

VICINITY MAP
NO SCALE



SOIL TEST DATA

SOIL TESTING AND EVALUATION BY: GREGORY J. MORSE, SE#2906
SOIL TESTING WITNESSED BY: PHIL SPATH, P.E.
DATE: OCTOBER 19, 2021

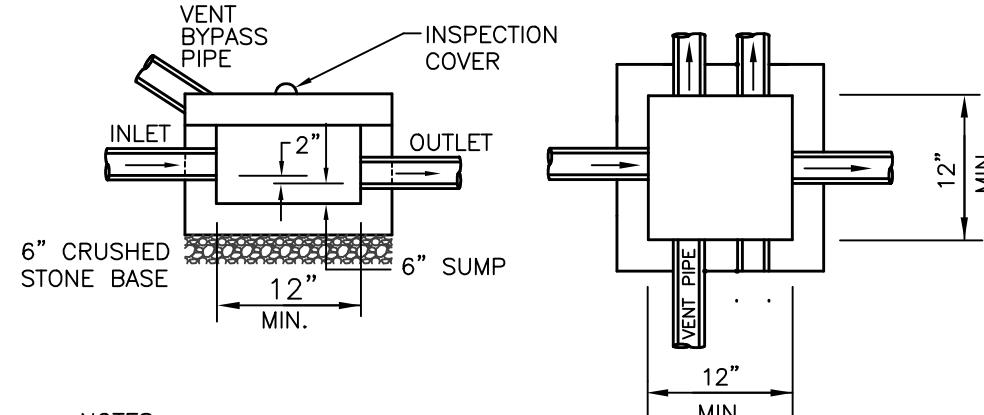
TP-A	APPROX. GRADE EL.	TP-B	APPROX. GRADE EL.	TP-C	APPROX. GRADE EL.
	102.1	102.5		102.1	
	FILL	FILL		FILL	
EL. 98.1	48"	EL. 94.5	96"	EL. 91.7	124"
EL. 91.2	130"				
WEeping OBSERVED: NONE MOTTling OBSERVED: NONE PERC. RATE: NONE ESHGW: NONE			WEeping OBSERVED: NONE MOTTling OBSERVED: NONE PERC. RATE: NONE ESHGW: NONE		

SOIL TEST DATA

SOIL TESTING AND EVALUATION BY: PHILLIP SPATH, P.E.
SOIL TESTING WITNESSED BY: JOSEPH GODZIK
DATE: APRIL 27, 1999

TP-2	APPROX. GRADE EL.	TP-3	APPROX. GRADE EL.
	99.8		98.5
	FILL		FILL
EL. 98.3	18"	EL. 95.2	40"
EL. 97.6	27"	EL. 93.9	55"
EL. 96.6	38"	EL. 93.2	64"
EL. 91.1	105"	EL. 89.2	112"
WEeping OBSERVED: NONE MOTTling OBSERVED: 47" PERC. RATE: 5 MPI @ 60-78" ESHGW: 47" (EL. 95.9)		WEeping OBSERVED: NONE MOTTling OBSERVED: 77" PERC. RATE: NONE ESHGW: 77" (EL. 92.1)	

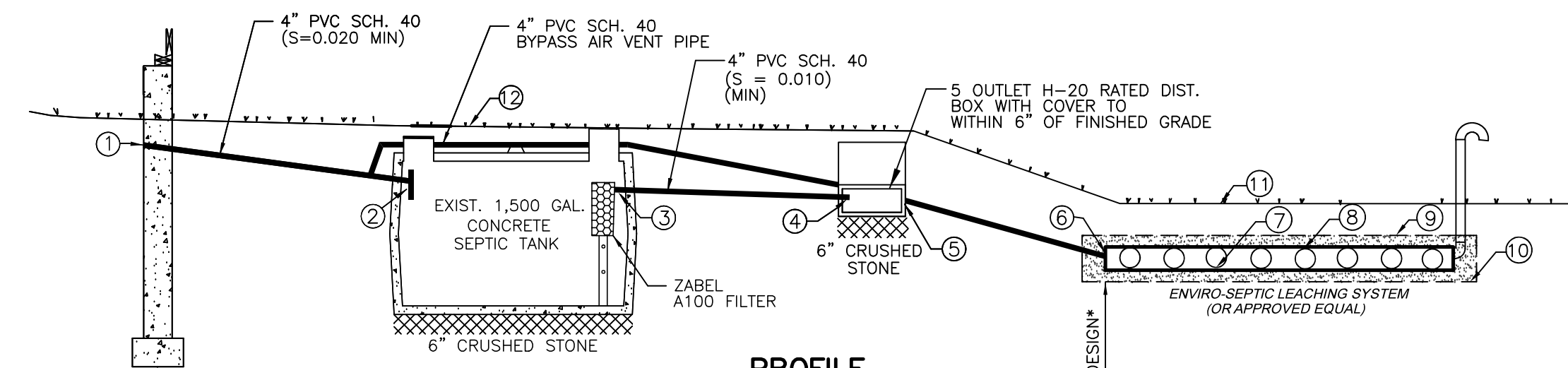
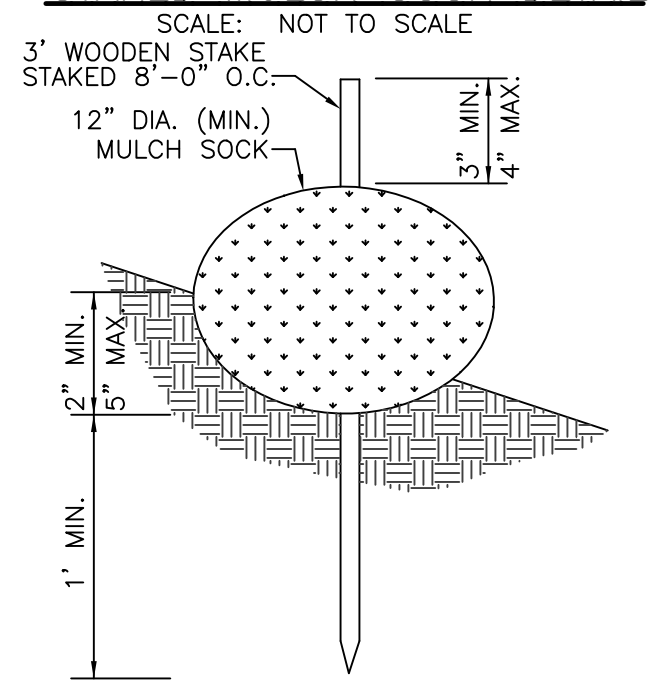
5 OUTLET (H-20 RATED) DISTRIBUTION BOX



NOTES:

- DISTRIBUTION BOX COVER SHALL BE EQUIPPED WITH RISERS AS NECESSARY TO BRING THE COVER TO WITHIN 6" OF FINISHED GRADE.
- ALL PIPE CONNECTION AND CONSTRUCTION JOINTS SHALL BE SEALED WITH HYDRAULIC CEMENT.
- DISTRIBUTION BOX TO BE INSTALLED ON A LEVEL 6" CRUSHED STONE BASE.
- THERE SHALL BE A 2" DIFFERENCE BETWEEN THE OUTLET OF THE DISTRIBUTION BOX AND THE PRESBY PVC INLET.

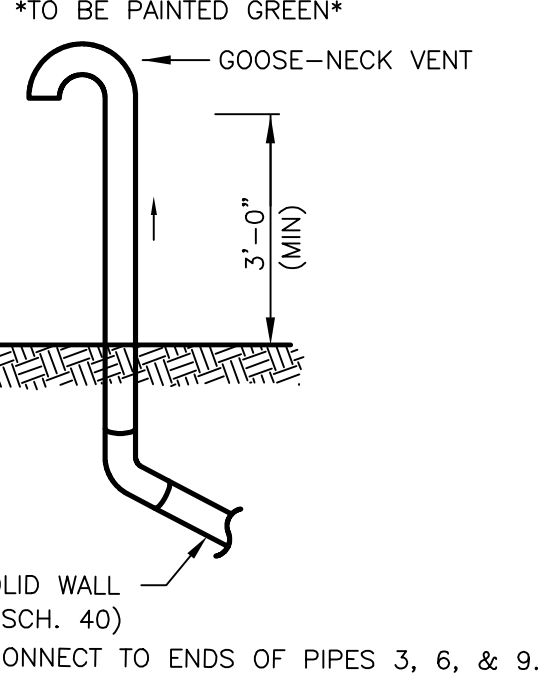
STAKED MULCH SOCK DETAIL



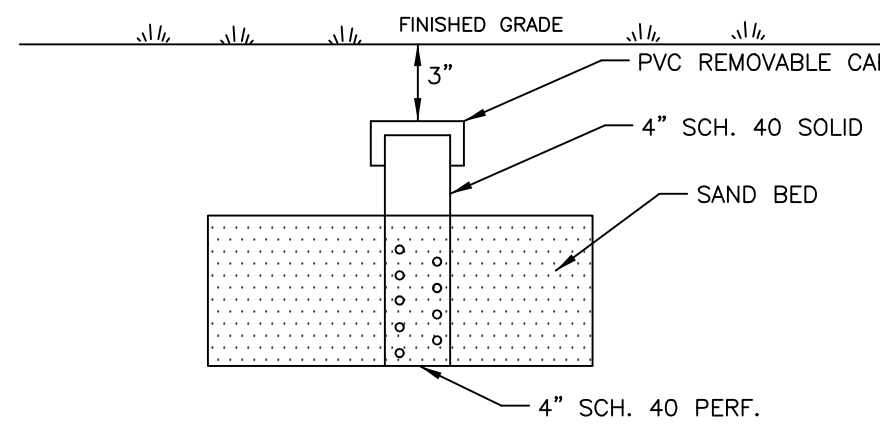
SCHEDULE OF ELEVATIONS

1. INV. OF PIPE AT FOUNDATION = 102.5± (EXISTING)	7. INVERT OF PRESBY PIPE = 98.40
2. INV. OF PIPE AT 1,500 GAL. SEPTIC TANK INLET = 101.61 (EXISTING)	8. TOP OF PRESBY PIPE = 99.40
3. INV. OF PIPE AT 1,500 GAL. SEPTIC TANK OUTLET = 101.28 (EXISTING)	9. TOP OF C-33 SAND = 99.90
4. INVERT OF 2" PVC AT DIST. BOX INLET = 99.33	10. BOTTOM OF C-33 SAND = 97.90
5. INVERT OF 4" PVC AT DIST. BOX OUTLET = 99.16	11. FINISHED GRADE OVER LEACHING FACILITY = 100.9 (MIN.) - 102.9 (MAX.)
6. INVERT OF 4" PVC AT PRESBY PIPE INLET = 98.99	12. FINISHED GRADE OVER SEPTIC TANK = 103.4 (MIN.) - 105.6 (MAX.)

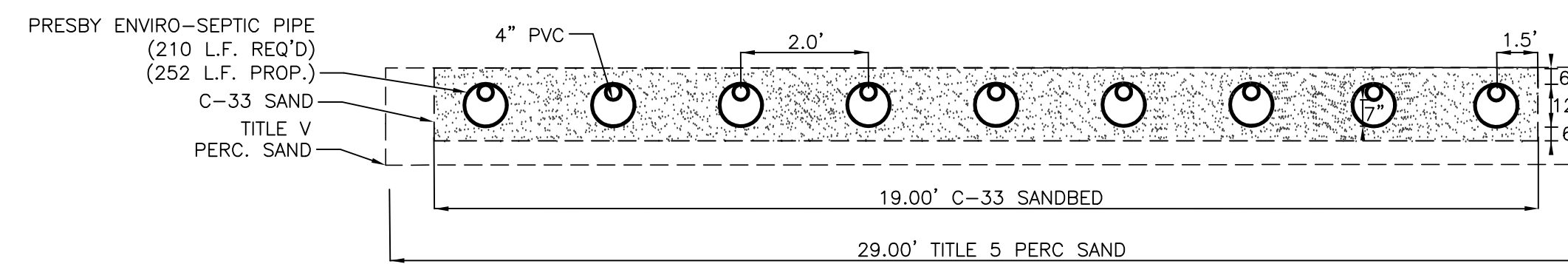
VENT SYSTEM



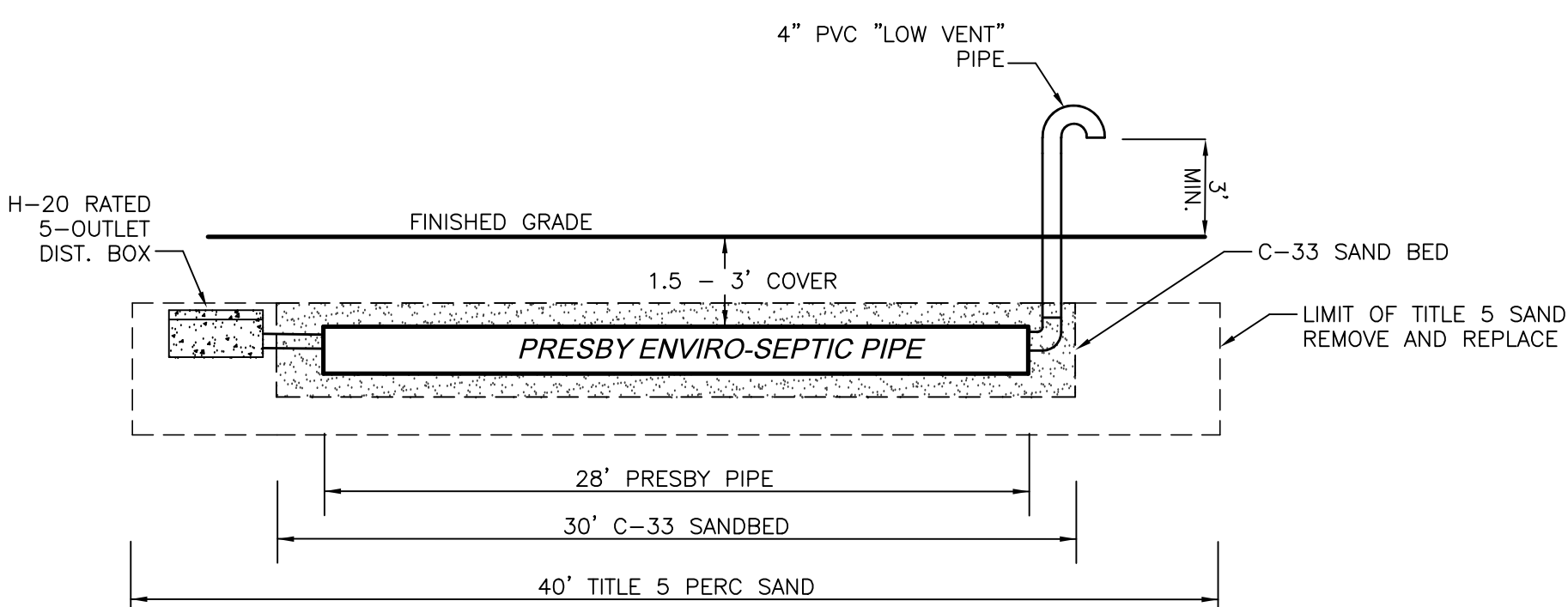
INSPECTION PORT



PRESBY ENVIRO-SEPTIC PIPE CROSS SECTIONS DETAIL



PRESBY ENVIRO-SEPTIC PIPE CROSS SECTIONS DETAIL



GENERAL NOTES

- SEPTIC SYSTEM INSTALLATION CONTRACTORS SHALL BE LICENSED BY THE BOARD OF HEALTH AND MUST COMPLY WITH ALL REQUIREMENTS OF THE BOARD OF HEALTH DISPOSAL WORKS CONSTRUCTION PERMIT AND ANY CONDITIONS, IF ISSUED BY THE CONSERVATION COMMISSION.
- ALL CONSTRUCTION MUST COMPLY WITH TITLE 5 OF THE STATE ENVIRONMENTAL CODE 310 CMR 15 & THE ANY LOCAL BOARD OF HEALTH SUPPLEMENTAL REGULATIONS.
- THERE SHALL BE NO CHANGES MADE IN THIS PLAN WITHOUT THE WRITTEN PERMISSION OF THE BOARD OF HEALTH AND DESIGN ENGINEER.
- ANY CHANGE IN SITE CONDITIONS, DISCREPANCIES, ERRORS OR OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF MORSE ENGINEERING PRIOR TO THE COMMENCEMENT OF WORK.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH TITLE 5 (310 CMR 15) AND THE LOCAL BOARD OF HEALTH REQUIREMENTS TO THE FULLEST EXTENT PRACTICABLE. NO GUARANTEE TO THE SYSTEMS PERFORMANCE IS EXPRESSED OR IMPLIED.
- SOIL TEST DATA SHOWN IS LIMITED TO THE CONDITIONS EXISTING AT THE SUBJECT TEST PIT LOCATION ONLY. IF DIFFERENT SOIL CONDITIONS ARE FOUND IN THE AREA OF THE PROPOSED SOIL ABSORPTION SYSTEM THEY SHALL BE BROUGHT TO THE ATTENTION OF MORSE ENGINEERING IMMEDIATELY.
- THE CONTRACTOR SHALL NOTIFY DIGSAFE PRIOR TO ANY EXCAVATION AT THE SUBJECT PROPERTY. IT IS SPECIFICALLY CAUTIONED THAT THE SUBSURFACE UTILITIES SHOWN ARE APPROXIMATE ONLY AND HAVE BEEN COMPILED FROM AVAILABLE RECORDS AND OBSERVABLE SITE FEATURES. UTILITIES OTHER THAN THOSE SHOWN MAY BE PRESENT AT THIS LOCATION.
- THIS PLAN HAS BEEN PREPARED SPECIFICALLY AS A SEPTIC SYSTEM DESIGN AND IS NOT TO BE USED TO ESTABLISH PROPERTY LINES OR BUILDING SETBACKS. PROPERTY LINES AND BUILDING LOCATIONS ARE GRAPHIC ONLY. PROPERTY LINES NOT HAVING BEEN VERIFIED. NO REPRESENTATION OR CERTIFICATION AS TO THE ACCURACY OF THOSE SHOWN IS IMPLIED.
- CONTRACTOR TO VERIFY AND ENSURE THAT ALL INTERIOR PLUMBING IS DIRECTED INTO PROPOSED SEPTIC SYSTEM. ANY VARIATIONS FROM THE DESIGN AS SHOWN SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.

CONSTRUCTION NOTES

- CONTRACTOR SHALL COORDINATE INSPECTION TIMES WITH THE LOCAL BOARD OF HEALTH AND DESIGN ENGINEER 24-HOURS IN ADVANCE OF THE FOLLOWING INSPECTIONS:
 - AFTER EXCAVATION OF ALL UNSUITABLE MATERIAL FROM SOIL ABSORPTION AREA.
 - PRIOR TO COVERING THE CONSTRUCTED SYSTEM.
 - AFTER SYSTEM BACKFILL AND FINAL GRADING.
- ALL CONSTRUCTION MUST COMPLY WITH TITLE 5 OF THE STATE ENVIRONMENTAL CODE 310 CMR 15 & THE ANY LOCAL BOARD OF HEALTH SUPPLEMENTAL REGULATIONS.
- ALL TIGHT-JOINT PLUMBING SHALL BE CONSTRUCTED OF SCH. 40 PVC PIPE WITH CLEANED AND CEMENTED FITTINGS, UNLESS OTHERWISE NOTED.
- ALL PRECAST/PIPE CONSTRUCTION JOINTS AND FITTINGS SHALL BE MADE WATERTIGHT BY PARKING WITH HYDRAULIC CEMENT.
- THE CONTRACTOR SHALL PROVIDE A SIEVE ANALYSIS OF THE TITLE 5 PERC SAND UTILIZED FOR FILL TO VERIFY THAT IT MEETS THE REQUIREMENTS OF 310 CMR 15.255(3). TITLE 5 SAND FILL SHALL COMPLY WITH THE FOLLOWING:

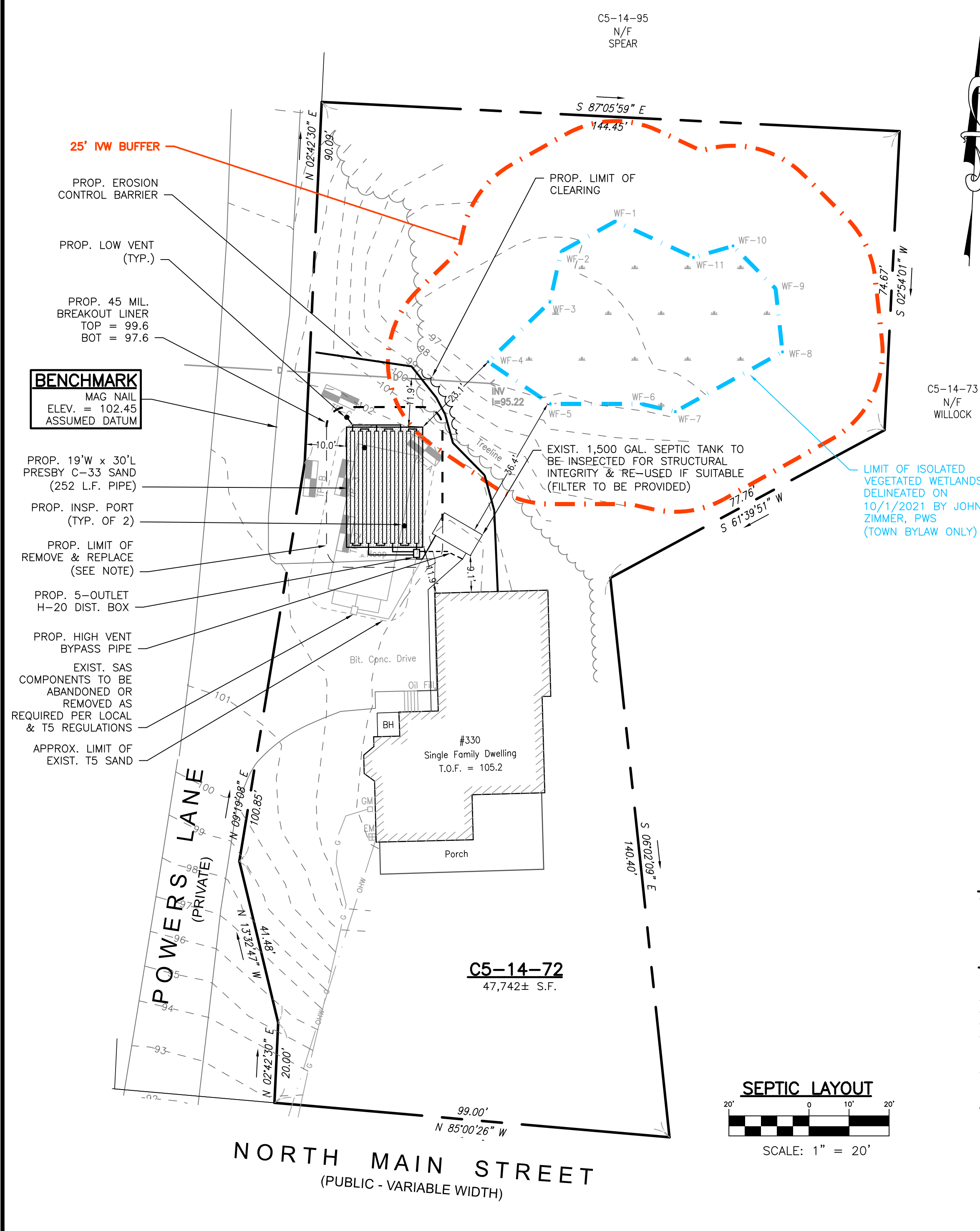
SIEVE SIZE	PARTICLE SIZE
#4	4.75 mm
#50	0.30 mm
#100	0.15 mm
#200	0.075 mm
- THE CONTRACTOR SHALL PREVENT ANY HEAVY CONSTRUCTION MACHINERY AND/OR TRUCKS FROM DRIVING OVER THE PROPOSED SOIL ABSORPTION SYSTEM LOCATION UNTIL FINISHED GRADE IS ESTABLISHED.
- THE CONTRACTOR SHALL INSTALL MAGNETIC TAPE OVER SYSTEM PIPING & COMPONENTS
- THE DESIGN ENGINEER SHALL CERTIFY AND PREPARE AN "AS-BUILT" PLAN FOR SUBMITTAL TO THE BOARD OF HEALTH UPON SEPTIC SYSTEM COMPLETION.
- ALL DISTURBED AREAS SHALL BE RESTORED WITH 4" LOAM & SEED POST CONSTRUCTION.
- ALL SEPTIC SYSTEM COMPONENTS TO BE STAKED OUT BY PROFESSIONAL LAND SURVEYOR PRIOR TO SYSTEM INSTALLATION.
- CONTRACTOR SHALL ABANDON EXISTING SEPTIC COMPONENTS IN ACCORDANCE WITH 310 CMR SEC. 15.354 OF TITLE 5 AND LOCAL REGULATIONS BY PUMPING DRY, CRUSHING AND ABANDONING

SITE NOTES

- LOCUS DOES NOT LIE WITHIN A DEP DESIGNATED ZONE II OR ZONE A RESOURCE AREA.
- TALL KNOWN WETLANDS WITHIN 100 FEET OF THE PROPOSED SEWAGE SYSTEM ARE SHOWN.
- PROPERTY LINE DATA WAS OBTAINED FROM RECORDED DEED (8883-146) AND RECORDED PLANS ON FILE AT THE NORFOLK COUNTY REGISTRY OF DEEDS.
- THERE WERE NO ACTIVE/POTABLE WELLS OBSERVED WITHIN 100' OF THE PROPOSED SYSTEM.
- LOCUS LIES IN FEMA ZONE "X" AS SHOWN ON FEMA COMMUNITY MAP PANEL 25021C 0252F DATED JULY 6, 2021. ZONE "X" IS NOT A SPECIAL FLOOD HAZARD AREA.

INSTALLER TO BE PRESBY CERTIFIED

	PREPARED BY:		
	PROJECT:		330 NORTH MAIN STREET (ASSESSOR'S PARCEL: C5-14-072) SCITUATE, MASSACHUSETTS
DESIGN:	PGG	CHECK:	GJM
JOB NO:	21-313	DATE:	11/23/2021
APPLICANT:	CHRIS COLLINS-WOLEY	REV:	
PLAN TITLE:	SEPTIC SYSTEM DESIGN PLAN	SHEET:	1



I/A TECHNOLOGY CREDITS

- TO ALLOW THE REDUCTION IN THE SEPERATION TO ESHGW FROM 4-FT. TO 2-FT.

DESIGN DATA

- BUILDING TYPE: SINGLE FAMILY DWELLING
- NO. OF BEDROOMS: 3
- DESIGN FLOW: 3 x 110 GPD/BEDROOM = 330 GPD (GALLONS PER DAY)
- DESIGN PERCOLATION RATE: 5 MPI (TP-2, CLASS II)
- GARBAGE DISPOSAL: NO
- SEPTIC TANK DESIGN REQUIREMENT: 200% DESIGN FLOW
330 x 2 = 660 GAL. (RE-USE EXISTING 1,500 GAL. SEPTIC TANK)
- LEACH AREA REQUIREMENTS GALLONS/SQ. FT.
BOTTOM: 0.60 GAL./S.F. SIDE: 0.60 GAL./S.F.
- TOTAL LEACH AREA REQUIRED:
TITLE 5: 330 GPD / (0.60 GPD/S.F.) = 550 S.F.
PROVIDED: PRESBY ENVIRO-SEPTIC (OR EQUAL)
PROVIDED AREA: 19.0'W x 30.0'L SAND BED = 570 S.F.
PER TABLE A: SYSTEM REQUIRES 210 L.F. OF ENVIRO-SEPTIC PIPE (252 L.F. PROVIDED)

REMOVE & REPLACE NOTE

CONTRACTOR TO REMOVE ALL CONTAMINATED SOILS WITHIN 5-FT. OF THE PROPOSED SYSTEM AND REPLACE WITH CLEAN TITLE 5 PERCOLATION SAND TO TOP OF C33 SAND.

C33 SAND REQUIRED

$$(2.0'D \times 19'W \times 30'L \times 1.2\%) / 27 = 51 \pm C.Y.$$

$$(51 C.Y. - (9 PIPES \times 28.0' \times 3.14' \times 5'2) / 27) = 44 \pm C.Y.$$

TITLE 5 SAND REQUIRED

$$(40.0'L \times 29.0'W \times (99.9-93.2) \times 1.2\%) / 27 - 44 \pm C.Y. = 298 \pm C.Y.$$

NOTE: EXTENT OF TITLE 5 SAND REQUIRED IS DEPENDENT ON REMOVAL OF CONTAMINATED SOILS ASSOCIATED WITH THE EXISTING SOIL ABSORPTION FIELD.