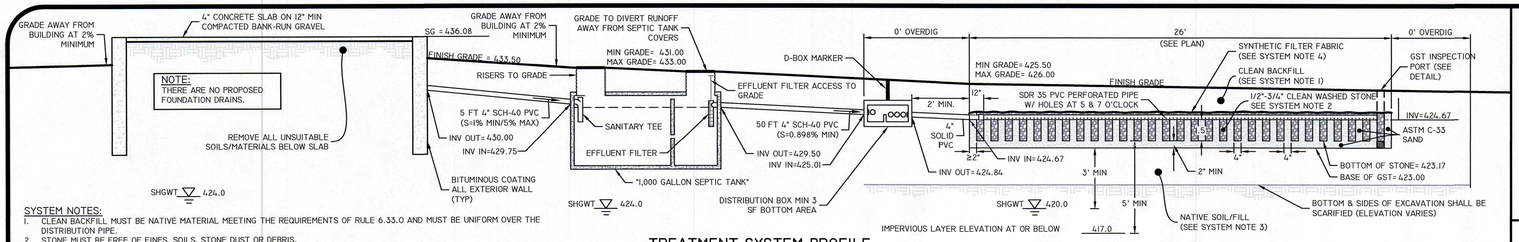
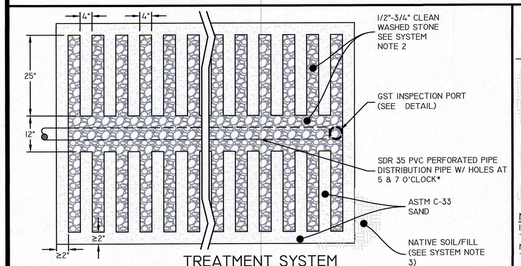


SYSTEM NOTES:
1. CLEAN BACKFILL MUST BE NATIVE MATERIAL MEETING THE REQUIREMENTS OF RULE 6.33.0 AND MUST BE UNIFORM OVER THE DISTRIBUTION PIPE.
2. STONE MUST BE FREE OF FINES, SOILS, STONE DUST OR DEBRIS.
3. NATIVE SOIL/FILL BELOW SYSTEM MUST BE SUITABLE NATIVE SOIL (LEFT UNDISTURBED) OR ASTM C-33 SAND. A LAYER OF NON-WOVEN SYNTHETIC FILTER FABRIC PER RULE 6.33.L MUST BE PLACED OVER STONE.

TREATMENT SYSTEM PROFILE

NOT TO SCALE

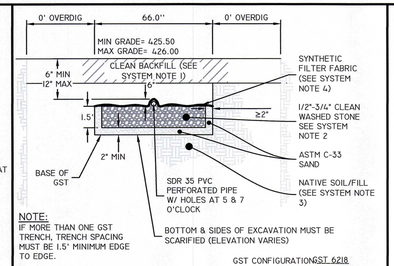


*DISTRIBUTION PIPE FOR GRAVITY SYSTEMS MUST COMPLY WITH RIDEM OWTS RULE 6.34.C.

TREATMENT SYSTEM PLAN VIEW

NOT TO SCALE

GST CONFIGURATION GST 6218

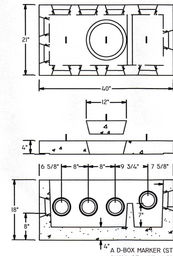


NOTE:
IF MORE THAN ONE GST TRENCH, TRENCH SPACING MUST BE 1.5' MINIMUM EDGE TO EDGE.

GST CONFIGURATION GST 6218

TREATMENT SYSTEM CROSS SECTION

NOT TO SCALE



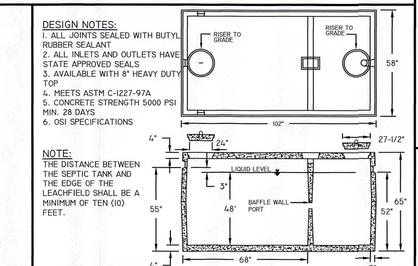
DESIGN NOTES:
1. CONCRETE MIN. STRENGTH - 5,000 P.S.I. @ 28 DAYS
2. STEEL REINFORCEMENT-ASTM A-615 GRADE 60, 7" MIN.COVER

PRECAST DISTRIBUTION BOX DB-11

JOLLEY PRECAST OR APPROVED EQUAL

NOT TO SCALE

DESIGN NOTES:
1. ALL JOINTS SEALED WITH BUTYL RUBBER SEALANT
2. ALL INLETS AND OUTLETS HAVE STATE APPROVED SEALS
3. AVAILABLE WITH 8" HEAVY DUTY TOP
4. MEETS ASTM C-1227-97A
5. CONCRETE STRENGTH 5000 PSI MIN. 28 DAYS
6. OSI SPECIFICATIONS



NOTE:
THE DISTANCE BETWEEN THE SEPTIC TANK AND THE EDGE OF THE LEACHFIELD SHALL BE A MINIMUM OF TEN (10) FEET.

SHGWT 424.0
BOTTOM OF TANK = 425.17
BUOYANT EFFECT = NONE
THE SEPTIC TANK IS ABOVE THE SHGWT

PRECAST TREATMENT TANK 1,000 GALLON 2-COMPARTMENT (5.1 TONS)

JOLLEY PRECAST OR APPROVED EQUAL

NOT TO SCALE

DESIGN CALCULATIONS:

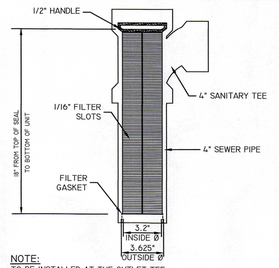
1. DESIGN FLOW = 3 BEDROOM HOME X 115 GAL/BEDROOM = 345 GALLONS(GAL)/DAY
2. DESIGN LOADING RATE = 0.61 GAL/SF/DAY
   DESIGN SHGWT = 6.0'
   DESIGN DEPTH TO IMPERVIOUS = 9.0'
3. MINIMUM LEACHING AREA = 345 GAL/DAY ÷ 0.61 GAL/SF/DAY = 565.6 SF
4. GST 6218 = 24.8 SF/FT
   565.6 SF ÷ 24.8 SF/FT = 22.8 FT OF GST 6218
5. LEACHING AREA PROVIDED = 644.8 SF (1-26 FT TRENCH)
   (OVERALL LEACHFIELD WIDTH = 5.5 FT)

SOIL TESTING:

RIDEM DIVISION OF OWTS APPROVAL
1. SITE SUITABILITY NO. N/A , DATE: N/A .
2. SITE TESTING DATE OF EXCAVATION 07/09/2025 .

SOIL EVALUATION: STH 25-2

SOIL STRATA:		SOIL CATEGORY:
AP	0-8" C S I0YR 3/2 SL I-SBK FRI	3
Bw	8-22" C S I0YR 4/6 GLS I-SBK FRI	3
C1	22-42" C S 2.5Y 6/4 GS 0-SG L	IM
C2	42-72" C S 2.5Y 6/3 GS 0-SG L	IM
C3	72-108" 2.5Y 4/3 GLS 0M FRI	6M

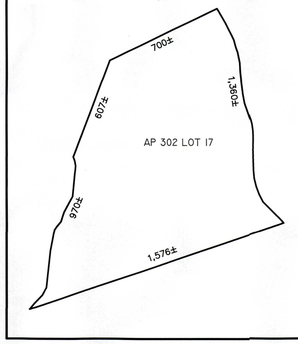


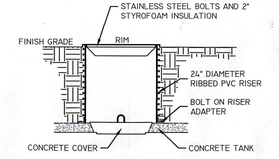
NOTE:
TO BE INSTALLED AT THE OUTLET TEE, WITH A MANHOLE SET TO FINISH GRADE FOR ACCESS.

RESIDENTIAL SEPTIC TANK EFFLUENT FILTER

ZABEL ENVIRONMENTAL A1800 OR APPROVED EQUAL

NOT TO SCALE





TREATMENT TANK RISER & COVER DETAIL

OR APPROVED EQUAL

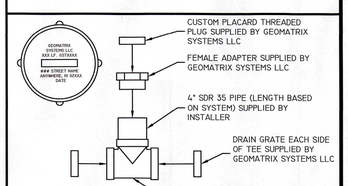
NOT TO SCALE

LEGEND

NOT ALL ITEMS SHOWN WILL APPEAR ON PLAN

SEV	SOIL EVALUATION
100.00	EXISTING SPOT ELEVATION
00.00	PROPOSED SPOT ELEVATION
120	EXISTING MINOR CONTOUR LINE
98	EXISTING MAJOR CONTOUR LINE
100	PROPOSED CONTOUR LINE
W	EXISTING WATER LINE
W	PROPOSED WATER LINE
W	EXISTING WELL
W	PROPOSED WELL
D	EXISTING DRAINAGE LINE
D	PROPOSED DRAINAGE LINE
	BENCH MARK

NOTE: FOR SUBDIVISIONS, OFFSITE PROPOSED FEATURES SUCH AS GRADING, DRAINAGE, UTILITIES ETC. MAY BE GRAYED



INSPECTION PORT NOTES:
INSTALL ONE GEOMATRIX GST INSPECTION PORT (PN:IPGST15) PER GST TRENCH. THE INSPECTION PORT MUST BE INSTALLED IN THE CENTER 12" CHANNEL OF STONE AND MUST EXTEND TO THE BASE OF THE GST.

GST INSPECTION PORT DETAIL

NOT TO SCALE

GENERAL NOTES:

1. DIPRETE ENGINEERING CERTIFIES TO THE SOIL CONDITIONS AND LOADING RATE ONLY IN AREA TESTED. INSTALLER TO NOTIFY DESIGNER IF SOIL CONDITIONS ARE FOUND DIFFERENT THAN STATED ON OWTS APPLICATION.
2. THE BOUNDARY LINES DEPICTED HEREON ARE APPROXIMATE ONLY UNLESS OTHERWISE NOTED. THIS PLAN DOES NOT REPRESENT A BOUNDARY OPINION.
3. TOPOGRAPHY OBTAINED FROM REAL KINEMATIC G.P.S. OBSERVATIONS. ELEVATIONS IN U.S. SURVEY FEET ARE REFERENCED TO THE NAVD 88 DATUM.
4. NO DRAINS OR WATERLINES TO BE INSTALLED WITHIN 25' OF LEACHING AREA.
5. NO GARBAGE GRINDERS SHALL BE INSTALLED.
6. THERE ARE NO KNOWN EXISTING OR PROPOSED PRIVATE WELLS WITHIN 200' OF THE PROPOSED OWTS OTHER THAN SHOWN ON PLAN.
7. THERE ARE NO KNOWN EXISTING OR PROPOSED OWTS WITHIN 200' OF THE PROPOSED OWTS OTHER THAN SHOWN ON PLAN.
8. THERE ARE NO KNOWN EXISTING OR PROPOSED DRAINS WITHIN 200' OF THE PROPOSED OWTS OTHER THAN SHOWN ON PLAN.
9. THERE ARE NO KNOWN EXISTING OR PROPOSED PUBLIC WELLS WITHIN 500' OF THE PROPOSED OWTS OTHER THAN SHOWN ON PLAN.
10. CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINISH GRADING AND DRAINAGE AROUND THE BUILDING TO ENSURE SURFACE WATER AND/OR GROUNDWATER ARE DIRECTED AWAY FROM THE STRUCTURE. THIS PLAN SHOWS GENERAL GRADING ONLY AND ADDITIONAL DETAIL MAY BE REQUIRED.
11. THE CONTRACTOR IS RESPONSIBLE FOR ALL OF THE MEANS, METHODS, SAFETY PRECAUTIONS AND REQUIREMENTS, AND OSHA CONFORMANCE IN THE IMPLEMENTATION OF THIS PLAN AND DESIGN.
12. THE FINAL LANDSCAPING, SOIL STABILIZATION AND EROSION CONTROL IS TO BE COMPLETED BY THE OWNER PER THE APPROVED PLAN. ALTERATIONS TO THIS DESIGN ARE TO BE IDENTIFIED BY THE HOMEOWNER IN WRITING TO THE DESIGN ENGINEER FOR APPROVAL AND POSSIBLE RESUBMISSION TO THE RIDEM.
13. THE CONTRACTOR SHALL COORDINATE WITH ALL OF THE APPROPRIATE UTILITY COMPANIES FOR AGREEMENTS TO SERVICE THE PROPOSED BUILDING. THIS SHALL BE DONE PRIOR TO CONSTRUCTION. NO REPRESENTATIONS ARE MADE BY DIPRETE ENGINEERING THAT UTILITY SERVICE IS AVAILABLE.
14. ALL EXISTING UTILITIES SHOWN ARE FROM VISIBLE INFORMATION, DRAWINGS BY OTHERS, OR INFORMATION PROVIDED TO DIPRETE ENGINEERING AND ARE SUBJECT TO CHANGE. NO ONE SHOULD RELY ON THE UTILITY LOCATIONS SHOWN FOR CONSTRUCTION AND DIG SAFE MUST BE NOTIFIED PRIOR TO ANY WORK.
15. THIS SITE IS REVIEWED UNDER RIDEM WETLANDS APPLICATION NO. N/A, DATED N/A.
16. THIS SITE IS LOCATED IN FEMA FLOOD ZONE X. REFERENCE FEMA FLOOD INSURANCE RATE MAP 44003C0090H, MAP REVISED APRIL 03, 2020.
17. ALL OWTS SHOULD BE MAINTAINED BY THE HOMEOWNER ON AN ANNUAL BASIS OR MORE FREQUENTLY IF REQUIRED BY LOCAL REGULATIONS.
18. OWTS DESIGNER REQUIRES A MINIMUM OF THREE INSPECTIONS: BOTTOM INSPECTION, COVER INSPECTION AND FINAL INSPECTION.
19. SILT FENCE (RIDOT STD 9.2.0) OR APPROVED EQUAL EROSION CONTROL BARRIER SHALL BE INSTALLED AT THE LIMIT OF DISTURBANCE AND INLET PROTECTION SHALL BE INSTALLED AT IMMEDIATELY ADJACENT CATCH BASINS, WHERE DOWNGRADIENT OF LAND DISTURBING ACTIVITIES.

CONSTRUCTION NOTES:

1. CONSTRUCTION SHALL CONFORM TO THE RHODE ISLAND SPECIFICATIONS SET FORTH IN THE "DEPARTMENT OF ENVIRONMENTAL MANAGEMENT - RULES AND REGULATIONS" ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION & CONSTRUCTION OF ONSITE WASTEWATER TREATMENT SYSTEMS, LATEST EDITION.
2. THE FILL AROUND THE SYSTEM SHALL BE COARSE SAND, OR BANK RUN GRAVEL.
3. INSTALLER TO REMOVE ALL TREES, BRUSH AND STUMPS WITHIN THE AREA OF THE LEACHFIELD AND WITHIN 10 FEET OF THE LEACH FIELD.
4. BUILDING SEWER PIPE TO BE MINIMUM 4" SCH 40 PVC. ALL OWTS PIPING TO BE MINIMUM 4" SDR 35.
5. TREATMENT TANK RISERS TO BE AT FINISH GRADE.
6. INSTALLER TO MAINTAIN OWTS INVERT ELEVATION OF 424.67 FOR 10' FILL PERIMETER.
7. MAXIMUM 3:1 SLOPE FOR 25' FROM LEACHFIELD.
8. BENCHMARK = NAIL IN 12" PINE.
   ELEVATION = 437.41.
9. ALL STAGES OF THE OWTS INSTALLATION MUST BE SUPERVISED BY THE DESIGN ENGINEER.
10. DIG SAFE IS REQUIRED TO BE NOTIFIED PRIOR TO START OF ANY CONSTRUCTION.

SEQUENCE OF CONSTRUCTION:

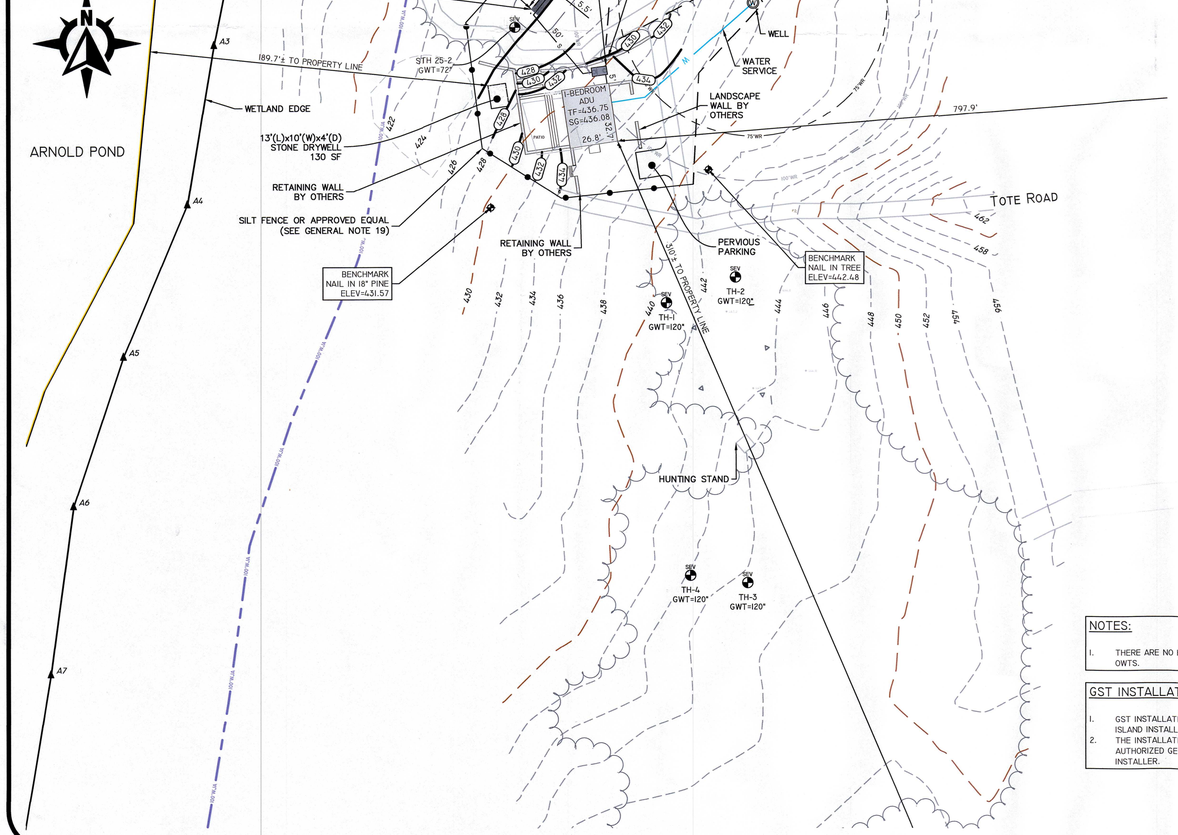
1. CONTRACTOR TO OBTAIN ALL REQUIRED FEDERAL, STATE AND MUNICIPAL PERMITS, AND TO NOTIFY "DIG SAFE" PRIOR TO CONSTRUCTION.
2. SET EROSION CONTROL BARRIER AT LIMIT OF DISTURBANCE. MAINTAIN CONTINUOUS EROSION CONTROL BARRIER DURING CONSTRUCTION AND REPAIR AS NEEDED.
3. CONTACT DESIGNER 24 HOURS PRIOR TO OWTS CONSTRUCTION.
4. BEGIN OWTS BOTTOM EXCAVATION.
5. CONTACT DESIGNER 24 HOURS PRIOR TO OWTS BOTTOM EXCAVATION COMPLETION FOR INSPECTION.
6. BEGIN OWTS CONSTRUCTION.
7. CONTACT DESIGNER 24 HOURS PRIOR TO OWTS COMPLETION FOR INSPECTION.
8. COVER OWTS COMPONENTS AND COMPLETE FINISH GRADING.
9. CONTACT DESIGNER 24 HOURS PRIOR TO OWTS FINAL GRADING FOR INSPECTION.
10. COMPLETE SOIL STABILIZATION BY LOAM AND SEEDING DISTURBED AREAS.

MINIMUM LOT REQUIREMENTS:

MINIMUM LOT AREA	5	ACRES
FRONTAGE/WIDTH	300	FEET
FRONT YARD	100	FEET
SIDE YARD	85	FEET
REAR YARD	150	FEET

ABBREVIATIONS

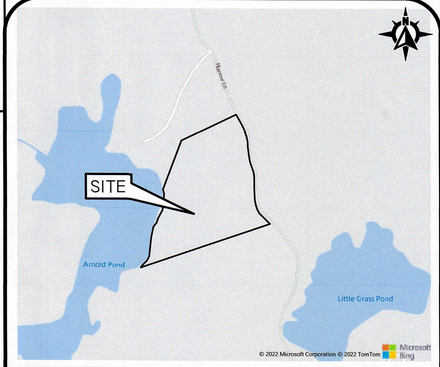
BS	BASEMENT SLAB ELEVATION	SF	SQUARE FEET
CS	CRAWL SPACE ELEVATION	SG	SLAB ON GRADE ELEVATION
FT	FEET	SHGWT	SEASONAL HIGH GROUNDWATER TABLE
GS	GARAGE SLAB ELEVATION	TF	TOP OF FOUNDATION
MAX	MAXIMUM	TYP	TYPICAL
MIN	MINIMUM	WO	WALKOUT ELEVATION



NOTES:
1. THERE ARE NO KNOWN EXISTING WELLS OR OWTS WITHIN 200' OF THE PROPOSED WELL OR OWTS.

GST INSTALLATION NOTES:
1. GST INSTALLATION MUST BE IN ACCORDANCE WITH THE GST LEACHING SYSTEMS RHODE ISLAND INSTALLATION AND OPERATION MANUAL, DATED DECEMBER 10, 2018.
2. THE INSTALLATION OF THE GST SYSTEM MUST BE PERFORMED IN THE PRESENCE OF AN AUTHORIZED GEOMATRIX REPRESENTATIVE OR A GEOMATRIX SYSTEMS, LLC CERTIFIED INSTALLER.

SCALE: 1"=40'
0 20' 40' 80'



VICINITY MAP NOT TO SCALE

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

05/15/2026
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NO.	DATE	DESCRIPTION	DRAWN BY: S.R.	DESIGN BY: J.P.C.
0	08-13-2025	OWTS Submission	S.R.	
1	07-22-2025	OWTS Revision	X.X.X.	

ONSITE WASTEWATER TREATMENT SYSTEM

655 NARROW LANE

ASSESSOR'S PLAT 302 LOT 17
COVENTRY, RHODE ISLAND

PREPARED FOR:
MS. NANCY HARTSIG
9755 BARNSWOOD LANE, LOVELAND, OH 04140

DE JOB NO. 330-00 COPYRIGHT 2025 BY DIPRETE ENGINEERING ASSOCIATES, INC.

SHEET 1 OF 1

Z:\DEMAIN\PROJECTS\330-001 NARROW LANE 655\AUTOCAD DRAWINGS\330-001-0PTIC.DWG PLOTTED: 7/22/2025