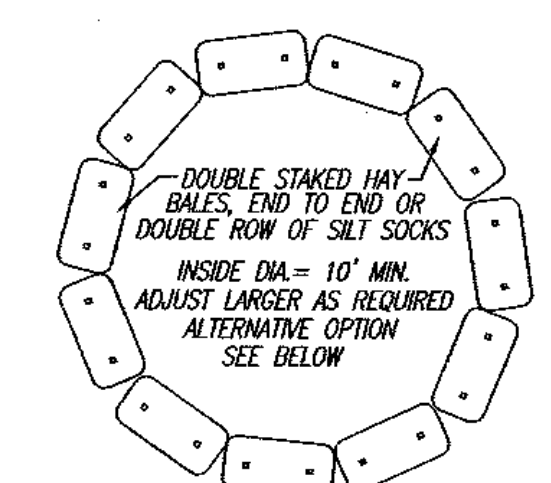
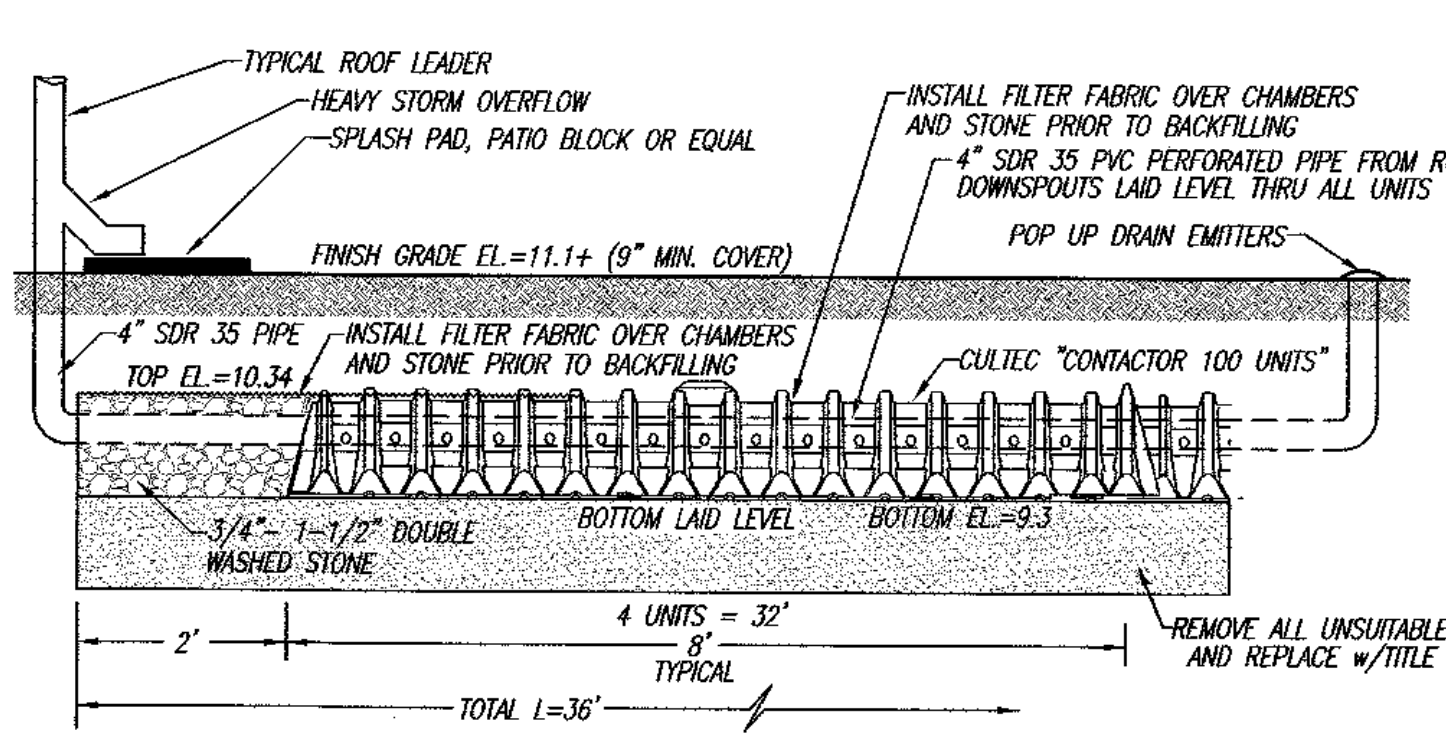
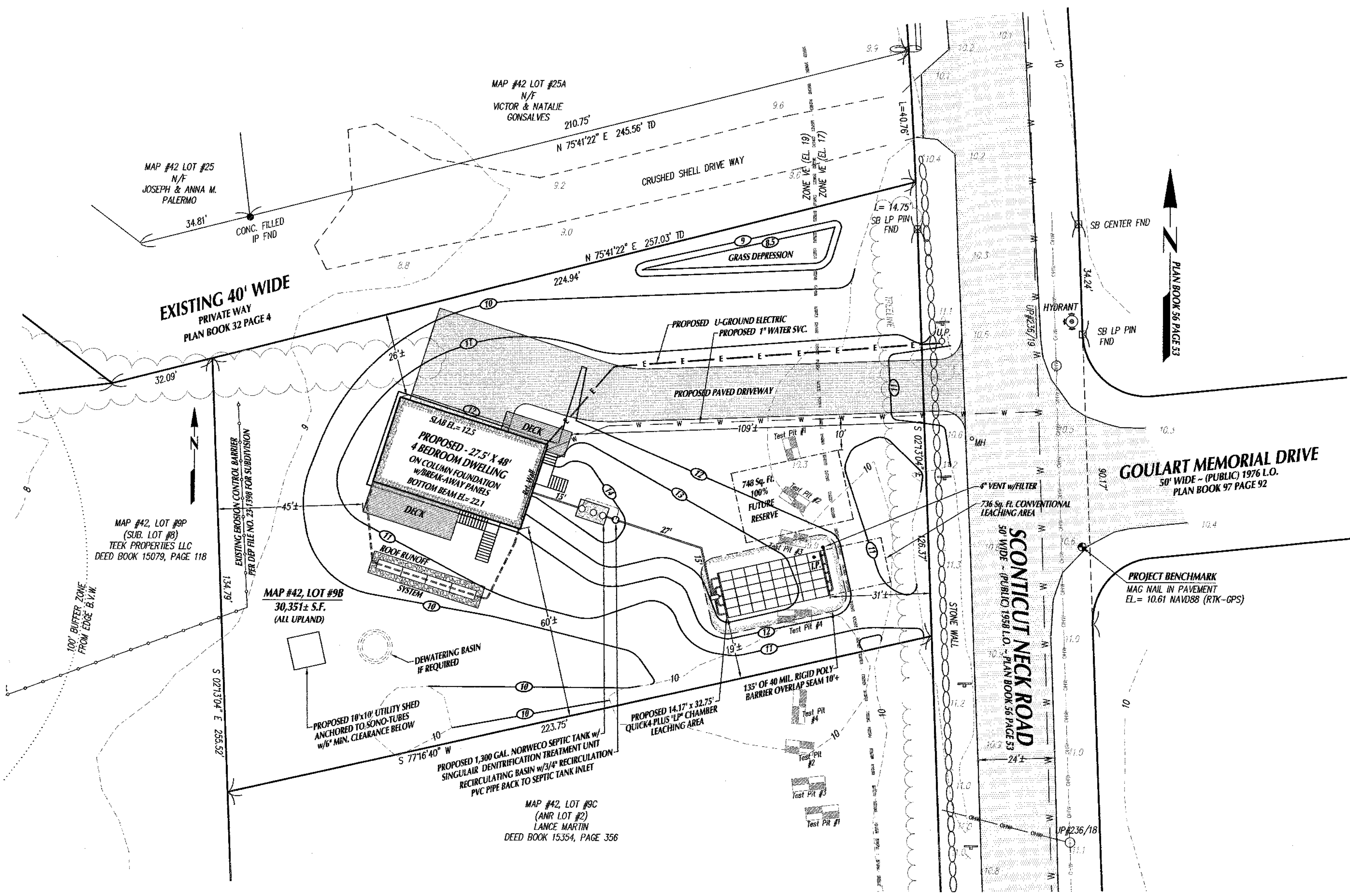


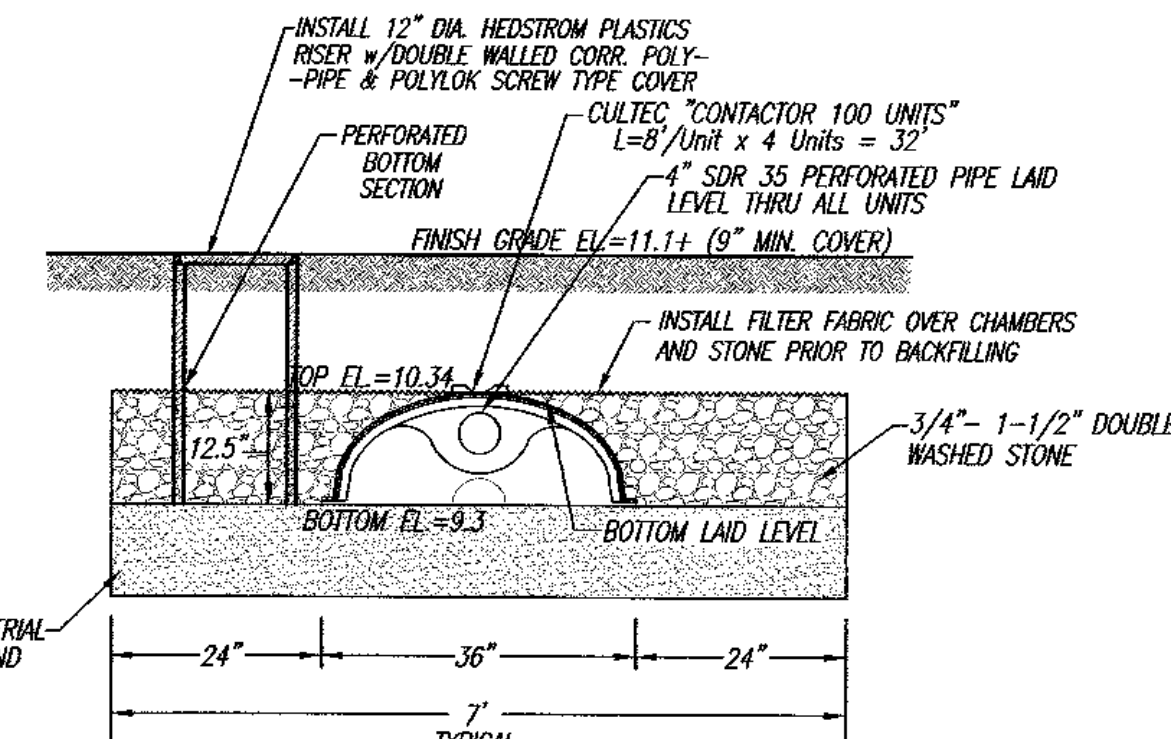
- LEGEND**
- PROPOSED CONTOURS
 - EXISTING CONTOURS
 - PROPOSED 4" PIPE
 - PROPOSED 4" PIPE POLY BARRIER @ 5' OVERDIE
 - PROPOSED CLEARING LIMITS
 - WATER SVC.
 - TEST PIT LOCATION
 - EXISTING ELEVATIONS
 - PROPOSED ELEVATIONS
 - EDGE OF BORDERING VEGETATED WETLAND
 - 100' BUFFER ZONE
 - FLOOD ZONE LINES



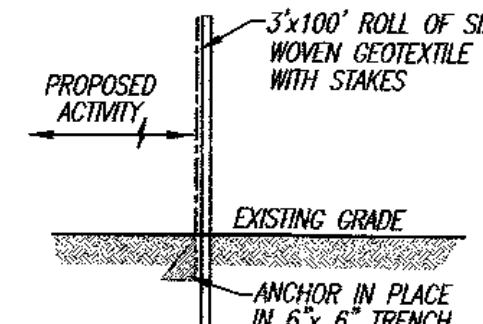
ALTERNATIVE OPTION: USE THE "DIRT BAG" PUMPED SILT CONTROL SYSTEM BY "ACE" DISTRIBUTOR: A.H. HARRIS & SONS, INC.
TYP. DEWATERING HAY BALE RING
 Not to Scale



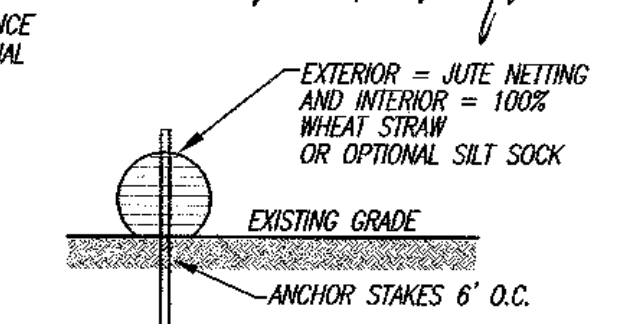
TYP. PROFILE OF ROOF RECHARGE TRENCH
 Not to Scale



TYP. X-SECTION OF ROOF RECHARGE TRENCH
 Not to Scale

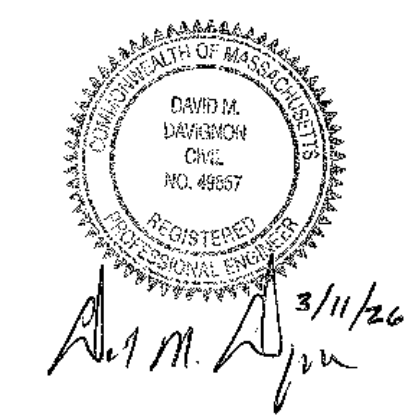


SILTATION FENCE DETAIL
 Not to Scale
 ALTERNATIVE NO. 1 - EROSION CONTROL



STRAW WATTLE OR SILT SOCK DETAIL
 Not to Scale
 ALTERNATIVE NO. 2 - EROSION CONTROL

- GENERAL NOTES:**
- UNLESS OTHERWISE NOTED, ALL SYSTEM COMPONENTS AND CONSTRUCTION METHODS SHALL CONFORM TO 310 CMR 15.00, TITLE 5 OF THE STATE ENVIRONMENTAL CODE AND ANY APPLICABLE LOCAL REGULATIONS.
 - ANY AND ALL CHANGES TO THIS DESIGN PLAN MUST BE APPROVED BY THE DESIGN ENGINEER AND BOARD OF HEALTH.
 - DESIGN ENGINEER AND LOCAL BOARD OF HEALTH ARE TO BE NOTIFIED PRIOR TO BACKFILLING WHEN THE SYSTEM IS NEARLY COMPLETE AND READY FOR INSPECTION. THE SYSTEM IS NOT TO BE BACKFILLED WITHOUT FIRST OBTAINING APPROVAL FROM THE BOARD OF HEALTH AND DESIGN ENGINEER.
 - CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION THROUGH DIS SAFE AND OTHER APPROPRIATE AGENCIES, AND REPORT ANY DISCREPANCIES TO DESIGN ENGINEER.
 - CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER OF ANY AND ALL DISCREPANCIES FOUND BETWEEN THE SITE CONDITIONS AND THOSE SHOWN ON DESIGN PLAN PRIOR TO THE CONTINUATION OF WORK.

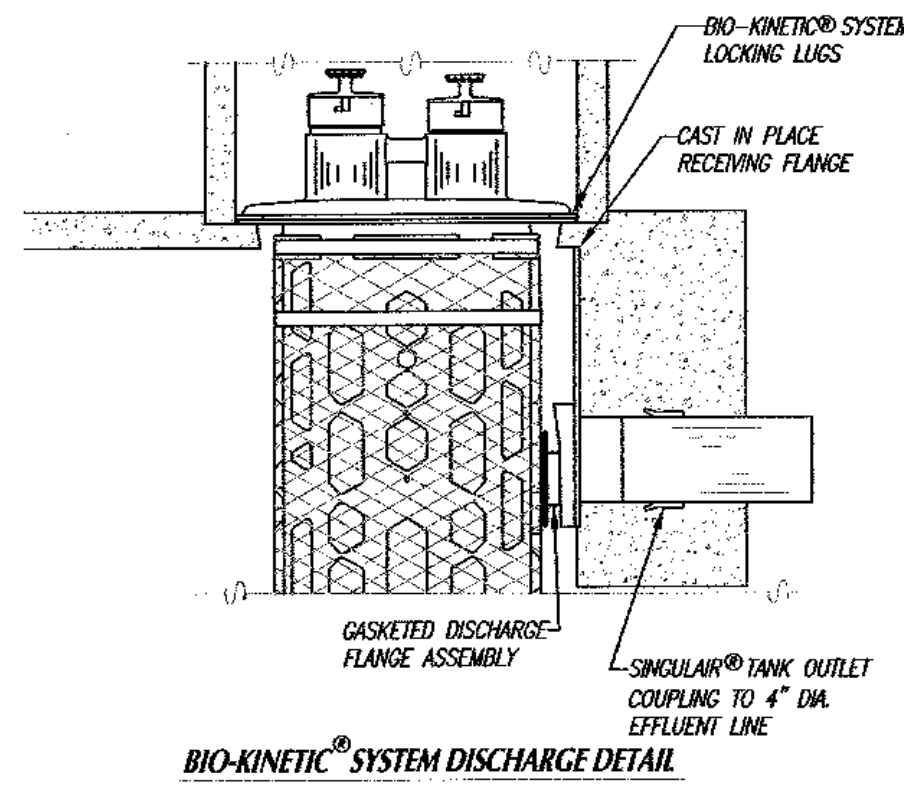
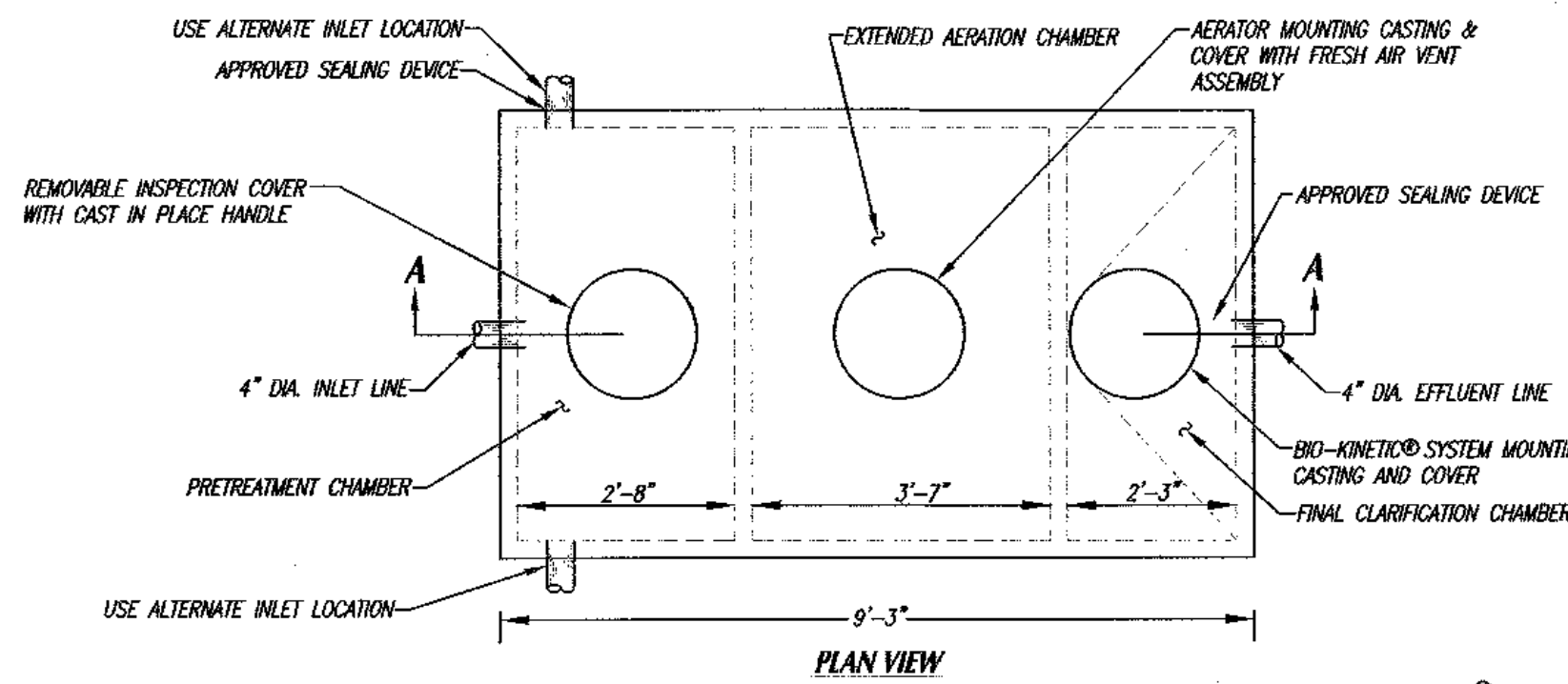


PROPERTY INFORMATION:
 SITE ADDRESS: SCANTICUT NECK ROAD
 ASSESSORS MAP # 42
 LOT # 9B
 a.k.a. - ANR LOT # 1
 FEMA FLOOD ZONE: V-2, ELEVATION: 12 & 19
 F.I.R.M. PANEL NO: 2500SC0503F
 CURRENT ZONING DISTRICT: RR BUILDING SETBACKS:
 FRONT: 30' OR AVERAGE SETBACK
 SIDE: 20' REAR: 30'
 MAXIMUM ALLOWABLE LOT COVERAGE = 25%
 PROPOSED LOT COVERAGE = 14.6%
 MAXIMUM ALLOWABLE BUILDING COVERAGE = 15%
 PROPOSED BUILDING COVERAGE = 4.3%
 NEW OWNER/APPLICANT:
 ROBERT S. & JOYCE M. CUMMINGS
 41143 MISSION DRIVE
 PALMDALE, CA 93551
 SEE DEED BOOK 15298, PAGE 198
 FORMER OWNER/APPLICANT:
 STARBOARD DRIVE NOMINEE TRUST

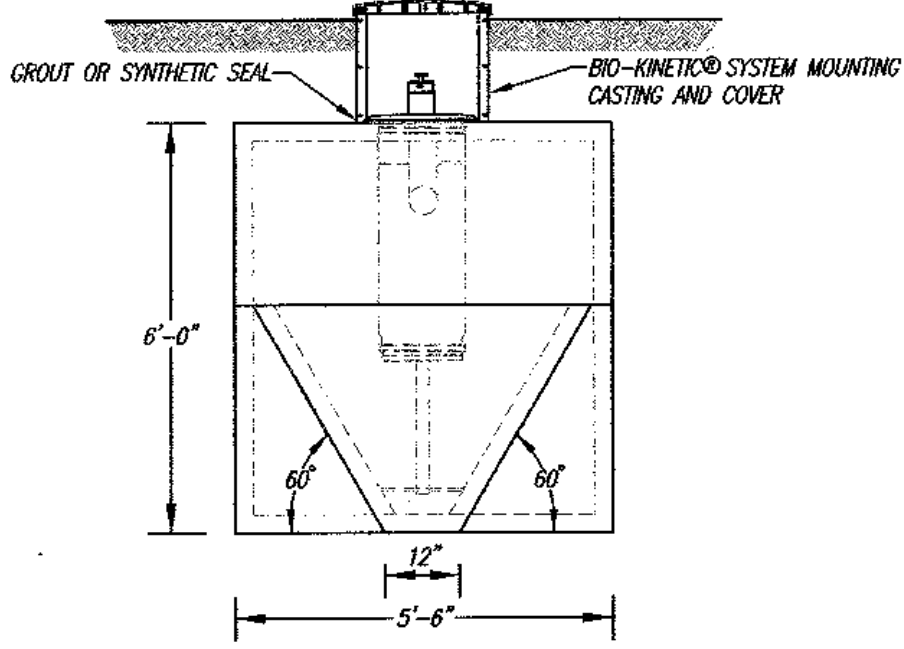
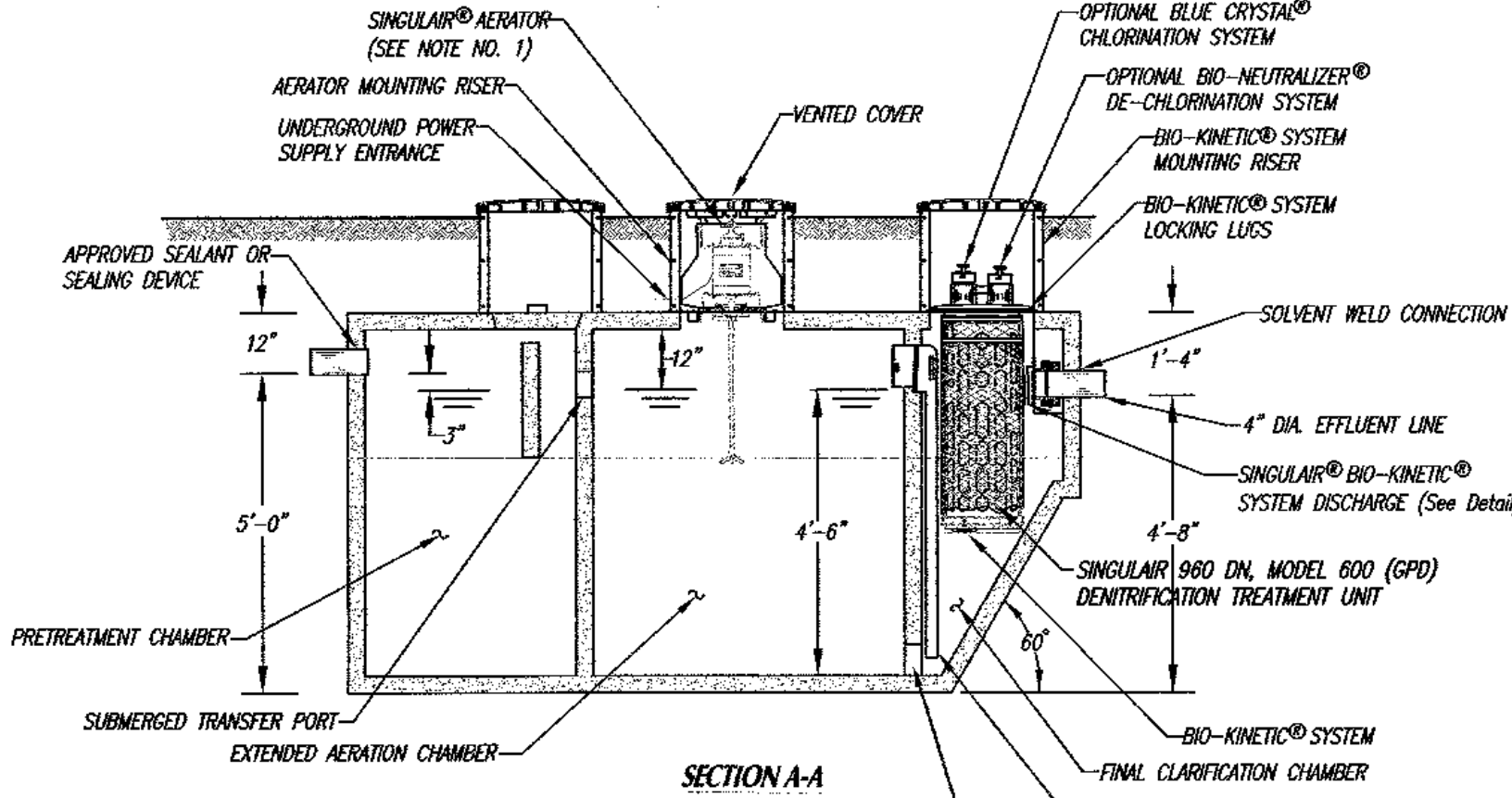
Rev. #	DATE	BY	DESCRIPTION
2	3-11-26	D.M.D.	CHANGE OWNER'S NAME, HOUSE FOOTPRINT & DRIVEWAY LAYOUT, OMIT P-PANE TANKS & PUMP CHAMBER
1	3-19-24	D.M.D.	REVISE SHED & PROPANE TANK SPECIFICATIONS

SEWAGE DISPOSAL SYSTEM - SITE PLAN
 MAP #42, LOT #9B, a.k.a ANR LOT #1 ON
SCANTICUT NECK ROAD in FAIRHAVEN, MA.
 PREPARED FOR
ROBERT S. & JOYCE M. CUMMINGS

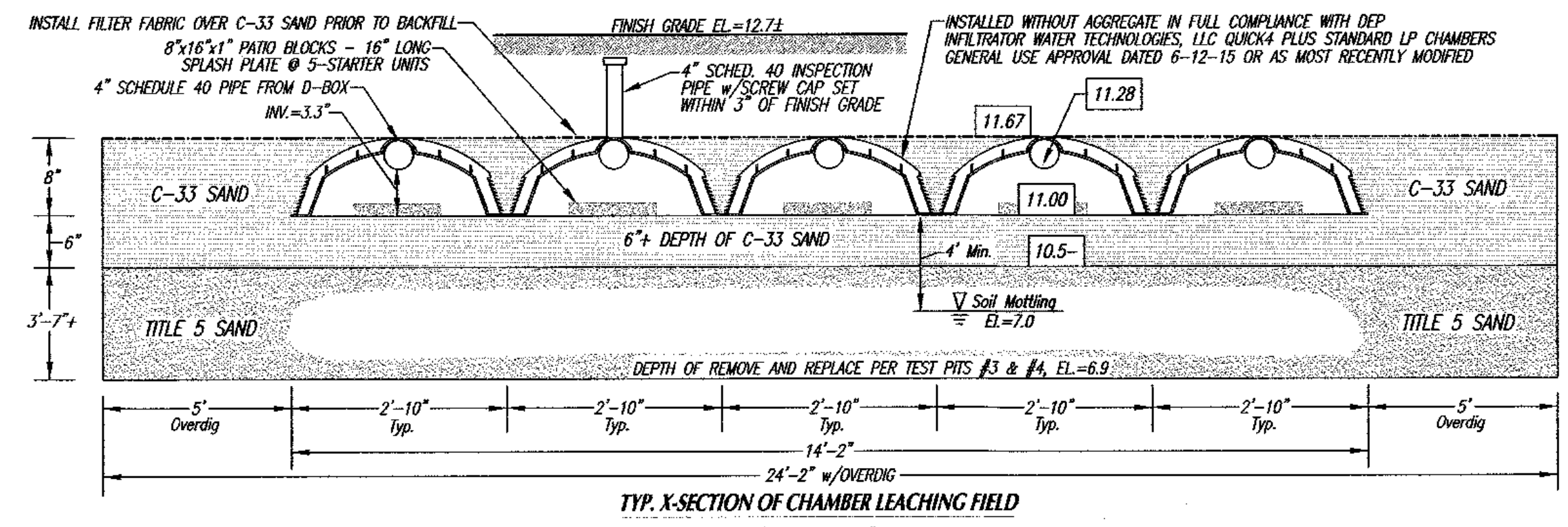
SHEET 1 OF 2 SHEETS
 SCALE: 1"=20'
 DATE: FEBRUARY 8, 2024
SCHNEIDER, DAVIGNON & LEONE, INC.
 PROFESSIONAL CIVIL ENGINEERS & LAND SURVEYORS
 P.O. Box 480, 81A COUNTY ROAD, UNIT G, MATTAPOISETT, MA 02739
 1-508-758-7866
 Drawn By: D.M.D. Check By: D.M.D. Job No. 4101



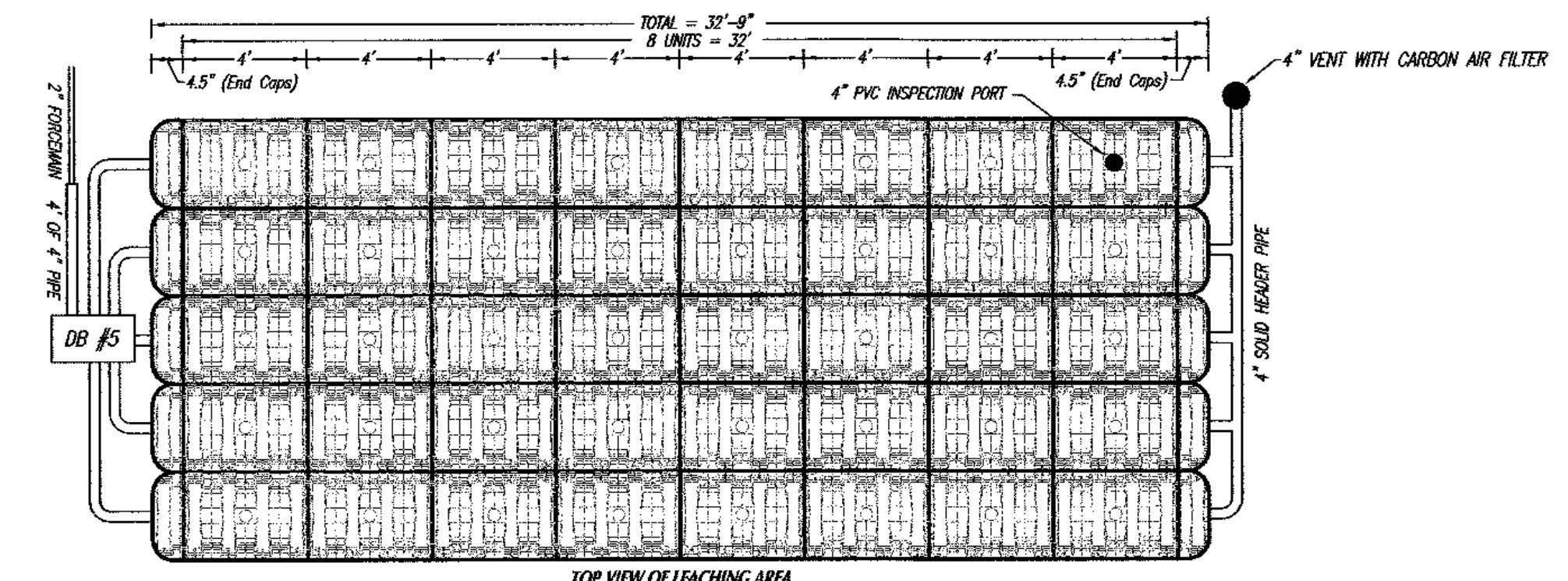
- GENERAL NOTES:**
- 1.) SINGULAR® AERATOR, AS TESTED AND ACCEPTED BY NSF.
 - 2.) FALL THROUGH SINGULAR® PLANT FROM INLET INVERT TO OUTLET INVERT IS FOUR INCHES. INLET INVERT IS TEN AND ONE HALF INCHES BELOW TANK TOP.
 - 3.) ON DEEPER INSTALLATIONS, RISERS MUST BE USED TO EXTEND AERATOR MOUNTING RISER AND BIO-KINETIC® SYSTEM MOUNTING RISER TO GRADE. INSPECTION COVER ON PRETREATMENT CHAMBER MUST BE DEVELOPED TO WITHIN TWELVE INCHES OF GRADE.
 - 4.) REMOVABLE COVERS ON RISERS ARE EACH SECURED TO PREVENT UNAUTHORIZED ACCESS.
 - 5.) CONTACT THE LOCAL LICENSED SINGULAR® DISTRIBUTOR FOR ELECTRICAL REQUIREMENTS.



NOTE: TOTAL SYSTEM CAPACITY: 1,300 GALLONS
RATED CAPACITY: 500/600 GALLONS PER DAY



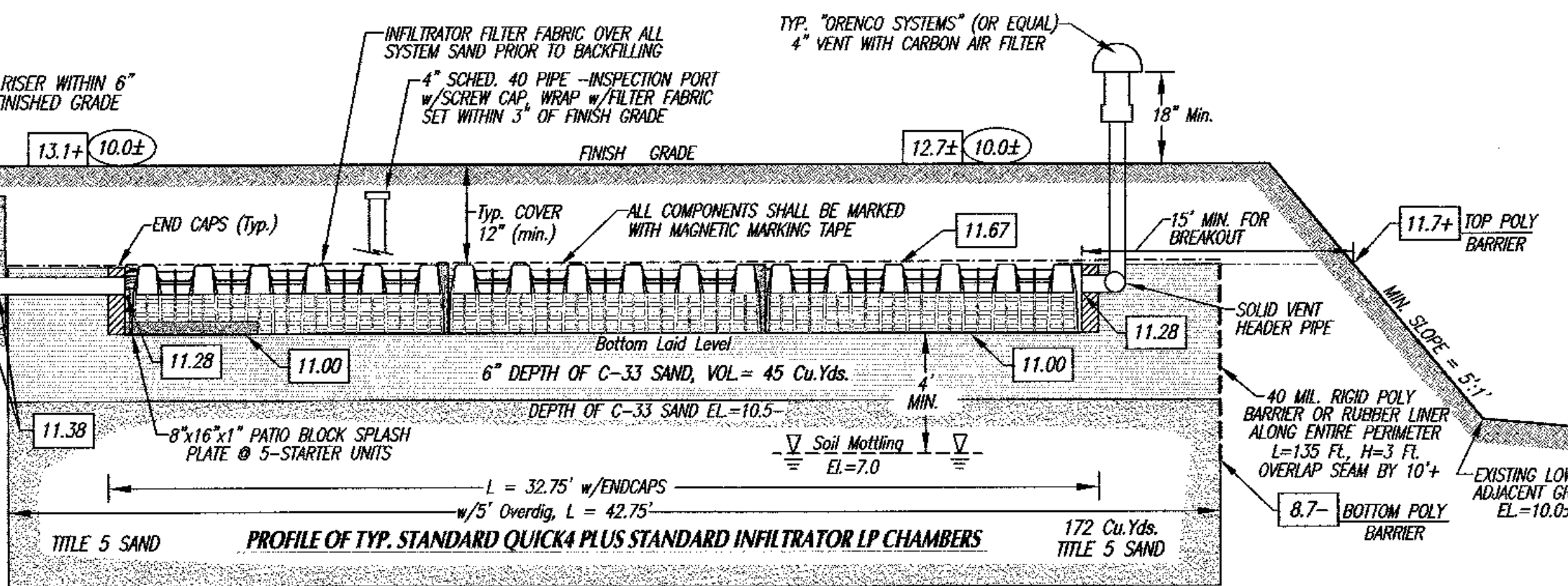
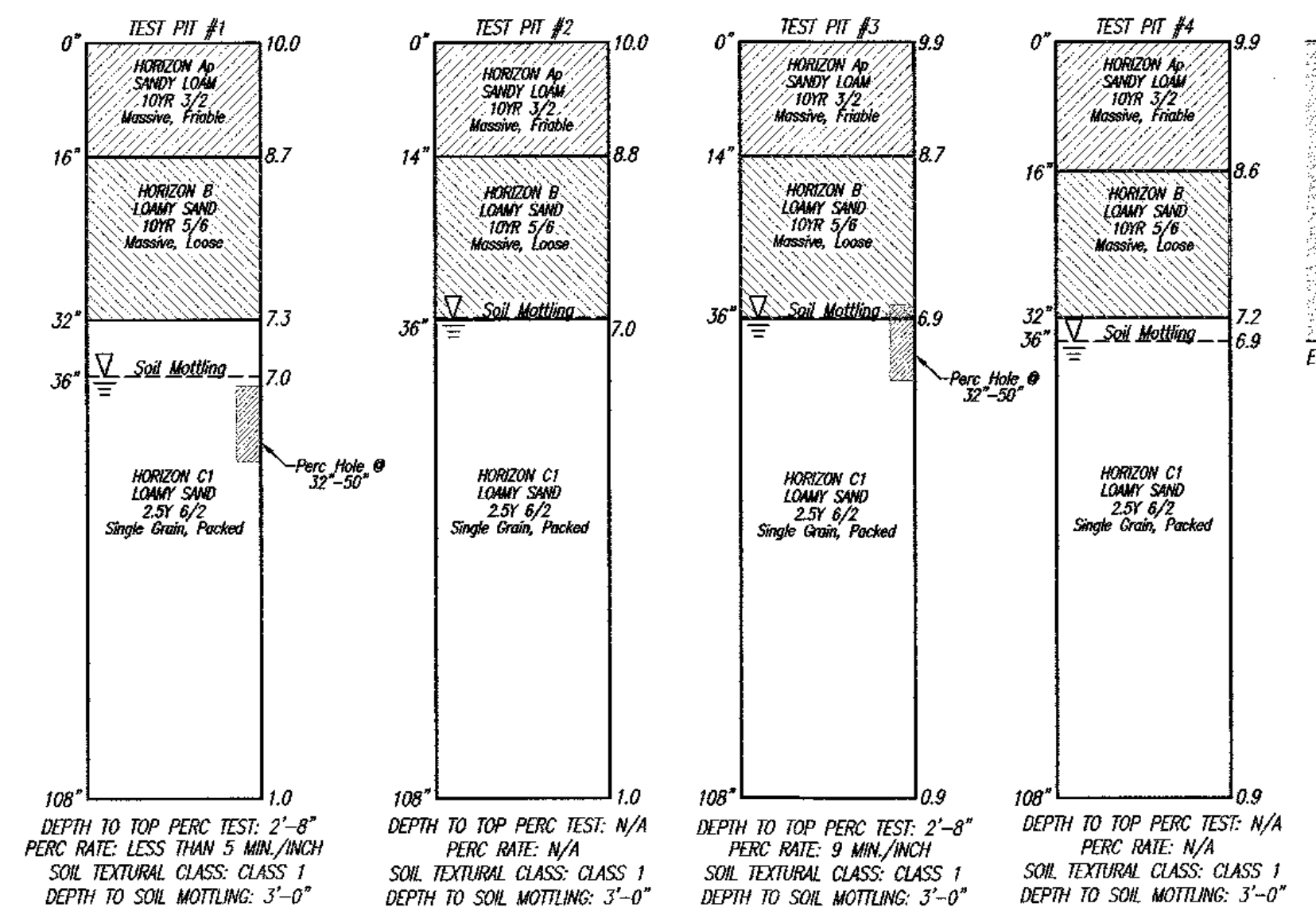
TYP. X-SECTION OF CHAMBER LEACHING FIELD
"Not to Scale"



TOP VIEW OF LEACHING AREA
"Not to Scale"

TEST PIT DATA

DATE OF SOIL EVALUATIONS: SEPTEMBER 28, 2020
SOIL EVALUATOR: DOREN MICHAELS, C.S.E.
ENGINEERING FIRM: FORESIGHT ENGINEERING
INSPECTOR: SARAH DUPONTE, HEALTH AGENT

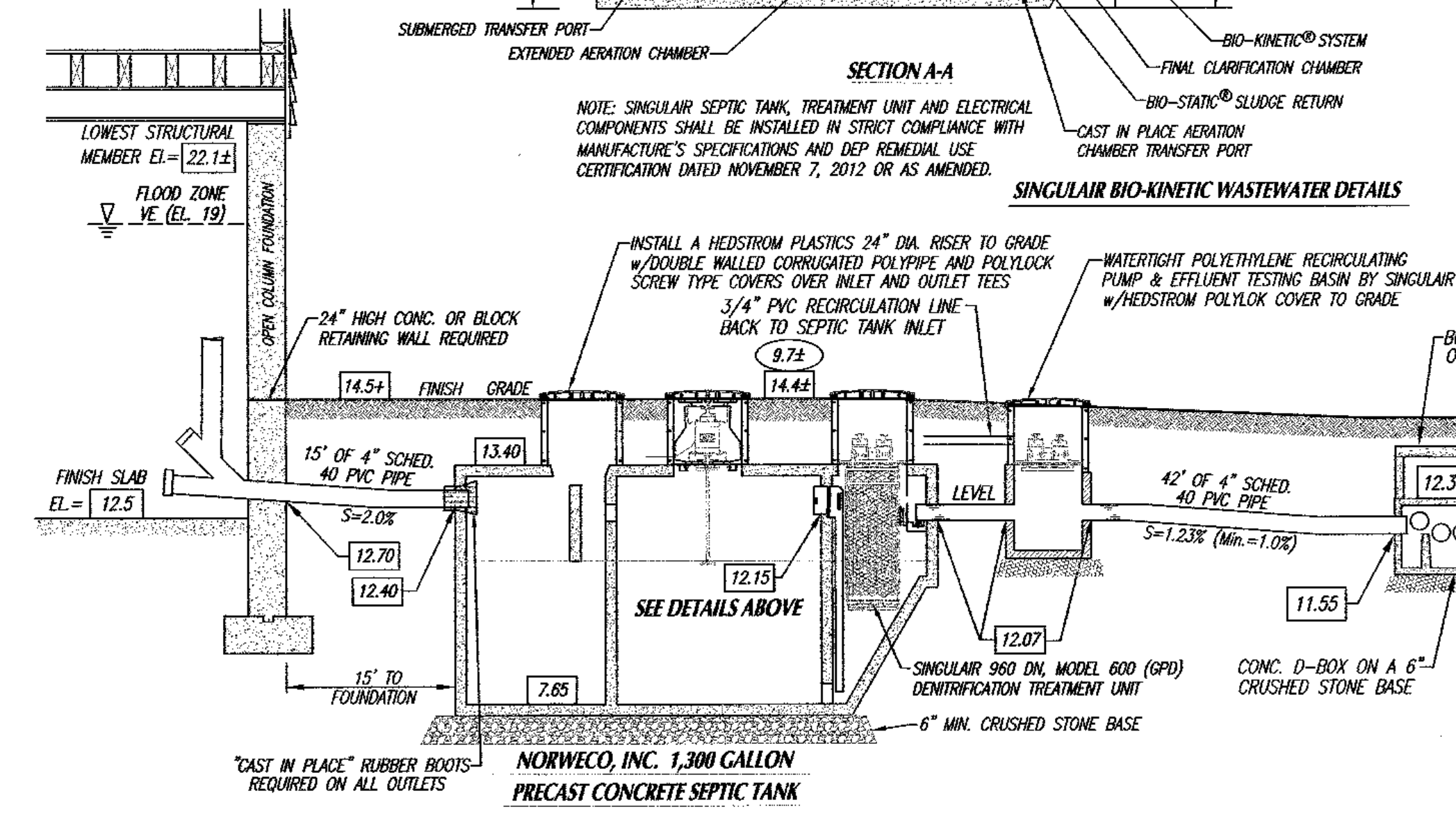


"REMOVE AND REPLACE" NOTE:

WHERE REQUIRED, CONTRACTOR IS TO REMOVE ALL LOAM, SUBSOIL AND OTHER UNSUITABLE MATERIAL IN THE AREA BENEATH AND FOR 5' FT. ON ALL SIDES OF THE LEACHING FACILITY. EXCAVATED MATERIAL IS TO BE REPLACED WITH CLEAN COARSE SAND FREE FROM CLAY, FINES, OR OTHER UNSUITABLE MATERIAL IN ACCORDANCE WITH 310CMR 15.225(3) CONTRACTOR SHALL PROVIDE A SIEVE ANALYSIS OF FILL MATERIAL. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN TWO INCHES. A SIEVE ANALYSIS, USING A #4 SIEVE, SHALL BE PERFORMED ON A REPRESENTATIVE SAMPLE UP TO 45% BY WEIGHT OF THE SAMPLE MAY BE RETAINED ON THE #4 SIEVE. SIEVE ANALYSIS ALSO SHALL BE PERFORMED ON A FRACTION OF SAMPLE PASSING THE #4 SIEVE. SUCH ANALYSIS MUST DEMONSTRATE THAT THE MATERIAL MEETS EACH OF THE FOLLOWING SPECIFICATIONS AS LISTED TO THE RIGHT:

SIEVE SIZE	% THAT MUST PASS SIEVE
#4	100%
#10	105-100%
#100	0%-20%
#200	0%-5%

BOTTOM OF EXCAVATION SHALL BE LEVEL AT ELEVATION 6.9 PER TEST PITS #3 & #4 TO HORIZON C1, LOAMY SAND STRATA AT A DEPTH OF 36" (ELEVATION TO BE VERIFIED BY ENGINEER IN FIELD PRIOR TO INSTALLATION)
TOP OF FILL PER NOTE TO EXTEND TO EL. = 11.67 TOP OF CHAMBERS
APPROX. VOLUME OF TITLE 5 SAND REQUIRED = 172 Cu.Yds. (20% Compaction Allowance)
APPROX. VOLUME OF C-33 SYSTEM SAND REQUIRED = 45 Cu.Yds. (20% Compaction Allowance)



FOUNDATION CONSTRUCTIONS NOTES:

- THE PROPOSED DWELLING IS LOCATED IN FLOOD ZONE VE (EL. 19 - N.A.V.D. Datum of 1988).
- THE LOWEST STRUCTURAL MEMBER SHALL BE SET AT OR ABOVE ELEVATION 22.0.
- THE PROPOSED FINISH CONCRETE SLAB UNDER DWELLING = ELEVATION 12.5.
- THE PROPOSED FOUNDATION SHALL BE AN OPEN COLUMN TYPE FOUNDATION DESIGN PER FEMA REQUIREMENTS.
- THE FOUNDATION SHALL BE DESIGNED BY A STRUCTURAL ENGINEER IN COMPLIANCE WITH THE MASS. BUILDING CODE AND F.E.M.A. REQUIREMENTS FOR CONSTRUCTION WITHIN A VELOCITY ZONE.
- THE NUMBER AND LOCATION OF COLUMNS SHALL BE DETERMINED BY THE STRUCTURAL ENGINEER. BREAKAWAY PANELS ARE OPTIONAL AND SHALL BE DESIGNED BY A STRUCTURAL ENGINEER.

SEWAGE DISPOSAL SYSTEM DESIGN DATA

FLOW REQUIREMENTS:
PROPOSED NUMBER OF BEDROOMS: FOUR (4)
DAILY DESIGN FLOW PER TITLE 5: 110 GALLONS/BEDROOM/DAY
TOTAL DESIGN FLOW: 110 GAL/BDRM x 4 BEDROOMS = 440 GAL/DAY

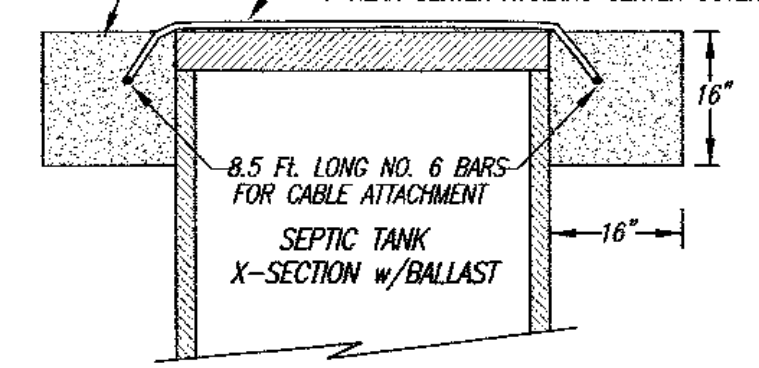
SEPTIC TANK SIZE:
TITLE 5: 440 GAL. X 200% = 880 GALLONS
INSTALL A 1,300 GAL. PRECAST CONCRETE NORWECO CO. SINGULAR SEPTIC TANK WITH A BIO-KINETIC SINGULAR 980 DN, MODEL 600 WASTEWATER TREATMENT SYSTEM

TYPICAL CHAMBER LEACHING FIELD:
DESIGN SOIL TEXTURAL CLASS: CLASS 2
DESIGN PERCOLATION RATE: 1 INCH IN 10 MINUTES
LONG TERM ACCEPTANCE RATE: 0.80
REQUIRED LEACHING AREA: 440 GAL/DAY Divided by LTAR 0.80 = 550 Sq.Ft.
LEACHING AREA PROVIDED: 4.73 Sq.Ft./Linear Ft. of INFILTRATOR QUICK4 PLUS STANDARD LP CHAMBERS (5 ROWS x 8 UNITS/ROW) = 40 UNITS x 4 FT./UNIT + (10 END CAPS x 0.375 FT./END CAP) = 163.75 LINEAR FT. OF INFILTRATOR QUICK4 PLUS STANDARD LP CHAMBERS x 4.73 Sq.Ft./LINEAR FT. = 774 Sq.Ft.
774 Sq.Ft. x 0.80 GAL/Sq.Ft. = 619 GAL LEACHING/DAY

TOTALS:
TOTAL NUMBER OF DISTRIBUTION LINES = FIVE (5)
TOTAL NO. OF INFILTRATOR QUICK4 PLUS STANDARD LP (INV.=3.3") CHAMBERS = 40
TOTAL LEACHING AREA = 774 > 550 Sq.Ft.
TOTAL LEACHING CAPACITY = 461 GAL/DAY >> 440 GAL/DAY

TITLE 5 NOTES:

1. SEPTIC SYSTEM COMPONENTS SHALL BE H-20 PRODUCTS IF LOCATED UNDER DRIVEWAY, PARKING OR OTHER AREAS SUBJECT TO VEHICULAR TRAFFIC. ALL OTHER SYSTEM COMPONENTS SHALL BE H-10 PRODUCTS.
2. GROUT OR CAST IN PLACE RUBBER BOOT IS TO BE USED WHERE PIPES ENTER OR LEAVE ALL CONCRETE STRUCTURES IN ORDER TO PROVIDE A WATER-TIGHT SEAL.
3. USE ALL SCHEDULE 80 PIPE UNDER DRIVEWAY AND SCHEDULE 40 AS SPECIFIED.
4. THE MINIMUM SLOPE PER TITLE 5 FOR ALL 4" SOLID PIPE = 1.0%.
5. THIS SYSTEM IS NOT DESIGNED FOR A GARBAGE DISPOSAL UNIT, WATER SOFTENER OR OTHER HIGH WATER USAGES.
6. ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE.
7. THE MINIMUM SLOPE OF THE FINISH GRADE SHALL BE 5:1.



SEPTIC TANK BUOYANCY CALCULATIONS:

1,300 GALLON CONCRETE SEPTIC TANK, WORST CASE = EMPTY TANK AND COMPLETELY SUBMERGED
WATER DISPLACED: ESTIMATED VOLUME OF TANK = 268 Cu. Ft. (62.4 lbs./cu.ft.) = 16,723 lbs.
ESTIMATED WEIGHT OF "NORWECO" 1,300 GAL. CONCRETE SEPTIC TANK = 11,175 lbs.
WEIGHT OF SATURATED SOIL COVER SHOWN = (5'-0" (9'-3") (13" Min.) (70 lbs./cu.ft.) = 3,134 lbs.
WEIGHT OF PROPOSED CONCRETE BALLAST = (16') (16') (9'-0") (2) (150 lbs./cu. ft.) = 4,776 lbs.
BUOYANCY FORCE = 16,723 lbs. - ((11,175 + 3,134 + 4,776) lbs. = (Negative) -2,362 lbs.
CONTRACTOR SHALL POUR A 16'x16'x9" LONG CONCRETE BALLAST ON EACH SIDE AS SHOWN

Rev. #	DATE	BY	DESCRIPTION
2	3-11-26	D.M.D.	CHANGE OWNER'S NAME, HOUSE FOOTPRINT & DRIVEWAY LAYOUT, OMT P-PANE TANKS & PUMP CHAMBER
1	3-19-24	D.M.D.	REVISE SHED & PROPANE TANK SPECIFICATIONS

SEWAGE DISPOSAL SYSTEM - SITE PLAN
MAP #42, LOT #9B, a.k.a ANR LOT #1 ON SCOTICUT NECK ROAD in FAIRHAVEN, MA
PREPARED FOR ROBERT S. & JOYCE M. CUMMINGS
SHEET 2 OF 2 SHEETS

SCALE: 1"=20' DATE: FEBRUARY 8, 2024
0 10 20 40 60

SCHNEIDER, DAVIGNON & LEONE, INC.
PROFESSIONAL CIVIL ENGINEERS & LAND SURVEYORS
P.O. Box 480, 81A COUNTY ROAD, UNIT G, MATTAPOISETT, MA 02739
1-508-758-7866

Drawn By: D.M.D. Check By: D.M.D. Job No. 4101