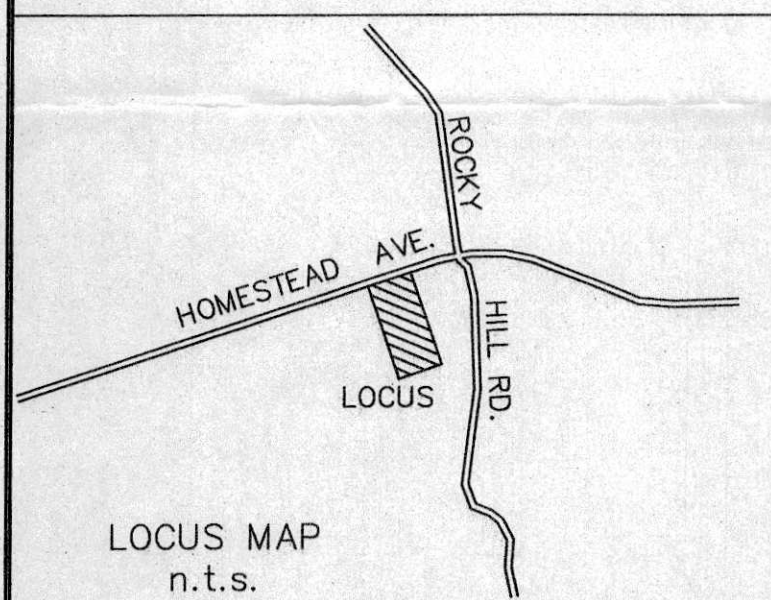


DATE OF TEST: SEPTEMBER 18, 2019 WITNESS: KARL DROWN					
TEST PIT #1 : ELEV.: 99.15 SOIL EVALUATOR: STEVE GILBERT, R.P.L.S.					
DEPTH FROM SURFACE FEET	DEPTH FROM SURFACE INCHES	SOIL HORIZON	SOIL TEXTURE (USDA)	SOIL COLOR (MUNSELL)	OTHER (STRUCTURE, STONES, BOULDERS, CONSISTENCY, % GRAVEL)
1	0 - 16	FILL & A	SANDY LOAM	10YR 3/4	
2	16 - 28	B	SANDY LOAM	10YR 5/6	
3					
4					
5					
6					
7	28 - 128	C	SANDY LOAM	2.5Y 6/3	COBBLES, STONES, & BOULDERS
8					
9					
10					
11					
PERCOLATION RATE: 24 M.P.I. @ 54"					
GROUNDWATER: NOT FOUND TO ELEV.: 88.48					
TEST PIT #2 : ELEV.: 98.55					
DEPTH FROM SURFACE FEET	DEPTH FROM SURFACE INCHES	SOIL HORIZON	SOIL TEXTURE (USDA)	SOIL COLOR (MUNSELL)	OTHER (STRUCTURE, STONES, BOULDERS, CONSISTENCY, % GRAVEL)
1	0 - 10	FILL & A	SANDY LOAM	10YR 3/4	
2	10 - 26	B	SANDY LOAM	10YR 5/6	
3					
4					
5					
6					
7	26 - 112	C	SANDY LOAM	2.5Y 6/3	COBBLES, STONES, & BOULDERS
8					
9					
10					
GROUNDWATER: MOTTLING @ 60" (EL.: 93.55)					

TEST PIT INFORMATION



DESIGN CALCULATIONS

CAPACITY REQUIRED - RESIDENTIAL USE:
DESIGN FLOW:
5 BEDROOMS @ 110 Gal/Day/Bedroom = 550 Gal/Day

CAPACITY PROVIDED:
SEPTIC TANK:
DESIGN FLOW = 550 Gal/Day
X 200%
REQUIRED SIZE = 1,100 Gal/Day
SIZE PROVIDED = 1,500 Gal/Day

LEACHING FACILITY:
DESIGN PERCOLATION RATE: 24 MPI
SOIL TEXTURAL CLASS: CLASS II
LONG TERM ACCEPTANCE RATE (L.T.A.R.): 0.44 GPD/SF
550 GPD/0.44 = 1,250 S.F. REQUIRED

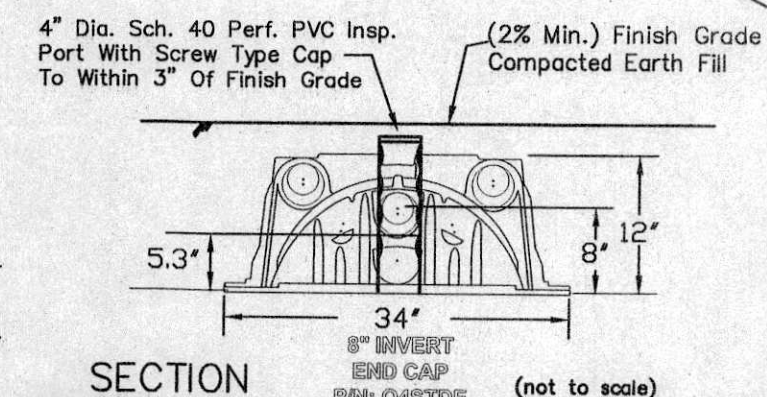
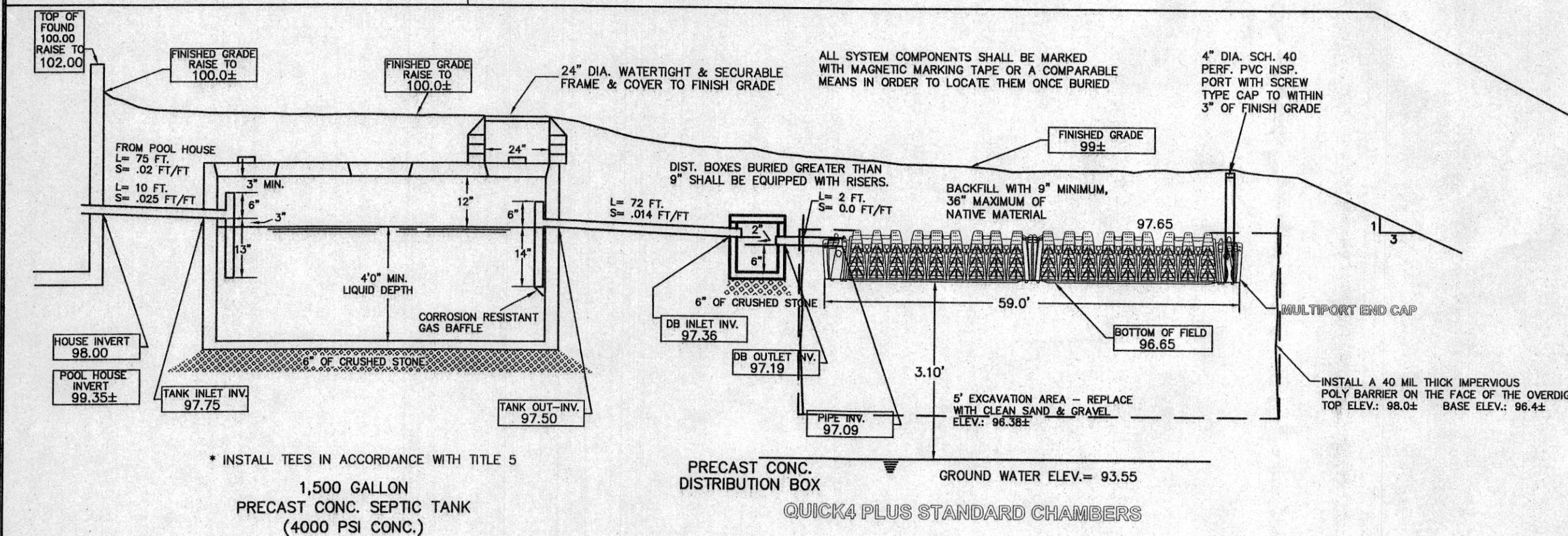
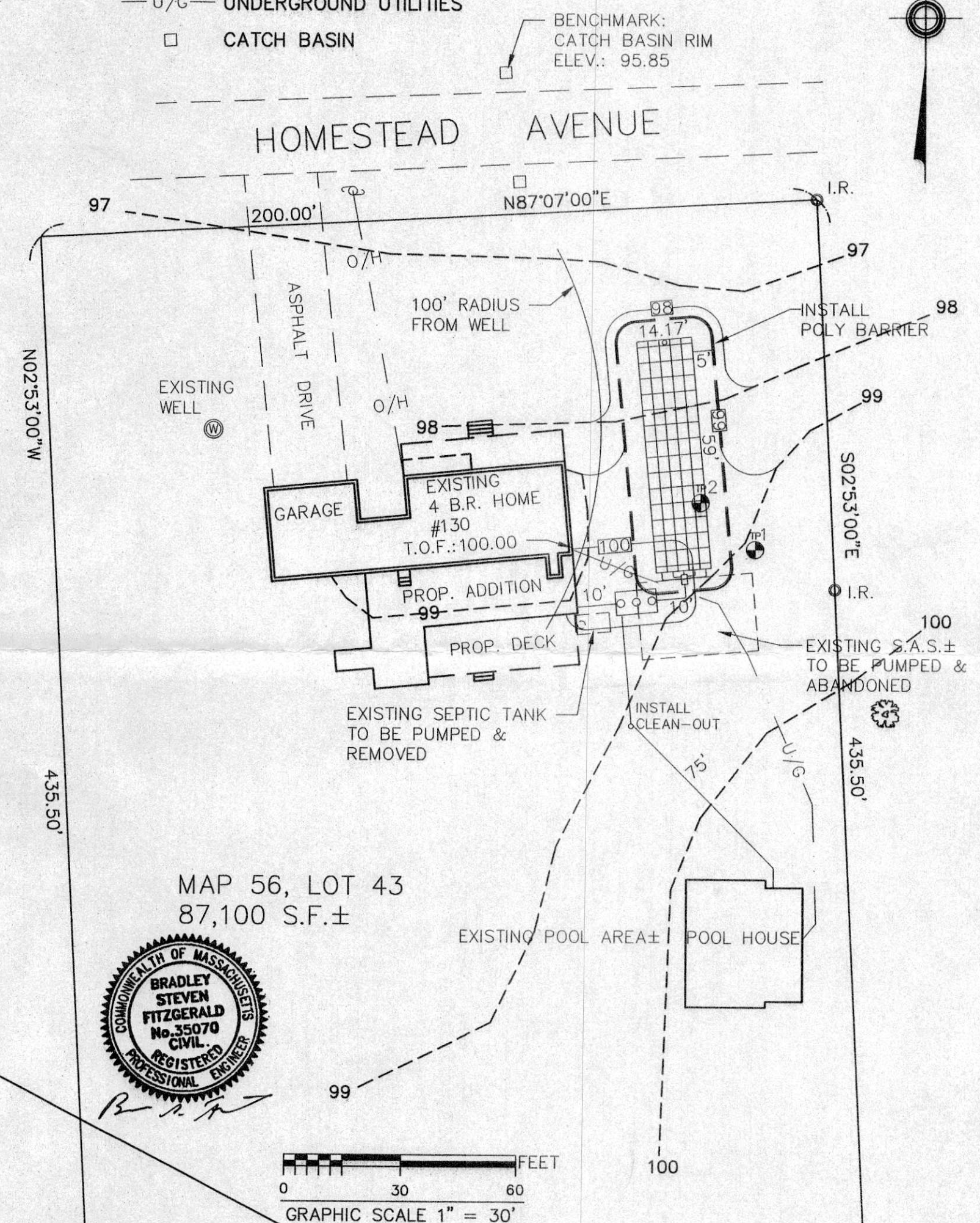
USING INFILTRATOR QUICK4 PLUS STANDARD CHAMBERS
1,250 S.F./4.73 S.F./L.F. = 264.27 L.F. REQUIRED
264.27/4' = 67 QUICK4 PLUS CHAMBERS REQUIRED
USE 5 ROWS OF 14 QUICK4 PLUS CHAMBERS
FIELD DIMENSIONS: 14.17' X 59' = 836 Sq. Ft.
70 QUICK4 PLUS CHAMBERS PROVIDES 582 Gal/Day
SYSTEM IS NOT DESIGNED FOR A GARBAGE GRINDER
OR WATER SOFTENER BACKWASH.

BOARD OF HEALTH NOTES

- THE TOP OF THE EXISTING FOUNDATION WILL BE RAISED 2'. THE NEW ADDITION FOUNDATION WILL MATCH THE NEW TOP OF FOUNDATION.
- RE-ROUTE THE PLUMBING TO EXIT AT THE LOCATION SHOWN, AT THE INVERT ELEVATION INDICATED.
- THE POOL HOUSE SHALL BE TIED INTO THE PROPOSED SEPTIC TANK BY A BUILDING SEWER MEETING THE EXISTING INVERT AT THE POOL HOUSE.
- INSTALL A CLEAN-OUT IN THE BUILDING SEWER FROM THE POOL HOUSE.
- TANK CONSTRUCTION SHALL MEET THE REQUIREMENTS SPECIFIED IN TITLE 5, SECTION 15.226.
- CONCRETE IS TO BE 4000 PSI @28 DAYS.
- TONGUE & GROOVE JOINT TO BE SEALED WITH BUTYL RESIN TO MAKE WATERTIGHT.
- ALL RISERS ARE TO BE MADE WATERTIGHT.
- ALL PIPE IS TO BE SCH. 40 P.V.C. OR EQUIVALENT.
- ALL JOINTS ARE TO BE MADE WATERTIGHT.
- ALL STONE IS TO BE DOUBLE WASHED.
- ALL COMPONENTS SHALL HAVE A MINIMUM OF 9" AND A MAXIMUM OF 36" OF COVER
- THE CONTRACTOR IS TO VERIFY ALL ELEVATIONS AND UTILITY LOCATIONS PRIOR TO CONSTRUCTION. ANY DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- INSTALL A ZABEL OR EQUIVALENT EFFLUENT FILTER IN THE SEPTIC TANK OUTLET TEE.
- THE RESERVE AREA IS TO BE IN THE SAME LOCATION AS THE ACTIVE SYSTEM.
- THERE ARE NO CONFLICTS WITH TITLE 5, SECTION 15.220(4)(k) - LOCATION OF PUBLIC AND PRIVATE WATER SUPPLIES.
- 5' IS TO BE EXCAVATED ALL AROUND THE SYSTEM, DOWN 28"± TO THE C LAYER, AND REPLACED WITH CLEAN SAND & GRAVEL AS PER TITLE 5, SECTION 15.255.
- INSTALL A 40 MIL THICK IMPERVIOUS POLY BARRIER ON THE FACE OF THE OVER-DIG, AS SHOWN, TO PREVENT BREAKOUT TOP ELEV.: 98.0±, BASE ELEV.: 96.4±
- A LOCAL UPGRADE IS REQUESTED UNDER TITLE 5, SECTION 15.405(1)(h) TO ALLOW THE BASE OF THE S.A.S. TO BE 3.0' ABOVE THE WATER TABLE, INSTEAD OF THE REQUIRED 4.0'.
- A VARIANCE IS REQUESTED TO THE REHOBOTH BOARD OF HEALTH REGULATIONS SECTION 8.5 TO ALLOW THE BASE OF THE S.A.S. TO BE 3.0' ABOVE THE WATER TABLE, INSTEAD OF THE REQUIRED 4.0'.

LEGEND

- DEEP OBSERVATION HOLE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- WELL
- UTILITY POLE
- OVERHEAD UTILITIES
- UNDERGROUND UTILITIES
- CATCH BASIN



139 HOMESTEAD AVENUE

**A SEPTIC SYSTEM REPAIR
IN REHOBOTH, MA
FOR DALE MCGUIRE**

DATE: NOVEMBER 5, 2019
REVISED: APRIL 29, 2021

SENNA FITZGERALD GILBERT ASSOCIATES
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