

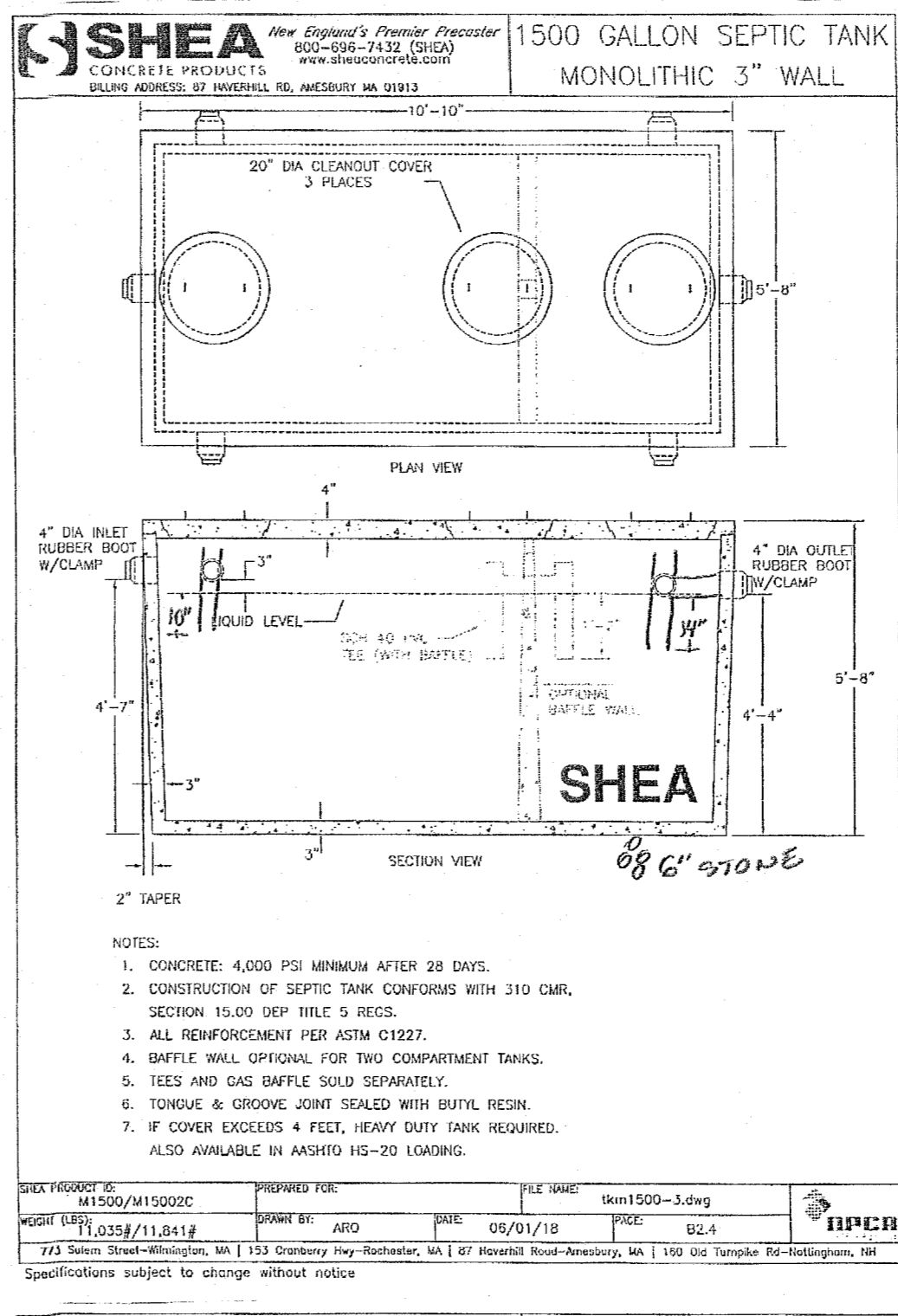
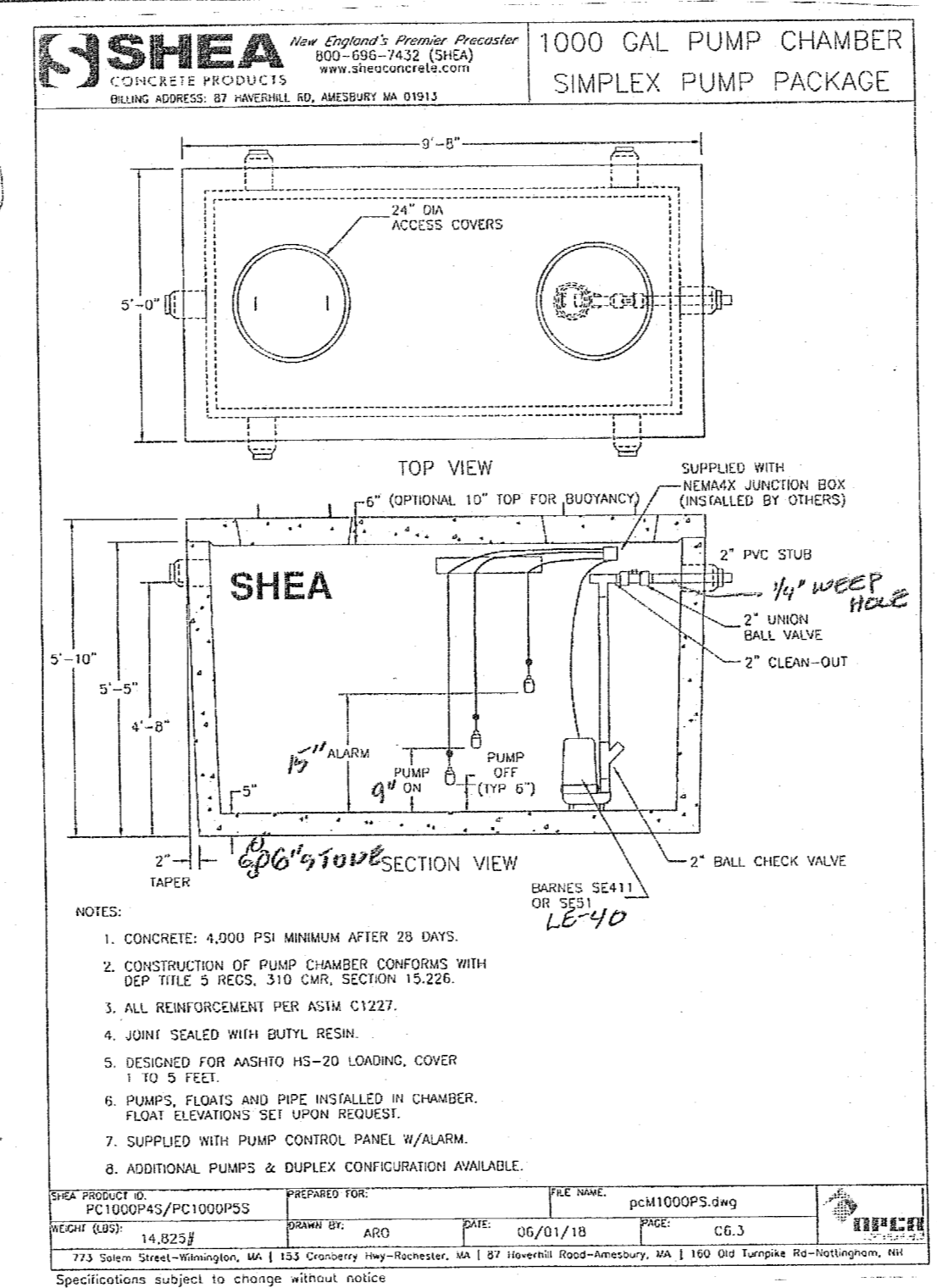
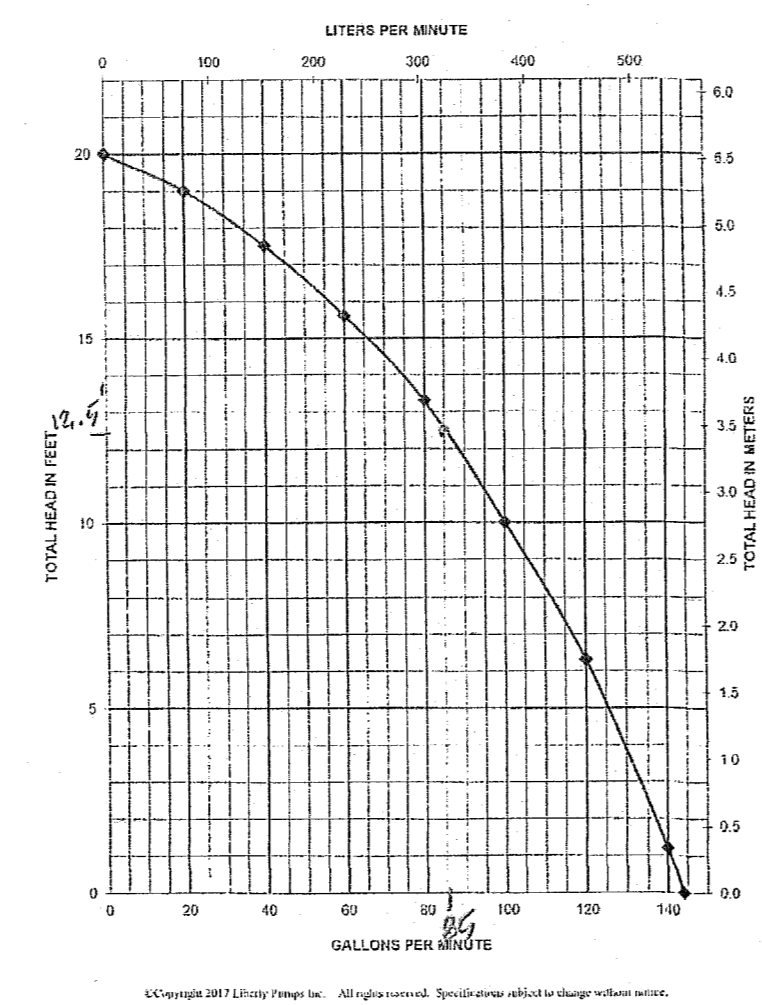
**LEGEND:**

EXISTING: -72-  
PROPOSED: 72.3

72.3 [72.3] SURFACE CONTOUR  
[72.3] SPOT ELEVATION

PERCOLATION TEST  
PROMINENT TREE, DIA. & SPECIES  
ELEVATION BENCH MARK & NO.  
WATER SERVICE

**Liberty Pumps**  
Pump Specifications  
**LE40 Series**  
4/10 HP Submersible Sewage Pump



- NOTES:**
- UNLESS OTHERWISE SPECIFIED, SYSTEM CONSTRUCTION SHALL CONFORM TO TITLE 5 OF THE STATE ENVIRONMENTAL CODE OR LOCAL BOARD OF HEALTH REGULATIONS, WHICHEVER IS MORE STRINGENT.
  - ALL WORK ON LINES, GRADES AND DETAILS SHALL BE DONE BY A LICENSED DISPOSAL WORKS INSTALLER.
  - ANY INTENDED REVISION OF PROPOSED ELEVATIONS AND/OR HORIZONTAL LOCATIONS AS SHOWN SHALL BE APPROVED BY THE ENGINEER AND HEALTH AGENT PRIOR TO IMPLEMENTATION.
  - PROPERTY LINES SHOWN ARE APPROXIMATE. REFERENCE PLAN IS BOOK 86, PAGE 26, LOT 115.
  - THE CONTRACTOR SHALL NOTIFY THE PROPER INSPECTORS AND ALLOW SUCH TIME AS REQUIRED FOR INSPECTIONS.
  - SAFETY MEASURES, DAY-TO-DAY CONTROL OF WORK AND CONSTRUCTION METHODS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
  - THE ISSUANCE OF A PERMIT TO CONSTRUCT OR A CERTIFICATE OF COMPLIANCE SHALL NOT BE CONSTRUED AS A GUARANTEE THAT THE DISPOSAL SYSTEM WILL FUNCTION SATISFACTORILY.
  - THE CONTRACTOR SHALL NOTIFY "DIG-SAFE" AT 1-800-322-4844 AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
  - ALL PIPE JOINTS SHALL BE MADE WATERTIGHT PER 222(3) & (4).
  - THE BUILDING SEWER SHALL BE LAID ON A COMPACTED FIRM BASE PER 222(5). THE BUILDING SEWER SHALL BE LAID ON A CONTINUOUS GRADE IN A STRAIGHT LINE PER 222(7).
  - A 24" CHILDPROOF RISER/MANHOLE WITH 6" OF FINAL GRADE SHALL BE PLACED OVER THE OUTLET END OF THE SEPTIC TANK.
  - IF PLACED IN FILL PROPER COMPACTION IS REQUIRED UNDER COMPONENTS PER 221(2). A SIX INCH CRUSHED STONE BASE IS TO BE PLACED UNDER COMPONENTS.
  - SEPTIC TANK, PUMP CHAMBER AND DISTRIBUTION BOX SHALL BE WATERTIGHT PER 221(1).
  - SEPTIC TANK, PUMP CHAMBER AND DISTRIBUTION BOX SHALL HAVE A MINIMUM 9" AND MAXIMUM 36" OF COVER PER 221(7) AND 228(1).
  - ALL OUTLETS FROM THE DISTRIBUTION BOX ARE TO BE CONSTRUCTED AT THE SAME ELEVATION PER 223(3)(B), AND LAID LEVEL FOR THE FIRST TWO FEET PER 223(3)(B).
  - FILL MATERIAL SHALL BE COMPRISED OF CLEAN, GRANULAR SAND, FREE FROM ORGANIC MATTER AND DELETERIOUS SUBSTANCES PER 255(3). MIXTURES AND LAYERS OF DIFFERENT CLASSES OF SOILS SHALL NOT BE USED.
  - PROVIDE MINIMUM 0.02FT/FT GRADE SLOPE OVER LEACH SYSTEM PER 240(10).
  - THERE SHALL BE A 3" SPACE BETWEEN TOPS OF TEES AND INSIDE OF TANK PER 227(4). TEES MUST EXTEND 6" ABOVE FLOWLINE PER 227(1). INLET TEE MUST EXTEND 10" BELOW FLOWLINE PER 227(6). OUTLET TEE MUST EXTEND 14" BELOW FLOWLINE PER 227(6). INSTALL LABEL OUTLET FILTER OR EQUIVALENT ON OUTLET TEE. ANNUAL MAINTENANCE OF THE FILTER IS REQUIRED. TEES MUST EXTEND TO CENTER OF ACCESS PORTS.
  - LEACH SYSTEM SHALL BE BUILT WITH INFILTRATOR CHAMBERS MANUFACTURED BY INFILTRATOR SYSTEMS, INC. APPROVED FOR GENERAL USE UNDER TRANSMITTAL NUMBER X228042 BY THE MASS. DEPARTMENT OF ENVIRONMENTAL PROTECTION. ALL INSTALLATION SHALL COMPLY WITH MANUFACTURER'S REQUIREMENTS. AN INSPECTION PORT SHALL BE PROVIDED PER MANUFACTURER'S AND BOARD OF HEALTH REQUIREMENTS.
  - PROVIDE 6 INCH CRUSHED STONE BASE BENEATH SEPTIC TANK AND DISTRIBUTION BOX.
  - MAGNETIC MARKING TAPE IS TO BE PROVIDED OVER SYSTEM COMPONENTS.
  - THIS PLAN IS DESIGNED IN CONFORMANCE WITH 310CMR 15.00 (TITLE 5).
  - SYSTEM DOES NOT APPEAR TO LIE WITHIN A NITROGEN SENSITIVE AREA AS DESIGNATED BY 310CMR 15.215.
  - THERE ARE NO SURFACE WATER SUPPLIES WITHIN 400', NO PUBLIC WELLS WITHIN 400', AND NO PRIVATE DOMESTIC WELLS WITHIN 125' OF SEPTIC SYSTEM BASED ON VISUAL INSPECTION.
  - THE EXISTING DWELLING IS ASSESSED AS TWO BEDROOMS. THE DESIGN IS FOR TWO BEDROOMS.
  - PUMP ALARM SHALL BE ON A SEPARATE CIRCUIT.

**DESIGN CRITERIA**  
Building Use: single family dwelling  
Number of Bedrooms: 2 Design No. of People: 4  
Design Flow: 110 gpd/bdrm. Total Daily Flow: 220 gals.  
No Garbage Grinder Allowed  
Design Percolation Rate: sieve analysis  
Leach Area Requirements: 0.33 gals/sf  
Total Area Required: 666 S.F.  
Total Area Provided: 681 S.F.  
4.73 SF/LF x 24' x 6' = 681 S.F.

**Soil Data**  
12/20/21  
Witness: Leo Cormier  
By: Joseph J. Serwatka, P.E.

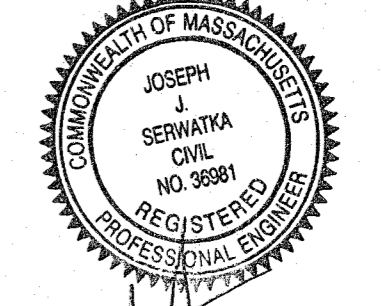
T-1 (98') T-2 (97.0') T-3 ( )  
0-72", fill 0-8", Ap, fs, 10YR3/2 0-72", fill  
72-80", Ab, fs, 10YR2/2 8-60", fill 72-96", fill/Ap, 10YR2/2  
80-120", C, sl, 2.5Y5/4 60-130", C, sl/s, 2.5Y5/4 96-144", C, sl/s, 2.5Y5/4  
g.w. - 72" g.w. - 48"

I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

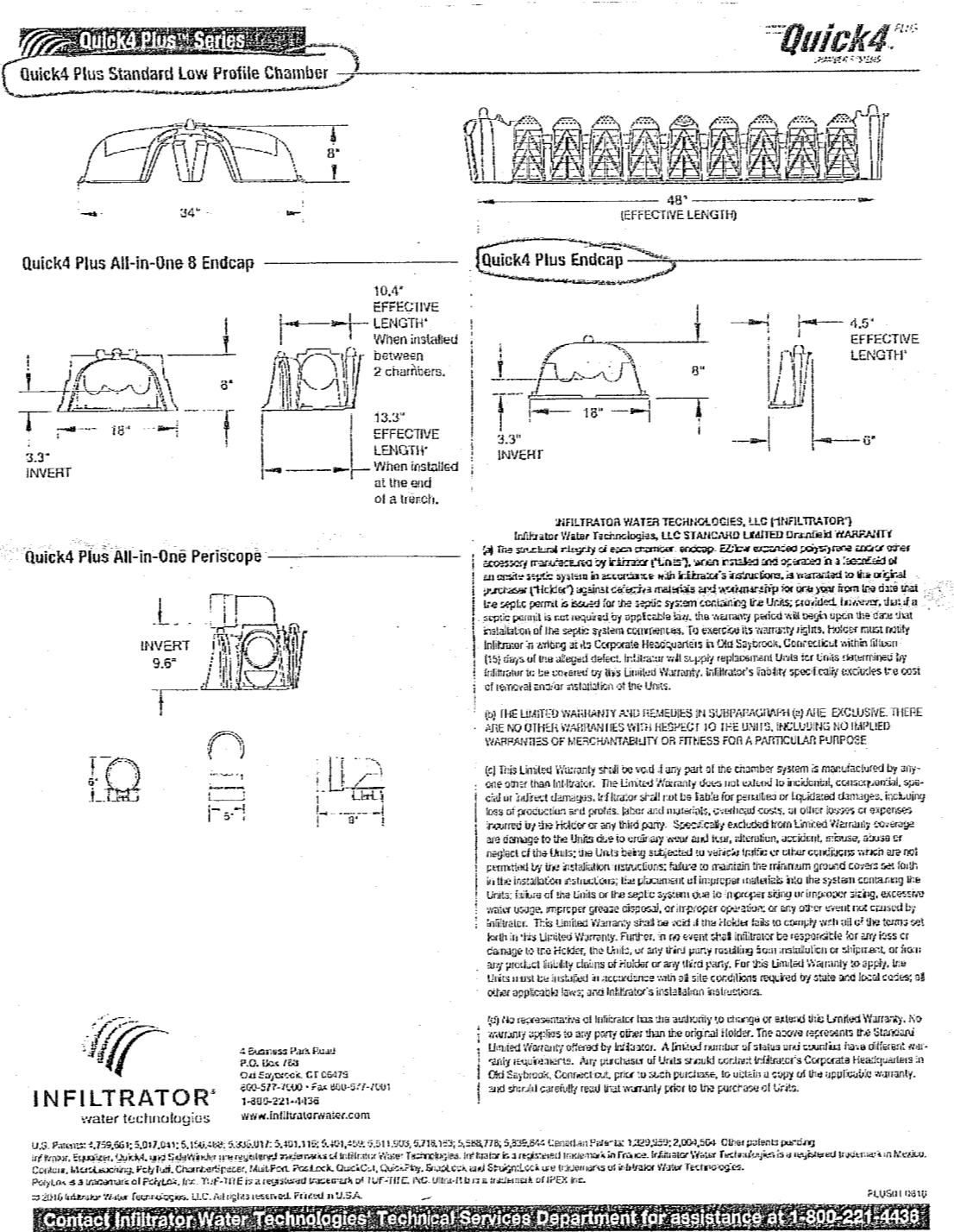
**Pump Calc's:**  
Static head: 4.5' four doses per day at 55gals/dose  
Dynamic head: 8' pump operates at 85gpm at 12.5" TDH  
TDH: 12.5' 24hrs storage provided

**Local Upgrade Approval:**  
To use sieve analysis in lieu of perc test per DEP policy guidelines, due to fill/groundwater.

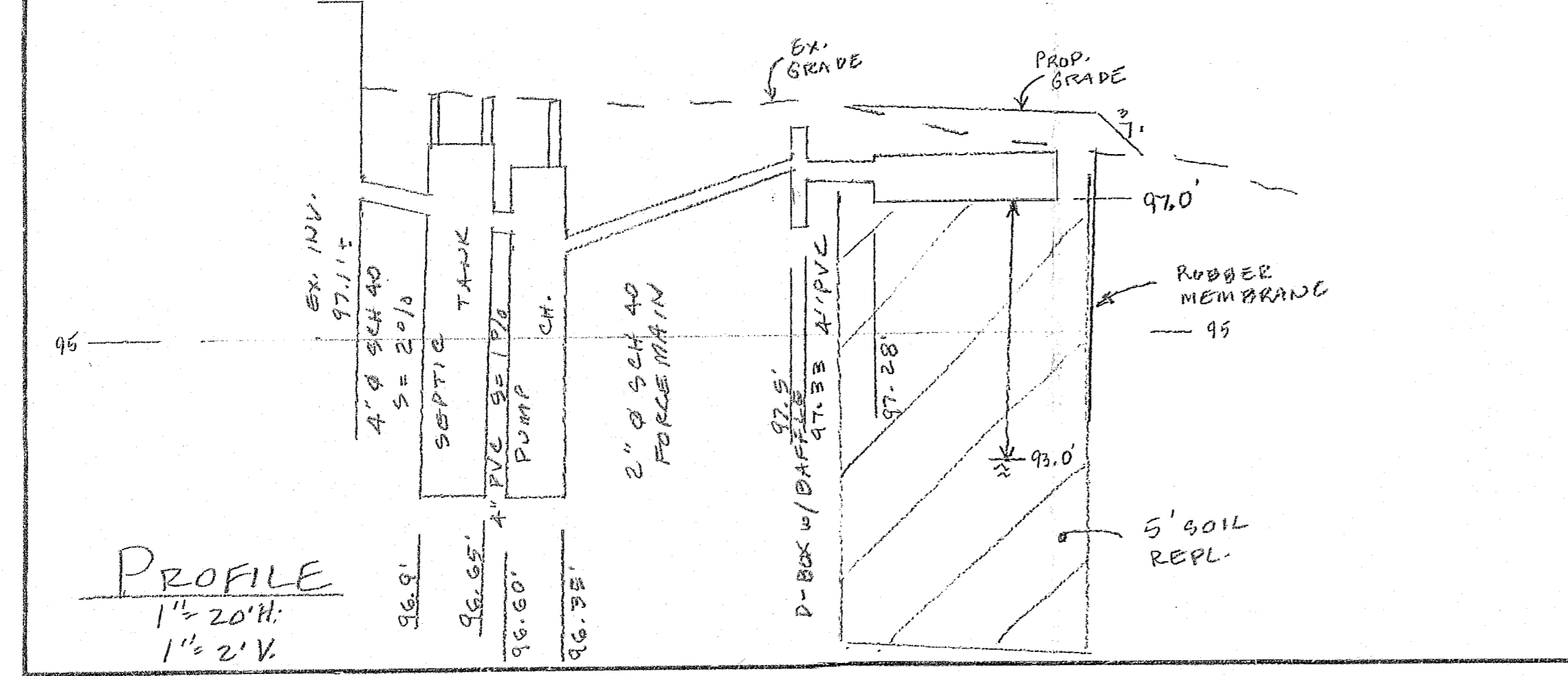
Joseph J. Serwatka, P.E.  
Post Office Box 1016  
North Andover, MA 01845  
978-314-8731



*Handwritten signature and date: JJS 1-22-22*



Contact Infiltrator Water Technologies, Technical Services Department for assistance at 1-800-221-4343



I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise, and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation, as indicated on the attached soil evaluation form, are accurate and in accordance with 310 CMR 15.000 through 15.107.

Certified Soil Evaluator  
Date: 1-22-22

DESIGN:	JJS				
DRAWN:					
CHECKED:					
SCALE:	AS SHOWN				
DATE:	1-22-22				
NO.	BY	APP.	DATE	REVISION	DESCRIPTION

**SEWAGE DISPOSAL SYSTEM  
SITE PLAN AND PROFILE**

6 TRICKETT ROAD (map 41, lot 1356)  
LYNNFIELD, MA

PREPARED FOR: POTE

SHEET 1 OF 1

JOB NO.