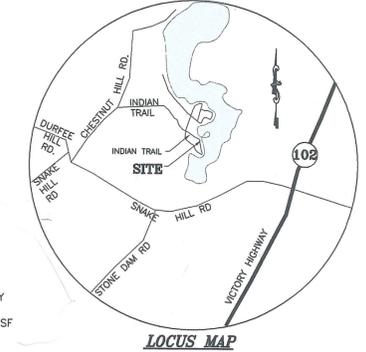


SUNRISE GARDENS PLAT
LOT 14 & 15
N/F Richard Harrington

SMITH AND SAYLES RESERVOIR
KEACH POND

- LEGEND**
- X 250 EXISTING SPOT ELEVATIONS
 - 260 EXISTING CONTOUR ELEVATION
 - 260 PROPOSED CONTOUR ELEVATION
 - EXISTING CONDITION
 - PROPOSED CONDITION
 - PROPERTY LINE
 - TH 1 ISDS TEST HOLE
 - EXISTING WELL
 - WETLAND SETBACKS
 - LIMIT OF DISTURBANCE / EROSION CONTROLS



O.W.T.S. DESIGN DATA:
SYSTEM TO SERVE SINGLE FAMILY 2-BEDROOM HOUSE
DAILY DESIGN FLOW = 115 GPD/BED * 2 BEDS = 230 GAL / DAY
BSF LOADING RATE = 1.5 GAL/SF/DAY (SOIL CATEGORY 9)
DISPERSAL AREA REQUIRED = 230 GPD / 1.5 GPD/SF = 153.3 SF
DISPERSAL AREA PROVIDED = 155 SF

SYSTEM ELEVATIONS

INVERT ELEVATIONS	
DWELLING SEWER	438.15
SEPTIC TANK IN	437.75
SEPTIC TANK OUT	439.50
ADVANTEK IN	441.30
ADVANTEK OUT	439.00
RECIRCULATING VALVE IN	438.85
PUMP BASIN IN	438.65
PUMP BASIN OUT	438.5±
BSF LATERAL	441.70

GENERAL NOTES

- A PORTION OF THIS LOT IS IN A FLOOD HAZARD ZONE AE, BASE FLOOD ELEVATION DETERMINED TO BE 438' MSL, ACCORDING TO THE NATIONAL FLOOD INSURANCE RATE MAP: COMMUNITY PANEL NUMBER 440034 0010 C. NO SIGNIFICANT GRADE CHANGES OR WORK IS PROPOSED WITHIN THE FLOOD ZONE.
- ALL DESIGN, CONSTRUCTION AND MAINTENANCE REQUIREMENTS SHALL BE IN CONFORMANCE WITH THE LATEST AMENDED VERSION OF THE RHODE ISLAND RULES & REGULATIONS ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION, DESIGN, CONSTRUCTION, AND MAINTENANCE OF ON SITE WASTE WATER TREATMENT SYSTEMS.
- BENCHMARK IS SET WITHIN 150' OF PROPOSED OWTs (SEE SITE PLAN).
- THERE ARE NO PROPOSED SUBSURFACE, FOUNDATION, OR STORM DRAINS WITHIN 25' OF THE PROPOSED OWTs.
- THERE ARE NO PUBLIC WELLS WITHIN 500' OF THE PROPOSED SYSTEM. ALL WELLS WITHIN 200' OF THE SYSTEM HAVE BEEN SHOWN. ALL WELLS SHOWN ARE PRIVATE. THERE ARE NO ACTIVE WELLS WITHIN 100 FEET OF THE PROPOSED FIELD. A NON-ACTIVE WELL LIES 92' FROM THE PROPOSED SYSTEM (WELL SHOWN WITHOUT A WATERLINE ON OWTs 1913-0351).
- THIS LOT HAS RECEIVED RIDEM FRESHWATER WETLANDS APPROVAL 11-0038 (7/20/20).
- PROPERTY LINES ARE ACCURATE, SHOWN FROM CLASS 1 SURVEY PLAN.
- VEGETATION WILL BE ESTABLISHED ON THE PROPERTY AND MAINTAINED. NO HARMFUL PESTICIDES OR HERBICIDES SHALL BE USED IN PROXIMITY OF THE POND OR WETLANDS BUFFER.

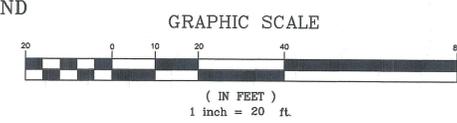
NOTICE TO INSTALLERS & OWNERS

- THE INSTALLER MUST NOTIFY THE LICENSED DESIGNER AT LEAST 5 DAYS PRIOR TO THE START OF CONSTRUCTION WITH A VALID INSTALLERS LICENSE NUMBER. A PRE-CONSTRUCTION MEETING WITH THE ENGINEER, INSTALLER, AND HOMEOWNER SHALL THEN BE SCHEDULED PRIOR TO COMMENCING ANY WORK.
- THE INSTALLER SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES WITH DIGSAFE OR OTHER APPROPRIATE UTILITIES PRIOR TO CONSTRUCTION.
- THE INSTALLER SHALL NOTIFY THE ENGINEER OF HIS/HER PROGRESS SO THAT THE ENGINEER CAN INSPECT AND MAKE MEASUREMENTS OF THE SYSTEM INSTALLATION AS REQUIRED.
- THE INSTALLER SHALL PROVIDE THE DESIGNER WITH A LIST OF ALL MATERIALS USED, THEIR SOURCE, AND THE DATES DELIVERED TO THE SITE.
- THE HOMEOWNER SHALL CONTRACT WITH A MAINTENANCE SERVICE PROVIDER FAMILIAR WITH ADVANCED TREATMENT SYSTEMS. A MAINTENANCE CONTRACT SHALL BE RECORDED BY THE HOMEOWNER IN THE LAND EVIDENCE RECORDS OF THE TOWN.
- THE DESIGNER IS NOT RESPONSIBLE FOR ANY NEGLIGENT ACT OF OMISSION OF THE USE OF AN ISDS, INCLUDING BUT NOT LIMITED TO FAILURE TO PROPERLY OPERATE AND MAINTAIN THE SYSTEM. VEHICLE MOVEMENT OVER THE SYSTEM SHALL BE PREVENTED. NO BACKWASH FROM DRINKING WATER TREATMENT SYSTEMS SHALL BE CONNECTED TO THE ISDS. GARBAGE DISPOSALS ARE NOT RECOMMENDED.

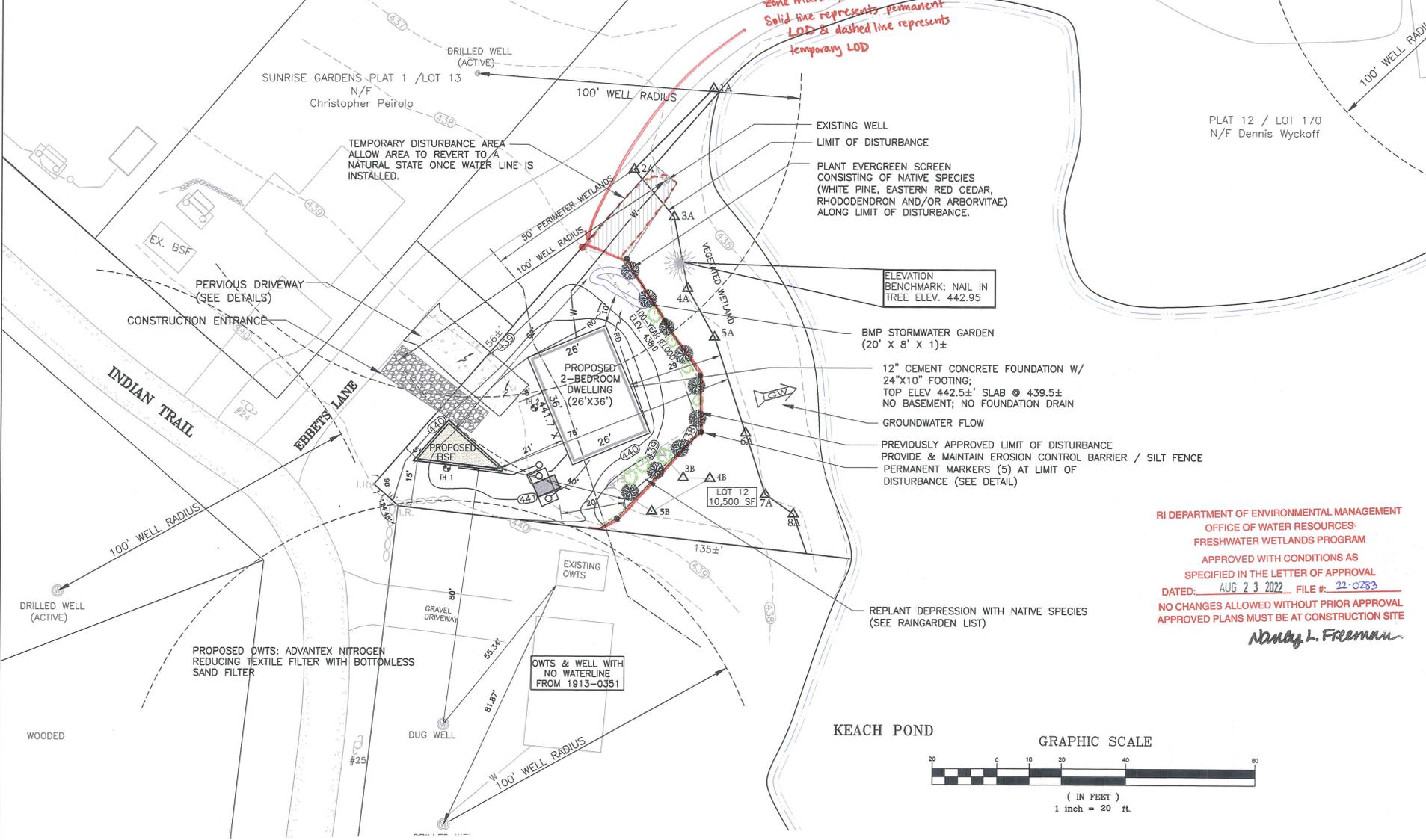
O.W.T.S. COMPONENTS:

- ALL GRAVITY PIPE SHALL BE INTERCONNECTED SCH-35, UNLESS OTHERWISE SPECIFIED.
- THE PROPOSED SEPTIC TANK SHALL BE PROVIDED WITH A SDR 40 PVC INLET TEE. AN ORENCO PUMP VAULT WITH A BIOTUBE EFFLUENT FILTER SHALL BE PROVIDED IN THE OUTLET END OF THE TANK. 24" DIAMETER PVC ACCESS RISERS SHALL BE INSTALLED DIRECTLY ABOVE THE INLET TEE AND BIOTUBE PUMP VAULT. RISER OPENINGS IN TANK SHALL HAVE CAST IN PLACE RISER ADAPTERS.
- ALL TANKS AND COMPONENTS SHALL BE WATERTIGHT. CONCRETE TANKS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM STANDARD C-1227-97A. CONCRETE TANKS SHALL BE SEALED WITH BUTYL RUBBER MASTIC BETWEEN SECTIONS AND WRAPPED WITH A 6" OF BUTYL MASTIC WRAP AROUND EXTERIOR OF SEAM. ALL GRAVITY INLETS AND OUTLETS SHALL BE SUPPLIED WITH RUBBER CAST-IN SEALS AND STAINLESS STEEL CLAMPS TO FASTEN BOOT AROUND PIPE. TANKS CONSISTING OF 2-PIECES WHICH ARE ASSEMBLED ONSITE SHALL BE VACUUM TESTED IN THE FIELD IN THE PRESENCE OF THE ENGINEER.
- ADVANTEK AX-20 TEXTILE FILTER IS DESIGNED; FOLLOW MANUFACTURER'S SPECIFICATIONS AND REQUIREMENTS FOR INSTALLATION, ORENCO SYSTEMS, INC., DISTRIBUTED BY ATLANTIC SOLUTIONS (401) 84-WATER.
- PUMPS SHALL BE EQUIPPED WITH A HIGH WATER ALARM. ALARM SHALL BE VISIBLE AND AUDIBLE AND SHALL BE POWERED ON A SEPARATE CIRCUIT THAN THE PUMP.
- THE CONTROL PANEL SHALL BE LOCATED ON THE EXTERIOR OF THE DWELLING IN AN AREA VISIBLE FROM THE SYSTEM. ALL ELECTRICAL WORK WILL BE COMPLETED IN CONJUNCTION WITH LOCAL AND STATE CODES.
- THE AIR INTAKE CAN BE RELOCATED IN THE FIELD BUT SHOULD REMAIN WITHIN 20' OF THE ADVANTEK UNIT.
- THE BOTTOMLESS SAND FILTER MEDIA SHALL BE HOLISTON SAND WITH EFFECTIVE SIZE OF 0.3 MM AND A UNIFORMITY COEFFICIENT OF 3.0 TO 4.0. THE MAXIMUM ALLOWABLE PERCENTAGE OF FINES PASSING THROUGH A NUMBER 200 SIEVE SHALL BE 1%. BELOW GROUND SUPPORT FOR THE SAND FILTER SHALL BE PROVIDED BY PLYWOOD SIDEWALLS LINED WITH A WATERTIGHT 30 MI. PVC LINER. ABOVE GRADE SUPPORT MAY BE PROVIDED BY RIGID AND STABLE BLOCK OR TIMBER WALLS.
- TO PREVENT FREEZING IN THE TRANSPORT LINE, THE CONTRACTOR SHALL ENSURE FREE DRAINBACK FROM THE DRAINFIELD MANIFOLD TO THE PUMP CHAMBER, AS SUCH; PROVIDE ADEQUATE (95% MAXIMUM DRY DENSITY) COMPACTION OF THE TRANSPORT LINE TRENCH; AND ENSURE THE PUMP QUICK DISCONNECT IS POSITIONED HORIZONTALLY TO ALLOW FREE DRAINING OF THE TRANSPORT LINE. A CHECK VALVE SHOULD NOT BE USED ON THE DRAINFIELD PUMP.
- ALL BACKFILL AROUND THE ADVANTEK UNIT AND SEPTIC TANK SHALL BE CLEAN AND FREE OF FINES TO ALLOW FOR DISPERSAL OF STORMWATER AWAY FROM THE TANK & TREATMENT UNIT.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: AUG 23 2022 FILE #: 22-0283
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman



75' RADIUS



per RIDEM
• Additional permanent buffer
zone marker;
Solid line represents permanent
LOD & dashed line represents
temporary LOD

PLANT EVERGREEN SCREEN
CONSISTING OF NATIVE SPECIES
(WHITE PINE, EASTERN RED CEDAR,
RHODODENDRON AND/OR ARBORVITAE)
ALONG LIMIT OF DISTURBANCE.

ELEVATION
BENCHMARK: NAIL IN
TREE ELEV. 442.95

BMP STORMWATER GARDEN
(20' X 8' X 1)±

12" CEMENT CONCRETE FOUNDATION W/
24"X10" FOOTING;
TOP ELEV 442.5± SLAB @ 439.5±
NO BASEMENT; NO FOUNDATION DRAIN

GROUNDWATER FLOW
PREVIOUSLY APPROVED LIMIT OF DISTURBANCE
PROVIDE & MAINTAIN EROSION CONTROL BARRIER / SILT FENCE
PERMANENT MARKERS (5) AT LIMIT OF
DISTURBANCE (SEE DETAIL)

REPLANT DEPRESSION WITH NATIVE SPECIES
(SEE RAINGARDEN LIST)

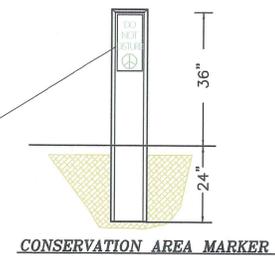
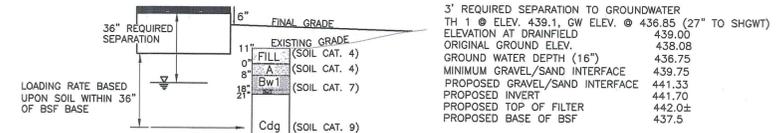
LANDSCAPING REQUIREMENTS:

- EVERGREEN SCREEN
STAGGER PLANTINGS 7' O.C.
- EVERGREEN TREES:
5' TALL BALLED AND BURLAPPED TREES
THUJA OCCIDENTALIS NIGRA - ARBORVITAE
OR JUNIPERUS VIRGINIANA - EASTERN RED CEDAR
- 3' TALL BALLED AND BURLAPPED
MYRTICA PENNSYLVANICA - NORTHERN BAYBERRY
VACCINIUM CORYMBOSUM - HIGH BUSH BLUEBERRY
ILEX VERTICILLATA - WINTERBERRY
VIBURNUM DENTATUM - SOUTHERN ARROWWOOD

SOIL BORING RESULTS

TEST HOLE #1	TEST HOLE #2
11' FILL GRAVELLY SAND, 0-sg, 1 (SOIL CAT. 1)	12' FILL GRAVELLY SAND, 0-sg, 1 (SOIL CAT. 1)
8' SILT LOAM, gr, fr (SOIL CAT. 4)	5' SILT LOAM, gr, vfr (SOIL CAT. 4)
8' SILT LOAM, 0-m, fr (SOIL CAT. 7)	5' SILT LOAM, 0-m, fr (SOIL CAT. 7)
REDOX FRATERS @ 16" FROM ORIGINAL GRADE	
8' SILT LOAM, 0-m, fip/fr (SOIL CAT. 9)	21' Bw2 VERY FINE SANDY LOAM, 0-m, fr (SOIL CAT. 7)
	8' Cd VERY FINE SANDY LOAM, 0-m, fr (SOIL CAT. 7)
	64' 2C2 GRAVELLY FINE SAND, 0-m, vfr (SOIL CAT. 2)
94± SEEPAGE; EXCAVATION HALTED	

CALCULATION OF DRAINFIELD ELEVATION



REVISIONS

NO.	DATE	DESCRIPTION



PREPARED BY:
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WICKFORD, RHODE ISLAND 02852
(401) 295-3037

RESIDENTIAL SITE PLAN
174 INDIAN TRAIL
SUNRISE GARDENS PLAT SECTION 1 / LOT 12
GLOUCESTER, RHODE ISLAND

DATE: 6/12/22
SCALE: AS SHOWN
DESIGNED: JJC

DRAWING NUMBER

