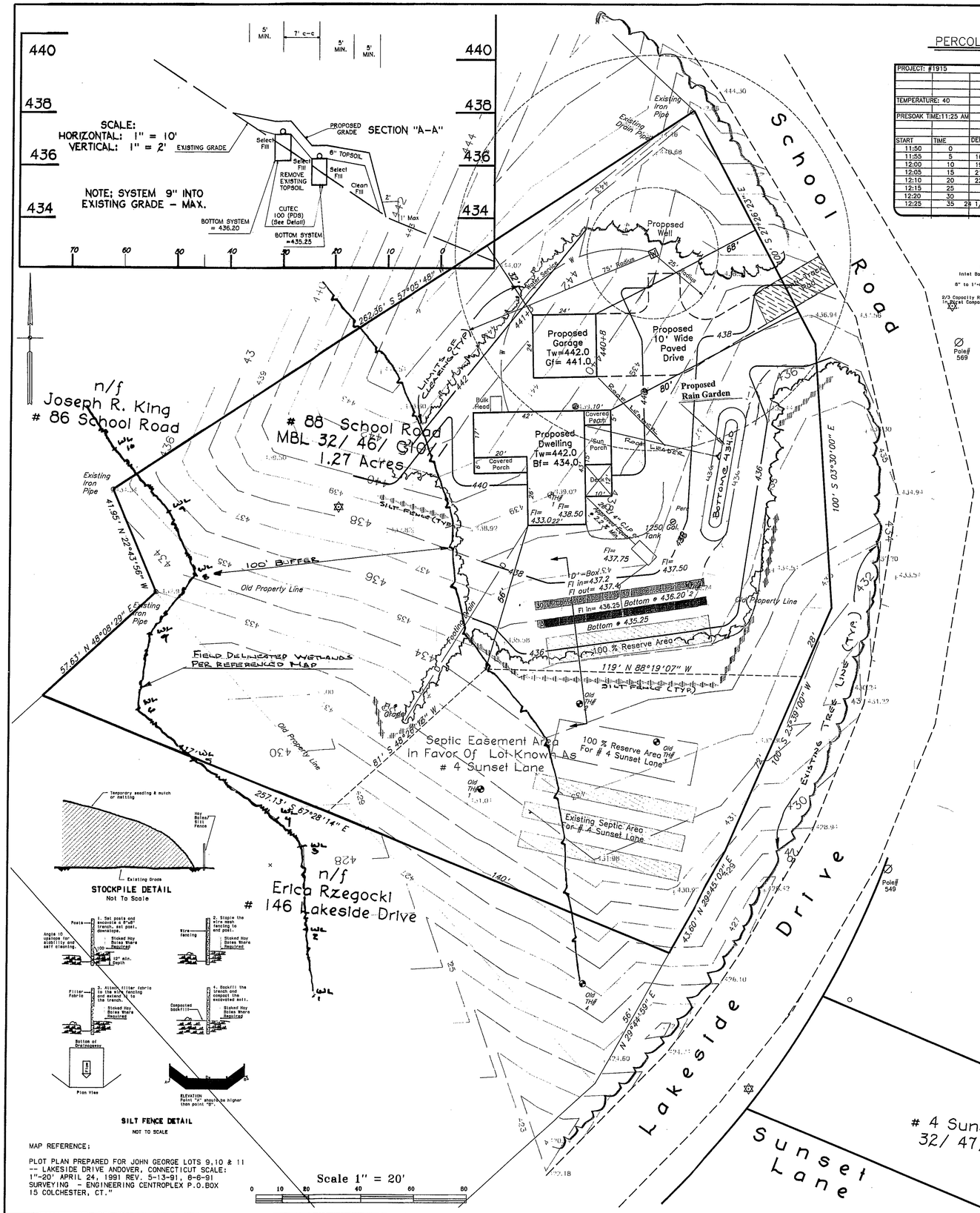


STOCKPILE DETAIL
Not To Scale

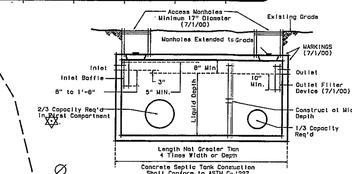
SILT FENCE DETAIL
NOT TO SCALE

MAP REFERENCE:

PLOT PLAN PREPARED FOR JOHN GEORGE LOTS 9,10 & 11 -- LAKESIDE DRIVE ANDOVER, CONNECTICUT SCALE: 1"=20' APRIL 24, 1991 REV. 5-13-91, 6-6-91 SURVEYING - ENGINEERING CENTROPLEX P.O.BOX 15 COLCHESTER, CT."

PERCOLATION TEST DATA

PROJECT: #1915			DATE: 11/17/21	
			LOT:	
			PERC:	
TEMPERATURE: 40			WEATHER CONDITIONS: CLDY	
PRESOAK TIME:11:25 AM			DEPTH TO BOTTOM: 30"	
START	TIME	DEPTH	AVG. TIME	AVG. DEPTH	MIN/INCH
11:50	0	12"			
11:55	5	16 1/2"	5	4 1/2"	1.1
12:00	10	19 1/2"	5	3"	1.6
12:05	15	21 1/2"	5	2"	2.5
12:10	20	22 1/4"	5	3/4"	6.66
12:15	25	23"	5	3/4"	6.66
12:20	30	24"	5	1"	5
12:25	35	28 1/2" (DRY)		1/2"	10



TYPICAL SEPTIC TANK DETAIL
Not To Scale

Test holes : By Tobell Heintz & EHHD (Thad King)11-17-21

Test Hole # 1
0-8" Topsoil
8-31" Org Brn Fine Sandy Loam
31-74" Gray Compact Sand and Silt/wet
No Ledge Seeps 65" Motts @ 31" Roots 31"

Test Hole # 2
0-8" Topsoil
8-28" Yel/Brn. fine Sandy Loam
28-64" Gray Compact Sand and Silt/wet
No Ledge Seeps @ 46" Motts @ 38" Roots @ 38"

Test Hole # 3
0-9" Topsoil
9-30" Yel/Brn. Fine Sandy Loam
30-57" Gray Compact Sand and Silt/wet
No Ledge Seeps @ 35" Motts @ 30" Roots @ 30"

Test Holes (Old): Per Referenced Map
4-24-91

Old Test Hole # 1

0-8" Topsoil
8-30" Brn Fine Sandy Silt
30-74" Greyish Mod. Compacted Silt
Depth 82" Seeps 51" Motts @ 43"

Old Test Hole # 2

0-7" Topsoil
7-27" Fine Brn Sandy Silt
27-82" Greyish Brn. Mod. Compact/Stones
Depth 82" Seeps 58" Motts @ 36"

Old Test Hole # 3

0-9" Topsoil
9-33" Brn Fine Sandy Silt
33-68" Greyish Brn. Mod. To Fine Compact
Depth 68" Seeps 51" Motts @ 36"

Old Test Hole # 4

0-8" Topsoil
8-32" Fine Sandy Loam
32- 42" Loosely Compact Med. Sand W/Stones
42- 88" Firmly Compact Sand
Depth 88" Seeps 46" Motts @ 36"

3-Bedroom House
Leaching area required = 495 S.F.
Leaching area provided = 516 S.F. + 100% reserve
Use 2 Rows of CULTEC Contactor 100(PDS)
(60' - 8' I x 36" w x 12.5" h) 4.3 Sq.Ft. E.L.A.
Use a 1250 gallon septic tank
Slope = 6% (HF)
Bedroom Design - 1.50 (FF)
MLSS = HF x FF x PF = 30 x 1.50 x 1.0 = 45 LF
Perc rate = 5 .1- 10 Min/In (PF)

HYDRAULIC FACTOR (HF)

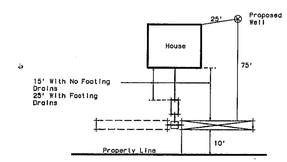
	HYDRAULIC GRADIENT (% OF SLOPE)								
	<1	1.1 -2	2.1 -3	3.1 -4	4.1 -5	5.1 -8	8.1 -10	10.1 -15	>15
<17.9	SEE NOTE #1								
18- 22	72	62	54	48	42	34	30	28	26
22.1 -26	66	56	48	42	34	30	28	26	24
26.1 -30	56	49	42	34	30	28	26	24	20
30.1 -36	48	42	34	30	28	26	24	20	18
36.1 -42	42	36	30	28	26	24	20	18	16
42.1 -48	36	32	28	26	24	20	18	16	14
48.1 -60.0	30	28	24	22	20	18	16	14	10
<60	MLSS NEED NOT BE CONSIDERED								

#1 - Cannot Be Approved Unless Hydraulic Analysis Demonstrates Suitability

FLOW FACTOR = DESIGN FACTOR (FF)	
TYPICAL USES	FLOW FACTOR (FF)
Residential Each Bedroom Has A Design Flow Of 150 Gallons Per Day (GPD)	
2 Bedroom Home = 300/300 3 Bedroom House = 450/300 4 Bedroom House = 600/300	1.50
Non - Residential Design Flow (GPD)/300 (FF)	

PERCOLATION FACTOR (PF)

1.1 - 5 = 0.5
5.1 - 10 = 1.0
10.1 - 20 = 1.25
20.1 - 30 = 1.5



MINIMUM CLEARANCE DETAIL
Not To Scale

General Notes:

1. Contractor and/or owner shall comply with all pertinent Town and State Health Department regulations.
2. Installation order and procedures shall be as directed by the State Health Department, the Town, and the Engineer.
3. Topography is based upon actual field location.
4. House sewer from foundation wall to septic tank shall be cast iron hubless A-888 pipe with cast iron slit sleeve bolted joint with rubber gasket, MG coupling or approved equal.
5. Distrubution pipes after septic tank to be S.D.R.-35 or approved equal.
6. The septic tank shall be made of concrete with watertight walls and bottom, shall have two compartments, with the inlet baffled or submerged for a depth of at least 12"-18" and the outlet baffled or submerged to a depth of at least 18" below the liquid surface, but not more than half the liquid depth. Baffles shall extend 6" above the liquid level. The outlet invert shall be 3" lower than the inlet invert. The tank shall conform to the current Health Department Standards and Specifications.
7. It is the responsibility of the licensed installer to construct the final approved plan without revision, unless prior approval has been granted.
8. If the installer finds any mottling, ground water or other conditions worse than shown on this plan, he shall immediately stop work and contact the Health Agency and the Engineer for revisions.
9. The design is based on field testing and it is possible that conditions may be found during construction that will increase the system cost to the owner.
10. All disturbed areas shall be loamed and seeded as soon as possible after system construction. All areas to be protected against erosion during construction, using hay bales/silt fence as required.
11. It is strongly recommended that a licensed Land Surveyor stake out the area of the system prior to house construction, as well as field stake both the elevations and locations for all parts of the leaching system prior to its construction.
12. The design Engineer shall supervise the staking of the septic system, location and elevation to insure conformance to the plan and the State Health code.

Construction Schedule/Erosion & Sedimentation Control Notes

1. Place staked hay bales/silt fence adjacent to disturbed areas to protect against possible sedimentation (see plan).
2. Strip and stockpile topsoil from area of proposed barn/garage, keep disturbance at a minimum (see temporary stockpile detail).
3. Excavate for and install footings and foundation.
4. Backfill foundation, loam and seed disturbed area as soon as possible. Protect area, as necessary, with hay bales, mulch, etc., until area is stabilized.
5. Strip and stockpile topsoil from area of septic system.
6. Install septic system. Install septic tank. Install well.
7. Loam and seed all remaining disturbed areas as soon as possible. Protect area, as necessary, with hay bales, mulch, etc., until area is stabilized.
8. All erosion and sedimentation control devices are to be maintained until disturbed areas are stabilized. Responsible party is MAT SCHULIST 1-860-922-2626.
9. At time of construcion stake-out, BM to be set near septic area.

Septic Notes

1. Flow lines need to be field adjusted to maintain bottom of system 9" into existing grade as it exists prior to any stripping or filling, the Town Sanitarian must be notified prior to installation.
2. Stone Trenches are to be set level.
3. System is a High Level Overflow Serial Distribution System.
4. Fill for septic system will be as specified below and meeting the State Health code requirements and approved by the local Sanitarian.
5. The first layer of fill shall be a 12" lift with each succeeding layer in 12" lifts.
6. Fill material to be compacted to 90% density.
7. Truck and equipment traffic as well as material stockpiles should be kept out of the area of the system.
8. Design of septic does not take into account a garbage disposal or a large capacity discharge type tub.

Septic Systems Select Backfill Specifications

1. The fill should not contain any material larger than 3 inches.
2. The fill should not contain more than 45 percent gravel (gravel falls between the No.4-3 sieves). No more than 45 percent of the material can be retained on the No. 4 sieve.
3. The fill less the gravel should meet the following gradation criteria:

Sieve	Percent Passing (Wet Sieve)	(Dry Sieve)
No.4	100	100
No.10	70-100	70-100
No.40	10-50 *	10-75
No.100	0-50	0-5
No.200	0-5	0-2.5

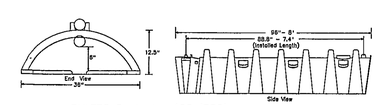
*Note: Percent passing the no.40 sieve can be increased to no greater than 75% if the percent passing the no.100 sieve does not exceed 10% and the no.200 sieve does not exceed 5%.

Note: The responsibility for the preparation of a leaching area utilizing "select" material is that of the licensed installer. The installer shall take the necessary steps to protect the underlying naturally occuring soils from overcompaction and siltation once exposed.

4. Stone Aggregate Specifications

Sieve	Percent Passing(By Weight) (Wet Sieve)
2-inch	
1.5-inch	90-100
1-inch	20-55
3/4-inch	0-15
3/8-inch	0-5
#40 0-3	0-3
#200 0-1.5	0-1.5

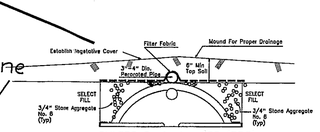
Stone aggregate shall be free of silt, dirt,or debris, and shall show a loss of abrasion of not more than 50% using AASHTO METHOD T-96, and when tested for soundness using AASHTO METHOD T-104 not have a loss of more than 15% at the end of 5 cycles.



CULTEC Contactor 100 (PDS)

Not To Scale

CULTEC Contactor 100 (PDS)
36" x 12.5" ELA(Sq.Ft.) 4.3
Center to Center Spacing 7'



CULTEC Contactor 100 (PDS)
(Section - NTS)
Primary - Reserve

NOTE: I HEREBY DECLARE THAT THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300b-1 THRU 20-300b-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES - "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. IT IS AN LIMITED PROPERTY/BOUNDARY SURVEY BASED ON A DEPENDENT RESURVEY, CONFORMING TO HORIZONTAL ACCURACY - CLASS "A-2".

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

L.S. 15464	12-20-22
REGISTRATION NO.	DATE

RUSSELL W. HEINTZ

MBL 32/ 46/ C10//

Revision 4-30-23
Raised Wood Added

REVISION
2-17-23 WETLANDS & CULTEC ADDED

STATE OF CONNECTICUT
RUSSELL W. HEINTZ
LICENSED PROFESSIONAL ENGINEER
15794

PERMIT PLAN - SEPTIC DESIGN - SITE PLAN

PREPARED FOR

MATHEW SCHULIST

88 SCHOOL ROAD

ANDOVER, CONNECTICUT

RUSSELL HEINTZ, L.S.
LAND SURVEYOR - CONSULTING - PLANNING
50 SPAK ROAD WILLINGTON, CT 06279 (860)798-6160

JOB NO.	DATE:	SCALE:	DRAWN BY	SHEET NO:
1915	12-20-22	AS SHOWN	R.H.H.	1 OF 1