

Bureau of Environmental Health
 8930 Stanford Boulevard, Columbia, MD 21045
 Main: 410-313-2640 | Fax: 410-313-2648
 TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
 Facebook: www.facebook.com/hocohealth

Maura J. Rossman, M.D., Health Officer

RECEIPT DATE: 4/13/23 **ONSITE SEWAGE DISPOSAL SYSTEM** P 574085

APPROVAL DATE: 8/18/2023 **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 8228 Hunterbrooke Lane

SUBDIVISION: Bruns Property LOT: 2 TAX ID: 05-452538

CONTRACTOR: Fogles Septic Clean Inc. EMAIL: kim@foglesinc.com

CONTRACTOR ADDRESS: 580 Obrecht Road, Sykesville, MD 21784 PHONE: 410-795-5670

PROPERTY OWNER: Kirandeep K. Gill EMAIL: _____

OWNER ADDRESS: 6513 Kells Court PHONE: 410-977-9595

SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: Maryland Concrete

PUMP MODEL: Liberty Pumps PUMP SIZE 1/3HP PUMP TANK CAPACITY: 1500 gal

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>208</u>	INLET DEPTH: <u>1.5</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>7</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE-AREA BEGINNING DEPTH: <u>6</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	See OSDS notes for grading, tree removal and fencing requirements	

ISSUED BY: H. Oswald ISSUE DATE: 6/23/2020 EXPIRATION DATE: _____

- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADIENT FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS
- NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM
 ELECTRICAL PERMIT ISSUED E 22004140
- NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

**NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.
 PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.
 CALL 410-313-1771 TO SCHEDULE INSPECTIONS.**

NOT TO SCALE

see separate
sheet for
AS-built

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	1.5'	7'
NUMBER OF TRENCHES		4
TOTAL LENGTH		205'
ABSORPTION AREA		615 ft ²
DISTRIBUTION BOX LEVEL		---
DISTRIBUTION BOX BAFFLE		yes
DISTRIBUTION BOX PORT		yes

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL	yes
MANUFACTURER	Babylon
CAPACITY	2000 GAL
SEAM LOC	Top
TANK LID DEPTH	1.5'
BAFFLES	6' Front
BAFFLE FILTER	---
MANHOLE LOC	Front + back
6" PORT LOC	---
WATERTIGHT TEST	---
SLOTTED	yes
DATE ON LID	1/20/2023

PUMP/SEPTIC TANK LEVEL

PUMP/SEPTIC TANK LEVEL	yes
MANUFACTURER	Babylon
CAPACITY	1500 GAL
SEAM LOC	Top
TANK LID DEPTH	1.5'
BAFFLES	---
BAFFLE FILTER	---
MANHOLE LOC	Front + back
6" PORT LOC	---
WATERTIGHT TEST	---
SLOTTED	---
DATE ON LID	4/12/2023

PRE-CONSTRUCTION:

5/22/2023- SDA not staked, did not layout trenches. Tanks staked, sewer coming out of house at diff. location compared elevation, will still make fall. 1" of fill on part of SDA near retention pond. Tanks 220' from house. Gave OK to set tanks. (SP)

5/26/2023- SDA staked. laid trenches out. 1/2 moved 2' down @ end & 1/2 moved 2' down @ end. 1/2 & 1/4 both straight. Measured 13' between trenches, center to center. Gave OK to start work. (SP)

INSTALLATION: 5/31/2023- Contractor installed sewer out of house @ 2 locations, from front line. 1" install connecting the 2 lines, pipe still makes fall & adequate C/O. Saw septic & pump tank. 1.5' cover on both tanks. PM sleeve coming out of tank. FM was SCHA 90 250 PSI. D box set in middle of trenches. Saw part on D-box. Inlet for bottom trenches @ 1.5'. Inlet for top trenches @ 1.5'-2'. Bottom trenches measured @ 52' & 54' long & top trenches @ 50' & 52' long. Reinspect for P & A. (SP)

8/18/2023- At 2m outside of house. Visual & Hydro good. Saw floats inside tank. Pump successfully goes to D-box. P & A successful. (SP)

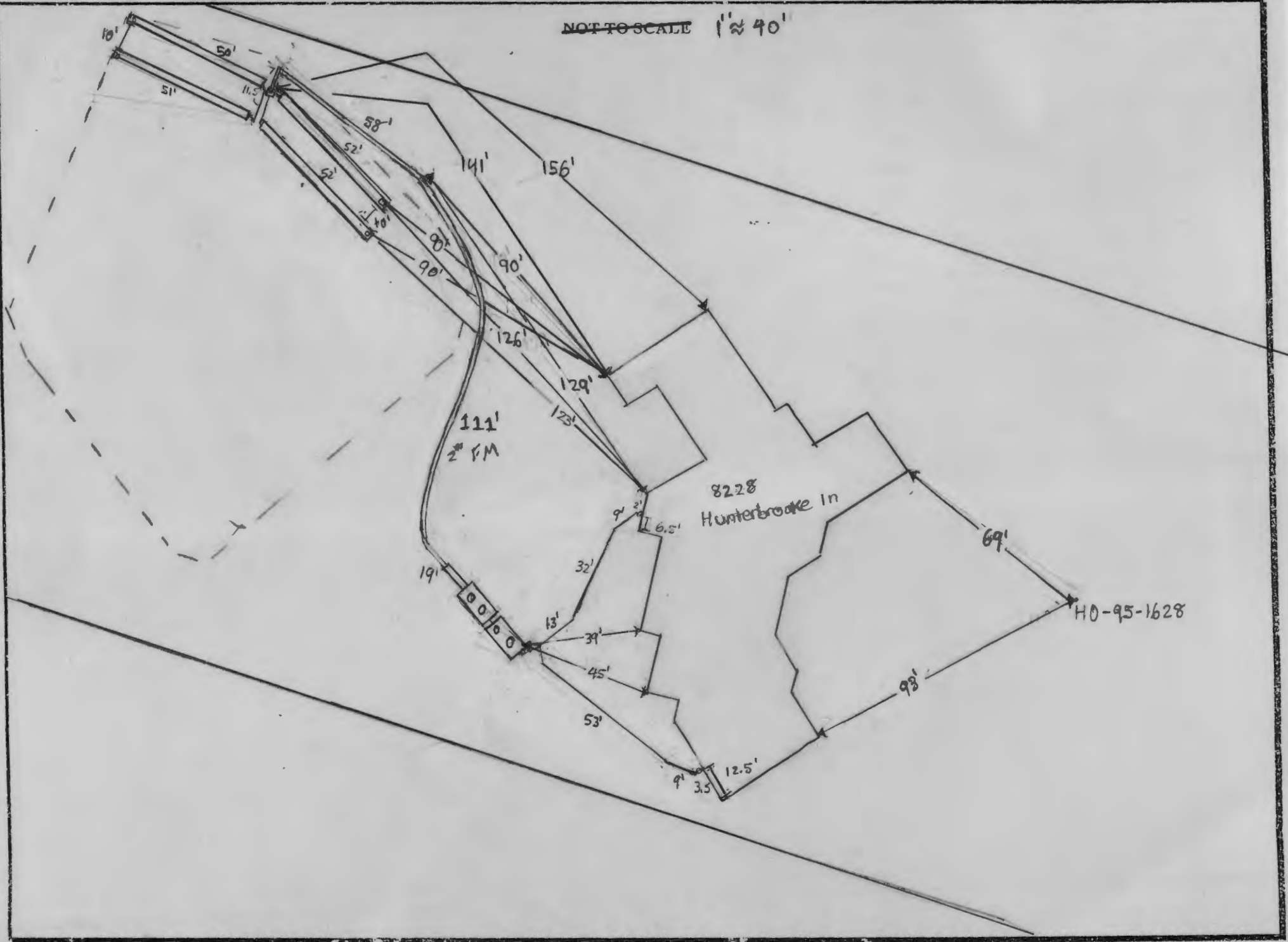
FINAL INSPECTOR

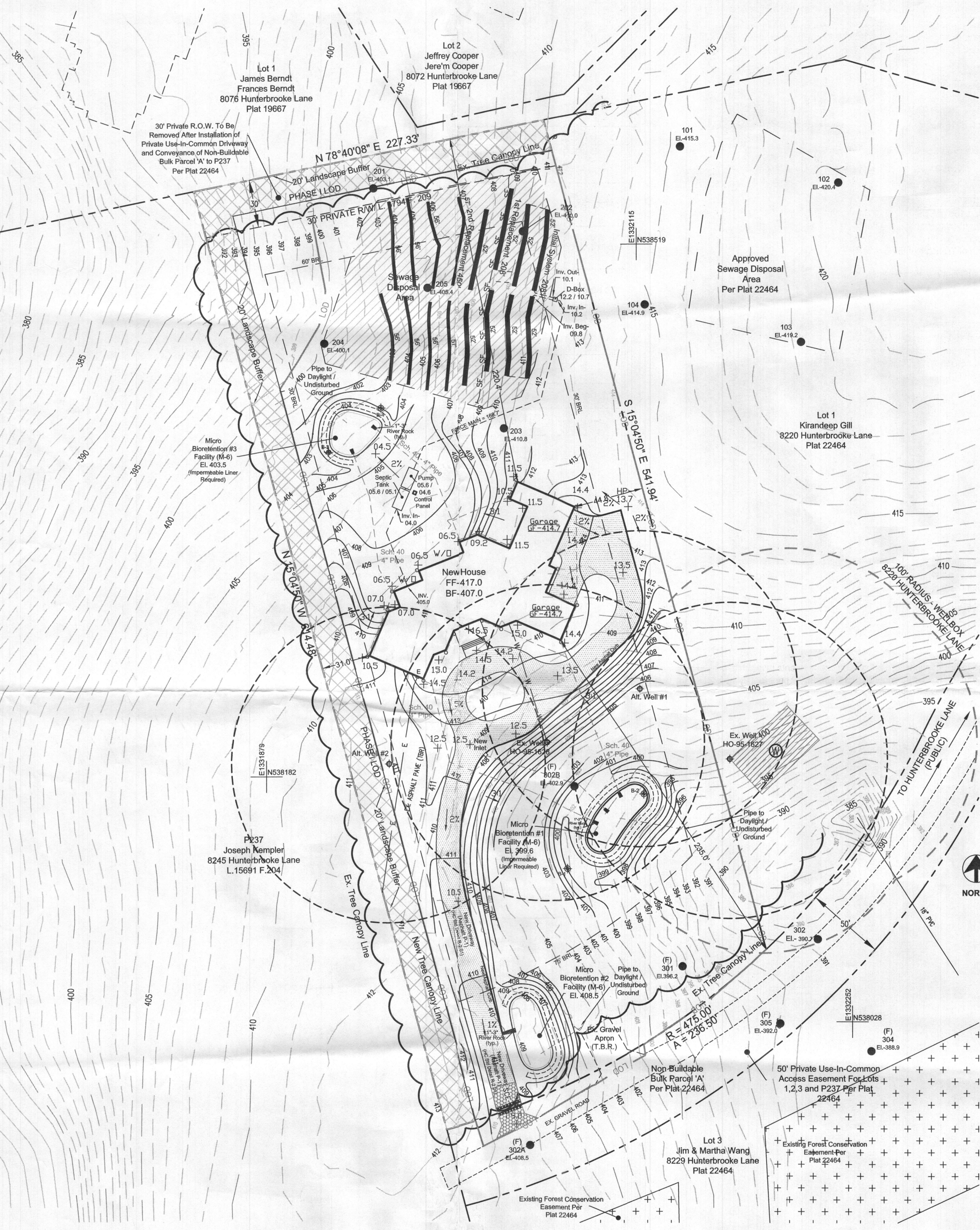
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DATE OF APPROVAL

8/18/2023 (SP)

NOT TO SCALE 1" ≈ 40'

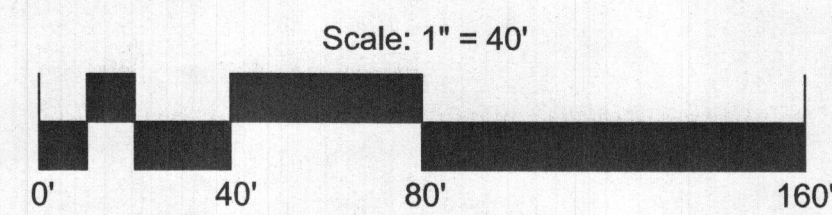




OFF-SITE INTERPOLATED ONE-FOOT CONTOUR INTERVAL TOPOGRAPHY: HOWARD COUNTY GIS

SOURCE OF ONE-FOOT CONTOUR INTERVAL TOPOGRAPHY: KRIS CONSULTANTS, LLC
301 PIPING ROCK DRIVE
SILVER SPRING, MD 20905
301-648-2649

NOTE: AT TIME OF THE PRE-CONSTRUCTION MEETING FOR INSTALLATION OF THE SEPTIC SYSTEM, THE ATTENDING ENVIRONMENTAL SANITARIAN MAY REQUIRE THAT AN OBSERVATION PROFILE TO BE DUG SLIGHTLY UPHILL OF THE INITIAL SYSTEM TRENCH LOCATIONS FOR THE PURPOSE OF OBSERVING THAT THERE IS ADEQUATE SOIL DEPTH.



8228 HUNTERBROOKE LANE SEPTIC CALCULATIONS (6BR)

Initial System: Application Rate - 1.2 Beg. Effective Area Depth - 6' Max. Bottom Depth - 7'
1st Replacement: Application Rate - 1.2 Beg. Effective Area Depth - 6' Max. Bottom Depth - 7'
2nd Replacement: Application Rate - 0.8 Beg. Effective Area Depth - 6' Max. Bottom Depth - 7'

INITIAL SYSTEM

Design Flow = 150 gal. per day / per BR = 900
Drainfield Required (square feet) = 900 / 1.2 = 750 sf
Length of Trench (width adjustment) 750 / 3(width) = 250
Linear Length of Trench Required = 250 x .83' = 208' (install 4 trenches @ 52')

*Sidewall Reduction Credit: (3' trench width)
 $\frac{3+2}{3+1+2(1)} \times 100 = .83$

1st REPLACEMENT:

Design Flow = 150 gal. per day / per BR = 900
Drainfield Required (square feet) = 900 / 1.2 = 750 sf
Length of Trench (width adjustment) 750 / 3(width) = 250
Linear Length of Trench Required = 250 x .83' = 208' (install 4 trenches @ 52')

*Sidewall Reduction Credit: (2' trench width)
 $\frac{3+2}{3+1+2(1)} \times 100 = .83$

2nd REPLACEMENT:

Design Flow = 150 gal. per day / per BR = 900
Drainfield Required (square feet) = 900 / 0.8 = 1125 sf
Length of Trench (width adjustment) 1,125 / 2(width) = 562.5'
Linear Length of Trench Required = 562.5 x .83' / 2 = 450' (install 2 trenches @ 57' and 4 trenches @ 56')

*Sidewall Reduction Credit: (2' trench width)
 $\frac{2+2}{2+1+2(1)} \times 100 = .80$

TOTAL TRENCH LENGTH = 866'

SEWAGE DISPOSAL SYSTEM DESIGN NOTES:

- Number of Bedrooms - 6
- Depth of Stone - 4'
- Passing Test Sites: 201, 202, 203, 204 and 205 from approved Percolation Certification Plan (Re-Certification) 03/02/2020
- Length of Initial System - 208'
- Reserve Area - 16,747 sf
- Distribution Pipe Invert at 18" Depth
- Size of Septic Tank - 2,000 gal. 2-compartment tank
- Pump - 1/3 HP, Liberty Pumps 250 Series

NOTES:

- Any change to the locations or depths to any components must be approved by the engineer and the Howard County Health Department prior to installation. A revised Site Plan may be required.
- The maximum earth cover over the tank is 3 feet. Greater earth cover will require a heavy load bearing tank.
- Electrical work for the installation must be performed by a licensed electrician.
- All wells and septic systems located within 100' of the property boundaries and 200' down gradient of any wells and/or septic systems have been shown.
- The existing wells shown on this plan (well Tag HO-95-1628 and HO-95-1627, respectively) have been field located and are accurately shown.
- Other than the installation of trenches, disturbance within the SDA is limited to the clearing of trees and evening of surface for the purpose of establishing new lawn area. Cut and Fill and re-shaping of contours is not allowed.
- The SDA is to be enclosed by a temporary fence (such as orange blaze) once the initial tree clearing has been completed.

SEWAGE DISPOSAL SYSTEM DESIGN DATA:

	GRADE	TOP OF TANK	INVERT IN	INVERT OUT
SEPTIC TANK	405.6	405.1	404.0	403.7
PUMP TANK	405.6	404.6	403.6	-
D-BOX	412.2	410.7	410.2	410.1

SOIL CHART

SYMBOL	SOIL	SLOPE	K-FACTOR	HYDRIC
MaB	Manor Loam	3-8%	0.24	No

LEGEND:

- NEW HOUSE
- PROPERTY LINE
- EXISTING TREE LINE
- MICRO BIORETENTION
- NEW DRIVEWAY
- EXISTING CONTOUR
- PROPOSED CONTOUR
- SEWAGE DISPOSAL AREA
- SEPTIC TANK
- PRIMARY ELECTRIC METER LOCATION
- WATER HOUSE CONNECTION
- LANDSCAPE BUFFER
- PERC TEST SITE
- FAILED PERC TEST SITE
- SEPTIC TRENCHES
- WELL
- WELL BOX

FORCE MAIN DESIGN NOTES:-

- Total Length of Force Main - 168.7' (includes pipe within pump)
- Diameter of Force Main - 2"
- Number of 45° Bends - 4
- Number of 90° Bends - 0
- Number of 22° Bends - 0
- Number of Couplings Required - 8
- Total Lift - 10.7' (Bottom of Pump 399.5' D-Box Inv. 410.2)
- Friction Loss Calculations-
 - Static Head (Inverse Elv. (D-Box Inv) = 410.2 - (Pump Elev. = 399.5) = 10.7'
 - Friction Head -
 - Force main length: 168.7'
 - Couplings: 8 x 2' = 16'
 - 45° Ell: 4 x 4' = 16'
 - 90° Ell: 0 x 7' = 0'
 - 22° Ell: 0 x 2' = 0'
 - Total = 200.7'
 - 2007 l.f. 2" PVC x 1.54 per 100 l.f. = 3.1'
 - Total Head = 13.8'
 - 13.8'(Head) @ 30 G.P.M. = Liberty Pumps 250-Series Submersible Effluent Pump 1/3 HP

Approved Septic System Plan
Howard County Health Department
Mark Oswald 6/23/2020
Signature Date

ADDRESS CHART	
LOT/PARCEL #	STREET ADDRESS
Lot 2	8228 Hunterbrooke Lane

PERMIT INFORMATION CHART				
Subdivision Name	BRUNS PROPERTY	Block/Sheet	Lot/Parcel No.	Lot 2
Plat # or L.P.	07	RR-DEO	05	8051.02
Water Code		Sewer Code		

REVISIONS	

ON-SITE SEWAGE DISPOSAL SYSTEM PLAN
BRUNS PROPERTY - Lot 2 (3.06 Acres)
8228 Hunterbrooke Lane Fulton
Plat No. 22463
Tax Map No. 46 Fifth Election District
Grid 07, Parcel 89
Howard County, Maryland

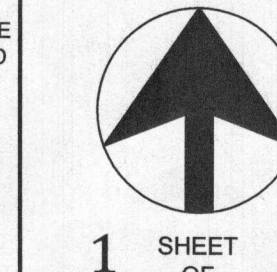
OWNER/APPLICANT:
KIRANDEEP K. GILL
6513 KELL'S COURT
CLARKSVILLE, MD 21029
410-977-8595
BUILDER:
COMPETENT BUILDERS INC.
12574 HALL SHOP ROAD
FULTON, MD 20759
443-829-1830

Benning & Associates, Inc.
Land Planning Consultants
8933 Shady Grove Court
Gaithersburg, MD 20877
(301)948-0240

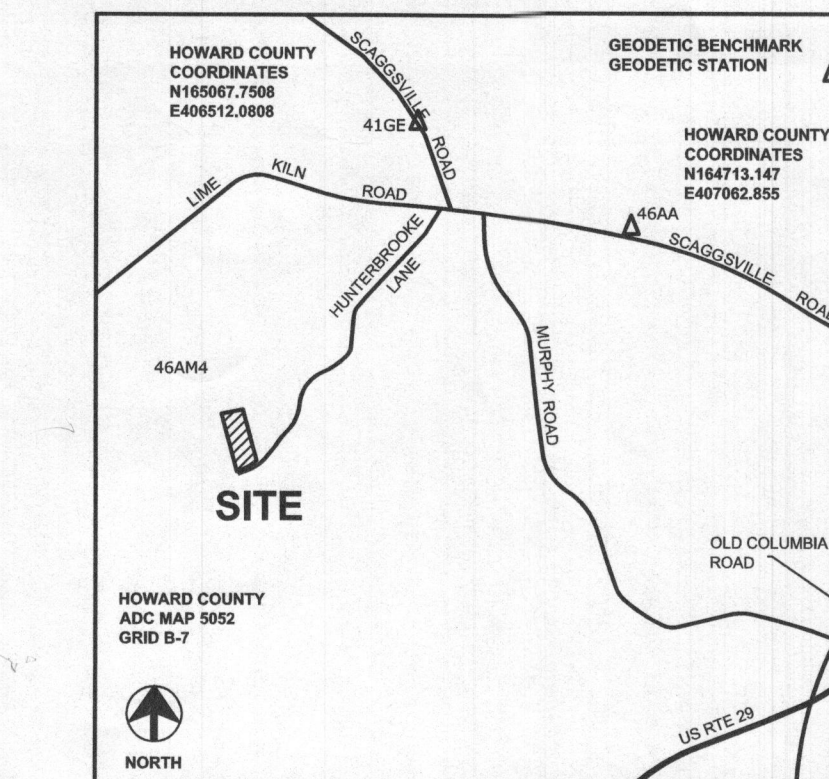


DESIGN BY: DW
DRAWN BY: PH
CHECKED BY: DV
DATE: May 2021
SCALE: 1" = 40'

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 2001 EXPIRATION DATE: 10/21/2020

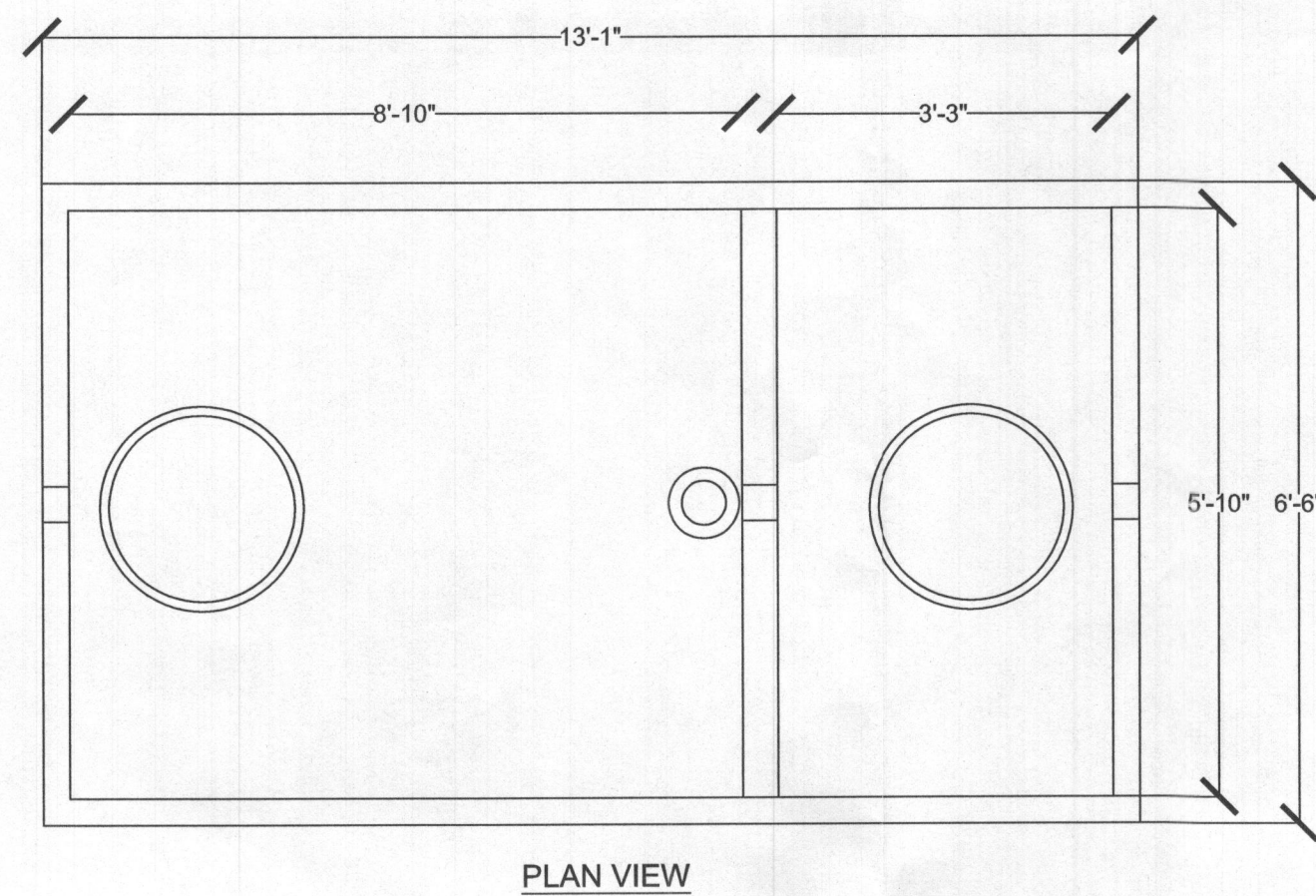


1 SHEET OF 2

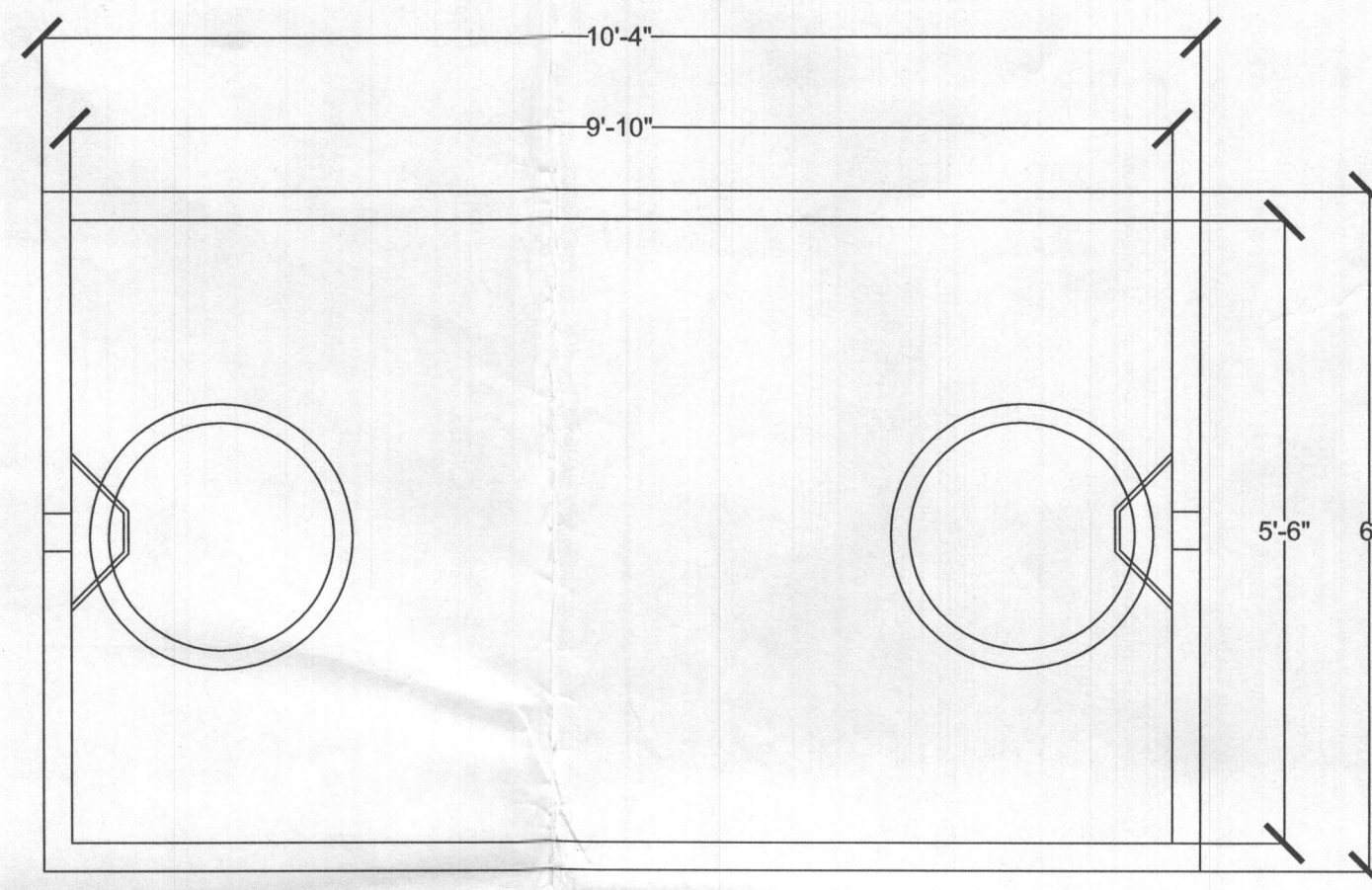


VICINITY MAP
SCALE: 1" = 2,000'

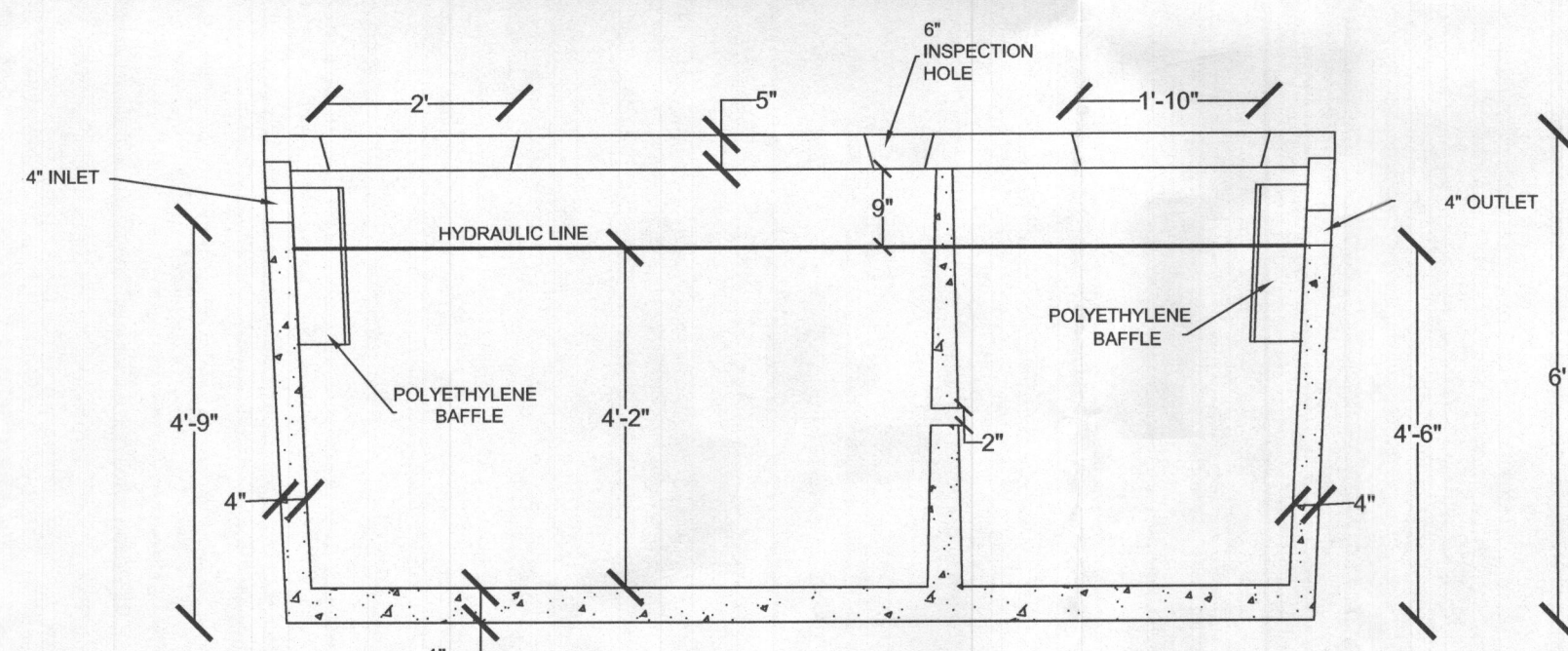
RECEIVED
JUN 23 2020
HOWARD COUNTY HEALTH DEPT. COMMUNITY HEALTH PROGRAM



PLAN VIEW



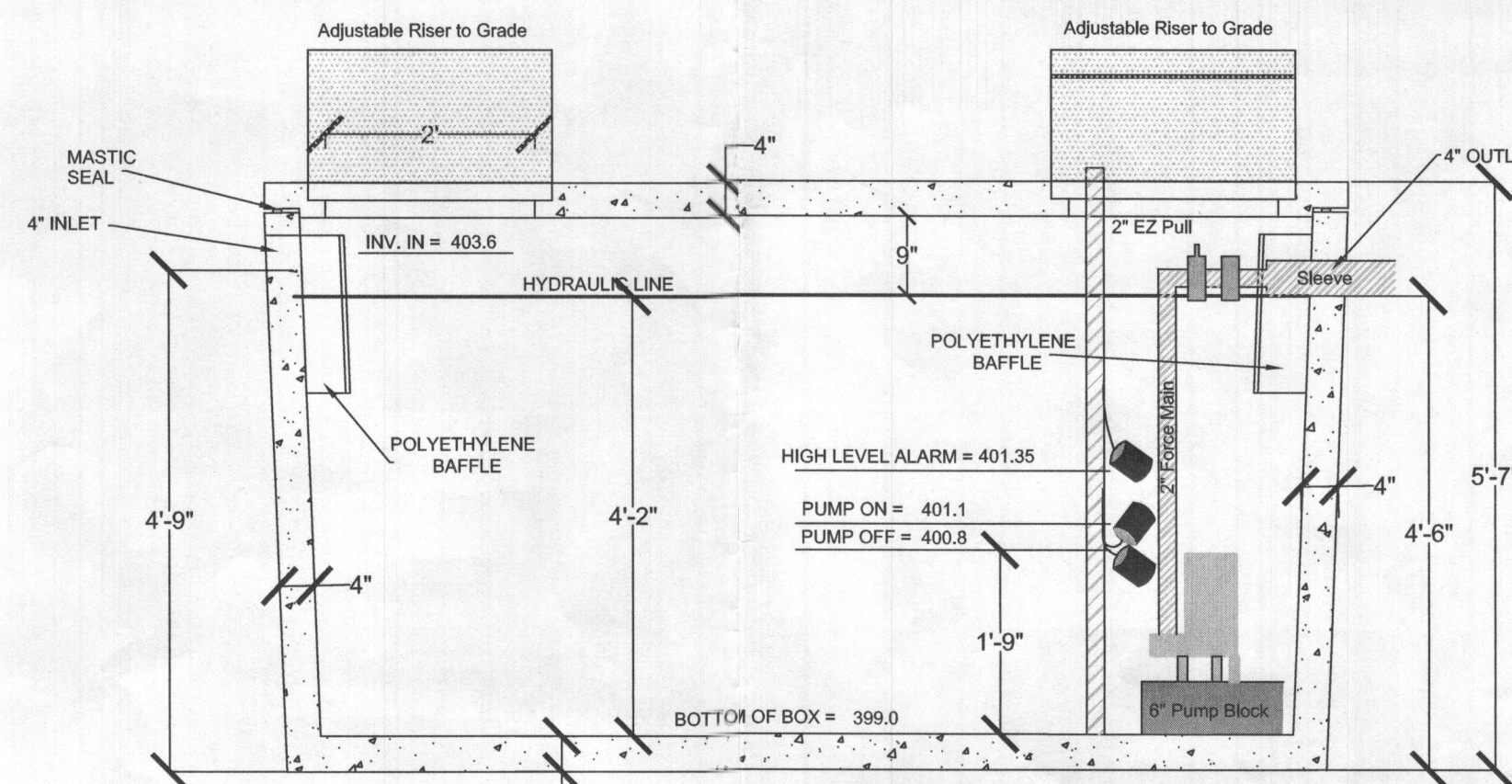
PLAN VIEW



SECTION VIEW
N.T.S.

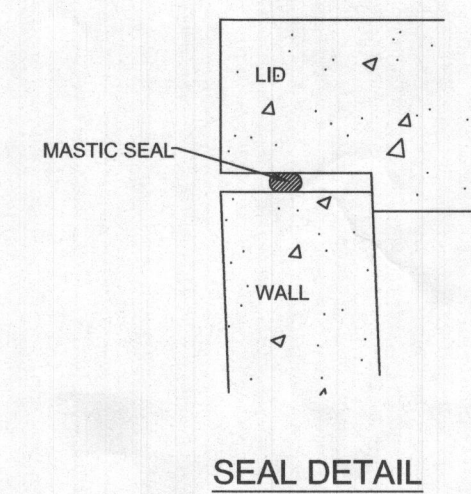
2,000 GALLON 2-COMPARTMENT SEPTIC TANK
N.T.S.

Source: www.marylandconcreteinc.com

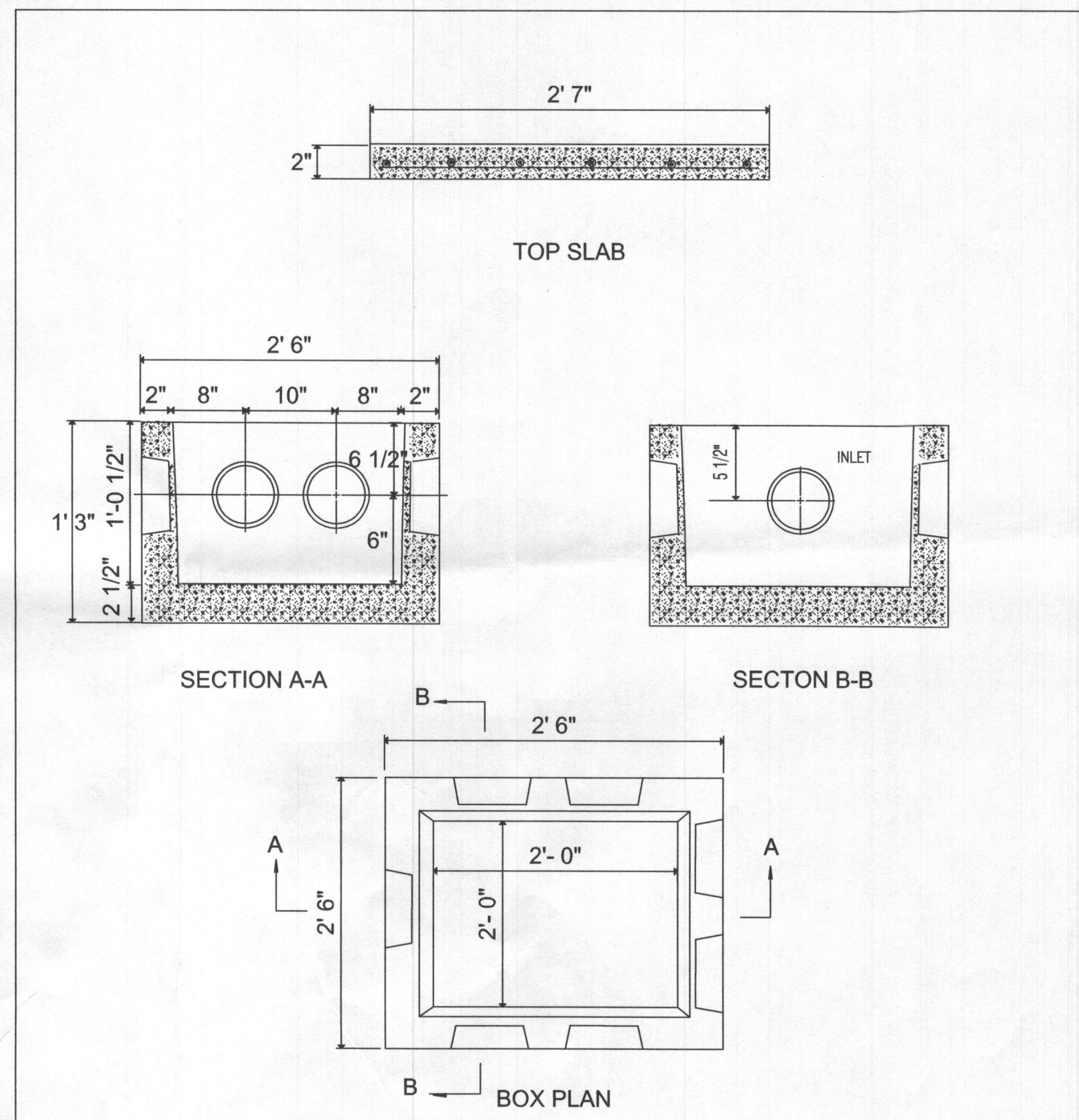


SECTION VIEW

1,500 GALLON SINGLE COMPARTMENT PUMP TANK
N.T.S.



SEAL DETAIL



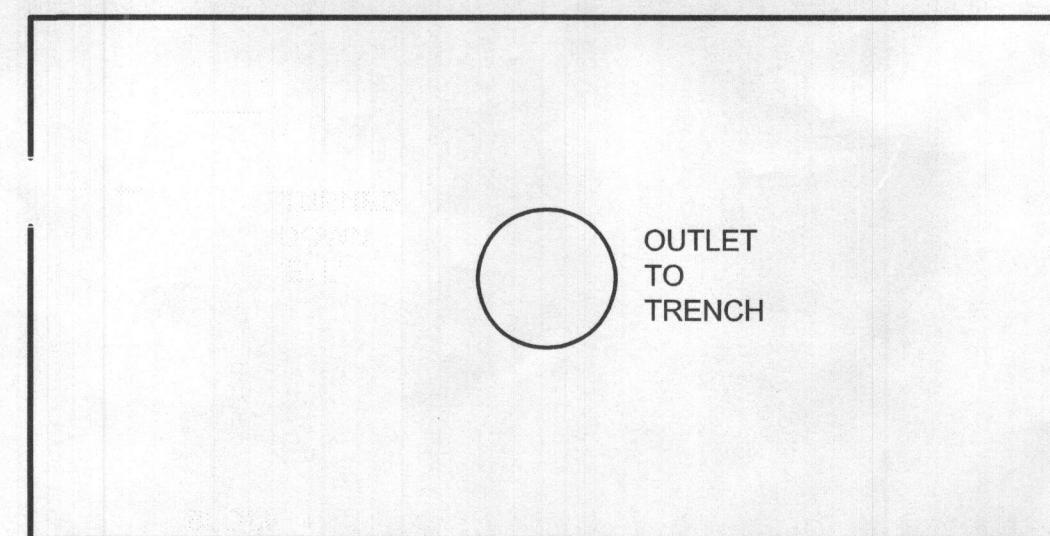
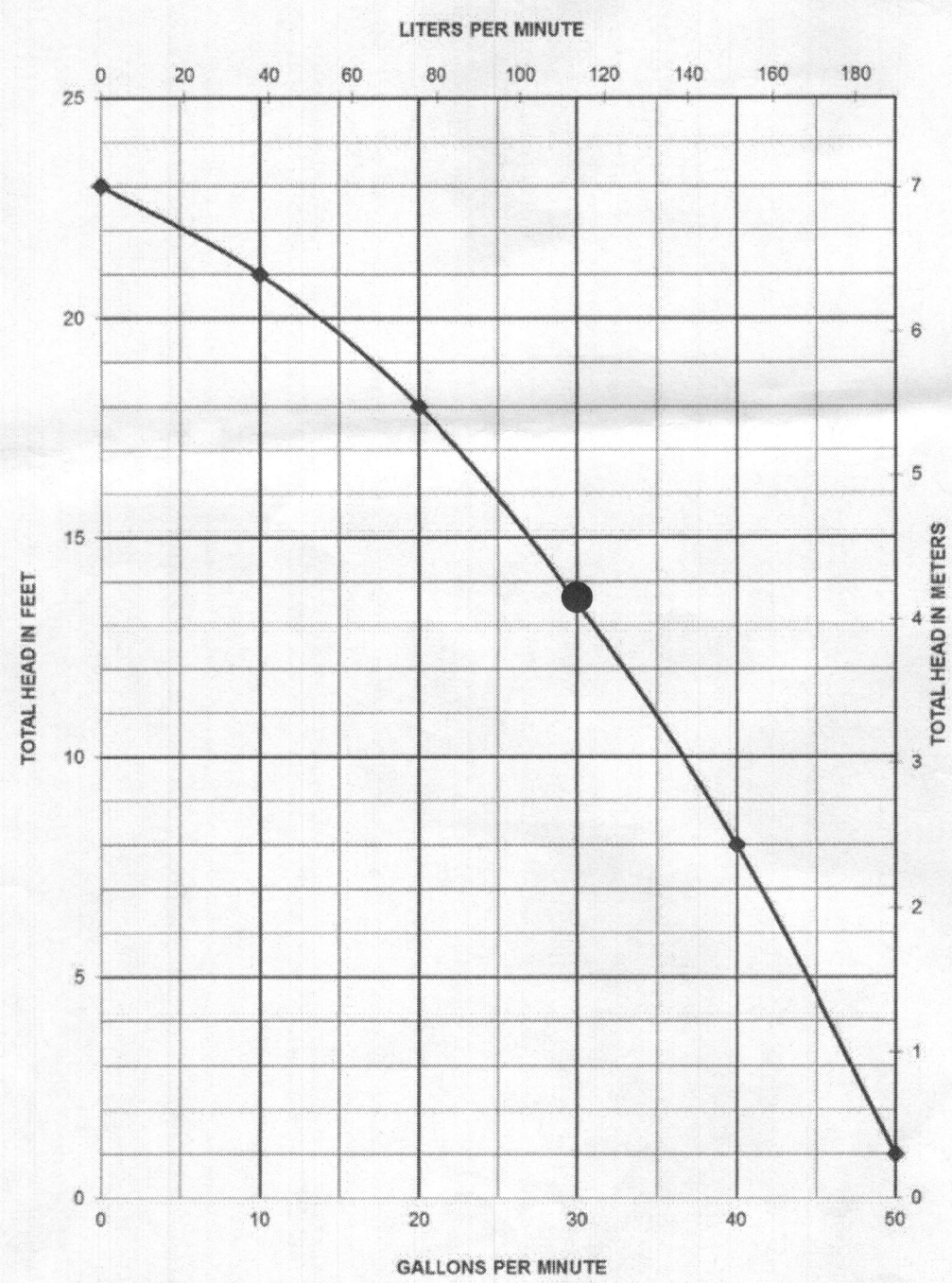
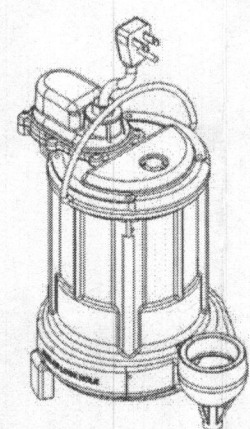
DESIGN DATA & GENERAL NOTES
 (1) Concrete strength $f_c=4,000$ p.s.i. @ 28 days. Density = 150 pcf.
 (2) Cement - Portland Type I/II per ASTM C 150-92.
 (3) Admixtures, air, & plasticizers per ASTM C 260-96 & C 494-92.

REINFORCING DESIGN:
 Reinforcing per ASTM A185. Min. 1-1/2" cover
 3x8 Welded Wire Mesh through out

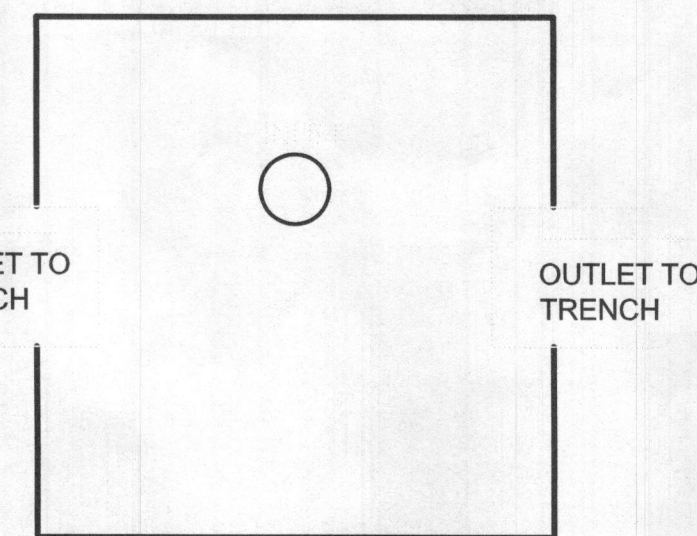
MB
 Mayer Bros., Inc.
 6264 Race Road
 Elkridge, Maryland 21075
 Tel. 410.796.1434
 Fax: 410.796.1438
 www.mayerbrosprecast.com

"LARGE" DISTRIBUTION BOX
 Stock Item
 Dwg. No. DBOX-LG No Scale August 2000

Liberty Pumps
Pump Specifications
250-Series Submersible Sump / Effluent Pump



LARGE DISTRIBUTION BOX - PROFILE
N.T.S.

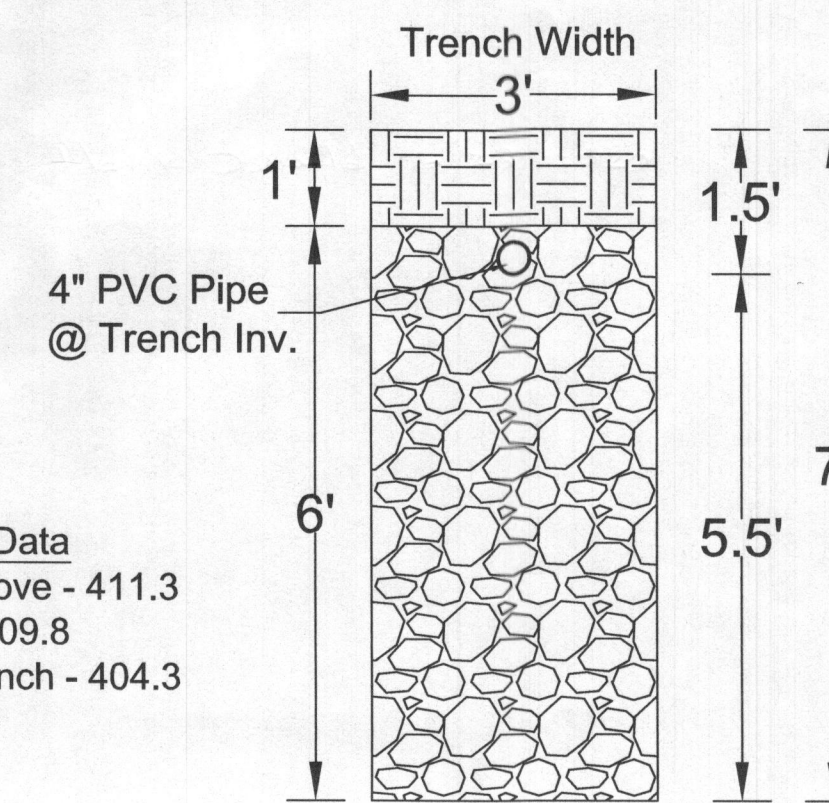


LARGE DISTRIBUTION BOX - END VIEW
N.T.S.

Dose Calculation
 Pump On - Pump Off (401.1 - 400.8) = 0.3'
 0.3' x 9.83' (L) x 5.5' (W) = 16.2 cf
 1 cf = 7.48 gallons
 16.2 x 7.48 = 121.17 gallons

Emergency Storage Calculation
 Inv. In - High Level Alarm (403.6 - 401.35) = 2.25'
 2.25' x 9.83' (L) x 5.5' (W) = 121.65 cf
 1 cf = 7.48 gallons
 121.65 x 7.48 = 909.94 gallons

LARGE DISTRIBUTION BOX
N.T.S.



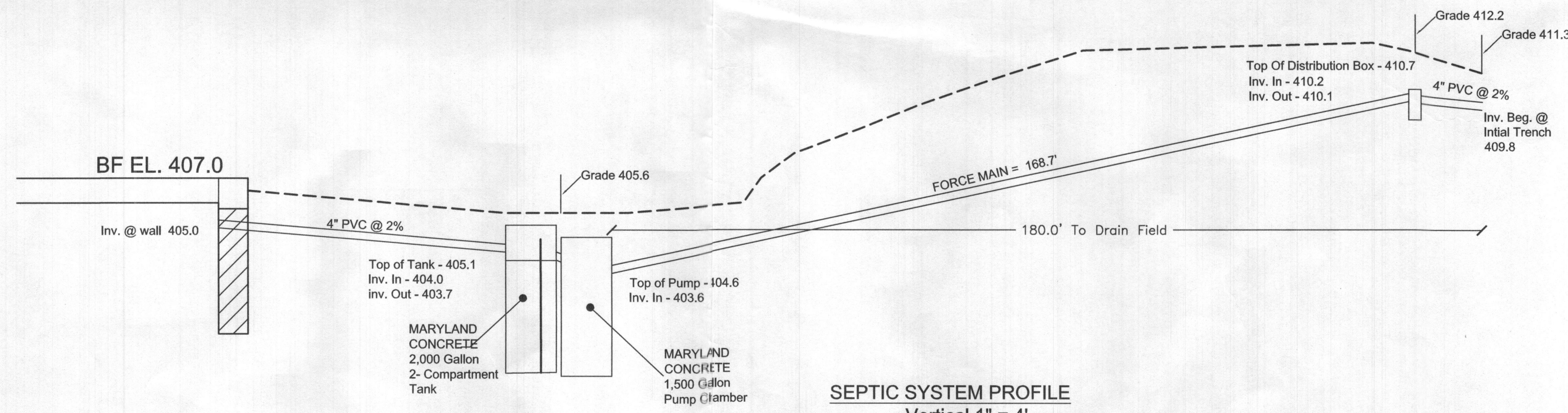
INITIAL TRENCH DETAIL
Scale 1" = 2'

ON-SITE SEWAGE DISPOSAL SYSTEM PLAN
BRUNS PROPERTY - Lot 2 (3.06 Acres)
8228 Hunterbrooke Lane Fulton
Plat No. 22463
Tax Map No. 46 Fifth Election District
Grid 07, Parcel 89
Howard County, Maryland

DESIGN BY: DW
 DRAWN BY: PH
 CHECKED BY: D
 DATE: May 2021
 SCALE: As Show

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 2001
 EXPIRATION DATE: 10/21/2020

2 SHEET OF 2



SEPTIC SYSTEM PROFILE
 Vertical 1" = 4'
 Horizontal 1" = 20'

