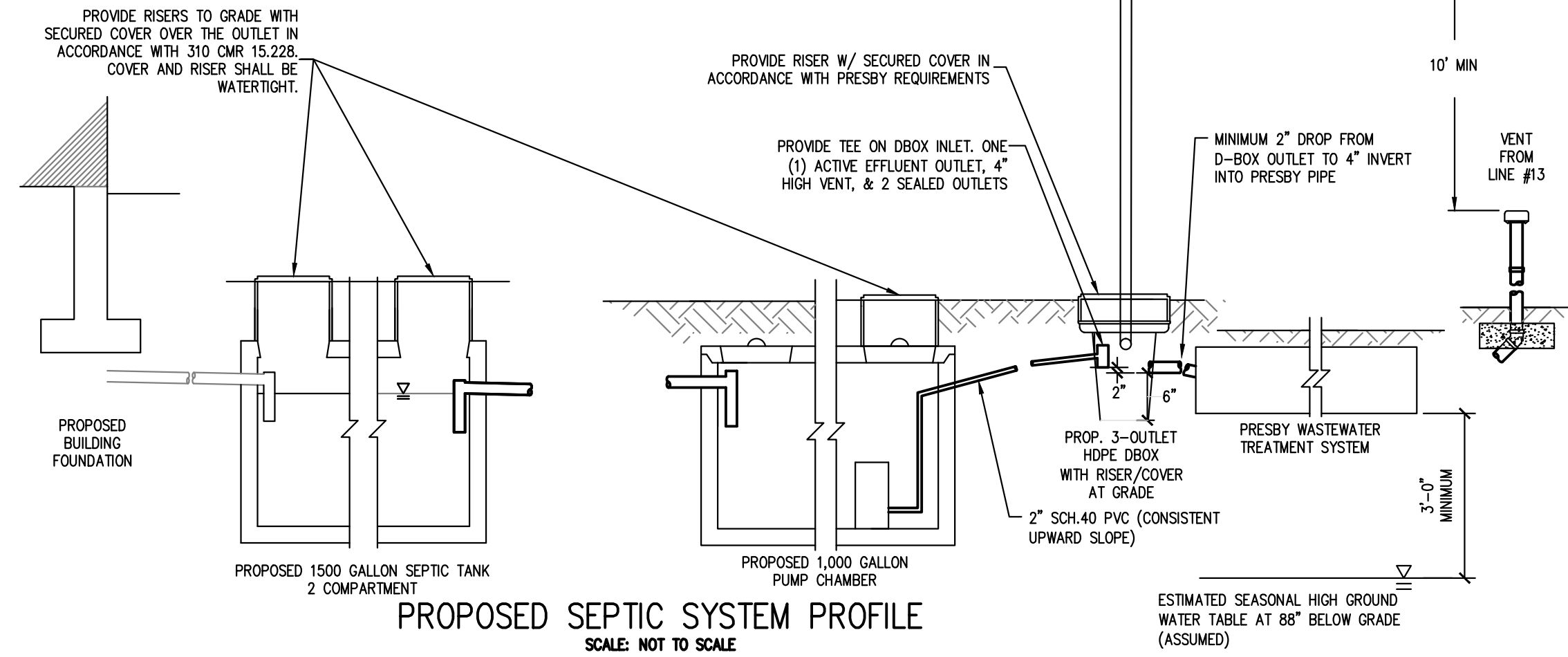


- NOTES:
- SEPTIC TANK, PUMP CHAMBER, AND DIST. BOX TO BE PLACED ON A LEVEL & STABLE BASE THAT HAS BEEN COMPACTED BY A VIBRATORY COMPACTOR OR EQUAL.
 - MIN. 3'-0" ELEV. REQUIRED BETWEEN BOTTOM OF LEACHING AREA AND MAX. G.W. ELEV.
 - THE DESIGN ELEVATIONS INDICATED WILL PROVIDE AT LEAST THESE MINIMUM SLOPES FOR THE LENGTHS INDICATED ON PLAN. IF ANY COMPONENT OF THE SYSTEM IS MOVED, THE DESIGN ELEVATIONS MAY NOT PROVIDE ADEQUATE SLOPE.
 - ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC TAPE OR A COMPARABLE MEANS IN ACCORDANCE WITH 310 CMR 15.221(12).



PRESBY LEACHING SYSTEM NOTES:

- INSTALLATION, MAINTENANCE, MONITORING, REPORTING, ETC. SHALL BE IN ACCORDANCE WITH THE REMEDIAL USE CERTIFICATION ISSUED BY DEP DATED OCTOBER 2019 AND IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- MASS DEP AND PRESBY REQUIRE ALL DESIGNERS AND INSTALLERS TO BE CERTIFIED. SYSTEM TO BE INSTALLED IN ACCORDANCE WITH PRODUCT DESIGN AND INSTALLATION MANUAL, STATE AND LOCAL REGULATIONS. FOR PRODUCT INFORMATION OR THE NEAREST DEALER CONTACT PRESBY.
- INSTALLERS OF PRESBY SYSTEMS SHALL PROVIDE OWNER, MANUFACTURER, AND THE LOCAL APPROVING AUTHORITY WITH A COPY OF A COMPLETED "SYSTEM INSTALLATION REPORT FORM" FOR EACH NEW OR REMEDIAL SYSTEM INSTALLED.
- ALL SYSTEMS SHALL BE DESIGNED AND INSTALLED USING DISTRIBUTION BOXES AS INSPECTION PORTS. THE OUTLET OF THE D-BOX SHALL BE AT LEAST 2" ABOVE THE INLET OF THE HIGHEST PRESBY LINE WITH THE CONNECTING PIPE SLOPE NOT LESS THAN 2%.
- THE MINIMUM TOTAL DEPTH OF COVER ON PRESBY LINES IS 10'; 6" OF SYSTEM SAND PLUS 4" OF TOPSOIL. PRESBY PIPES WITH 12" OF STRUCTURAL COVER IS DESIGNED FOR H-10 LOADING, AND PRESBY PIPE WITH 18" OF STRUCTURAL COVER IS DESIGNED FOR H-20 LOADING.
- THE USE OF PRESSURE DISTRIBUTION LINES IN PRESBY WASTEWATER TREATMENT SYSTEMS IS PROHIBITED.
- SYSTEMS INCORPORATING PUMPS TO GAIN ELEVATION MUST USE DIFFERENTIAL VENTING AND VELOCITY REDUCTION TO CONTROL LIQUID FLOW. VELOCITY REDUCTION MAY BE ACCOMPLISHED THROUGH THE USE OF A DISTRIBUTION BOX WITH A TEE OR 90° ELBOW AT THE FORCE MAIN OUTLET.
- EACH PRESBY SYSTEM MUST BE INSTALLED WITH VENTING AT THE END OF EACH D-BOX LINE, SECTION OR SERIAL BED. VENT MANIFOLDS MAY BE USED TO CONNECT MULTIPLE VENTS TO ONE VENT OUTLET.
- EFFLUENT TEE FILTERS WILL NOT BE REQUIRED FOR SEPTIC TANKS USED IN GRAVITY PRESBY SYSTEMS.
- PRESBY SYSTEMS MAY BE INSTALLED IN AN AREA UP TO 40% SMALLER THAN A CONVENTIONAL TITLE 5 BED DESIGNED IN ACCORDANCE WITH 310 CMR 15.252. CURRENTLY MASSACHUSETTS LIMITS ALL SYSTEMS TO A MINIMUM BED SIZE OF 400 SQ. FT.
- ALL CONFIGURATIONS OF PRESBY SYSTEMS REQUIRE A MINIMUM OF 6" OF SYSTEM SAND SURROUNDING THE CIRCUMFERENCE OF THE PIPE, AND 12" OF SAND BEYOND ALL PIPE ENDS AND THE OUTER PIPE ROWS (FIRST & LAST). ASTM STANDARD: C-33 (CONCRETE SAND) MEETS THE REQUIREMENTS FOR SYSTEM SAND.
- SAND BEDS SLOPING 10% OR LESS REQUIRE THE SYSTEM SAND AREA TO EXTEND A MINIMUM OF 1 FOOT AROUND THE PERIMETER OF THE PRESBY PIPE. (SEE EFFLUENT DISPOSAL AREA CROSS SECTION DETAIL).
- SAND BEDS SLOPING GREATER THAN 10% REQUIRE THE SYSTEM SAND AREA TO EXTEND A MINIMUM OF 1 FOOT AROUND THE PERIMETER OF THE PRESBY PIPE PLUS AN ADDITIONAL 3 FOOT EXTENSION SHALL BE PROVIDED ON THE DOWNSLOPE SIDE. (SEE EFFLUENT DISPOSAL AREA CROSS SECTION DETAIL).
- A COMBINATION DISTRIBUTION IS REQUIRED FOR SYSTEMS WITH GREATER THAN 500GPD. TO PREVENT MOVEMENT, BE SURE DISTRIBUTION BOX IS PLACED ON A STABLE SOIL BASE OR CONCRETE PAD.
- ALL DISTRIBUTION BOXES THAT DIVIDE EFFLUENT FLOW IN PUMP OR GRAVITY SYSTEMS REQUIRE FLOW EQUALIZERS IN THEIR OUTLETS. MOST FLOW EQUALIZERS ARE LIMITED TO A MAXIMUM OF 10 GALLONS/MINUTE IN GRAVITY SYSTEMS AND 20 GALLONS/MINUTE IN PUMPED SYSTEMS.
- DO NOT INSTALL SYSTEM ON FROZEN GROUND OR LEAVE SYSTEM UNCOVERED FOR EXTENDED PERIODS OF TIME.

DESIGN CRITERIA

TYPE OF BUILDING:	EXISTING RESIDENTIAL
# OF BEDROOMS:	2 BEDROOMS
ESTIMATED DAILY FLOW:	220 GPD RESIDENTIAL LOADING:
PERC RATE:	14 MPI & 2 MPI, 2 MPI & 2 MPI
SOIL GROUP (1-4):	1
SYSTEM SLOPE:	18.0 %
GARBAGE GRINDER:	NOT ALLOWED
PIPE ROW LENGTH:	11 FT
ENVIRO-SEPTIC PIPE REQ'D:	140 FT
ENVIRO-SEPTIC PIPE PROVIDED:	143 FT
USE C/L TO C/L SPACING:	2.25 FT
NUMBER OF SECTIONS:	1
NUMBER OF ROWS PER SECTION:	13 ROWS / SECTION
SYSTEM PIPE WIDTH:	28.0 FT
NUMBER OF PIPE ROWS:	13 ROWS
MIN SAND AREA REQ'D:	400 SQ FT
SAND AREA PROVIDED:	429 SQ FT
SYSTEM SAND LENGTH:	33 FT
SYSTEM SAND WIDTH:	13 FT
SYSTEM SAND (C-33) BEYOND HIGHEST ROW =	1 FT
SYSTEM SAND (C-33) BEYOND LOWEST ROW =	4 FT
MATERIAL COVER OVER ENVIRO-SEPTIC PIPES =	10 INCHES
SYSTEM SLOPE =	18%
DEPTH TO SEASONAL HIGH GROUND WATER	88 INCHES
SEPARATION DISTANCE TO HIGH GROUND WATER	3+ FT
DROP IN ELEVATION FROM PIPE TO PIPE =	0.4 FT

PROPOSED COMPONENT ELEVATIONS

PROPOSED INVERT AT FOUNDATION	207.00
INVERT AT TANK INLET	206.75
INVERT AT TANK OUTLET	206.25
4" INVERT AT PUMP CHAMBER IN	206.00
2" INVERT AT PUMP CHAMBER OUT	205.75
INVERT AT DBOX INLET	214.95
INVERT AT DBOX OUTLET	214.78

FIELD ELEVATIONS

ROW #	1	2	3	4	5	6	7	8	9	10	11	12	13
FINISH GRADE (SYSTEM SLOPE = 18%)	216.00	215.60	215.20	214.80	214.40	214.00	213.60	213.20	212.80	212.40	212.00	211.60	211.20
TOP OF ENVIRO-SEPTIC PIPE	215.00	214.60	214.20	213.80	213.40	213.00	212.60	212.20	211.80	211.40	211.00	210.60	210.20
4" PVC INVERT INTO PIPE	214.50	214.18	213.78	213.38	212.98	212.58	212.18	211.78	211.38	210.98	210.58	210.18	209.78
BOTTOM OF ENVIRO-SEPTIC PIPE	214.00	213.60	213.20	212.80	212.40	212.00	211.60	211.20	210.80	210.40	210.00	209.60	209.20
BOTTOM OF C33 SYSTEM SAND (BREAKOUT)	213.50	213.10	212.70	212.30	211.90	211.50	211.10	210.70	210.30	209.90	209.50	209.10	208.70

CONVENTIONAL SIZING REQUIREMENT COMPLIANCE

LEACHING AREA REQUIRED UNDER TITLE 5: (220 GPD)/(0.74 GPD/S.F.) = 298 S.F. (PRESBY SYSTEMS ARE REQUIRED TO BE NO LESS THAN 60% OF THE AREA OF A PIPE AND AGGREGATE SYSTEM AND NO LESS THAN 400 S.F.)

429 S.F. PROVIDED > (298 S.F.)(60%)
429 S.F. PROVIDED > 179 S.F. REQ'D

NOTES:

- PROPERTY INFORMATION: OWNER: FRANS & MARY JANE CRAMER; ADDRESS: 44 PINE POINT ROAD; ASSESSORS REF.: U01-0120; DEED REF.: BOOK 56791 PAGE 316.
- THERE ARE NO RESOURCE AREAS WITHIN 50' OF THE PROPOSED SYSTEM.
- THE SITE DOES NOT LIE WITHIN AN AREA OF OUTSTANDING RESERVE WATER.
- THE SITE DOES NOT LIE WITHIN A ZONE A SURFACE WATER PROTECTION AREA.
- THE PROPERTY DOES NOT FALL WITHIN A FLOOD HAZARD ZONE AS INDICATED IN NIP FIRM COMMUNITY PANEL 250170342F.
- NO PORTION OF THE SITE FALLS WITHIN A MAPPED ESTIMATED HABITAT OF RARE WILDLIFE AND WITHIN A PRIORITY HABITAT OF RARE SPECIES.
- THE SITE IS NOT LOCATED WITHIN A MAPPED PRIMARY OR SECONDARY ZONE SUBJECT TO JURISDICTION UNDER THE MASSACHUSETTS WATERSHED PROTECTION ACT (SEE 350 CMR 11.00 ET SEQ.).

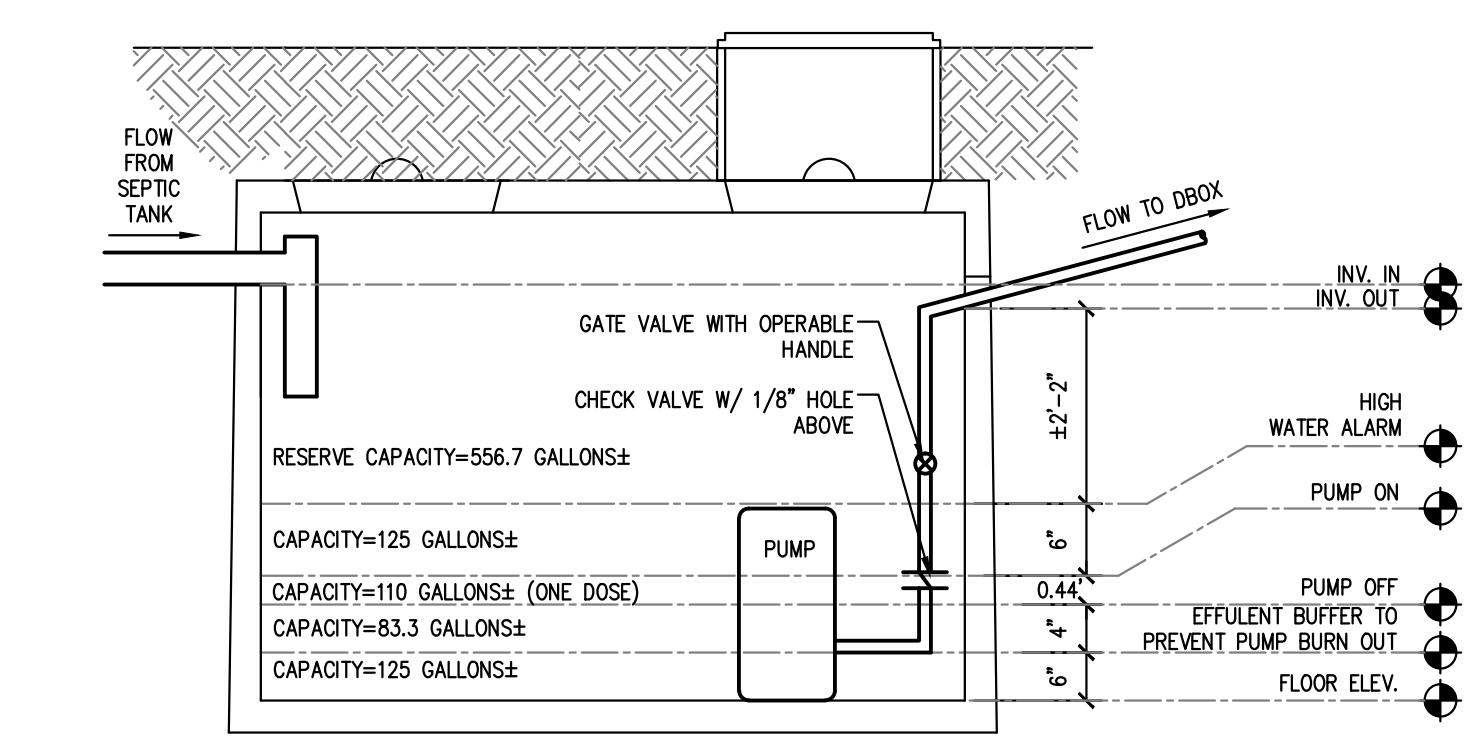
SEPTIC LOCAL UPGRADE APPROVAL REQUESTS

LESS THAN 10' PROVIDED FROM TANK TO FOUNDATION - 8.6' PROVIDED
LESS THAN 10' PROVIDED FROM TANK (PUMP CHAMBER) TO FOUNDATION - 5.0' PROVIDED
LESS THAN 10' FROM SAS TO PROPERTY LINE (FRONT & SIDE) - 6.0' & 6.6' PROVIDED
LESS THAN 20' FROM SAS TO FOUNDATION - 4' PROVIDED
REDUCTION IN SEPARATION TO HIGH GROUND WATER (5 FT REQUIRED WITH C2 MIN/IN PERC) - 3' PROVIDED WITH USE OF PRESBY
REDUCTION IN SEPARATION TO HIGH GROUND WATER (5 FT REQUIRED WITH C2 MIN/IN PERC) - 3' PROVIDED WITH USE OF PRESBY
WATER FROM LOCAL REGULATION REQUIRED 150K OF MINIMUM DESIGN CAPACITY REQUIRED BY STANDARD TITLE 5 CODE - 144K PROVIDED
220 GPD / 0.74 GPD/SF = 297.3 SF STANDARD TITLE 5 SIZING
297.3 SF x 150K = 446 SF SIZING REQUIRED BY BOH FOR 150K CAPACITY
446 SF x 60% = 268 SF REQUIRED FOR 150K CAPACITY OF ALLOWED ENVIRO SEPTIC SIZE REDUCTION OF 40%
429 SF LEACHING AREA PROVIDED

RELIEF REQUESTS FROM LOCAL BOH REGULATIONS

LESS THAN 100' PROVIDED FROM ON SITE WELL TO SAS (HOUSE #46) - 85.1' PROVIDED
MINIMUM DISTANCE FROM A SAS TO A WATER BODY - 100' REQUIRED, 62' PROVIDED

NOTE: THE PUMP CHAMBER, RISERS, AND COVERS SHALL BE RATED TO CARRY AN AASHTO H-10 VEHICLE LOAD.



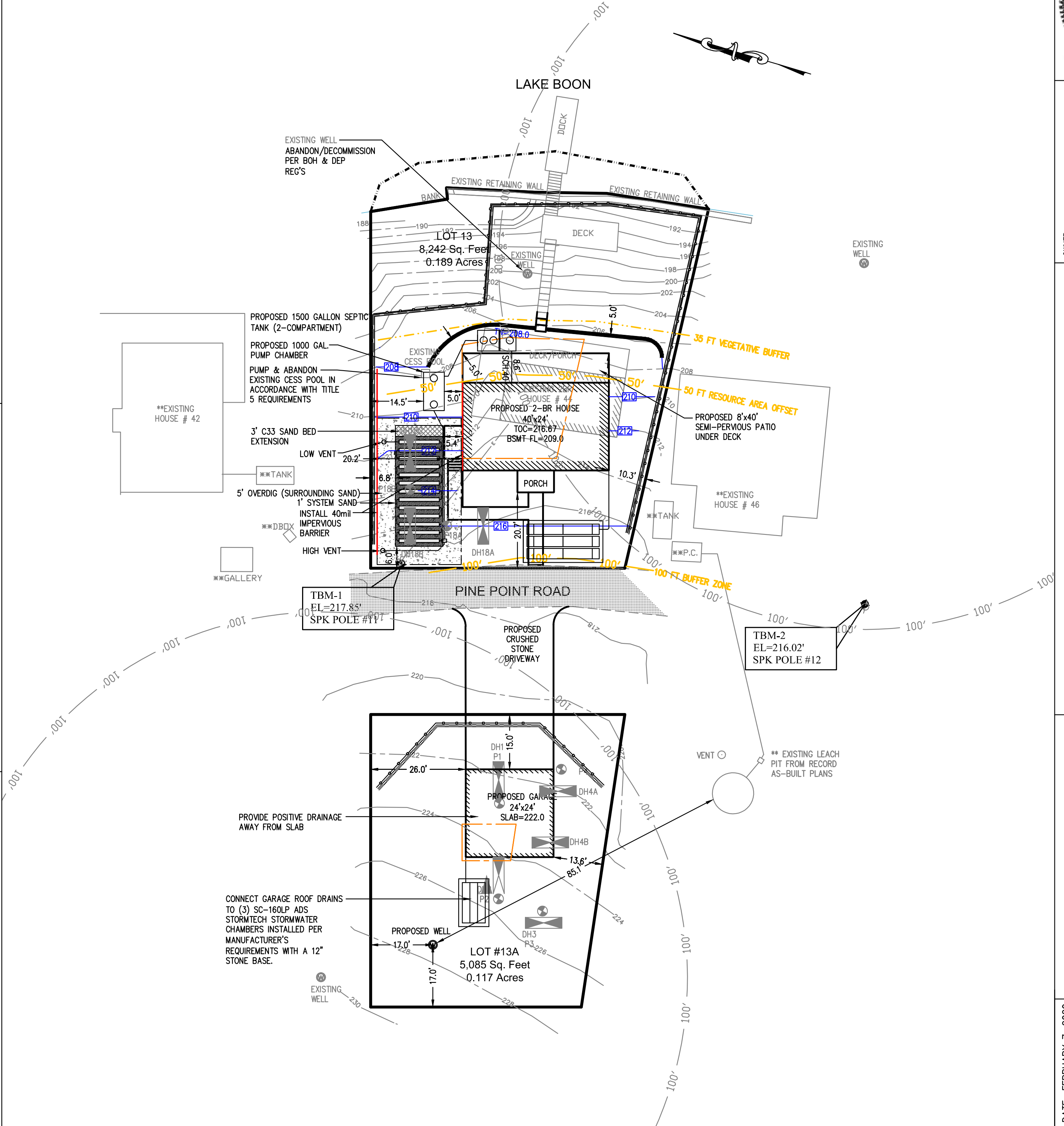
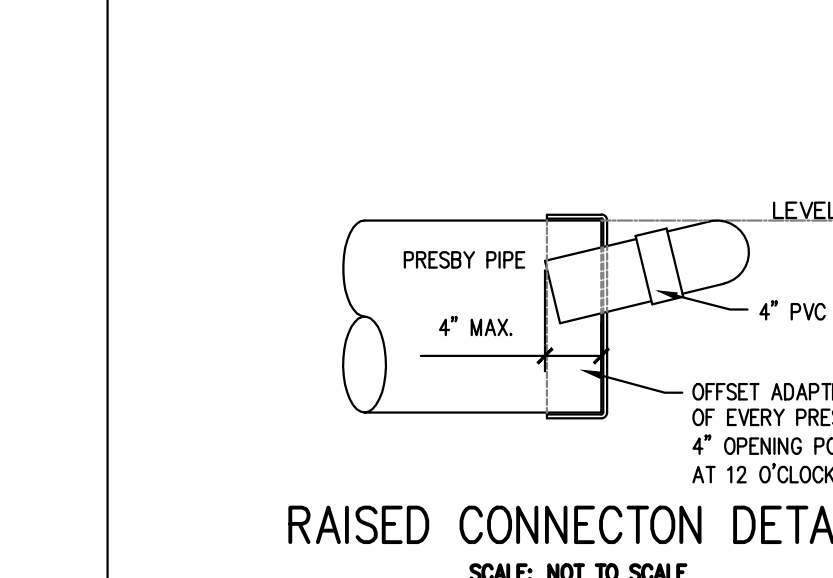
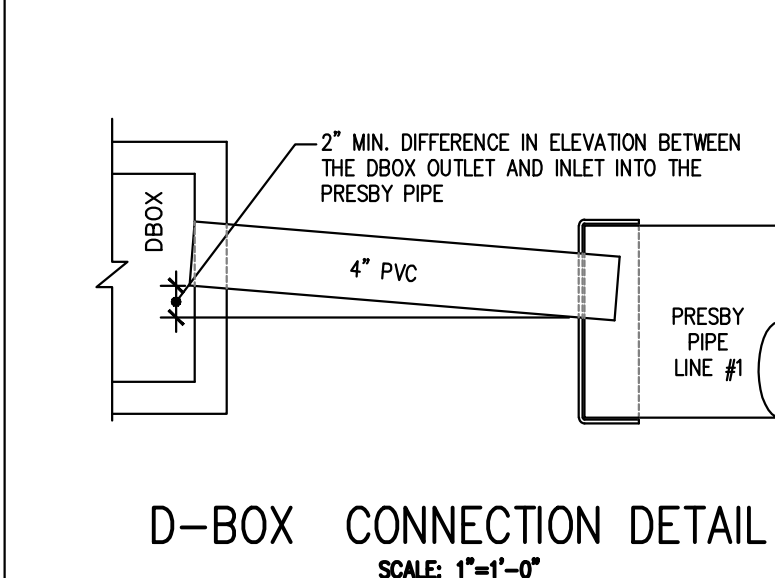
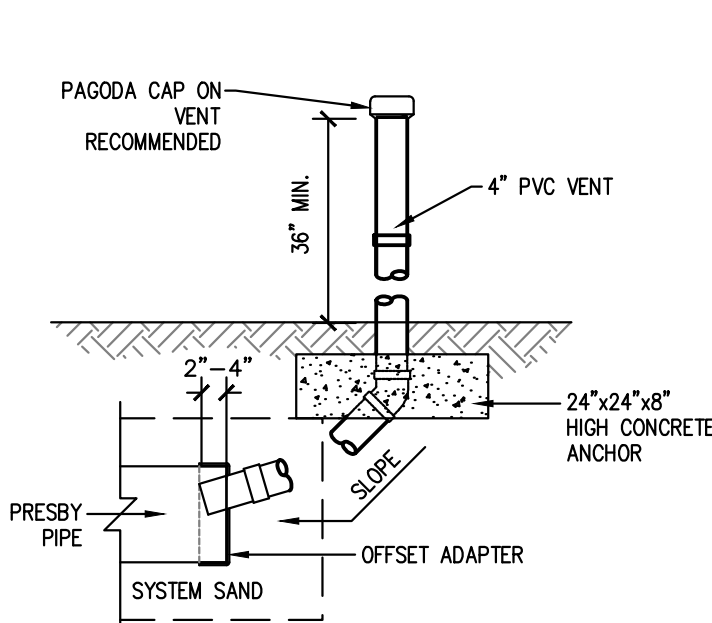
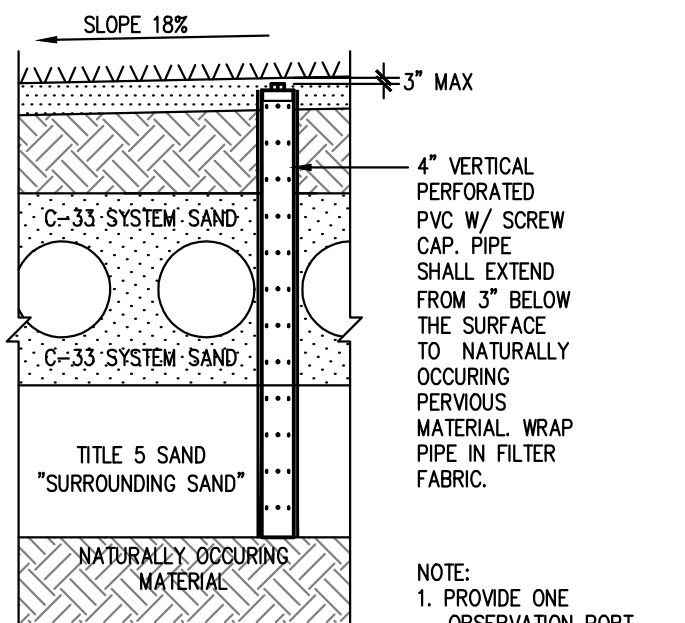
- PUMP STATION NOTES:**
- PUMP CHAMBER SHALL BE A 1,000 GALLON REINFORCED CONCRETE TANK AS IN WACHUSETT PRECAST MODEL CST-1000 OR EQUAL. METAL BASINS WILL NOT BE ACCEPTED.
 - THE PUMP CHAMBER SHALL HAVE AN INTERIOR FLOOR AREA OF ±33 S.F. AND SHALL HAVE A MINIMUM 4FT LIQUID DEPTH.
 - THE PUMP CHAMBER SHALL BE CAPABLE OF WITHSTANDING A H-10 WHEEL LOADING UNDER THE PROPOSED SOIL OVERBURDEN.
 - THE TANK SHALL BE EQUIPPED WITH ONE SINGLE PHASE, SIMPLEX EFFLUENT PUMP AS IN LIBERTY LE-40 MODEL (OR APPROVED EQUAL). PUMP SHALL PUMP AT A RATE OF 20 GALLONS PER MINUTE AT A HEAD OF APPROXIMATELY 15.8 FEET. CONTRACTOR SHALL ENSURE THAT THE PUMP CAN PHYSICALLY FIT INTO THE PUMP CHAMBER. THE CONTRACTOR SHALL CLOSE THE GATE VALVE (AS NECESSARY) TO LIMIT THE FLOW THROUGH THE DISCHARGE TO THE DESIGN FLOW.
 - CONTRACTOR SHALL ENSURE THAT THE PUMP STATION IS COMPLETELY WATERTIGHT.
 - PUMP SHALL BE EQUIPPED WITH CONTROL SYSTEM WHICH CAUSE PUMP TO OPERATE UPON SENSING "PUMP ON LEVEL" AND SHUTS PUMP OFF UPON SENSING "PUMP OFF LEVEL", AND SHALL PROVIDE A LOW AND HIGH LEVEL ALARM DETECTION AND ANNUNCIATION SYSTEM.
 - ALARM CONDITION SHALL BE INDICATED BY A FLASHING LIGHT AND AN AUDIBLE SIGNAL INSIDE OF THE BUILDING, AND SHALL BE ON A SEPARATE ELECTRICAL CIRCUIT.
 - A SIGN SHALL BE MOUNTED ADJACENT TO THE FLASHING LIGHT AND AUDIBLE SIGNAL STATING THAT THE ALARM CONDITION IS A RESULT OF THE WASTEWATER EFFLUENT PUMP FAILURE.
 - A LICENSED ELECTRICIAN SHALL INSTALL THE POWER SUPPLY TO THE PUMPS STATION, WITH A SEPARATE CIRCUIT IN THE BUILDING ELECTRICAL SYSTEM, AND SHALL INSTALL ALL WIRING, CONTROL, AND ALARM CONNECTIONS. ALL ELECTRICAL WORK AND MATERIALS SHALL CONFORM TO THE LOCAL, STATE, AND NATIONAL ELECTRICAL CODES AND THE RECOMMENDATIONS OF THE MANUFACTURER.
 - DISCHARGE PIPE SHALL HAVE A 1/8" HOLE DRILLED ABOVE THE CHECK VALVE TO ENABLE THE FORCE MAIN TO DRAIN.
 - PUMP STATION ELECTRICAL PANEL SHALL BE LOCATED INSIDE OF THE BUILDING OR AT THE DISCRETION OF THE BUILDING OWNER.
 - PUMPS SHALL BE EQUIPPED WITH A HANGER PIPE FOR PUMP REMOVAL.
 - PROVIDE A CONCRETE RISER TO BRING THE ACCESS COVER TO GRADE.

SYSTEM NOTES:

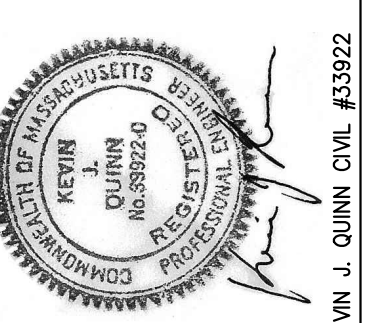
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE ENGINEER TO VERIFY THAT THE CONSTRUCTION PLANS ARE THE MOST CURRENT REVISION.
- ALL MODIFICATIONS TO THIS PLAN MUST BE PRE APPROVED IN WRITING BY THE DESIGN ENGINEER AND THE LOCAL BOARD OF HEALTH, ZONING BOARD, BUILDING DEPARTMENT & CONSERVATION COMMISSION.
- ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM WITH THE LOCAL BOARD OF HEALTH AND THE STATE ENVIRONMENTAL CODE TITLE 5 (310 CMR 15.000) & THE MANUFACTURER'S SPECIFICATIONS.
- SEVENTY TWO HOURS PRIOR TO COMMENCING ANY EXCAVATION, THE CONTRACTOR SHALL NOTIFY DIG-SAFE AT 811. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF NEW UTILITIES WITHIN THE VICINITY OF EXISTING UTILITIES (UNDERGROUND AND OVERHEAD) WITH THE APPROPRIATE UTILITY PROVIDER.
- EXISTING UTILITY LOCATIONS ARE APPROXIMATE ARE TO BE FIELD VERIFIED. QUINN ENGINEERING, INC. DOES NOT WARRANT THAT ALL EXISTING UTILITIES HAVE BEEN INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE EXISTING UTILITY LOCATIONS AND ENSURING THAT THE PROPOSED WORK DOES NOT CONFLICT WITH THE EXISTING UTILITIES (SHOWN OR NOT SHOWN).
- THE SYSTEM WAS NOT DESIGNED TO FACILITATE A GARBAGE DISPOSAL OR WATER CONDITIONING/SOFTENING SYSTEMS.
- A SURVEYOR REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS SHALL STAKE OUT THE SYSTEM LOCATION AND SHALL PROVIDE AS-BUILT LOCATION AND ELEVATIONS TO QUINN ENGINEERING, INC. THE INSTALLER SHALL NOT COVER THE SYSTEM OR PIPING UNTIL QUINN ENGINEERING, INC. VERIFIES FROM THE AS-BUILT INFORMATION PROVIDED THAT THE SYSTEM LOCATIONS AND ELEVATIONS ARE SUITABLE.
- ALL PORTIONS OF THE FILL, A AND B SOIL HORIZONS SHALL BE REMOVED FROM WITHIN THE LIMITS OF THE LEACHING FACILITY AND FOR A DISTANCE OF FIVE FEET IN ALL DIRECTIONS THEREFROM (310 CMR 15.255 (5)). (SEE DEEP HOLE DATA FOR SOIL HORIZON INFORMATION).
- WHERE A SEWAGE DISPOSAL SYSTEM IS TO BE CONSTRUCTED IN FILL, THE FILL SHALL BE PLACED AND COMPACTED IN 12 INCH LIFTS OR ALLOWED TO SETTLE FOR A MINIMUM OF ONE YEAR. THE FILL MATERIAL MUST CONFORM WITH THE LOCAL BOARD OF HEALTH AND STATE ENVIRONMENTAL CODE TITLE 5 SECTION 15.255.
- ALL INTERIOR PLUMBING SHALL BE CONNECTED TO PROPOSED LEACHING FACILITY WITH THE EXCEPTION OF WATER SOFTENING OR CONDITIONING SYSTEMS, BACKWASH FROM FILTRATION SYSTEMS, OR FLOOR DRAINS.
- THE INSTALLER SHALL SUBMIT TO THE ENGINEER A GRADATION ANALYSIS FOR THE FILL WITHIN THE SYSTEM TO DEMONSTRATE CONFORMANCE WITH 310 CMR 15.255(3) FOR "TITLE 5 FILL" & CONFORMANCE WITH THE MANUFACTURER'S SPECIFICATIONS FOR THE "SYSTEM SAND" PRIOR TO PLACING THE FILL.
- THE SYSTEM INSTALLATION SHALL BE INSPECTED BY THE LOCAL BOARD OF HEALTH AT THE MILESTONES AS DETERMINED BY THE LOCAL BOARD OF HEALTH.
- THE INSTALLER SHALL NOTIFY QUINN ENGINEERING, INC. AT LEAST 24 HOURS IN ADVANCE OF REQUESTING INSPECTIONS. QUINN ENGINEERING, INC. SHALL CONDUCT INSPECTIONS AT THE FOLLOWING MILESTONES:
A. EXCAVATION COMPLETE - PRIOR TO PLACING FILL
B. INSTALLATION OF PIPING
C. FINISH GRADING COMPLETE
D. COMPLETE STABILIZATION
- ALL SYSTEM PIPING SHALL BE MARKED WITH MAGNETIC MARKING TAPE IN ACCORDANCE WITH 310 CMR 15.221 (12).
- THE SYSTEM OWNER SHALL HAVE A SEPTAGE HANDLER, LICENSED BY THE LOCAL BOARD OF HEALTH, PUMP THE SEPTIC TANK IN ACCORDANCE WITH 310 CMR 15.351. ALL COMPONENTS OF THE SYSTEM SHALL BE MAINTAINED IN ACCORDANCE WITH 310 CMR 15.351, THE SYSTEM MANUFACTURER'S REQUIREMENTS OR OTHER APPLICABLE SECTION OF 310 CMR 15.
- MACHINERY WHICH MAY CRUSH OR DISTURB THE PIPE SHALL NOT BE ALLOWED ON THE DISPOSAL AREA.
- THE CONSTRUCTION OF PERMANENT STRUCTURES UPON THE DISPOSAL SYSTEM AND/OR RESERVE AREA IS NOT ALLOWED.

GENERAL NOTES:

- THE CONTRACTOR SHALL:
A. BE RESPONSIBLE TO COORDINATE HIS WORK WITH MUNICIPALITY TO LIMIT THE POTENTIAL DISRUPTIONS TO THE GENERAL PUBLIC.
B. EMPLOY DUE CARE AND CAUTION TO PROTECT THE PUBLIC FROM DANGERS ASSOCIATED WITH THE OPERATION.
C. INSTALL TEMPORARY FENCES, BARRICADES AND SIGNAGE TO ENSURE THAT NO PERSONS ENTER THE WORK AREA.
D. CONTRACTOR SHALL COORDINATE WITH THE TOWN DEPARTMENTS AS REQUIRED FOR WORK TO BE CONDUCTED IN THE STREET.
E. EMPLOY DUE CARE WHEN WORKING AROUND PEDESTRIAN AND VEHICLE TRAFFIC.
- THE CONTRACTOR SHALL RECORD AND PROVIDE THE OWNER WITH AS-BUILT LOCATIONS OF ALL UTILITIES INSTALLED AS PART OF HIS/HER WORK, INCLUDING UTILITIES NOT INDICATED ON PLAN (I.E. GAS, CABLE TV, TELEPHONE, ELECTRIC, ETC.).
- CONTRACTOR SHALL CONTROL, AEROSOLS, DUST WITH USE OF SPRAYED WATER AS REQUIRED TO MINIMIZE IMPACT ON NEIGHBORING PROPERTIES. USE OF CALCIUM CHLORIDE OR OTHER CHEMICALS IS NOT PERMITTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT THE PROPOSED CONSTRUCTION ACTIVITIES DO NOT DAMAGE OR UNDERMINE EXISTING SLOPES, BUILDINGS, WALLS, STRUCTURES, ETC. IN THE AREA AROUND THE CONSTRUCTION. REPAIR OF EXISTING SLOPES, BUILDINGS, WALLS, STRUCTURES, ETC. THAT ARE DAMAGED OR UNDERMINED BY THE CONTRACTOR'S WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND ARE TO BE FIELD VERIFIED. QUINN ENGINEERING, INC. DOES NOT WARRANT THAT ALL EXISTING UTILITIES HAVE BEEN INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE EXISTING UTILITY LOCATIONS AND ENSURING THAT THE PROPOSED WORK DOES NOT CONFLICT WITH ANY EXISTING UTILITIES NOT SHOWN.
- THE CONTRACTOR SHALL REMOVE ALL TOPSOIL AND SUBSOIL PRIOR TO PLACING ANY FILL ON-SITE. WHERE GRAVEL IS CALLED FOR ON-SITE, CONTRACTOR MAY UTILIZE ON-SITE MATERIALS IF APPROVED BY THE OWNER.
- ALL AREAS DISTURBED BY THE PROPOSED WORK SHALL BE STABILIZED. CONTRACTOR SHALL PLACE A MINIMUM OF 6" LOAM AND GRASS SEED IN ALL AREAS NOT SUBJECT TO RESTORATION BY ANY OTHER MEANS.
- ALL SLOPES WHERE INDICATED THE PLAN SHALL BE STABILIZED WITH NORTH AMERICAN GREEN S1508N EROSION CONTROL BLANKET. BLANKET SHALL BE BIODEGRADABLE AND SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATION UNLESS OTHERWISE SPECIFIED ON PLAN. ALL SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED LIKEWISE WHETHER NOTED OR NOT.
- SUITABLE FILL SHALL CONSIST OF MATERIAL SOIL FREE OF ORGANIC MATERIALS, LOAM, AND ANY DELETERIOUS MATERIALS. SUITABLE FILL SHALL NOT CONTAIN STONES LARGER THAN 10" IN ANY DIMENSION, AND SHALL HAVE LESS THAN 75% PASSING THE NO. 4 SIEVE AND A MAXIMUM OF 20% PASSING THE NO. 200 SIEVE. SUITABLE FILL SHALL NOT CONTAIN ANY BUILDING RUBBLE, GRANITE, OR CONCRETE BLOCK, ROOFING MATERIALS, OR OTHER CONSTRUCTION REFUSE. AT THE TIME OF PLACEMENT SUITABLE FILL SHALL NOT CONTAIN FROST, SNOW, OR ICE AND SHALL NOT CONTAIN WATER GREATER THAN THE OPTIMAL MOISTURE CONTENT.
- ANY CONDITIONS REQUESTED BY THE ZONING BOARD OF APPEALS, BOARD OF HEALTH, CONSERVATION COMMISSION IN THE APPROVAL PROCESS ARE HEREBY MADE PART OF THIS WORK.
- THE GROUND IMMEDIATELY ADJACENT TO FOUNDATIONS SHALL BE SLOPED AWAY FROM THE BUILDING IN ACCORDANCE WITH THE MA STATE BUILDING CODE.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY TRENCH PERMITS IN ACCORDANCE WITH 520 CMR 14.400.

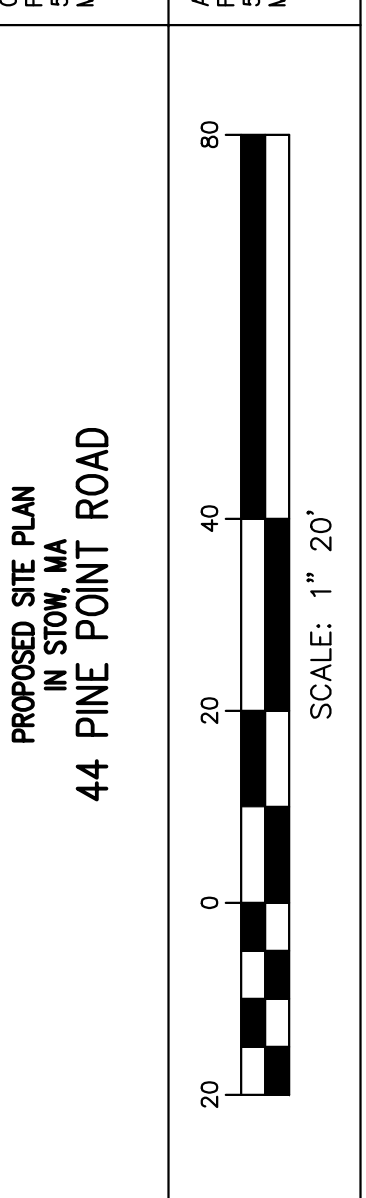


NO.	1	2	3	4	DATE
REVISION	REVISED PER BOH & ZBA	REVISED PER CON COM & BOH	REVISED PER CON COM & BOH	REVISED PER BOH & ZBA	8/24/20
NO.	1	2	3	4	DATE
REVISION	REVISED PER BOH & ZBA	REVISED PER CON COM & BOH	REVISED PER CON COM & BOH	REVISED PER BOH & ZBA	3/4/21



OWNER: FRANS & MARY JANE CRAMER
52 FLINT DRIVE
MARLBORO MA, 01528

APPLICANT: FRANS & MARY JANE CRAMER
52 FLINT DRIVE
MARLBORO MA, 01528



DATE: FEBRUARY 7, 2020
SUBSURFACE SEWAGE DISPOSAL SYSTEM REPAIR

QUINN ENGINEERING, INC.
P.O. Box 107
Paxton, Massachusetts 01612
(508)753-7999 Fax: (508)795-0939

44 POINT POINT ROAD
SHEET 2 OF 5