ZONING COMPLIANCE CHART - ZONE: L

	REQUIRED	PROVIDED
MINIMUM LOT AREA	1 ACRE	0.151 ACRES*
MINIMUM LOT WIDTH	150'	49.97'*
FRONT YARD SETBACK	25'	34.5'
SIDE YARD SETBACK**	8'	8.6'L* - 4.8'R*
REAR YARD SETBACK	25'	55.8'
MAX. BUILDING COVERAGE	10%	19.2%*
MAX. BUILDING HEIGHT	24'	ONE STORY

*** PRE-EXISTING CONDITION**
**** THE SUBJECT LOT IS IN ZONE 'L'. DUE TO THE LOT HAVING A WIDTH OF 49.97' THE SIDE YARD SETBACKS ARE REDUCED TO AN AGGREGATE OF 20' WITH A MINIMUM OF 8' PER SEC. 10.3.1 OF THE EAST HADDAM ZONING REGULATIONS.**

PERCOLATION TEST DATA (2024)

PT 'A' - 10/4/24
DEPTH: 22"
PRESOAK: 8:50 10/3/24
REF. NAIL: 3"

TIME:	READING:
8:39	7.00"
8:45	10.25"
8:51	12.00"
8:57	13.25"
9:03	14.50"
9:09	15.50"
9:15	16.50
9:21	17.25"
9:27	17.75"
9:30	18.00" DRY

PERC. RATE: 6.0 MIN./IN.

PERC TEST CONDUCTED BY DUTCH & ASSOCIATES

2024 DEEP TEST PIT DATA

TP 'A'
MOTTLING: 38" - GW: NONE - LEDGE: NONE

TEST PIT AS WITNESSED AND DESCRIBED BY RACHEL COLONNI, MPH, RS, 9/26/24

GENERAL NOTES

PRIMARY AND RESERVE SEPTIC AREAS ARE TO BE PROTECTED FROM COMPACTION AND DAMAGE BY MACHINERY AND EQUIPMENT DURING CONSTRUCTION.

ADDITION-L TEST PITS MAY BE REQUIRED TO CONFIRM SOIL CONDITIONS IN THE AREA OF THE PRIMARY AND RESERVE LEACHING FIELDS. PITS ARE TO BE DUG PRIOR TO THE START OF CONSTRUCTION OF THE SEPTIC SYSTEM AND ARE TO BE STAKED IN THE FIELD BY ENGINEER TO ENSURE PROPER LOCATION.

DISTRIBUTION BOXES TO BE INSTALLED TO CREATE A HIGH LEVEL OVERFLOW (5" MIN.)

SEPTIC SYSTEM SHALL CONFORM TO THE CURRENT STATE OF CONNECTICUT PUBLIC HEALTH CODE

IF FIELD CONDITIONS (MOTTLING LEDGE-GROUNDWATER) ARE ENCOUNTERED AT SHALLOWER DEPTH THAN THOSE SHOWN IN THE DEEP TEST HOLE RESULTS THE ENGINEER SHALL BE CONTACTED IMMEDIATELY AND CONSTRUCTION HALTED UNTIL FURTHER DIRECTED

SDR 35 TIGHT PIPE FROM TANK TO D. BOX AND BETWEEN D. BOXES

CONTOURS TAKEN FROM ON SITE FIELD TOPOGRAPHY AND ARE TO T-2 STANDARDS

REQUIRED FILL SPECIFICATIONS

ALL LEACHING PRODUCTS WITH EFFECTIVE LEACHING CREDITS OF 7.4 SF/LF AND HIGHER SHALL NOT BE UTILIZED WHERE THE UNDERLYING NATURALLY OCCURING SOILS HAVE A MINIMUM PERCOLATION RATE SLOWER THAN THIRTY (30) MINUTES PER INCH.

SELECT FILL MATERIAL AND SELECT BACKFILL MATERIAL, PLACED WITHIN AND ADJACENT TO PROPOSED LEACHING AREAS SHALL BE COMPOSED OF CLEAN SAND AND GRAVEL , FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE FILL MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE APPROVED BY A PROFESSIONAL ENGINEER FOR USE WITHIN THE LEACHING AREA:

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

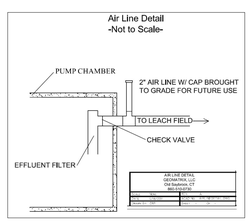
THE REMAINING SAMPLE SHALL MEET THE FOLLOWING GRADATION CRITERIA:

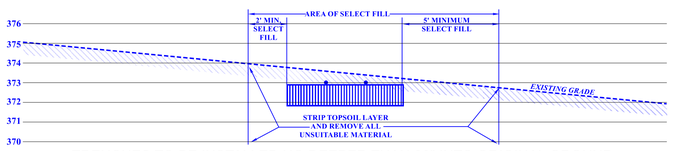
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING
#4	100%	100%
#10	70% - 100%	70%-100%
#40	10% - 50%	10%-75%
#100	0% - 20%	0%-5%
#200	0% - 5%	0%-2.5%
	WET SIEVE TEST	DRY SIEVE TEST

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.

NOTE: WATER TREATMENT DEVICES NOT TO DISCHARGE INTO SEPTIC SYSTEM

Air Line Detail
-Not to Scale-





TRENCHES TO BE INSTALLED NO DEEPER THAN 20" INTO ORIGINAL GROUND

TRENCH SECTION B-B
NO SCALE

REFERENCE NOTE

THIS SURVEY AND MAP HAVE BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300B-1 THROUGH 20-300B-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" ADOPTED FOR USE BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

THE TYPE OF SURVEY IS "ZONING LOCATION SURVEY".

THE BOUNDARY DETERMINATION CATEGORY IS "DEPENDENT RESURVEY".

THE HORIZONTAL ACCURACY CONFORMS TO "A-2" STANDARDS.

MAP REFERENCE:

PLAN 2 LAKE HAYWARD PROPERTY IN THE TOWN OF EAST HADDAM, CONN SHORE AND LAKE CORPORATION, OWNERS - JAS. JAY SMITH CO., SALES AGENTS - BY ERNEST C. DABOLL

HYDRAULIC LOADING RATE FACTORS (HLRF)

Hydraulic Gradient (% Slope)

Receiving Soil Depth (Inches)	0-2	2.1-4	4.1-6	6.1-8	8.1-10	10.1-12	12.1-15	>15.0
	See Comments in Section VIII A							
0-11 (T)*								
11.1 - 22.0	75	82	90	98	92	86	80	27
22.1 - 24.0	69	76	84	91	86	80	28	25
24.1 - 30.0	56	61	67	73	69	64	25	23
30.1 - 36.0	50	54	59	65	61	57	22	20
36.1 - 42.0	44	48	53	58	55	51	20	18
42.1 - 48.0	40	43	47	52	49	45	18	16
48.1 - 60.0	35	38	42	46	43	40	16	14
>60.0	31	34	37	41	38	36	14	13

*(T) Soil Need Not be Considered.

PERCOLATION TEST DATA (2000)

PT #1 - 7/12/00
DEPTH: 22"
PRESOAK: 45 MIN.

TIME:	READING:
10:47	2 3/8"
10:52	5 3/8"
10:57	7 1/2"
11:02	9 3/8"
11:07	10 5/8"
11:12	11 1/2"
11:17	12 5/8"
11:22	13 3/4"
11:27	14 7/8"

PERC. RATE: 4.4 MIN./IN.

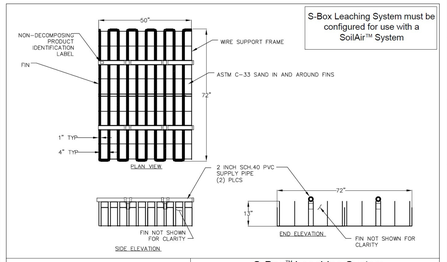
PERC TEST CONDUCTED BY F. TROMBLEY, SANITARIAN

BASIS OF SANITARY DESIGN

3 BEDROOM HOUSE - 6.0 Min/In PERC RATE
495 SQ. FT. OF LEACHING AREA REQUIRED
USE 1 TRENCHES 72" WIDE @ 14' CTRS @ LENGTHS SHOWN
712.5 SQ. FT. OF LEACHING AREA PROVIDED
USE MINIMUM 1,000 GALLON SEPTIC TANK.
HF 18 x FF 1.5 x PF 1.0 = MLSS 27'

USE 1 ROW OF S-BOX SB1-13-72 @ 28.5 FT² OF LEACHING PER LINEAR FT X 25' OF TRENCH = 712.5 FT² OF LEACHING PROVIDED (495 FT² REQUIRED)

S-Box Leaching System must be configured for use with a SoilAir™ System



S-BOX SB1 - 13-72
PLAN/ ELEVATION VIEW
January 25, 2011

S-Box™ Leaching System
Geomatrix Systems, LLC
114 Mill Rock Road E. - Old Saybrook, CT
860-510-0730

Copyright 2005 Geomatrix Systems, LLC - Manufactured under one or more of the following US Patent Numbers: 7,744,749; 7,797,855; 7,901,574; 8,065,836; 8,225,561; 8,323,483; 8,607,383; 8,621,797; 8,631,614. Other patents pending.
S-Box and SoilAir are trademarks of Geomatrix.

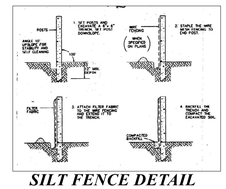
2000 DEEP TEST PIT DATA

TP #1
0 - 8" TOPSOIL
8 - 25" LT TAN SANDY LOAM
25 - 55" REDDISH BROWN MEDIUM COMPACT FINE SILTY SAND
MOTTLING: NONE APPARENT - GW: NONE - REFUSAL: 55"

TEST PIT AS WITNESSED AND DESCRIBED BY F. TROMBLEY, SANITARIAN, 7/12/00

LEGEND

- UTILITY POLE
- I.P. AS NOTED
- WELL
- HEDGE ROW
- FENCE
- SILT FENCE
- 374 PROPOSED CONTOUR



SILT FENCE DETAIL

PLAN NOTES:

NORTH SHOWN PER NORTH AMERICAN DATUM OF 1983

ALL SEPTIC SYSTEMS SHOWN PER EXISTING HEALTH RECORDS

THE LOCATION OF THE EXISTING SUBJECT SEPTIC SYSTEM IS PER INSTALLER'S AS-BUILT AND IS THEREFORE APPROXIMATE

STANDARD SEPTIC NOTES:

AN AS-BUILT SHALL BE SUBMITTED (A-2) WITH TIES FOR ENGINEERED PLAN AND TIED PLAN FOR NON-ENGINEERED) TO THE HEALTH DEPARTMENT WITH DISTANCES TO FLOW LINE AT HOUSE, INLET AND OUTLET COVER OF TANK, D-BOX(S), CLEANOUTS AND ENDS OF LEACHING ROWS, WELL, FOOTING/CURTAIN DRAINS AND BETWEEN TIE POINTS. IN ADDITION, PROVIDE THE NAME OF THE INSTALLER, DATE, HOUSE LOCATION AND STREET/DIRECTIONAL ARROW.

ALL TANKS REQUIRING RISERS SHALL MAINTAIN THE ORIGINAL COVERS ON THE TANKS, HAVE RISER COVERS THAT WEIGH AT LEAST 100 LBS. AND/OR INSTALL A SAFETY DEVICE BELOW THE RISER TO PREVENT INDIVIDUALS FROM FALLING INTO TANK. ALL BELOW GRADE TANK OR RISER COVER HANDLES SHALL CONTAIN OR BE FITTED WITH A MATERIAL THAT CAN BE LOCATED WITH A METAL DETECTOR.

THE HEALTH DEPARTMENT SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO ANY INSPECTIONS AND THE FOLLOWING INSPECTIONS WILL BE REQUIRED: A.) SYSTEM STAKE/BENCHMARK INSPECTION/ WELL SITE STAKE VERIFICATION B.) SEPTIC LEACHING STRIP INSPECTION. C.) SEPTIC FINAL INSPECTION (WHICH MAY ALSO REQUIRE OTHER INSPECTIONS INCLUDING, BUT NOT LIMITED TO FILL INSPECTIONS/ PERCING OF FILL, PUMP/PUMP CHAMBER, GREASE TRAP, CURTAIN DRAIN, FOOTING DRAIN DISCHARGE, COVER INSPECTIONS, BUILDING WALKTHROUGH, WATER TREATMENT WASTEWATER DISPOSAL SYSTEM LOCATION VERIFICATION, WELL CASTING AND CAP VERIFICATIONS)

THOUGH NOT REQUIRED, ALL PROPOSED WELL ARC'S SHOULD BE KEPT ON THE PROPERTY THEY SERVE (TO ALLOW NEIGHBORS FULL USE OF THEIR PROPERTIES) AND ALL WELL CASTINGS SHOULD BE LOCATED AT LEAST 10' FROM DRIVING SURFACES AND/OR STRUCTURES TO PREVENT FUTURE DAMAGE AND ALLOW FOR MAINTENANCE OF THE WELLS.

IT IS STRONGLY ENCOURAGED TO KEEP THE ORIGINAL TANK COVERS ON ALL TANKS REQUIRING RISERS TO PREVENT THE ESCAPE OF SEWER GASES AND PREVENT INDIVIDUALS FROM FALLING INTO TANKS.

THE DESIGNER SHOULD TAKE INTO CONSIDERATION THE LOCATION OF POTENTIAL FUTURE WATER TREATMENT DISCHARGE SYSTEMS, RAIN GARDENS AND FOOTING/CURTAIN DRAIN DISCHARGE LOCATIONS.

"THE CONNECTICUT PUBLIC HEALTH CODE - ON-SITE SEWAGE DISPOSAL REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS" ARE PART OF THIS PLAN. ALL WORK SHALL BE SUBJECT TO THESE REGULATIONS.

SEPTIC NOTES:

EXISTING LEACHING FIELDS TO BE PROPERLY ABANDONED (PUMPED, CRUSHED/REMOVED, AND FILLED).

PROPOSED NEW LEACHING SYSTEM TO UTILIZE THE EXISTING SEPTIC TANK, PUMP CHAMBER AND PUMP (GOULD MODEL EP04111A).

INSTALLER TO INSPECT TANK, PUMP, AND PUMP CHAMBER FOR SUITABILITY.

CURRENT DOSE TO BE REDUCED FROM 300 GALLONS TO 90 GALLONS.

PROPOSED LEACHING FIELD ELEVATIONS BASED ON RECORD TEST PIT DATA AND EXISTING CONTOURS. A CONFIRMATORY TEST PIT SHALL BE CONDUCTED PRIOR TO INSTALLATION TO VERIFY SEPORATION TO RESTRICTIVE LAYER.

ALL UNSUITABLE MATERIAL TO BE REMOVED FROM THE AREA DESIGNATED AS "AREA OF SELECT FILL" PRIOR TO INSTALLATION.

INSTALL AIR SUPPLY LINE FOR FUTURE USE PER GEOMATRIX REQUIREMENTS.



LOCATION MAP - SCALE 1" = 300'

ZONING LOCATION SURVEY

PREPARED FOR

JENNIFER L. & CHRISTOPHER POPOLIZIO

161 LAKE SHORE DRIVE - EAST HADDAM, CONNECTICUT
SCALE 1" = 10' - SEPTEMBER 10, 2024
REVISED: 10/8/24

0 10' 20'

"TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON."

CHARLES R. DUTCH, L.S. 15776 LICENSE NUMBER

DUTCH & ASSOCIATES
LAND SURVEYORS
392 SOUTH MAIN STREET, COLCHESTER, CONN.
PHONE: (860) 537-3465

JOB NO. 24-165

Traverse PC