

TOWN OF ESSEX
LAND USE APPLICATION
PART ONE

PLEASE CHECK THE APPROPRIATE LINE(S) AND ATTACH THE APPROPRIATE APPLICATION(S):

SPECIAL EXCEPTION	<input type="checkbox"/>	VARIANCE/ APPEAL	<input type="checkbox"/>
SITE PLAN REVIEW	<input checked="" type="checkbox"/>	APPROVAL OF LOCATION	<input type="checkbox"/>
INLAND WETLANDS PERMIT	<input type="checkbox"/>	REGULATION TEXT AMENDMENT	<input type="checkbox"/>
INLAND WETLANDS PERMIT - AGENT APPROVAL	<input type="checkbox"/>	ZONE CHANGE	<input type="checkbox"/>
	<input type="checkbox"/>	COASTAL SITE PLAN REVIEW	<input type="checkbox"/>
SUBDIVISION OR RESUBDIVISION	<input type="checkbox"/>	MODIFICATION OF PRIOR APPROVAL	<input type="checkbox"/>
LOT LINE REVISION	<input type="checkbox"/>	SPECIAL FLOOD HAZARD AREA PERMIT	<input type="checkbox"/>

PROJECT DESCRIPTION:

See Attached.

PROJECT NAME:

STREET ADDRESS OF PROPERTY

10 West Ave

ASSESSOR'S MAP

32

LOT

60

LOT SIZE

.

DISTRICT

VR

APPLICANT

Thomas Nichols

PHONE

860, 919, 9582

APPLICANT'S AGENT (if any)

PHONE

ENGINEER, SURVEYOR/ARCHITECT

H.E. Cole (Steve Giudice), Jay Beveridge

PHONE

860, 767, 3072

Note:

1) TO BE ACCEPTED BY THE LAND USE OFFICE. THIS APPLICATION MUST BE COMPLETED, SIGNED, AND SUBMITTED WITH THE REQUIRED FEE(S) AND MAP(S) PREPARED IN ACCORDANCE WITH THE APPLICABLE REGULATIONS.

2) THE SUBMITTAL OF THIS APPLICATION CONSTITUTES THE PROPERTY OWNER'S PERMISSION FOR THE COMMISSION OR ITS STAFF TO ENTER THE PROPERTY FOR THE PURPOSE OF INSPECTION.



TOWN OF ESSEX
Planning and
Zoning Commission

29 West Avenue
Essex, CT 06426
860-767-4340 x 115 Fax: 860-767-8509

Fees: \$135.00 + \$60.00 (DEEP)
Make check payable to the Town of Essex

www.essexct.gov

Application for Site Plan Review
PART TWO

Owner(s) of Property : Thomas + Kelly Nichols
Address: 10 West Ave
Phone No.: 860.919.9382 Email: tdnichols1@comcast.net

The Commission is authorized to grant a site plan approval for the use and/or improvement herein proposed by the provisions of Section 45 of the Essex Zoning Regulations.

Accompanying this application form is:

- A) A complete and comprehensive statement describing the proposed changes in use and/or improvements for which the ^{application} amendment is requested;
- B) A complete legal description of the premises involved, identifying boundaries by metes and bounds or by courses and distances;
- C) A list of names and addresses, with Tax Map and Tax Lot Numbers of owners of all land abutting, and directly across the street from the land to which this application relates and;
- D) A Site Development Plans prepared or approved by a registered professional engineer or surveyor showing all information required to determine the compliance with the Zoning Regulations including lot area, distances of improvements from lot lines, area coverage, and building height.

I/We, the undersigned, certify that all the information on this application, including all accompanying documents, is correct as of the date below, and conforms with Town's zoning regulations. I/ We certify that I/ We am/are the owner(s) of the premises described above, and are aware of and understand the above referenced zoning regulations.

FOR OFFICIAL USE ONLY:
Application No. _____
Date received by ZEO: _____

Signed: TLDB
Property owner
Dated: 12/7/21

Town of Essex
29 West Avenue
Essex, CT 06426
Attn: Carey R. Duques

Property: Thomas and Kelly Nichols
10 West Avenue, Cell 860.919.9582

December 8, 2021

Re: Application for Site Plan Review

Statement of Improvements:

Due to the deterioration of the existing barn foundation and framing members it is necessary to replace the building before it becomes a safety hazard. Years of erosion has caused the old stone foundation to settle to a point where the structure is one foot out of level towards South Main Street. Furthermore, the main framing members have deteriorated and are no longer supporting the floor joist or main perimeter walls.

The current plans are to replace the entire foundation and building while keeping the historic look and architecture to match the house and surrounding village area. This structure will be constructed on the exact building footprint and remain the same size as the current building. This new building has been designed as an "Accessory Apartment Dwelling Unit" for use by elderly parents. Working with local architect, Jay Beveridge, town approved Engineer, Harry E. Cole and Essex Health official Lisa Fasulo, we have developed an approved new septic system and building structure. This new building will improve the historic look of the building while making it safer and bring the structure up to current building codes.

SUBSURFACE SEWAGE DISPOSAL NOTES:

- Bench Mark to be set in proximity of septic system area by surveyor prior to the start of construction.
- Private sewer and public water service proposed.
- System to be level.
- Topsoil is to be removed and subsoil scarified before constructing trenches.
- Affected areas shall receive 4" of topsoil, fertilize as required and use lawn type grass seed mixture.
- Buried oil tanks are prohibited.
- Solid distribution pipe beyond tank must be 4" PVC SDR-35.
- No bath facilities over 100 gallon capacity or garbage grinders are proposed.
- Percolation tests must be performed in any in-place select quality fill material and tests must be equal to or better than design rate.
- Any quality septic fill must meet requirements of local Health Department.
- 90% soil compaction required on any filled septic systems.
- "Select Fill Material" and "Select Backfill Material", placed within and adjacent to proposed leaching areas shall be comprised 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:
 - The fill shall not contain any material larger than three (3) inches.
 - Up to 45% retained on the #4 sieve (This is the gravel portion of the sample.)
 - 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	Wet Sieve	Dry Sieve
#4	100%	100%
#10	70%-100%	70%-100%
#40	10%-50% (See Note Below)	10%-75%
#100	0%-20%	0%-5%
#200	0%-5%	0%-2.5%

Note: 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%. 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 occurring soils from over compaction and siltation once exposed.

INSTALLER NOTES:

- Prior to construction, the contractor and/or owner shall obtain a "Permit To Install Subsurface Sewage Disposal System" from the Sanitarian's Office.
- Proposed construction shall conform to the "State Of Connecticut Public Health Code, as amended to date.
- No construction activity or stumping shall take place within the primary and reserve areas prior to the subsurface sewage disposal system installation.
- If field conditions (ledge, groundwater, mottling) are encountered at shallower depths than shown in the deep test hole results, the Sanitarian and Design Engineer shall be contacted immediately and construction halted until directed further.
- The Design Engineer and/or Sanitarian shall be contacted prior to back-filling the Subsurface Sewage Disposal System, to take the necessary measurements for the preparation of a "as-built" drawing of the Subsurface Sewage Disposal System construction. A copy of the "As-Built" drawing must be submitted to the local Health Department and design engineer for review and final approval of the Subsurface Sewage Disposal System.
- No deviations from the approved design plan shall be allowed without the prior approval of the local Health Department and Design Engineer.
- The Town Sanitarian shall be notified after the following (as applicable) for inspection:
 - Topsoil removal and subsoil scarification.
 - Placement of fill material.
 - Installation of Subsurface Sewage Disposal System.
- Eljen mandates venting for the Mantis DW-100 when the system will have more than 18" of cover material as measured from the top of the unit to finished grade. Install Vent at the distal (Eastern End) of the row and protect from rainwater intrusion. Activated Granular Charcoal (Carbon) filter can be installed to address odor concerns.

DESIGN CRITERIA:

- Percolation Rate:** 1.1 - 10.0 Min/Inch
- One(1) Bedroom Outbuilding**
- Required Effective Leaching Area (ELA)**
 - Primary Area: 187.5 Sq. Ft.
 - Reserve Area: 187.5 Sq. Ft.
- Required Septic Tank Capacity:** 1,000 Gal. (Existing Tank)
- Average Slope:** >15%
- Depth to Restrictive Layer:** 82 In. (Bottom of Pit #1)
- Minimum Leaching System Spread (MLSS)**
 - No MLSS Required
- Proposed Primary Area:**
 - 10 LF of Mantis Double-wide 100 Units
 - (10 LF)(20 FULF) = 200 Sq. Ft.
 - 200 Sq. Ft. of Proposed ELA > 187.5 Sq. Ft. of Required ELA
- Proposed Reserve Area:**
 - 10 LF of Mantis Double-wide 100 Units
 - (10 LF)(20 FULF) = 200 Sq. Ft.
 - 200 Sq. Ft. of Proposed ELA > 187.5 Sq. Ft. of Required ELA

INVERT DATA:

Proposed House:
Outlet Inv. = 52.15

Proposed Septic Tank:
Inlet Inv. = 51.90
Outlet Inv. = 51.65

D-Box #1:
Inlet Inv. = 51.45
Outlet Inv. = 51.20

SOIL TEST DATA

Observation Pit Data:
Date: 10/15/2021
By: Essex Health Department

Pit #1
0-8" Topsoil
8-17" Fill
17-82" Brown Sandy Loam

No Mottling, No Groundwater, No Ledge

Percolation Test Data:
Date: 11/11/21
By: Harry E. Cole & Son

Perc. Test #1 @ 30" 1.1-10.0 Min/Inch

PROPOSED LEACHING STRUCTURE DETAIL:

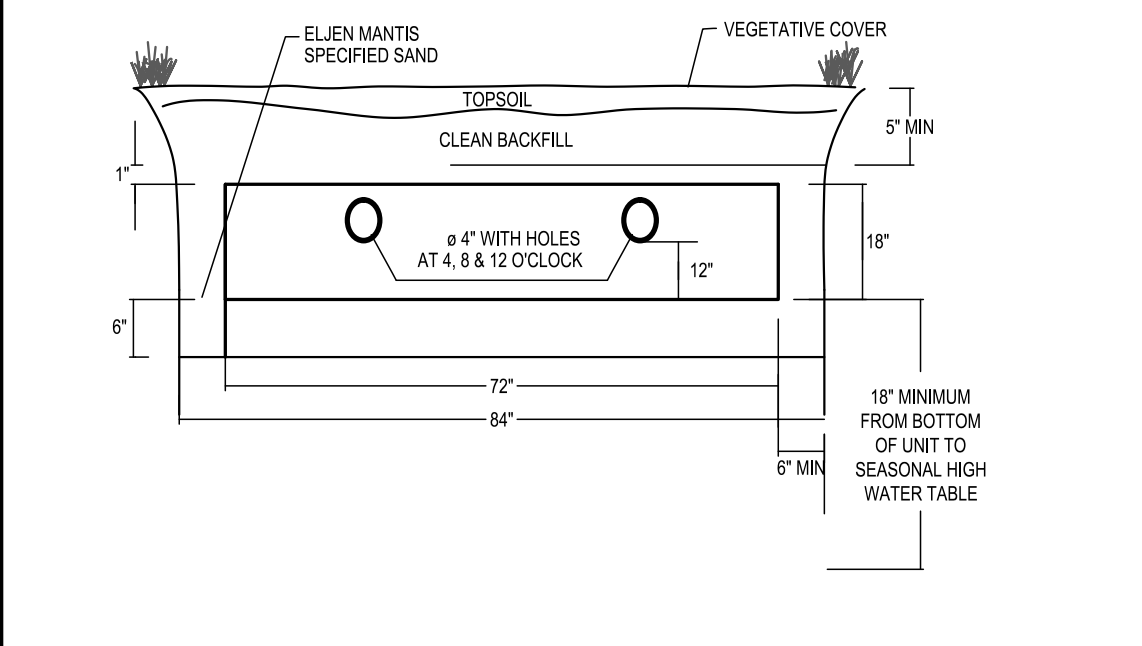
Mantis Installation Notes

- This system is not designed for backwash from a water softener.
- The Mantis system is not to be used under vehicle traffic or for other paving applications.
- Organic lawn layer must be removed from trench and slope extension areas prior to select fill or specified sand placement.
- Scarfing should be performed to select fill or specified sand placement.
- All Mantis installers shall use a specified sand envelope around the Mantis units: 4" minimum underneath, 6" minimum on the sides, 4" minimum on top, and between the Support Modules of the Mantis units. The Mantis specified sand specification is listed below:

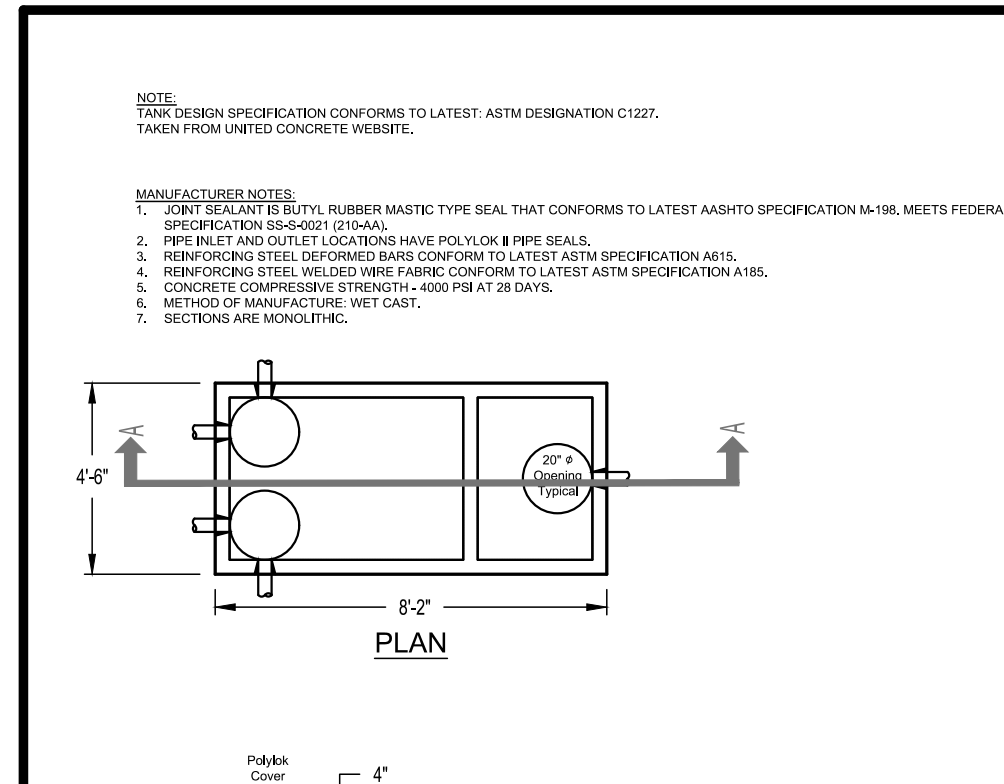
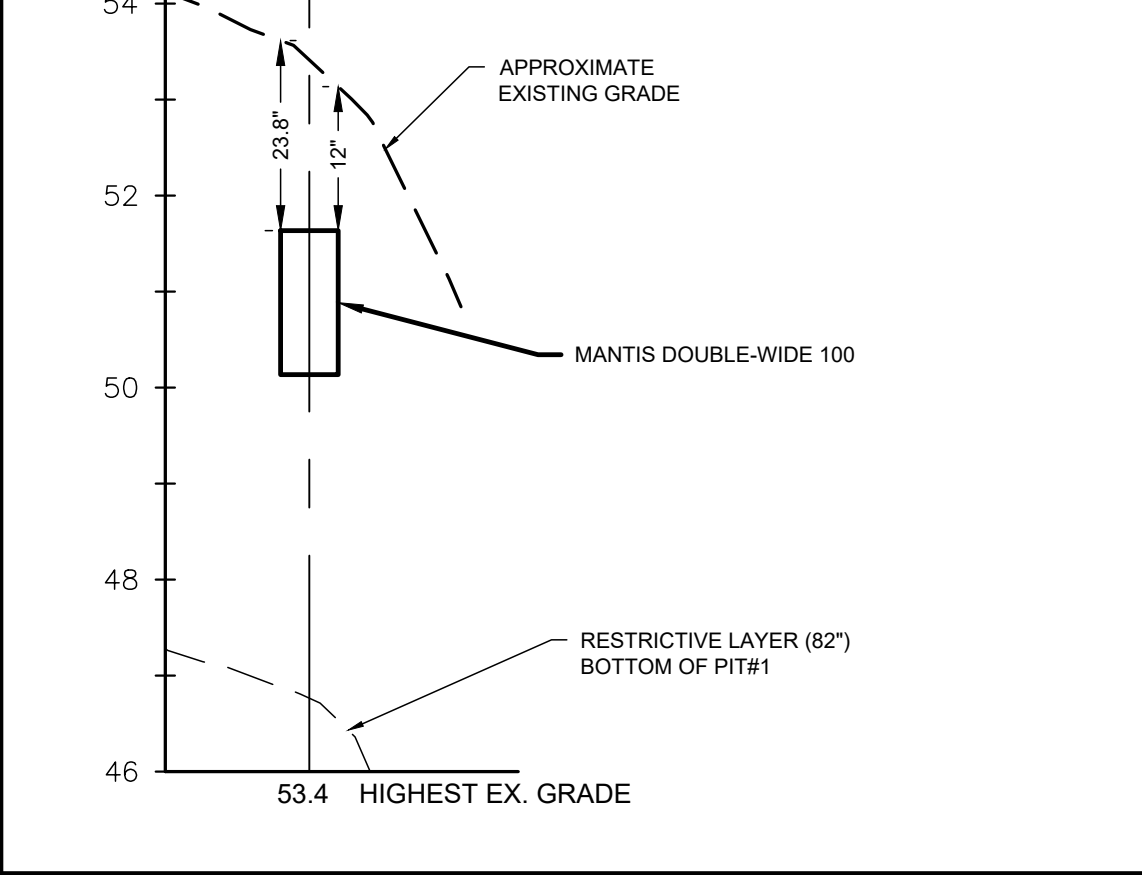
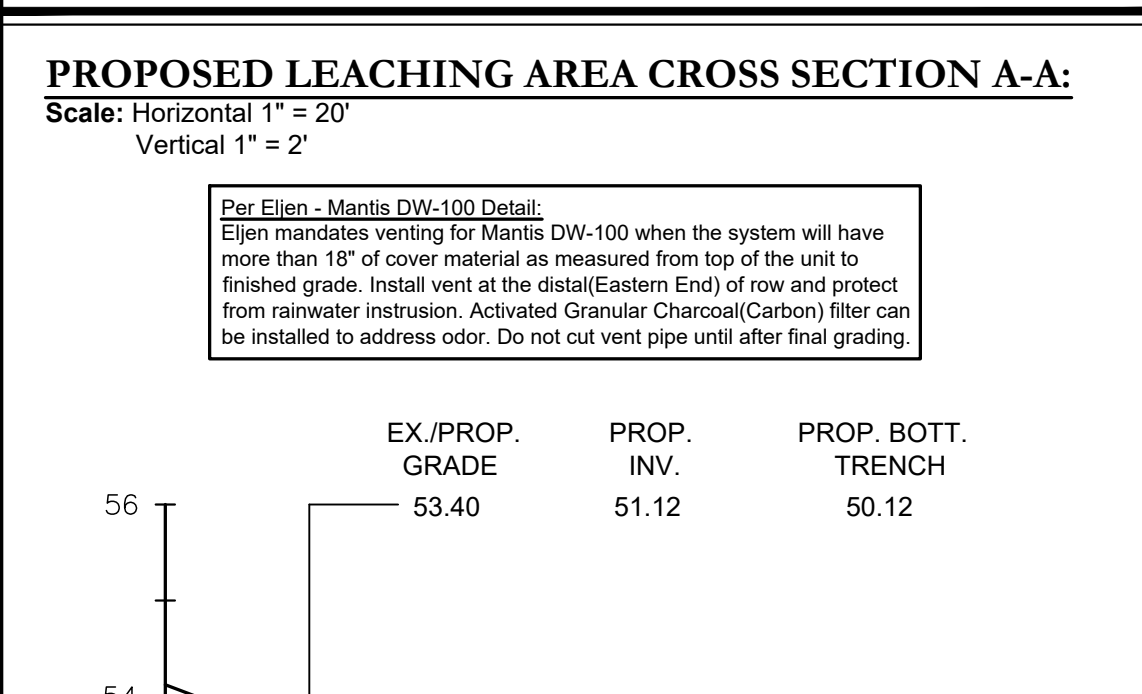
Sieve Size	Wet Sieve	Dry Sieve
0.75"	100%	100%
#4	70%-100%	70%-100%
#10	10%-50% (See Note Below)	10%-75%
#40	0%-20%	0%-5%
#100	0%-5%	0%-2.5%

Eljen Mantis Specified Sand Requirements

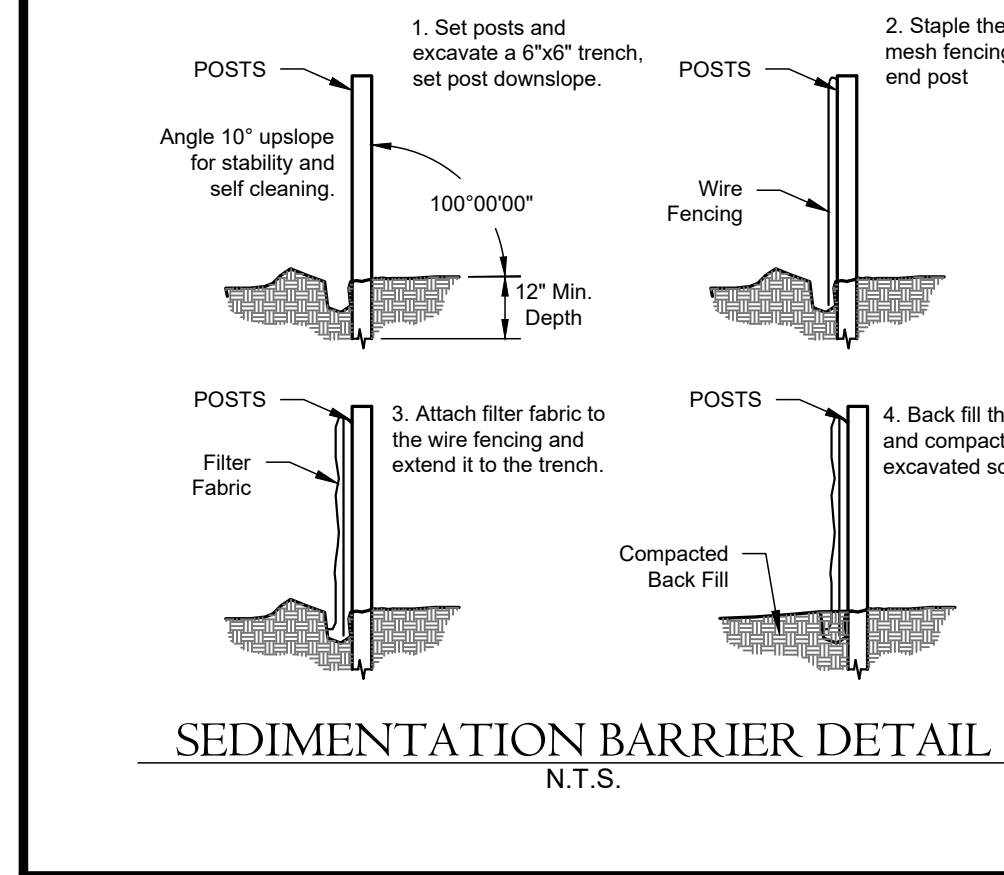
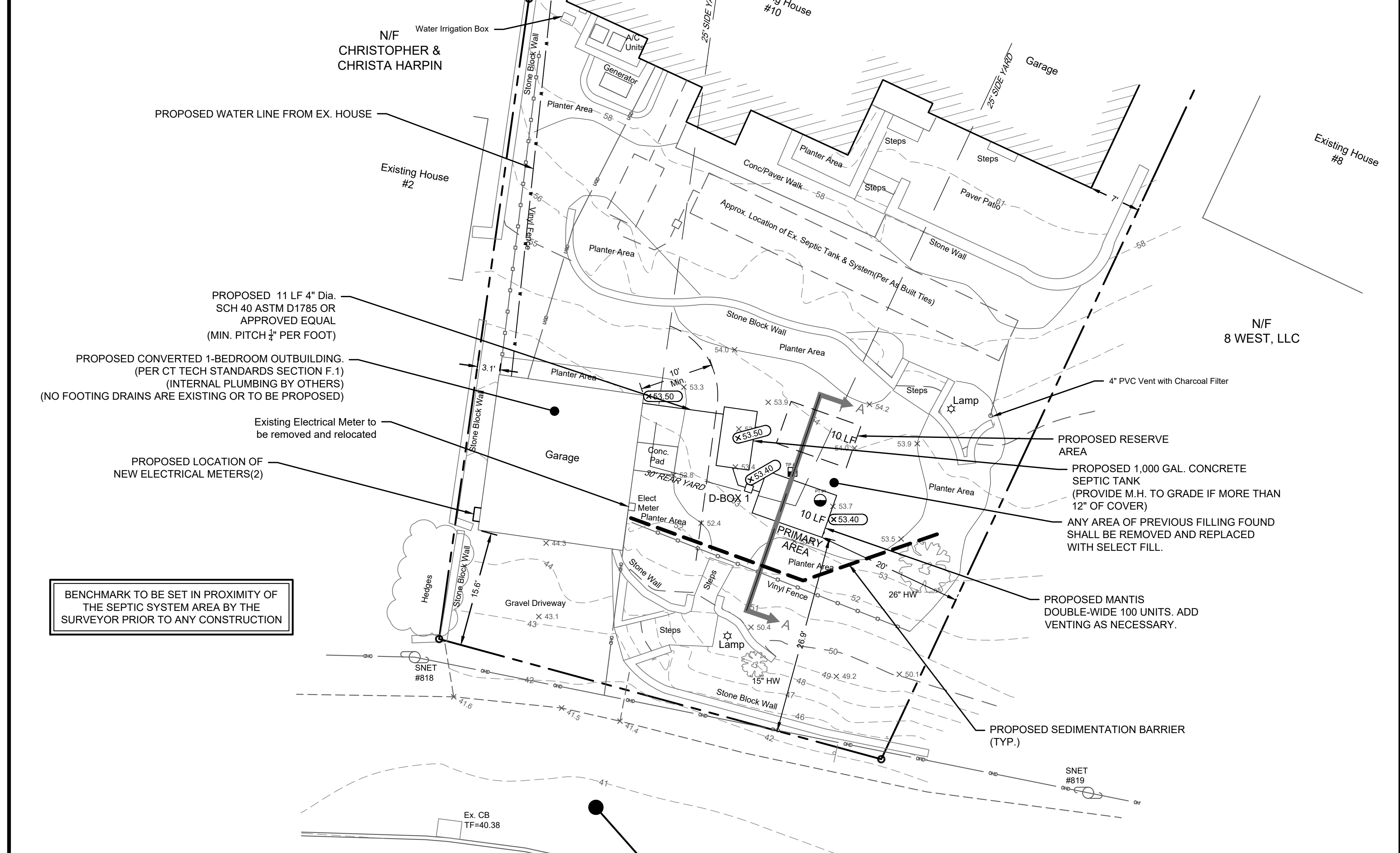
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#40	0%-20%	0%-5%
#100	0%-5%	0%-2.5%



PROPOSED LEACHING STRUCTURE DETAIL:
Eljen - MANTIS DW-100
N.T.S.

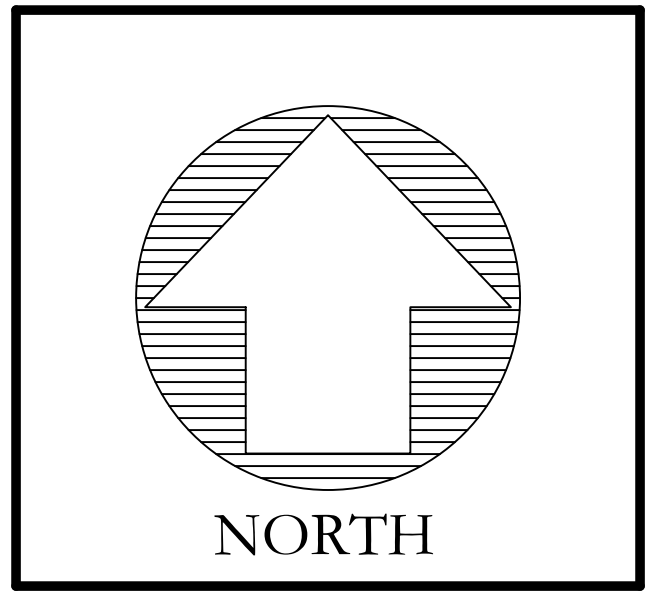


1,000 GALLON CONCRETE SEPTIC TANK
N.T.S.



LEGEND

	= Existing utility pole		= Existing edge of pavement
	= Existing light pole		= Proposed curbing
	= Proposed Light		= Existing/Proposed well
	= Existing fire hydrant		= Existing catch basin
	= Proposed fire hydrant		= Existing drainage manhole
	= Existing water valve		= Existing sanitary manhole
	= Existing gas valve		= Proposed catch basin
	= Existing underground pipe		= Proposed manhole
	= Existing treeline		= Existing utility box
			= Proposed sidewalk ramp
			= Existing contour
			= Existing spot elevation
			= Proposed contour
			= Proposed spot elevation
			= Deep test location
			= Percolation test location
			= Grade to drain
			= Proposed Riprap
			= Proposed Drainage Pipe



cole
HARRY E. COLE & SON
engineering. surveying. planning.

876 South Main Street
P.O. Box 44
Plantsville, CT 06479 - 0044

Tel: (860) 628-4484
Fax: (860) 620-0196
www.hecole.com

PROJECT NAME:

PROPOSED 1-BEDROOM OUTBUILDING

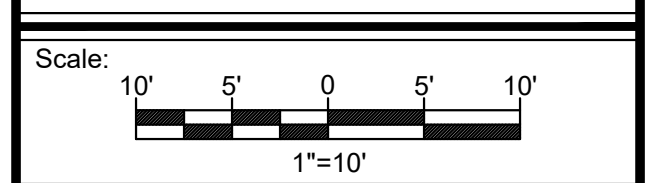
10 West Avenue
Essex, Connecticut

PREPARED FOR:

THOMAS D. & KELLY A. NICHOLS

Sheet Description:

PLOT PLAN SUBSURFACE SEWAGE DISPOSAL SYSTEM DESIGN



Date: November 16, 2021

Project #: JML F.B. #:

Drawn By: 2225 Approved By: BNB

Revisions:

Date	Descriptions
Nov. 29, 2021	Revisions Per Health Department

Sheet #:

P1.1

811

Know what's below.
Call before you dig.

Barton Nichols P.E.
Reg. No. #13653

NOT VALID UNLESS EMBOSSED SEAL OR STAMP IS AFFIXED HERETO