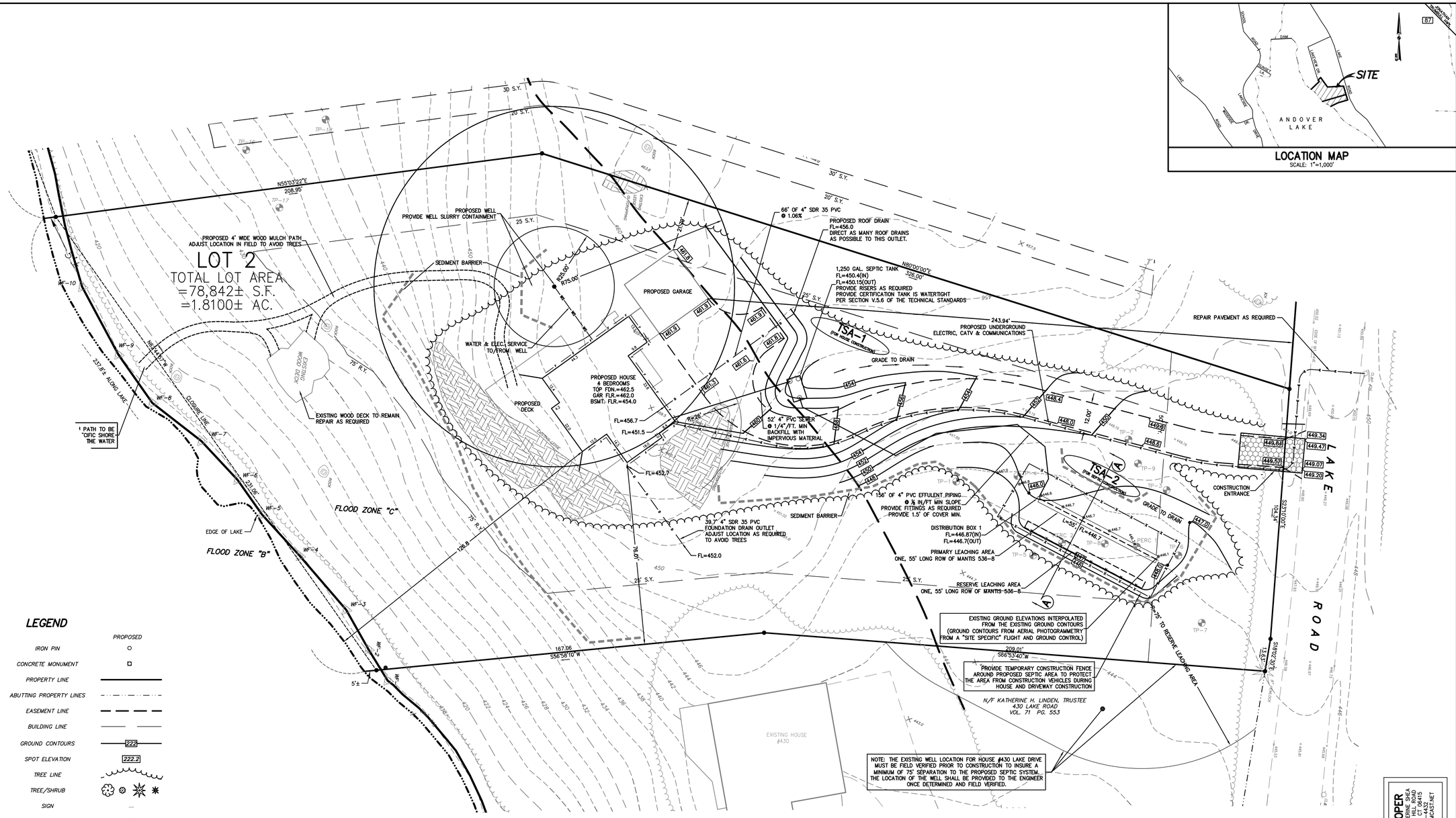


LEGEND

EXISTING		PROPOSED
●	IRON PIN	○
■	CONCRETE MONUMENT	□
	PROPERTY LINE	
	ABUTTING PROPERTY LINES	
	EASEMENT LINE	
	BUILDING LINE	
	GROUND CONTOURS	222
101.25	SPOT ELEVATION	222.2
	TREE LINE	
	TREE/SHRUB	
	SIGN	
	LIGHT POLE	
	BUILDINGS	
	ROOF OVERHANG	
	STEPS/HATCHWAY	
CONC. PAVEMENT	CONCRETE PAVEMENT	
BIT. PAVEMENT	BITUMINOUS PAVEMENT	
BIT. CURB	BITUMINOUS CURB	BCLC
	WETLANDS LIMIT	
	BUFFER LIMIT	
F F	FOUNDATION DRAIN	F F
	SEPTIC TANK	
□	DISTRIBUTION BOX	□
	LEACHING TRENCH	
TP	TEST PIT LOCATION	
WELL	WELL	WELL
	SEDIMENT BARRIER	
	CONSTRUCTION ENTRANCE	
	SOIL STOCKPILE	TSA

ABBREVIATIONS

CONC.	CONCRETE
BIT.	BITUMINOUS
WLK.	WALK
VOL.	VOLUME
PG.	PAGE
N/F	NOW OR FORMERLY
BCLC	BITUMINOUS CONCRETE LIP CURB
GC	GRANITE CURB
T.F.	TOP OF FRAME
T.G.	TOP OF GRATE
INV.	INVERT
F.L.	FLOW LINE
SMH	SANITARY MANHOLE
C.B.	CATCH BASIN
A.K.A.	ALSO KNOWN AS
F.Y.	FRONT YARD
S.Y.	SIDE YARD
R.Y.	REAR YARD
RET.	RETAINING
EXIST.	EXISTING
HYD.	HYDRANT
W.G.	WATER GATE
HELCO	HARTFORD ELECTRIC LIGHT COMPANY
CL&P	CONNECTICUT LIGHT & POWER
WL	WETLANDS
TOP FND.	TOP FOUNDATION ELEVATION
BSMT. FLR.	BASEMENT FLOOR ELEVATION
GAR. FLR.	GARAGE FLOOR ELEVATION
PLA	PRIMARY LEACHING AREA
RLA	RESERVE LEACHING AREA

BLASTING NOTES:

THIS SITE WILL REQUIRE BLASTING TO COMPLETE THE PROJECT.

ALL BLASTING SHALL BE COORDINATED WITH THE TOWN OF ANDOVER BUILDING AND LAND USE DEPARTMENT, EASTERN HIGHLANDS HEALTH DISTRICT AND THE FIRE MARSHAL PRIOR TO ANY BLASTING ACTIVITY.

THE SEPTIC SYSTEM AND WELL LOCATION SHALL BE PROTECTED FROM CONSTRUCTION EQUIPMENT DURING BLASTING OPERATIONS (SEE PLAN FOR FENCING LOCATION AROUND SEPTIC).

SEDIMENT BARRIERS AND OTHER APPLICABLE EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED IMMEDIATELY FOLLOWING TREE REMOVAL AND PRIOR TO BLASTING AND TREE STUMP REMOVAL.

VEGETATION (TREES, BRUSH, ETC.) SHALL BE REMOVED PRIOR TO BLASTING, STUMPS SHALL REMAIN IN PLACE UNTIL ALL BLASTING IS COMPLETE

TOPSOIL SOIL AND OVERBURDEN SHALL NOT BE STRIPPED PRIOR TO BLASTING.

BLASTING MATS SHALL BE PROVIDED AND USED AS REQUIRED.

EXCAVATED ROCK SHALL BE USED ON SITE OR DISPOSED OF AT AN APPROVED LOCATION AS REQUIRED.

FOUNDATION, HOUSE, DRIVEWAY, WELL DRILLING AND SEPTIC SYSTEM CONSTRUCTION SHALL NOT COMMENCE UNTIL ALL BLASTING IS COMPLETE.

ZONING TABLE
ANDOVER LAKE (YEAR ROUND)

ITEM	REQUIRED/ALLOWED	PROPOSED
LOT AREA	60,000 S.F.	78,842 S.F.
LOT WIDTH	200 FT.	130.8 FT.*
FRONT YARD	50 FT.	243.94 FT.
SIDE YARD	25 FT.	21.29 FT./76.01 FT.
TOTAL SIDE YARD	50 FT.	97.30 FT.
REAR YARD	75 FT.	126.80 FT.
MAXIMUM BUILDING HEIGHT	2 STORY / 35 FT.	<35 FT.
LOT COVERAGE	12% (9,461 S.F.)	6,886.5 S.F. (8.73%)

*LOT OF RECORD

DEVELOPER
KEVIN & CATHERINE SHEA
254 BUCKLEY HILL ROAD
COLCHESTER, CT 06415
(860) 462-4423
KSHEA01@COMCAST.NET

REFERENCE IS MADE TO MAPS TITLED:

"PROPERTY BOUNDARY SURVEY LOT LINE ADJUSTMENT PLAN LOTS 1 AND 2 LAKE ROAD PREPARED FOR PETER & SUSAN KLOCK, ANDOVER, CONNECTICUT, PREPARED BY DUTTON ASSOCIATES, LLC, GLASTONBURY CONNECTICUT, SCALE 1"=40', DATE: 11-14-2019, REV: 02/05/2020-HEALTH MEMO, A-07-106-BND"

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

THE TYPE OF SURVEY PERFORMED IS A ZONING LOCATION SURVEY.

THE BOUNDARY DETERMINATION CATEGORY IS RE-SURVEY..

THIS SURVEY CONFORMS TO HORIZONTAL ACCURACY CLASS A-2.

THIS SURVEY CONFORMS TO TOPOGRAPHIC ACCURACY CLASS T-2 & T-3.

THIS SURVEY CONFORMS TO VERTICAL ACCURACY CLASS V-2.

THIS MAP WAS PREPARED FOR THE PURPOSE OF SITE DESIGN.

TOPOGRAPHIC INFORMATION, UTILITY LOCATIONS AND ELEVATIONS SHOWN PER PHOTOGRAMMETRIC MAPPING UPDATED BY FIELD SURVEY.

NO ZONING VIOLATIONS EXIST WITH REGARD TO THE PROPOSED HOUSE LOCATION OR SIZE.

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

THIS MAP IS NOT VALID UNLESS IT BEARS THE LIVE SIGNATURE AND SEAL OF THE UNDERSIGNED SURVEYOR.

DUTTON ASSOCIATES, LLC
LAND SURVEYORS AND CIVIL ENGINEERS
67 EASTERN BOULEVARD
GLASTONBURY, CONNECTICUT 06033
TEL: 860-633-8401 FAX: 860-633-8851
EMAIL: DUTTONLC@AOL.COM

STATE OF CONNECTICUT · JOHN R. MARTUCCI · No. 19494 · LICENSED PROFESSIONAL ENGINEER

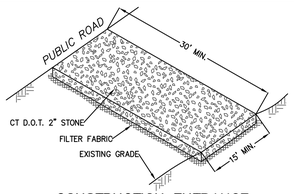
JOHN R. MARTUCCI, P.E. #19494

STATE OF CONNECTICUT · JAMES W. DUTTON · No. 70074 · LICENSED LAND SURVEYOR

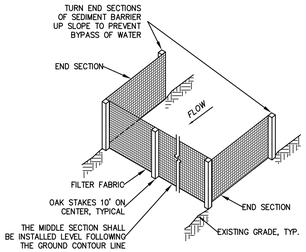
JAMES W.DUTTON, L.S. #70074

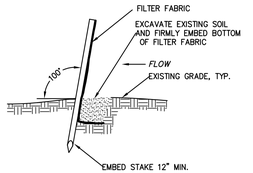
ZONING LOCATION SURVEY
PLOT PLAN
436 LAKE ROAD
PREPARED FOR
KEVIN & CATHERINE SHEA
ANDOVER, CONNECTICUT

REVISIONS:
11/18/2020 - UPDATE
11/20/2020 - UPDATE
DATE: 10-29-2020
SCALE: 1" = 20'
SHEET 1 of 2
A-20-058-P
FILE: 20058.DWG

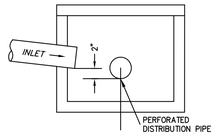


CONSTRUCTION ENTRANCE
NOT TO SCALE

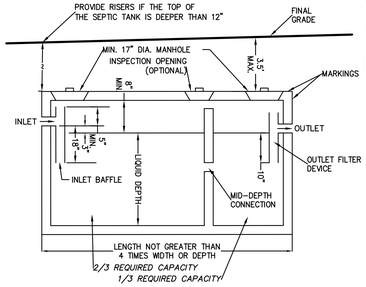




SEDIMENT BARRIER
NOT TO SCALE

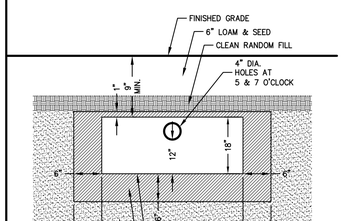


DISTRIBUTION BOX
NOT TO SCALE



CONCRETE SEPTIC TANKS SHALL CONFORM TO SECTION V. "SEPTIC TANKS" OF THE "CONNECTICUT PUBLIC HEALTH CODE, REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS", REVISED THROUGH JANUARY 1, 2018

TYPICAL SEPTIC TANK
NOT TO SCALE



FOR ADDITIONAL INFORMATION AND INSTALLATION INFORMATION, CONTACT THE ELJEN CORPORATION 125 McKEE STREET, EAST HARTFORD, CT 06108 TEL 800-444-1359 ELJEN.COM

TYPICAL SECTION – LEACHING SYSTEM
NOT TO SCALE

SEPTIC SYSTEM NOTES:

THE LOCATION AND ELEVATION OF THE LEACHING TRENCHES SHALL NOT BE ADJUSTED WITHOUT FIRST CONSULTING THE HEALTH DEPARTMENT AND THE ENGINEER.

THE SEPTIC SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE STATE OF CONNECTICUT PUBLIC HEALTH CODE.

SERIAL DISTRIBUTION SHALL BE USED.

A LICENSED SEPTIC INSTALLER MUST OBTAIN A "PERMIT TO CONSTRUCT" FROM THE LOCAL HEALTH DEPARTMENT BEFORE BEGINNING CONSTRUCTION OF THE SEPTIC SYSTEM.

THE LEACHING AREA SHALL BE STAKED FOR CONSTRUCTION BY A LICENSED LAND SURVEYOR.

THE CONTRACTOR SHALL COORDINATE INSPECTIONS WITH THE LOCAL HEALTH DEPARTMENT.

PIPING FROM THE FOUNDATION WALL TO THE SEPTIC TANK SHALL BE 4" MINIMUM IN DIAMETER AND COMPLY WITH TABLE NO. 2 OF THE CONNECTICUT PUBLIC HEALTH CODE TECHNICAL STANDARDS. THE PIPE SHALL BE INSTALLED AT A MINIMUM PITCH OF 1/4 IN/FT.

PIPING FROM THE SEPTIC TANK TO THE DISTRIBUTION BOX, BETWEEN DISTRIBUTION BOXES AND PERFORATED DISTRIBUTION PIPE SHALL BE 4" IN DIAMETER AND COMPLY WITH TABLE NO. 5 OF THE CONNECTICUT PUBLIC HEALTH CODE TECHNICAL STANDARDS.

ALL CHANGES IN PIPE DIRECTION OR GRADE SHALL BE MADE WITH PROPER FITTINGS.

THE SEPTIC TANK INSPECTION OPENINGS SHALL BE PROVIDED WITH RISERS IF GREATER THAN 12" BELOW GRADE.

THE LEACHING AREA SHALL BE "ROPED OFF" OR OTHERWISE PROTECTED FROM DISTURBANCE AND TRAFFIC UNTIL CONSTRUCTION OF THE LEACHING AREA IS STARTED.

SELECT FILL

IT IS THE RESPONSIBILITY OF THE SEPTIC INSTALLER TO PROVIDE AND INSTALL SELECT FILL MATERIAL IN CONFORMANCE WITH THE FOLLOWING:

THE SEPTIC INSTALLER SHALL PROVIDE A SIEVE ANALYSIS TO THE LOCAL HEALTH DEPARTMENT OR ENGINEER FOR APPROVAL, IF REQUESTED.

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 A PROFESSIONAL ENGINEER FOR USE WITHIN THE LEACHING AREA.

TOPSOIL AND ORGANIC MATTER WITHIN THE LEACHING AREA SHALL BE STRIPPED PRIOR TO PLACEMENT OF THE SELECT FILL MATERIAL, EXCAVATION EQUIPMENT IS NOT PERMITTED IN THE LEACHING AREA UNTIL THE SELECT FILL MATERIAL HAS BEEN PLACED AND COMPACTED.

THE SELECT FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 12 INCHES IN DEPTH AND SHALL BE COMPACTED TO 90% OF OPTIMUM DENSITY.

AT THE DIRECTION OF THE LOCAL HEALTH DEPARTMENT OR ENGINEER, A PERCOLATION TEST MAY BE REQUIRED IN THE COMPACTED SELECT FILL MATERIAL TO CONFIRM PROPER PLACEMENT.

THE SELECT FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THREE (3) INCH SIEVE. 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). THE MATERIAL THAT PASSES THE #4 SIEVE IS THAN REWEIGHED AND THE SIEVE ANALYSIS STARTED. THE REMAINING SAMPLE SHALL MEET THE FOLLOWING CRITERIA:

SIEVE SIZE	PERCENT PASSING	
	WET SIEVE	DRY SIEVE
#4	100	100
#10	70 – 80	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%.*

SEPTIC SYSTEM DESIGN

THE SEPTIC SYSTEM DESIGN IS BASED ON A PERCOLATION RATE OF 7.3 MIN/IN AND A 4 BEDROOM HOUSE, THE REQUIRED EFFECTIVE LEACHING AREA IS 577.5 SQ.FT.

THE LEACHING SYSTEM SHALL CONSIST OF ONE, 55 FOOT LONG ROW OF MANTIS 536-8 LEACHING SYSTEM PROVIDING AN EFFECTIVE LEACHING AREA OF 605 SQ. FT.

ELEVATIONS OF THE SEPTIC SYSTEM SHALL BE ADJUSTED IN THE FIELD SO THAT THE BOTTOM OF THE LEACHING SYSTEM IS NOT MORE THAN 12 INCHES BELOW EXISTING GRADE FROM THE HIGHEST EXISTING GROUND ELEVATION MEASURED ALONG THE HIGH SIDE OF THE PROPOSED LEACHING SYSTEM.

MLSS ANALYSIS:

HF = 30 (4.2% SLOPE, 30" TO RESTRICTIVE LAYER)
FF = 1.75 (4 BEDROOM HOUSE)
PF = 1.0 (PERC. RATE 7.3 MIN/INCH)
MLSS REQUIRED = 30 x 1.75 x 1.0 = 52.5 FT
MLSS PROVIDED = 55 FT

NOTES:

THE PROPOSED TOP OF FOUNDATION (TOP FDN.), BASEMENT FLOOR (BSMT. FLR.), GARAGE FLOOR (GAR. FLR.) AND GRADING SHOWN ON THIS PLAN SHALL BE REVIEWED IN THE FIELD BY THE OWNER, BUILDER AND ARCHITECT PRIOR TO CONSTRUCTION TO INSURE CONFORMANCE TO THE ARCHITECTURAL PLANS AND CONCEPTS. ANY ADJUSTMENTS TO THE PROPOSED ELEVATIONS OR GRADING SHALL BE REVIEWED WITH THE ENGINEER AND THE HEALTH DEPARTMENT TO INSURE PROPER FUNCTION OF THE SEPTIC SYSTEM AND DRAINAGE.

PRIOR TO ANY EXCAVATION OR GRADING ON THE SITE, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES BY CONTACTING THE CONNECTICUT UNDERGROUND UTILITY PROTECTION PLAN FOR UTILITY MARK-OUT (TEL.1-800-922-4455)

PRIOR TO THE START OF CONSTRUCTION, STRIPPING OR GRADING, SEDIMENT BARRIERS SHOWN ON THIS PLAN SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DETAILS OUTLINED IN THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION. THE BARRIERS SHALL REMAIN IN PLACE AND BE PROPERLY MAINTAINED UNTIL ALL UPSTREAM AREAS ARE STABILIZED TO THE SATISFACTION OF THE ENVIRONMENTAL PLANNER.

AT THE REQUEST OF THE ENVIRONMENTAL PLANNER, ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED TO ADDRESS FIELD CONDITIONS.

ALL DISTURBED AREAS WHICH ARE TO BE STABILIZED WITH VEGETATIVE COVER SHALL BE TOPSOILED, FERTILIZED, SEEDED AND MULCHED IN ACCORDANCE WITH THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION.

ALL UNDERGROUND UTILITY (ELECTRIC, TELEPHONE, CATV, ETC.) INSTALLATION SHALL PROVIDE FOR EFFECTIVE EROSION AND SEDIMENTATION CONTROL TO THEIR POINT OF CONNECTION.

INSPECTION BY THE TOWN STAFF IS REQUIRED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THIS INSPECTION EVALUATES COMPLIANCE TO THE APPROVED PLOT PLAN AND THE PERMANENT STABILIZATION REQUIREMENT. THE BUILDER SHALL NOTIFY THE TOWN UPON COMPLETION OF PERMANENT STABILIZATION.

A CERTIFICATE OF OCCUPANCY SHALL NOT BE ISSUED PRIOR TO ADEQUATE SITE STABILIZATION AS DETERMINED BY TOWN STAFF.

ALL DRIVEWAY SHOULDERS SHOULD BE STABILIZED IMMEDIATELY UPON COMPLETION OF ROUGH GRADING. THE DRIVEWAY ROADBED SHOULD BE STABILIZED WITH COMPACTED GRAVEL OR AGGREGATE AS SOON AS POSSIBLE.

TOPSOIL AND/OR EXCAVATED SUBSOIL SHOULD BE STOCKPILED WITHIN THE AREA OF DISTURBANCE IF NOT USED FOR ON SITE REGRADING. EACH STOCKPILE SHALL BE RINGED WITH SEDIMENT BARRIERS AND STABILIZED AS DIRECTED BY THE ENVIRONMENTAL PLANNER.

LUMBER AND BUILDING MATERIAL STOCKPILES, VEHICLE PARKING AND MOVEMENT SHALL BE CONFINED TO THE AREA OF DISTURBANCE. THE BUILDER SHALL PROVIDE A DUMPSTER FOR STORAGE AND/OR DISPOSAL OF ALL CONSTRUCTION WASTE.

THE CONTRACTOR SHALL VERIFY THE FOUNDATION DIMENSIONS AND IMMEDIATELY RESOLVE ANY CONFLICTS WITH THE ENGINEER.

Specified Sand

The Specified Sand envelope around the Mantis units (6" minimum underneath, 6" minimum on the sides, 1" minimum on the top, and 3" in-between the Support Modules) shall meet the requirements as indicated in the Eljen Mantis Specified Sand Requirements chart listed below. This sand is a medium to coarse textured, washed, silica sand with less than 10% passing a #100 sieve and less than 5% passing a #200 sieve based on a wet sieve analysis. If your material fails outside of the specification, contact Eljen's Technical Resource Department at 1-800-444-1359 for a review of the sieve report. Eljen may approve the material under certain conditions to be used for the Specified Sand envelope around the Mantis units.

Some material suppliers are manufacturing their Connecticut Select Fill so that it will also meet the requirements of the Eljen Specified Sand Requirements specification, in such cases, that Connecticut Select Fill material can be used for the fill package and the sand envelope around the Mantis units as described above. Ask your material supplier for a sieve analysis to verify that your material meets the required specifications.

Eljen Mantis Specified Sand Requirements		
Sieve Size	Sieve Square Opening Size (mm)	Specification Percent Passing (Wet Sieve)
0.375"	9.5 mm	100.0
#4	4.75 mm	95.0 – 100.0
#8	2.36 mm	80.0 – 100.0
#16	1.18 mm	50.0 – 85.0
#30	600 µm	25.0 – 60.0
#50	300 µm	5.0 – 30.0
#100	150 µm	< 10.0
#200	75 µm	< 5.0
Request a sieve analysis from your material supplier to ensure that the system sand meets the specification requirements listed above.		

Mantis System Installation Guidance

1. Carefully lay out the system components and boundaries defining the location and elevation for all trenches and distribution or drop boxes based on the outlet elevation of the septic tank and pipe grades required to maintain flow to each component.
2. Prepare the site according to state and local regulations. Do not install a system on frozen or saturated soils. When installing the Mantis in clayey soils, take precautions not to compact the area with heavy machinery.
3. Plan all drainage requirements above (up-slope) the system and set soil grades to insure storm water drainage and surface water is diverted away from the absorption area once the system is complete.
4. Excavate a minimum forty-eight inch (48") wide level trench.
5. Remove all organic soil and roots within the absorption trench area.
6. Scarify receiving layers including sidewalls to eliminate soil smearing. Once scarifying is completed, avoid walking over prepared absorption area until 6" minimum of the Specified Sand has been placed on the bottom of the trench.
7. Place, compact, and rake a minimum 6" finished level layer of Specified Sand along the trench bottom. Specified Sand must meet the minimum requirements listed on the chart on Page 3 of this manual. Ask your material supplier for a sieve analysis report to verify that the sand you are going to install meets this specification. A hand tamper or a vibratory plate compactor is sufficient for compaction of the Specified Sand layer.
8. Place the Mantis units in the trench with the fabric side up.
9. Adjust the modules to ensure they are spaced evenly and have not shifted during placement.
10. Center the units along the trench length. The remaining units are joined by connecting the Support Distribution Pipe (SDP) to one another. All pipe connections must be primed and glued.
11. Install termination caps at the end of the Support Distribution Pipe on each trench line to prevent soil intrusion into the Mantis units.
12. Direction changes are accomplished easily and quickly by using a variety of inexpensive off the shelf fittings. 90°, 45°, 22.5°, T, TY, and Y fittings are readily available at most local suppliers.
13. Specified Sand filling between and over the units may begin once the units are in the trench. Specified Sand must be placed lightly and may be accomplished with a backhoe or other suitable equipment.
14. Steps for placement of Specified Sand.
    a. Starting at the top center of the Mantis units, use a minimal amount of Specified Sand necessary to set in place the bottom section of the Support Modules at their correct spacing.
    b. Using a standard 2" x 4" wood stud, tamp and compact the sand that is in-between the Support Modules. Ensure that the void area under the Support Distribution Pipe is filled and compacted with Specified Sand.
    c. After the Modules are set in place, cut the plastic straps holding the cardboard supports on the sides of the Mantis units.
    d. Remove the cardboard supports from the bottom of the Mantis units by sliding them outward and along the bottom of the trench.
    e. Remove the cardboard supports that are on top of the Mantis units. Remove any remaining plastic straps from the cardboard supports from the trench.
    f. Additional Specified Sand is lightly added between the Support Modules and along the sides of the Mantis units to bring the sand fill 1-inch above the Support Modules.
    g. Using a standard 2" x 4" wood stud, continue to moderately tamp and compact the sand that is in-between the Support Modules. Spread additional Specified Sand as necessary.
15. Set distribution box to the proper elevation.
16. Make the connection to the beginning of the first Mantis row from the distribution box with SDR-35 pipe.
17. Install a termination cap or vent piping if required at the distal (far) end of the distribution pipe.
18. Venting is optional but required when the system has more than 18" of cover material as measured from the top of the unit to finished grade.
19. If required, install a 90° fitting at the distal (far) end of the SDP. Install a section of non-perforated pipe extended above final grade. Plumb to prevent rain water and pest intrusion from entering the system by using two 90° fittings or a mushroom cap fitting as shown in Figure 3 and 6.
20. Prior to backfilling the system, provide 1 additional inch of the Specified Sand fill over the top of the units to account for sand settling.
21. Complete backfill over the units followed by topsoil to a depth of 10" – 18" as measured from the top of the units. 1" of the fill is Specified Sand, immediately on top of the unit. Systems with total cover that exceeds 18" as measured from the top of the units to finished grade shall be vented at the distal (far) end of the system. Backfill material shall be well graded sandy fill; clean, porous, and devoid of large rocks. Divert surface runoff with diversion ditches or berms. Finish grade to prevent surface ponding. Seed or sod excavated areas to protect against erosion. As with all systems, do not drive or pave over the absorption area.

PERCOLATION TEST DATA

TEST #: PT-1 DATE: 10/23/2020
DEPTH OF HOLE: 25"
DEPTH OF WATER, PRESOAK: 14"
TIME AT START OF PRESOAK: 12:47
DEPTH OF WATER, TEST: 14"

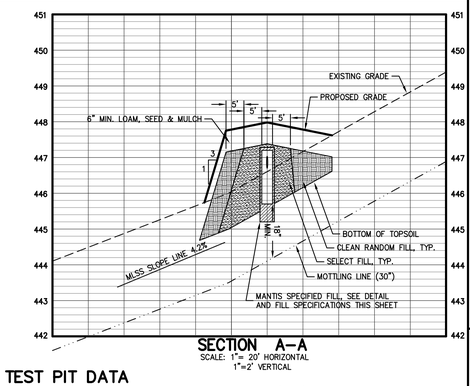
TIME	READING	CHANGE
1:48	3 5/8"	4 3/8"
1:58	8 1/4"	2 3/4"
2:08	11"	2 1/4"
2:18	13 1/4"	1 3/4"
2:28	15"	1 3/4"
2:38	16 3/4"	1 3/8"
2:48	18 1/8"	
1:50	DRY	

DESIGN: 7.3 MIN/IN

TEST #: PT-2 DATE: 10/23/2020
DEPTH OF HOLE: 25"
DEPTH OF WATER, PRESOAK: 14"
TIME AT START OF PRESOAK: 11:33
DEPTH OF WATER, TEST: 14"

TIME	READING	CHANGE
1:50	4"	4 1/2"
2:00	8 1/4"	2 1/2"
2:10	10 1/2"	1 3/4"
2:20	12 1/4"	2"
2:30	14 1/4"	1 1/4"
2:40	16"	1 1/2"
2:50	17 1/2"	
3:00	DRY	

DESIGN: 8.00 MIN/IN



SECTION A–A
SCALE: 1"= 20' HORIZONTAL
1"=2' VERTICAL

TEST PIT DATA

TESTPITS OBSERVED ON 12/05/2007 BY: HOLLY HOOD, R.S., EASTERN HIGHLANDS HEALTH DISTRICT (EHHD)

NUMBER: TP-1 DATE: 12/05/2007
WITNESS: EHHD LEDGE: @ 21"
DEPTH: 21" WATER: –
SOIL PROFILE: MOTTLING: –

LEDGE @ 21"

NUMBER: TP-2 DATE: 12/05/2007
WITNESS: EHHD LEDGE: @ 28"
DEPTH: 28" WATER: –
SOIL PROFILE: MOTTLING: –

LEDGE @ 28"

NUMBER: TP-3 DATE: 12/05/2007
WITNESS: EHHD LEDGE: –
DEPTH: 72" WATER: –
SOIL PROFILE: MOTTLING: @ 20"
ROOTS: @ 27"

0–8" TOPSOIL, LEAF LITTER
8"–31" ORANGE BROWN FINE SANDY LOAM
31"–72" COMPACT FILE SAND TILL

NO SEEPAGE
NO LEDGE

NUMBER: TP-4 DATE: 12/05/2007
WITNESS: EHHD LEDGE: –
DEPTH: 60" WATER: –
SOIL PROFILE: MOTTLING: @ 32"
ROOTS: @ 38"

0–7" TOPSOIL
7"–41" ORANGE BROWN FINE SANDY LOAM
41"–60" GREY SAND AND DECOMPOSED ROCK

NO SEEPAGE

NUMBER: TP-5 DATE: 12/05/2007
WITNESS: EHHD LEDGE: –
DEPTH: 66" WATER: –
SOIL PROFILE: MOTTLING: @ 30"
ROOTS: @ 33"

0–12" TOPSOIL
12"–33" FINE SANDY LOAM
33"–66" FINE SAND AND DECOMPOSED ROCK

NO SEEPAGE

NUMBER: TP-6 DATE: 12/05/2007
WITNESS: EHHD LEDGE: –
DEPTH: 72" WATER: –
SOIL PROFILE: MOTTLING: @ 22"
ROOTS: @ 19"

0–9" TOPSOIL, LEAF LITTER
9"–31" ORANGE BROWN FINE SAND, MOTTLED
31"–72" COMPACT FINE SAND TILL MOTTLED

NO SEEPAGE

NUMBER: TP-7 DATE: 12/05/2007
WITNESS: EHHD LEDGE: @ 57"
DEPTH: 57" WATER: –
SOIL PROFILE: MOTTLING: –
ROOTS: –

0–6" TOPSOIL, LEAF LITTER
6"–32" ORANGE BROWN FINE SANDY LOAM
32"–57" COMPACT FINE SAND TILL

LEDGE @ 57"
LEDGE @ WEST END – 34"
NO SEEPAGE

NUMBER: TP-8 DATE: 10/09/2020
WITNESS: EHHD LEDGE: –
DEPTH: 60" WATER: –
SOIL PROFILE: MOTTLING: @ 30"
ROOTS: @ 30"

0–9" TOPSOIL
9"–30" LT BR SILTY LOAM
30"–60" TAN/GR SILTY SAND COMPACT

NUMBER: TP-9 DATE: 10/09/2020
WITNESS: EHHD LEDGE: @ 50"
DEPTH: 50" WATER: –
SOIL PROFILE: MOTTLING: @ 25"
ROOTS: @ 25"

0–6" TOPSOIL
6"–25" LT BR SILTY LOAM
25"–50" TAN/GR SILTY SAND COMPACT

NUMBER: TP-16 DATE: 12/05/2007
WITNESS: EHHD LEDGE: @ 42"
DEPTH: 42" WATER: –
SOIL PROFILE: MOTTLING: –

LEDGE @ 42"

NUMBER: TP-17 DATE: 12/05/2007
WITNESS: EHHD LEDGE: @ 32"
DEPTH: 32" WATER: –
SOIL PROFILE: MOTTLING: –

LEDGE @ 32"

NUMBER: TP-18 DATE: 12/05/2007
WITNESS: EHHD LEDGE: –
DEPTH: 60" WATER: –
SOIL PROFILE: MOTTLING: –
ROOTS: @ 39"

0–3" TOPSOIL
3"–38" ORANGE BROWN FINE SANDY LOAM
38"–60" COMPACT, SAND TILL

The Hidden Garden and ConnSoil LLC — Soil & Environmental Evaluations • Landscape Designs • Installations

Job No: 3-08-11

12 March 2008

Dutton Associates, LLC
67 Eastern Boulevard
Glastonbury, CT 06033

LOCATION: Andover Lake Road, Andover, Connecticut

SOILS AND WETLANDS REPORT

INSPECTION DATE:	3/10/08
MAP PROVIDED:	topographic survey
CONTOUR INTERVAL SHOWN:	2 feet
SCALE SHOWN:	no
SOIL MOISTURE CONDITIONS:	moist
PROPERTY LINES IDENTIFIABLE:	ok
NUMBERING OF WETLAND FLAGS:	#1-#10; SEE COMMENTS

This site inspection was conducted to evaluate the presence of inland-wetlands and watercourses. A detailed classification of the soils was not part of this study. Field observations of the wetland and upland soils together with the classification system of the National Cooperative Soil Survey, USDA, and the County Soil Legend were used in this investigation to identify the soil series names.

In conducting field investigations, soil borings are taken from which many important soil properties are observed, as follows: seasonal soil moisture condition OR the presence of free water and its depth, for each horizon in the soil profile, the thickness, color and texture are also observed. The areas shown on soil maps are called soil map units. Some map units consist of one kind of soil while others consist of two or more kinds of soil. A few have little or no soil material at all. The information in this report is based on examination and interpretation of soils with the use of a shovel and/or a hand auger. All observations and conclusions within this report were based on field conditions at the time of investigation and best professional judgment. Field conditions may change over time.

COMMENTS: This property is located along the eastern shore of Andover Lake and is bounded by Andover Lake Road along its east edge. The land is undulating in the area nearest the road and rock outcrops and boulders are noted. The land drops very steeply towards the west where it abuts the lake shore. Rock outcrops are noted throughout this area, and large boulders. There are no poorly drained or very poorly drained soils on this site, nor watercourses except for the lake. Wetland flags were placed along the edge of the lake.

Soils formed in glacial till and descriptions are provided below for your convenience.

NON-WETLAND SOILS

SOIL TYPE:	CHARLTON-HOLLIS
DEPTH TO MOTTLING:	NO MOTTLING
DEPTH TO BEDROCK:	CHARLTON - >60"; HOLLIS – 10-20"
DEPTH TO SEASONAL HIGH WATER TABLE:	>6'

This is a complex of well-drained soils found on gently sloping and sloping, uplands where the relief is affected by the underlying bedrock. Slopes may be either concave or convex. The areas frequently have a rough surface topography with bedrock outcrops and a few narrow intermittent drainageways and small wet depressions. Included with this complex in mapping, are small areas, generally less than 1 acre in size, of moderately well-drained Sutton soils, well-drained Paxton soils and poorly drained Leicester soils. In a few areas the stones and boulders have been cleared. Also included are many small and intermingled areas where the bedrock is 20-40 inches from the surface. During construction, conservation measures are essential to prevent excessive runoff, erosion and siltation.

SOIL TYPE:	SUTTON
DEPTH TO MOTTLING:	18"
DEPTH TO BEDROCK:	>60"
DEPTH TO SEASONAL HIGH WATER TABLE:	1.5 – 3.5 FEET

A typical profile of this moderately well-drained soil in an undisturbed forested area has a surface layer of very dark grayish-brown fine sandy loam about 3 inches thick. The subsoil is yellowish-brown sandy loam in the upper part but grades to light olive-brown sandy loam in the lower part. Mottles of strong brown, yellowish red, and light brownish gray are common below a depth of 18 inches. The substratum begins at a depth of about 27 inches; it is gray and grayish- brown sandy loam and gravelly sandy loam.

Yours truly,

Cynthia M. Rabinowitz
Soil Scientist and Landscape Designer

DUTTON ASSOCIATES, LLC
LAND SURVEYORS AND CIVIL ENGINEERS
67 EASTERN BOULEVARD
GLASTONBURY, CONNECTICUT 06033
TEL: 860-633-8401 FAX: 860-633-8851
EMAIL: DUTTONLC@AOL.COM

STATE OF CONNECTICUT — JOHN R. MARTUCCI — #19494 — LICENSED PROFESSIONAL ENGINEER

JOHN R. MARTUCCI, P.E. #19494

PLOT PLAN
436 LAKE ROAD
PREPARED FOR
KEVIN & CATHERINE SHEA
ANDOVER, CONNECTICUT

REVISIONS:
11/18/2020 - UPDATE
11/20/2020 - UPDATE

DATE: 10-29-2020
SCALE: 1" = 20'
SHEET 2 of 2
A-20-058-P
FILE: 20058.DWG