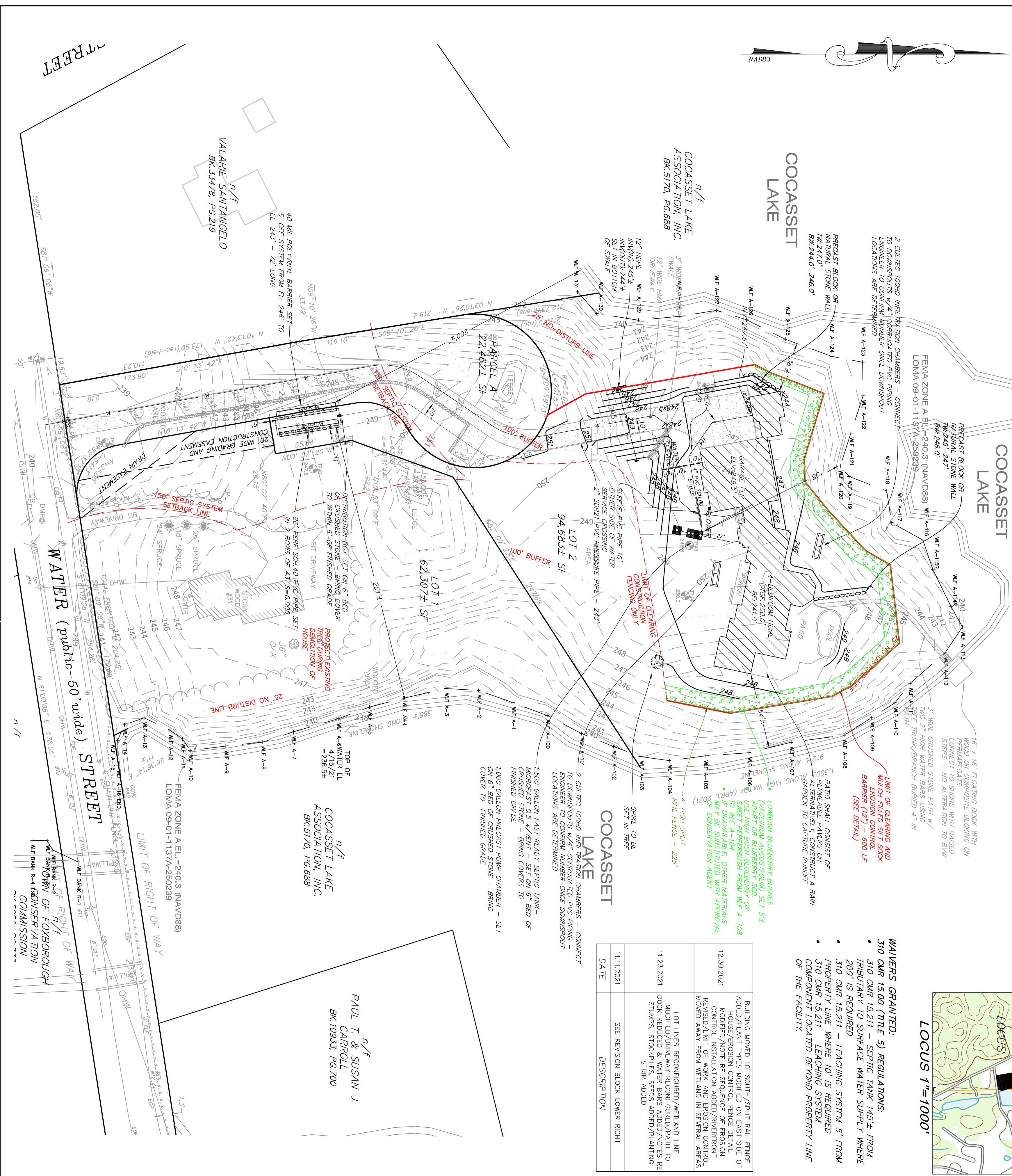
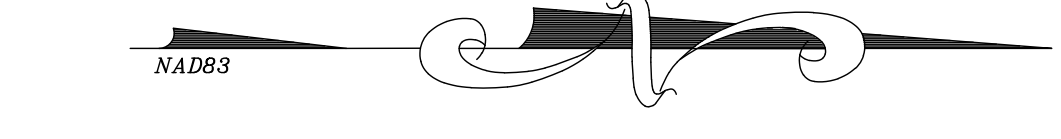
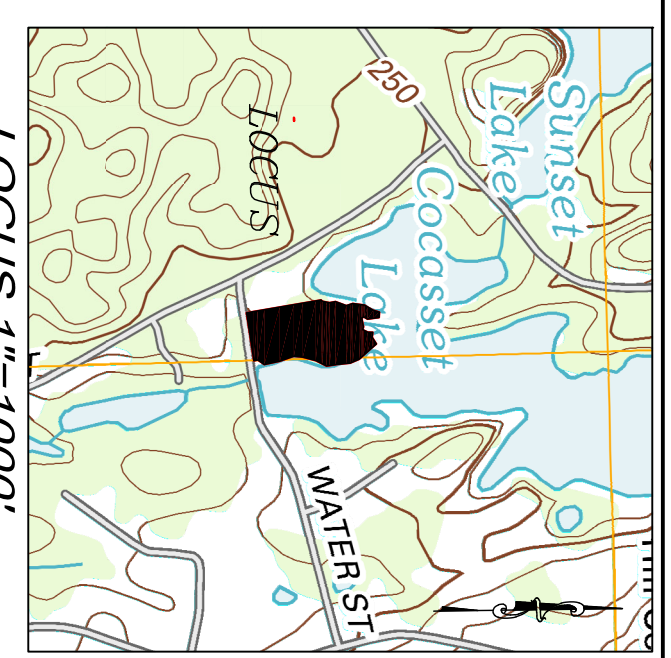
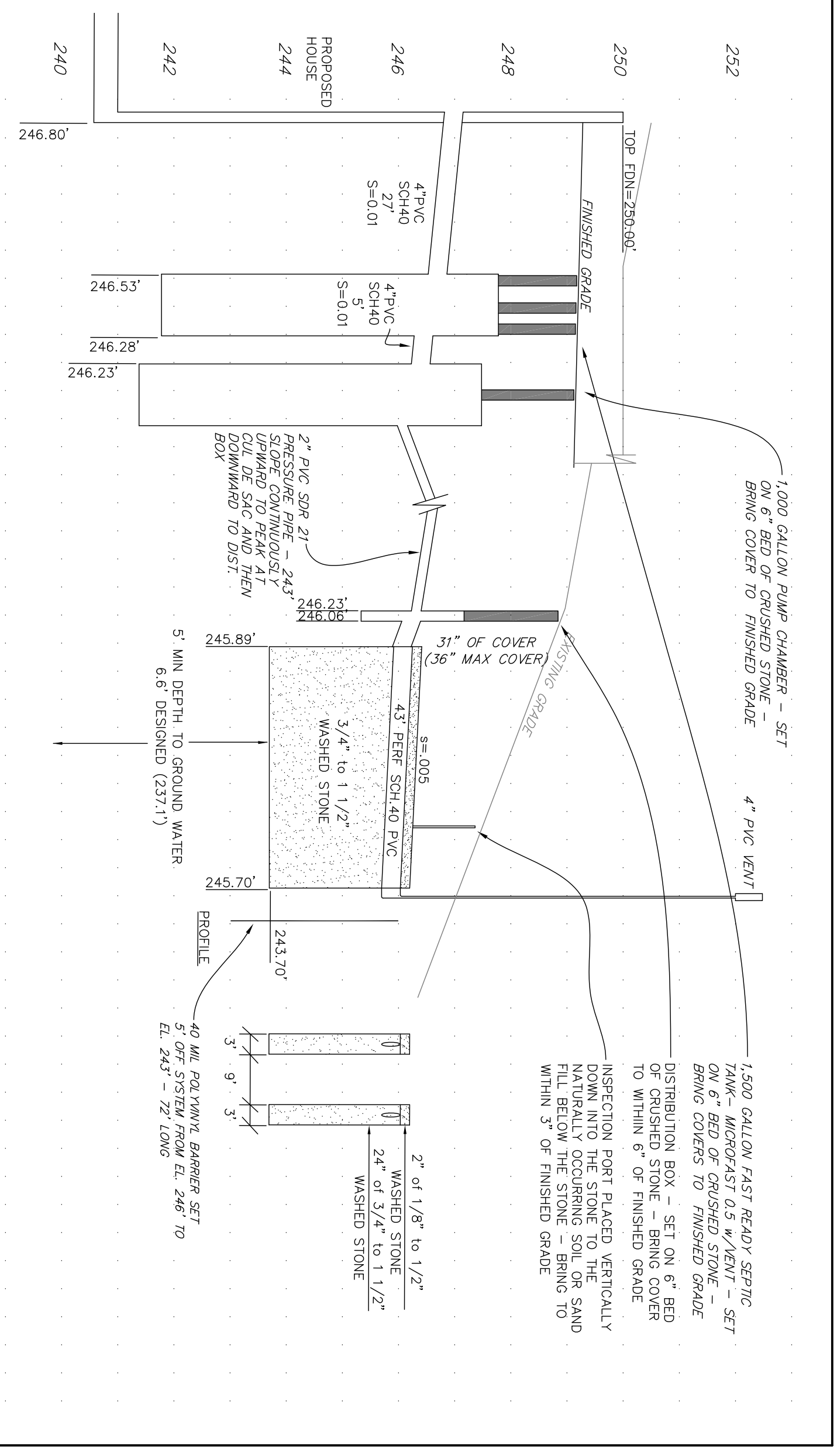


- NOTES:**
- AREAS NORTH, EAST AND WEST OF THE HOUSE SHALL HAVE "ORIGINAL JONATHAN GREEN BLACK BEAUTY" SEED MIX ON 6" OF LOAM. AREA IN FRONT OF THE HOME SHALL BE STANBORD 6" LOAM AND SEED.
  - STUMPS WITHIN 50' OF WETLANDS SHALL BE GROUND AND NOT PULLED.
  - NO STUMPS SHALL BE BURIED ON THE SITE.
  - ALL MATERIAL STOCKPILES SHALL BE OUTSIDE OF THE 100' BUFFER ZONE.
  - ORANGE CONSTRUCTION FENCING SHALL BE INSTALLED PRIOR TO CLEARING. SILT SOCKS SHALL BE INSTALLED AFTER CLEARING AND BEFORE GRUBBING.



DATE	DESCRIPTION
11.11.2021	SEE REVISION BLOCK LOWER RIGHT
12.30.2021	LOT LINES RECONFIGURED/WETLAND LINE MODIFIED/DRAINAGE RECONFIGURED/PATH TO DRINK WATER TANKS ADDED/PAVING STUMPS, STONE, SLOPE ADDED/PAVING STRIP ADDED
11.23.2021	BUILDING MOVED 10' SOUTH/SPLIT RAIL FENCE ADDED/PLANT TYPES MODIFIED ON EAST SIDE OF HOUSE/EROSION CONTROL FENCE DETAIL COMPLETED/REVISIONS ADDED/PERMIT REVISION/LIMIT OF WORK AND EROSION CONTROL MOVED AWAY FROM WETLAND IN SEVERAL AREAS

- WAINERS GRANTED:**
- 310 CUR 15.00 (TITLE 5) REGULATIONS.
  - 310 CUR 15.211 SEPTIC TANK 145.7' FROM TROUGHARY TO SURFACE WATER SUPPLY WHERE 200' IS REQUIRED.
  - 310 CUR 15.211 - LEACHING SYSTEM 5' FROM PROPERTY LINE WHERE 10' IS REQUIRED.
  - 310 CUR 15.211 - LEACHING SYSTEM COMPONENT LOCATED BEYOND PROPERTY LINE OF THE FACILITY.



**DESIGN DATA:**

1. ESTIMATED HYDRAULIC LOADING = **4** BEDROOMS AT 110 GPD/BEDROOM = **440** G.P.D.

2. SEPTIC TANK SIZE: AVERAGE DAILY FLOW = **440** x 200% = **880** GALLONS

3. DESIGN PERCOLATION RATE = **0.24** M.P.D. (90.0) G.P.D./S' SOIL CLASS = **1**

4. LEACHING AREA: SIDEWALL = **344** SF x **0.24** GAL/SF = **255** G.P.D. BOTTOM = **288** SF x **0.24** GAL/SF = **191** G.P.D.

5. REQUIRED HYDRAULIC LOADING = **440** GAL/DAY

SOIL TEST DATA	TEST PIT #1	TEST PIT #2	TEST PIT #3	PERCOLATION TESTS
DATE	8/11/2021	8/11/2021	11/8/2021	TEST PIT NO. 2
DATE	8/11/2021	8/11/2021	11/8/2021	TEST PIT NO. 7
10" (244.1)	A. S.L.: 10M93/2	6" (248.8)	A. S.L.: 10M93/2	DEPTH OF PERC START PRESSURE
30" (246.4)	B. S.L.: 10M93/6	24" (247.4)	B. S.L.: 10M93/6	END PRESSURE
120" (237.1)	C. SAND, 2.5% S&G, GRAVELLY COBBLE X, COARSE STONES, COARSE	120" (238.4)	C. SAND, 2.5% S&G, GRAVELLY, MANY STONES, SOME Boulders	TIME @ 12"
	NO WATER OR MOTTLING		NO WATER OR MOTTLING	TIME @ 6"
				TIME @ 3"
				CALC. RATE
				DESIGN RATE

**GENERAL CONSTRUCTION NOTES:**

- All work shall conform to the latest edition of the Commonwealth of Massachusetts regulations governing the installation of subsurface sewage disposal systems, as published in the Code of Massachusetts regulations and referred to as Title 51 and any additional local codes and details. Contractor shall coordinate his work with the Designer to allow open hole inspection of the foundation excavation. Components shall not be installed until inspection and approval is obtained from the Board of Health, Designer and Owner.
- Manufacturer, packing of windows, stoppage of materials, and storage of equipment over time of installation until Certificate of Compliance is issued. Magnetic tape shall be placed over all components.

**LEACHING FIELD NOTES:**

- Contractor shall strip and stockpile A and B horizons and any other unsuitable material. Material shall be removed from the site - stump burial not permitted. Excess material shall be removed from the site - stump burial not permitted.
- Stone used in leaching system shall consist of double washed 3/4" to 1-1/2" stone free of soil, rock, silt and other deleterious matter. The stone shall be placed in a trench 36" wide and 36" deep. The trench shall be backfilled with the same stone. The trench shall be backfilled with the same stone.
- Leaching stone shall be schedule 80 PVC with solvent welded joints. Holes shall be 3/8 inch diameter. The holes shall be spaced 12 inches apart. The holes shall be spaced 12 inches apart.
- Leaching stone shall be covered with a 2 inch layer of double washed 1/2" to 1/2" peastone. Stone shall be free of dust, fines, iron, silt and other deleterious material.
- Contractor shall provide certified Nitrogen test report as required to reduce nitrogen subsurface. Contractor shall provide certified Nitrogen test report as required to reduce nitrogen subsurface. Contractor shall provide certified Nitrogen test report as required to reduce nitrogen subsurface.

**DESIGNER NOTES:**

- No vent pipes from this plan shall be made without written direction from the Designer, Owner and Board of Health Agent.
- The contractor shall notify the Designer of any discrepancies between the plan and actual site conditions. The Designer shall be notified of any discrepancies between the plan and actual site conditions.
- The contractor shall be responsible for obtaining all necessary permits and approvals from the local health department and other regulatory agencies.
- Notwithstanding anything shown or not shown on these drawings, the Owner and Contractor are responsible for complying with the current edition of the Massachusetts Building Code regarding foundation drainage, backfilling and waterproofing and are responsible for ensuring that water does not enter the basement through the walls or floor.

BENCHMARK ELEVATION AND DATUM TO BE SET (MAID 88)

THERE ARE NO PUBLIC WELLS OR SURFACE WATER SUPPLIES WITHIN 400' OF THE PROPOSED SYSTEM.

THERE ARE NO PRIVATE WELLS WITHIN 200' OF THE PROPOSED SYSTEM.

THERE ARE WETLANDS BORDERING A SURFACE WATER SUPPLY OR RIBBONARIES TO SAME.

THERE ARE NO STREAMS AS DEFINED BY THE RIVERS ACT WITHIN 200' OF THE PROPOSED SYSTEM.

THERE ARE NO OTHER OPEN, SURFACE OR SUBSURFACE DRAINS THAT INTERCEPT HIGH GROUND WATER ON THE LOT.

THE SITE DOES NOT LIE WITHIN A REGULATORY FLOODPLAIN BUT IS PARTIALLY WITHIN A 100 YEAR FLOOD ZONE.

WASTEWATER FROM THE PROPERTY WILL CONSIST OF DOMESTIC WASTE ONLY.

**SCHEDULE OF ELEVATIONS**

Top of foundation	= 239.00'	Inv. @ pump chamber inlet	= 246.23'	Inv. @ leaching structure(n)	= 245.20'	249.1'
Basement floor	= 241.00'	Inv. @ dist. box inlet	= 246.23'	Inv. @ leaching structure(n)	= 245.20'	249.0'
Inv. @ pump chamber	= 246.83'	Inv. @ dist. box outlet	= 246.08'	Elevation of stone bottom	= 245.20'	
Inv. @ septic tank inlet	= 246.23'					
Inv. @ septic tank outlet	= 246.23'					

PREPARED FOR: STEVEN GRINGERI 617.680.8039

PROPERTY ADDRESS: #31 WATER STREET (LOT 2) FOXBOROUGH, MA

ASSESSORS MAP/PARCEL: MAP 105, PARCEL 026

DESIGNED BY: CHG

DRAWN BY: CHG

DATE: AUGUST 20, 2020

SCALE: 1"=40'

COMMISSIONER OF REGISTRATION

WILLIAM J. BUCKLEY, JR.

NO. 35833

CIVIL ENGINEER

REGISTERED PROFESSIONAL ENGINEER

WILLIAM J. BUCKLEY, JR.

NO. 35833

CIVIL ENGINEER

FILE NUMBER: 21-0142

MODIFIED/DATE: 11/08/2021

DATE: 11/20/2021

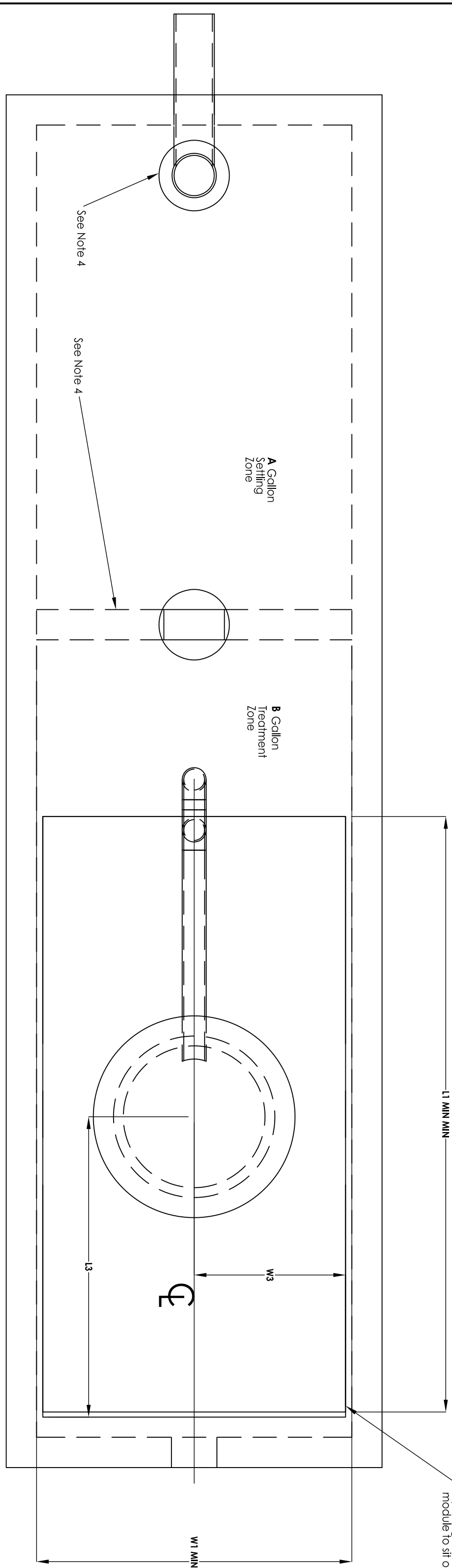
DESIGNED BY: CHG

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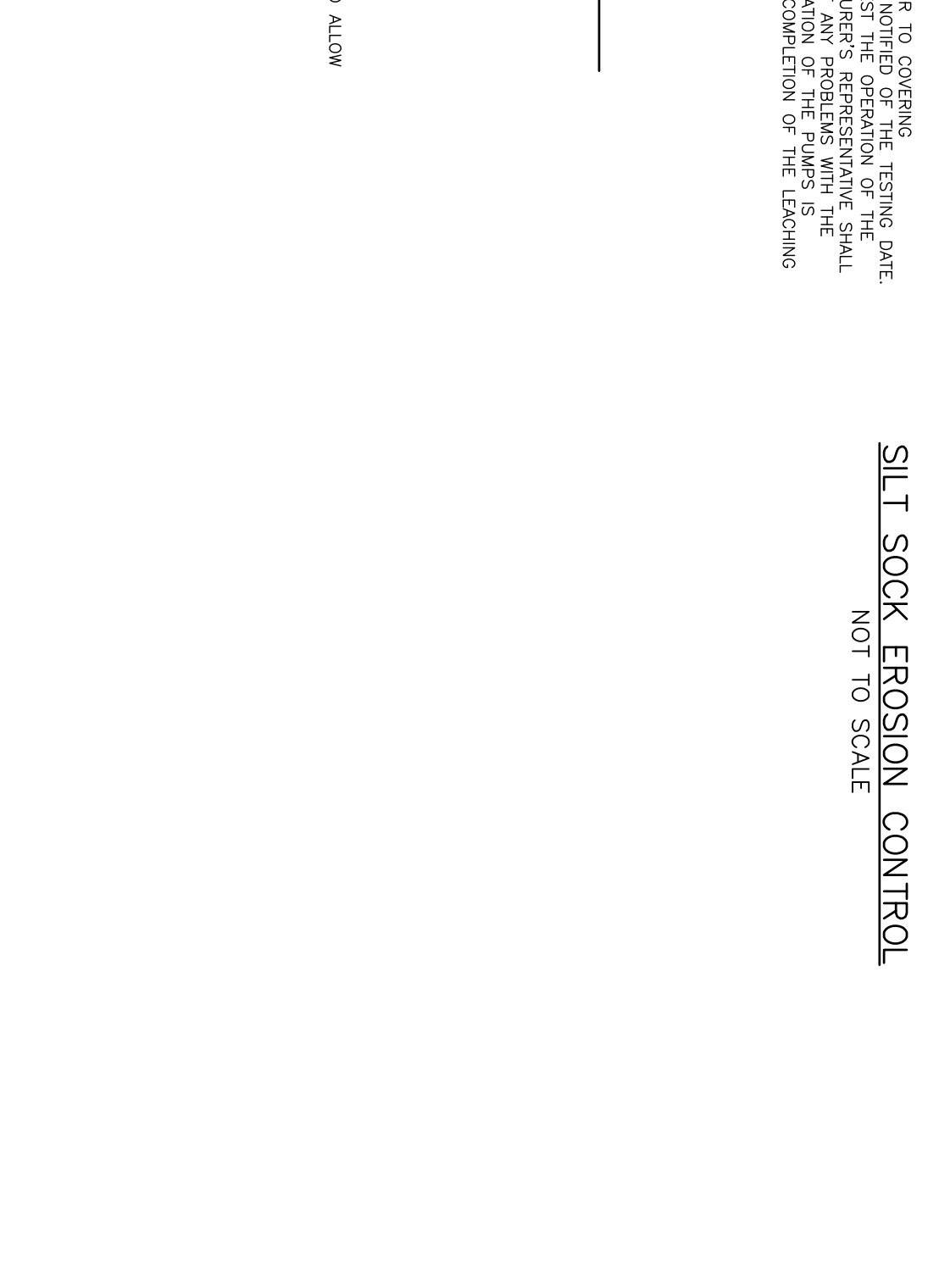
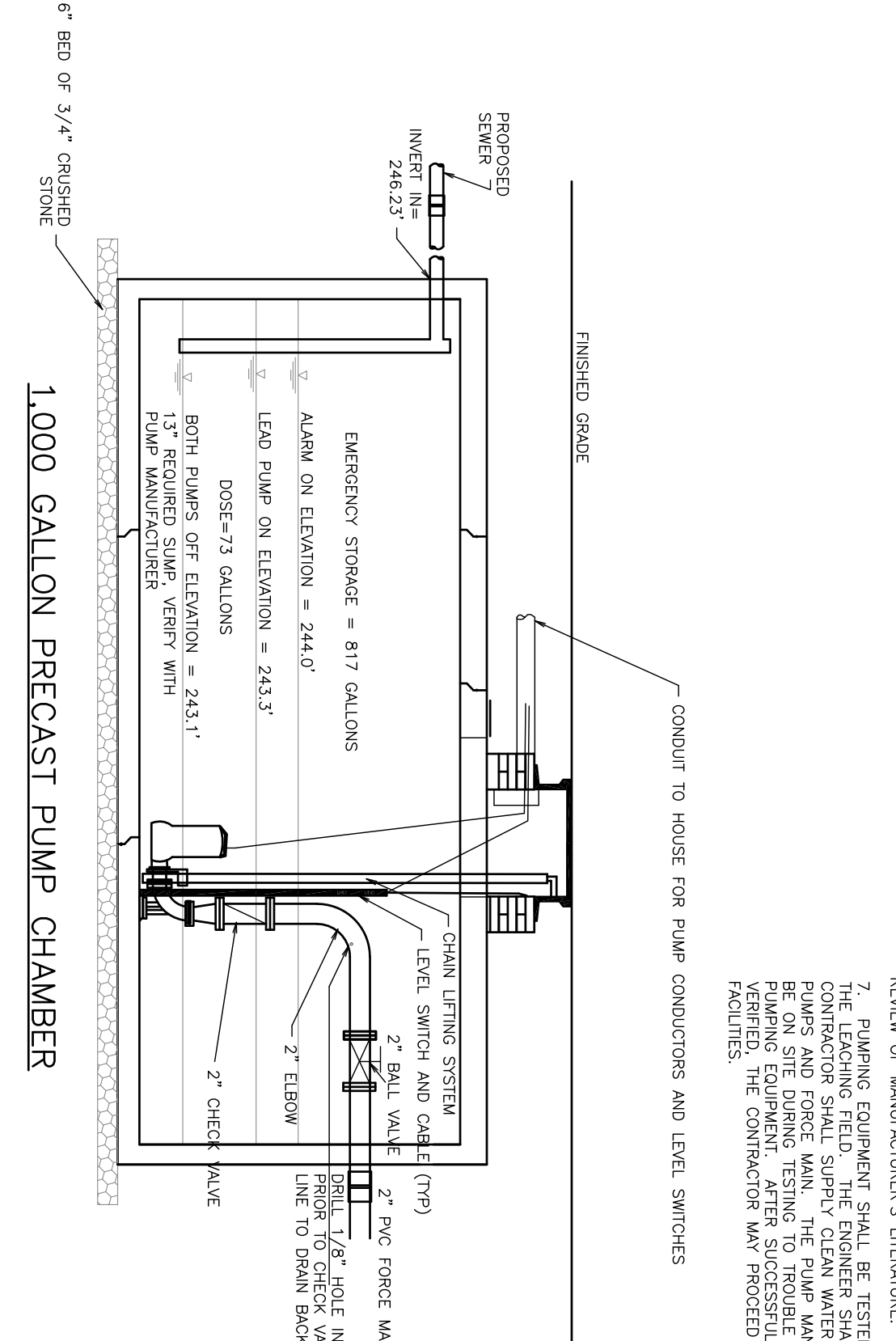
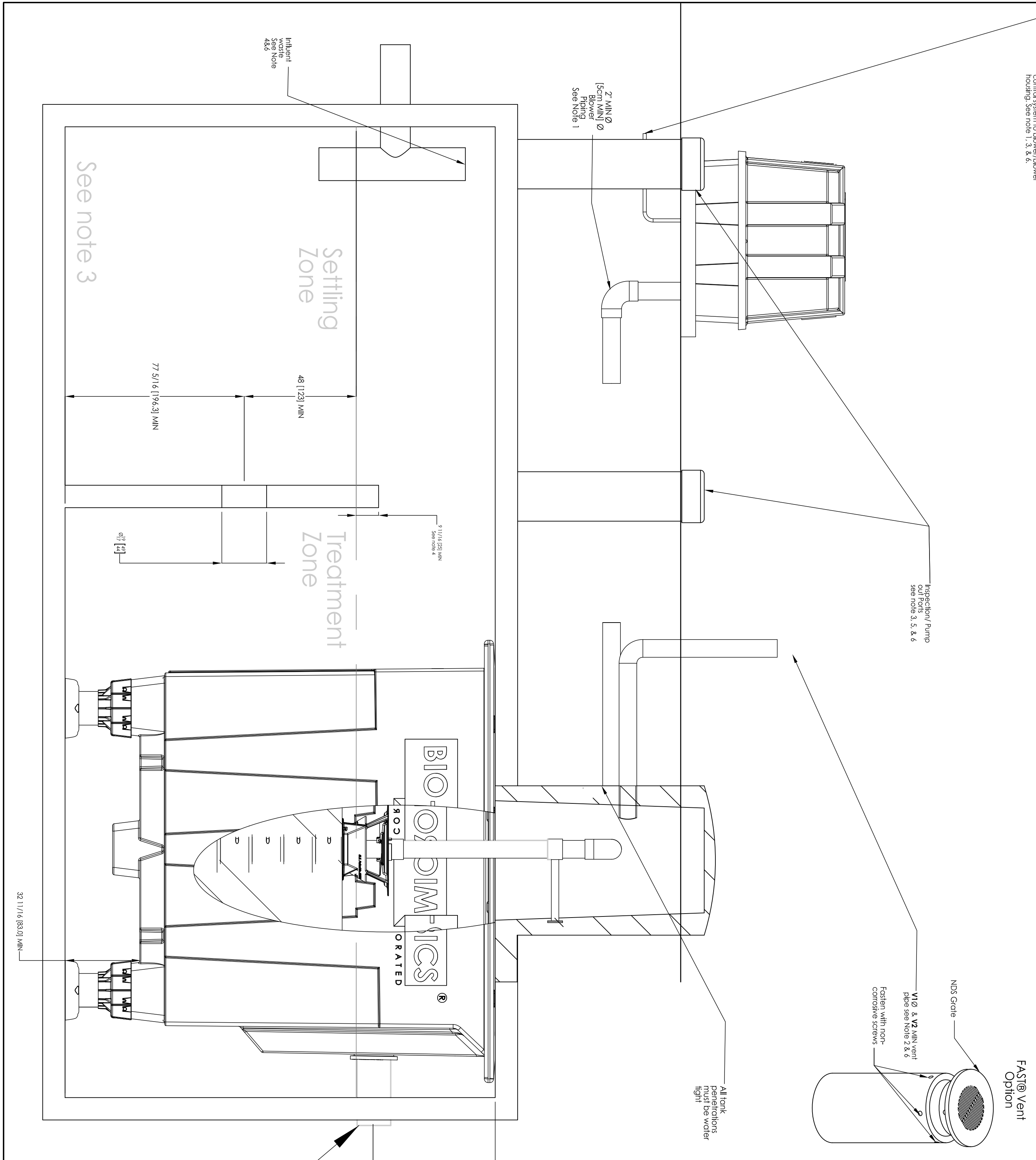
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THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF BIO-MICROBICS, INC. CONTRACTOR SHALL CONTACT BIO-MICROBICS, INC. TO CORRECT THE DESIGN DATA AND TO RECEIVE CONSTRUCTION DRAWINGS. ANY CHANGES TO THE PLAN ARE TO BE COORDINATED AND APPROVED BY THE ENGINEER AND THE BOARD OF HEALTH.

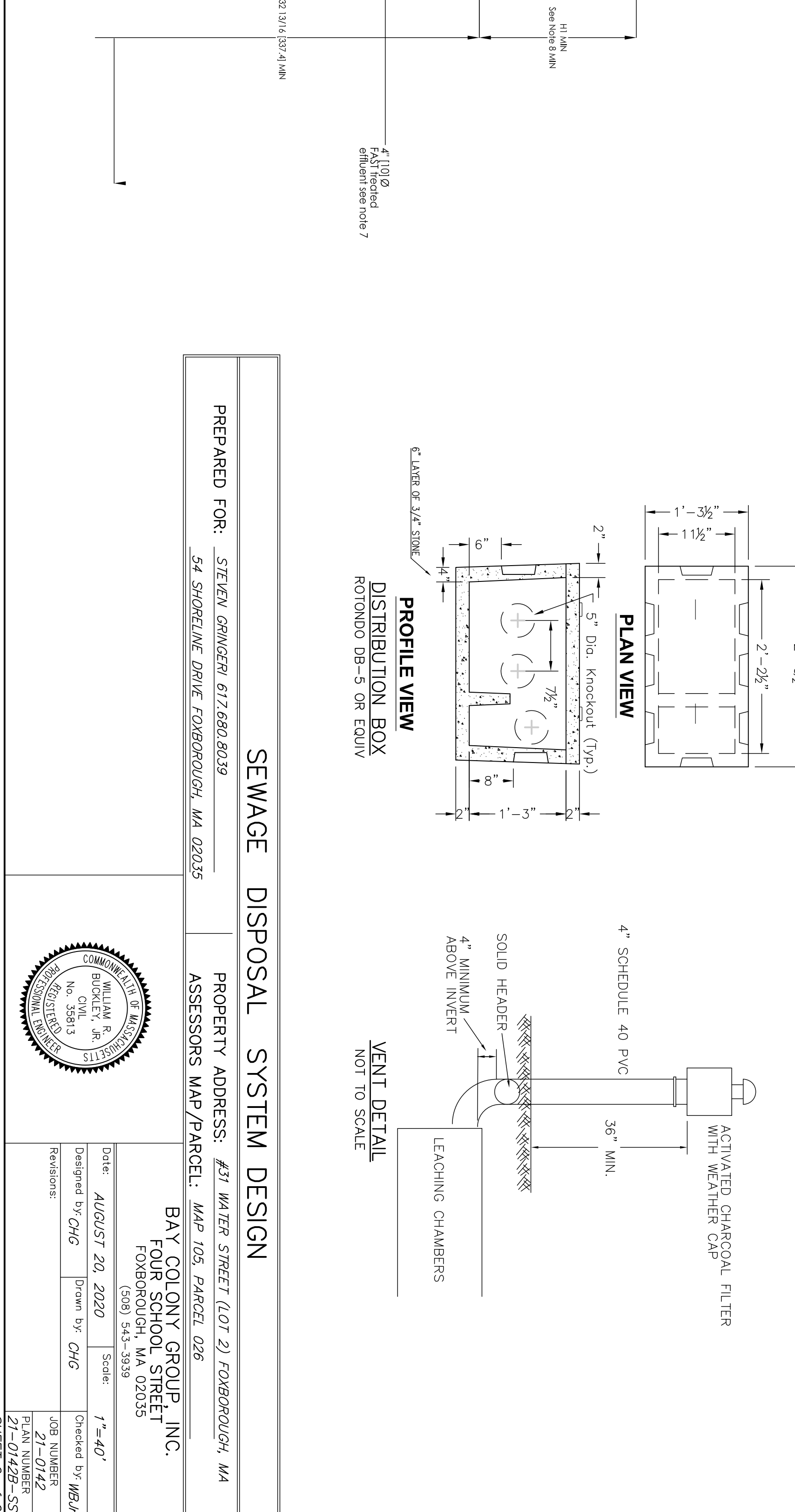


Unit Size	A	B	V1	V2	L1	L2	L3	W1	W2	W3	H1
0.5	500	1000	3"	7.1 in sq	59.5"	54"	29.75'	31.25'	25'	151.25'	16.375'
0.75	500	1000	3"	7.1 in sq	60"	54"	31.5"	44.25'	37'	21.5'	16.375'
0.9	500	1000	3"	7.1 in sq	59"	54"	31.25'	54.5'	49'	24.625'	16.375'
1.0	500	1000	4"	9 in sq	59"	54"	31.25'	54.5'	49'	24.625'	16.375'
1.5	750	2000	4"	9 in sq	83.5"	53.5"	42.875'	53.5'	49'	27.625'	16.25'

- NOTES:**
1. Filter media depth to FAST® may not exceed 100 FT (30.5m) total length and use 4 elbows maximum. For distances greater than 100 FT (30.5m) - consult factory. Blower must be located above flood/standing water levels on a concrete base.
  2. Installation: Consult manufacturer for details on FAST® single surface area. Secure with stainless steel screws (see sheet 3 of 3 FAST® Details).
  3. Run vent to desired location and cover opening with vent grate with at least 1/2 sq ft of open surface area. Secure with moisture build up or back pressure.
  4. All opportunities to FAST® (e.g. tank pump outs, etc.) must conform to all county, state, province, and local plumbing by codes. For details on FAST® plumbing, consult manufacturer. For details on FAST® plumbing, consult manufacturer. For details on FAST® plumbing, consult manufacturer.
  5. Either the influent pipe has shall be fitted with a pipe cap or the vent tank, if choosing to use the pipe cap, call (1-800-451-1000) for details on FAST® plumbing. For details on FAST® plumbing, consult manufacturer.
  6. All inspection, viewing and pump out ports must be secured to prevent accidental or unauthorized access.
  7. Tank, control, piping, conduit, blowout panel and vents not to be used for anything other than intended purpose.
  8. **H1 MIN** Height may be reduced, consult factory and reference 3/4" FAST® Details.
  9. See sheet 3 of 4 for required dimensions.
  10. Contractor shall supply a backup generator that will connect through a secondary panel to the main panel. Said generator shall be capable of servicing the FAST® system as a minimum.



- PLUMBING EQUIPMENT**
1. Filter media depth to FAST® may not exceed 100 FT (30.5m) total length and use 4 elbows maximum. For distances greater than 100 FT (30.5m) - consult factory. Blower must be located above flood/standing water levels on a concrete base.
  2. Installation: Consult manufacturer for details on FAST® single surface area. Secure with stainless steel screws (see sheet 3 of 3 FAST® Details).
  3. Run vent to desired location and cover opening with vent grate with at least 1/2 sq ft of open surface area. Secure with moisture build up or back pressure.
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**SEWAGE DISPOSAL SYSTEM DESIGN**

PREPARED FOR: **STEVEN GRINGERI 617.680.8039**

PROPERTY ADDRESS: **#31 WATER STREET (LOT 2) FOXBOROUGH, MA**

ASSESSORS MAP/PARCEL: **MAP 105, PARCEL 026**

DESIGNED BY: **WILLIAM R. BUCKLEY, JR. REGISTERED PROFESSIONAL ENGINEER**

DATE: **AUGUST 20, 2020**

SCALE: **1"=40'**

CHECKED BY: **WBAJ**

JOB NUMBER: **21-0142**

PLAN NUMBER: **21-0142B-SS**

SHEET **2** OF **2**