PERCOLATION TEST DATA

P-1
DEPTH: 19"
PRESOAK: YES

READING:		CHANGE:
1:14	5"	—
1:16	8.5"	3.5"
1:18	9.75"	1.25"
1:20	10.75"	1
1:22	11.75"	1"
1:24	12.75"	1"
1:26	13.5"	0.75"
1:28	14"	0.5"
1:30	14.75"	0.75"
1:32	15.25"	0.5"
1:34	16"	0.75"
1:36	16.5"	0.5"
1:38	17"	0.5"
1:40	17.25"	0.25"
1:42	17.5"	0.25"
1:44	18"	0.5"
1:46	18.5"	0.5"
1:48	19"	0.5"

MIN 1:26 TO 1:48 = 22 MIN
IN = 8.5 TO 19 = 5.5"
22MIN / 5.5IN = 4 MIN/IN

PERCOLATION RATE: 4 MIN/IN (1.0-10.0 MIN/IN)

PERCOLATION TEST CONDUCTED BY
CLA Engineers, Inc, 8/14/2024

PERCOLATION TEST DATA

P-2
DEPTH: 17"
PRESOAK: YES

READING:		CHANGE:
1:49	3"	—
1:51	7"	4"
1:53	9"	2"
1:55	10.5"	1.5"
1:57	11.25"	0.75"
1:59	12"	0.75"
2:01	12.5"	0.5"
2:03	13.5"	1"
2:05	14"	0.5"
2:07	14.5"	0.5"
2:09	15"	0.5"
2:11	15.5"	0.5"
2:13	16"	0.5"
2:15	16.5"	0.5"
2:17	17"	0.5"

MIN 1:55 TO 2:17 = 22 MIN
IN = 10.5 TO 17 = 6.5"
22MIN / 6.5IN = 3.4 MIN/IN

PERCOLATION RATE: 4 MIN/IN (1.0-10.0 MIN/IN)

PERCOLATION TEST CONDUCTED BY
CLA Engineers, Inc, 8/14/2024

TEST HOLE DATA:

RECORDED BY –
LEDGE LIGHT HEALTH DISTRICT
8/13/2024

TEST HOLE 1
0-12" TOP SOIL
12"-32" ORANGE BROWN FINE SANDY LOAM
32"-90" SAND AND GRAVEL WITH COBBLES THROUGHOUT

MOTTLING AT 32"
ROOTS TO 30"
NO GROUNDWATER
NO LEDGE

TEST HOLE 2
0-10" TOP SOIL
10"-32" ORANGE BROWN FINE SANDY LOAM
32"-85" SAND AND GRAVEL WITH COBBLES THROUGHOUT

MOTTLING AT 32"
ROOTS TO 30"
GROUNDWATER AT 79"
NO LEDGE

TEST HOLE 3
0-12" TOP SOIL
12"-32" ORANGE BROWN FINE SANDY LOAM
32"-42" GRAVEL AND COBBLES, VERY LOOSE
42"-85" SAND & GRAVEL WITH COBBLES THROUGHOUT

MOTTLING AT 42"
ROOTS TO 32"
GROUNDWATER AT 72"
NO LEDGE

TEST HOLE 4
0-12" TOP SOIL
12"-36" ORANGE BROWN FINE SANDY LOAM
36"-60" SAND AND GRAVEL WITH COBBLES THROUGHOUT

MOTTLING AT 36"
ROOTS TO 34"
NO GROUNDWATER
NO LEDGE

PRIMARY LEACHING AREA

4 BEDROOM RESIDENCE
PERCOLATION RATE: 1–10 MIN./INCH
LEACHING AREA REQUIRED: 577.5 SF

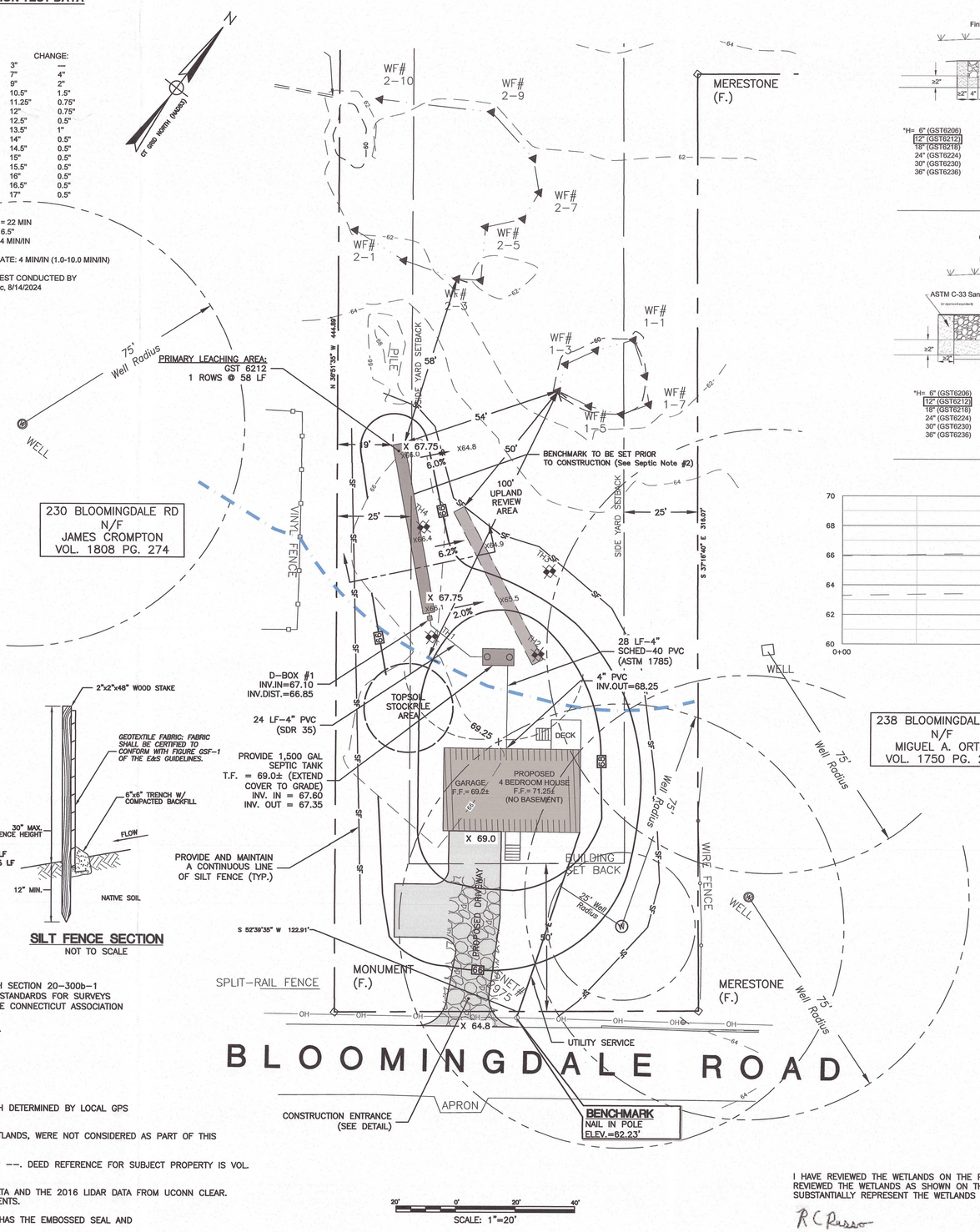
USE 12x48" LEACHING TRENCH
EFFECTIVE LEACHING AREA OF GST 6212 = 10.0 SF/LF
REQUIRED LENGTH = 577.5 SF / 10.0 SF/LF = 57.5 LF

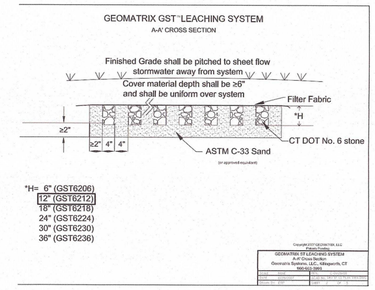
MLSS CALCULATION
RESTRICTIVE LAYER @ 32" AT TP#1 & 2
Slope = 4% (AVERAGED)
MLSS = 30x1.75x1.0=52.5

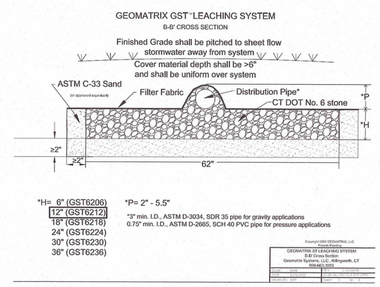
PRIMARY SYSTEM
1 ROW OF 58 L.F. OF GST 6212

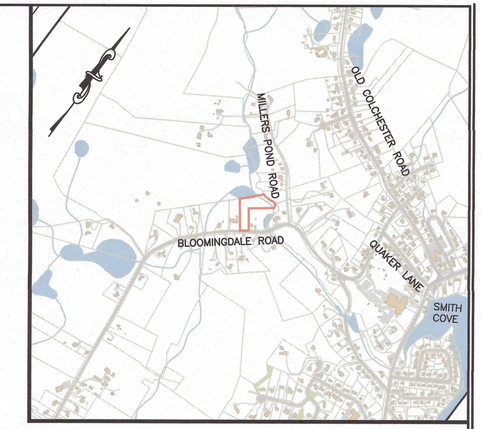
RESERVE LEACHING AREA
SAME AS PRIMARY

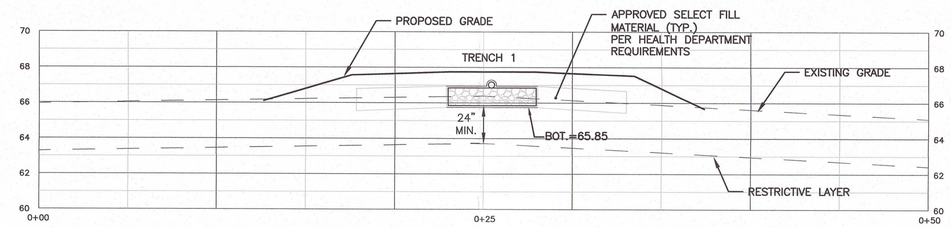
SILT FENCE SECTION
NOT TO SCALE











PRIMARY SEPTIC SYSTEM - CROSS SECTION A-A
Horiz. Scale: 1" = 4'
Vert. Scale: 1" = 4'

LEGEND:

PROPERTY LINE	WF — WETLANDS VEGETATION, FLAG
CHAIN-LINK FENCE	X64.9 — EXISTING SPOT GRADE
RETAINING WALL	X 67.75 — PROPOSED SPOT GRADE
WETLANDS EDGE	UTILITY POLE
STONE WALL	N/F — NOW OR FORMERLY
BOUNDARY POINT	U.G. — UNDER GROUND
IRON PIN, IRON PIPE	
CHD, MON — MONUMENT	
OH — OVERHEAD ELECTRIC LINE	

SURVEY NOTES

1. THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 20–300b–1 THRU 20–300b–20 OF THE REGULATIONS FOR STATE AGENCIES "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC.

   A. TYPE OF SURVEY: EXISTING CONDITIONS BOUNDARY SURVEY
   B. BOUNDARY DETERMINATION CATEGORY: RESURVEY
   C. HORIZONTAL ACCURACY: CLASS A–2
   VERTICAL ACCURACY: CLASS V–2
   TOPOGRAPHIC ACCURACY: CLASS T–2

2. LATEST DATE OF FIELD WORK: JULY 2024

3. HORIZONTAL GRID IS NAD83 AND VERTICAL DATUM IS NAVD88 BOTH DETERMINED BY LOCAL GPS OBSERVATIONS.

4. UNDERGROUND AND ENVIRONMENTAL CONDITIONS, OTHER THAN WETLANDS, WERE NOT CONSIDERED AS PART OF THIS SURVEY.

5. SUBJECT PROPERTY IS DEPICTED AS LOT –– OF ASSESSOR'S MAP ––. DEED REFERENCE FOR SUBJECT PROPERTY IS VOL. 64 PG. 750.

5. CONTOUR DATA SHOWN IS A COMBINATION OF FIELD MEASURED DATA AND THE 2016 LIDAR DATA FROM UCONN CLEAR. CONTOUR DATA IN AREA OF DEVELOPMENT IS FROM FIELD MEASUREMENTS.

6. THIS MAP AND SURVEY ARE VALID ONLY IF THE PRINT OR MYLAR HAS THE EMBOSSED SEAL AND LIVE SIGNATURE OF THE SURVEYOR.

I HAVE REVIEWED THE WETLANDS ON THE PROPERTY IN THE FIELD AND HAVE REVIEWED THE WETLANDS AS SHOWN ON THE PLAN AND FIND THAT THEY SUBSTANTIALLY REPRESENT THE WETLANDS AS DELINEATED IN THE FIELD.

R C Russo — 9/13/2024
ROBERT C. RUSSO — DATE
CERTIFIED SOIL SCIENTIST

RECEIVED
SEP 16 2024
Planning & Development
Town of Waterford, CT

No.	DATE	REVISION

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Quaker Hill, Connecticut

Integrity Properties

Septic System Design Plan

Project No. CLA-7880
Proj. Engineer R.A.D.
Date: July 2024
Sheet No. 1

CLA