

LOCUS
NOT TO SCALE

LEGEND

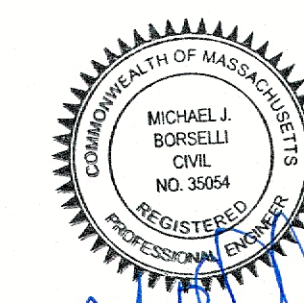
---	EXISTING 2' CONTOUR
---	EXISTING 10' CONTOUR
+12.5	EXISTING SPOT ELEVATION
+12.0	PROPOSED SPOT ELEVATION
OAK ○	EXISTING TREE
PP ○	EXISTING UTILITY POLE
CB FOUND □	CONCRETE BOUND

TITLE 5 VARIANCES REQUIRED:

- BOURNE BOARD OF HEALTH REGULATION REQUIRING 150' MINIMUM SETBACK FROM S.A.S. TO WETLAND RESOURCE. THE ACTUAL SETBACK PROVIDED TO TOP OF WESTERLY COASTAL BANK IS 22' AND EASTERLY COASTAL BANK IS 34'. THE ACTUAL SETBACK PROVIDED TO SALT MARSH IS 69', TO DUNE IS 58', TO MHW EAST IS 66' AND MHW WEST IS 87'.
- BOURNE BOARD OF HEALTH REGULATION REQUIRING 150' MINIMUM SETBACK FROM RESERVE AREA TO WETLAND RESOURCE. THE ACTUAL SETBACK PROVIDED TO THE TOP OF THE WESTERLY COASTAL BANK IS 24' AND EASTERLY COASTAL BANK IS 30', TO SALT MARSH IS 65' TO DUNE IS 60', TO MHW EAST IS 64' TO MHW WEST IS 83'.
- 310 CMR 15.211 MINIMUM SETBACK SAS TO TOP OF COASTAL BANK 50'. THE ACTUAL SETBACK TO WESTERLY COASTAL BANK IS 22' AND EASTERLY COASTAL BANK IS 34'.
- 310 CMR 15.211 MINIMUM SETBACK RESERVE AREA TO TOP OF COASTAL BANK IS 50'. THE ACTUAL SETBACK PROVIDED TO THE TOP OF WESTERLY COASTAL BANK IS 24' AND EASTERLY COASTAL BANK IS 30'.
- 310 CMR 15.211 MINIMUM SETBACK RESERVE AREA TO CELLAR WALL 20'. THE ACTUAL SETBACK IS 9'.

GENERAL NOTES:

- ASSESSOR'S INFORMATION: MAP 30.1, PARCEL 3, LOT 3
- FLOOD ZONES: AE15 & VE18 (FEMA MAP 25001C0501J)
- ZONING DISTRICT: R-40
- WIND EXPOSURE CATEGORY: C
- OVERLAY DISTRICT: PARTIAL NHSP DISTRICT
- LOT COVERAGE BY:
 - EXISTING STRUCTURES: 3,195 S.F./34,800 S.F. = 9.2%
 - EXISTING & PROPOSED STRUCTURES: 3,741 S.F./34,800 S.F. = 10.8%
- STREET ADDRESS: ROCKY POINT ROAD
- HOUSE NUMBER: 104
- TOPOGRAPHIC INFORMATION COMPILED FROM AN ON THE GROUND SURVEY
- ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988.



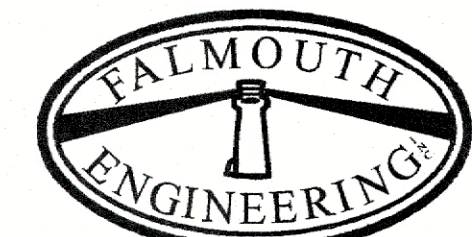
SITE PLAN — PROPOSED IMPROVEMENTS

FOR #104 ROCKY POINT ROAD
PREPARED FOR
PATRICK CURRAN
IN
BOURNE MA

PLAN DATE: JULY 26, 2022

PLAN SCALE: 1" = 20'

CIVIL ENGINEERING
WASTEWATER DESIGN
TITLE 5 PLOT PLANS
LAND USE PLANNING



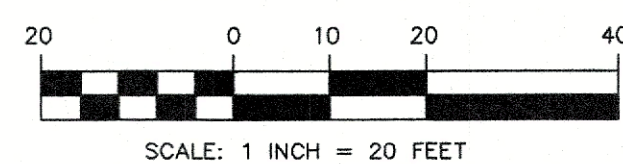
WETLANDS PERMITTING
COASTAL ENGINEERING
PIERS AND DOCKS
COMMERCIAL/RESIDENTIAL

Serving Cape Cod and Southeastern Massachusetts

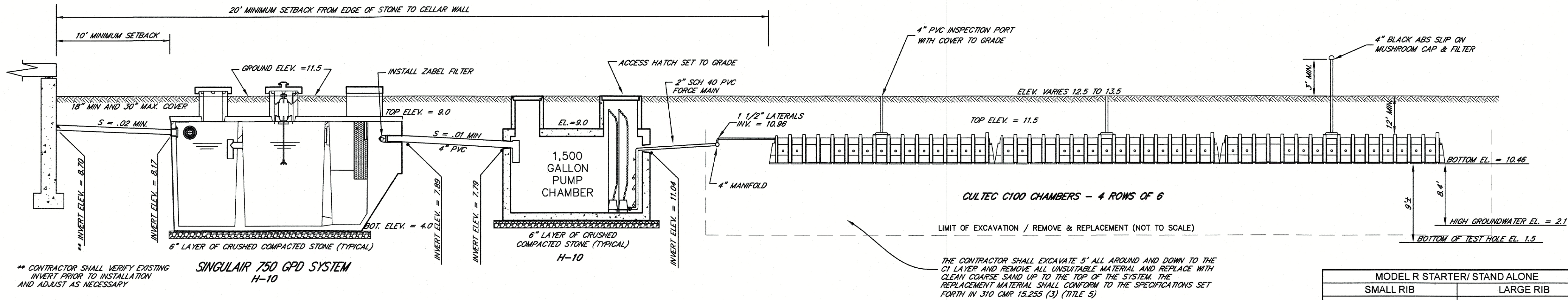
17 ACADEMY LANE, SUITE 200 — FALMOUTH, MA — 02540 — 508.495.1225

PROJECT NUMBER: 21001 CAD FILE NAME: 21001SP DRAWN BY: L.M. SHEET 1 OF 3

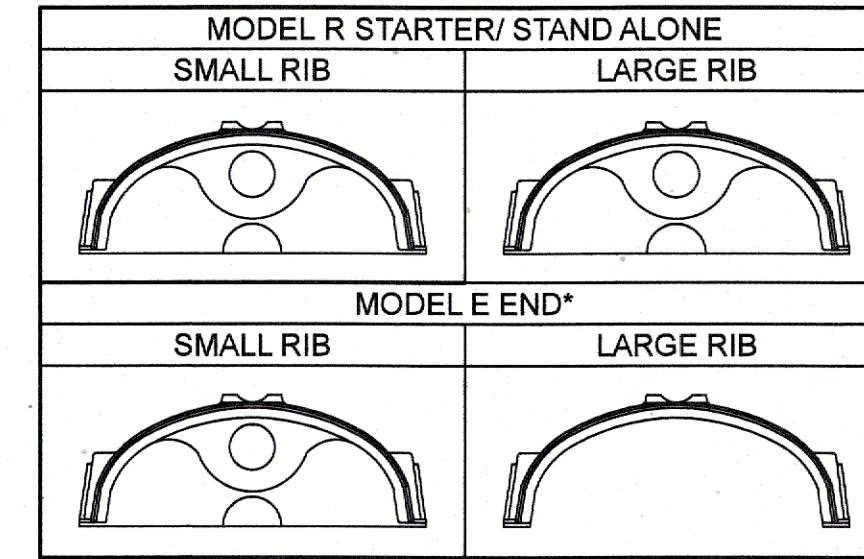
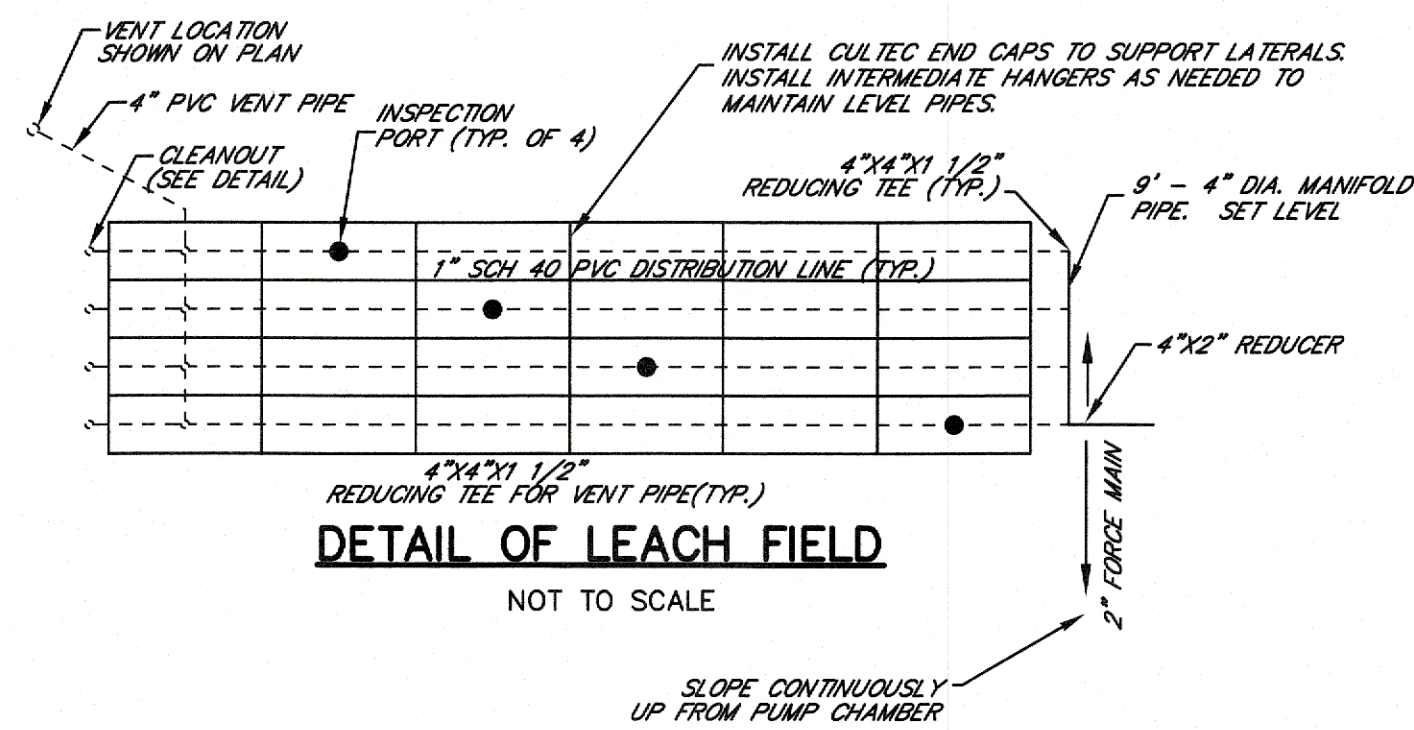
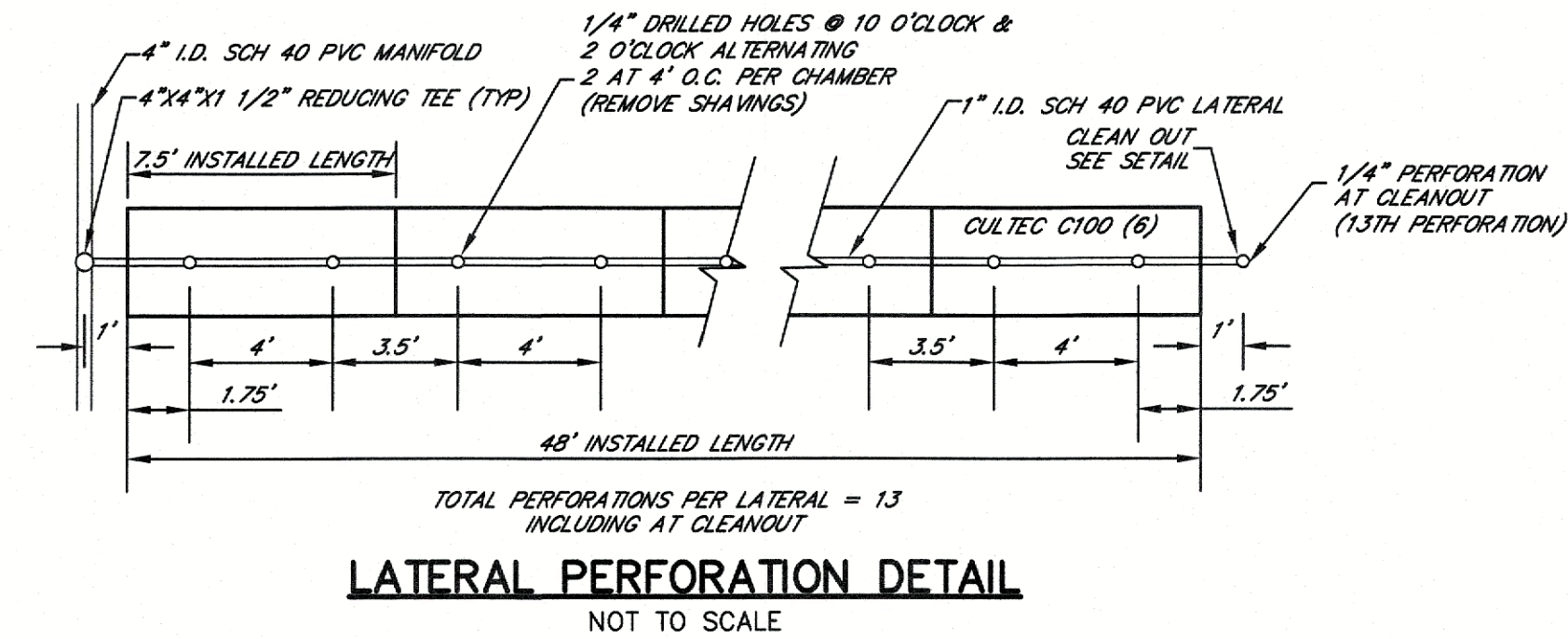
THE CONTRACTOR SHALL LOCATE THE EXISTING WATER SERVICE AND RELOCATE AS NECESSARY TO PROVIDE 10' MINIMUM SEPARATION FROM ALL COMPONENTS OF THE PROPOSED SEPTIC SYSTEM. THE WATER SERVICE SHALL BE SLEEVED IN ALL AREAS WHERE IT IS LESS THAN 10' FROM THE SEPTIC SYSTEM, OR CROSSES A SEPTIC SYSTEM PIPE.



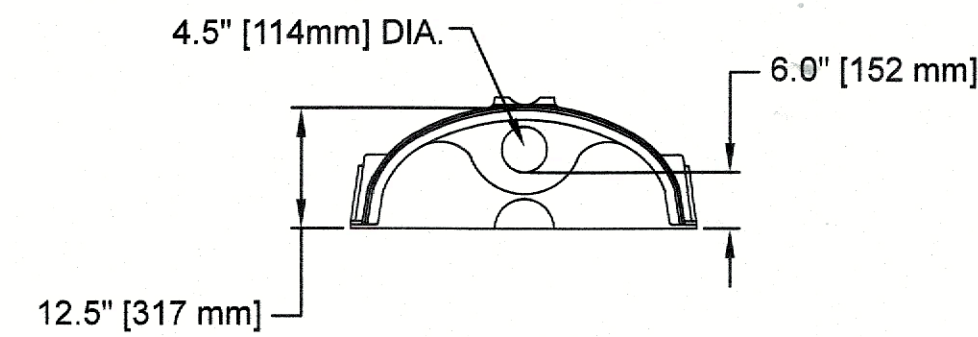
SCALE: 1 INCH = 20 FEET



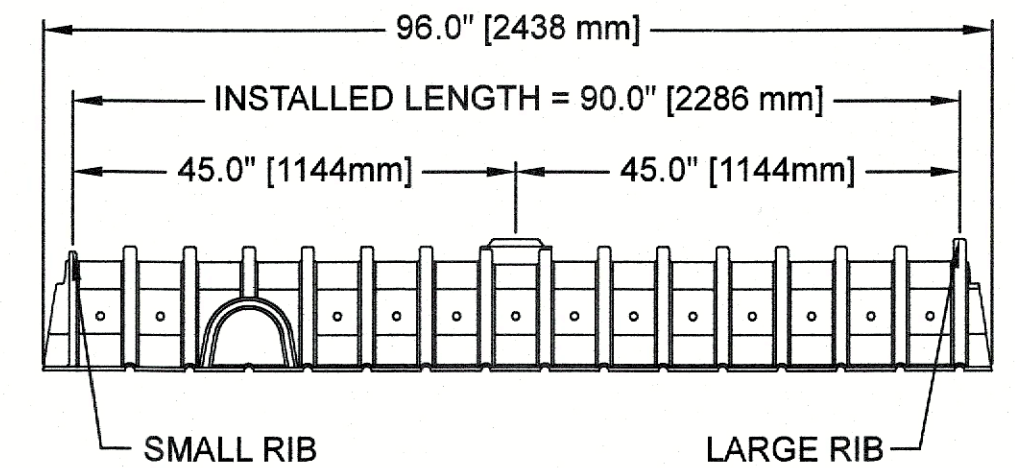
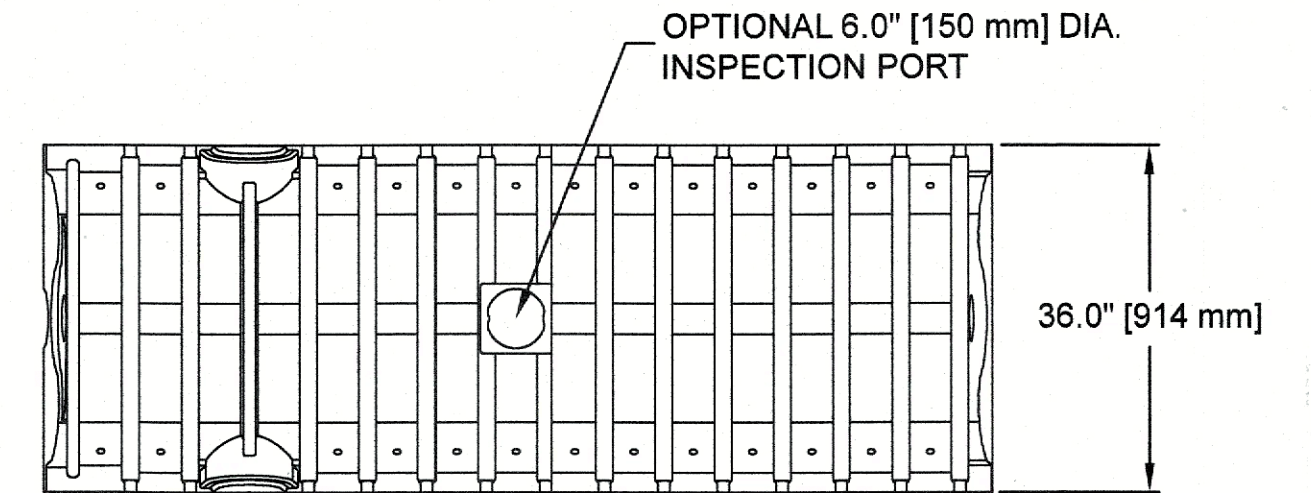
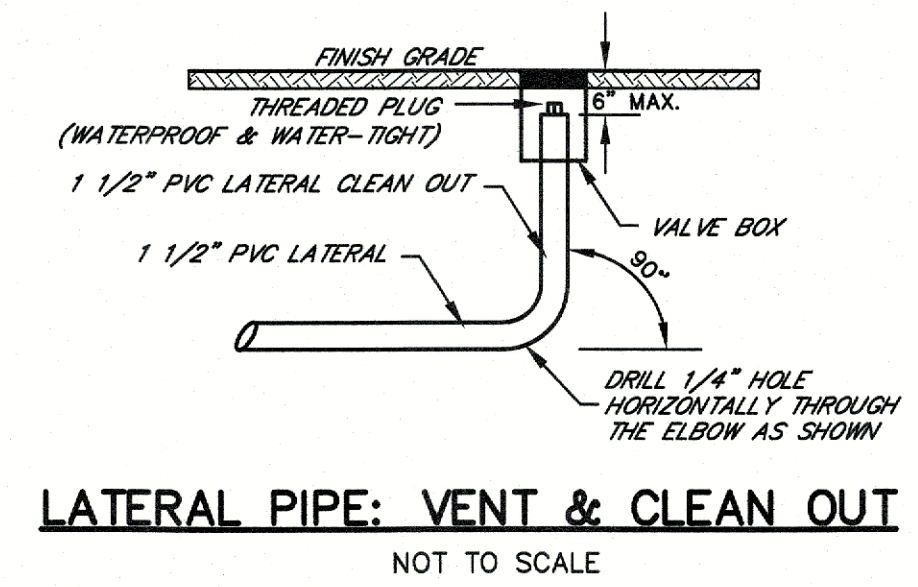
PROFILE
NOT TO SCALE



*MAY ALSO BE USED AS AN INTERMEDIATE UNIT TO EXTEND THE LENGTH OF A RUN.



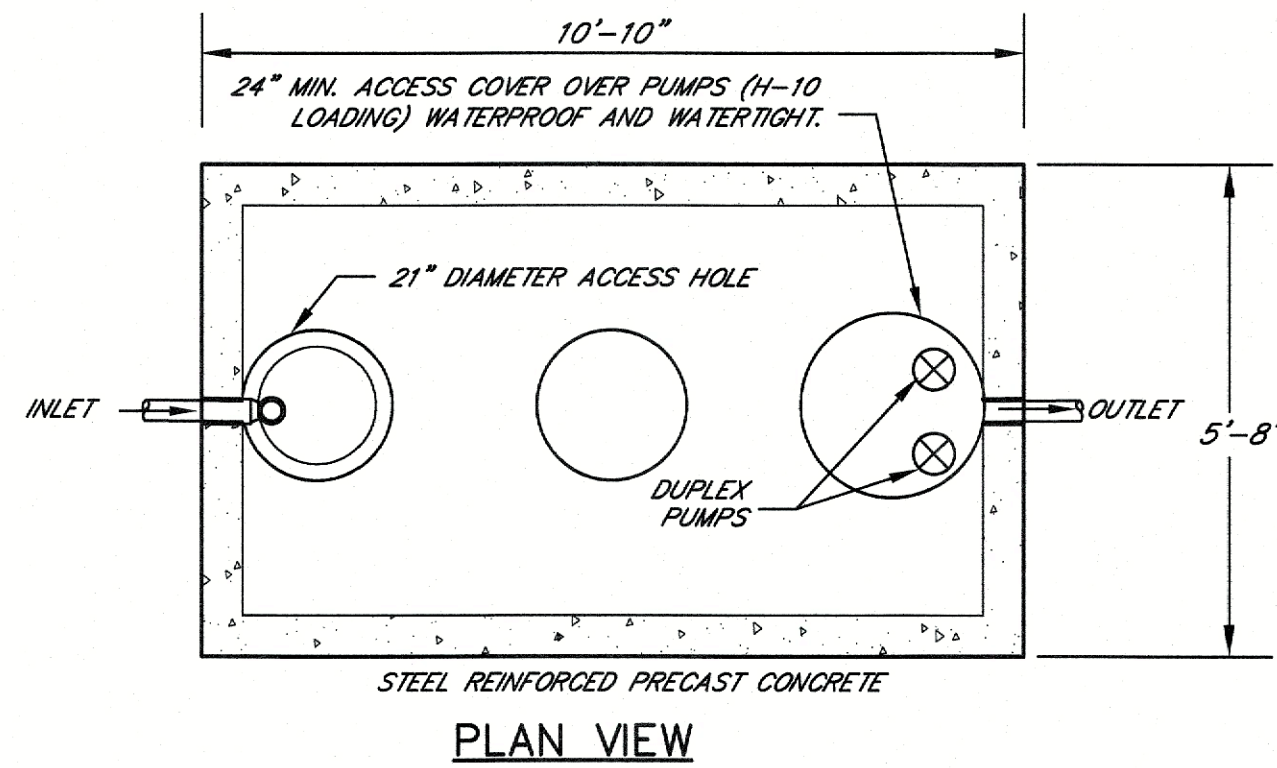
CULTEC C100 CHAMBER DETAILS
NOT TO SCALE



INSTALLED LENGTH ADJUSTMENT = 0.5' [0.15 m]
ALL CONTACTOR 100HD HEAVY DUTY UNITS ARE MARKED WITH A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.

BASIS FOR DESIGN:

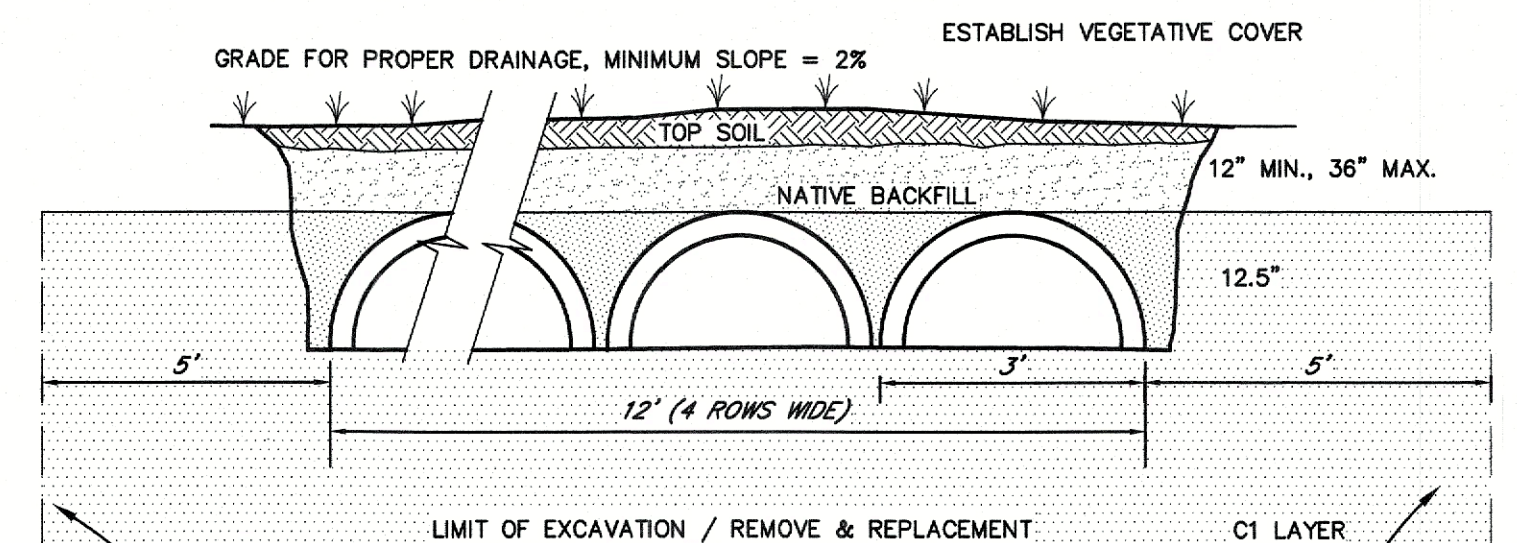
TOTAL DAILY FLOW IS BASED ON 6 BEDROOMS, NO GARBAGE DISPOSAL
TOTAL DAILY FLOW = 110 GPD/BEDROOM X 6 BEDROOMS = 660 GPD
SQUARE FOOT AREA PER LINEAR FOOT OF CULTREC C100 CHAMBERS IN AGGREGATE
FREE BED = 5.0 S.F./L.F. (DEP APPROVAL TRANSMITTAL X260808, DATED MARCH 31, 2016)
TOTAL LINEAR FEET PROVIDED = 4 ROWS AT 48 L.F. PER ROW = 192 L.F.
EQUIVALENT AREA PROVIDED = 5 X 192 = 960 S.F.
SAS CAPACITY = 960 S.F. X .74 GPD/S.F. = 710 GPD > 660 GPD



SOIL TEST

Date of soil test: February 18, 2022
Test taken by: Michael Borselli, P.E.
Percolation rate: < 2 MPI in C layer
Ground water: NONE

TEST HOLE #1		
0"		EL. = 13.5
12"	A LOAMY SAND	EL. = 12.5
42"	B LOAMY SAND	EL. = 10.0
144"	C COARSE SAND	EL. = 1.5

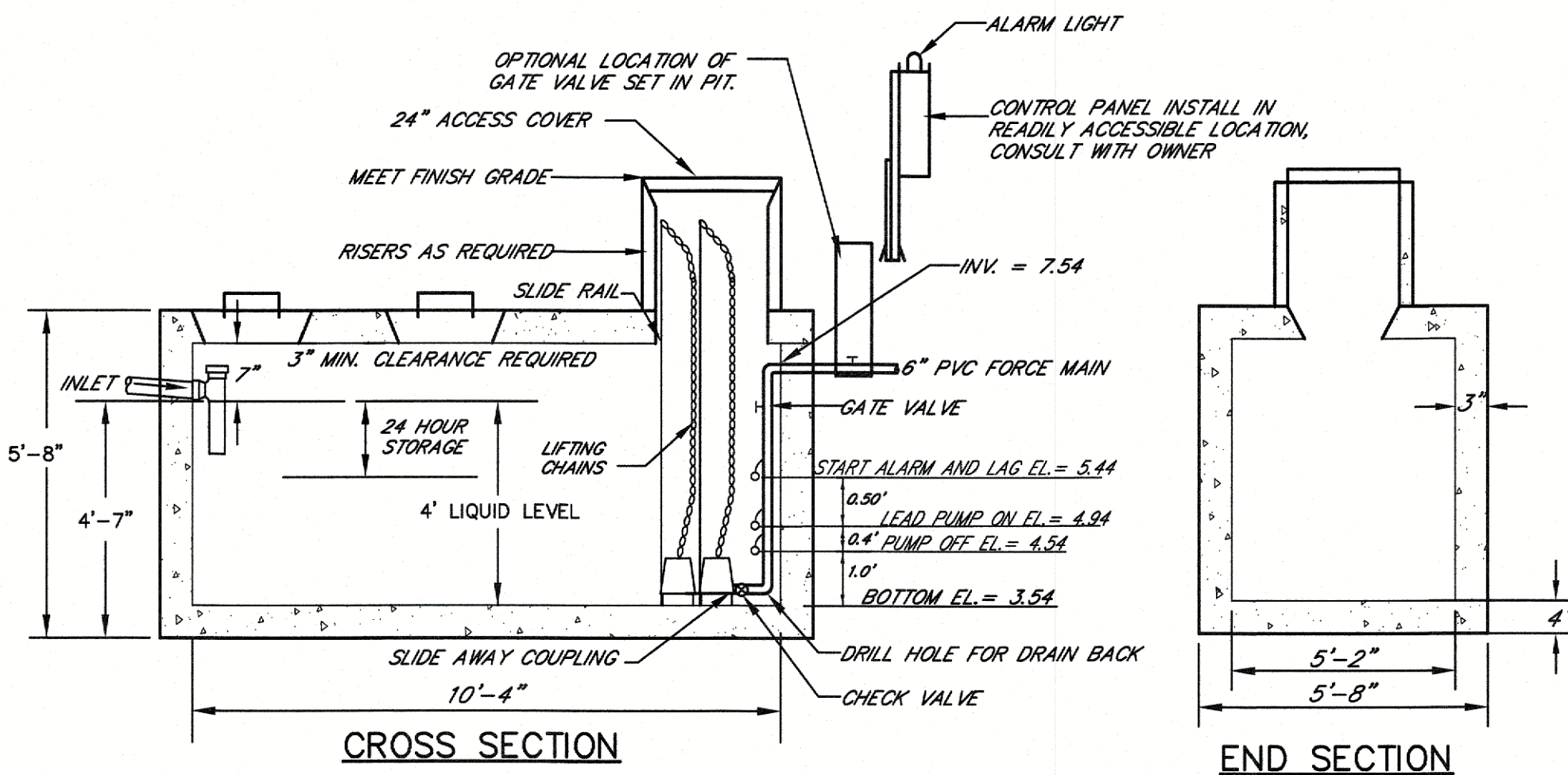


THE CONTRACTOR SHALL EXCAVATE 5' ALL AROUND AND DOWN TO THE C1 LAYER AND REMOVE ALL UNSUITABLE MATERIAL AND REPLACE WITH CLEAN COARSE SAND UP TO THE TOP OF THE SYSTEM. THE REPLACEMENT MATERIAL SHALL CONFORM TO THE SPECIFICATIONS SET FORTH IN 310 CMR 15.255 (3) (TITLE 5)

FIELD SECTION
NOT TO SCALE

CONSTRUCTION NOTES:

1. INSTALLATION OF THE PROPOSED SEPTIC SYSTEM SHALL BE IN ACCORDANCE WITH TITLE 5 AND THE BOARD OF HEALTH REGULATIONS.
2. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF THE WATER SERVICE AND SLEEVE IN ALL AREAS LESS THAN 10' FROM THE PROPOSED SEPTIC SYSTEM.
3. A COPY OF THE PLANS SHALL BE AVAILABLE ON SITE FOR REFERENCE AT ALL TIMES DURING THE INSTALLATION OF THE SEPTIC SYSTEM.
4. NO CHANGES TO THE DESIGN SHALL BE PERFORMED WITHOUT THE APPROVAL OF BOTH FALMOUTH ENGINEERING, INC. AND THE BOARD OF HEALTH.
5. THE SEPTIC SYSTEM IS SUBJECT TO INSPECTION BY FALMOUTH ENGINEERING, INC. AND THE BOARD OF HEALTH.
6. THE CONTRACTOR SHALL NOTIFY FALMOUTH ENGINEERING, INC. AND THE BOARD OF HEALTH TO INSPECT THE SEPTIC SYSTEM PRIOR TO BACKFILL. IN SOME INSTANCES, MORE THAN ONE INSPECTION MAY BE NEEDED. THE CONTRACTOR SHALL ONLY BACKFILL THE PORTIONS OF THE SYSTEM THAT HAVE BEEN INSPECTED AND APPROVED BY FALMOUTH ENGINEERING, INC. AND THE BOARD OF HEALTH.
7. IF THE CONTRACTOR ENCOUNTERS ANY VARIATIONS IN SITE CONDITIONS, SUCH AS DIFFERING SOILS, TOPOGRAPHY, WETLANDS OR OTHER CONDITIONS THAT MAY REQUIRE RE-EVALUATION OF THE DESIGN, THE CONTRACTOR SHALL IMMEDIATELY CONTACT FALMOUTH ENGINEERING, INC.




TYPICAL 1,500 GALLON MONOLITHIC PUMP CHAMBER (H-10)
NOT TO SCALE

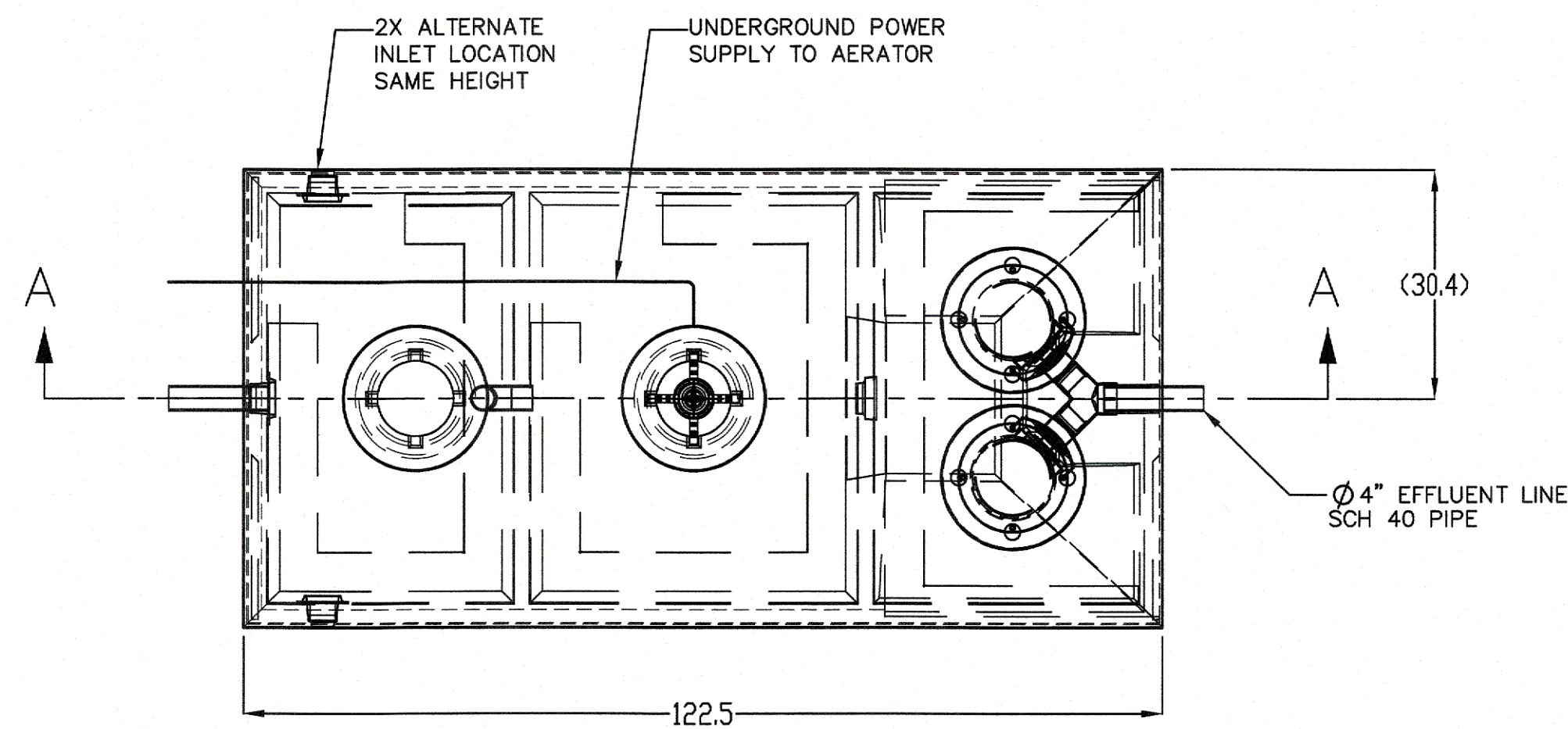
NOTE: PUMP CHAMBER SHALL BE CERTIFIED WATERPROOF AND WATERTIGHT BY MANUFACTURER

PUMP AND PUMP CHAMBER NOTES

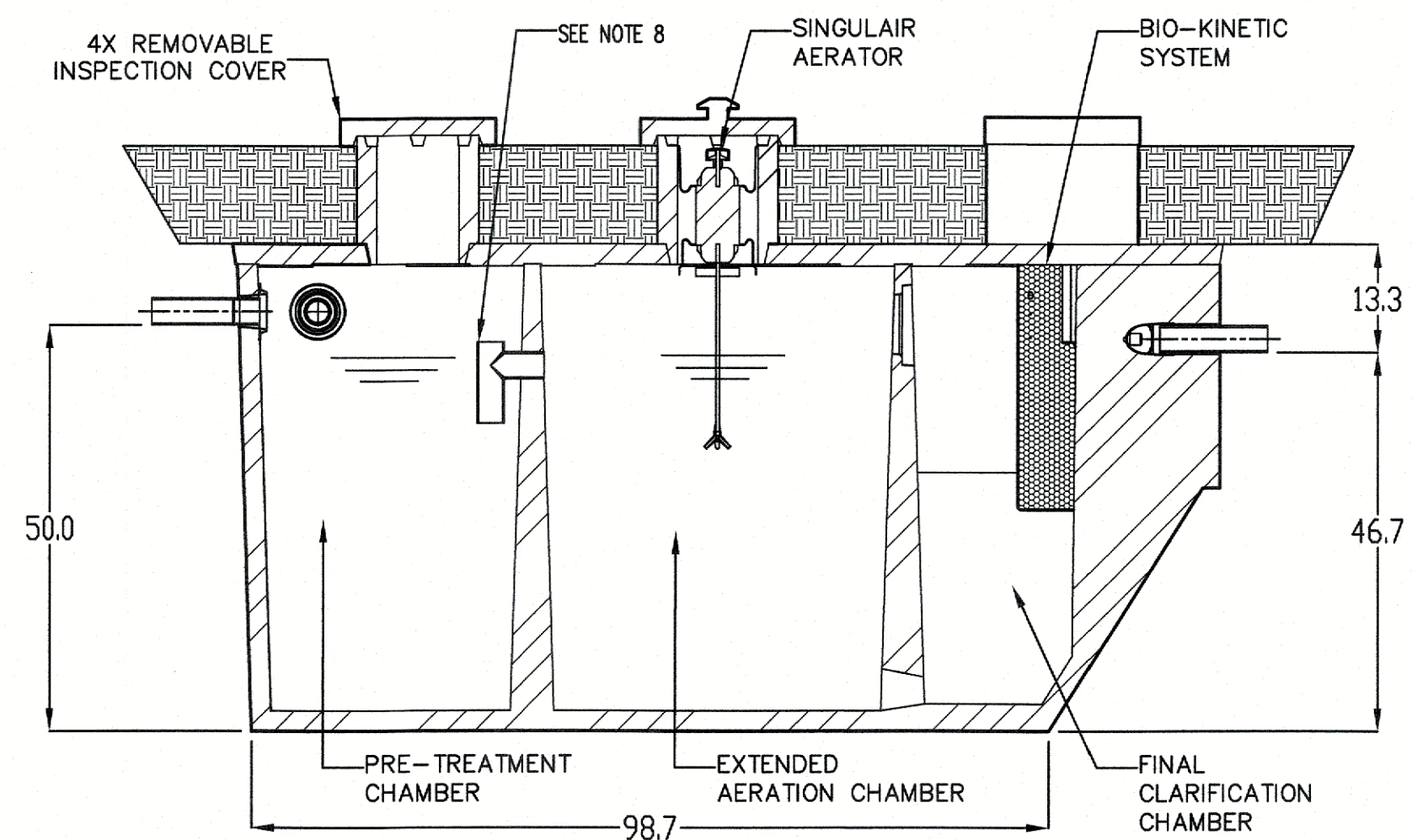
1. PUMPS SHALL BE DUPLEX SYSTEM INSTALLED ON A SLIDERAIL SYSTEM.
2. THE PUMP SYSTEM SHALL BE EQUIPPED WITH A CONTROL PANEL INSTALLED IN A READILY ACCESSIBLE AREA.
3. THERE SHALL BE AN AUDIO/VISUAL ALARM MOUNTED IN AN AREA EASILY VISIBLE FROM THE OUTSIDE OF THE BUILDING.
4. ALL SLIDERAILS AND MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
5. INSTALL PUMP SWITCHES AT THE ELEVATIONS INDICATED.
6. THE COVER SHALL BE WATERPROOF AND WATERTIGHT.
7. PUMPS SHALL BE CAPABLE OF PUMPING AT 72 GPM AGAINST 15' OF TDH.
8. THE CONTRACTOR SHALL PROVIDE PUMP SPECIFICATIONS TO FALMOUTH ENGINEERING, INC.



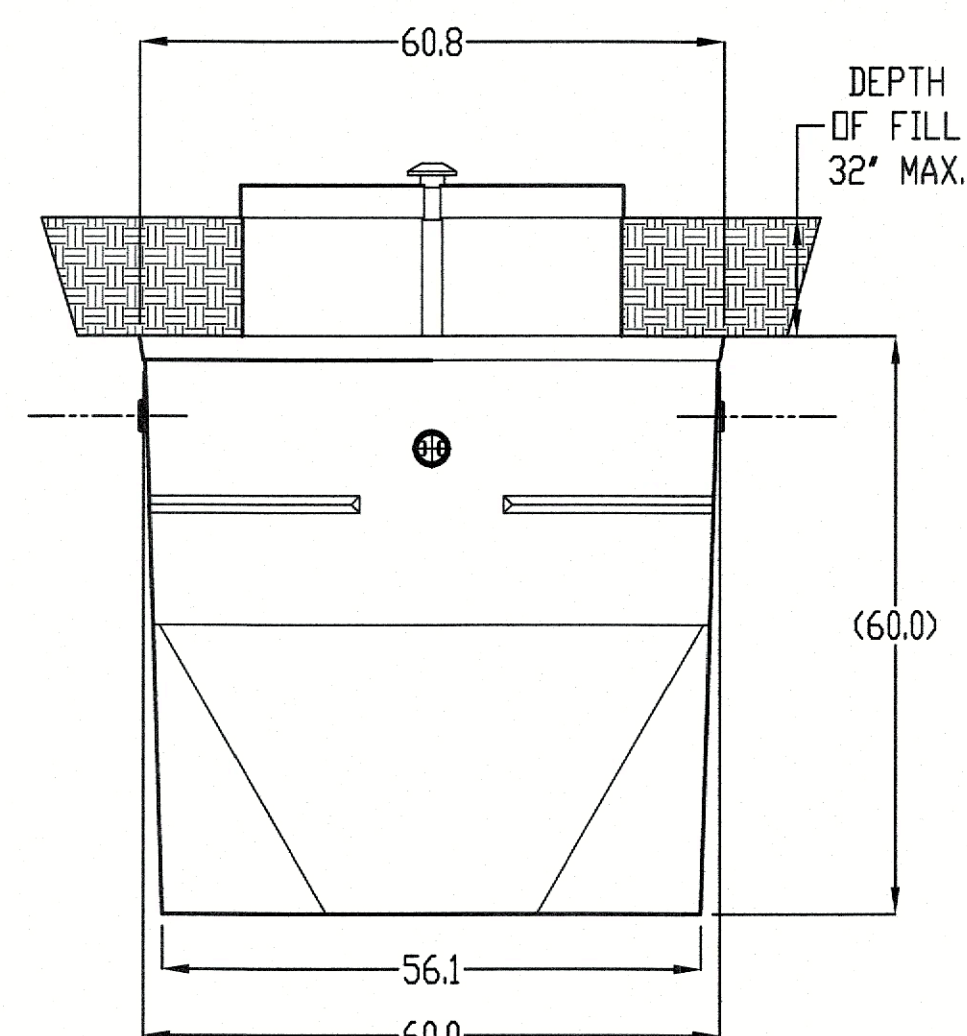
SEPTIC SYSTEM DETAILS FOR #104 ROCKY POINT ROAD PREPARED FOR PATRICK CURRAN IN BOURNE MA			
PLAN DATE: JULY 26, 2022		PLAN SCALE: AS SHOWN	
CIVIL ENGINEERING	WETLANDS PERMITTING		
WASTEWATER DESIGN	COASTAL ENGINEERING		
TITLE 5 PLOT PLANS	PIERS AND DOCKS		
LAND USE PLANNING	COMMERCIAL/RESIDENTIAL		
17 ACADEMY LANE, SUITE 200 - FALMOUTH, MA - 02540 - 508.495.1225			
PROJECT NUMBER: 21001	CAD FILE NAME: 21001.DT	DRAWN BY: L.M.	SHEET 2 OF 3



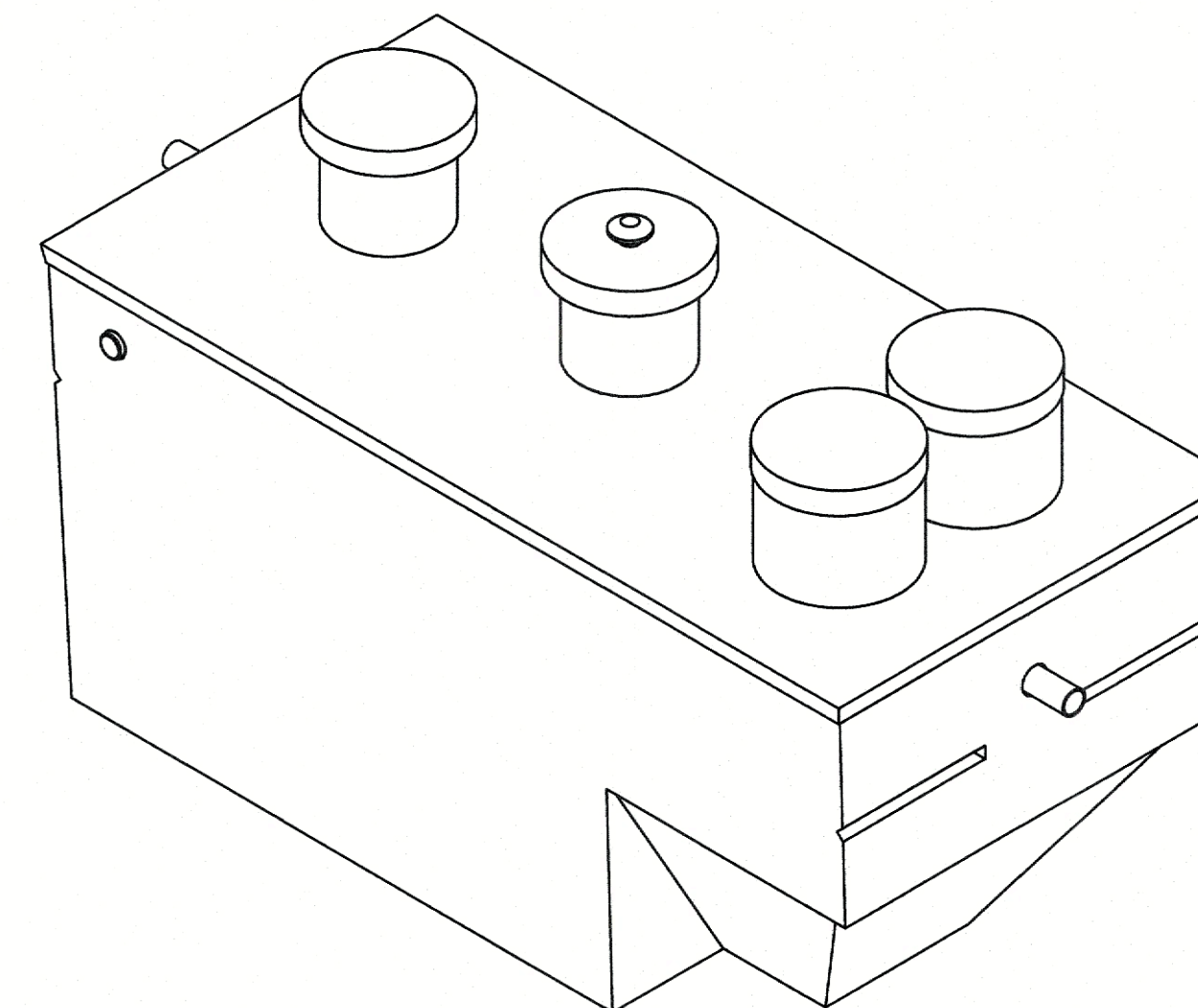
PLAN VIEW



SECTION A-A



OUTLET END VIEW



GENERAL NOTES:

1. THE AUTHORIZED SINGLAIR REPRESENTATIVE IN RI, MA, NH, AND ME IS SES WASTEWATER (WWW.SESWASTEWATER.COM, (888-999-1389). UNITS MUST BE SERVICED BY FACTORY TRAINED SERVICE PERSONNEL.
2. SINGLAIR 750 CONCRETE SYSTEM IS RATED FOR H10 LOADING. PLEASE CONTACT SES FOR H20 LOAD APPLICATIONS.
3. A REVIEW OF PLANS FOR COMPLIANCE WITH SYSTEM REQUIREMENTS IS AVAILABLE BY SES. DESIGNERS ARE ENCOURAGED TO TAKE ADVANTAGE OF THIS SERVICE.
4. ALL RISERS AND COVERS MUST BE TO GRADE AND ACCESSIBLE FOR SERVICE.
5. CONCRETE TANKS MEET ASTM STANDARD SPECIFICATIONS FOR PRECAST CONCRETE SEPTIC TANKS, C-1227-09.
6. FOR DEEPER THAN NORMAL INSTALLATIONS CONTACT SES FOR SUGGESTED DETAILS.
7. FOR CONDITIONS WITH A HIGH WATER TABLE, BOUYANCY CALCULATIONS ARE AVAILABLE FROM SES UPON REQUEST.
8. SANITARY "T" TO BE INSTALLED IN THE FIELD BEFORE SEALING RISERS TO TANK COVER.

WEIGHT:
SINGLAIR = 15,900 LBS
COVER = 2,600 LBS
TANK = 13,300 LBS

SINGLAIR® WASTEWATER TREATMENT SYSTEM DETAILS

NOT TO SCALE

SES WASTEWATER

SINGLAIR 750 GPD
TREATMENT SYSTEM -
STANDARD

SINGLAIR® WASTEWATER TREATMENT SYSTEM DETAILS

FOR #104 ROCKY POINT ROAD

PREPARED FOR

PATRICK CURRAN

IN
BOURNE

MA

PLAN DATE: JULY 26, 2022

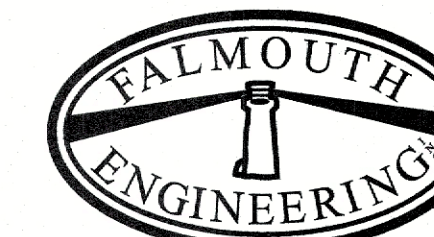
PLAN SCALE: AS SHOWN

CIVIL ENGINEERING

WASTEWATER DESIGN

TITLE 5 PLOT PLANS

LAND USE PLANNING



WETLANDS PERMITTING

COASTAL ENGINEERING

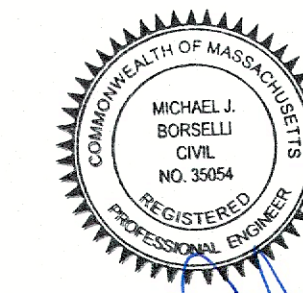
PIERS AND DOCKS

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