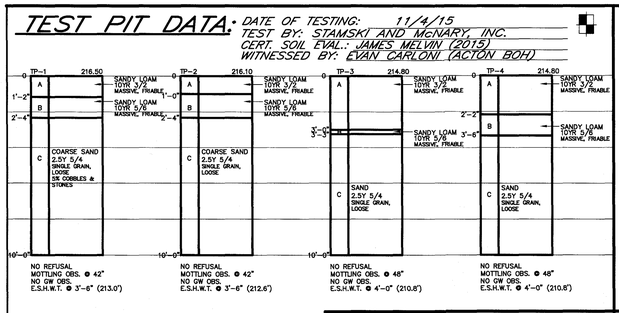
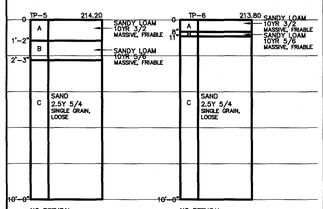
TEST PIT DATA:

DATE OF TESTING: 11/4/15
TEST BY: STAMSKI AND McNARY, INC.
CERT. SOIL EVAL.: JAMES MELVIN (2015)
WITNESSED BY: EVAN CARLONI (ACTON BOH)





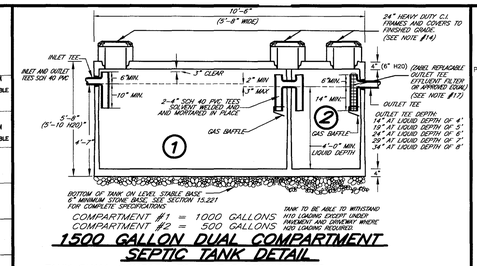
PERC. TEST DATA:

DATE OF TESTING: 11/4/2015
TEST BY: STAMSKI AND McNARY, INC.
CERT. SOIL EVAL.: JAMES MELVIN (2015)
WITNESSED BY: EVAN CARLONI

PT-A
DEPTH OF TEST: 50"
RATE: <2 MPI

PT-B
DEPTH OF TEST: 59"
RATE: <2 MPI

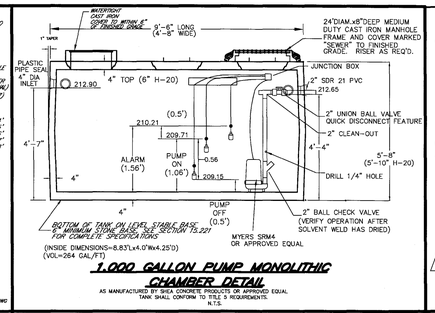
PT-C
DEPTH OF TEST: 48"
RATE: <2 MPI



1500 GALLON DUAL COMPARTMENT SEPTIC TANK DETAIL

TANK SHALL CONFORM TO TITLE 5 REQUIREMENTS.
N.T.S.
AS MANUFACTURED BY SHEA CONCRETE OR APPROVED EQUAL

FILE: CONCORD 2000 ST.DWG

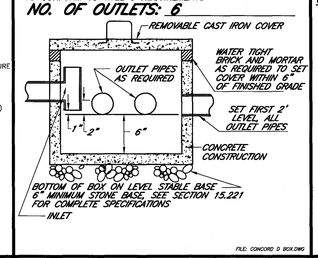


1,000 GALLON PUMP MONOLITHIC CHAMBER DETAIL

AS MANUFACTURED BY SHEA CONCRETE PRODUCTS OR APPROVED EQUAL
TANK SHALL CONFORM TO TITLE 5 REQUIREMENTS.
N.T.S.

D.BOX DETAIL:

N.T.S.
TO CONFORM TO TITLE 5 REQUIREMENTS
NO. OF OUTLETS: 6

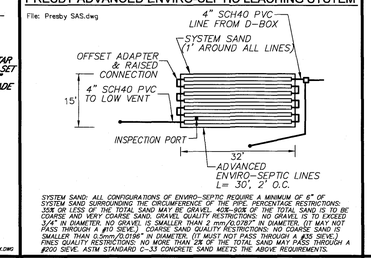


FILE: CONCORD D BOX.DWG

SOIL ABSORPTION SYSTEM

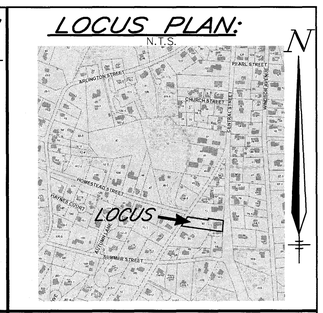
PRESBY ADVANCED ENVIRO-SEPTIC LEACHING SYSTEM

File: Presby SAS.dwg



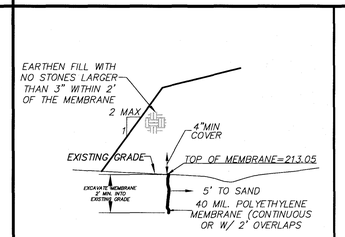
SYSTEM SAND: ALL CONFIGURATIONS OF ENVIRO-SEPTIC REQUIRE A MINIMUM OF 6" OF SYSTEM SAND SURROUNDING THE CIRCUMFERENCE OF THE PIPE. PERCENTAGE RESTRICTIONS: 35% OR LESS OF THE TOTAL SAND MAY BE GRAVEL, 40%-80% OF THE TOTAL SAND IS TO BE COARSE AND VERY COARSE SAND GRAVEL. QUALITY RESTRICTIONS: NO GRAVEL IS TO EXCEED 3/4" IN DIAMETER. NO GRAVEL IS SMALLER THAN 2 mm/0.0787" IN DIAMETER. (IT MAY NOT PASS THROUGH A #10 SIEVE.) COARSE SAND QUALITY RESTRICTIONS: NO COARSE SAND IS SMALLER THAN 0.5mm/0.0196" IN DIAMETER. (IT MUST NOT PASS THROUGH A #35 SIEVE.) FINES QUALITY RESTRICTIONS: NO MORE THAN 5% OF THE TOTAL SAND MAY PASS THROUGH A #200 SIEVE. ASTM STANDARD C-33 CONCRETE SAND MEETS THE ABOVE REQUIREMENTS.

LOCUS PLAN:



INVERT ELEVATIONS

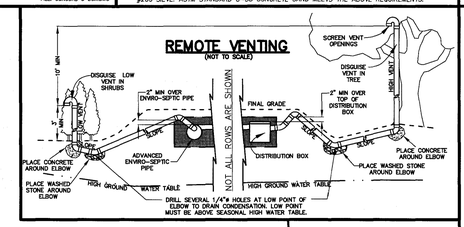
4" INV. @ BUILDING EXIST.*	= 215.64**
* SEE NOTE 18	
** SEE NOTE 21	
4" INV. @ SEPTIC TANK (IN)	= 213.50
4" INV. @ SEPTIC TANK (OUT)	= 213.25
4" INV. @ PUMP CHAMBER (IN)	= 212.90
2" INV. @ PUMP CHAMBER (OUT)	= 212.65
2" INV. @ D.BOX (IN)	= 214.50
4" INV. @ D.BOX (OUT)	= 214.33
TOP OF SAND	= 215.05
4" INV. TO LINE	= 214.13
INV. OF PRESBY LINE	= 213.66
BOTTOM OF SAND	= 213.05



BREAKOUT PROTECTION BARRIER DETAIL

N.T.S.

PUMP NOTES:
1. DESIGN REQUIREMENTS
PUMP CHAMBER CAPACITY:
RECOMMENDED: 851 GAL
PROVIDED : 1,122 GAL
DOSING:
PROVIDED : 147 GAL
PUMPING CURVE DATA:
RATE : 59 GPM
TDH : 10.2'
2. PUMP AND PUMP ALARMS SHALL BE WIRED ON SEPARATE CIRCUITS.
3. THE PUMP ALARM AND PUMP CONTROL PANEL SHALL BE MOUNTED WITHIN THE BUILDING IN A READILY AUDIBLE AND OBSERVABLE LOCATION SELECTED BY THE OWNER.
4. THERE WILL BE 711 GAL OF STORAGE ABOVE THE NORMAL OPERATING LEVEL. (ALARM ON TO INV IN)
5. PUMP SIZE SUBJECT TO VERIFICATION BY SUPPLIER
6. ALL PUMPS AND CONTROLS SHALL BE SUPPLIED BY THE SAME SUPPLIER
7. THE SYSTEM SHALL BE PRESSURE TESTED PRIOR TO BACKFILLING.



DESIGN DATA:

DESIGN FLOW:
4 BR x 110 GPD/BR = 440 GPD
NO GARBAGE DISPOSAL ALLOWED

REQUIRED SEPTIC TANK:
REQUIRED: 880 & 440 GAL=1,320 GAL
PROVIDED: 1,000 & 500 GAL=1,500 GAL

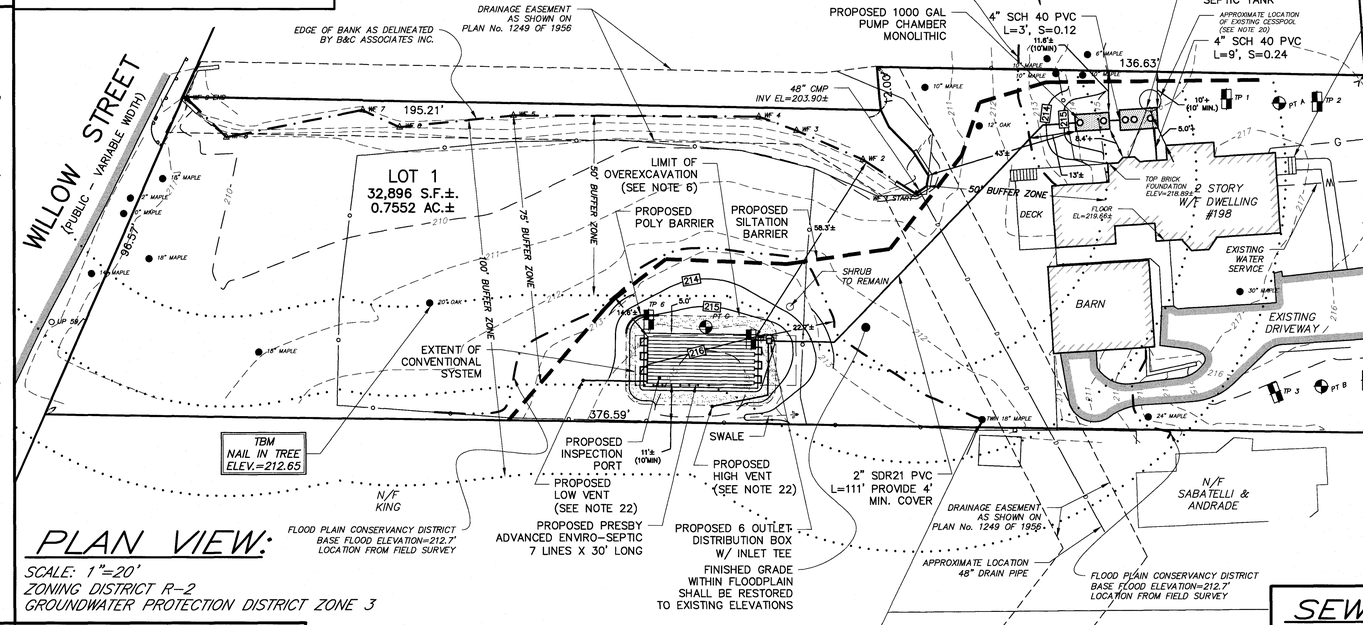
REQUIRED SIZE SOIL ABSORPTION SYSTEM: (PRIMARY & RESERVE)
PT-A = <2 MPI CLASS 1 SOIL
440 GPD/0.74 GPD/S.F. = 595 S.F.
800 S.F. MINIMUM PER ACTON BOH

PRIMARY:
PRESBY ADVANCED ENVIRO-SEPTIC LEACHING SYSTEM: DEP APPROVAL = 400 S.F. MIN. OR 60% OF 310 CMR 15.242 (SEE NOTE 22)
0.6 x 800 S.F. = 480 S.F.
<2 MPI, 4 BDRM = 200 L.F. OF PIPING
FIELD AREA = 15' W x 32' L
15' x 32' = 480 S.F.
480 S.F. = 480 S.F. O.K.

TITLE V CONVENTIONAL SYSTEM
3 TRENCHES: 2' W X 2' D X 45' L
3 TRENCHES X 6 SF/FT X 45 FT = 810 SF > 800 SF O.K.

NOTES:

1. THIS PLAN IS FOR THE DESIGN AND CONSTRUCTION OF A SEWAGE DISPOSAL FACILITY ONLY.
2. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO TITLE 5 AND THE ACTON BOARD OF HEALTH REGULATIONS.
3. IF ALTERATIONS (REMOVAL OF VEGETATION, GRADING, EXCAVATIONS, ETC.) ARE TO BE MADE WITHIN 100 FT OF WETLAND AREAS (PONDS, BROOKS, SWAMPS, ETC.) A REQUEST FOR DETERMINATION OF APPLICABILITY OF THE WETLANDS PROTECTION ACT (c131 s40A) SHOULD BE FILED WITH THE TOWN'S CONSERVATION COMMISSION. THE FILING OF A NOTICE OF INTENT MAY BE REQUIRED AND LOCAL BYLAWS MAY APPLY.
4. 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.
5. UNLESS OTHERWISE SHOWN, THERE ARE NO KNOWN WELLS WITHIN 150' OF THE PROPOSED SEWAGE DISPOSAL SYSTEM.
6. 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"
7. 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.
8. FINISHED GRADE OVER THE LEACHING AREA SHALL HAVE A MINIMUM SLOPE OF 2%
9. THE FIRST TWO FOOT SECTIONS OF PIPE FROM THE D. BOX SHALL BE SET LEVEL.
10. THE SYSTEM, INCLUDING SEPTIC TANK, SHALL BE STAKED AND THE BENCHMARK SET IN THE FIELD BY THE DESIGN ENGINEER
11. 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 TELE. NO.: 1-888-344-7233.
12. ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO BE LOCATED ONCE BURIED.
13. ALL DISTURBED SURFACES SHALL BE RESTORED WITH 4" OF LOAM AND SEED.
14. SEWER MANHOLES BROUGHT TO FINISH GRADE SHALL BE SECURED TO PREVENT UNAUTHORIZED ACCESS.
15. THIS SEPTIC SYSTEM IS NOT DESIGNED FOR A GARBAGE GRINDER.
16. 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 X255471b. AS THE DESIGNER OF RECORD, WE HEREBY CERTIFY WE HAVE RECEIVED THE REQUIRED TRAINING AND THE PLAN IS IN ACCORDANCE WITH THE LATEST DEP I/A APPROVAL.
17. EFFLUENT TEE FILTER SHALL BE INSTALLED IN COMPLIANCE WITH APPROVAL ISSUED AUGUST 11, 1997. COVER SHALL BE PERMANENTLY MARKED "EFFLUENT TEE FILTER".
18. CONTRACTOR SHALL VERIFY EXISTING BUILDING SEWER INVERT PRIOR TO CONSTRUCTION OF THE PROPOSED SOIL ABSORPTION SYSTEM, DISTRIBUTION BOX, SEPTIC TANK, AND PUMP CHAMBER. ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGN ENGINEER.
19. LOCAL UPGRADE APPROVAL
TITLE V 15.405(1)(b):
REQUIRED: 10' FROM SEPTIC TANK TO CELLAR WALL AND SLAB FOUNDATION
PROVIDED: 5'
TOWN OF ACTON HEALTH DEPARTMENT RULES AND REGULATIONS
ARTICLE 16-6.2.5:
REQUIRED: 5' SEPARATION TO ESTIMATED SEASONAL HIGH WATER TABLE
PROVIDED: 3'
ARTICLE 16-6.2.7:
REQUIRED: 100' FROM WETLANDS TO SEWAGE DISPOSAL SYSTEM
PROVIDED: 54'
REQUIRED: 100' FROM FLOOD PLAIN TO SEWAGE DISPOSAL SYSTEM
PROVIDED: 17.5'
20. THE EXISTING CESSPOOL SHALL BE PUMPED, RUPTURED AND FILLED WITH CLEAN SAND.
21. LAUNDRY AND SINK PLUMBING TO BE RE-PLUMBED AND/OR PUMPED TO BUILDING SEWER.
22. FINAL VENT LOCATION SUBJECT TO OWNER'S APPROVAL.

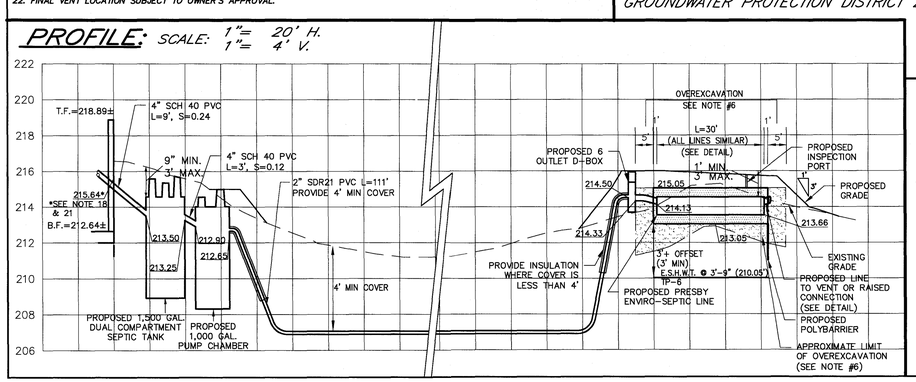


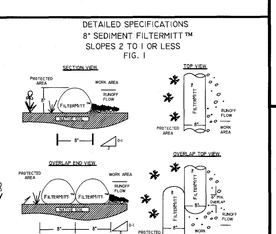
PLAN VIEW:

SCALE: 1"=20'
ZONING DISTRICT R-2
GROUNDWATER PROTECTION DISTRICT ZONE 3

PROFILE:

SCALE: 1"= 20' H.
1"= 4' V.

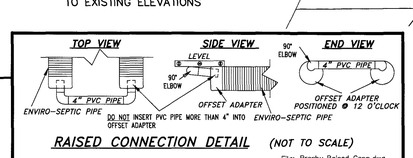




SILTATION BARRIER DETAIL

NOT TO SCALE

FOR FURTHER INFORMATION ABOUT PHASE II STORMWATER PRODUCTS, INC. CONTACT US AT:
P.O. BOX 737 - WRENTHAM, MA 02093 - PH: (508) 384-7140 - FAX: (508) 384-0571
WWW.GROUNDCARESEXPRESS.COM



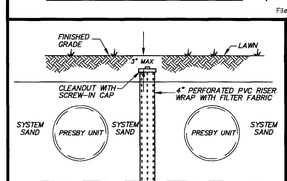
RAISED CONNECTION DETAIL

(NOT TO SCALE)

File: Presby Raised Conn.dwg

LEGEND:

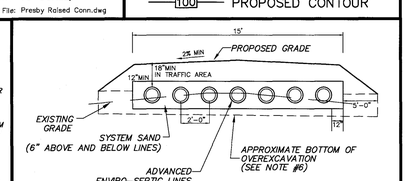
T.F. =TOP OF FOUNDATION
B.F. =BASEMENT FLOOR
T.B.R. =TO BE REMOVED
—100— EXISTING CONTOUR
—100— PROPOSED CONTOUR



INSPECTION PORT DETAIL

N.T.S.

File: Pres Inspec port.dwg



PRESBY ADVANCED ENVIRO SEPTIC LEACHING SYSTEM SECTION

N.T.S.

SEWAGE DISPOSAL PLAN

PREPARED FOR: PAMELA COCHRANE
ADDRESS: 198 CENTRAL STREET
ACTON, MA 01720

LOCATION: 198 CENTRAL STREET
ACTON, MA 01720
MAP F2B, PARCEL 83

SCALE: AS SHOWN
DATE: JANUARY 6, 2016

PREPARED BY:

STAMSKI AND McNARY, INC.
CIVIL ENGINEERS LAND SURVEYORS
1000 MAIN STREET - ACTON, MA 01720
(978) 263-8585

COMMONWEALTH OF MASSACHUSETTS JOSEPH MARCH #36384 PROFESSIONAL LAND SURVEYOR

COMMONWEALTH OF MASSACHUSETTS GEORGE DIMAKARAKOS CIVIL No. 41281 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: MKO DRAWN BY: MKO JOB No. SM-5564 FILE: 5564SDS.DWG