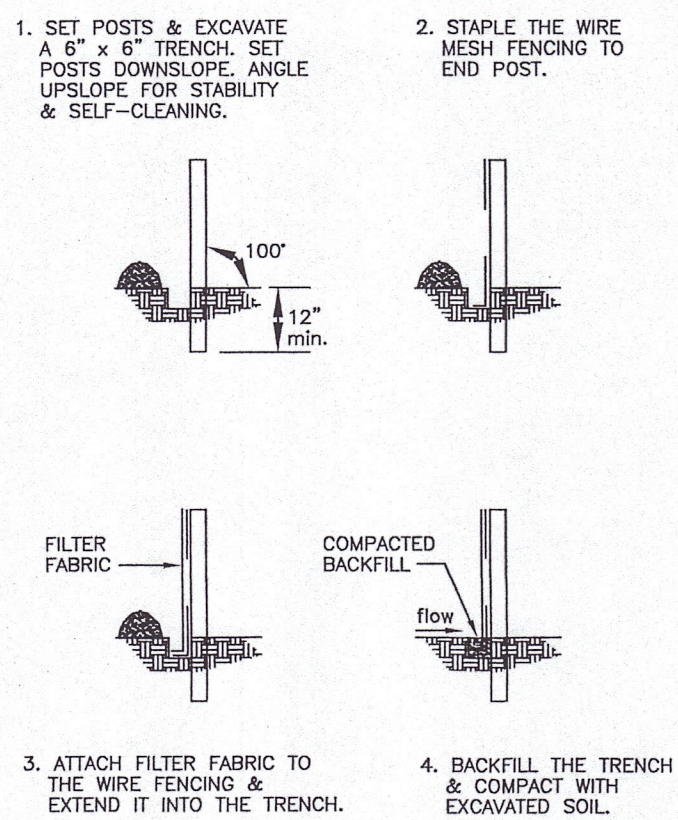
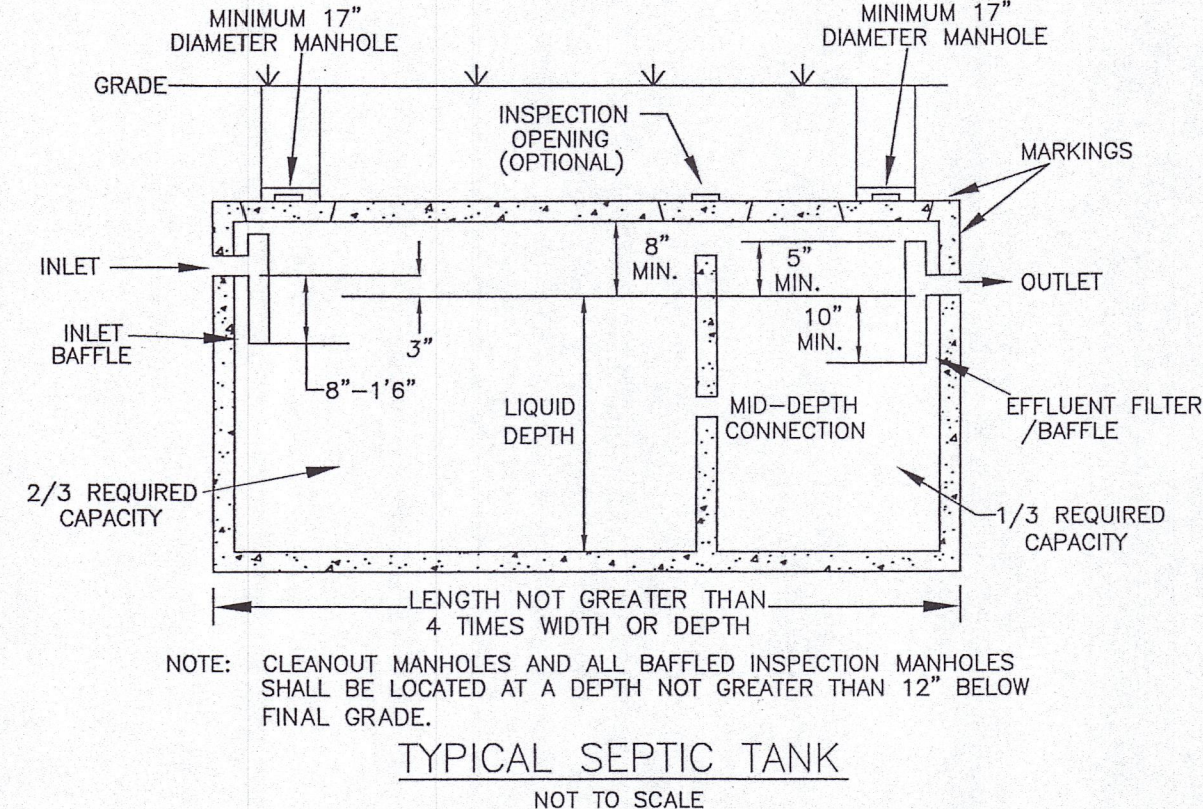
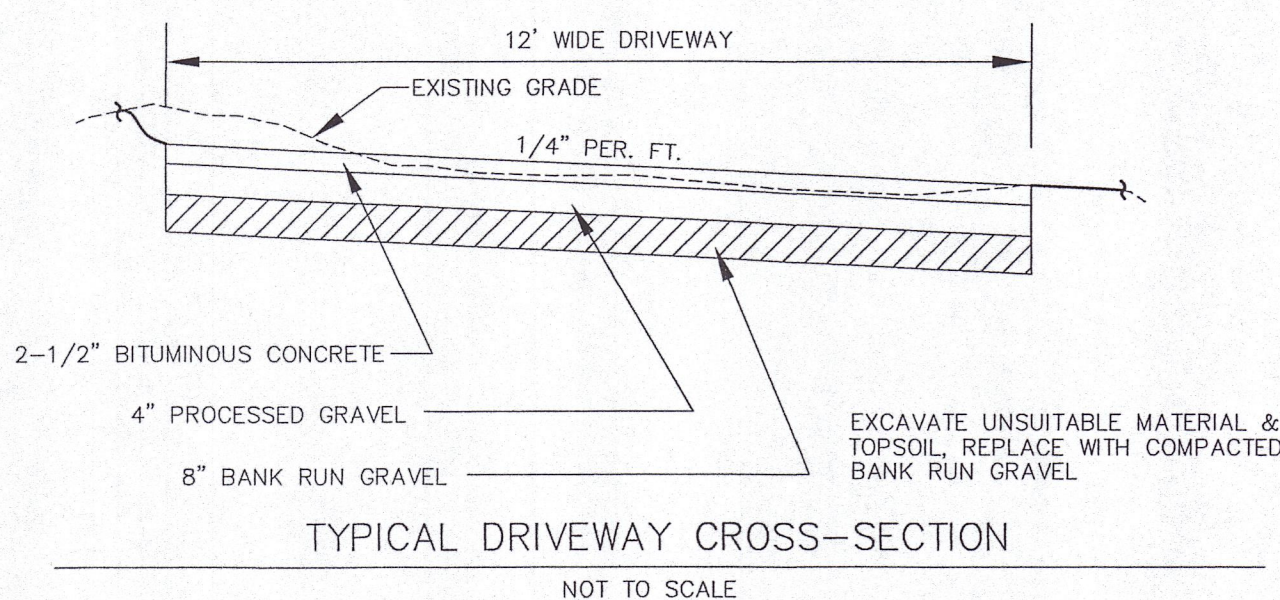
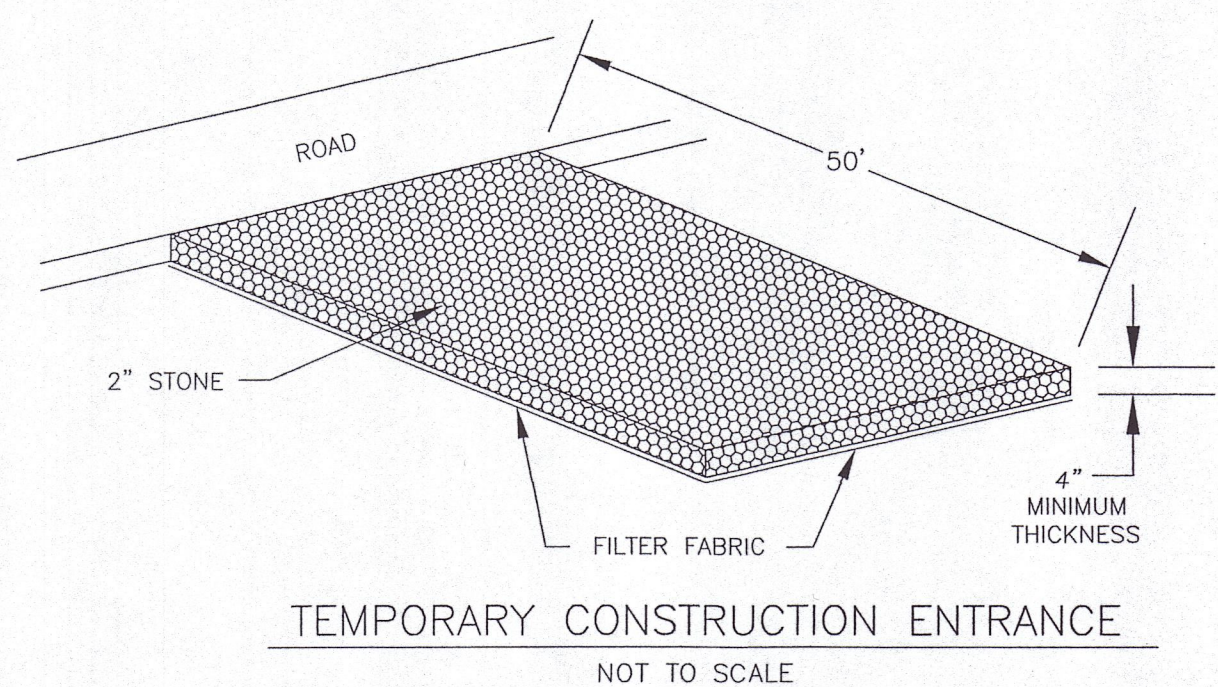
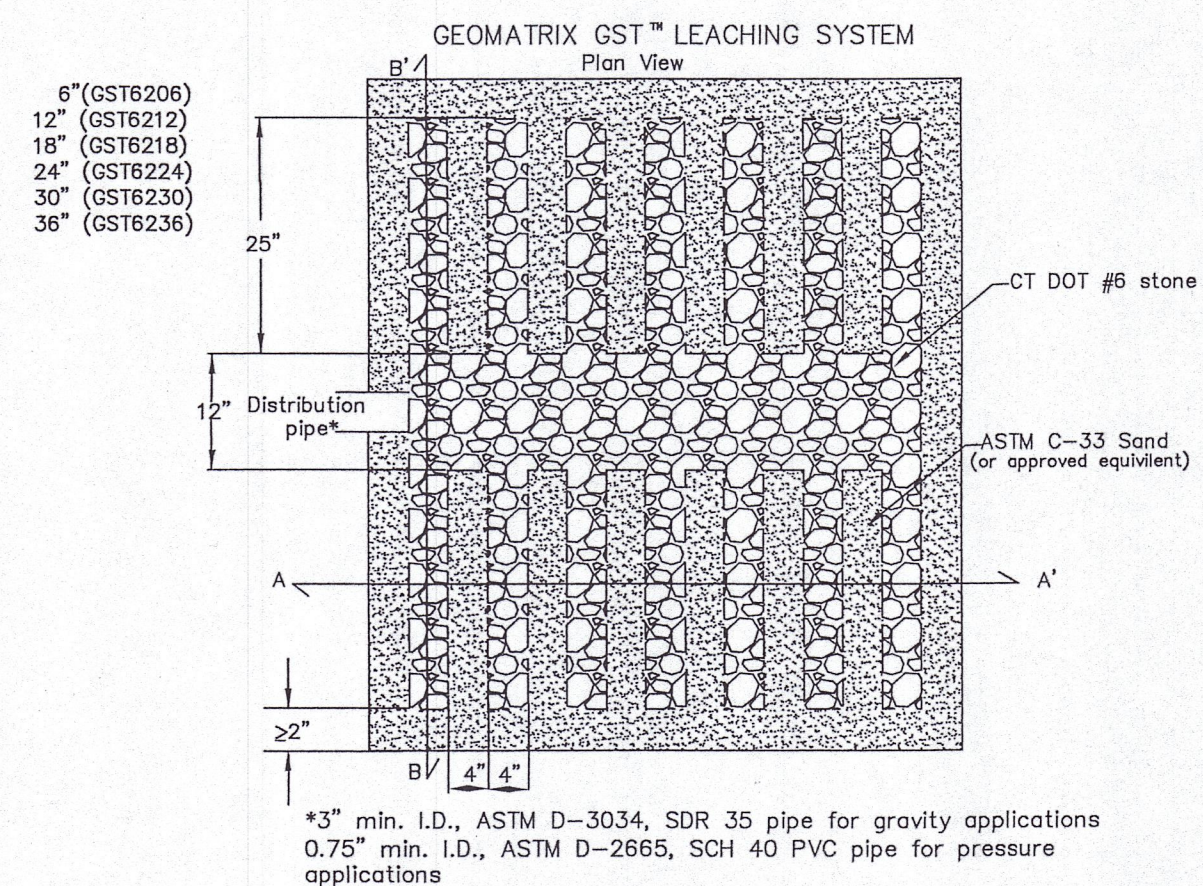
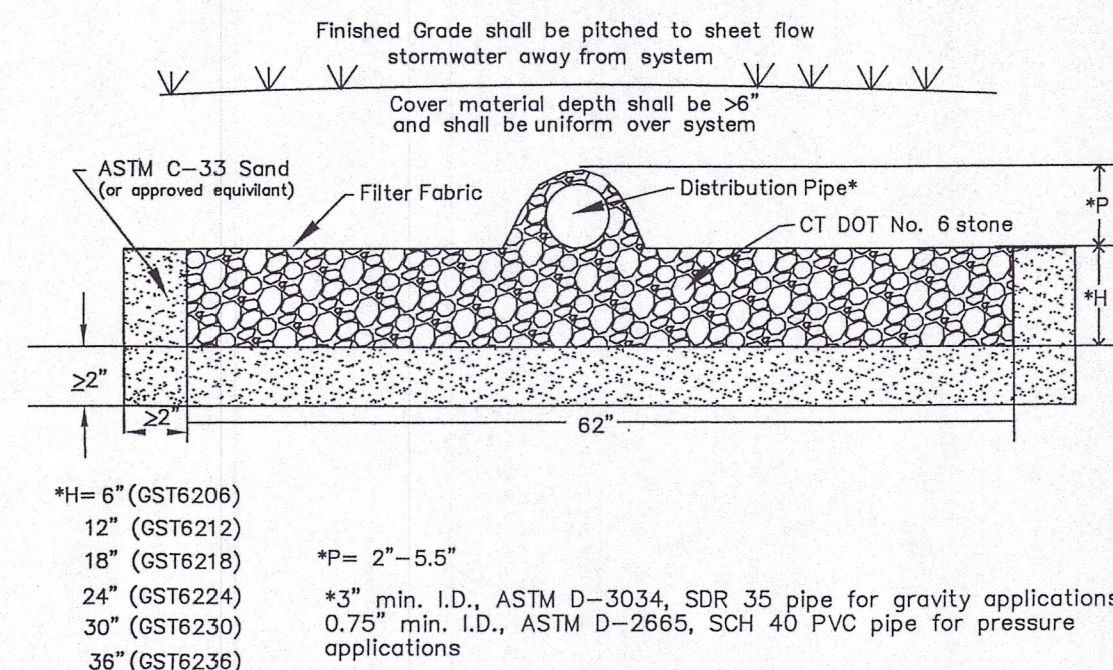




FILTER FABRIC SEDIMENT BARRIER
NOT TO SCALE



GEOMATRIX GST™ LEACHING SYSTEM
B-B' CROSS SECTION



- GENERAL NOTES
1. MAP REFERENCE:
SUBDIVISION PLAN OWNER: MILTON & JAMES ALLGOOD 26 BRAMAN ROAD WATERFORD, CONNECTICUT SCALE: 1"=40' DATE: FEB. 19, 1999.
 2. THIS LOT WAS TOPOED IN THE AREA OF THE HOUSE AND SEPTIC AND A BENCHMARK SET BY DIETER & GARDNER, INC. LAND SURVEYORS AND BENCHMARK SET IN AUGUST 2025.
 3. SELECT FILL PLACED WITHIN AND ADJACENT TO LEACHING SYSTEM AREAS SHALL BE COMPRISED OF CLEAN SAND, OR SAND AND GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE SELECT FILL SHALL MEET THE FOLLOWING REQUIREMENTS: UNLESS OTHERWISE APPROVED BY THE DESIGN ENGINEER, SELECT FILL EXCEEDING 6% PASSING THE #200 SIEVE BASED ON A WET SIEVE TEST CANNOT BE APPROVED BY THE DESIGN ENGINEER.

1. THE SELECT FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THE THREE (3) INCH SIEVE.
2. UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED ON THE #4 SIEVE. NOTE: THIS IS THE GRAVEL PORTION OF THE SAMPLE.
3. THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN REWEIGHED AND THE SIEVE ANALYSIS STARTED.
4. THE REMAINING SAMPLE SHALL MEET THE FOLLOWING GRADATION CRITERIA:

SIEVE SIZE	PERCENT PASSING	
	WET SIEVE	DRY SIEVE
#4	100	100
#10	70-100	70-100
#40	10-50 *	10-75
#100	0-20	0-5
#200	0-5	0-2.5

* PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.

SELECT FILL THAT DOES NOT MEET THE DRY SIEVE GRADATION CRITERIA BUT MEETS THE WET SIEVE GRADATION CRITERIA IS ACCEPTABLE. SIEVE TESTING OF SELECT FILL IS REQUIRED FOR LARGE (2,000 GPD OR GREATER) SYSTEMS WHENEVER THE LEACHING SYSTEM IS LOCATED TOTALLY IN SELECT FILL. THE LOCAL DIRECTOR OF HEALTH MAY REQUIRE SIEVE TESTING OF SELECT FILL ON LESS THAN 2,000 GPD SEWAGE SYSTEMS IN ACCORDANCE WITH PHC SECTION 19-13-B103e (D) (5).

THE LICENSED INSTALLER IS RESPONSIBLE FOR PREPARING THE LEACHING AREA WITH NECESSARY SELECT FILL. THE TOPSOIL IN THE LEACHING SYSTEM AREA MUST BE REMOVED AND THE SUBSOIL SCARIFIED PRIOR TO SELECT FILL PLACEMENT UNLESS OTHERWISE DIRECTED BY THE DESIGN ENGINEER. THE INSTALLER SHALL TAKE THE NECESSARY STEPS TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOIL FROM OVER COMPACTION OR DAMAGE. THE INSTALLER IS RESPONSIBLE FOR PROPERLY COMPACTING SELECT FILL TO FACILITATE CONSTRUCTION AND TO PREVENT SETTLING. SELECT FILL SHALL EXTEND A MINIMUM OF FIVE (5) FEET Laterally IN ALL DIRECTIONS BEYOND THE OUTER PERIMETER OF THE LEACHING SYSTEM.

THE COMMISSIONER OF PUBLIC HEALTH MUST APPROVE MANUFACTURED FILL ROCK USED TO PRODUCED MANUFACTURED FILL MUST HAVE A LOSS OF ABRASION OF NOT MORE THAN 50% USING AASHTO METHOD T-96, AND WHEN TESTED FOR SOUNDNESS USING AASHTO METHOD T104 NOT HAVE A LOSS OF MORE THAN 15% AT THE END OF 5 CYCLES. SUPPLIERS OF MANUFACTURED FILL MUST MAKE APPLICATION FOR APPROVAL TO THE COMMISSIONER OF PUBLIC HEALTH. DOCUMENTATION MUST BE SUBMITTED ON THE QUARRY OPERATION AND PRODUCTION PROCESS. FILL SPECIFICATIONS (GRADATION, PERMEABILITY, ETC) AND A NARRATIVE OF THE QUALITY CONTROL/QUALITY ASSURANCE PROGRAM MUST ALSO BE INCLUDED FOR ALL ACTIVE QUARRIES. THE MANUFACTURED FILL PRODUCERS MUST PROVIDE ANNUAL PRODUCT REGISTRATIONS TO THE COMMISSIONER OF PUBLIC HEALTH BY JULY 1ST OF EACH YEAR.

4. APPLICANT: CHRIS & VANESA KELMIS
5. THE FOUNDATION AND SEPTIC SYSTEM SHALL BE STAKED OUT AND GRADES ESTABLISHED BY A LICENSED LAND SURVEYOR.
6. AT THE TIME OF THIS DESIGN THERE WERE NO EXISTING WELLS WITHIN 75' OF THE PROPOSED SEPTIC SYSTEM.
7. INLAND WETLANDS AS SHOWN ON REFERENCED PLAN.

SHEET INDEX

SHEET 1)	GENERAL NOTES; EROSION AND SEDIMENT CONTROL DETAILS AND SEPTIC DETAILS
SHEET 2)	30 SCALE SITE PLAN

PLAN SHOWING
PROPOSED HOUSE, DRIVE,
WATER CONNECTION,
UNDERGROUND UTILITY CONNECTION
AND
SEPTIC SYSTEM
PREPARED FOR
CHRIS & VANESSA KELMIS
34 BRAMAN ROAD
WATERFORD, CONNECTICUT
SEPTEMBER 2025

DEEP TEST PIT DATA
WITNESSED AND RECORDED BY KIMBERLY HAMLEY RS, LEDGE LIGHT HEALTH DISTRICT ON AUGUST 11, 2025.

TP 10
0-35" FILL
35-70" YELLOW/BROWN FINE SANDY
LOAM, DRY
70-75" GREY FINE/MEDIUM SAND
& GRAVEL, DRY
MOTTLES: NO
NO GW
LEGE: 75"
ROOTS: TO 24"
RESTRICTIVE: 75" LEDGE

TP 11
0-20" FILL
20-30" YELLOW/BROWN FINE SANDY
LOAM, DRY
30-75" GREY FINE/MEDIUM SAND
& GRAVEL, DRY
MOTTLES: 30"
NO GW
NO LEDGE
ROOTS: TO 24"
RESTRICTIVE: 30" MOTTILING

TP 12
0-6" TOPSOIL (STRIPPED)
6-32" YELLOW/BROWN FINE SANDY
LOAM, DRY
MOTTLES: NO
NO GW
LEGE: 32"
ROOTS: 12"
RESTRICTIVE: 32" LEDGE

TP 13
0-12" TOPSOIL
12-30" YELLOW/BROWN FINE SANDY
LOAM, DRY
30-78" COMPACT GREY FINE/MEDIUM SAND
& GRAVEL, MOTTLED THROUGHOUT,
DRY
MOTTLES: 24"
NO GW
NO LEDGE
ROOTS: NO
RESTRICTIVE: 24" MOTTILING

TP 14
SIDE OF HOLE FACING STREET
0-12" TOPSOIL
12-34" YELLOW/BROWN FINE SANDY
LOAM, DRY
34-80" GREY FINE/MEDIUM SAND
& GRAVEL, DRY
SIDE OF HOLE FACING LEDGE OUTCROP
0-30" TOPSOIL
30-80" GREY FINE/MEDIUM SAND
& GRAVEL, DRY
MOTTLES: 34"
NO GW
NO LEDGE
ROOTS: NO
RESTRICTIVE: 34" MOTTILING

TP 15
0-12" TOPSOIL
12-24" YELLOW/BROWN FINE SANDY
LOAM, DRY
24-80" GREY FINE/MEDIUM SAND
& GRAVEL, DRY
MOTTLES: 24"
NO GW
NO LEDGE
ROOTS: NO
RESTRICTIVE: 24" MOTTILING

TP 16
0-6" TOPSOIL (STRIPPED)
6-22" YELLOW/BROWN FINE SANDY
LOAM, DRY
22-82" GREY FINE/MEDIUM SAND
& GRAVEL, LOOSE, DRY
MOTTLES: 63"
NO GW
NO LEDGE
ROOTS: 12"
RESTRICTIVE: 63" MOTTILING

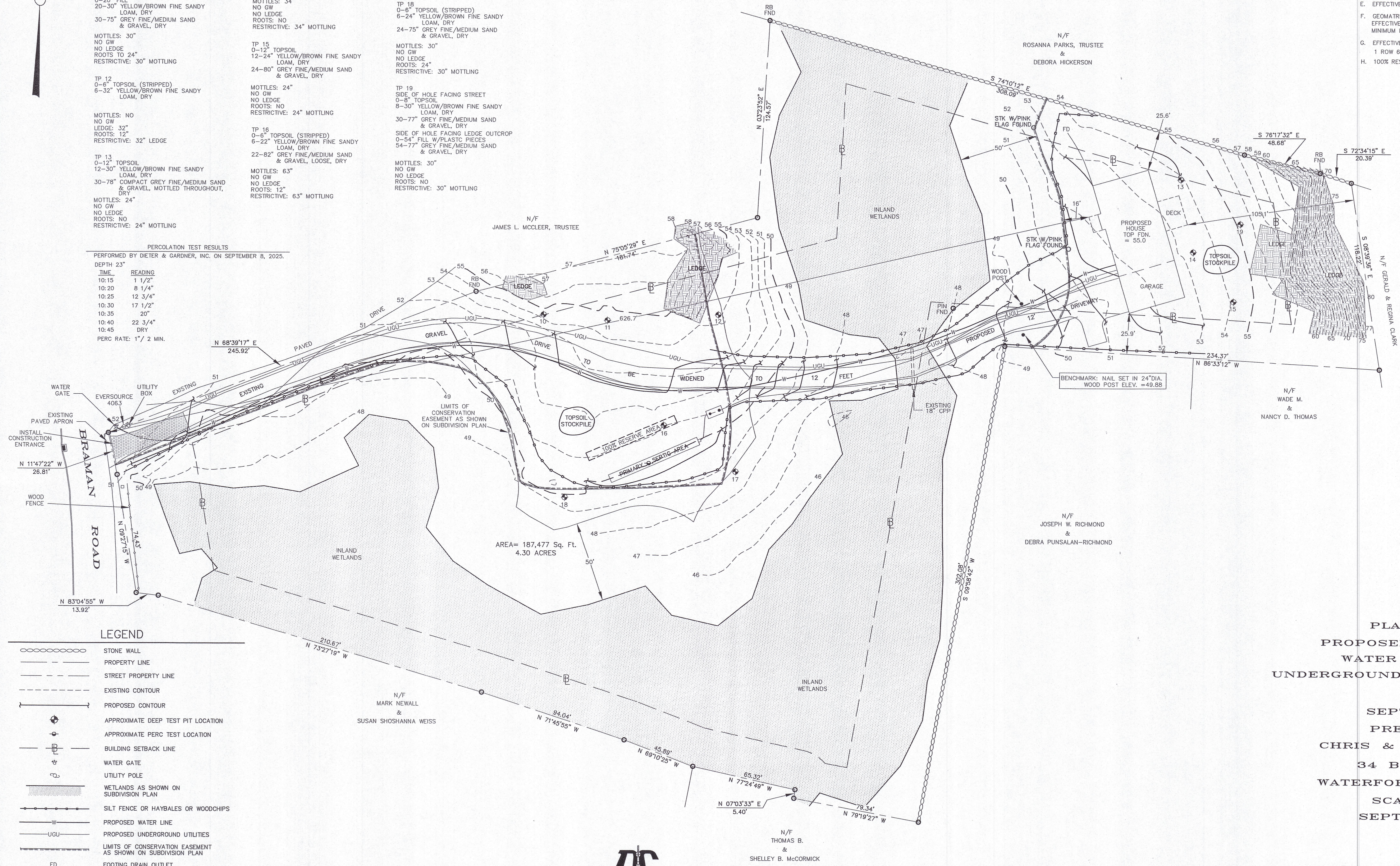
TP 17
0-12" TOPSOIL
12-30" YELLOW/BROWN FINE SANDY
LOAM, DRY
30-78" COMPACT GREY FINE/MEDIUM
SAND & GRAVEL, MOTTLED
THROUGHOUT, DRY
MOTTLES: 30"
NO GW
NO LEDGE
ROOTS: 44"
RESTRICTIVE: 30" MOTTILING

TP 18
0-6" TOPSOIL (STRIPPED)
6-24" YELLOW/BROWN FINE SANDY
LOAM, DRY
24-75" GREY FINE/MEDIUM SAND
& GRAVEL, DRY
MOTTLES: 30"
NO GW
NO LEDGE
ROOTS: 24"
RESTRICTIVE: 30" MOTTILING

TP 19
SIDE OF HOLE FACING STREET
0-8" TOPSOIL
8-30" YELLOW/BROWN FINE SANDY
LOAM, DRY
30-77" GREY FINE/MEDIUM SAND
& GRAVEL, DRY
SIDE OF HOLE FACING LEDGE OUTCROP
0-54" FILL W/PLASTIC PIECES
54-77" GREY FINE/MEDIUM SAND
& GRAVEL, DRY
MOTTLES: 30"
NO GW
NO LEDGE
ROOTS: NO
RESTRICTIVE: 30" MOTTILING

PERCOLATION TEST RESULTS
PERFORMED BY DIETER & GARDNER, INC. ON SEPTEMBER 8, 2025.

DEPTH 23"	READING
10:15	1 1/2"
10:20	8 1/4"
10:25	12 3/4"
10:30	17 1/2"
10:35	20"
10:40	22 3/4"
10:45	DRY
PERC RATE: 1" / 2 MIN.	



LEGEND

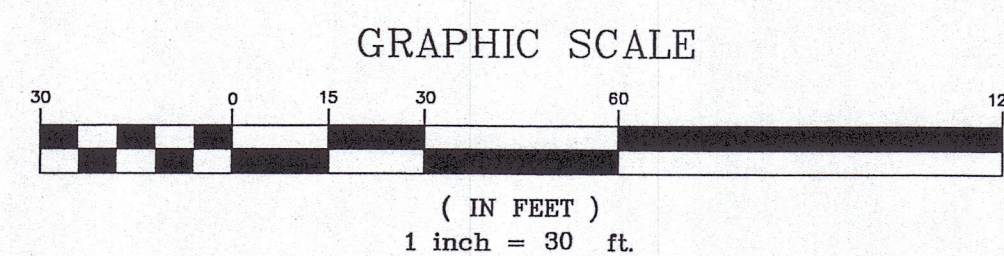
- STONE WALL
- PROPERTY LINE
- STREET PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- APPROXIMATE DEEP TEST PIT LOCATION
- APPROXIMATE PERC TEST LOCATION
- BUILDING SETBACK LINE
- WATER GATE
- UTILITY POLE
- WETLANDS AS SHOWN ON SUBDIVISION PLAN
- SILT FENCE OR HAYBALES OR WOODCHIPS
- PROPOSED WATER LINE
- PROPOSED UNDERGROUND UTILITIES
- LIMITS OF CONSERVATION EASEMENT AS SHOWN ON SUBDIVISION PLAN
- FOOTING DRAIN OUTLET

NOTE: BOUNDARY LINES OF ADJOINING PROPERTIES ARE SHOWN FOR GENERAL INFORMATION PURPOSES ONLY AND ARE NOT TO BE CONSTRUED AS BEING ACCURATELY LOCATED OR DEPICTED.

THIS DRAWING IS THE PROPERTY OF THE LAND SURVEYOR. THIS PLAN AND REPRODUCTIONS, ADDITIONS OR REVISIONS OF THIS PLAN ARE NOT VALID WITHOUT THE EMBOSSED SEAL AND SIGNATURE OF THE LAND SURVEYOR WHO PREPARED THIS PLAN. JOB# 25-064.DWG FBK#315

THE STONE WALLS AND/OR FENCES SHOWN AS BOUNDARIES MAY HAVE IRREGULARITIES OF COURSE BETWEEN PRINCIPAL POINTS OF COURSE INDICATED. THE WORD "CERTIFY" IS UNDERSTOOD TO BE AN EXPRESSION OF THE PROFESSIONAL OPINION BY THE LAND SURVEYOR WHICH IS BASED ON HIS OR HER BEST KNOWLEDGE, INFORMATION AND BELIEF, AS SUCH IT CONSTITUTES NEITHER GUARANTEE OR WARRANTY.

DIETER & GARDNER
LAND SURVEYORS • PLANNERS
1641 ROUTE 12
P.O. BOX 335
GALES FERRY, CT. 06335
(860) 484-7455
EMAIL: DIETER.GARDNER@YAHOO.COM



SANITARY DESIGN CRITERIA:

- A. PROPOSED FIVE BEDROOM HOME. NO TUBS GREATER THAN 100 GALLONS IN SIZE.
- B. 1500 GALLON TWO COMPARTMENT SEPTIC TANK REQUIRED BY CODE AND PROVIDED.
- C. DESIGN PERCOLATION RATE: 2 MIN./IN.
- D. MINIMUM LEACHING SYSTEM 'SPREAD':
HF = 30, GRADIENT BETWEEN 4.1 TO 6.0%
FF = 2.0, FIVE BEDROOM HOME
PF = 1.0, PERC RATE MIN./INCH
MLSS = HF X FF X PF = 30 X 2.0 X 1.0 = 60'
- E. EFFECTIVE LEACHING AREA REQUIRED PER CODE: 600 S.F.
- F. GEOMATRIX GST 6212 SELECTED FOR PRIMARY SYSTEM DESIGN.
EFFECTIVE LEACHING AREA PROVIDED PER L.F. PER CODE: 10 S.F./L.F.
MINIMUM LENGTH OF TRENCH REQUIRED: 600 S.F. / 10 S.F./L.F. = 60'
- G. EFFECTIVE LEACHING AREA PROVIDED:
1 ROW 60' GEOMATRIX GST 6212 - 1 X 60' X 10 S.F./L.F. = 600 S.F.
- H. 100% RESERVE AREA REQUIRED AND PROVIDED 60 L.F. GEOMATRIX GST 6212.

PLAN SHOWING
PROPOSED HOUSE, DRIVE,
WATER CONNECTION,
UNDERGROUND UTILITY CONNECTION
AND
SEPTIC SYSTEM
PREPARED FOR
CHRIS & VANESSA KELMIS
34 BRAMAN ROAD
WATERFORD, CONNECTICUT
SCALE: 1"=30'
SEPTEMBER 2025

SHEET 2 OF 2

THIS MAP AND SURVEY HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300B-1 THROUGH 20-300B-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES--MINIMUM STANDARDS OF ACCURACY, CONTENT AND CERTIFICATION FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT, ADOPTED EFFECTIVE JUNE 21, 1996, REVISED OCTOBER 28, 2018. IT IS AN IMPROVEMENT LOCATION SURVEY BASED ON A DEPENDENT RESURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS A-2, TOPOGRAPHIC ACCURACY T-2, TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

TITLE: LAND SURVEYOR CT No. 14208
DATE: SEPTEMBER 10, 2025