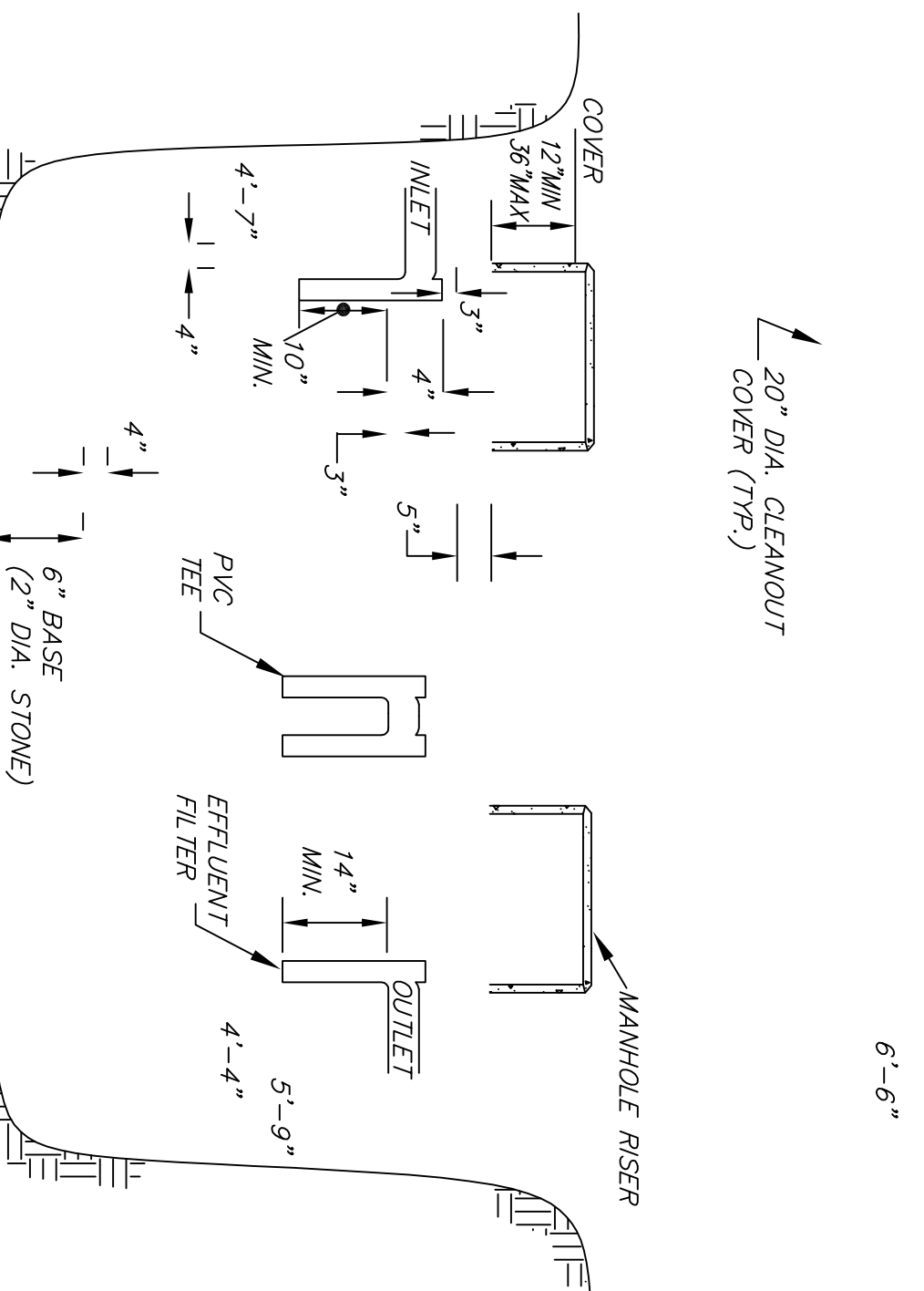
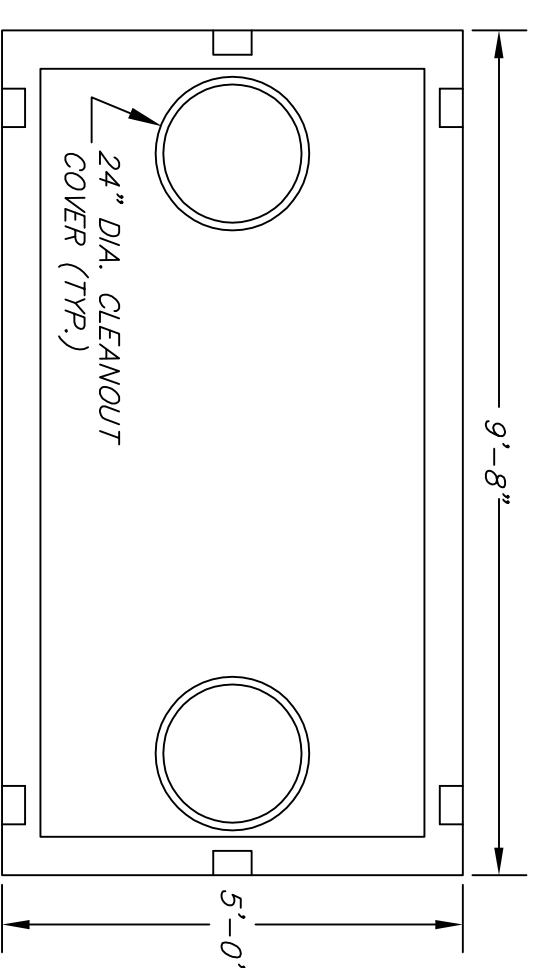


**SEPTIC TANK REQUIREMENTS**

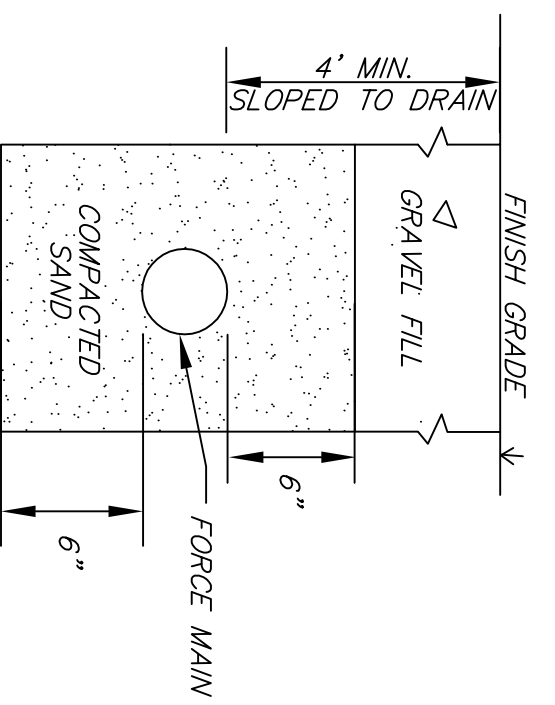
12'-6"

- 1) FIRST COMPARTMENT: 1100 GALLONS
- 2) SECOND COMPARTMENT: 550 GALLONS
- 3) PROVIDED: 2 COMP 2000 GALLON MONOLITHIC SEPTIC TANK



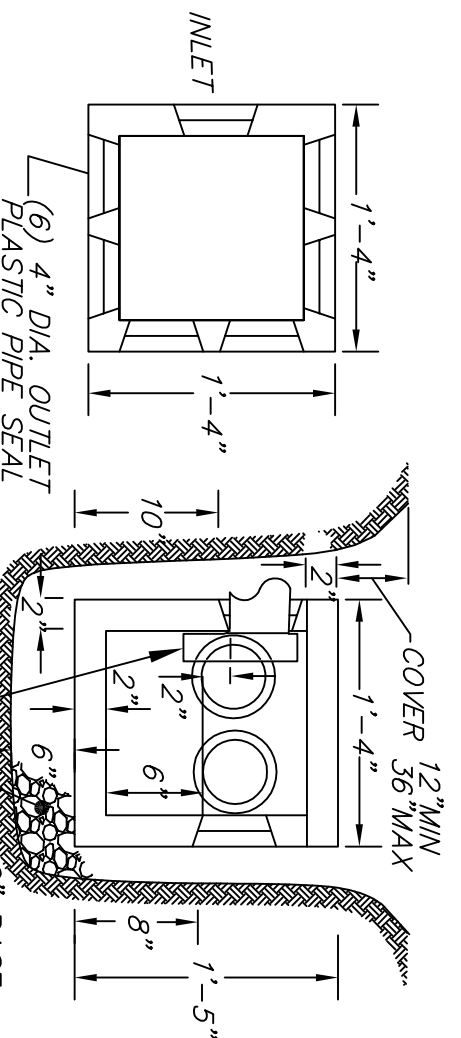
- NOTES:**
- 1) TANK SHALL BE WATER-TIGHT THROUGH MANUFACTURER'S SPECIFICATIONS AND WARRANTY.
  - 2) TANK SHALL BE SET LEVEL AND TRUE TO GRADE ON A LEVEL BASE WHICH HAS BEEN MECHANICALLY COMPACTED.
  - 3) TANK SHALL BE EMBOSSED WITH A SEAL STATING THAT ASTM STANDARD C 1227-93 HAS BEEN MET.
  - 4) THE OUTLET TEE SHALL BE EQUIPPED WITH AN EFFLUENT FILTER.
  - 5) THE INLET & OUTLET COVERS SHALL HAVE A RISER TO FINISH GRADE.
  - 6) SECURE COVERS TO PREVENT UNAUTHORIZED ACCESS.

310 CMR 15.223 - 15.228  
(NOT TO SCALE)



- FORCE MAIN TRENCH**
- 1) TRENCH SHALL BE PLACED IN UNDISTURBED SUBGRADE OR COMPACTED TO 95% PER ASTM D-1557

310 CMR 15.221(6)  
(NOT TO SCALE)

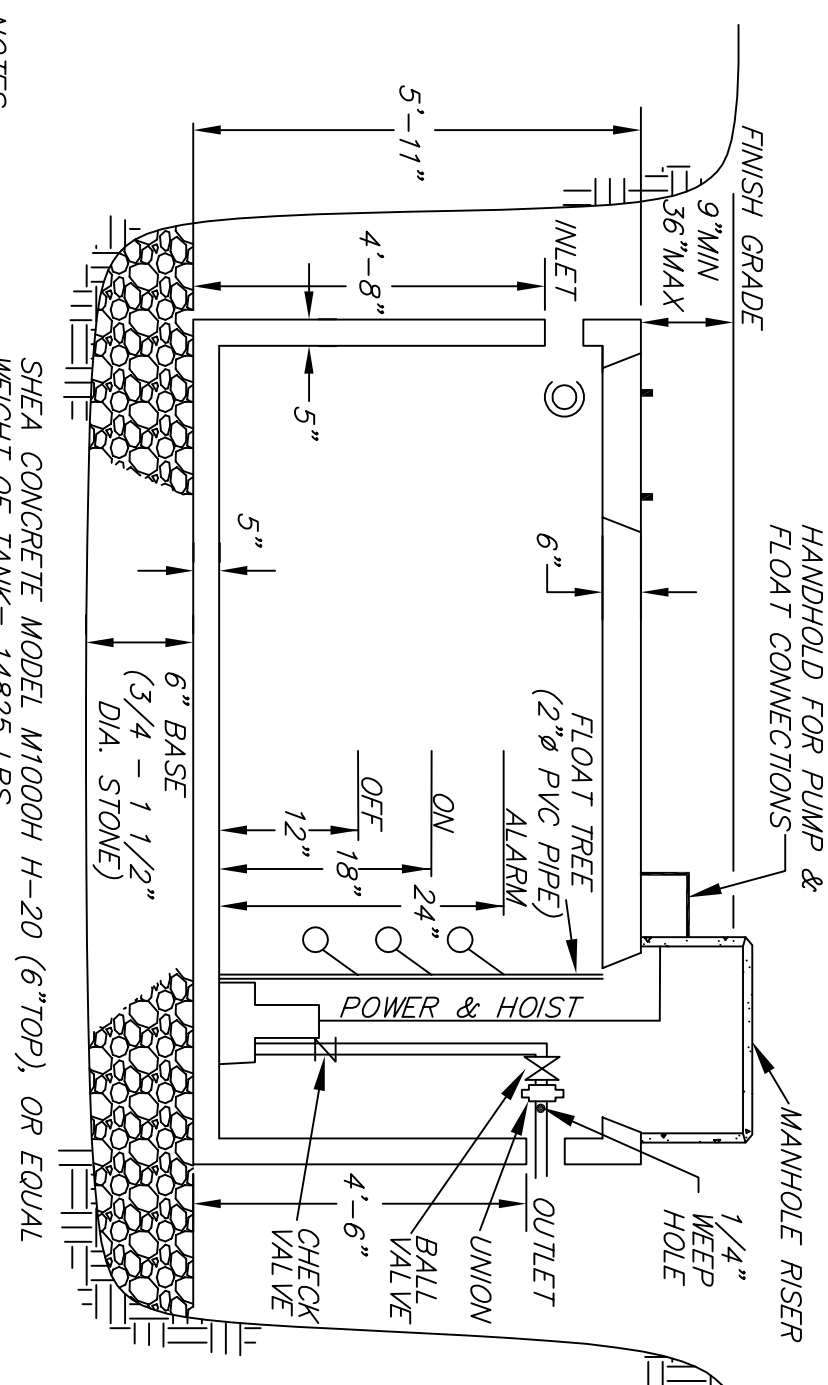


- 1) DBOX SHALL BE WATER-TIGHT THROUGH MANUFACTURER'S SPECIFICATIONS AND WARRANTY.
- 2) SPEED-LIFTERS SHALL NOT BE INSTALLED IN OUTLET PIPES.
- 3) OUTLET PIPES SHALL BE LEVEL FOR THE FIRST TWO FEET (MIN).
- 4) OUTLET PIPES SHALL BE CEMENTED TO DBOX USING HYDRAULIC CEMENT

**DISTRIBUTION BOX (6-OUTLET)**

310 CMR 15.232  
(NOT TO SCALE)

- PUMP ACCESSORIES:**
- MANUFACTURER: LIBERTY PUMPS
  - CONTROL PANEL: LIBERTY SXL24=3
  - ALARM: INCLUDED
  - ALARMS & AUDIBLE: INCLUDED
  - ALARMS: 0.4
  - PHASE: 1
  - FULL AMPS: 12
  - DISCHARGE: 2"



- NOTES:**
- 1) TANK SHALL BE WATER-TIGHT THROUGH MANUFACTURER'S SPECIFICATIONS AND WARRANTY.
  - 2) TANK SHALL BE SET LEVEL AND TRUE TO GRADE ON A LEVEL BASE WHICH HAS BEEN MECHANICALLY COMPACTED.
  - 3) TANK SHALL BE EMBOSSED WITH A SEAL STATING THAT ASTM STANDARD C 1227-93 HAS BEEN MET.
  - 4) PUMP SHALL BE ON A SEPARATE CIRCUIT FROM ALARM.
  - 5) ALARM AND PUMP CONTROLS SHALL BE ACCESSIBLE TO LIVING UNIT.
  - 6) PUMP AND FLOAT CONNECTIONS SHALL BE PLACED IN A HANDHOLD ADJACENT TO THE OUTLET MANHOLE RISER.
  - 7) MANHOLE RISERS REQUIRED: TO-GRADE FOR OUTLET.
  - 8) SECURE COVERS AT-GRADE TO PREVENT UNAUTHORIZED ACCESS.

**1000 GALLON MONOLITHIC PUMP CHAMBER**

310 CMR 15.231  
(NOT TO SCALE)

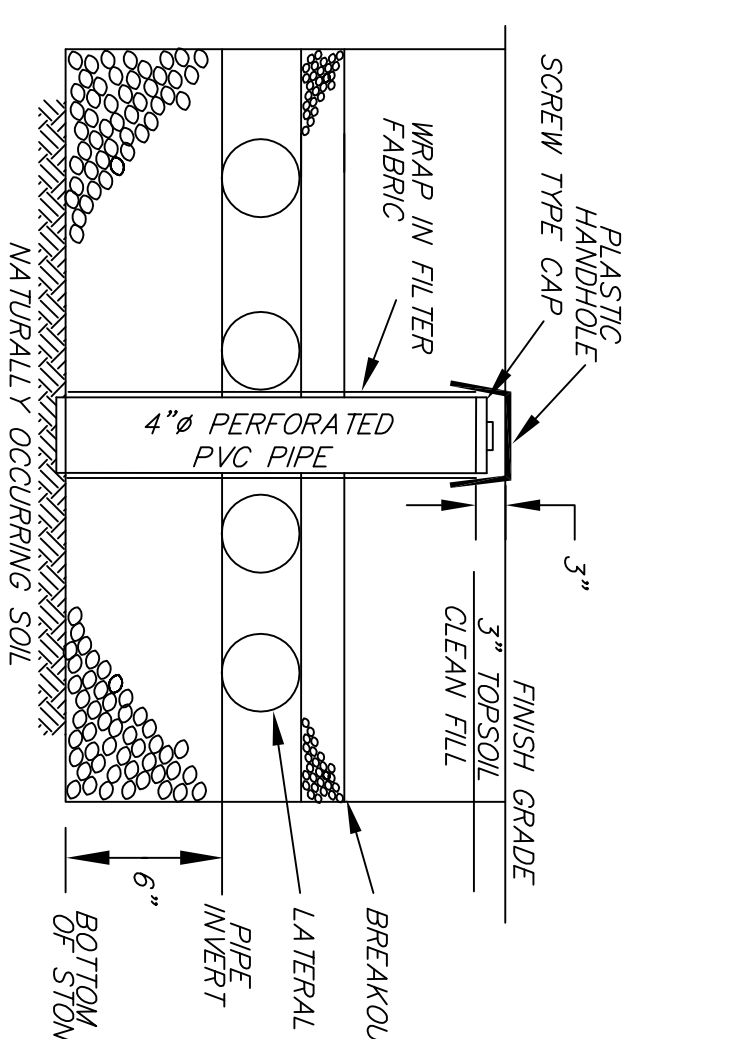
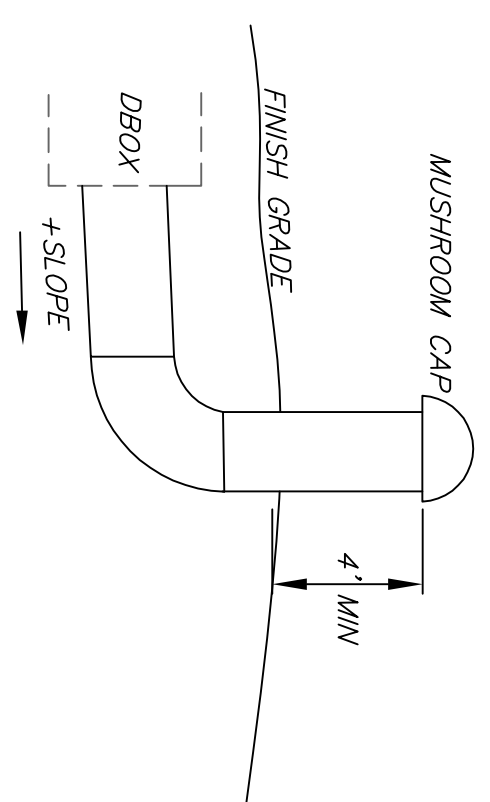
**BUOYANCY CALCULATIONS:**

	2000 GALLON SEPTIC TANK	1000 GALLON MONOLITHIC 2-COMPARTMENT TANK
FINISH GRADE	106.00	107.00
MANHOLE GRADE	106.00	107.00
ESHOW	103.20	103.20
INLET INVERT	104.00	103.71
TOP	105.17	104.96
BOTTOM	99.42	99.04
BALLAST WEIGHT	0	0
WEIGHT OF SOILS	6845	6441
WEIGHT OF TANK	1985	1453
WEIGHT OF DISPLACED WATER	1918	1251
<b>NET FORCES**</b>	6830	11715
<b>FACTOR OF SAFETY:</b>	1.38	1.93

- 1) VENT SHALL BE SAME SIZE AS LEACH LINES
- 2) VENT PIPE SHALL HAVE A CHARCOAL FILTER.
- 3) VENT SHALL BE SCH-40 PVC PIPE
- 4) OWNER SHALL BE CONSULTED REGARDING PLACEMENT OF VENT.

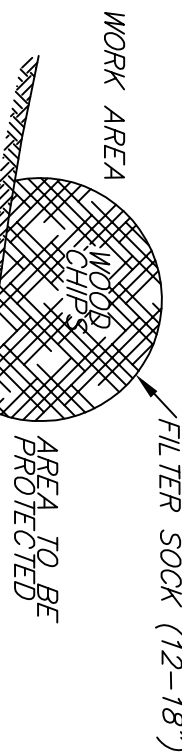
**VENT**

310 CMR 15.241  
(NOT TO SCALE)



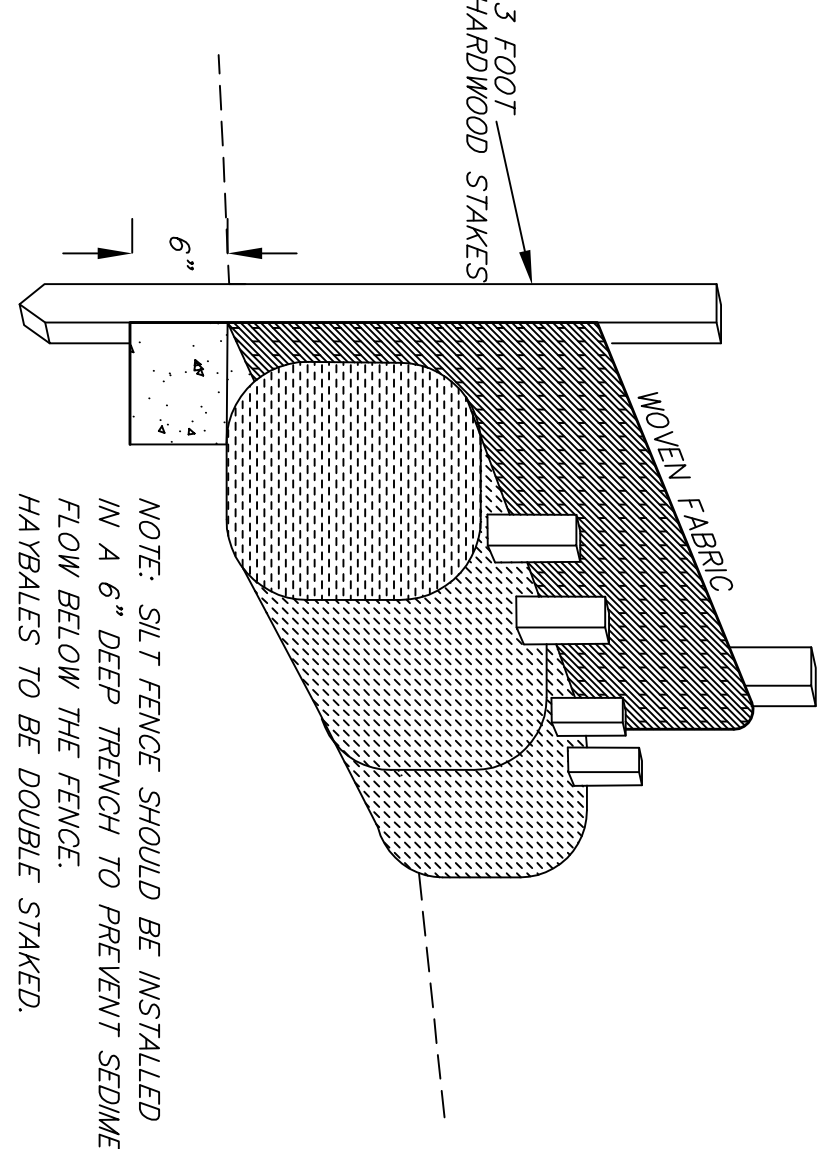
**INSPECTION PORT**

310 CMR 15.240(13)  
(NOT TO SCALE)



**SILTATION BARRIER**

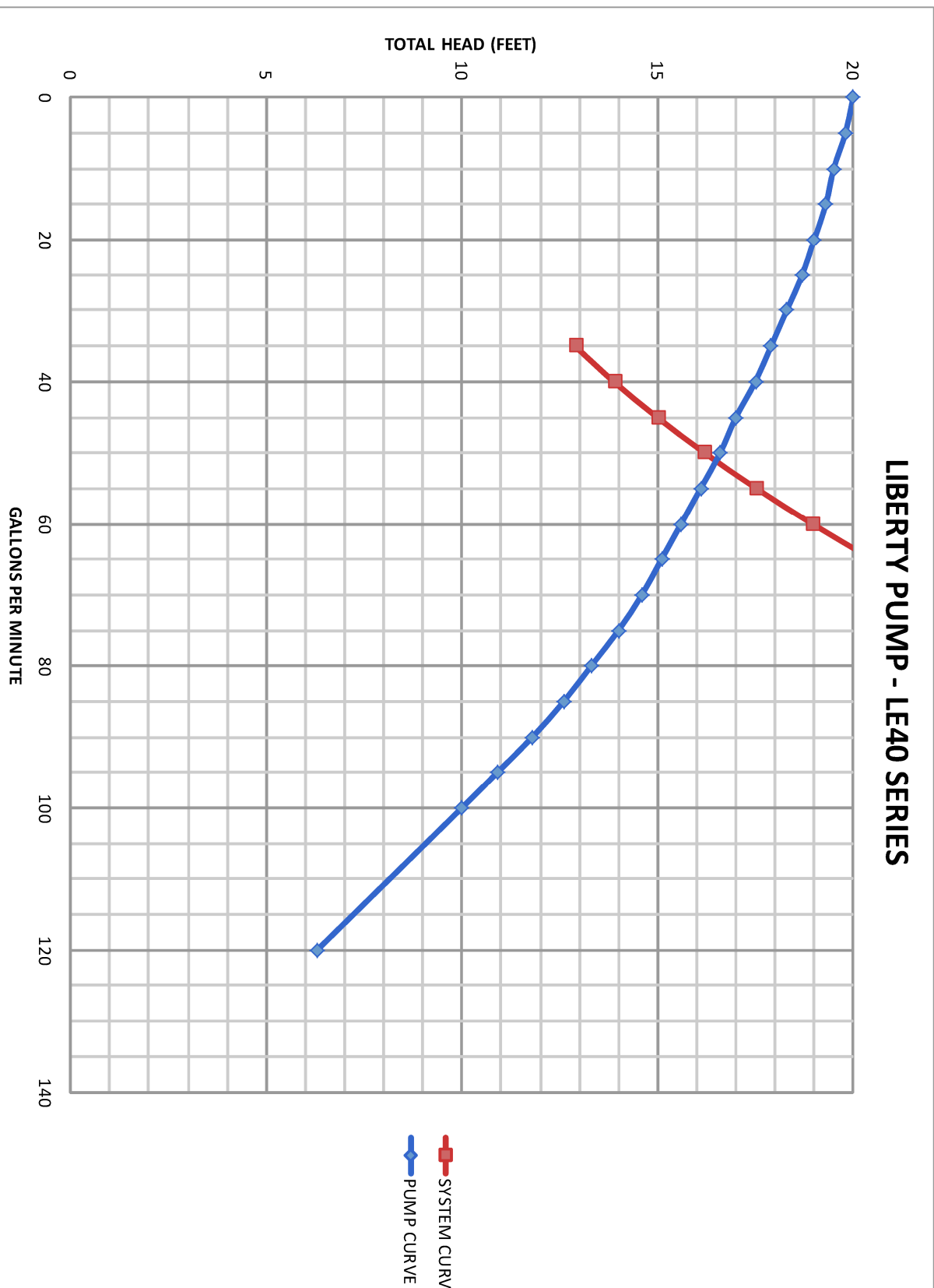
(NOT TO SCALE)



**HAYBALE/SILT FENCE DETAIL**

(NOT TO SCALE)

- NOTES:**
1. THIS PLAN IS INTENDED ONLY FOR THE CONSTRUCTION OF A SEPTIC SYSTEM TO SERVE THE SITE. NO OTHER USE OF THIS PLAN IS AUTHORIZED. PROPERTY LINES SHOWN HERE-ON ARE APPROXIMATE AND INTENDED ONLY TO SHOW THAT MINIMUM SETBACKS HAVE BEEN MET. NO BOUNDARY SURVEY WAS PERFORMED IN PREPARATION OF THIS PLAN.
  2. CONTRACTOR SHALL NOTIFY DISGAS AT 1-888-DIG-SAFE (888-231-7233) AT LEAST 72 HOURS PRIOR TO CONSTRUCTION.
  3. CONTRACTOR SHALL MAKE THEMSELVES AWARE OF ALL CONSTRUCTION REQUIREMENTS ASSOCIATED WITH THE JOB.
  4. ANY AND ALL REVISIONS TO THE APPROVED PLAN SHALL BE APPROVED BY THE DESIGN ENGINEER AND THE APPROPRIATE TOWN REPRESENTATIVE.
  5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROJECT WITH RESPECT TO SAFETY METHODS. CONSTRUCTION METHODS AND SUPERVISION OF WORKERS FOR THE PROJECT AND SHALL BE A LICENSED SEPTIC INSTALLER IN THE TOWN IN WHICH THE SEPTIC SYSTEM IS BEING INSTALLED.
  6. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF BENCHMARKS PRIOR TO CONSTRUCTION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES IN THE BENCHMARK ELEVATIONS.
  7. CONTRACTOR SHALL CONFIRM THAT THE DESIGN PLAN DETAILS ARE CONSISTENT WITH THE CURRENT MANUFACTURER'S SPECIFICATIONS.
  8. APPROVAL OF THE SEPTIC DESIGN, ISSUANCE OF A DISPOSAL SYSTEM CONSTRUCTION PERMIT AND SEPTIC SYSTEM WITH THE FUNCTION SATISFACTORILY.
  9. SEPTIC SYSTEM WITH 310CMR15.214- NITROGEN LOADING LIMITATIONS.
  10. BACKWASH FROM A WATER SOFTENER SHALL NOT BE DISCHARGED INTO A SEPTIC SYSTEM.
  11. ALL WORK SHALL COMPLY WITH 310CMR15.000 AND LOCAL BOARD OF HEALTH REGULATION, UNLESS VARIANCES/WAIVERS HAVE BEEN APPROVED.
  12. ALL WORK OUTSIDE OF THE BUILDING THAT IS LESS THAN 10 FEET FROM THE OUTSIDE FACE OF THE BUILDING SHALL CONFORM TO 240B02.02. THE STATE PLUMBING CODE.
  13. ALL WORK SHALL COMPLY WITH 310CMR15.000 AND LOCAL BOARD OF HEALTH REGULATION, UNLESS VARIANCES/WAIVERS HAVE BEEN APPROVED.
  14. THE EXISTING WELL IS TO BE RELOCATED THERE ARE NO OTHER KNOWN WELLS WITHIN 100 FEET OF THE SOIL ABSORPTION SYSTEM OR WITHIN 50 FEET OF ANY SEPTIC COMPONENTS.
  15. THERE ARE NO KNOWN WELLS WITHIN 100 FEET OF THE SOIL ABSORPTION SYSTEM OR WITHIN 50 FEET OF ANY SEPTIC COMPONENTS.
  16. ALL SEPTIC COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE METHOD AS APPROVED BY THE DESIGN ENGINEER.
  17. SITE COMPLETS WITH 310CMR15.214- NITROGEN LOADING LIMITATIONS.
  18. FILL MATERIAL FOR SYSTEMS CONSTRUCTED IN FILL SHALL CONSIST OF ASTM C-33 SAND ACCORDING TO 310CMR15.259(3).
  19. CONTRACTOR SHALL REMOVE A & B SOIL HORIZON(S) AND OTHER DELETERIOUS MATERIAL WITHIN 5 FT OF SOIL ABSORPTION SYSTEM AND REPLACE WITH ASTM C-33 SAND UP TO BREAKOUT ELEVATION.
  20. COMPONENTS SHALL NOT BE BROADCASTED WITHOUT INSPECTION BY THE BOARD OF HEALTH AND 21' VEHICULAR TRAFFIC PARKING OF VEHICLES, STOCKPILING OF MATERIALS AND STORAGE OF EQUIPMENT OVER LEACHING AREA IS PROHIBITED.
  22. THERE ARE FRESHWATER WELLS WITHIN 100 FEET OF THE SEPTIC SYSTEM. THIS PLAN SHALL ACCOMPANY A NOTICE OF INTENT FILED WITH THE LOCAL CONSERVATION COMMISSION AND THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION.
  23. CONTRACTOR SHALL BE NOTIFIED BY SEPTIC TANK MANUFACTURER TO THE BUILDING OWNER AS TO THE LOCATION OF THE SEPTIC TANK. THE SEPTIC TANK SHALL BE CONNECTED TO THE BUILDING SEWER AS SHOWN, WITH A MINIMUM 2% SLOPE. IF NOT, CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.
  25. THE EXISTING SEPTIC SYSTEM SHALL BE EITHER CRUSHED AND FILLED WITH CLEAN FILL, OR REMOVED, AS PER 310CMR15.00.



**SITE PLAN**

**TO ACCOMPANY A NOTICE OF INTENT**

15 LANTERN LANE  
BOXFORD, MA

**REGISTRY INFORMATION:**

DEED:  
BOOK NO.: 38101  
PAGE NO.: 533

**ASSESSORS INFORMATION:**

MAP: 28  
BLOCK: 02  
LOT: 06

**PREPARED FOR:**

HOLLY BALDASSARE  
3 WILDWOOD ROAD  
DANVERS, MA

**SCANLAN ENGINEERING LLC**  
FO BOX 906-GEORGETOWN, MA 01833  
PHONE: (978) 372-3440  
FAX: (978) 891-3888  
EMAIL: info@scanlanengineering.com  
WEB: www.scanlanengineering.com

#	BY	DATE	REVISIONS TO PLANS
1	JBS	4/30/20	SITE WALK REVISIONS
2	JBS	7/20/20	ADD DRIVEWAY, WALLS & INSTALLATION MEMPHIS

**DETAILS & NOTES**

DATE	BY	DATE
DESIGN BY:	JBS	MARCH 29, 2020
DRAWN BY:	JBS	

SHEET 2 OF 2  
SCALE: 1" = 20'  
PROJECT # 1005