



Howard County  
Health Department

**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](http://www.hchealth.org)  
Facebook: [www.facebook.com/hocohealth](http://www.facebook.com/hocohealth)

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

RECEIPT DATE: 9/6/2024 **ONSITE SEWAGE DISPOSAL SYSTEM** P 587802

APPROVAL DATE: 10/18/24 MB/SP **PERMIT: NEW CONSTRUCTION** A \_\_\_\_\_

PROPERTY ADDRESS: 13044 Highland Road

SUBDIVISION: McDaniel Property LOT: 2 TAX ID: \_\_\_\_\_

CONTRACTOR: Hatfields EMAIL: \_\_\_\_\_

CONTRACTOR ADDRESS: \_\_\_\_\_ PHONE: 410 984 0161

PROPERTY OWNER: John P. McDaniel EMAIL: \_\_\_\_\_

OWNER ADDRESS: 13032 Highland Road, Highland MD 20777 PHONE: 443-367-0422

SEPTIC TANK SIZE: 1500 PUMP SIZE: N/A PUMP TANK CAPACITY: N/A

DISTRIBUTION SYSTEM:  GRAVITY  DRIP DISPERSAL BEDROOMS: 5 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>189</u>	INLET DEPTH: <u>2.5</u>
	TRENCH WIDTH: <u>2</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4.5</u>
LOCATION:	SYSTEM TO BE STAKED BY DESIGNER AND VERIFIED BY APPROVING AUTHORITY DURING PRE-CONSTRUCTION INSPECTION.	
NOTES:	Install 3 trenches of 63' in length	

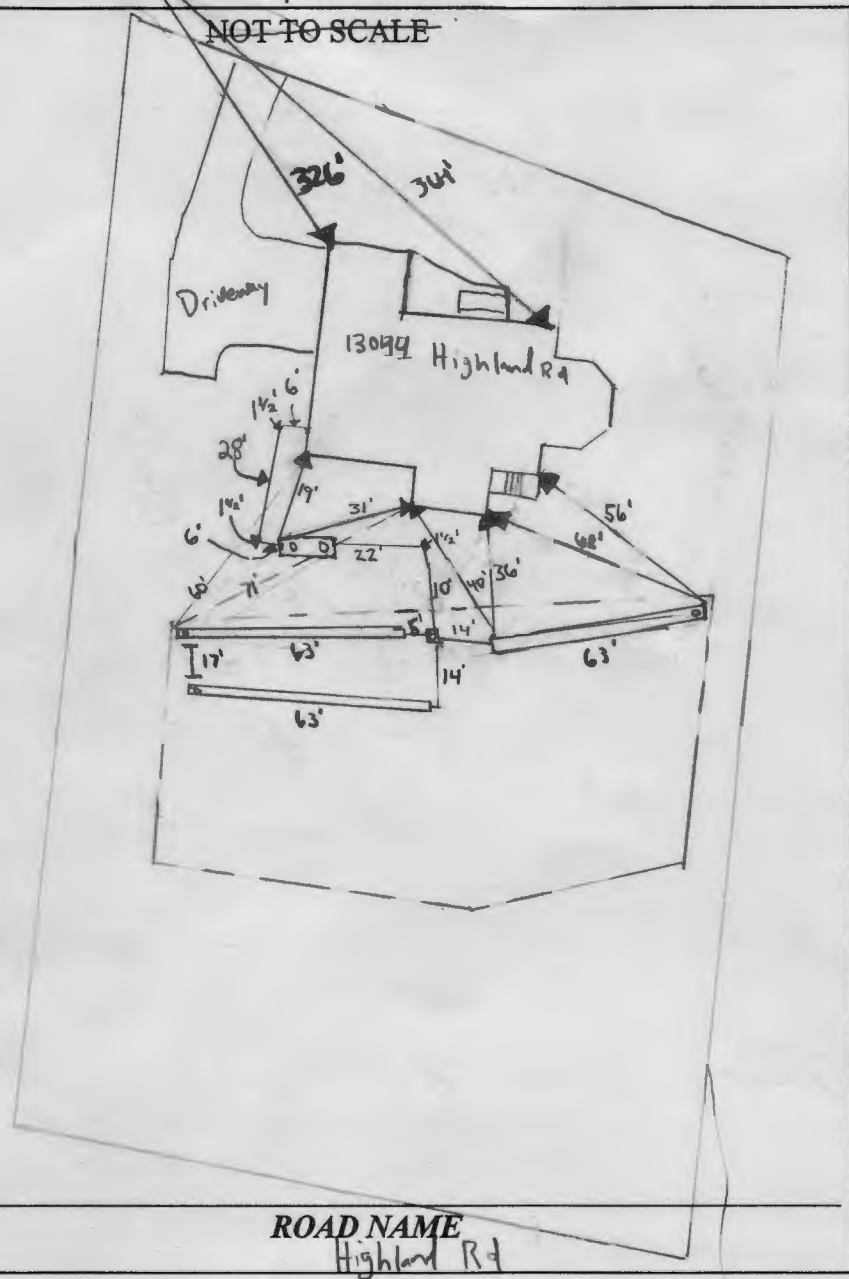
ISSUED BY: [Signature] ISSUE DATE: 9/6/2024 EXPIRATION DATE: 9/6/2024

- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR REGISTERED WITH THE STATE OF MD ON-SITE WASTEWATER PROFESSIONALS BOARD: CONFIRMED
- 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 SEPTIC 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 N/A
- NOTE: THE HCHD DOES NOT WARRANT ANY SYSTEM AND CANNOT GUARANTEE THE PERFORMANCE OF THIS SYSTEM AS DESIGNED. BY ACCEPTING THIS PERMIT, THE OWNER AND/OR APPLICANT ACKNOWLEDGE THAT THE SPECIFICATIONS DETAILED IN THIS DESIGN ARE ONE POSSIBLE OPTION AND THAT THE HCHD WILL REVIEW OTHER PROPOSALS. YOU HAVE THE OPTION TO SEEK THE ADVICE OF A QUALIFIED DESIGN CONSULTANT OR PROFESSIONAL ENGINEER FOR FURTHER GUIDANCE.
- NOTE: AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.
- 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.**

Ho-95-2651  
1" : 50'

NOT TO SCALE



ROAD NAME  
Highland Rd

TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
2	2.5	9
NUMBER OF TRENCHES		3
TOTAL LENGTH		189
ABSORPTION AREA		2079
DISTRIBUTION BOX LEVEL		Yes
DISTRIBUTION BOX BAFFLE		Yes
DISTRIBUTION BOX PORT		Yes

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	Yes
MANUFACTURER	Babylon
CAPACITY	1500 GAL
SEAM LOC	Top
TANK LID DEPTH	1 1/2' - 3 1/2'
BAFFLES	6" Front / 4" Back
BAFFLE FILTER	No
MANHOLE LOC	Front/Back
6" PORT LOC	Front/Back
WATERTIGHT TEST	✓
SLOTTED	Yes
DATE ON LID	8/19/2024

PUMP/SEPTIC TANK LEVEL	N/A
MANUFACTURER	
CAPACITY	GAL
SEAM LOC	
TANK LID DEPTH	
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	✓

SEPTIC CONTRACTOR ONSITE INSTALLING SYTEM: Nathan Heath  
 SEPTIC CONTRACTOR ONSITE LICENSED WITH THE STATE OF MD. YES/NO

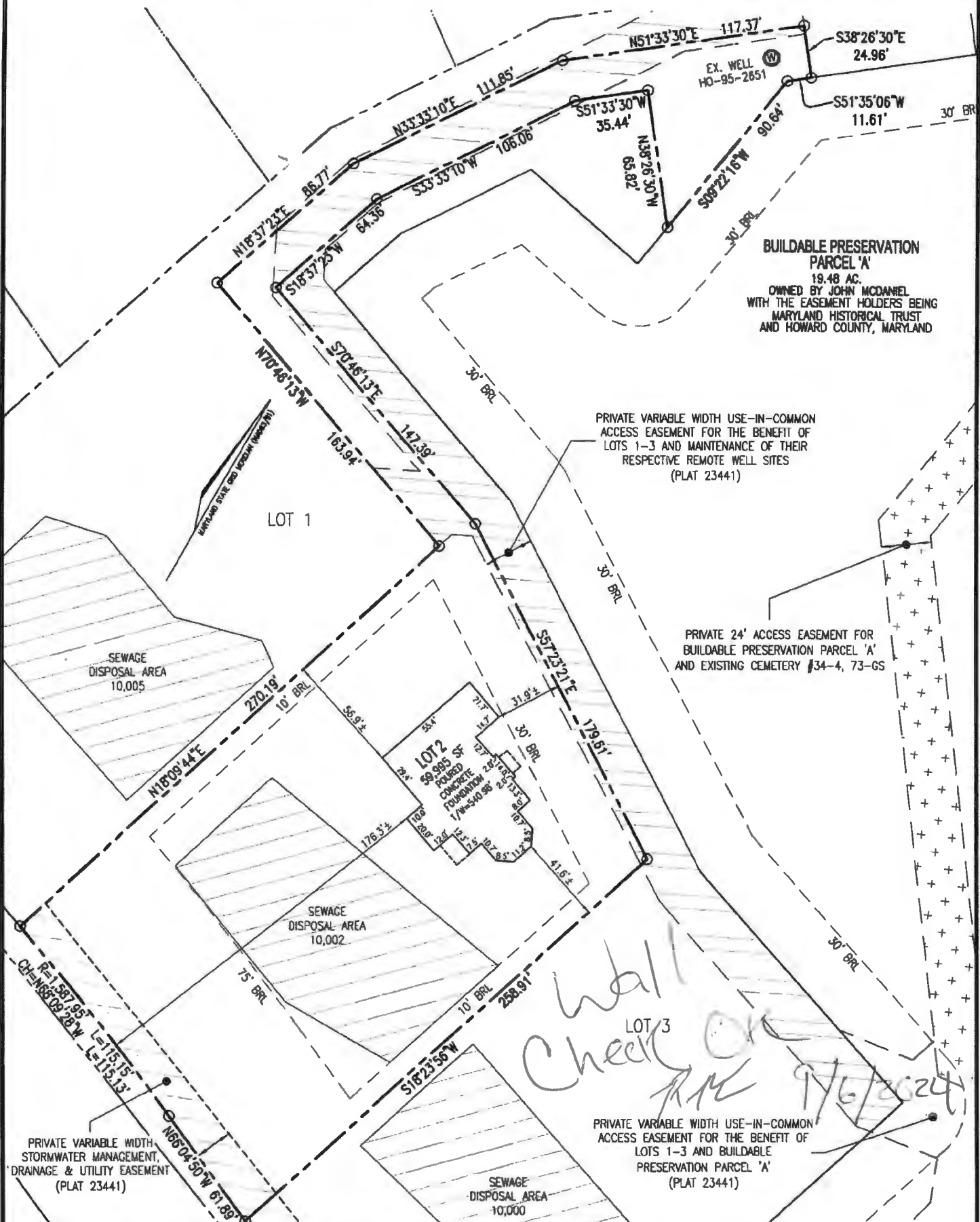
PRE-CONSTRUCTION NOTES:  
10/3/2024 - installers wanted sewer not stubbed out of house, septic contractor to drill through wall. Tank stacked & moved 1' away from house compared to plan. SLOTTED trenches stacked. trench lengths @ 63', on contour & distance between trenches 17' & 14'. OK to stack.

CONTROL PANEL DATA	
CONTROL PANEL HEIGHT	(MIN 30")
INSPECTION DATE	
INSPECTION: PASS/FAIL (CIRCLE ONE)	

INSTALLATION NOTES:  
10/4/2024 Contractor on site. SL and tank installed. OK to backfill due to weekends. first trench dug according to plan. Stone OK. OK to backfill. Re-inspect ST for baffles and risers. Re-inspect for D-box and leveling. Re-inspect for U/O on SL observation port in trench. (AB/RR) 10/7/2024 Contractor on site. Confirmed Baffles (6" front / 4" back) and risers. Levelled D-box. Cleanup has been installed near the SL connection at house. Trench inlets and lengths per plan. Generator fabric OK. Good to backfill. (MB/SP)

FINAL INSPECTOR M. Burns -/S. Page DATE OF APPROVAL 10/18/24

THIS WALL CHECK DRAWING CONTAINS A HORIZONTAL TOLERANCE IN ACCURACY OF 0.1' AND A VERTICAL TOLERANCE IN ACCURACY OF 0.2'



**BUILDABLE PRESERVATION PARCEL 'A'**  
19.48 AC.  
OWNED BY JOHN MCDANIEL  
WITH THE EASEMENT HOLDERS BEING  
MARYLAND HISTORICAL TRUST  
AND HOWARD COUNTY, MARYLAND

PRIVATE VARIABLE WIDTH USE-IN-COMMON ACCESS EASEMENT FOR THE BENEFIT OF LOTS 1-3 AND MAINTENANCE OF THEIR RESPECTIVE REMOTE WELL SITES (PLAT 23441)

PRIVATE 24' ACCESS EASEMENT FOR BUILDABLE PRESERVATION PARCEL 'A' AND EXISTING CEMETERY #34-4, 73-GS

PRIVATE VARIABLE WIDTH STORMWATER MANAGEMENT, DRAINAGE & UTILITY EASEMENT (PLAT 23441)

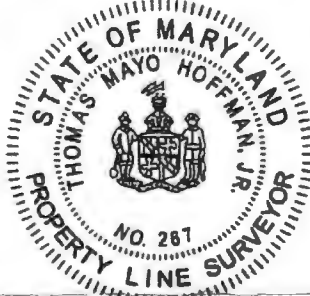
PRIVATE VARIABLE WIDTH USE-IN-COMMON ACCESS EASEMENT FOR THE BENEFIT OF LOTS 1-3 AND BUILDABLE PRESERVATION PARCEL 'A' (PLAT 23441)

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF THAT THE IMPROVEMENTS ARE LOCATED AS SHOWN AND THAT THERE ARE NO ENCROACHMENTS EXCEPT AS SHOWN; THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND.

*Thomas M. Hoffman Jr.*

8/8/24  
DATE

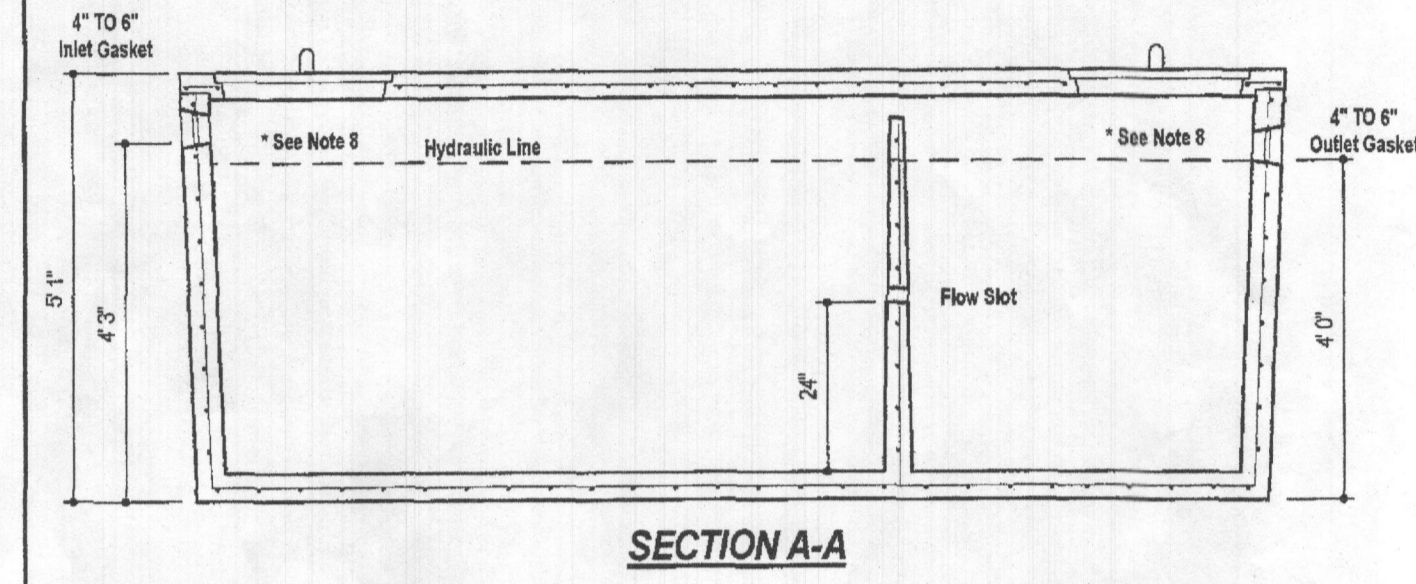
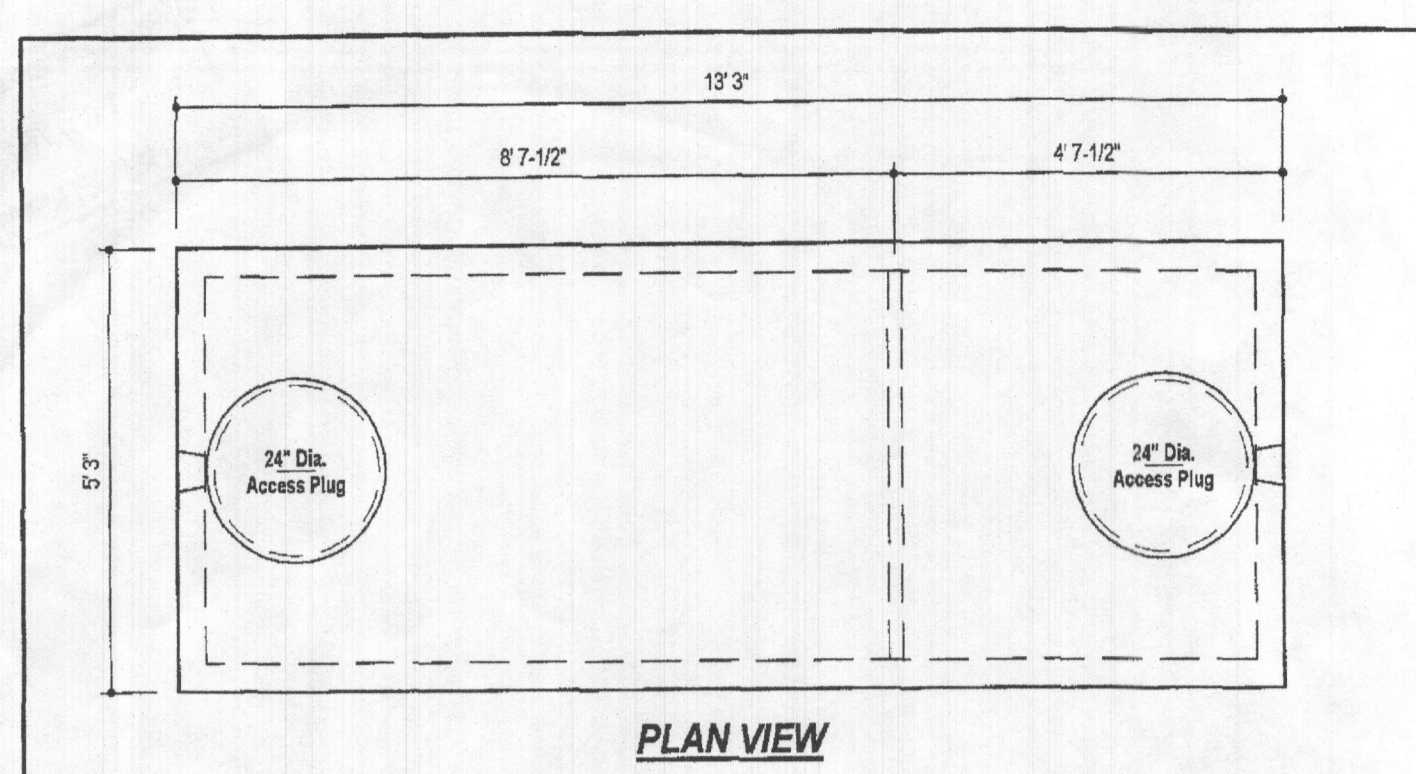
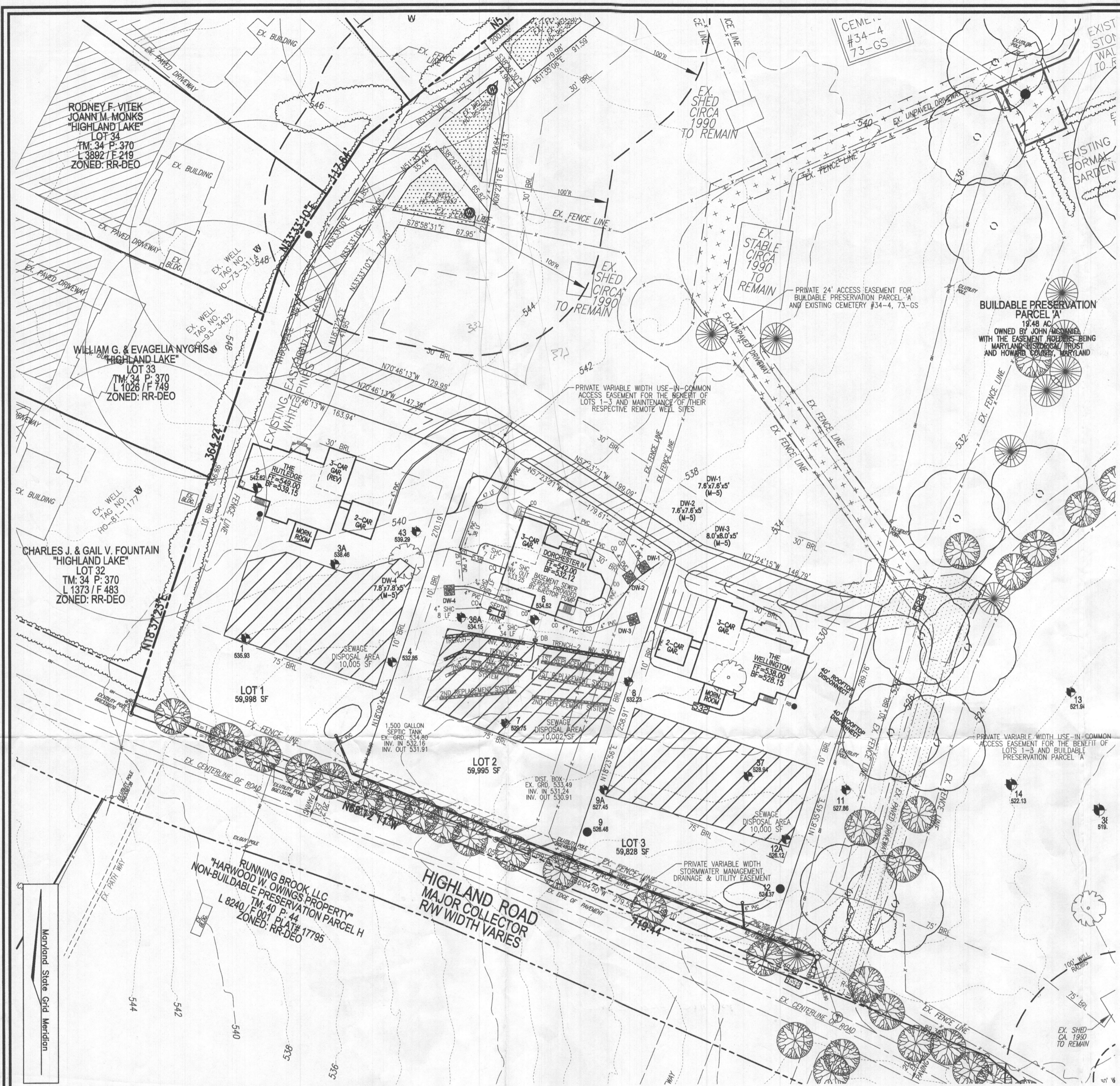
THOMAS M. HOFFMAN JR.,  
PROPERTY LINE SURVEYOR  
LICENSE NO. 267  
EXP. DATE: JULY 28, 2026



SCALE 1" = 60'	DATE 08/07/2024
DRAWN BY J.M.M.	CHECKED BY T.M.H.
PLAT NUMBER 23440-23442	JOB NUMBER 08-43.00

**VOGEL ENGINEERING**  
**TIMMONS GROUP**  
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043  
P: 410.461.7666 F: 410.461.8961 www.timmons.com

WALL CHECK DRAWING  
13044 HIGHLAND ROAD  
LOT 2  
MCDANIEL PROPERTY  
PLAT NO. 23441  
FIFTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND



**DESIGN DATA & GENERAL NOTES**

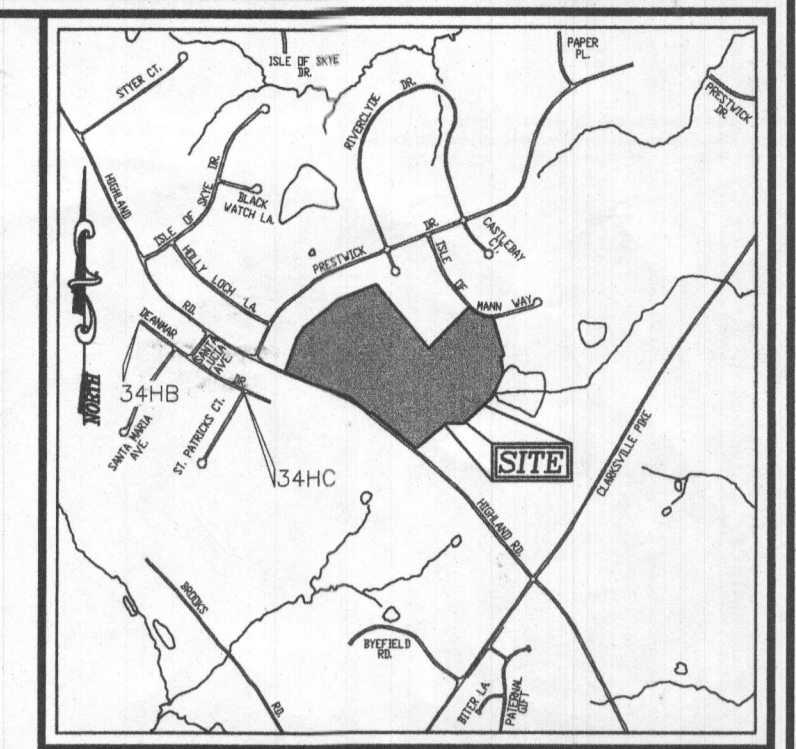
- Concrete strength 4,000 p.s.i. @ 28 days. Density = 150 p.c.f.
- Concrete - Portland Type III per ASTM C 150-02.
- Reinforcing per ASTM A 601. Min. 1-1/2" cover.
- Top side coated with heavy grade mastic.
- 4" wall, base, & top thickness.
- Min 3-1/2" of cover.
- Depending on use of tank, inlet & outlet baffles may be required by code.

**Mayer Bros., Inc.**  
 6264 Race Road  
 Elkridge, Maryland 21075  
 Tel. 410.796.1434  
 Fax. 410.796.1439  
 www.mayerbrospc.com

**1,500 GALLON TANK (Non-Traffic) 2-Compartment**  
 Stock Item

Dwg. No. 1500-2C    No Scale    Aug. 11, 2008

**WEIGHT = 16,750 lbs.**



**VICINITY MAP**  
 SCALE: 1"=2000'  
 ADC MAP COORDINATE: 31, A5

**LEGEND:**

- BOUNDARY LINE
- RIGHT-OF-WAY LINE
- EXISTING EDGE OF PAVING
- EXISTING UTILITY POLE
- EXISTING FENCE LINE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING TREES
- PRIVATE VARIABLE WIDTH USE-IN-COMMON ACCESS EASEMENT
- PROP. ALTERNATE WELL LOCATION
- EX. WELL LOCATION
- FAILED PERC. TEST
- PASSED PERC. TEST
- APPROVED SEPTIC AREA

**WELL LOCATION CERTIFICATION:**  
 THE EXISTING WELL SHOWN ON THIS PLAN (HO-95-2651) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

**PLAN VIEW**  
 SCALE: 1"=50'

**TRENCH INFO. (INITIAL)**

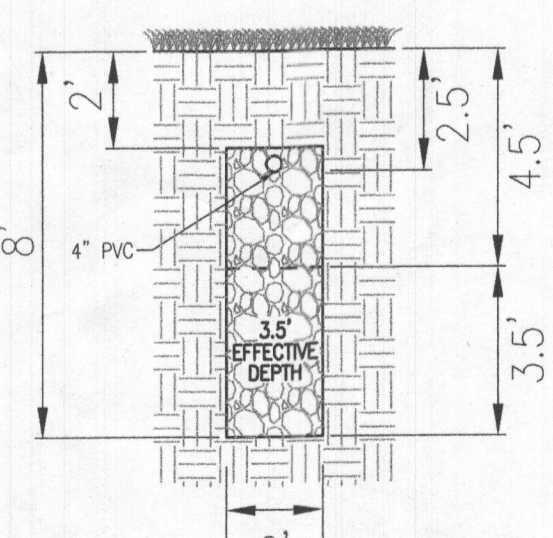
TRENCH	TRENCH LENGTH	INVERT	INTO	BOTTOM OF TRENCH	EXISTING GROUND
1	63'	530.72	525.22	533.22	533.22
2	63'	530.73	525.23	533.23	533.23
3	63'	529.75	524.25	532.25	532.25

**SYSTEM CALCULATIONS:**

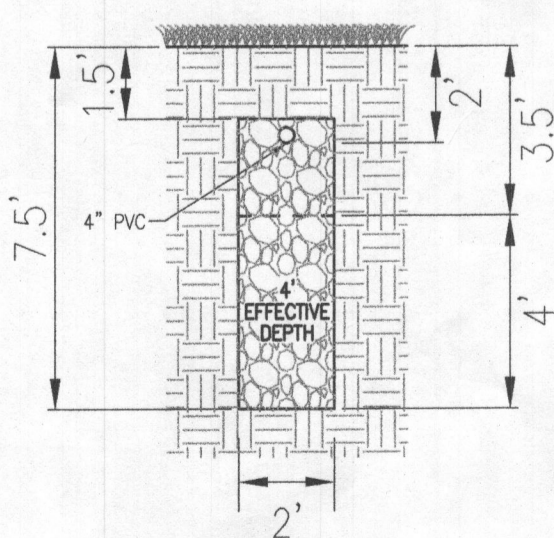
**INITIAL SYSTEM:**  
 5 BEDROOMS AT 750ppd / 0.8 ABSORPTION RATE = 938 SQ. FT.  
 938 SQ. FT. / 2 (TRENCH WIDTH) x .40 (SIDEWALL REDUCTION) = 188 LINEAR FEET  
 188 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.  
 (3 TRENCHES OF 63' IN LENGTH)

**FIRST REPLACEMENT SYSTEM:**  
 5 BEDROOMS AT 750ppd / 1.2 ABSORPTION RATE = 625 SQ. FT.  
 625 SQ. FT. / 2 (TRENCH WIDTH) x .36 (SIDEWALL REDUCTION) = 113 LINEAR FEET  
 114 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.  
 (2 TRENCHES OF 57' IN LENGTH)

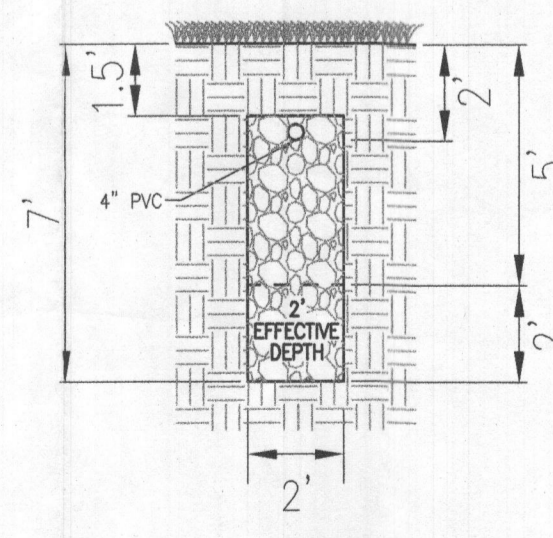
**SECOND REPLACEMENT SYSTEM:**  
 5 BEDROOMS AT 750ppd / 1.2 ABSORPTION RATE = 625 SQ. FT.  
 625 SQ. FT. / 2 (TRENCH WIDTH) x .57 (SIDEWALL REDUCTION) = 178 LINEAR FEET  
 180 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.  
 (3 TRENCHES OF 60' IN LENGTH)



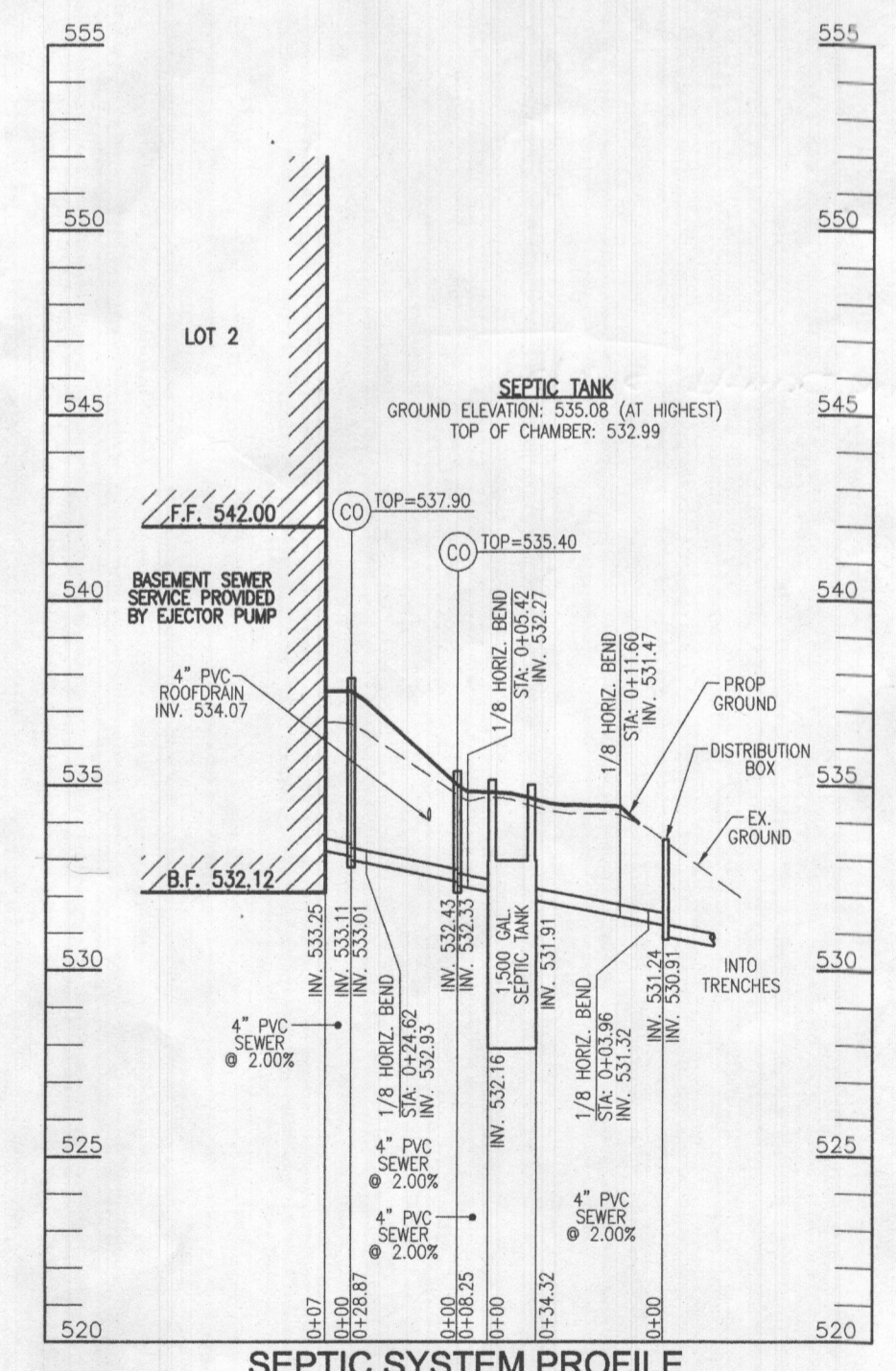
**INITIAL SYSTEM TRENCH DETAIL**  
 NOT TO SCALE



**1ST REPLACEMENT TRENCH DETAIL**  
 NOT TO SCALE



**2ND REPLACEMENT TRENCH DETAIL**  
 NOT TO SCALE



**SEPTIC SYSTEM PROFILE**  
 SCALE: HORIZONTAL - 1"=50'  
 VERTICAL - 1"=5'

THIS AREA DESIGNATES A PRIVATE SEWAGE DISPOSAL AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS AREA SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE DISPOSAL AREA. RECORDATION OF A MODIFIED SEWAGE DISPOSAL AREA SHALL NOT BE NECESSARY.

**GENERAL 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.
- THE WELL (HO-95-2651) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
- 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.
- ANY CHANGE TO A PRIVATE SEWAGE DISPOSAL AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- ADJUSTMENT TO THE PRIVATE SEWAGE DISPOSAL AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
- THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.

Approved Septic System Plan  
 Howard County Health Department  
 Howard Daniel 5/8/24  
 Signature Date

**OWNER/DEVELOPER**  
 JOHN P. MCDANIEL  
 13032 HIGHLAND ROAD  
 HIGHLAND, MD 20777  
 ATTN: MR. JOE RUTTER  
 (443) 367-0422

**ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN**

**MCDANIEL PROPERTY - LOT 2**  
 13044 HIGHLAND ROAD  
 HIGHLAND, MD 20777

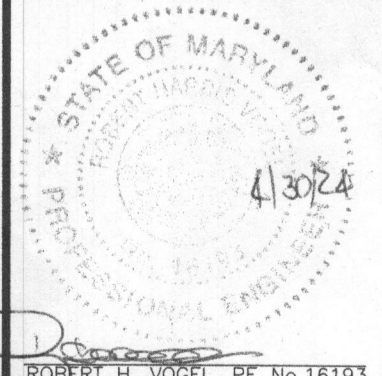
PLATS: 23440-42  
 TAX MAP: 34 GRID: 22  
 5TH ELECTION DISTRICT

BUILDING PERMIT #

PARCEL: 117  
 ZONED: RR-DEO  
 HOWARD COUNTY, MARYLAND

**VOGEL ENGINEERING**

**TIMMONS GROUP**  
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043  
 P: 410.461.7666 F: 410.461.8961 www.timmons.com



DESIGN BY: RHV  
 DRAWN BY: JMR  
 CHECKED BY: RHV  
 DATE: APRIL 2024  
 SCALE: AS SHOWN  
 W.O. NO.: 08-43

PROFESSIONAL CERTIFICATE  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 16193 EXPIRATION DATE: 09-27-2024