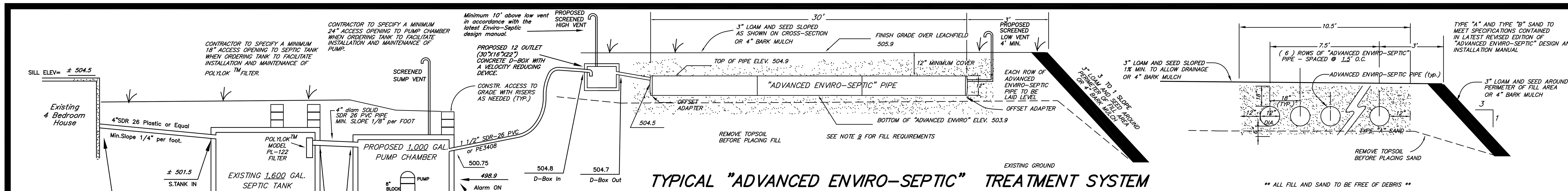


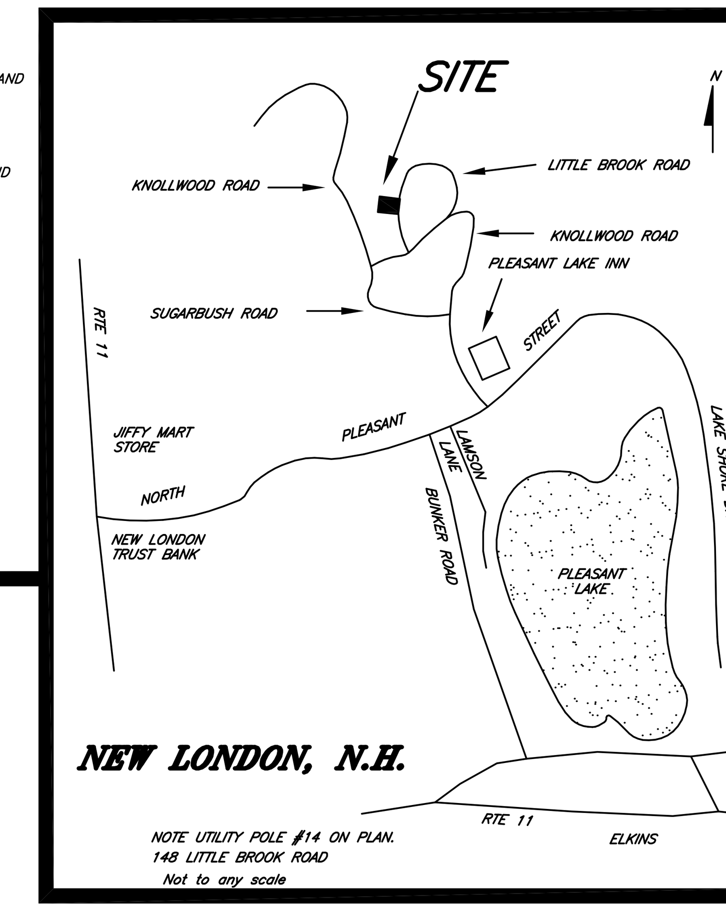
TYPICAL "ADVANCED ENVIRO-SEPTIC" TREATMENT SYSTEM

CROSS SECTION

NOT TO SCALE

"ADVANCED ENVIRO-SEPTIC" NOTES

1. "ADVANCED ENVIRO-SEPTIC" PIPE SHALL BE INSTALLED AS SET FORTH IN THE LATEST REVISED EDITION OF THE "ENVIRO-SEPTIC" DESIGN & INSTALLATION MANUAL FOR THE STATE OF NEW HAMPSHIRE."
2. "ADVANCED ENVIRO-SEPTIC" UNITS ARE AVAILABLE AT L.E. WEED, NEWPORT, NH.



LOCATION MAP

NOTE
SAND ENVELOPE SHALL BE 10.5' X 32' LONG

NOTE
TIES ARE TO CENTER ENDS OF ENVIRO PIPE.

PUMP SPECIFICATIONS

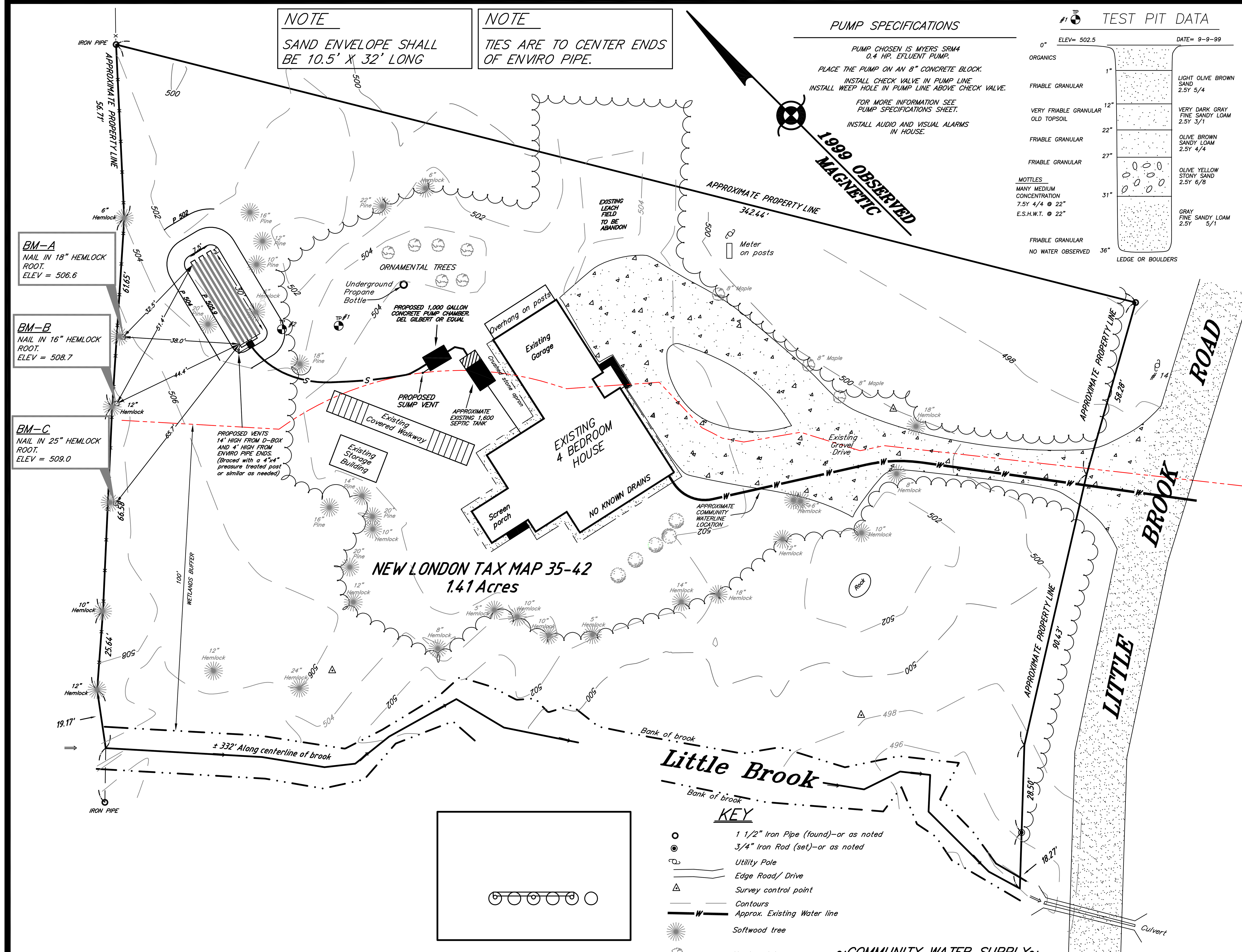
PUMP CHOSEN IS MYERS SRM4
0.4 HP. EFLUENT PUMP.

PLACE THE PUMP ON AN 8" CONCRETE BLOCK.

INSTALL CHECK VALVE IN PUMP LINE
INSTALL WEEP HOLE IN PUMP LINE ABOVE CHECK VALVE.

FOR MORE INFORMATION SEE PUMP SPECIFICATIONS SHEET.

INSTALL AUDIO AND VISUAL ALARMS IN HOUSE.



KEY

- 1 1/2" Iron Pipe (found)—or as noted
- 3/4" Iron Rod (set)—or as noted
- Utility Pole
- Edge Road/ Drive
- Survey control point
- Contours
- Approx. Existing Water line
- Softwood tree
- Hardwood tree

#1 TEST PIT DATA

ELEV= 502.5 DATE= 9-9-99

Depth	Description	Soil
0"	ORGANICS	
1"	FRIABLE GRANULAR	LIGHT OLIVE BROWN SAND 2.5Y 5/4
12"	VERY FRIABLE GRANULAR OLD TOPSOIL	VERY DARK GRAY FINE SANDY LOAM 2.5Y 3/1
22"	FRIABLE GRANULAR	OLIVE BROWN SANDY LOAM 2.5Y 4/4
27"	FRIABLE GRANULAR	OLIVE YELLOW STONY SAND 2.5Y 6/8
31"	FRIABLE GRANULAR	GRAY FINE SANDY LOAM 2.5Y 5/1
36"	NO WATER OBSERVED	LEDGE OR BOULDERS

MOTTLES: MANY MEDIUM CONCENTRATION 7.5Y 4/4 @ 22"
E.S.H.W.T. @ 22"

SOIL TYPE
559C SKERRY, FINE SANDY LOAM
8-15% SLOPES, VERY STONEY
WEB SOILS SURVEY

PERC TEST DATA
DATE 9-9-99
DEPTH 20"
RESULTS 1" IN 3 MIN

#2 TEST PIT DATA

ELEV= 503.3 DATE= 9-9-99

Depth	Description	Soil
0"	ORGANICS	MANY ROOTS SAPRIC & HEMIC
3"	LOOSE GRANULAR	DARK BROWN SANDY LOAM 7.5YR 3/2
4"	ALBIC HORIZON FRIABLE GRANULAR	GRAY SANDY LOAM 7.5YR 6/1
8"	FRIABLE GRANULAR SPODIC LAYER	YELLOWISH BROWN SANDY LOAM 10YR 5/6
20"	FIRM BLOCKY ROOTS TO 32"	LIGHT YELLOWISH BROWN SANDY LOAM 5Y 6/4
41"	FIRM MASSIVE	OLIVE SANDY LOAM 5Y 5/3
45"	NO WATER OBSERVED	PROBABLY BOULDERS OR LEDGE

MOTTLES: MANY PROMINENT LARGE CONCENTRATION 10YR 4/6 @ 21"
E.S.H.W.T. @ 21"

GENERAL NOTES

1. The contractor shall adhere strictly to these plans and any deviation from these plans shall require prior approval from the designer and the NHWS&PCD.
2. Remove all trees, bushes, boulders and topsoil prior to the placement of any fill within the leach field area, inclusive of the area containing the slope extension and the slope embankments.
3. Septic tank and distribution box shall be constructed of concrete as manufactured by L.E. WEED and Son, Newport, N.H. or equivalently constructed tanks.
4. Septic tank and distribution box shall be set as level as possible and sealed watertight. All pipe penetrations shall be sealed with a non-shrink grout or watertight sealant.
5. All PVC pipe joints shall be solvent welded.
6. Should the contractor, prior to the start of construction, find field conditions other than those shown on these plans, he shall immediately cease work and notify the designer.
7. Any future replacement system will be constructed in the same area as the original system unless otherwise shown.
8. Approved plans may be transferred to a new owner by applying to the NHWS&PCD for a transfer form.
9. "System Sand" Requirements, It is critical to the proper functioning of the Advanced Enviro-Septic System that the proper amount and type of System Sand be installed. System Sand must be clean, granular sand free of organic matter and must adhere to the following percentage and quality restrictions. under and 12 inches around the perimeter shall be:

- Percentage Restrictions;
  * 0% retained on 3/4 in. sieve (19mm)
  * 0%-35% retained on #10 sieve (2mm)
  * 40%-90% retained on the #35 sieve (0.5 mm)
  * Fines Quality Restrictions: A maximum of 3% of total sand may pass through a #200 sieve (.07 mm)
- ASTM C-33 ("concrete sand") may be acceptable for use as System Sand providing that no more than 3% can pass a #200 sieve (verified by washing sample per requirements of ASTM C-117 as noted in the ASTM C-33 specification)

System Sand is placed a minimum of 6 in. below the Advanced Enviro-Septic rows, a minimum of 6 in. above the Advanced Enviro-Septic rows, and a minimum of 12 in. horizontally around the perimeter of the Advanced Enviro-Septic rows.
Note: System Sand may be used in place of sand fill; however, this may increase material costs.

10. Fill material is to be used to form the fill extensions and side-slope extensions. This soil material (native to the site or equivalent) should be clean, bank run sand free of topsoil or humus, dredgings, or stones larger than 6 in., roots and other organics. The soil should be of sufficient density to contain the System Sand and Sand Fill. See Env-Wq 1021.03.
11. Env-Wq 1023.01 Septic Tank Inspection and Pumping Requirements
    a) Septic tanks shall be inspected for accumulation of sludge and surface scum at frenquency sufficent to allow the tank to be pumped by a licensed septage hauler when the combined thickness of the sludge and surface scum equal 1/3 or more of the tank depth.
    b) Septage and effluent shall be discharged from a septic tank only to; (1) An approved or grandfarthered effluent disposal area: or (2) A licensed septage hauling vehicle.
12. Env-Wq 1014.03 (a) Wetlands (if shown) were "delineated on the basis of Hydrophytic vegetation, hydric soils, and wetlands hydrology in accordance with the techniques outlined in the "Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1" January 1987." The hydric soil components were "determined by using the "Field Indicators for Identifying Hydric Soil's in New England, Version 2", July 1998"
13. EDA shall be kept clear of any trees and shrubs.

EFFLUENT DISPERSAL AREA REQUIREMENTS

PERC RATE 1" IN 4 MIN.
NUMBER OF BEDROOMS 4
AREA REQUIRED 165 SF.
AREA PROVIDED 6 ROWS OF 30'/ROW = 180 SF.
DAILY SEWAGE LOAD : 4 BEDROOMS @150 G/B/D = 600 GPD.

DESIGN INTENT

- THE BOTTOM OF THE EFFLUENT DISPOSAL AREA (EDA) SHALL BE CONSTRUCTED AT 503.9 ELEVATION.
- THERE ARE APPROXIMATELY 0.3 FEET ABOVE ORIGINAL GROUND ON THE HIGH CONTOUR OF THE DESIGNED EFFLUENT DISPOSAL AREA (E.D.A.).
- IN THE EVENT OF FAILURE, SYSTEM IS TO BE REBUILT IN PLACE.
- ALL EDS LINES SHALL BE SEALED INTO THE SEPTIC TANK AND DISTRIBUTION BOX WITH NON-SHRINKING MORTAR OR OTHER SEALANT WHICH CAN BE SHOWN TO BE SHRINK PROOF, WATER PROOF, AND WILL NOT DETERIORATE OVER TIME.
- NEAREST SURFACE WATER 75'+ FROM E.D.A. AND 50'+ FROM SEPTIC TANKS.
- NEAREST DWELLING 100'+.
- DISTRIBUTION BOX IS TO BE A 12 OUTLET, CONCRETE BOX, L.E. WEED OR EQUAL.
- INSTALL FLOW EQUALIZERS IN DISTRIBUTION BOX.
- DATUM ASSUMED (NOT REFERENCED TO U.S.G.S. DATUM).
- DESIGNER IS TO BE NOTIFIED OF ANY FIELD CONDITIONS CONTRARY TO THOSE DEPICTED ON THIS PLAN.
- THIS PLAN HAS BEEN PREPARED TO ASSIST IN THE INSTALLATION OF A SEPTIC SYSTEM AND THE USE OF THIS DESIGN FOR ANY OTHER PURPOSE IS AT THE USERS RISK.
- THERE ARE NO VERY POORLY DRAINED SOILS WITHIN 75' OF SYSTEM AND NO POORLY DRAINED SOILS WITHIN 50' OF SYSTEM.
- IF A GARBAGE GRINDER IS OR WILL BE USED IN THE STRUCTURE SERVED BY THE TANK, THE TANK SIZE SIZE SHALL BE INCREASED BY 50%.
- SEPTIC TANK SHALL BE SEALED.
- Advanced Enviro-Septic treatment systems are approved by NHDES as ITA in accordance with

Part Env-Ws 1024. The system is designed in accordance with the Advanced Enviro-Septic Treatment Systems Design and Installation Manual and the Advanced Enviro-Septic Wastewater Treatment System Design and Installation Manual New Hampshire State Attachment.

Bottom of effluent disposal area is to be 0.3' Above ground at the high corner. This places 100% of the effluent disposal area a minimum of 2' above SHWT and 100% of the effluent disposal area a minimum of 2' above ledge or impermeable soil.

- WHEN EXCAVATING YOU SHOULD CALL DIG SAFE AT #811.

CAUTION: !!!
THERE IS AN UNDERGROUND PROPANE LINE FROM TANK TO HOUSE

PREVIOUS APPROVAL # eCA2015020201, Feb 2, 2015.

EFFLUENT DISPOSAL SYSTEM (EDS)

PREPARED FOR

PENELOPE J. OBENSHAIN
QUAL. PERS. RES. TRUST

LOCATED IN

NEW LONDON, NEW HAMPSHIRE

Scale in Feet = 20' 0' 20' 40' 60' 80'

1" = 20'

AUGUST 8, 2018

NEW HAMPSHIRE Designer of Subsurface Disposal Systems PIERRE J. BEDARD No. 641 Water Supply & Pollution Control

DESIGNER'S STAMP

PREPARED BY PIERRE J. BEDARD, and ASSOCIATES, P.C., P.O. BOX 238, WILMOT, N.H. 03287.
LAND SURVEYING, SEWAGE DISPOSAL DESIGN, and NATURAL RESOURCE CONSULTANTS.