUM ALLOWABLE PERCENT PASSING THE NO. 200 SIEVE SHALL BE 1%. THE SIEVE ANALYSIS SHALL BE SUBMITTED TO THE DESIGN ENGINEER PRIOR TO PLACING WITHIN THE BSF.

BUOYANCY CALCULATIONS:

SEPTIC TANK
 BUOYANT FORCE = 12,705 LBS.
 WEIGHT OF TANK = 12,200 LBS.
 WEIGHT OF SOIL = 2,256 LBS.
 TOTAL WEIGHT 14,456 LBS. > BUOYANT FORCE 12,705 LBS.
 THEREFORE, NO FLOTATION WILL OCCUR.
 PUMP CHAMBER
 BUOYANT FORCE: 3.14X2.3X62.4 PCF = 451 LBS.
 CONCRETE ANTI-FLOTATION COLLAR THICKNESS=18" MINIMUM AT 42" DIAM. RING DIMENSION

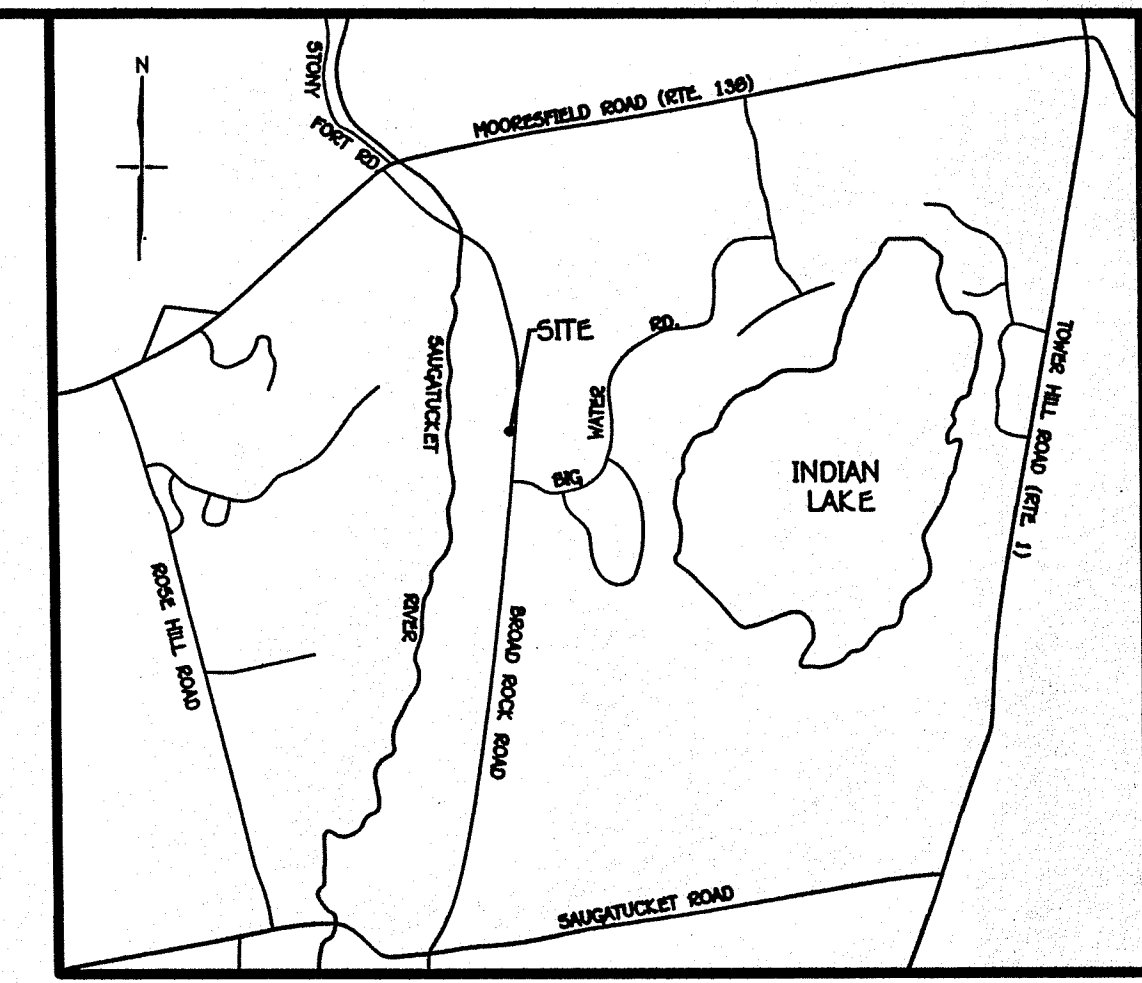
ALTERATION VARIANCE

PER RULE 6.51, VARIANCES ARE REQUIRED, HOWEVER THERE IS NO INCREASE IN FLOW FOR THIS APPLICATION.

THE FOLLOWING IS A LIST OF VARIANCES REQUIRED:

1. RULE 6.23(B), MINIMUM SETBACK DISTANCES, GENERAL: DISTANCE FROM LEACHFIELD TO PROPERTY LINE, 10 FEET REQUIRED (6' PROVIDED).
2. RULE 6.23(E)-MINIMUM SETBACK DISTANCES FROM DRINKING WATER WELLS: DISTANCE FROM THE EXISTING WELL TO THE BUILDING SEWER IS LESS THAN 50 FEET (47' PROVIDED), DISTANCE FROM THE EXISTING WELL TO THE SEPTIC TANK IS LESS THAN 75 FEET (63' PROVIDED) AND THE DISTANCE FROM THE EXISTING WELL TO THE BOTTOMLESS SAND FILTER IS LESS THAN 100 FEET (82' PROVIDED).

THE NOTED VARIANCES WERE PREVIOUSLY APPROVED UNDER OWTS APPLICATION NO. 1132-0259.



LOCATION MAP
SCALE: NONE

DESIGN DATA

EXISTING 2 BEDROOM HOUSE
 PROPOSED 2 BEDROOM HOUSE
 CATEGORY 1 TREATMENT (TIMED DOSED)
 DESIGN FLOW: 2 BEDROOMS X 115 GPD/BEDROOM = 230 GPD
 CATEGORY 1 TREATMENT (TIMED DOSED)
 SOIL CATEGORY 7 - REQ'D HYDRAULIC LOADING RATE=2.10 GPD/SF

MINIMUM LEACHING AREA REQUIRED:

230 GPD/2.10 GPD/SF = 109.5 SF

LEACHING AREA PROVIDED:

18 FT. BY 6.5 FT. = 117 SF (LOADING RATE=1.96 GPD/SF)

SCHEDULE OF PVC PIPE SIZES:

- HOUSE TO SEPTIC TANK: 4" SCH. 40
- SEPTIC TANK TO TEXTILE FILTER: 1 1/2" SCH. 40
- TEXTILE FILTER MANIFOLD: 1" SCH. 40
- TEXTILE FILTER LATERALS: 1" SCH. 40
- TEXTILE FILTER TO PUMP BASIN: 2" SCH. 40
- PUMP DISCHARGE ASSEMBLY: 1 1/2" SCH. 40
- TRANSPORT LINE: 1 1/2" SCH. 40
- SAND FILTER MANIFOLD: 1 1/2" SCH. 40
- SAND FILTER LATERALS: 3/4" SCH. 40

OWTS SYSTEM COMPONENT SCHEDULE

- (1) 1,500 GALLON SEPTIC TANK
- (2) ORENCO RISERS/ADAPTERS
- (1) AX-20 FILTER POD
- (1) 24-INCH DIAMETER FIBERGLAS PUMP CHAMBER BY ORENCO
- (1) CONTROL PANEL

ELEVATION SCHEDULE

NOTE: CONTRACTOR SHALL VERIFY SEPTIC TANK INVERT PRIOR TO CONSTRUCTION

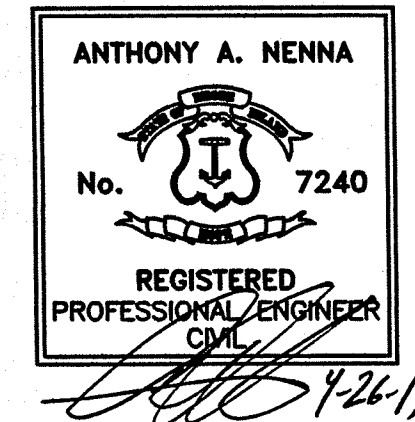
BUILDING SEWER INV.=95.80
 SEPTIC TANK/FILTER POD
 INV. IN=95.33 (MATCH EXISTING)
 RSV INV.=96.75
 ADVANTEK INV. OUT/BOTTOM POD=96.07
 TOP OF ADVANTEK POD=99.51
 PUMP CHAMBER
 TF=98.2
 INV. IN=96.30
 INV. OUT=96.30
 BOTTOMLESS SAND FILTER
 STONE/SAND INTERFACE=103.5

APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAY 23 2019 FILE # 19-066
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

SITE PLAN TO SUPPORT A WETLAND AND ONSITE WASTEWATER TREATMENT SYSTEM APPLICATIONS

PREPARED FOR
CARLOS MENDES AND MIKE SENNA
 1360 BROAD ROCK ROAD - PLAT 25, LOT 27
 SOUTH KINGSTOWN, RHODE ISLAND

SCALE: AS SHOWN FEBRUARY 22, 2019 JOB I.D. NO. 18-064



PREPARED BY
 ON-SITE ENGINEERING, INC.
 85 BEACH STREET, BUILDING B
 WESTERLY, RHODE ISLAND 02891
 TELE.: 401-348-6831

| REV | DATE | DESCRIPTION | BY |
|-----|---------|--|----|
| 1 | 4/22/19 | REVISED RAIN GARDEN, REVISED GRADES ADJACENT TO RAIN GARDEN, ADDED PAVED DRIVEWAY W/ INFILTRATION TRENCH | AA |

