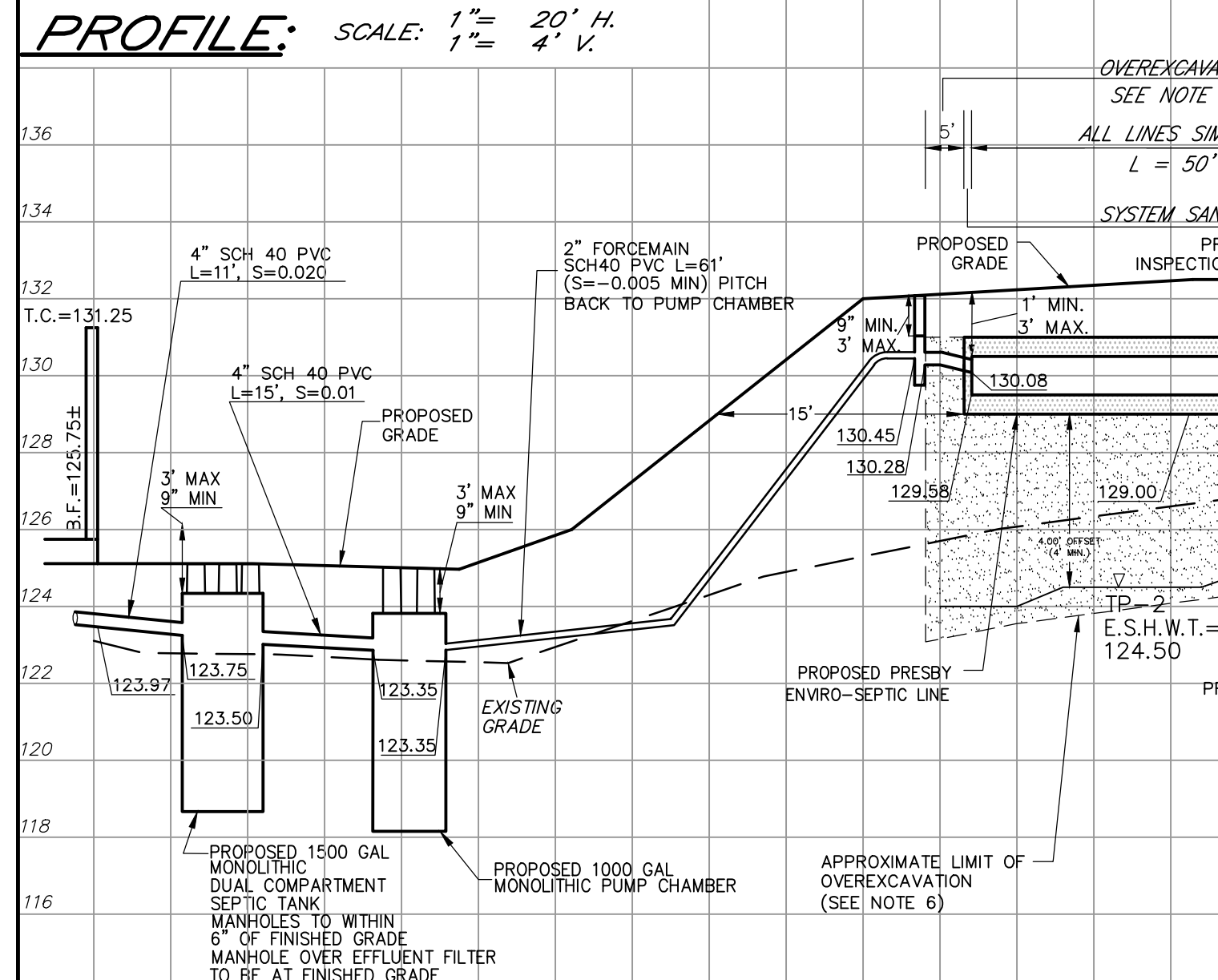


TEST PIT DATA: DATE OF TESTING: 3/18/08
 TEST BY: STAMSKI & McNARY, INC.
 CERT. SOIL EVAL.: DAVID HASLETT (2006)
 WITNESSED BY: STAN SOSNICKI

11'-4"	127.00	11'-2"	126.75	11'-8"	126.50	11'-0"	122.60
A	SANDY LOAM 10YR 3/3	A	SANDY LOAM 10YR 3/3	A	SANDY LOAM 10YR 3/3	A	SANDY LOAM 10YR 3/3
B	SANDY LOAM 10YR 6/6	B	SANDY LOAM 10YR 6/6	B	SANDY LOAM 10YR 6/6	B	SANDY LOAM 10YR 6/6
C	SANDY LOAM 2.5Y 7/2	C	SANDY LOAM 2.5Y 7/2	C	SANDY LOAM 2.5Y 7/2	C	SANDY LOAM 2.5Y 7/2
11'-0"	NO REFUSAL MOTTLING AT 25" (124.92) G.W. @ 25"	12'-0"	NO REFUSAL MOTTLING AT 27" (124.50) G.W. @ 27"	10'-0"	NO REFUSAL MOTTLING AT 28"(124.17) G.W. @ 32"	10'-0"	NO REFUSAL MOTTLING AT 34"(124.77) G.W. @ 35"

- NOTES:**
- THIS PLAN IS FOR THE DESIGN AND CONSTRUCTION OF A SEWAGE DISPOSAL FACILITY ONLY.
 - ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO TITLE 5 AND THE CONCORD BOARD OF HEALTH REGULATIONS.
 - IF ALTERATIONS (REMOVAL OF VEGETATION, GRADING, EXCAVATIONS, ETC.) ARE TO BE MADE WITHIN 100 FT OF WETLAND AREAS (POND, BROOKS, SWAMPS, ETC.) A REQUEST FOR DETERMINATION OF APPLICABILITY OF THE WETLANDS PROTECTION ACT (131 940A) SHOULD BE FILED WITH THE TOWN'S CONSERVATION COMMISSION. THE FILING OF A NOTICE OF INTENT MAY BE REQUIRED AND LOCAL BYLAWS MAY APPLY.
 - ACCEPTABLE MATERIAL SPECIFICATIONS FOR DISTRIBUTION LINES: PVC-SCHEDULE 40 (ASTM D 1785 & D 2665), SDR 35 (ASTM D 3034), ABS-SCHEDULE 40 (ASTM F 628), HDPE-SHALL MEET OR EXCEED ASTM F 810 FOR SMOOTH WALL POLYETHYLENE PIPE FOR USE IN DRAINAGE AND WASTE DISPOSAL FIELDS. SCHEDULE 40 PVC SHALL BE USED IN AREAS SUBJECT TO VEHICULAR TRAFFIC.
 - UNLESS OTHERWISE SHOWN, THERE ARE NO KNOWN WELLS WITHIN 150' OF THE PROPOSED SEWAGE DISPOSAL SYSTEM.
 - ALL TOP, SUBSOIL, FILL, BOULDERS, AND OTHER MATERIALS UNDER AND WITHIN 5' OF THE PROPOSED LEACHING AREA SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL ACCORDING TO TITLE V SECTION 15.255 CONSTRUCTION IN FILL.
 - PER TITLE 5 REQUIREMENTS, THE DESIGN ENGINEER IS REQUIRED TO INSPECT CONSTRUCTION OF THE SEPTIC SYSTEM AND CERTIFY THAT THE SYSTEM IS CONSTRUCTED ACCORDING TO THE PLANS, LOCAL REGULATIONS, AND TITLE 5. IN MOST INSTANCES THE DESIGN ENGINEER IS ALSO REQUIRED TO PREPARE AN "AS-BUILT" PLAN, UNLESS OTHERWISE SPECIFICALLY STATED IN WRITING BETWEEN OWNER AND THE INSTALLER, THE INSTALLER SHALL BE RESPONSIBLE FOR COORDINATING INSPECTIONS WITH THE DESIGN ENGINEER AND PAY FOR THESE SERVICES. NOTIFYING THE DESIGN ENGINEER DOES NOT RELIEVE THE OWNER OR INSTALLER FROM THE RESPONSIBILITY OF HAVING THE REQUIRED INSPECTIONS ETC. BY THE BOARD OF HEALTH.
 - FINISHED GRADE OVER THE LEACHING AREA SHALL HAVE A MINIMUM SLOPE OF 2%.
 - THE FIRST TWO FOOT SECTIONS OF PIPE FROM THE D. BOX SHALL BE SET LEVEL.
 - THE SYSTEM SHALL BE STAKED AND THE BENCHMARK SET IN THE FIELD BY THE DESIGN ENGINEER.
 - ALL UNDERGROUND UTILITIES SHOWN HERE WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS FROM VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED BEFORE DESIGNING, EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, OR PAVEMENT RESTORATION OR REPAIR. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED, INCLUDING THOSE IN CONTROL OF UTILITIES. SEE CHAPTER 370, ACTS OF 1963 MASS. WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS, THE APPROPRIATE UTILITY ENGINEERING DEPARTMENT MUST BE CONSULTED. D.I.G. SAFE FILE. NO.: 1-888-344-7233.
 - FINAL VENT LOCATION SUBJECT TO OWNER'S APPROVAL.
 - ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO BE LOCATED ONCE BURIED.
 - ALL DISTURBED SURFACES SHALL BE RESTORED WITH 4" OF LOAM AND SEED.
 - ZABEL EFFLUENT TEE FILTER SHALL BE IN COMPLIANCE WITH APPROVAL ISSUED AUGUST 11, 1997. ALL SEWER MANHOLES AT FINISHED GRADE SHALL BE SECURED TO PREVENT UNAUTHORIZED ACCESS. COVER SHALL BE PERMANENTLY MARKED "EFFLUENT TEE FILTER".
 - THE PRESBY ADVANCED ENVIRO-SEPTIC LEACHING SYSTEM HAS BEEN CERTIFIED FOR GENERAL USE; THIS SYSTEM SHALL BE INSTALLED AND OPERATED IN COMPLIANCE WITH THE MODIFIED APPROVAL FOR GENERAL USE REVISED AUGUST 12, 2013, TRANSMITTAL NUMBER X2554716. AS THE DESIGNER OF RECORD, WE HEREBY CERTIFY WE HAVE RECEIVED THE REQUIRED TRAINING AND THE PLAN IS IN ACCORDANCE WITH THE LATEST DEP 1/A APPROVAL.
 - THE ROOF VENT WILL FUNCTION AS THE HIGH VENT IF THERE ARE NO PUMPS, RESTRICTIONS, OR OTHER VENTS BETWEEN THE LOW VENT AND THE ROOF VENT. IF A RESTRICTION IS PLACED BETWEEN THE LOW VENT AND THE ROOF VENT, A HIGH VENT IS REQUIRED THROUGH AN UNUSED DISTRIBUTION BOX OUTLET. IF AN EFFLUENT FILTER IS USED IT MUST BE PROPERLY MAINTAINED TO ENSURE ADEQUATE AIR FLOW.



PERC. TEST DATA: DATE OF TESTING: 9/28/08
 CERT. SOIL EVAL.: D. HASLETT
 TEST BY: STAMSKI & McNARY, INC.
 WITNESSED BY: STAN SOSNICKI

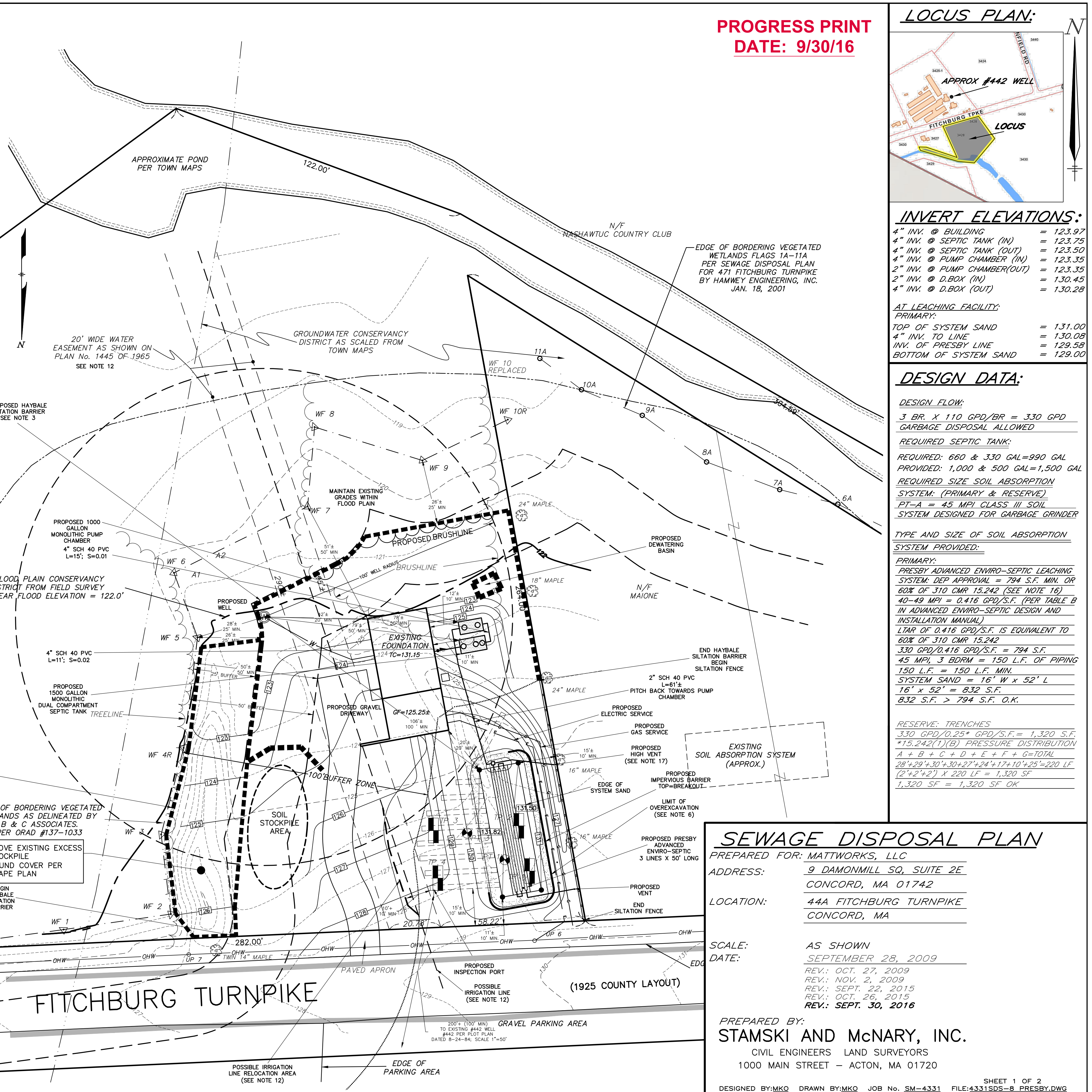
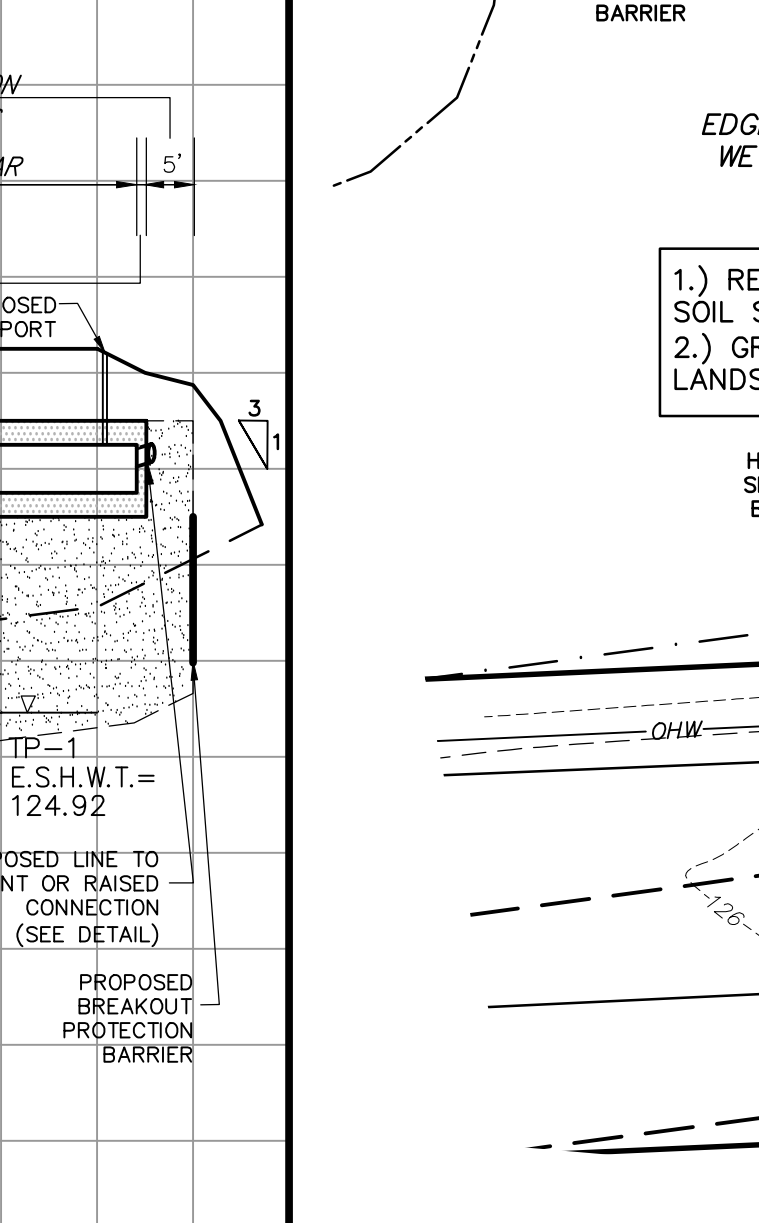
PT-1
 DEPTH OF TEST: 45"
 RATE: 45 MIN/IN

PT-3
 DEPTH OF TEST: 49"
 RATE: 42 MIN/IN

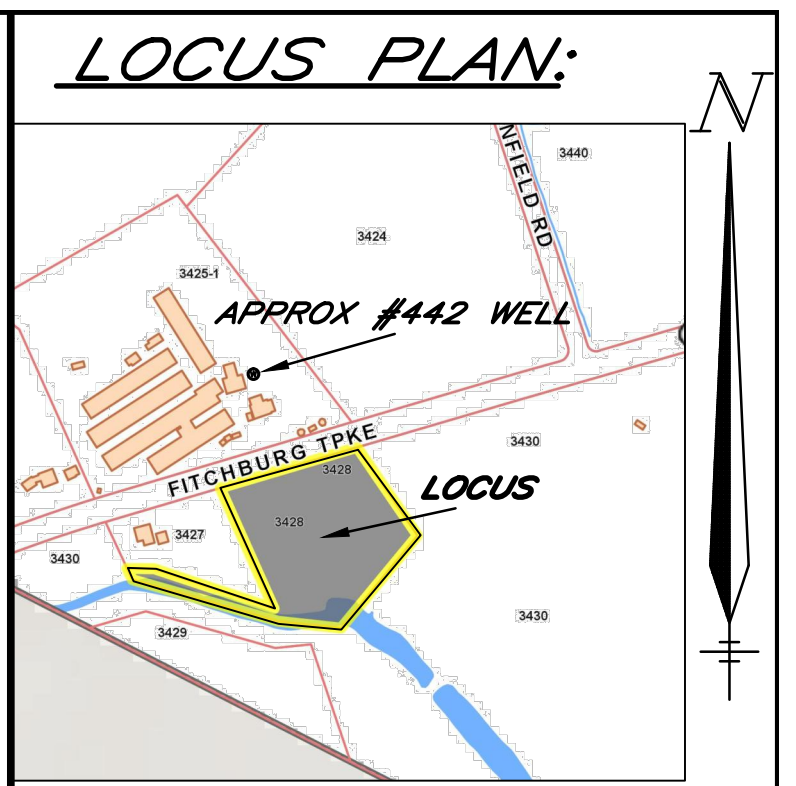
PLAN VIEW:
 SCALE: 1" = 20'
 ZONING DISTRICT: RESIDENCE A

PARCEL ID#3428
 94,050 ± S.F.
 2,1591 ± AC.

- REMOVE EXISTING EXCESS SOIL STOCKPILE
- GROUND COVER PER LANDSCAPE PLAN



PROGRESS PRINT
 DATE: 9/30/16



INVERT ELEVATIONS:

4" INV. @ BUILDING	= 123.97
4" INV. @ SEPTIC TANK (IN)	= 123.75
4" INV. @ SEPTIC TANK (OUT)	= 123.50
4" INV. @ PUMP CHAMBER (IN)	= 123.35
2" INV. @ PUMP CHAMBER (OUT)	= 123.35
2" INV. @ D.BOX (IN)	= 130.45
4" INV. @ D.BOX (OUT)	= 130.28

AT LEACHING FACILITY:

PRIMARY:	
TOP OF SYSTEM SAND	= 131.00
4" INV. TO LINE	= 130.08
INV. OF PRESBY LINE	= 129.58
BOTTOM OF SYSTEM SAND	= 129.00

DESIGN DATA:

DESIGN FLOW:
 3 BR. X 110 GPD/BR = 330 GPD
 GARBAGE DISPOSAL ALLOWED

REQUIRED SEPTIC TANK:
 REQUIRED: 680 & 330 GAL=990 GAL
 PROVIDED: 1,000 & 500 GAL=1,500 GAL
REQUIRED SIZE SOIL ABSORPTION SYSTEM: (PRIMARY & RESERVE)
 PT-A = 45 MPI CLASS III SOIL SYSTEM DESIGNED FOR GARBAGE GRINDER

TYPE AND SIZE OF SOIL ABSORPTION SYSTEM PROVIDED:

PRIMARY:
 PRESBY ADVANCED ENVIRO-SEPTIC LEACHING SYSTEM: DEP APPROVAL = 794 S.F. MIN. OR 608 OF 310 CMR 15.242 (SEE NOTE 16)
 40-49 MPI = 0.416 GPD/S.F. (PER TABLE B IN ADVANCED ENVIRO-SEPTIC DESIGN AND INSTALLATION MANUAL)
 LTAR OF 0.416 GPD/S.F. IS EQUIVALENT TO 608 OF 310 CMR 15.242
 330 GPD / 0.416 GPD/S.F. = 794 S.F.
 45 MPI, 3 BDRM = 150 L.F. OF PIPING
 150 L.F. = 150 L.F. MIN.
 SYSTEM SAND = 16" W x 52' L
 16" x 52' = 832 S.F.
 832 S.F. > 794 S.F. O.K.

RESERVE: TRENCHES
 330 GPD / 0.25* GPD/S.F. = 1,320 S.F.
 *15.242(1)(B) PRESSURE DISTRIBUTION
 A + B + C + D + E + F + G = TOTAL
 28'+29'+30'+30'+27'+24'+17'+10'+25'=220 LF
 (2'+2'+2') X 220 LF = 1,320 SF
 1,320 SF = 1,320 SF OK

SEWAGE DISPOSAL PLAN
 PREPARED FOR: MATTWORKS, LLC
 ADDRESS: 9 DAMONMILL SQ, SUITE 2E
 CONCORD, MA 01742
 LOCATION: 44A FITCHBURG TURNPIKE
 CONCORD, MA

SCALE: AS SHOWN
 DATE: SEPTEMBER 28, 2009
 REV.: OCT. 27, 2009
 REV.: NOV. 2, 2009
 REV.: SEPT. 22, 2015
 REV.: OCT. 26, 2015
 REV.: SEPT. 30, 2016

PREPARED BY:
STAMSKI AND McNARY, INC.
 CIVIL ENGINEERS LAND SURVEYORS
 1000 MAIN STREET - ACTON, MA 01720

DESIGNED BY: MKQ DRAWN BY: MKQ JOB No. SM-4331 FILE: 4331SDS-B_PRESBY.DWG

SHEET 1 OF 2