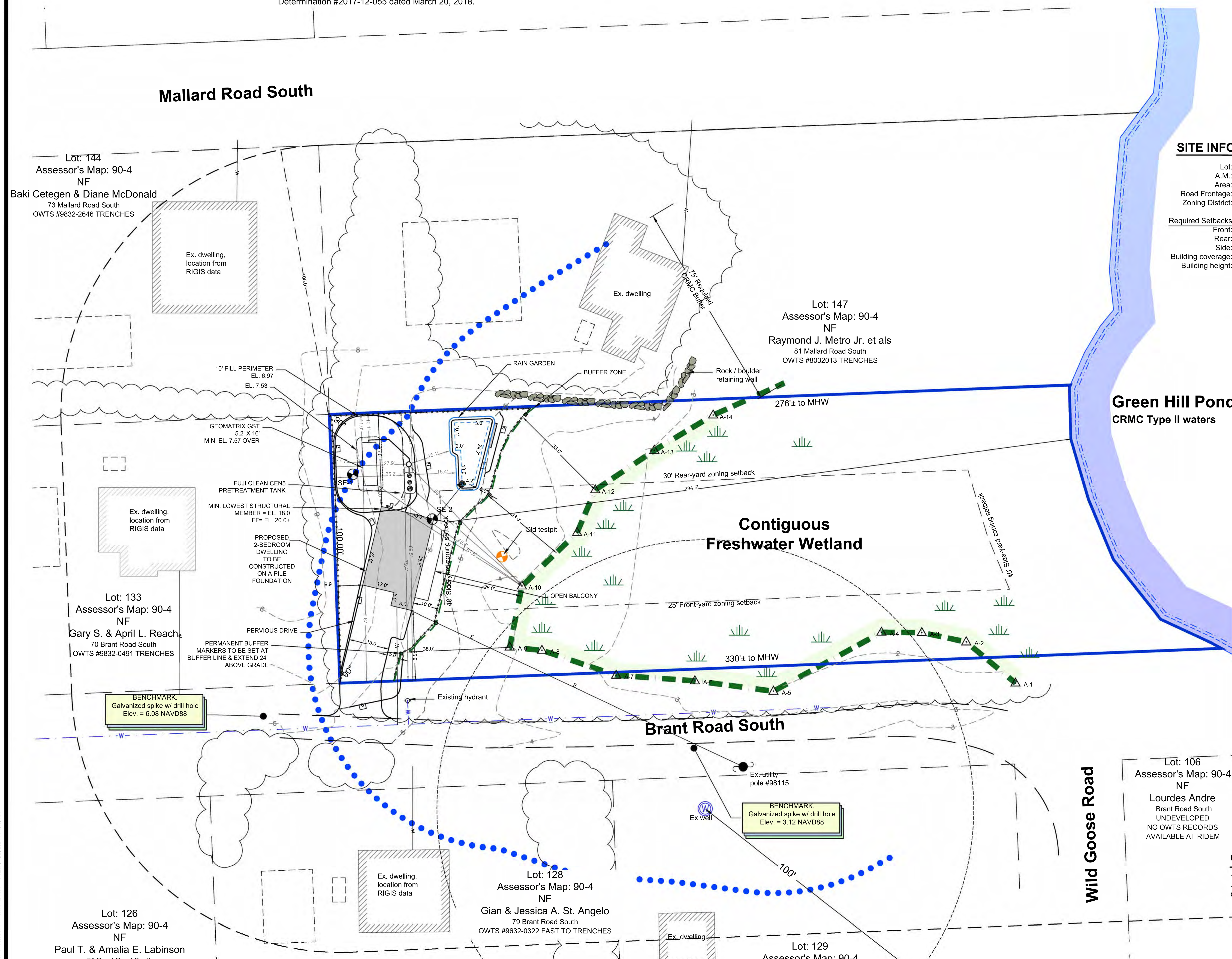
FEMA DESIGNATIONS:
The subject property depicted hereon appears within zone VE having a base flood elevation 15' of FEMA Flood Insurance Rate Map 44009C0301J, dated October 16, 2013 and per FEMA LOMR 20-01-1104P effective 3/19/2021.

WETLANDS:
Natural Resources Services, Inc. delineated the contiguous freshwater wetland with flag series A1 - A14 on November 1, 2016. see Report of Findings for more detail. Wetland edge verified in CRMC Preliminary Determination #2017-12-055 dated March 20, 2018.

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.

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.
UNLESS SHOWN THERE ARE NO EXISTING OR PROPOSED ONSITE WASTEWATER TREATMENT SYSTEMS WITHIN 100' OF THE PROPOSED WELL.



GEOMATRIX GST DESIGN

GIVEN:

SOIL CATEGORY: 7
LOADING RATE: 2.1 GAL/SF/DAY
STRUCTURE: 2 BEDROOMS
DESIGN FLOW: 115 GAL/DAY/BEDROOM

TOTAL DAILY FLOW:

230 GAL/DAY / 2.10 GAL/SF/DAY = 110 SF REQ'D

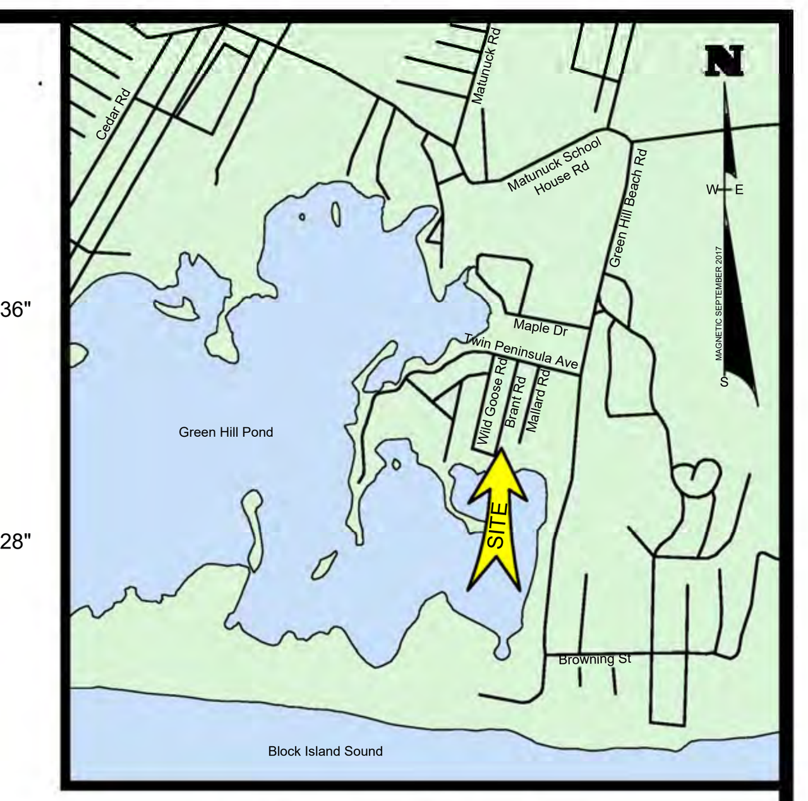
LENGTH GST 6206 PROVIDED:

16.0' LONG x 10.3 SF/LF (6" HIGH, 5.17' WIDE) = 164 SF PROVIDED*

*DESIGNED ON LESSER LOADING RATE OF 1.40

SOIL NOTES:
OCTOBER 3, 2017
TEST HOLE #1 (Elev. 7.30)
2"-0 Oi
0-8" Ap, 10YR2/2, sil, 1sbkf, fr
8-34" Bw1, 2.5Y4/4, sil, 1sbkf, fr
34-51" Bw2, 2.5Y6/1, sil, 0-m, fr
51-96" 2C, 2.5Y5/4, cobgrs, 0-sg, l
DEPTH TO GROUNDWATER TABLE = 36"
GROUNDWATER ELEV. = 4.30

Test Hole #2 (Elev. 5.90)
2"-0 Oi
0-8" Ap, 10YR2/2, sil, 1sbkf, fr
8-24" Bw1, 10YR4/6, sil, 1sbkf, fr
24-45" Bw2, 2.5Y5/4, sil, 0-m, fr
45-84" 2C, 2.5Y5/4, cobgrs, 0-sg, l
DEPTH TO GROUNDWATER TABLE = 28"
GROUNDWATER ELEV. = 3.57



LOCATION PLAN
SCALE: 1" = 2000'

STRUCTURE:
A PROPOSED 2-BEDROOM DWELLING WITH PILE FOUNDATION DESIGNED TO MEET FEMA FLOOD ZONE REQUIREMENTS.

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.
THIS SITE IS LOCATED IN A CRITICAL RESOURCE AREA (RULE 6.42).
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 CONTIGUOUS TO THE SALT POND WITHIN 200' OF THE PROPOSED O.W.T.S.

SCHEDULE OF INVERTS		
INVERT No.	LOCATION OF INVERT	INVERT ELEV.
1	BUILDING SEWER	5.31
2	SEPTIC TANK - IN	5.17
3	SEPTIC TANK - OUT	4.92
4	PUMP CHAMBER - IN	4.88
5	PUMP CHAMBER - OUT	5.05
6	LATERAL INVERT	6.97
7	MIN. FIN. GR.	7.57

SITE INFORMATION

Lot: 130
A.M.: 90-4
Area: 28,800± SF
Road Frontage: 330'±
Zoning District: R-80

Required Setbacks		Proposed Setbacks
Front:	25 feet	25.9 feet
Rear:	30 feet	35.0 feet
Side:	40 feet	9.9 feet*
Building coverage:	20 %	0.027%±
Building height:	35 feet	<35 feet

* Requires zoning variance

PROPOSED OWTS COMPONENTS

(A) 4" DIA. SCHEDULE 40 PVC BUILDING SEWER, LENGTH = 7'.

(B) PROPOSED FUJICLEAN CEN5 SEPTIC/TREATMENT TANK. SEPTIC TANK OCVERS TO FINISHED GRADE. SEE SEPARATE DETAILS ON SHEET 2.

(C) PROPOSED 24" DIA. PVC PUMP CHAMBER. ENSURE DRAINBACK OF PRESSURE LINE TO GST. SEE SEPARATE DETAILS ON SHEET 2.

(D) PROPOSED 1.25" DIA. SCHEDULE 40 PVC PRESSURE LINE TO GST, LENGTH = 20'.

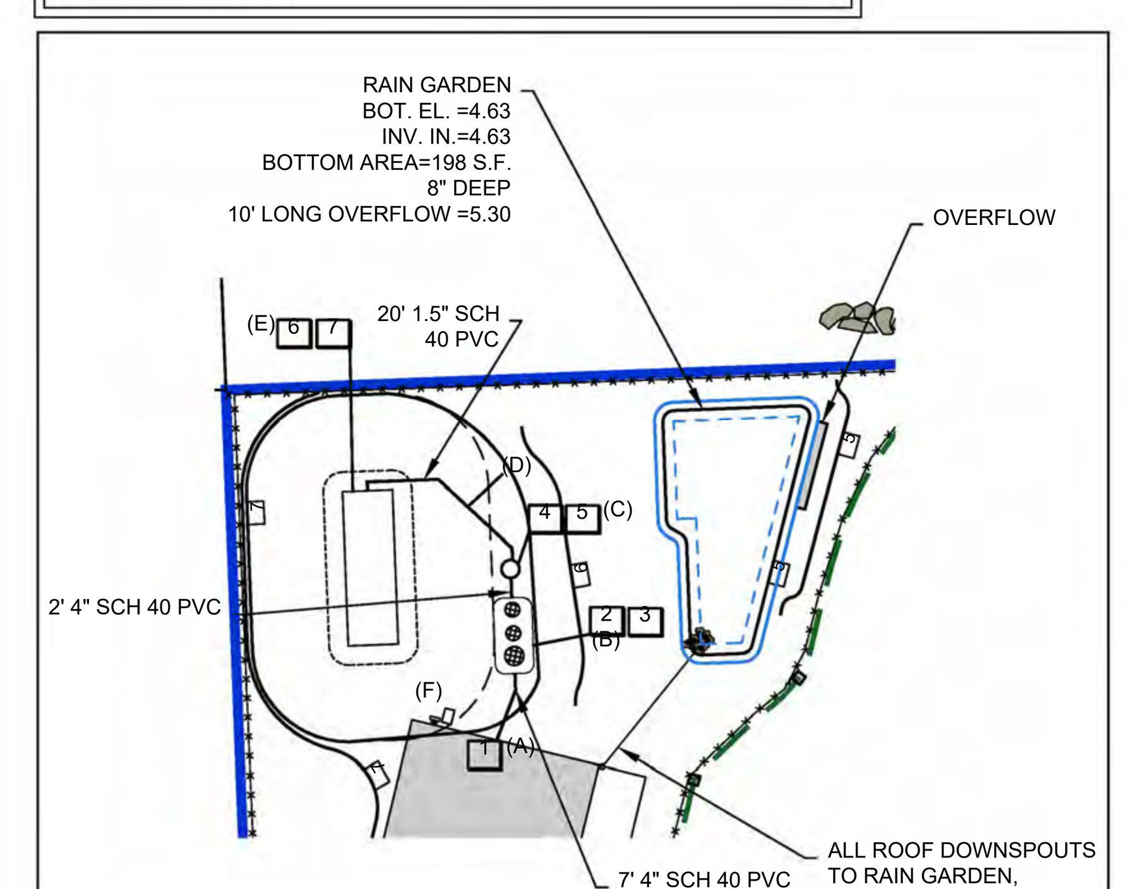
(E) PROPOSED GEOMATRIX GST LEACH FIELD, 5.17' X 16' = 82.7 S.F. SEE SEPARATE DETAILS ON SHEET 2.

(F) PROPOSED CONTROL PANEL TO BE MOUNTED MINIMUM 36" ABOVE GRADE ON POST OR APPROVED EQUIVALENT. BLOWER TO BE SET ADJACENT TO CONTROL PANEL.

VARIANCES REQUESTED FOR OWTS:
- RULE 6.23 D. MINIMUM SETBACK DISTANCE FROM SALT POND/CONTIGUOUS WETLAND = 150' REQUIRED, 51.5' PROVIDED TO BUILDING SEWER, 65.6' TO GST, 52.9' TO SEPTIC TANK AND 60.9' TO PUMP CHAMBER

LEGEND

PROPERTY LINE
UTILITY POLE
PROPOSED CONTOUR
PROPOSED SPOT GRADE
EXISTING CONTOUR
TEST PIPE
SILT FENCE/ LIMIT OF DISTURBANCE
EXISTING WATER LINE
WELL
WATER SHUT-OFF
WATER VALVE
EXISTING EDGE OF BRUSH



OWTS/RAIN GARDEN DETAIL
SCALE: 1" = 20'

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.

COPY OF CURRENT SIEVE ANALYSIS FOR BOTTOMLESS SAND FILTER MEDIA MEETING ALL REQUIREMENTS AS SPECIFIED IN RULE 6.37 ADVANCED PRESSURE DRAINFIELDS (APDS) C.2.b OF THE MOST RECENTLY PUBLISHED R.I.D.E.M. REGULATIONS. THIS ANALYSIS HAS TO BE PRESENTED TO CJ DOYLE, P.E. BEFORE BEING PLACED IN THE BSF.

SCHEDULE OF INSPECTIONS:
1. 3-BUSINESS DAYS NOTICE SHALL BE GIVEN TO CJ DOYLE, P.E PRIOR TO THE START OF CONSTRUCTION.
2. 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.:

1. BOTTOM OF EXCAVATION FOR LEACH FIELD.
2. PRIOR TO COVERING ANY COMPONENT OR PIPING.
3. 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.
4. FINAL GRADING AND 5' FILL PERIMETERS.

CERTIFICATION:

This survey has been conducted on August 31, 2017 and the plan has been prepared pursuant to 435-RICR-00-00-1.9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS on November 25, 2015, as follows:

Type of Boundary Survey: Limited Content Boundary Survey — Measurement Specification: I

Other Type of Survey: Data Accumulation Survey (By Onsite Instrument Survey) — III

Topographic Standard: T-2

Vertical Control Standard: V-1

The purpose for the conduct of the survey and the preparation of the plan is as follows:

This plan is intended to show the location of existing and proposed improvements for regulatory and municipal applications.

NOTE: THIS PLAN IS MARKED UNSIGNED. THE RI BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS PROHIBITS DIGITAL SIGNATURES; THEREFORE, A SIGNED PDF IS NOT A VALID SURVEY PLAN. ONLY A PLAN WITH AN ORIGINAL SIGNATURE IS CONSIDERED A LEGAL SURVEY PLAN. REDUCED COPIES OF PLANS ARE ALSO NOT CONSIDERED LEGAL SURVEY PLANS.

Unsigned 10:49AM 3/25/2024

BY: ____________ DATE: ____________

JEFFREY K. BALCH, RI PROFESSIONAL LAND SURVEYOR #1839
CERTIFICATE OF AUTHORIZATION #A535.

RECEIVED
03-25-2024
COASTAL RESOURCES MANAGEMENT COUNCIL

FRISELLA - BALCH & ASSOCIATES
LAND SURVEYORS
33 NORTH RD. SUITE C-201
PEACE DALE, RI
PHONE (401) 783-5949
www.frisella.com

CJ DOYLE, P.E.
CIVIL ENGINEERING
MAILING ADDRESS: P.O. BOX 1161, HOPE VALLEY RI 02832
OFFICE: 1122 MAIN STREET, WYOMING, RI
PHONE (401) 491-9530
ckengine@cox.net

NO.	DATE	DESCRIPTION	BY
5	03/25/2024	INCREASED BUFFER ZONE & ADDED MARKERS	CJD
4	08/18/2023	REVISED SIDE SETBACK REQUIRED	CJD
3	12/14/2022	REVISED PER DEM COMMENTS	CJD
2	12/06/2022	REVISED PER DEM COMMENTS	CJD
1	10/31/2022	REVISED PER DEM COMMENTS/GEOMATRIX GST	CJD

DRAWING TITLED: SITE PLAN FOR ONSITE WASTEWATER TREATMENT SYSTEM

LOCATED ON: LOT130 PLAT 90-4

OWNED BY: JEAN-LUC BELLEFLEUR (BUYER)

ADDRESS: BRANT ROAD SOUTH
IN THE TOWN OF SOUTH KINGSTOWN, RI

DATE: SEPTEMBER 16, 2022

SCALE: 1" =20'

DESIGNED BY: CAROLYN J. DOYLE

DRAWN BY: JK/CJD — CHECKED BY: CJD OR JKB

DRAWING No. SHEET 1 OF 2

JEFFREY K. BALCH — No. 1839 — PROFESSIONAL LAND SURVEYOR — Unsigned 10:49AM 3/25/2024

CAROLYN J. DOYLE — STATE OF RHODE ISLAND — No. 5078 — HOPE — REGISTERED PROFESSIONAL ENGINEER

FOR SURVEYS ONLY — FOR ENGINEERING

OWTS APPLICATION #: 1732-1372

CONTROL PANEL:

THE CONTROL PANEL SHALL BE MANUFACTURED BY ORENCO SYSTEMS, INC. MODEL VERICOMM AXB.
THE PROGRAMMABLE TIMER FOR THE RECIRCULATING TANK PUMP SHALL BE SET TO THE DEFAULT SETTINGS AS SUPPLIED BY THE MANUFACTURER.

THE EXTERNAL PUMP CHAMBER SHALL BE DEMAND DOSED AND HAVE:
THE FLOATS SET AS SHOWN IN THE PUMP CHAMBER DETAIL.
THE HIGH AND/OR LOW LEVEL ALARMS SHALL BE IN THE CONTROL PANEL.

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.

MAINTENANCE:

ALL COMPONENTS OF THE SYSTEM SHALL BE INSPECTED AFTER THE FIRST 4-6 MONTHS OF OPERATION, AND AFTER ONE YEAR OF OPERATION. THE SYSTEM SHALL BE INSPECTED TWICE ANNUALLY THEREAFTER UNLESS ORIGINAL INSPECTIONS DETERMINE MORE FREQUENT INSPECTIONS ARE REQUIRED. THE OWNER SHOULD BE AWARE THAT THIS ONSITE WASTEWATER TREATMENT SYSTEM SHALL HAVE A PERMANENT ROUTINE MAINTENANCE AGREEMENT THAT SHALL BE RECORDED IN THE LAND EVIDENCE RECORDS OF THE TOWN.

ELECTRICAL:

ALL WIRING REQUIRED FOR PUMPS, ALARMS, ETC. SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND MANUFACTURER'S INSTRUCTIONS. CONDUITS ENTERING THE PUMP CHAMBERS SHALL BE PROPERLY INSTALLED WITH CONDUIT SEALS TO PREVENT SEWAGE GASES FROM LEAVING THE BASIN. CONDUITS ENTERING THE FAN CHAMBER SHALL BE PROPERLY INSTALLED WITH CONDUIT SEALS TO PREVENT WATER FROM ACCESSING THE CHAMBER.

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 DEFOLIATED 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.

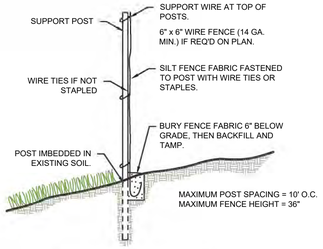
DUE TO CHANGING CHARACTERISTICS OF THE SITE CAUSED BY AND DURING CONSTRUCTION ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS SITE CONDITIONS WARRANT.

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 MANUFACTURERS 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.



SILT FENCE DETAIL
NOT TO SCALE

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 ¾" AND 3". THE GRAVEL SHALL MEET THE FOLLOWING CRITERIA:

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

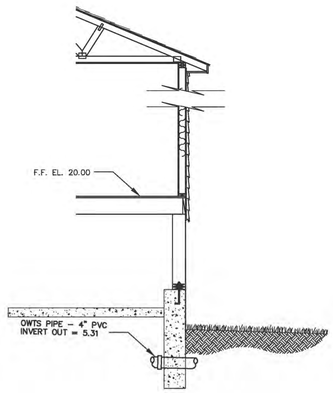
GRAVEL SHALL BE PLACED IN SHALLOW LIFTS (6") AND PROPERLY COMPACTED. THE SURFACE OF THE GRAVEL SHALL BE LEVEL AND SCARIFIED.

EXTERNAL PUMP CHAMBER:

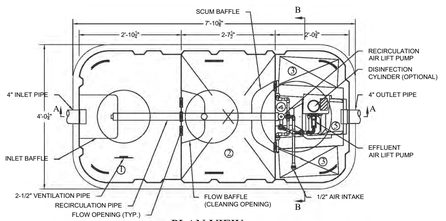
THE PUMP CHAMBER SHALL HOUSE AN EFFLUENT PUMP MANUFACTURED BY ORENCO SYSTEMS, INC. MODEL PFEF401-B (OR APPROVED EQUIVALENT) AND SHALL BE INSTALLED ACCORDING TO DETAILS PROVIDED AND TO MANUFACTURER'S SPECIFICATIONS. SEE TYPICAL PUMP CHAMBER DETAIL.

SAND FILTER MEDIA

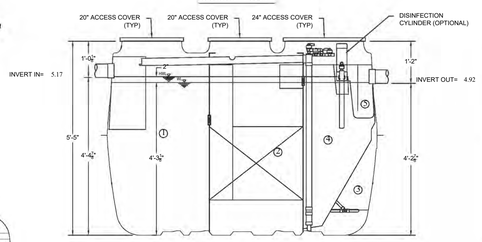
BOTTOMLESS SAND FILTER MEDIA SHALL BE ASTM C33 SAND MEETING ALL OF THE FOLLOWING ADDITIONAL REQUIREMENTS:
-EFFECTIVE SIZE: D10 = 0.3MM.
-UNIFORMITY COEFFICIENT: 3.0 TO 4.0
-MAXIMUM ALLOWABLE FINES PASSING A #200 SIEVE SHALL BE 1%
OR AS SPECIFIED ON FIGURE 9 OF THE MOST RECENTLY PUBLISHED R.I.D.E.M. GUIDELINES FOR THE DESIGN AND USE OF BOTTOMLESS SAND FILTERS.



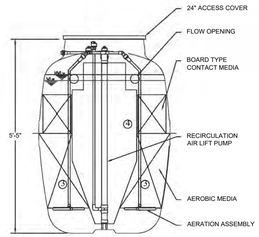
DETAIL OWTS BUILDING SEWER
NO SCALE



PLAN VIEW



SECTION A-A VIEW



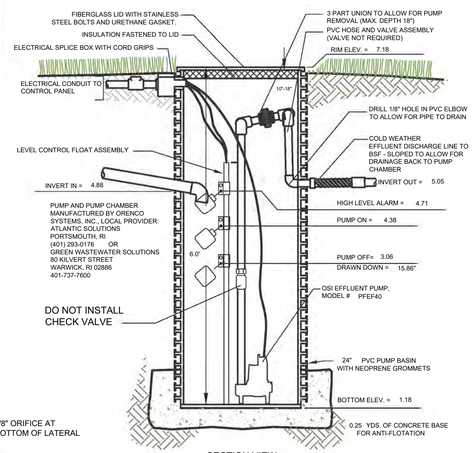
SECTION B-B VIEW

CHAMBER		Volume (gal)
①	Sedimentation Chamber	277
②	Anaerobic Filtration Chamber	278
③	Aerobic Contact Filtration Chamber	127
④	Clarification Chamber	63
⑤	Disinfection Chamber	4
	Total Volume	749

SPECIFICATIONS	
Anaerobic Media	PP / PE
Board Type Aerobic Media	PVC / PP / PE
Aerobic Media	PP / PE
Blower	2.8 cfm
Tank	FRP
Piping	PVC / PP / PE
Access Covers	Plastic / Cast Iron
Disinfectant (Optional)	Chlorine Tablets

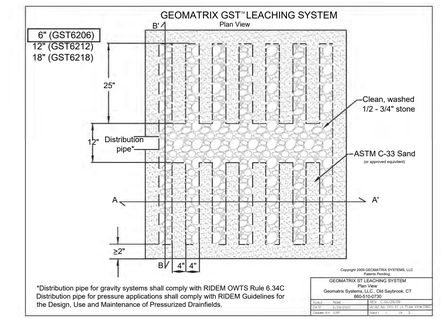
FUJICLEAN NOTES

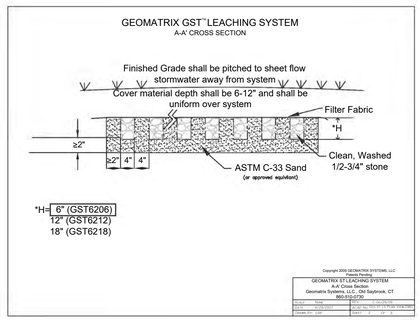
1. THE DESIGN ENGINEER SHALL OBSERVE THE OWTS PRIOR TO BACKFILL.
2. THE OWTS SHALL BE TESTED FOR WATER TIGHTNESS USING A METHOD APPROVED BY THE MFGR PRIOR TO ARRIVAL AT THE SITE.
3. A FUJI CLEAN REPRESENTATIVE SHALL BE PRESENT DURING START-UP.
4. THE OWNER SHALL EXECUTE AND MAINTAIN AN OPERATION AND MAINTENANCE AGREEMENT WITH AN AUTHORIZED MAINTENANCE PROVIDER.
5. NO KITCHEN SINK GARBAGE DISPOSER SHALL DISCHARGE TO THE OWTS.
6. NO WATER SOFTENER SHALL DISCHARGE TO THE OWTS.
7. INSTALLATION AND USE OF THE I/A OWTS MUST CONFORM TO THE DEPARTMENTS APPROVED I/A OWTS GUIDANCE DOCUMENT PREPARED IN ACCORDANCE WITH THE STANDARDS FOR "APPROVAL AND MANAGEMENT OF INNOVATIVE AND ALTERNATIVE ON SITE WASTEWATER TREATMENT SYSTEMS."
8. WHEN AN I/A OWTS REQUIRES A VENT. THE UNIT SHALL BE VENTED TO THE ROOF OF THE RESIDENCE BEING SERVED. VENT PIPES SHALL EXTEND A MINIMUM OF 6" ABOVE THE ROOF LINE AND THE TOP OF THE VENT SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 12" TO THE SLOPED PORTION OF THE ROOF. IN CASES WHERE IT IS NOT PRACTICAL TO VENT THE SYSTEM TO THE RESIDENCE ROOF, A VENT PIPE MAY BE PIPED TO THE EXTERIOR SIDE OF THE RESIDENCE AND TERMINATES A MINIMUM OF 18" ABOVE GRADE. THESE VENT PIPES SHALL BE LOCATED A MINIMUM OF 3' FROM ANY WINDOW OR DOORWAY AND MUST TERMINATE WITH A CARBON FILTER DEVICE. ALL VENT PIPES MUST HAVE MINIMUM DIAMETER OF 2".
9. ALL ADAPTORS, RISERS, SAFETY SCREENS, AND LIDS SHALL BE MANUFACTURED BY POLYLOCK.
10. DIRECT BURIAL OF ELECTRICAL AND CONTROL WIRES IS PROHIBITED. ALL WIRES SHALL BE ENCASED IN ¾" MIN SCH 40 PVC CONDUIT.
11. THE OWTS INSTALLER SHALL PROVIDE EITHER A 20-AMP CIRCUIT BREAKER INSIDE THE DWELLING MAIN ELECTRICAL PANEL OR INSTALL A SUB-PANEL IN AN EASILY ACCESSIBLE LOCATION.

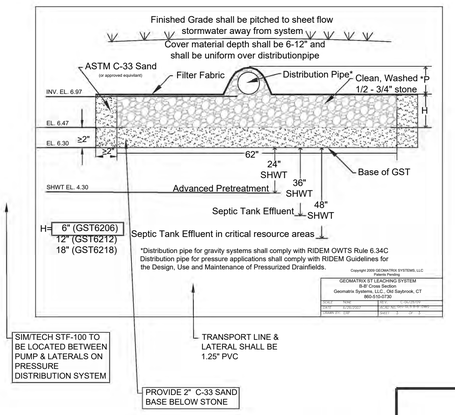


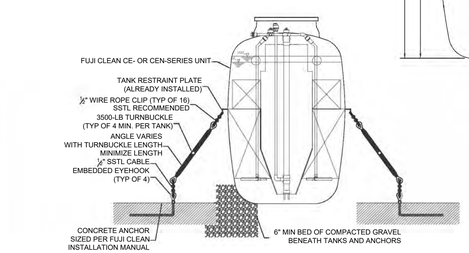
SECTION VIEW

EXTERNAL PUMP BASIN DETAIL
NO SCALE

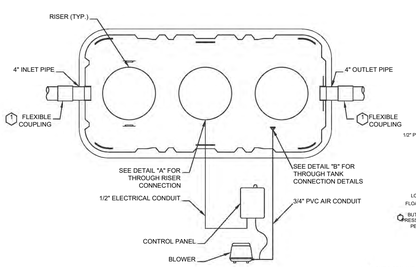


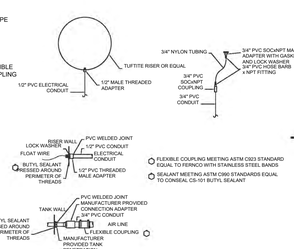






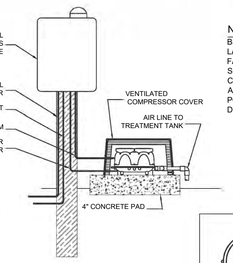
TIE-DOWN DETAIL
NO SCALE



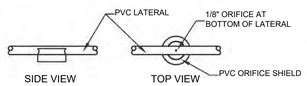


INSTALLATION DETAILS
NO SCALE

BUOYANCY NOTE
MIN. 2.55 CU YDS. CONCRETE REQUIRED PER BUOYANCY CALCULATIONS BY OWTS DESIGNER

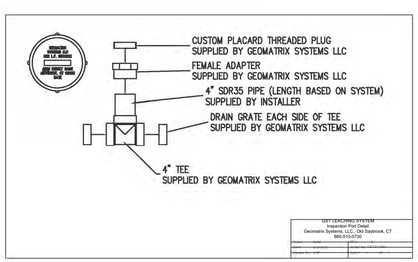


BLOWER AND PANEL DETAIL
NO SCALE



NOTE:
BSF ORIFICES SHALL BE 1/8" DIA. HOLES DRILLED IN THE DISTRIBUTION LATERALS. THE LATERALS SHALL BE INSTALLED WITH THE ORIFICES FACING DOWN (6 O'CLOCK POSITION) COVERED BY ORIFICE SHIELDS WITH SLOTS OR HOLES TO PROVIDE FREE DRAINAGE (USUALLY REFERRED TO AS COLD WEATHER SHIELDS). TWO ORIFICES PER LATERAL (APPROXIMATELY AT 1/3 AND 2/3 OF LATERAL LENGTH) SHALL BE FACING UP (12 O'CLOCK POSITION) AND COVERED BY ORIFICE SHIELDS TO ALLOW FOR PROPER DRAINAGE.

COLD WEATHER ORIFICE DETAIL
NOT TO SCALE



GEOMATRIX GST6206 DRAIN FIELD:

THE LEACH FIELD SHALL BE COMPRISED OF ONE CELL WITH 1 ZONE WITH ONE LATERAL OF 16.0' LENGTH. GEOMATRIX GST6206 WITH AN INDIVIDUAL FEED DESIGN. THE MANIFOLD SHALL BE 1.25" PVC (CLASS 200).

THE LATERAL FOR THE GEOMAT DRAIN FIELD SHALL BE SCHEDULE 40, 1.25" DIAMETER PVC.

A SERIES OF 1/8" DIAMETER HOLES (ORIFICES) SHALL BE MADE IN THE BOTTOM OF THE DISTRIBUTION LATERALS AND SPACED EVERY 18 INCHES. A NEW DRILL BIT SHALL BE USED TO ASSURE A SMOOTH AN ORIFICE AS POSSIBLE. UPWARD FACING ORIFICES SHALL BE LOCATED AT 1/3 AND 2/3 DISTANCE FROM THE MANIFOLD.

SCHEDULE 40 PVC SWEEP ELBOWS (TURNUPS) OR ONE 45° ELBOW SHALL BE ATTACHED TO THE DISTAL END OF EACH DRAIN FIELD LATERAL TO FACILITATE MAINTENANCE AND INSPECTION (SEE DRAINFIELD TERMINAL RISER DETAIL). THE FINAL PIPE END FOR EACH LATERAL WITH EITHER A BALL VALVE OR MALE PLUG. EITHER THE VALVE OR PLUG SHALL HAVE FEMALE THREADS.

4" DIAMETER INSPECTION PORT SHALL BE INSTALLED IN THE LEACH FIELD, EXTEND TO THE BOTTOM OF THE FIELD AND BE BROUGHT TO THE FINAL GROUND SURFACE (SEE DETAIL).

INSTALLATION OF THE GEOMATRIX GST DRAINFIELD SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS/ GEOMATRIX SYSTEMS, LLC, 114 MILL ROCK ROAD EAST, OLD SAYBROOK, CT 06475 860-510-0730 AND IN THE PRESENCE OF AN AUTHORIZED GEOMATRIX REPRESENTATIVE OR A GEOMATRIX SYSTEMS LLC CERTIFIED INSTALLER.

THE AREA OF THE GEOMATRIX GST FIELD SHALL BE STAKED PRIOR TO CONSTRUCTION AND PROTECTED FROM VEHICLE TRAFFIC TO PREVENT COMPACTION OF THE SOILS IN THE LEACHING AREA. SOIL BETWEEN THE TRENCHES SHALL BE PRESERVED AND TRENCHES DUG ON A TRENCH BY TRENCH BASIS. INSTALLER SHALL BE TRAINED IN THE INSTALLATION OF GEOMATRIX GST SYSTEMS.

GEOMATRIX GST EXCAVATION:

THE PRESENCE OF FILL ON THE SITE IN THE LEACH FIELD AREA IS NOT DOCUMENTED BY THE SOIL EVALUATION. IF FILL IS ENCOUNTERED IT SHALL BE EXCAVATED TO THE BOTTOM OF THE FILL. IF FILL EXTENDS BELOW BOTTOM OF GEOMAT GST, FILL IS TO BE REMOVED TO 5' AROUND THE LEACH FIELD AND BACKFILLED WITH ASTM C–33 SAND TO THE DESIGN ELEVATION OF THE BOTTOM OF THE LEACH FIELD.

CJ DOYLE, P.E.
CIVIL ENGINEERING
MAILING ADDRESS:
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OFFICE LOCATION:
1122 MAIN STREET, WYOMING, RI
PHONE (401) 491-9530
cjengine@cox.net

NO.	DATE	DESCRIPTION	BY
2	12/06/2022	REVISED PER DEM COMMENTS	CJD
1	10/31/2022	REVISED PER DEM COMMENTS/GEOMATRIX GST	CJD

DRAWING TITLED:
DETAILS FOR NEW ONSITE WASTEWATER TREATMENT SYSTEM

LOCATED ON:
LOT 130 PLAT 90-4

OWNED BY:
JEAN-LUC BELLEFLEUR (BUYER)

ADDRESS:
BRANT ROAD SOUTH
IN THE TOWN OF WESTERLY, RI

RECEIVED
03-25-2024
COASTAL RESOURCES MANAGEMENT COUNCIL

SEPTEMBER 16, 2022
DESIGNED BY: CAROLYN J. DOYLE, P.E.
SCALE: AS SHOWN
DRAWN BY: CJD
CHECKED BY: CJD
DRAWING No.
SHEET 2 OF 2

CAROLYN J. DOYLE
No. 5078
REGISTERED PROFESSIONAL ENGINEER