

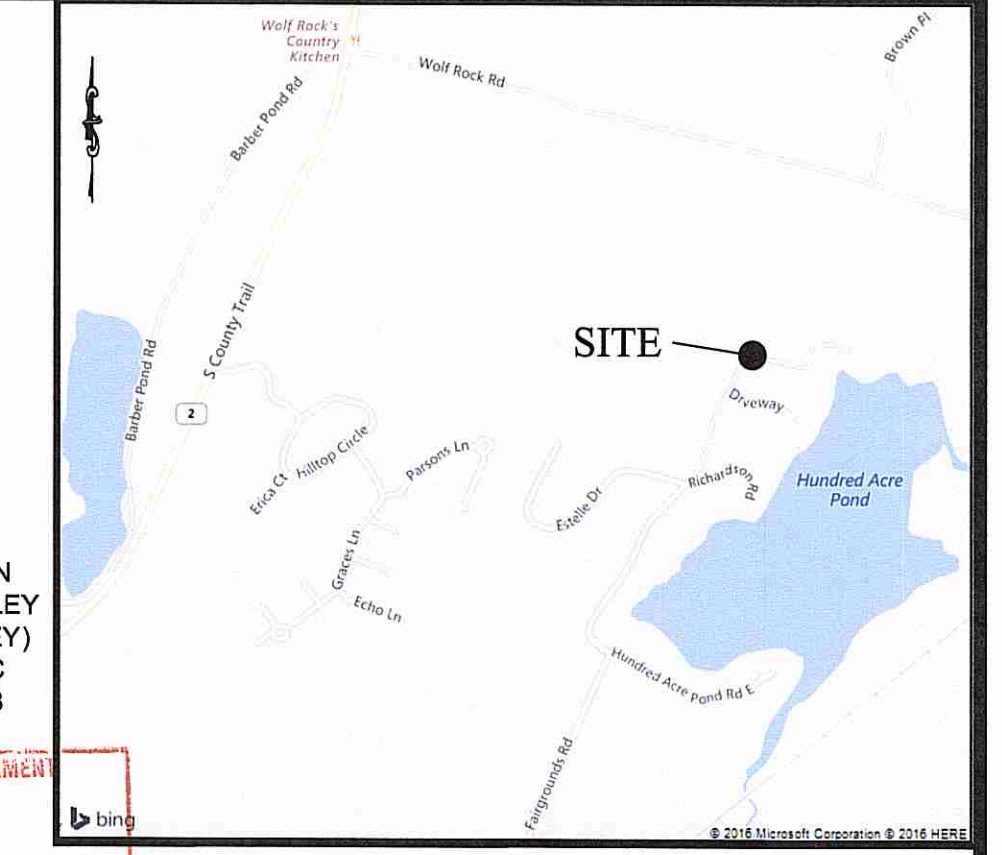
DESIGN CRITERIA:

TOTAL NUMBER OF BEDROOMS PROPOSED - 3
 DESIGN SOIL CATEGORY - 5
 ASSIGNED LOADING RATE = 0.52 GPD/SQ.FT.
 USE 115 GPD/BEDROOM
 115 GPD / BEDROOM x 3 BEDROOMS = 345 GPD/0.52 GPD/SQ.FT. = 663.5 SQ. FT.
 USE PRECAST CONCRETE FLOW DIFFUSERS W/ 12" OF CRUSHED STONE AROUND AND UNDERNEATH
 END UNIT CREDIT: 78 SQ. FT.
 INTERIOR UNIT CREDIT: 64 SQ. FT.
 TOTAL END UNITS = 4... 78 x 4 = 312 SQ. FT.
 TOTAL INTERIOR UNITS = 6... 64 x 6 = 384 SQ. FT.
 TOTAL SQ. FT. PROVIDED = 312 + 384 = 696 SQ. FT.
 APPROVED S.H.W.T. @ 120" BELOW SURFACE
 REQUIRED WATER TABLE SEPARATION = 3.0'
 WATER TABLE SEPARATION PROVIDED = 5.0'

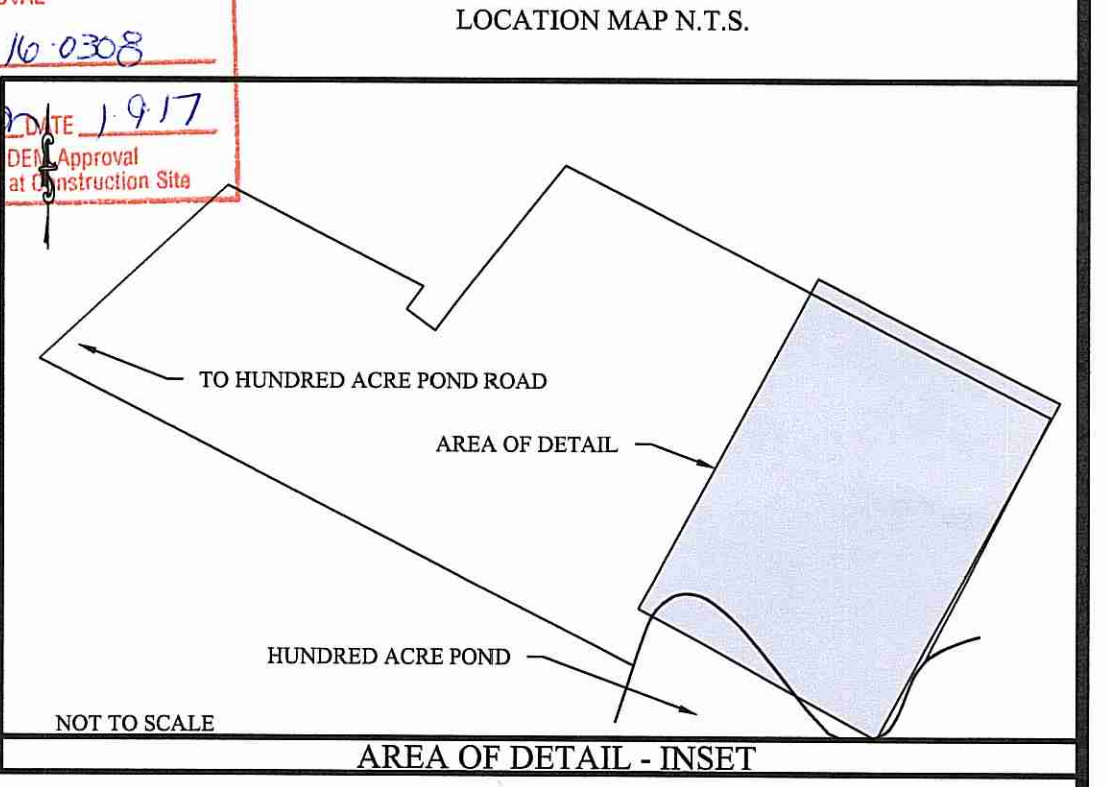
INVERT No.	LOCATION OF INVERT	INVERT ELEV.
1	BUILDING SEWER	96.60
2	SEPTIC TANK - IN	96.50
3	PUMP CHAMBER - OUT	97.26
4	D-BOX - IN	96.52
5	D-BOX - OUT	96.27
6	SHALLOW CHAMBER - INV (BEG)	96.10
7	SHALLOW CHAMBER - INV (END)	96.10

SITE CONDITIONS

LOT: 1
 A.M.: 10-4
 AREA: 7.43 ACRES
 ROAD FRONTAGE: 266.48'
 ZONING DISTRICT: R-80
 SETBACKS:
 FRONT: 50 FEET
 REAR: 50 FEET
 SIDE: 40 FEET
 BUILDING COVERAGE: 20 %
 BUILDING HEIGHT: 35 FEET
 REQUIRED FRONTAGE: 200'
 SOILS: BRIDGEMPTON-CHARLTON COMPLEX (BnB) AND HINCKLEY (HkC) (REF. WEB SOIL SURVEY)
 HYDROLOGIC GROUP A - HkC
 HYDROLOGIC GROUP B - BnB



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 OWTS & FRESHWATER WETLANDS
 JOINT PERMIT APPROVAL
 OWTS# 0432 6555 PWW# 16 0308
 APPROVED *John P. Comeau* 12/11/16
 No Changes Allowed Without P.E. Approval
 Approved Plans/Permit Must Be kept at Construction Site



CALCULATION OF WATER TABLE ELEVATIONS:

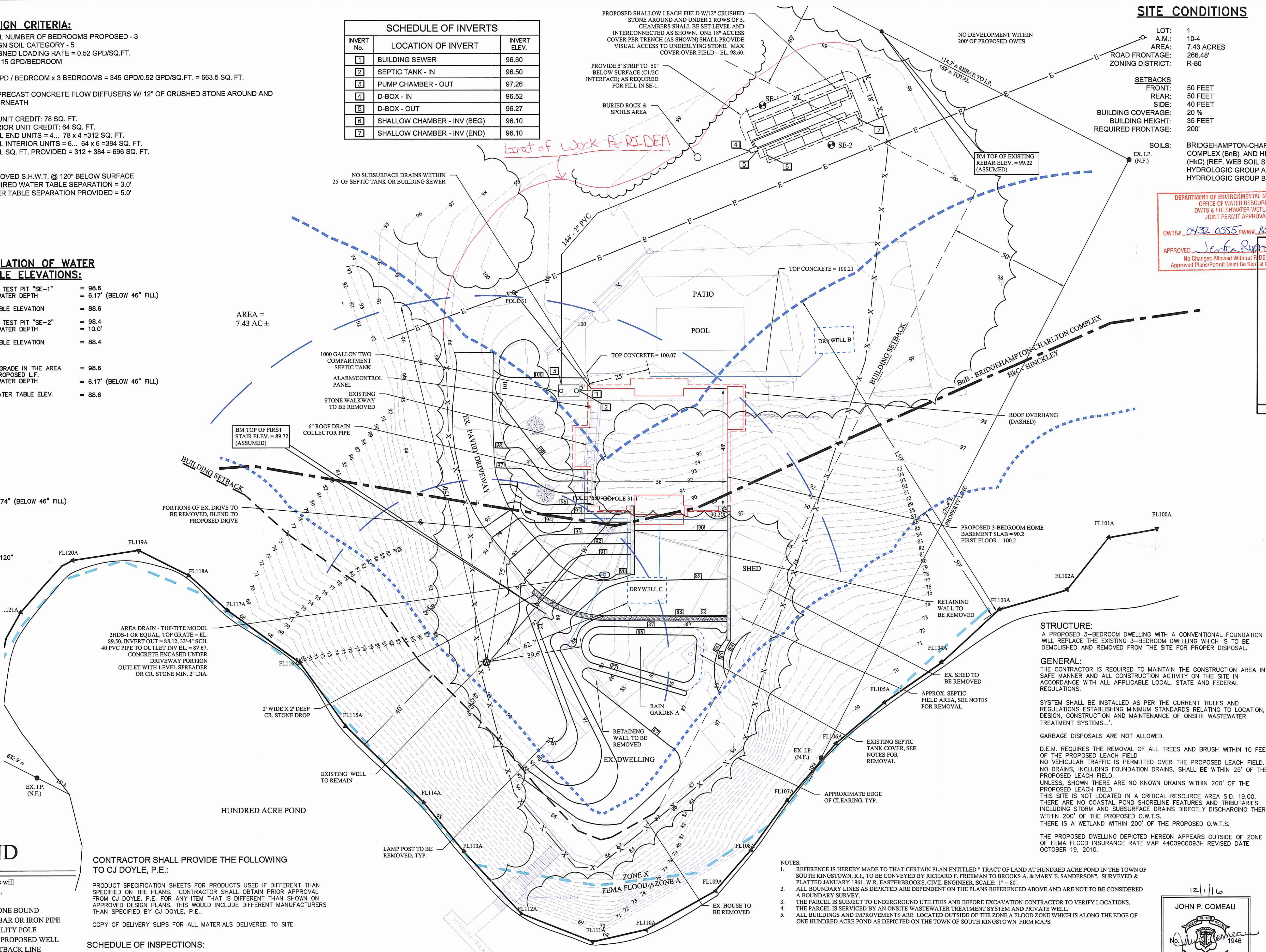
GRADE AT TEST PIT "SE-1" = 98.6
 GROUND WATER DEPTH = 6.17' (BELOW 46" FILL)
 WATER TABLE ELEVATION = 88.6
 GRADE AT TEST PIT "SE-2" = 98.4
 GROUND WATER DEPTH = 10.0'
 WATER TABLE ELEVATION = 88.4
 AVERAGE GRADE IN THE AREA OF THE PROPOSED LF = 98.6
 GROUND WATER DEPTH = 6.17' (BELOW 46" FILL)
 DESIGN WATER TABLE ELEV. = 88.6

SOIL NOTES:

OCTOBER 21, 2016
 TEST HOLE #1 (Elev. 98.6)
 46-10" FILL
 10-0" CI
 0-1" Ab, 10YR3/3, sil, 1sbkf, fr
 1-2" Bw, 2.5Y5/3, sil, 1sbkf, fr
 2-4" C1, 2.5Y5/4, sil, 1sbkf, fr
 4-74" 2C, 5Y7/3, s, 0-eg, 1
 DEPTH TO GROUNDWATER TABLE = 74" (BELOW 46" FILL)
 GROUNDWATER ELEV. = 88.6
 Test Hole #2 (Elev. 98.4)
 0-6" Ap, 10YR3/3, sil, 1sbkf, fr
 6-36" Bw, 2.5Y5/6, sil, 1sbkf, fr
 36-48" C1, 2.5Y5/4, sil, 0-m, fr
 48-120" C2, 5Y7/3, s, 0-eg, 1
 DEPTH TO GROUNDWATER TABLE = 120"
 GROUNDWATER ELEV. = 88.4

NO SUBSURFACE DRAINS WITHIN 25' OF SEPTIC TANK OR BUILDING SEWER

AREA = 7.43 AC ±



WATER SUPPLY:
 ALL WATER SUPPLY LINES SHALL NOT COME WITHIN 25' OF THE PROPOSED LEACH FIELD AND 10' OF THE PROPOSED SEPTIC TANK. UNLESS SHOWN THERE ARE NO KNOWN EXISTING OR PROPOSED WELLS WITHIN 200 FEET OF THE PROPOSED LEACH FIELD. THERE ARE NO KNOWN EXISTING OR PROPOSED PUBLIC WELLS WITHIN 500' OF THE PROPOSED LEACH FIELD.

UTILITIES:
 THE LOCATION OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY AND HAVE BEEN SHOWN USING THE BEST AVAILABLE DATA.

THE CONTRACTOR SHALL CONTACT "DIG-SAFE" AND/OR OTHER APPROPRIATE UTILITY COMPANIES TO ASCERTAIN THE EXACT LOCATION OF THE RESPECTIVE UTILITY PRIOR TO CONSTRUCTION. UTILITIES INCLUDE BUT ARE NOT LIMITED TO GAS, ELECTRIC, WATER, TELEPHONE CABLE TV, ETC.

WETLANDS:
 WETLANDS FLAGGING FOR THE SUBJECT PROPERTY WAS PERFORMED BY ECOTONES, INC. ON NOVEMBER 1, 2016. FLAG SERIES A-100 TO A-122 DEPICT THE POND/EDGE OF WETLAND AND HAS AN ASSOCIATED 50' PERIMETER WETLAND.

STRUCTURE:
 A PROPOSED 3-BEDROOM DWELLING WITH A CONVENTIONAL FOUNDATION WILL REPLACE THE EXISTING 3-BEDROOM DWELLING WHICH IS TO BE DEMOLISHED AND REMOVED FROM THE SITE FOR PROPER DISPOSAL.

GENERAL:
 THE CONTRACTOR IS REQUIRED TO MAINTAIN THE CONSTRUCTION AREA IN A SAFE MANNER AND ALL CONSTRUCTION ACTIVITY ON THE SITE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

SYSTEM SHALL BE INSTALLED AS PER THE CURRENT 'RULES AND REGULATIONS ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION, DESIGN, CONSTRUCTION AND MAINTENANCE OF ONSITE WASTEWATER TREATMENT SYSTEMS...'

GARBAGE DISPOSALS ARE NOT ALLOWED.

D.E.M. REQUIRES THE REMOVAL OF ALL TREES AND BRUSH WITHIN 10 FEET OF THE PROPOSED LEACH FIELD. NO VEHICULAR TRAFFIC IS PERMITTED OVER THE PROPOSED LEACH FIELD. NO DRAINS, INCLUDING FOUNDATION DRAINS, SHALL BE WITHIN 25' OF THE PROPOSED LEACH FIELD.

UNLESS SHOWN THERE ARE NO KNOWN DRAINS WITHIN 200' OF THE PROPOSED LEACH FIELD.

THE PARCEL IS NOT LOCATED IN A CRITICAL RESOURCE AREA S.D. 19.00. THERE ARE NO COASTAL POND SHORELINE FEATURES AND TRIBUTARIES INCLUDING STORM AND SUBSURFACE DRAINS DIRECTLY DISCHARGING THERETO WITHIN 200' OF THE PROPOSED O.W.T.S.

THERE IS A WETLAND WITHIN 200' OF THE PROPOSED O.W.T.S.

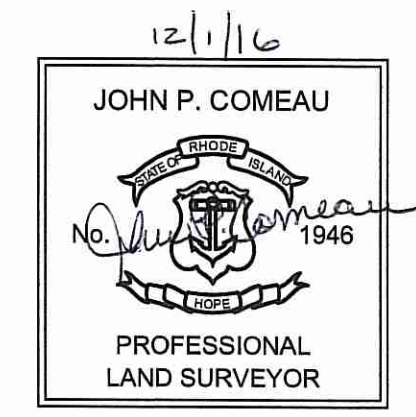
THE PROPOSED DWELLING DEPICTED HEREON APPEARS OUTSIDE OF ZONE A OF FEMA FLOOD INSURANCE RATE MAP 44099C0093H REVISED DATE OCTOBER 19, 2010.

- NOTES:**
- REFERENCE IS HEREBY MADE TO THAT CERTAIN PLAN ENTITLED "TRACT OF LAND AT HUNDRED ACRE POND IN THE TOWN OF SOUTH KINGSTOWN, R.I. TO BE CONVEYED BY RICHARD F. FREEMAN TO BROOKS A. & MARY E. SANDERSON", SURVEYED & PLATTED JANUARY 1961, W.R. EASTERBROOKS, CIVIL ENGINEER, SCALE: 1" = 80'
 - ALL BOUNDARY LINES AS DEPICTED ARE DEPENDENT ON THE PLANS REFERENCED ABOVE AND ARE NOT TO BE CONSIDERED A BOUNDARY SURVEY.
 - THE PARCEL IS SUBJECT TO UNDERGROUND UTILITIES AND BEFORE EXCAVATION CONTRACTOR TO VERIFY LOCATIONS.
 - THE PARCEL IS SERVICED BY AN ONSITE WASTEWATER TREATMENT SYSTEM AND PRIVATE WELL.
 - ALL BUILDINGS AND IMPROVEMENTS ARE LOCATED OUTSIDE OF THE ZONE A FLOOD ZONE WHICH IS ALONG THE EDGE OF ONE HUNDRED ACRE POND AS DEPICTED ON THE TOWN OF SOUTH KINGSTOWN FIRM MAPS.

CERTIFICATION:
 THIS SURVEY HAS SUBSTANTIALLY BEEN CONDUCTED AND THE PLAN HAS SUBSTANTIALLY BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON JAN. 1, 2016, AS FOLLOWS:

A. NOT A BOUNDARY SURVEY
 B. DATA ACCUMULATION SURVEY CLASS III VERTICAL CONTROL (ASSUMED) CLASS T-2
 THE PURPOSE FOR THE CONDUCT OF THE SURVEY AND FOR THE PREPARATION OF THE PLAN IS AS FOLLOWS:
 SHOW THE RELATIONSHIP FOR PROPOSED IMPROVEMENTS TO EXISTING BOUNDARY INFORMATION UTILIZING PLANS AND FIELD WORK PERFORMED BY RICHARD A. GREENE & ASSOCIATES, INC. DATED SEPT. 2014 AND PROVIDED TO JOHN P. COMEAU, P.L.S.

BY *John P. Comeau* 12/11/16
 JOHN P. COMEAU LIC #1946
 COA I.S. 000426



JOHN P. COMEAU, P.L.S.
 P.O. BOX 419
 1122 MAIN STREET
 WYOMING, RHODE ISLAND 02898
 TEL.: 401-491-9197
 LIC. CT. & R.I.

LEGEND

These standard symbols will be found in the drawing.

- — — — — EXISTING STONE BOUND
- — — — — EXISTING REBAR OR IRON PIPE
- — — — — EXISTING UTILITY POLE
- — — — — EXISTING OR PROPOSED WELL
- — — — — BUILDING SETBACK LINE
- — — — — OVERHEAD UTILITIES
- — — — — PROPOSED SPOT GRADE
- — — — — EROSION CONTROL/LIMIT OF DISTURBANCE
- — — — — FEMA FLOOD LINE
- — — — — SOIL SURVEY LINE
- — — — — WETLANDS FLAGS
- — — — — 50' PERIMETER WETLAND

CONTRACTOR SHALL PROVIDE THE FOLLOWING TO CJ DOYLE, P.E.:

PRODUCT SPECIFICATION SHEETS FOR PRODUCTS USED IF DIFFERENT THAN SPECIFIED ON THE PLANS. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM CJ DOYLE, P.E. FOR ANY ITEM THAT IS DIFFERENT THAN SHOWN ON APPROVED DESIGN PLANS. THIS WOULD INCLUDE DIFFERENT MANUFACTURERS THAN SPECIFIED BY CJ DOYLE, P.E.

COPY OF DELIVERY SLIPS FOR ALL MATERIALS DELIVERED TO SITE.

SCHEDULE OF INSPECTIONS:

- 3-BUSINESS DAYS NOTICE SHALL BE GIVEN TO CJ DOYLE, P.E. PRIOR TO THE START OF CONSTRUCTION.
- ALL INSPECTIONS SHALL REQUIRE AT LEAST 1 BUSINESS DAYS NOTICE TO CJ DOYLE, P.E.

THE FOLLOWING INSPECTIONS ARE REQUIRED BY CJ DOYLE, P.E.:

- BOTTOM OF EXCAVATION FOR LEACH FIELD.
- PRIOR TO COVERING ANY COMPONENT OR PIPING.
- PRIOR TO COVERING THE WATERLINE FROM THE WELL OR THE MUNICIPAL WATER SERVICE. THE LINE MUST BE COMPLETELY INSTALLED AND EXPOSED FROM SOURCE TO FINAL DESTINATION.
- FINAL GRADING AND 10' FILL PERIMETERS.
- CHECKING OF PUMPS, CONTROL PANEL AND FLOAT ELEVATIONS (WHERE APPROPRIATE).
- SUPPLIER OF GRENCO PRODUCTS TO PERFORM THE START-UP.

EXISTING OWTS:

THE LOCATION OF EXISTING OWTS COMPONENTS ARE APPROXIMATE. THE EXISTING OWTS IS TO BE ABANDONED. THE SEPTIC TANK SHALL BE PUMPED DRY AND EITHER FILLED WITH CLEAN MATERIAL OR REMOVED OFF SITE. IF ANY UNSUITABLE MATERIAL FROM THE EXISTING OWTS IS ENCOUNTERED DURING CONSTRUCTION IT IS TO BE REMOVED FROM THE SITE AND DISPOSED OF BOTH PROPERLY AND LEGALLY. ALTERNATIVELY, MATERIAL ENCOUNTERED WHICH IS SUITABLE FOR FILL SHALL BE PERMITTED TO BE BURIED ONSITE PROVIDED SUCH SUITABLE AREA EXISTS ON-SITE. IF MATERIAL IS REQUIRED TO BE DISPOSED OF AT A LICENSED SOLID WASTE FACILITY, COPIES OF ALL TIPPING SLIPS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW. ANY ADDITIONAL QUANTITIES OF FILL MATERIAL THAT IS REQUIRED TO BE BROUGHT ON-SITE SHALL BE VERIFIED FOR QUANTITIES BY THE ENGINEER.



CJ DOYLE, P.E.
 CIVIL ENGINEERING
 MAILING ADDRESS:
 P.O. BOX 1161, HOPE VALLEY, RI
 OFFICE LOCATION:
 1122 MAIN STREET,
 WYOMING, RI
 PHONE (401) 491-9530
 cjd@jdoyle.com

NO.	DATE	DESCRIPTION	BY

DRAWING TITLED:
PROPOSED DWELLING AND ALTERATION OF AN ONSITE WASTEWATER TREATMENT SYSTEM

LOCATED ON:
LOT 1 PLAT 10-4

OWNED BY:
ALLISON L. ARNOLD

ADDRESS:
**301 HUNDRED ACRE POND ROAD
 IN THE TOWN OF SOUTH KINGSTOWN, RI**

NOVEMBER 18, 2016
 DESIGNED BY:
CAROLYN J. DOYLE, P.E.

SCALE: 1" = 20'
 DRAWN BY: CJD
 CHECKED BY: CJD

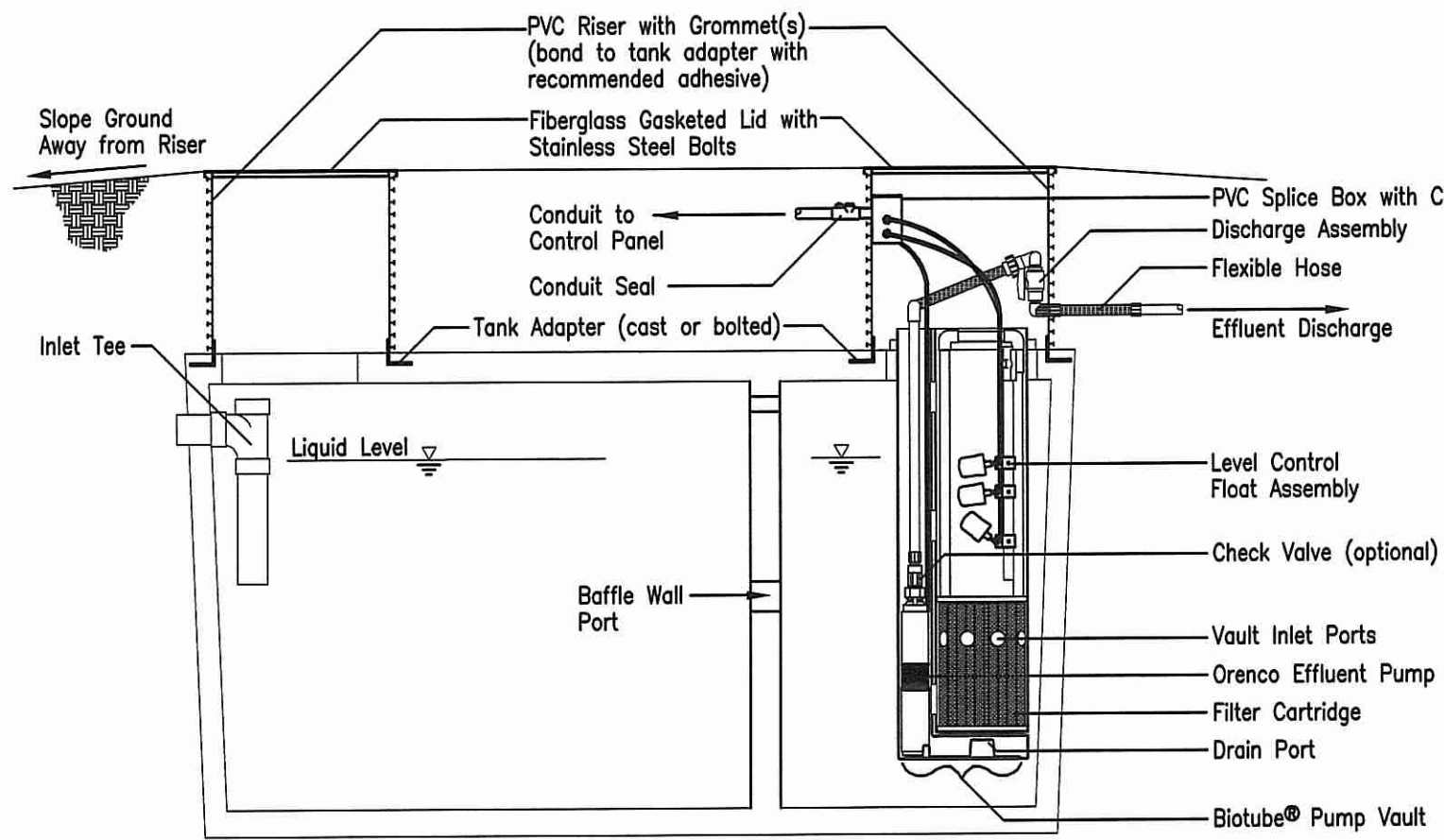
SHEET 1 OF 2

CAROLYN J. DOYLE 2016
CAROLYN J. DOYLE
 No. 5078
 REGISTERED PROFESSIONAL ENGINEER

Effluent Pumping System - Dual Compartment Drawdown



Oranco Systems®
 814 ARWAY AVENUE
 SUDBURY, ONTARIO
 97479-9012
 TELEPHONE:
 (541) 459-4449
 FACSIMILE:
 (541) 459-2884

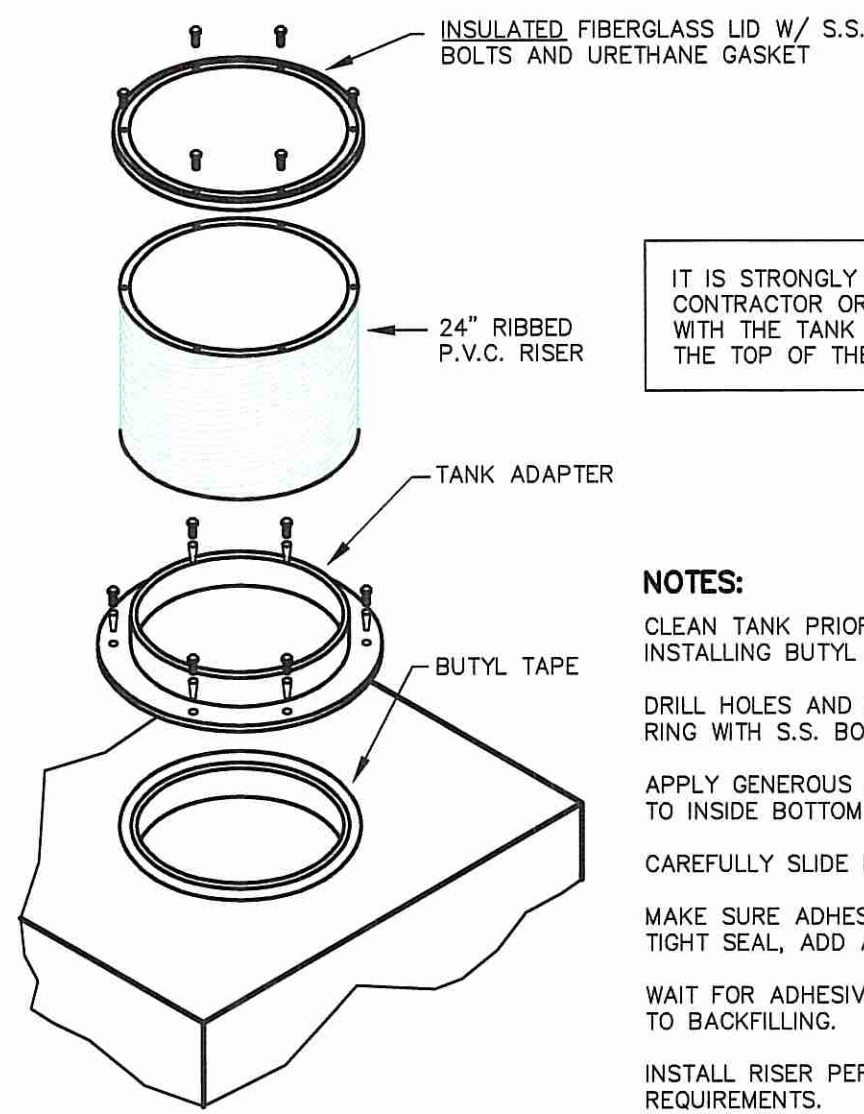


FLOAT SETTINGS:
 HIGH WATER FLOAT: 96.50
 PUMP-OFF FLOAT: 95.50
 PUMP-ON FLOAT: 94.63

BASED ON PERFORMANCE CURVE, PUMP RUNS AT 25 GPM. AVERAGE PUMP DOSE IS 225 GALLONS. BASED ON EXPECTED USE, PUMP WILL RUN APPROX. 5.0 MINUTES, APPROXIMATELY 1.5 TIMES PER DAY.

NOTE:
 SEPTIC TANK SHALL BE A TWO-COMPARTMENT (1,000 GALLON STANDARD H-10 RATED), PRECAST CONCRETE SEPTIC TANK.

NDW-TD-04
 Rev. 2.0 (10/02)

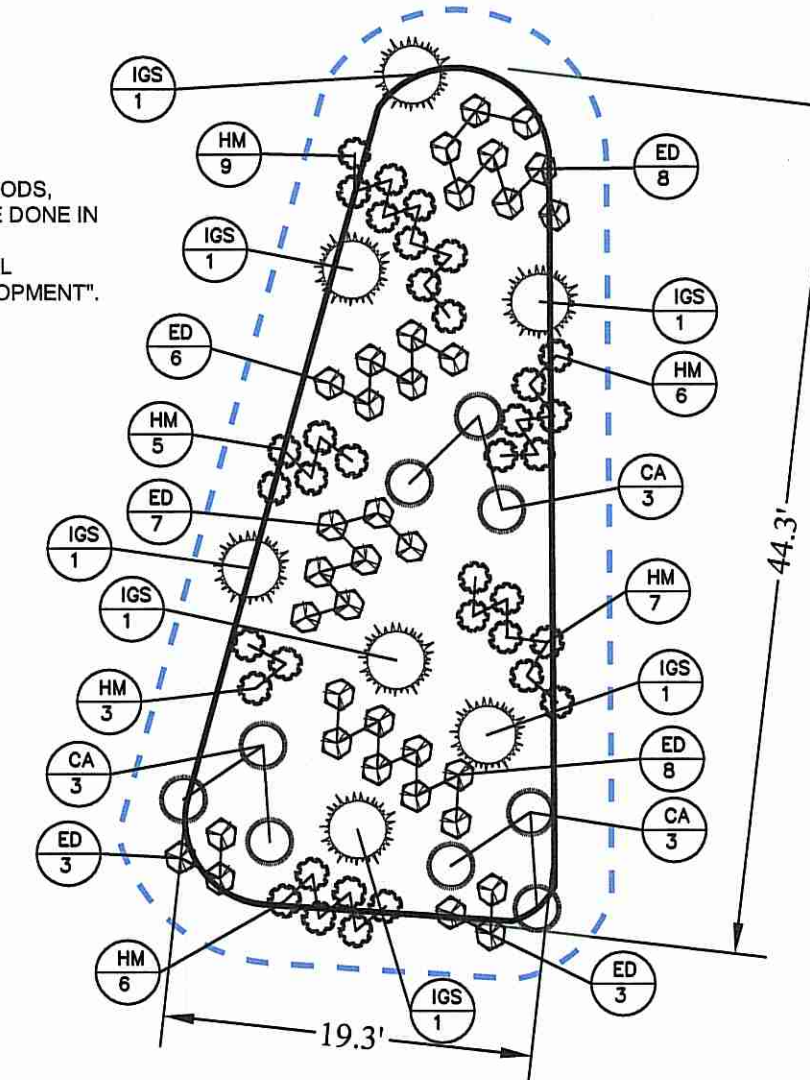


MANHOLE RISER DETAIL
 NOT TO SCALE

IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR ORDER THE SEPTIC TANK WITH THE TANK ADAPTER PRECAST IN THE TOP OF THE SEPTIC TANK.

NOTES:
 CLEAN TANK PRIOR TO INSTALLING BUTYL TAPE.
 DRILL HOLES AND FASTEN ADAPTER RING WITH S.S. BOLTS, TIGHTEN EVENLY.
 APPLY GENEROUS AMOUNT OF ADHESIVE TO INSIDE BOTTOM OF RISER.
 CAREFULLY SLIDE RISER ONTO RING.
 MAKE SURE ADHESIVE FORMS A WATER-TIGHT SEAL, ADD ADHESIVE AS REQ'D.
 WAIT FOR ADHESIVE TO HARDEN PRIOR TO BACKFILLING.
 INSTALL RISER PER MANUFACTURER'S REQUIREMENTS.
 MANUF: ORANCO SYSTEMS, (503) 459-4449.

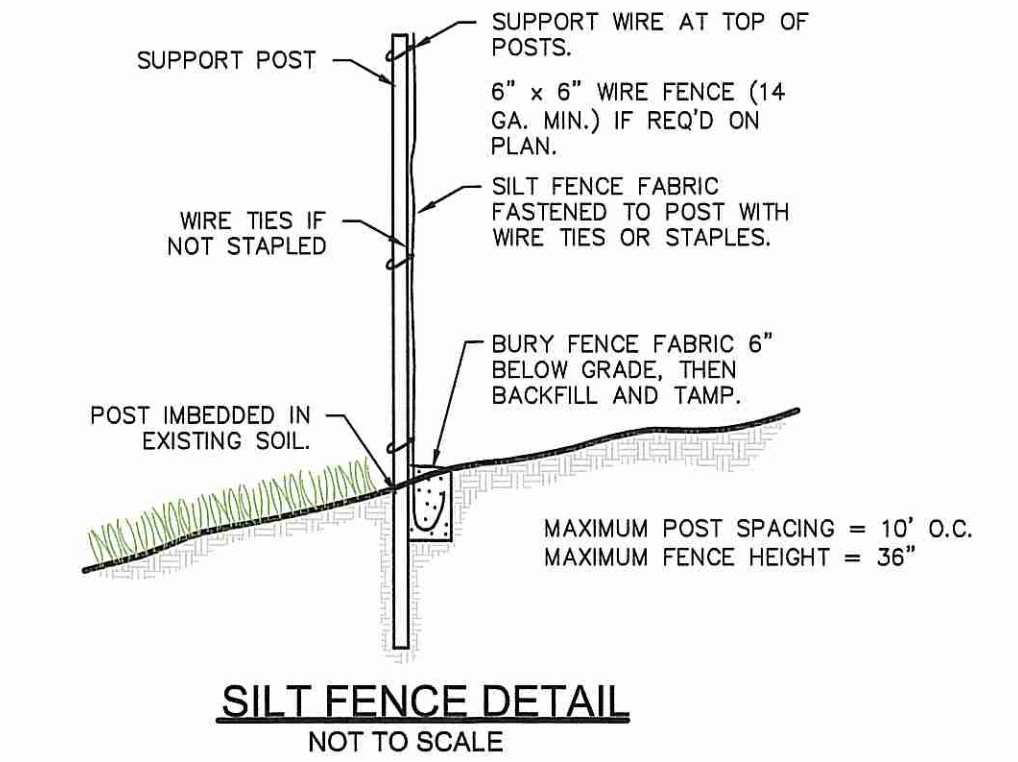
RAIN GARDEN NOTES:
 ALL RAIN GARDEN CONSTRUCTION METHODS, MATERIALS AND MAINTENANCE SHALL BE DONE IN ACCORDANCE WITH THE "STATE OF RI STORMWATER GUIDANCE FOR INDIVIDUAL SINGLE-FAMILY RESIDENTIAL LOT DEVELOPMENT".



TYPICAL DETAIL PLAN VIEW OF RAIN GARDEN
 NOT TO SCALE

PLANT SCHEDULE FOR RAIN GARDENS (TOTAL)

Perennials / ground cover					
ED	35	Eupatorium dubium "Little Joe"	Joe Pys Weed	#1	30" O.C.
HM	36	Hibiscus moscheutos	Rose Mallow	#1	2' O.C.
Shrubs					
CA	9	Clethra alnifolia	Sweet pepperbush	#5	5' O.C.
IGS	7	Ilex glabra "hamrock"	Shamrock Inkberry	#3	3' O.C.



SILT FENCE DETAIL
 NOT TO SCALE

EROSION AND SEDIMENTATION CONTROL NOTES:
 TEMPORARY AND/OR PERMANENT EROSION CONTROL DEVICES SUCH AS BALED HAY, SILT FENCING, ETC. SHALL BE INSTALLED PRIOR TO ANY CLEARING OR EXCAVATION. HAY BALES OR SILT FENCING SHALL BE PLACED IMMEDIATELY DOWN SLOPE AND ADJOINING AREAS OF SOIL DISTURBANCE AND STOCKPILES. INSTALLATION OF ALL EROSION CONTROL DEVICES SHALL BE CONDUCTED IN ACCORDANCE TO DETAIL SPECIFICATIONS.

CLEARING OF EXISTING VEGETATION SHALL BE DONE IN A CONTROLLED MANNER SO AS TO AVOID EXTENSIVE AREAS OF DEPOLLATED TERRAIN SUBJECT TO EROSION. AREAS SO DISTURBED SHALL BE BROUGHT TO FINAL GRADES AND STABILIZED AS SOON AS POSSIBLE.

DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.

ALL EROSION CONTROL DEVICES SHALL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS DURING CONSTRUCTION, ESPECIALLY AFTER EACH RAINFALL.

DUE TO CHANGING CHARACTERISTICS OF THE SITE CAUSED BY AND DURING CONSTRUCTION ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS SITE CONDITIONS WARRANT.

IF CONSTRUCTION IS SUSPENDED, ALL DISTURBED AREAS SHALL BE SEEDED AND ALL NECESSARY EROSION CONTROL DEVICES SHALL BE IN PLACE AND IN GOOD WORKING ORDER. IF SEEDING IS NOT POSSIBLE THEN EROSION CONTROL MATS SHALL BE PLACED OVER ALL DISTURBED SOIL.

EROSION CONTROL BLANKETS (MATS) SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. EROSION CONTROL BLANKETS (MATS) SHALL BE MANUFACTURED BY NORTH AMERICAN GREEN OR APPROVED EQUIVALENT AND INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

ALL EROSION CONTROL METHODS, MATERIALS AND MAINTENANCE SHALL BE DONE IN ACCORDANCE WITH THE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK".

ALL AREAS WHICH ARE DISTURBED DURING CONSTRUCTION ARE TO BE BROUGHT TO FINISHED GRADE WITH AT LEAST 6" MINIMUM DEPTH OF GOOD QUALITY LOAM AND ALL SOIL AMENDMENTS DEEMED NECESSARY. THE AREA SHALL BE SEEDED WITH A QUICK GERMINATING GRASS SEED SUCH AS URI #2 OR APPROVED EQUIVALENT.

THE CONTRACTOR SHALL PROVIDE FOR ALL SEEDED AREAS TO BE WATERED AND IN GOOD CONDITION UNTIL A GOOD HEALTHY AND UNIFORM GROWTH IS ESTABLISHED OVER THE ENTIRE AREA.

TABLE OF SIZES AND INVERTS FOR STORMWATER DRAINAGE AREAS

AREA	CONTR. AREA	BOTTOM SIZE	DEPTH	OVERFLOW BERM	BOTTOM ELEV.	OVERFLOW INVERT @ BLDG	INVERT @ DRYWELL	GWT	SEPARATION TO GWT
RAIN GARDEN "A"	3,628 SF (PAVING)	44.3' x 19.3'	8"	86.80	86.00	N/A	N/A	81.33	4.67'
DRYWELL "B"	1,693 SF(1)	16' x 10.5'	N/A	N/A	94.96(2)	100.00	97.25	89.50(120')	5.46'
DRYWELL "C"	1,693 SF(1)	16' x 10.5'	N/A	N/A	83.96(2)	88.50	86.25	81.83(80')	2.07'

(1) ONE HALF OF THE ROOF AREA TO EACH INFILTRATION AREA
 (2) BOTTOM OF STONE

NOTE:
 DRYWELLS B AND C SHALL BE CULTEC 330 XLHD UNITS WITH 6" STONE UNDER AND OVER, 12" STONE ON SIDES AND ENDS, AND 6" BETWEEN CHAMBERS. EACH OF THE DRYWELLS SHALL HAVE 3 ROWS OF ONE UNIT FOR A TOTAL OF 3 UNITS EACH.

LEDGE OR BOULDER REMOVAL:

LEDGE OR BOULDER EXCAVATION IS NOT ANTICIPATED FOR THIS SITE. HOWEVER, THE CONTRACTOR SHALL PROVIDE A UNIT PRICE COST FOR LEDGE AND/OR BOULDER REMOVAL. UNIT PRICE COST WILL USE CUBIC YARD MEASURE. LEDGE AND/OR BOULDERS LESS THAN 1 CUBIC YARD IN SIZE BASED ON AVERAGE DIMENSIONS WILL NOT BE CONSIDERED PAYABLE ROCK. UNIT PRICE SHALL BE GIVEN FOR BOTH ON AND OFF SITE DISPOSAL. COST OF REPLACEMENT MATERIAL SHALL BE INCLUDED IF ADDITIONAL FILL MATERIAL IS REQUIRED.

WATER-TIGHTNESS:

CONTRACTOR SHALL TEST THE SEPTIC TANK(S) FOR WATER TIGHTNESS (IN THE PRESENCE OF C.J. DOYLE, P.E.) PRIOR TO BACK FILLING THE EXCAVATION. TESTING MAY INCLUDE: FILLING THE TANK FULL OF WATER AND LET STAND FOR 24 HOURS, (SIDE OF TANK MUST BE EXPOSED), OR ON-SITE VACUUM TESTING, OR A CERTIFICATION OF WATER TIGHTNESS BY MANUFACTURER IS ACCEPTABLE WHEN VACUUM TESTED AS PER ASTM C 1227-93. ALL INLETS AND OUTLETS SHALL HAVE PRESS SEALS PRECASTED.

CONFINED SPACE SIGNS:

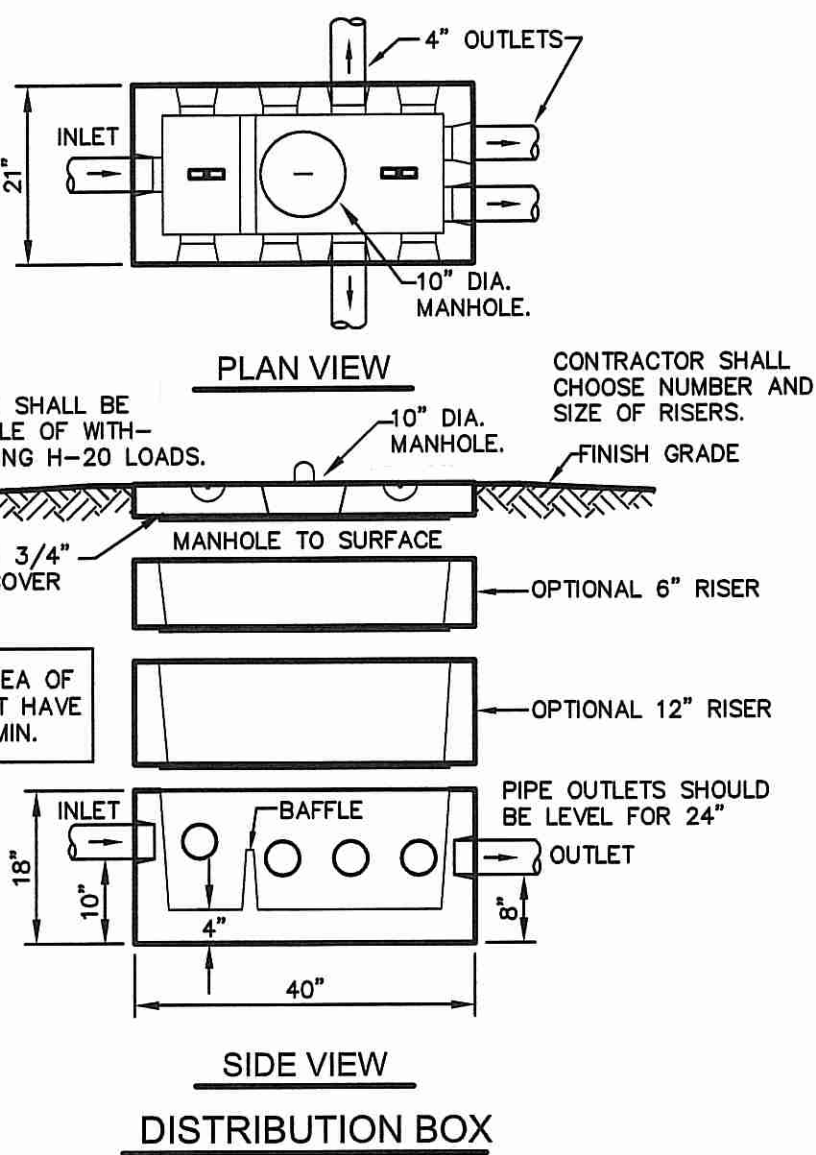
PERMANENT DURABLE CORROSION RESISTANT SIGNS INDICATING "CONFINED SPACE - ENTRY BY PERMIT ONLY" SHALL BE PLACED AT EACH TANK AND PUMP CHAMBER SIDEWALL OF RISER. SIGNS SHALL MEET O.S.H.A. REQUIREMENTS FOR SIZE, MARKINGS AND LOCATION.

CONSTRUCTION NOTE:

ALL UNOCCUPIED SIDE INLETS OF FLOW DIFFUSERS ARE TO BE CAPPED OFF PROPERLY WITH PVC CAP OR CEMENT. ALSO, FLOW DIFFUSERS TROUGH MUST BE CLEANED PROPERLY OF ALL CEMENT FRAGMENTS AND LOOSE STONE.

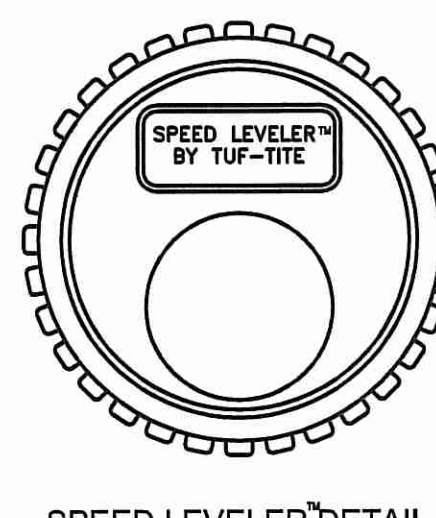
EXCAVATION:

THE AREA BENEATH THE PROPOSED LEACH FIELD SHALL BE EXCAVATED DOWN TO THE 2C SOIL STRATA (SAND) APPROXIMATELY 50" BELOW THE EXISTING GRADE. BACKFILL THE EXCAVATION WITH CLEAN INDRAIN SAND OR BANK RUN GRAVEL COMPACTED IN 6" LIFTS.



DISTRIBUTION BOX
 NO SCALE

SEE MAIN PLAN AND NOTES FOR NUMBER OF OUTLETS.
 D-BOX SPECIFICATION TAKEN FROM JOLLEY PRECAST, INC. DANIELSON, CONNECTICUT 1-800-582-4638 OR APPROVED EQUAL.



SPEED LEVELER DETAIL
 SCALE: NONE

SPEED LEVELERS SHALL BE INSTALLED IN EACH OUTLET PIPE OF THE DISTRIBUTION BOX UNLESS NOTED OTHERWISE.

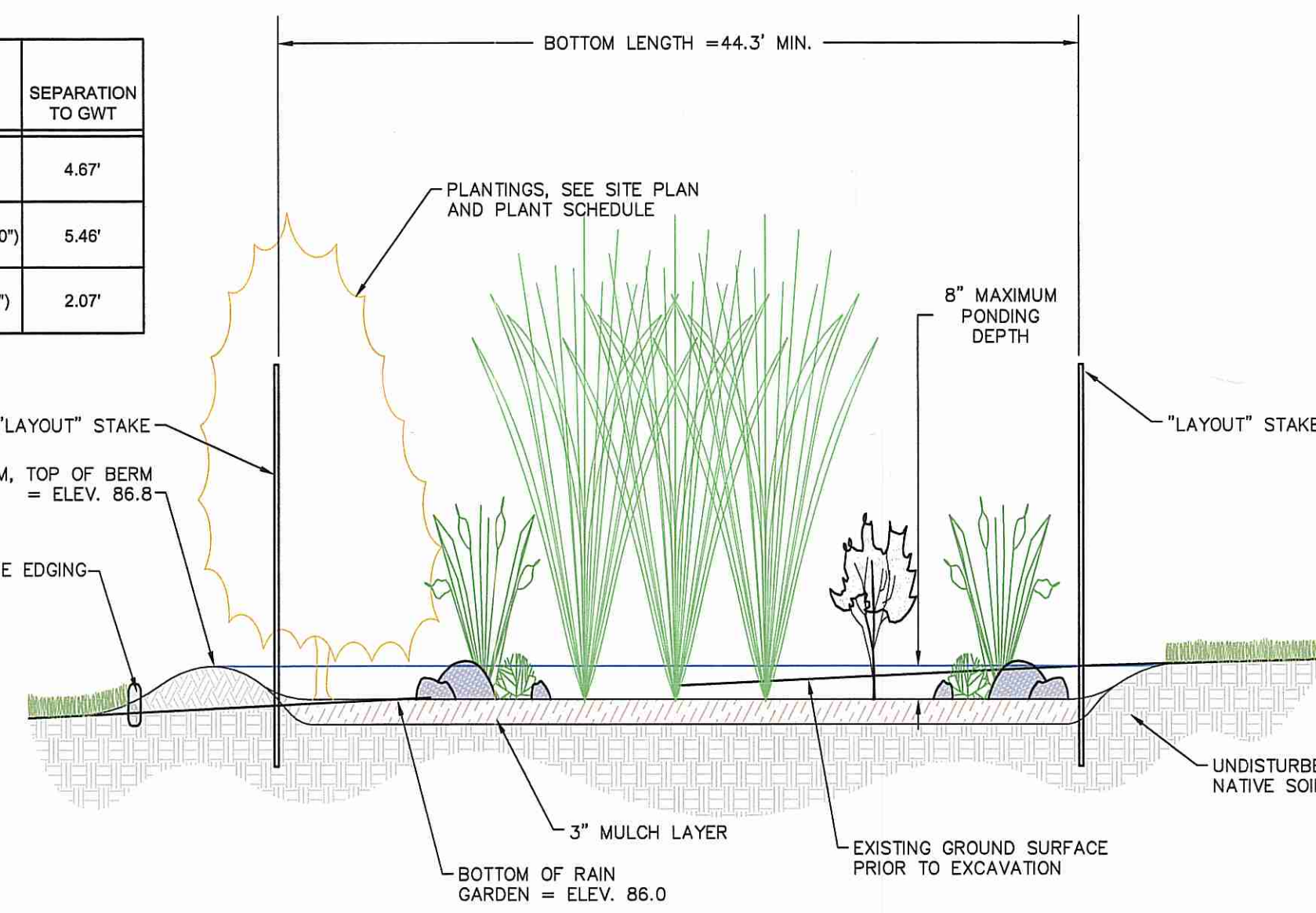
CONTRACTOR SHALL DETERMINE THE HIGHEST OUTLET ELEVATION BY FILLING THE D-BOX WITH WATER. THE SPEED LEVELER IN THE HIGHEST PIPE SHALL HAVE THE 2" HOLE AT THE SIX-O'CLOCK POSITION. ROTATE THE REMAINING LEVELERS IN THE D-BOX SO THE LIQUID LEVEL UNIFORMLY ENTERS EACH OUTLET PIPE.

GRAVEL SPECIFICATIONS:

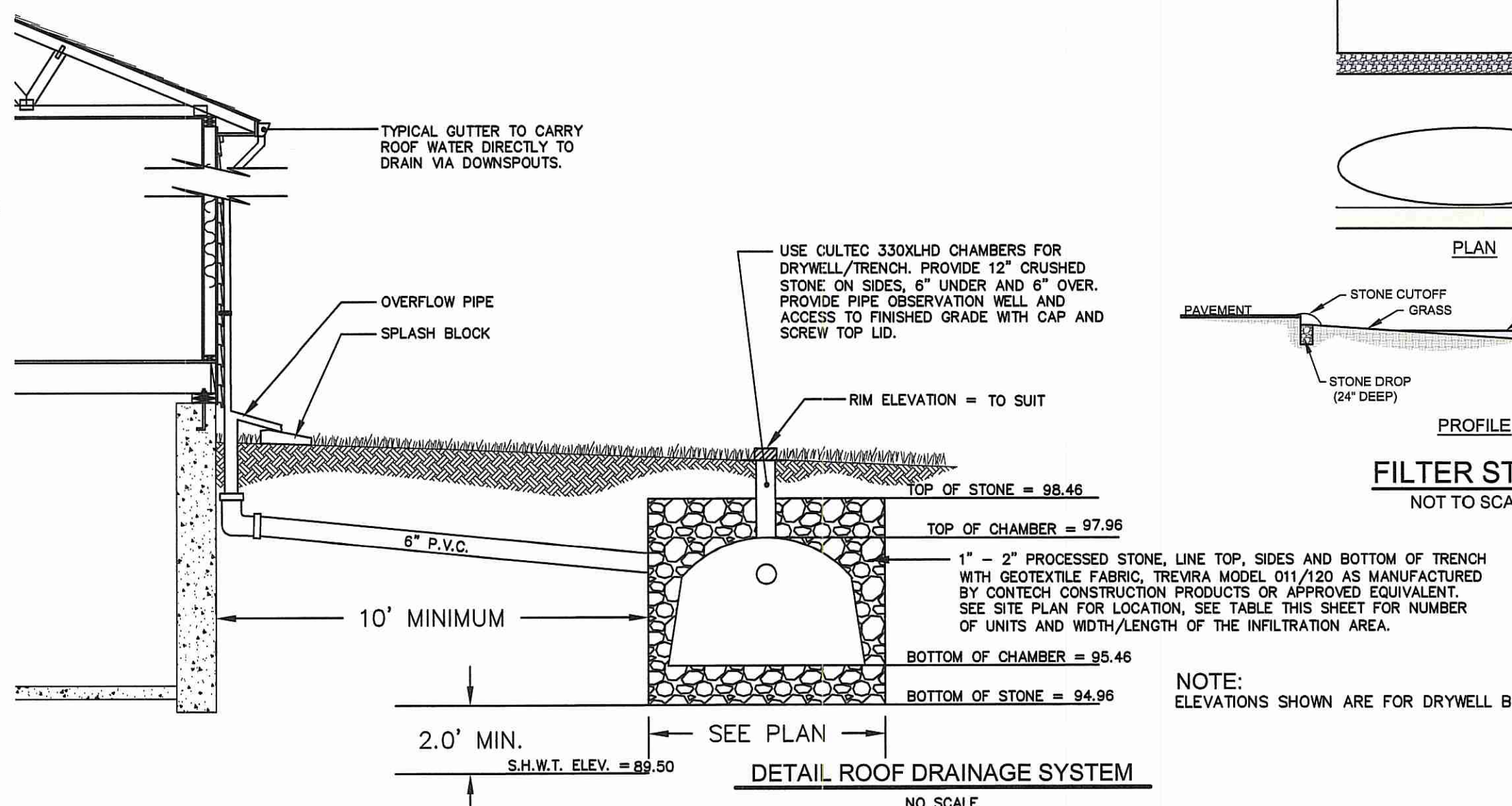
THE GRAVEL BASE MATERIAL SHALL CONSIST OF CLEAN SAND AND GRAVEL FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE GRAVEL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 3 INCHES AND UP TO 10% MAY BE SIZED BETWEEN 3/4" AND 3". THE GRAVEL SHALL MEET THE FOLLOWING CRITERIA:

SIEVE SIZE	PERCENT PASSING
3/4"	100%
#4	55% - 100%
#10	40% - 100%
#40	10% - 50%
#100	0% - 20%
#200	0% - 5%

GRAVEL SHALL BE PLACED IN SHALLOW LIFTS (6") AND PROPERLY COMPACTED. THE SURFACE OF THE GRAVEL SHALL BE LEVEL AND SCARIFIED.



DETAIL RAIN GARDEN, TYPICAL CROSS-SECTION
 NOT TO SCALE



DETAIL ROOF DRAINAGE SYSTEM
 NO SCALE

NOTE:
 ELEVATIONS SHOWN ARE FOR DRYWELL B

CJ DOYLE, P.E.
 CIVIL ENGINEERING

MAILING ADDRESS: P.O. BOX 1161, HOPE VALLEY, RI 02832
 OFFICE LOCATION: 1122 MAIN STREET, WYOMING, RI
 PHONE (401) 491-9590
 cjdoyle@cox.net

NO.	DATE	DESCRIPTION	BY

DETAILS FOR A PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM & STORMWATER DRAINAGE

LOCATED ON:
 LOT 1 PLAT 10-4

OWNED BY:
 ALLISON L. ARNOLD

SITE ADDRESS:
 301 HUNDRED ACRE POND ROAD
 IN THE TOWN OF SOUTH KINGSTOWN, RI

DESIGNED BY:
 CAROLYN J. DOYLE, P.E.

SCALE: AS SHOWN
 DRAWN BY: C.J.D. CHECKED BY: C.J.D.

DATE: NOVEMBER 18, 2016
 SHEET 2 OF 2

