

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DESIGN CRITERIA:

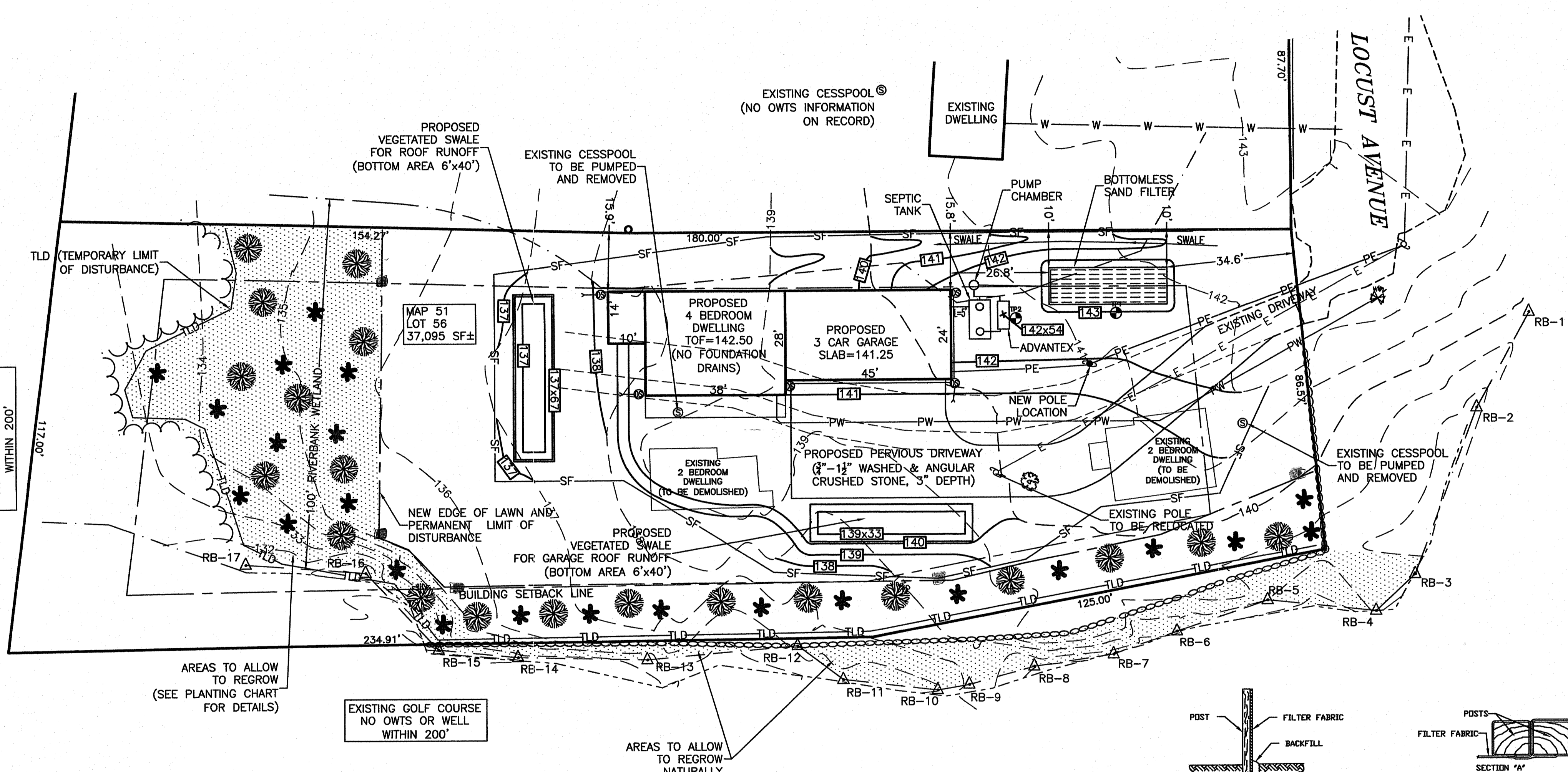
TYPE OF ESTABLISHMENT: PROPOSED 4 BEDROOM SINGLE FAMILY DWELLING
 NO ADDITIONAL CAPACITY HAS BEEN PROVIDED FOR GARBAGE GRINDERS
 DESIGN FLOW: 4 BDRM X 115 GPD/BDRM = 460 GPD
 SEPTIC TANK CAPACITY REQUIRED: 1500 GALLONS (2 COMPARTMENT)
 SEPTIC TANK CAPACITY PROVIDED: 1500 GALLONS (2 COMPARTMENT)
 DESIGN PERCOLATION RATE: 40 MIN./INCH
 BOTTOMLESS SAND FILTER
 CATEGORY 1 SYSTEM LOADING RATE: 1.5 GPD/SF
 LEACHING CAPACITY REQUIRED: 460 GPD / 1.5 GPD/SF = 307 SF
 LEACHING CAPACITY PROVIDED: 10' x 32' = 320 SF

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAR 12 2021 FILE # 20-0136
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

GENERAL NOTES

- ALL CHANGES TO THIS PLAN MUST BE APPROVED BY THE RI DEM AND MOUNT HOPE ENGINEERING.
- ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE STATE ENVIRONMENTAL CODE AND ANY APPLICABLE LOCAL RULES AND REGULATIONS.
- ANY CONDITIONS ENCOUNTERED DURING CONSTRUCTION DIFFERING FROM THOSE SHOWN HEREON SHALL BE REPORTED TO MOUNT HOPE ENGINEERING, BEFORE CONSTRUCTION CONTINUES.
- ALL ELEVATIONS BASED ON NAVD-88 DATUM.
- PER RI DEM REGULATIONS (NOVEMBER 2018) AND IN ACCORDANCE WITH SOUND CONSTRUCTION PRACTICE, THE FOLLOWING INSPECTIONS SHALL BE MADE:
 - THE CONTRACTOR/HOMEOWNER SHALL NOTIFY THE ENGINEER 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.
 - THE ENGINEER SHALL BE NOTIFIED UPON EXCAVATION OF THE LEACHING FIELD BOTTOM.
 - THE ENGINEER SHALL BE NOTIFIED UPON INSTALLATION OF ALL REQUIRED STRUCTURES. SAND AND AGGREGATE SHALL MEET THE SPECIFICATION BELOW AND SHALL BE APPROVED BY THE ENGINEER.
 - THE ENGINEER SHALL BE NOTIFIED UPON COMPLETION AND PRIOR TO FINAL COVER OF THE SYSTEM.
 - THE ENGINEER SHALL BE NOTIFIED AFTER ALL BACKFILL AND FINAL GRADING HAS BEEN COMPLETED, INCLUDING REQUIRED FILL PERIMETER.
 - THE CONTRACTOR SHALL SUPPLY A LIST OF ALL MATERIALS USED, SOURCE OF MATERIAL, AND DATES DELIVERED TO THE SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR DELAY OR ANY AND ALL ADDITIONAL EXCAVATION, LABOR, OR OTHER WORK FOR THE FAILURE OF THE CONTRACTOR AND/OR HOMEOWNER TO ADHERE TO THE ABOVE INSPECTION SCHEDULE.
- REMOVE ALL UNSUITABLE MATERIAL WITHIN THE LIMITS OF EXCAVATION AND REPLACE WITH THE FOLLOWING: FILL MATERIAL AROUND LEACHING FACILITIES SHALL BE FREE OF CLAY, FINES, DUST, ORGANIC MATTER, AND OTHER DELETERIOUS MATERIAL, AND SHALL HAVE A PERCOLATION RATE OF 2 MIN/IN OR LESS. IT SHALL BE GRADED SUCH THAT, OF THE MATERIAL PASSING THE #4 SIEVE, LESS THAN 7% SHALL PASS THE #100 SIEVE AND LESS THAN 3% SHALL PASS THE #200 SIEVE. MATERIAL SHALL BE REMOVED TO ELEV.=140.0
- THERE ARE NO WELLS, EXISTING OR PROPOSED, WITHIN 200' OF SYSTEM. NO PUBLIC WELLS EXISTING OR PROPOSED, WITHIN 500'. NO DRAINS WITHIN 25'.
- HOMEOWNER SHALL OBTAIN REQUIRED O&M AGREEMENT FOR TREATMENT TECHNOLOGY MAINTENANCE THROUGH THE EQUIPMENT VENDOR. EXECUTED AGREEMENT SHALL BE RECORDED AT THE LOCAL TOWN HALL BY THE OWNER. COPY OF THE RECORDED AGREEMENT TO BE PROVIDED TO THE ENGINEER FOR SUBMITTAL TO DEM FOR FINAL COMPLIANCE.
- PROPERTY LINE INFORMATION TAKEN FROM SURVEY AND AVAILABLE RECORD PLANS

Martin D. Wenzel



EXISTING GOLF COURSE
NO OWTS OR WELL
WITHIN 200'

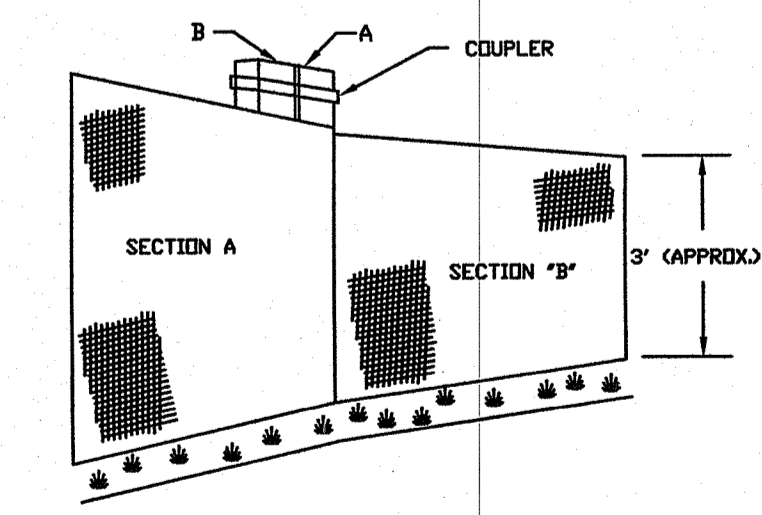
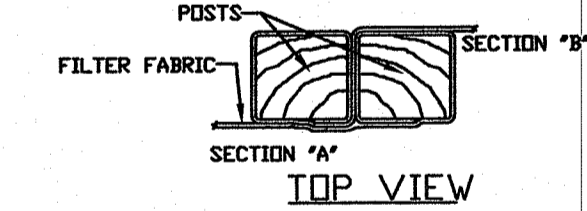
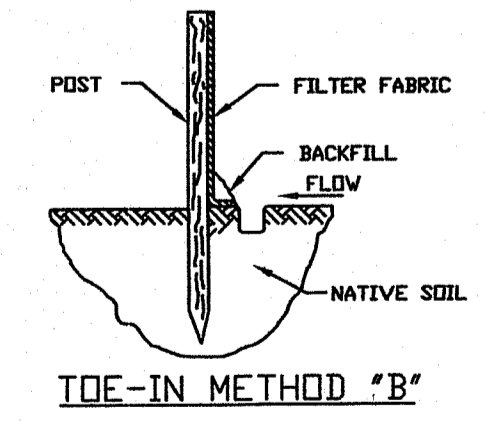
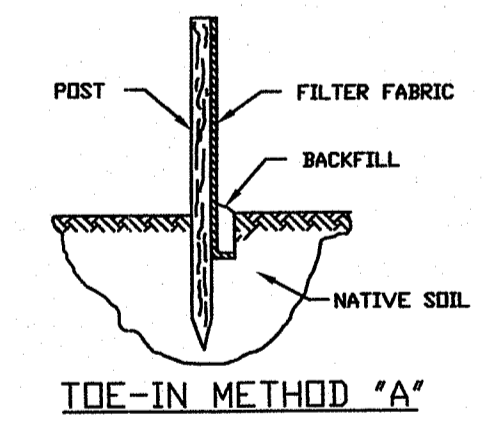
AREAS TO ALLOW
TO REGROW
(SEE PLANTING CHART
FOR DETAILS)

EXISTING GOLF COURSE
NO OWTS OR WELL
WITHIN 200'

AREAS TO ALLOW
TO REGROW
NATURALLY

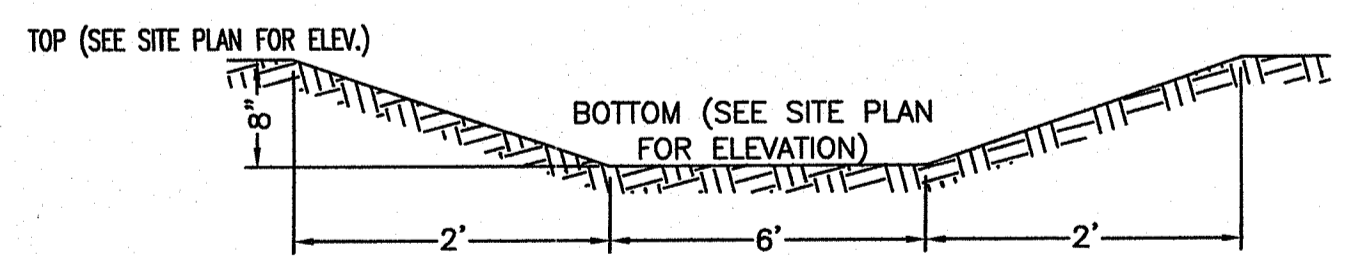
LEGEND

- - - 56 - - - EXISTING CONTOURS
- - - 56x5 - - - PROPOSED CONTOURS
- - - W - - - EXISTING WATER LINE
- - - PW - - - PROPOSED WATER LINE
- - - E - - - EXISTING OVERHEAD ELECTRIC
- - - PE - - - PROPOSED OVERHEAD ELECTRIC
- - - SF - - - PROPOSED SILT FENCE
- ⊙ TEST PIT
- 56x5 EXISTING SPOT GRADE
- 56x5 PROPOSED SPOT GRADE
- ⊙ PROPOSED DOWNSPOUT
- ⊙ Buffer Zone Markers - see permit condition number 16.



SILT FENCE DETAIL
NOT TO SCALE

VEGETATED SWALE
NOT TO SCALE



GENERAL MAINTENANCE REQUIREMENTS FOR VEGETATED SWALE:

- SWALE SHOULD BE MOWED AT LEAST ONCE PER GROWING SEASON TO PREVENT ESTABLISHMENT OF WOODY GROWTH AND OTHER UNDESIRABLE PLANTS TO INHIBIT PROPER PERFORMANCE. GRASS VEGETATION SHOULD NOT BE CUT SHORTER THAN 4 INCHES.
- BARE SPOTS AND ERODED AREAS WITHIN THE SWALE MUST BE RESEED IMMEDIATELY FOLLOWING OBSERVATIONS TO PREVENT SUBSEQUENT FAILURE OF THE SYSTEM.
- SWALE SHOULD BE INSPECTED ON A SEMI-ANNUAL BASIS. ALL TRASH AND OTHER LITTER MUST BE REMOVED DURING INSPECTIONS.
- SEDIMENTS SHOULD BE REMOVED AT LEAST ONCE PER YEAR OR MORE FREQUENTLY IF SEDIMENTS ARE OVER TOPPING CHECK-DAMS. ACCUMULATED SEDIMENTS MUST BE REMOVED MANUALLY TO PREVENT DAMAGE TO THE SWALE. RESEEDING MAY BE NECESSARY AFTER SEDIMENT REMOVAL OPERATIONS, ESPECIALLY IF EXCESSIVE DAMAGE IS DONE TO VEGETATION.

RI STORMWATER MANAGEMENT GUIDANCE FOR INDIVIDUAL SINGLE FAMILY RESIDENTIAL LOT DEVELOPMENT

- STEP 1: NEW ROOFTOP AREAS - 1204 SF FOR DWELLING & 1080 SF FOR GARAGE
- STEP 2: LOCATION OF CONTROLS - SILTY SOILS, 12" O.G. (18" E.G.) WT AS PER SOIL EVALUATION
- STEP 3: STORMWATER CONTROL - VEGETATED SWALE FOR ROOF RUNOFF
- STEP 4: SIZE OF CONTROL, WQ - VEGETATED SWALE FOR DWELLING 224 SF REQUIRED & 240 SF PROVIDED
- STEP 5: SITE PLAN - INCLUDED

NOTES
SITE DOES NOT LIE IN A FLOOD PLAIN AS PER FIRM MAP 44005C0084J DATED 9-4-13.

VARIANCES REQUESTED:
RULE 6.33(E)
DEPTH TO GROUNDWATER LESS THAN 24". ACTUAL DEPTH TO GROUNDWATER IS 12" FROM ORIGINAL GRADE & 18" FROM EXISTING GRADE.

PLANTING CHART:

- TREES**
- FLOWERING DOGWOOD (CORNUS FLORIDA)
 - OAK (ONE OF MANY SPECIES TO CHOOSE FROM)
 - YELLOW BIRCH (BETULA ALLEGHENIENSIS)
- SHRUBS**
- MOUNTAIN LAUREL (KALMIA LATIFOLIA)
 - HIGHBUSH BLUEBERRY (VACCINIUM CORYMBOSUM)
 - MALEBERRY (LYONIA LIGUSTRINA)
- GROUND COVER**
- CONSERVATION SEED MIX, OR NE SHOWY WILDFLOWER MIX (PURCHASED AT NE WETLAND PLANTS, INC.)
 - FERNS (PLUGS)
- TREES SHALL BE 1" CALIPER AND SHRUBS SHALL BE 3 GALLON AND SPACED GENERALLY 8'-10' ON CENTER TO FORM A DENSE AND NATURAL SCREEN WHEN GROWN TO MATURE HEIGHTS.

REVISED 1/08/21: PER WETLANDS & DEM COMMENTS
 REVISED 10/08/20: PER WETLANDS & DEM COMMENTS
 REVISED 07/13/20: PER DEM COMMENTS

ONSITE WASTEWATER TREATMENT SYSTEM

PREPARED FOR: JONATHAN AND BRENDA TAGGART 31 GRAIN TERRACE PORTSMOUTH, RI 02871	SCALE: 1" = 20' DATE: 06/17/20
OWNED BY: JONATHAN & BRENDA TAGGART LOCATION: MAP 51, LOT 56 187-189 LOCUST STREET, PORTSMOUTH	DRAWN: AB DESIGN: TC CHECKED: TC
Mount Hope ENGINEERING CIVIL/ENVIRONMENTAL SERVICES Post Office Box 943 Portsmouth, Rhode Island 02871 (401) 683-1934/(508) 379-1234	PROJECT NO. 2020-148 SHEET NO. 1 OF 1

Environmental Management
 JAN 13 2021
 Office of Water Resources