

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: 11-19-25 **ONSITE SEWAGE DISPOSAL SYSTEM** P 590281

APPROVAL DATE: 1/15/26 **PERMIT: NEW CONSTRUCTION** A _____

PROPERTY ADDRESS: 857 Morgan Station Road

SUBDIVISION: Robert H. Davis Property LOT: 2 TAX ID: _____

CONTRACTOR: WTC Contractors EMAIL: _____

CONTRACTOR ADDRESS: 3033 Salem Bottom Rd, Westminster, MD 21157 PHONE: 410-875-9171

PROPERTY OWNER: Joseph Ames EMAIL: _____

OWNER ADDRESS: 16801 Colton Court, Woodbine, MD 21797 PHONE: _____

SEPTIC TANK SIZE: 2000 PUMP SIZE: N/A PUMP TANK CAPACITY: N/A

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>157 (4 @ 40') 47'</u>	INLET DEPTH: <u>2.5 4' 3.5'</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8 7'</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>18 11'</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3</u>
LOCATION:	SYSTEM TO BE STAKED BY DESIGNER AND VERIFIED BY APPROVING AUTHORITY DURING PRE-CONSTRUCTION INSPECTION.	
NOTES:		

ISSUED BY: Zack Silvast ISSUE DATE: 11-19-25 EXPIRATION DATE: 11-29-26

- 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 WARRANTY 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.**

NOT TO SCALE

11/24/2025-Installer & Builder onsite for pre-con sewer out of house excavated. Elevation from sewer to proposed tank w/ 1%. Fall would be too deep; \Rightarrow 3' cover on tank & would not make inlet @ trenches. Builder wants to move ST downhill & install PT to trenches. **SP/MB**

1/13/2026-Installer onsite for pre-con. Tank & SDA started for plan trenches 211 @ 47'. Discovered realine changes, installer understands trenches changed to 47' & bottom @ 4', inlet @ 3.5'. Tank to have 43' cover & sewer line holding 1%. Trenches on contour. OK to start work. **MB**

1/15/2026 Trenches 1 and 2 have been dug. 3.5' inlets. Trench lengths per plan with geotextile fabric added. Distance between trenches 1 and 2 are 10.5' - 11'. D-box leveled. OK to backfill. **MB**

* See Separate Sheet for As-built
ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	3.5'	7'
NUMBER OF TRENCHES		4
TOTAL LENGTH		186'
ABSORPTION AREA		564 ft ² + Sidewall
DISTRIBUTION BOX LEVEL		Yes
DISTRIBUTION BOX BAFFLE		Yes
DISTRIBUTION BOX PORT		Yes

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL Yes

MANUFACTURER Baby's

CAPACITY 2000 GAL

SEAM LOC Top

TANK LID DEPTH 1.5'

BAFFLES 6" Front / 4" Back

BAFFLE FILTER -

MANHOLE LOC Front/Back

6" PORT LOC _____

WATERTIGHT TEST X

SLOTTED Yes

DATE ON LID 10-20-25

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: Dwayne Nail
SEPTIC CONTRACTOR ONSITE LICENSED WITH THE STATE OF MD: YES/NO

PRE-CONSTRUCTION NOTES:

11/21/25 Revisited plan's trench, SDA, tank, and d-box started. Trenches are on contour. Contractor having trouble locating stubbed out pipe coming out of footer. Plumber will be locating stubbed out pipe tomorrow. **MB/SP** 11/22/25 spoke with builder superintendent. Pipe has been camera'd and is located further over than what was dug. Contractor to dig 1/4 on Monday to verify pipe depth. **MB**

INSTALLATION NOTES:

1/13/2026 - Front line completed. Contractor confirmed 1% fall. Balled pipe with 57 stone for pipe 20' or so. Schedule 40 pipe used. Installed 2 cleanouts. Tank installed and level. Tank has sloped. 1' risers installed, more may be added depending on final grading. Well is \geq 100' from SDA. **MB**

1/14/26 Back line to d-box 15 ft. Stone on site and 15 OK. Trenches are 11' apart. Contractor starting trenches. **MB**

1/14/26 Contractor has trenches 3 and 4 dug. Using a laser level to measure bottom. Trench 4 inlet at 3'-3.5'. Observation ports added on both ends. Geotextile fabric added. Distance between trench 4 and 3 is 10'. Asked contractor to have distance at 11' for next two trenches. Trench 3 installed with 3.5' inlet Geotextile fabric installed. OK to backfill trenches. **MB**

FINAL INSPECTOR M. Burns DATE OF APPROVAL 1/15/26

~~N/A~~

CONTROL PANEL DATA

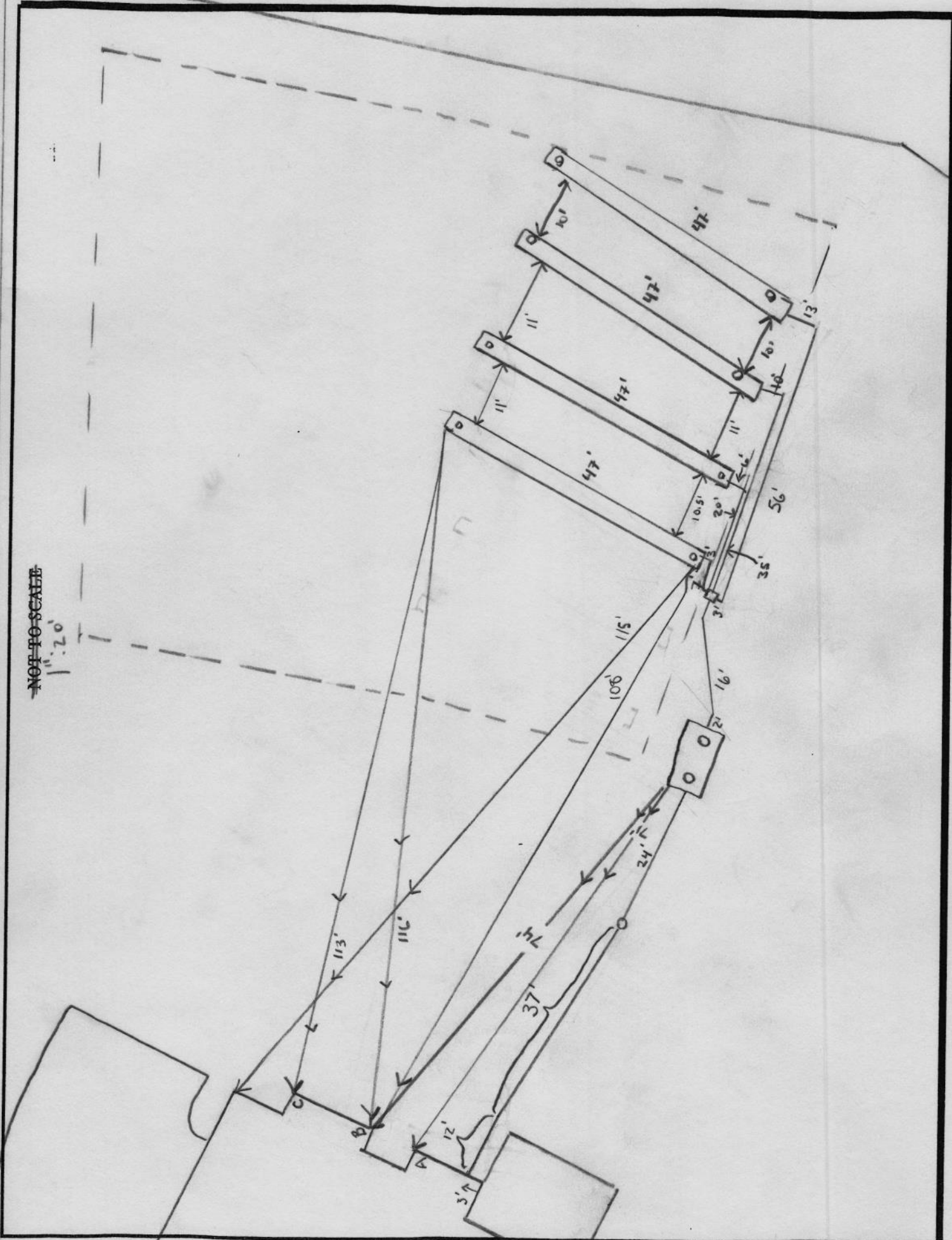
CONTROL PANEL HEIGHT (MIN 30") _____

INSPECTION DATE _____

INSPECTION: PASS/FAIL (CIRCLE ONE)

NOT TO SCALE

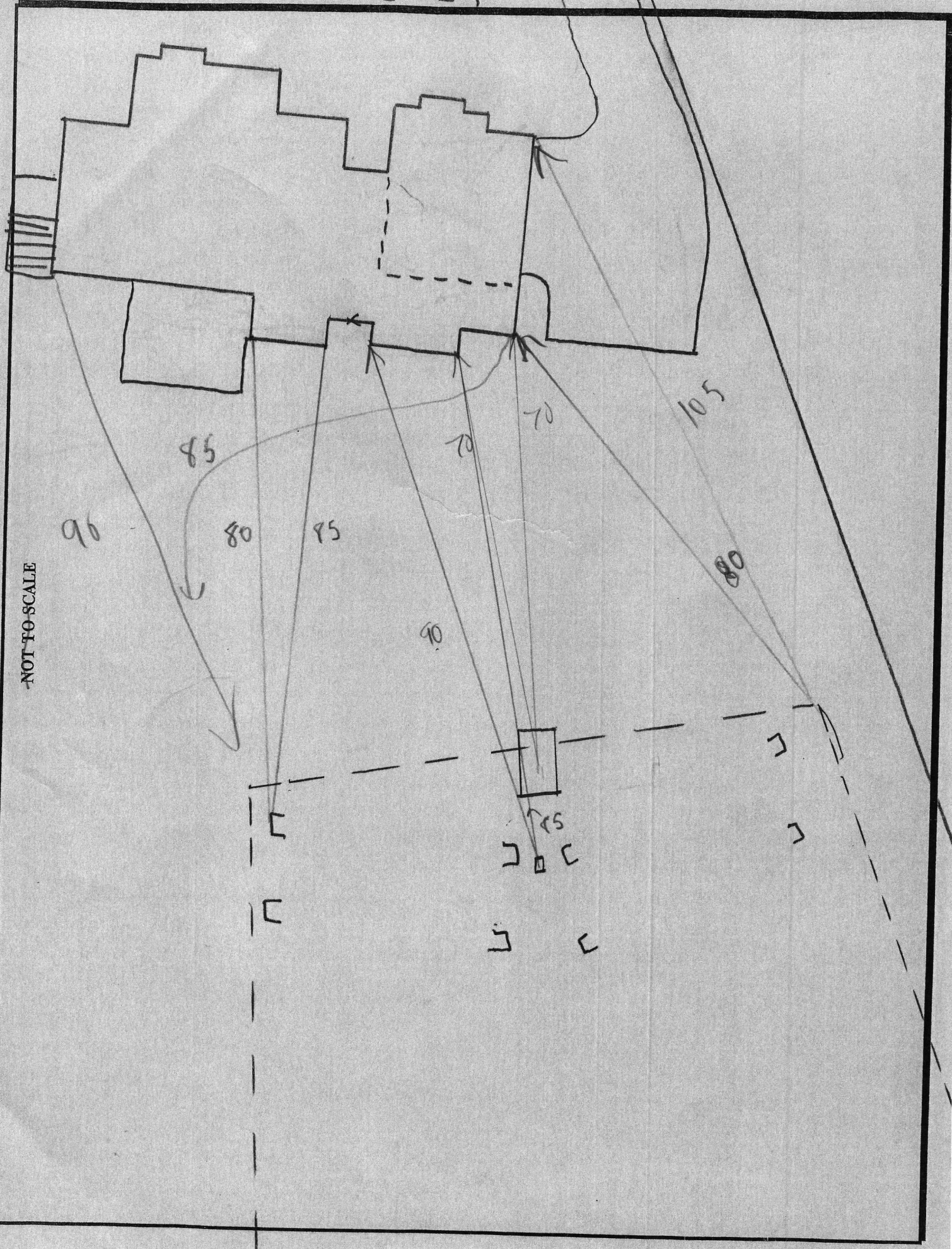
1" = 2.0'



Ex. No. 10-9
2/75

1" = 20'

NOT TO SCALE



Silvast, Zackary

From: Silvast, Zackary
Sent: Tuesday, January 6, 2026 12:49 PM
To: 'Jim Witmer'
Cc: Wolf, Kevin
Subject: RE: FW: Lot 2 redline

Hey Jim,

I did look over this plan, and I was waiting for Kevin to get back from holiday before sending out comments because he knew what was going on with the site as it stood more than I did. Please see comments below.

1. **The septic contractor made it seem like the main septic line leaving the house was under the “enclosed porch.” Is your redline piping accurate and we do know that the invert out of the house is 580.4’ and coming out of the house at that location?**
 - a. **Can you provide that confirmed invert depth on the septic profile as well.**
2. **For the initial system, all of the invert depths should be at 3’ for all four of the trench lines.**
3. **For the 2nd reserve system, all of the invert depths should be at 2’.**
4. **ON septic system profile it says 1500 GAL tank, should state 2000 GAL.**
5. **Add a general note that states, “When the 2nd reserve septic system is required to be installed, a pump chamber will be required and an updated OSDS plan with all required details and pump calculations must be provided to the Health Department for approval.”**

If you can address these comments Jim and I will approve the plan right away when you drop it off. Thank you.

- ZS

From: Jim Witmer <jnmengineeringllc@gmail.com>
Sent: Tuesday, January 6, 2026 8:13 AM
To: Silvast, Zackary <zsilvast@howardcountymd.gov>
Subject: Re: FW: Lot 2 redline

WARNING!!!

This email originated from someone outside of Howard County
*****DO NOT CLICK LINKS OR OPEN ATTACHMENTS*****
unless you recognize the sender and know for sure that the content is safe

hi Zack,

hope your holiday was nice. I wanted to follow up on the attached redline I dropped a copy off a few weeks ago. Does this work for you?

Jim Witmer, P.E.
JNM Engineering, LLC
(301) 514-2808
jnmengineeringllc.com

On Tue, Nov 25, 2025, 12:57 PM <jnmengineeringllc@gmail.com> wrote:

Zack,

This is the plan I just left a message about. They are about 1-foot low at the top trenches. They wanted to use the 1st reserve system now to avoid installing a pump. If/when the first system fails they could go to the second reserve or install a pump at that time. Please let me know if this would work.

Thanks,

Jim

From: Jim Witmer <jnmengineeringllc@gmail.com>
Sent: Tuesday, October 14, 2025 7:33 AM
To: Rob Scranton <rscranton@catonsvillehomes.com>
Subject: Lot 2 redline

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Jim Witmer, P.E.

JNM Engineering, LLC

(301) 514-2808

jnmengineeringllc.com

Silvast, Zackary

From: Silvast, Zackary
Sent: Wednesday, June 11, 2025 7:58 PM
To: Jim Witmer
Subject: RE: ROBERT H. DAVIS lots
Attachments: 857 Mogran Station Rd (OSDS comments DB 3.4.25).pdf

Hey Jim,

I was able to track down this file, which was a nightmare. Dana was correct. The well box on the OSDS plan does not match the approved Perc Cert from 2007. I can send that to you if you need it (the old PC) Just let me know.

OSDS comments

1. **Need to update the plan to reflect a 2000 GAL tank on the plot plan, on the tank detail, and on the septic profile.**
2. **Need all trenches to be 13' apart due to 5' of sidewall credit. [W +D(2)]**
3. **You could put a 22.5 or 45 degree bend in some of the system trenches to get them on contour better. (overall not bad tho)**
4. **Still need to show perc holes & elevations on OSDS.**
5. **Provide exact square footage of well box and SDA.**
6. **Need an updated Perc Cert if changing the well box for Lot 2.**

- Zack S

From: Jim Witmer <jim@jnmengineeringllc.com>
Sent: Wednesday, June 11, 2025 5:40 PM
To: Silvast, Zackary <zsilvast@howardcountymd.gov>
Subject: Re: ROBERT H. DAVIS lots

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Hey Zack, I wanted to check in on these. I know one I'm working with Spencer and the other one you were going to look at for us. Could you let me know if you have any comments or if it's approvalable. The client is really upset with me.

On Thu, May 15, 2025, 6:57 PM Jim Witmer <jim@jnmengineeringllc.com> wrote:

No worries, thank you.

On Thu, May 15, 2025, 6:20 PM Silvast, Zackary <zsilvast@howardcountymd.gov> wrote:

OK I'll jump on this one quickly then. Sorry about that.

From: jim@jnmengineeringllc.com <jim@jnmengineeringllc.com>
Sent: Thursday, May 15, 2025 6:19 PM
To: Silvast, Zackary <zsilvast@howardcountymd.gov>
Subject: RE: ROBERT H. DAVIS lots

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Hi Zack, thank you. I just checked and I do have Spencer's comments. I can revise and get back in. I do not see Dana's comments.

From: Silvast, Zackary <zsilvast@howardcountymd.gov>
Sent: Thursday, May 15, 2025 6:06 PM
To: Jim Witmer <jim@jnmengineeringllc.com>
Subject: RE: ROBERT H. DAVIS lots

Hey Jim,

I totally get that, and I understand you've been getting your feet back under you. I work until 5:30 -6pm, and will take any call if I'm at my desk from certain respectable people.

As for these, there has only been one submittal for 857 Morgan Station Road (Lot 2) around February 18th and a plan is marked up & comments were made early March. I haven't seen a plan come in since then. Did you receive comments from Dana?

The other lot in question I'm assuming is Lot 1 at 851 Morgan Station Road, and Spencer has revisions required on April 14th from a plan that looks like it was submitted on March 27th. Did you receive comments from Spencer?

Let me know on these, if you didn't receive comments from Dana..... I'm going to review it from scratch, and submit notes. Sometimes notes from her can be very confusing, she does mention having to alter the perc cert possibly. I'm hoping not to do that.

- ZS

From: Jim Witmer <jim@jnmengineeringllc.com>
Sent: Thursday, May 15, 2025 5:06 PM
To: Silvast, Zackary <zsilvast@howardcountymd.gov>
Cc: Jim Witmer <jnmengineeringllc@gmail.com>
Subject: Re: ROBERT H. DAVIS lots

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Hey Zack,

I apologize for not calling but I'm tied up from 7:30 to 4:30 now. I definitely don't want to be doing personal projects during my County schedule. I emailed a few minutes ago to note that we had submitted osds plans for each lot. That's what he is looking for the status of.

On Thu, May 15, 2025, 2:49 PM Silvast, Zackary <zsilvast@howardcountymd.gov> wrote:

Hey Jim,

Are you working on these? I am confused what this property owner wants? I approved the plans in PDOX, if we are making those changes I need some paper copies submitted.

It would help if you could give me a call on this one as I am a little lost on what's going on here as far as "process" is concerned and where we're at currently.

- ZS

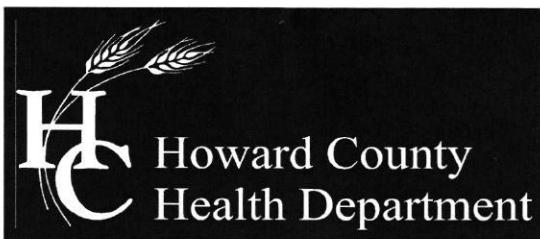
Zack Silvast (LEHS)

Plan Review Supervisor - Water & Sewer Division

410-313-1777

Environmental Health Bureau

Howard County Health Department



Office of the Health Officer

8930 Stanford Drive, MD 21045
Main: 410-313-6300 | Fax: 410-313-6303
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org

Facebook: www.facebook.com/hocohealth

Maura J. Rossman, M.D.,

Date: March 3, 2025

To: Jim Witmer
Via E-Mail: jnengineeringllc.com

RE: 857 Morgan Station
Tax Map: 8 Parcel: 18989 (Lot#2)

Jim,

Your proposal for your OSDS has been reviewed. Please address the following:

- A new revised percolation certification plan must be submitted prior to the submission of the OSDS. There have been several changes to this subdivision and the location of the well box has changed on the OSDS submitted.
- When you submit your revised OSDS to reflect your PC please make sure the trenches are on contour.
- The OSDS proposal for your plan shows a 1500-gallon tank and you are proposing a house with 6 bedrooms. You must accommodate the number of bedrooms proposed with a 2000-gallon tank. Please revise.
- The revised PC must match OSDS.

The next step in this process is to resubmit all the information required and confirm the installation design of the septic reserve areas. If you have any questions regarding this evaluation or requirements for the Percolation Certification Plan, please contact me at the above address or by telephone at (410) 313-2775.

Respectfully,

A handwritten signature in cursive script that reads 'Dana Bernard'.

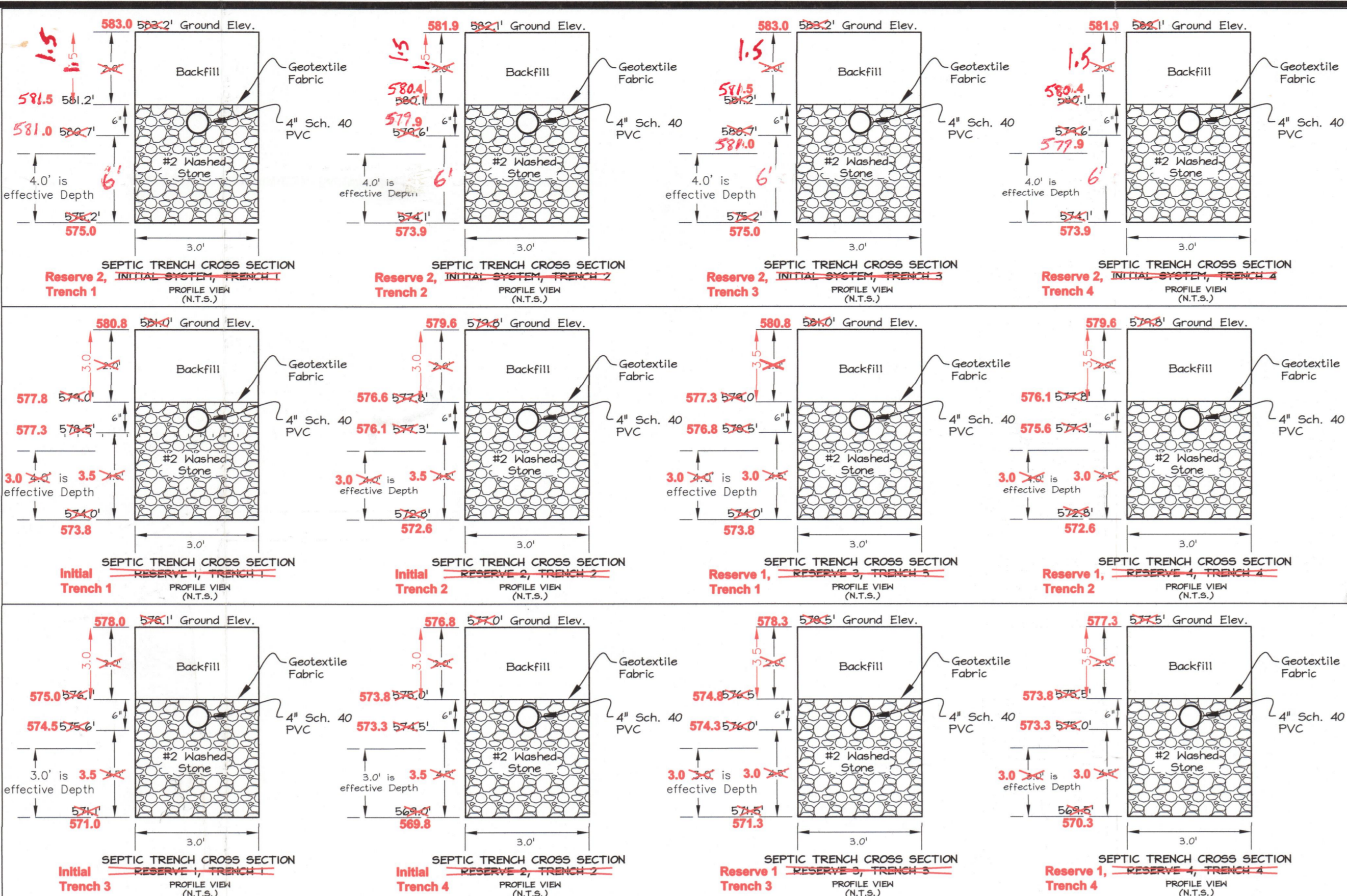
Dana Bernard, REHS/RS
Environmental Specialist II
Well and Septic Program
Phone (410) 313-2775
E-mail: dbernard@howardcountymd.gov

GENERAL NOTES

- THIS PROPERTY IS ZONED RC-DEO.
- THE PROPERTY BOUNDARY SHOWN IS BASED ON CURRENT PLAT.
- DEED REFERENCE: LIBER 22255 FOLIO 374.
- THE EXISTING TOPOGRAPHY ON SITE IS BASED ON A FIELD RUN SURVEY CONDUCTED BY JNM ENGINEERING IN JANUARY, 2025. OFFSITE TOPOGRAPHY IS BASED ON HOWARD COUNTY GIS.
- ADJUSTMENTS TO THE SEPTIC AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
- SOIL TYPES SHOWN ON THIS PLAN ARE FROM THE USDA WEB SOIL SURVEY.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- ALL EXISTING WELLS AND SEWERAGE DISPOSAL AREAS AND COMPONENTS WITHIN 100'-FEET OF THE PROPERTY BOUNDARIES AND ALL EXISTING/PROPOSED WELLS 200' DOWN GRADIENT FROM EXISTING OR PROPOSED SEPTIC SYSTEMS HAVE BEEN SHOWN FROM THE BEST AVAILABLE INFORMATION.
- THIS LOT WAS CREATED BY PLAT (18989) IN 2011.
- SEPTIC TANK AND PUMP CHAMBERS COVER DEPTHS SHALL NOT EXCEED 3'-FEET UNLESS DESIGNED AND APPROVED NOTING A TRAFFIC BEARING LID.
- 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 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 SHOWN ON THIS PLAN HAVE BEEN FIELD LOCATED AND ARE ACCURATELY SHOWN.
- When the 2nd reserve system is required to be installed, a pump chamber will be required and an updated OSDS plan with all required details and pump calculations must be provided to the Health Department for approval.

LEGEND

- EX. PROP. LINE
- EX. FENCE
- PROP. DRIVEWAY
- APPROVED SEWAGE DISPOSAL AREA
- SOIL BOUNDARY
- EX. 2' CONTOUR
- EX. 10' CONTOUR
- WELL (EX. OR PROP.)
- BUILDING RESTRICTION LINE
- PASSED PERC TEST
- EX STEEP SLOPES
- WELL BOX



SEPTIC SIZING
 System Requirements (1 initial and 2 replacements).
 Proposed Number of Bedrooms: 6
 Design Load: 900 Gal/Day
 Initial System:
 - Reserve 2 System
 Effective Start Depth: 3.5'
 Maximum Bottom Trench Depth: 8'
 Inlet Depth: 2.1'
 Absorption Area Required: 900/0.8=1125
 1125/3= 375sf
 Total Trench Length Required: 157'-feet (Four at 40').
 - Reserve 1 System
 Effective Start Depth: 4.0'
 Maximum Bottom Trench Depth: 7'
 Inlet Depth: 4.1'
 Absorption Area Required: 900/0.8= 1125
 1125/3= 375
 375x0.50 (3.0' Sidewall)= 187.5 LF Required
 (Install 4- 47' long trenches)

SOILS DATA TABLE

SYMBOL	SOIL	HYDRIC	K-FACTOR	ERODIBLE	WET SEASON
M6C	Minor loam, 8-15% Slopes	NO	0.26	NO	NO
G6B	Glennig Loam, 3%-5% Slopes	NO	0.24	NO	NO

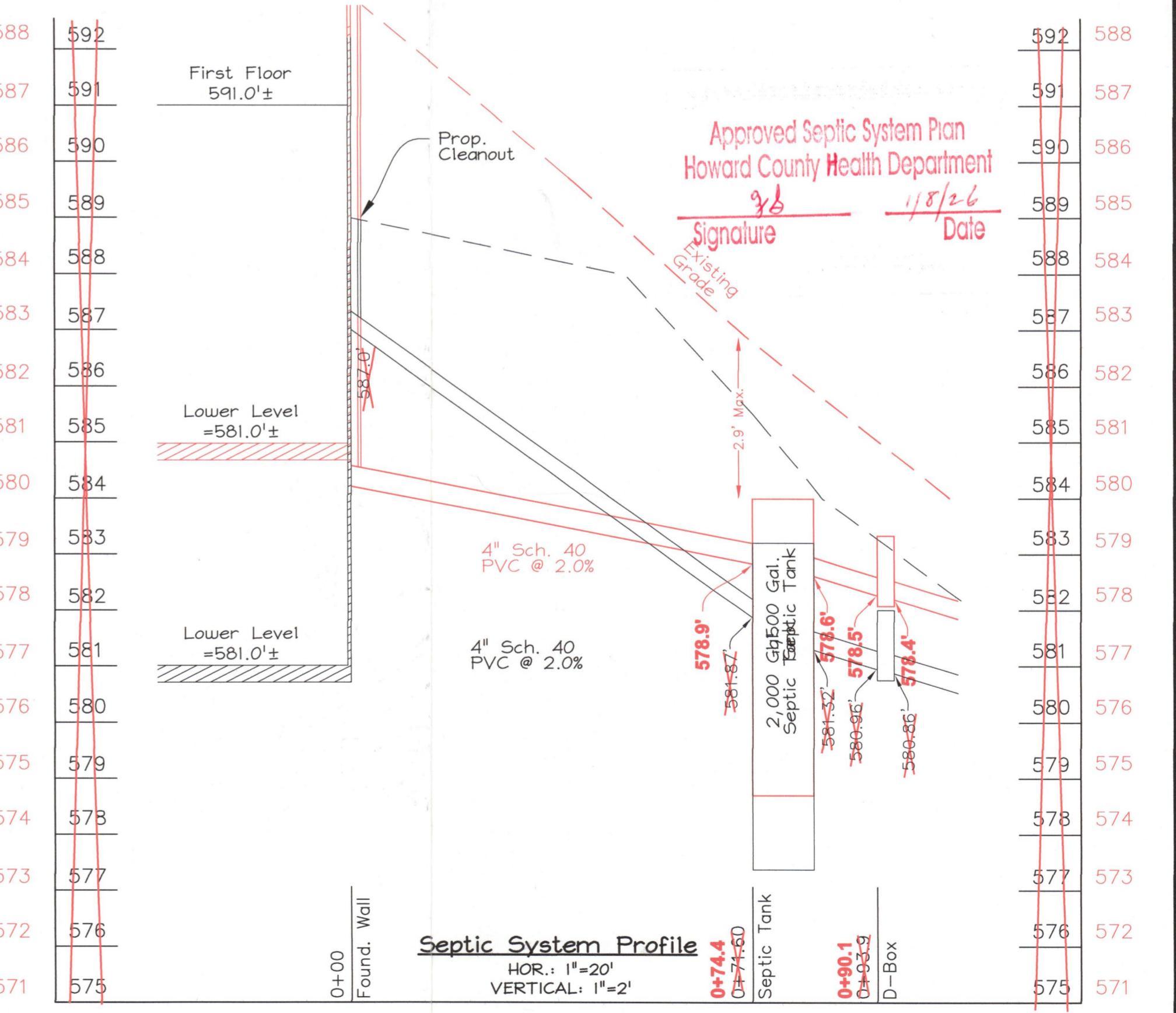
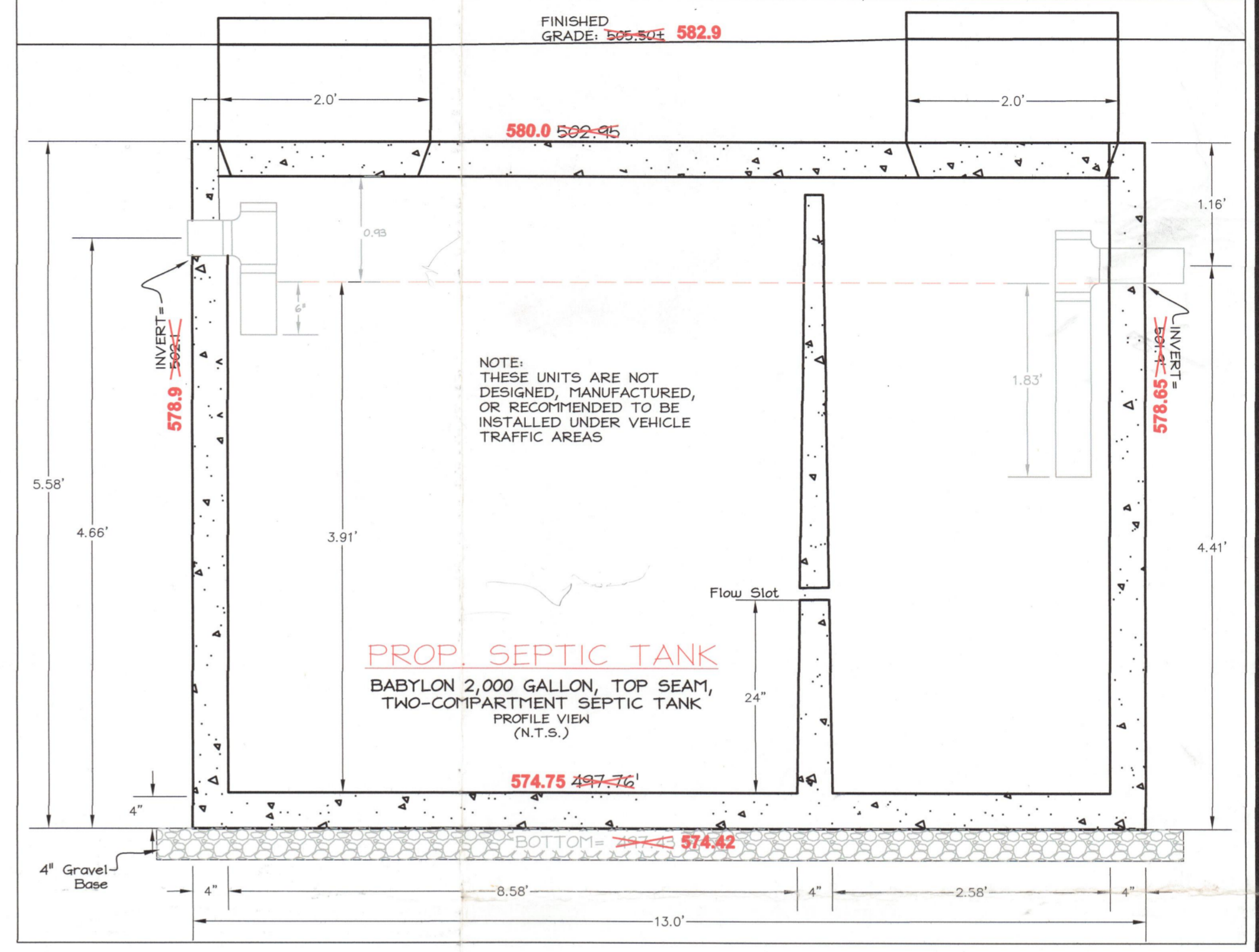
- SOILS INFORMATION TAKEN FROM USDA WEB SOIL SURVEY WEBSITE
 NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 1% OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 1% GREATER THAN 0.36 WITH A SLOPE GREATER THAN 5 PERCENT.



PROFESSIONAL CERTIFICATION:
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21931, EXPIRATION 12/18/2024.
 JAMES MILLER, P.E.
 1/20/2025
 DATE



VICINITY MAP



857 MORGAN STATION ROAD
 WOODBINE, MD 21797
 LOT 2, PLAT 18989, MAP 8
 GRID 2, 48,494SF, ACCT#04-593623
 ONSITE SEWAGE DISPOSAL
 SYSTEM DESIGN PLAN

OWNER/DEVELOPER:
 MEGHAN AND JOSEPH AMES
 1680 COLTON COURT
 WOODBINE, MD 21747

JNM ENGINEERING, LLC
 CIVIL ENGINEERING, SURVEYING, LAND PLANNING,
 ENVIRONMENTAL, ARBORICULTURE, LEED PROFESSIONALS
 105 LEAFY HOLLOW CIRCLE, MOUNT AIRY, MD 21771
 (301) 514-2808, JNMENGINEERINGLLC.COM

857 MORGAN STATION RD
 TAX MAP 8, LOT 2, PLAT 18989, 48,494SF
 ELECT. DIST. 4, HOWARD COUNTY, MARYLAND

ONSITE SEWAGE DISPOSAL DESIGN PLAN

DATE	BY	REVISION
03/23	JWW	ENGINEERING
03/23	JWW	NA
03/23	JWW	APPROVAL

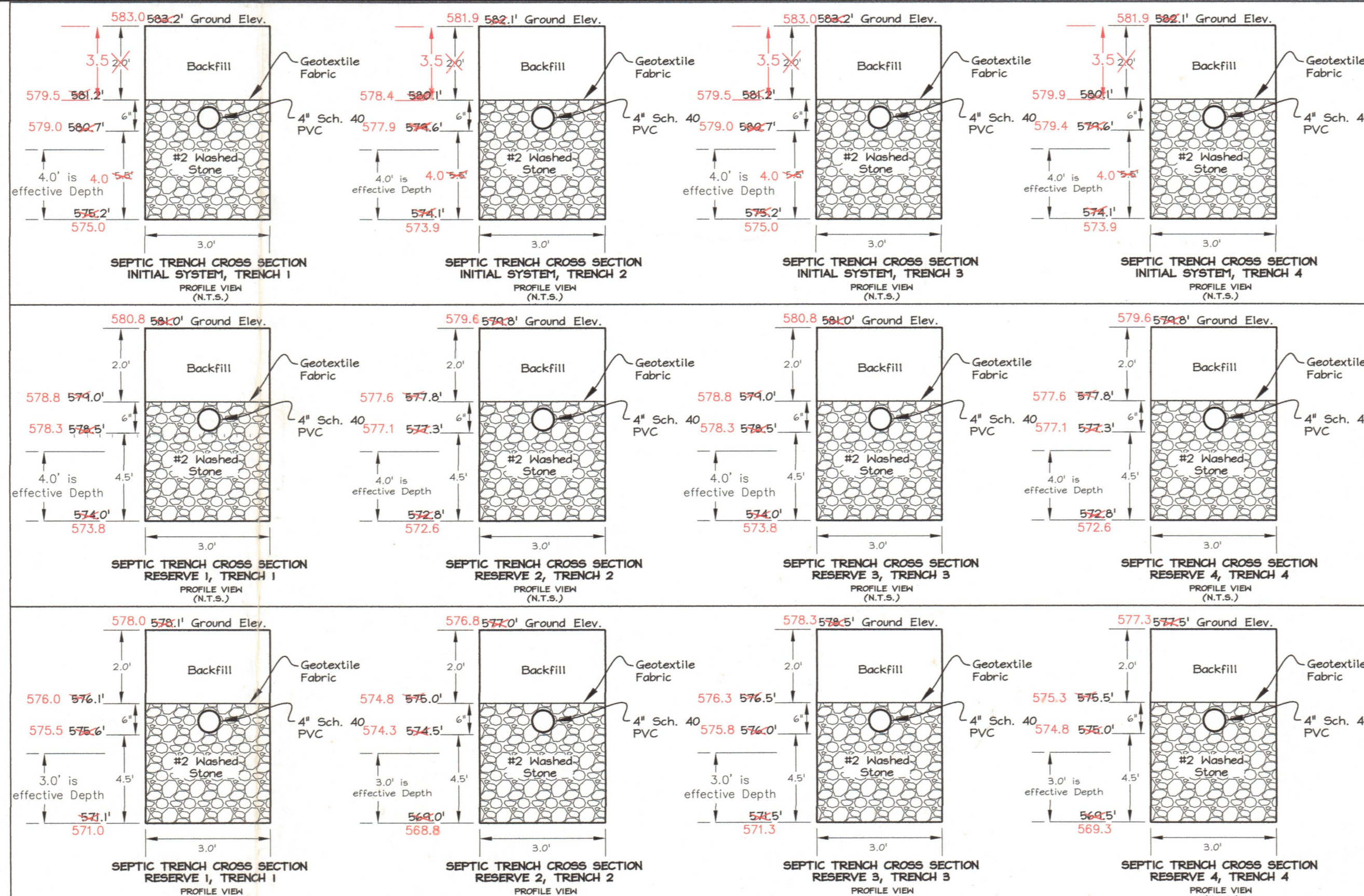
DATE: 03/23
 PROJECT: 22-0812
 ILLUSTRATION: JWW
 SCALE: 1"=20'

GENERAL NOTES

- 1) THIS PROPERTY IS ZONED RC-DEO.
- 2) THE PROPERTY BOUNDARY SHOWN IS BASED ON CURRENT PLAT.
- 3) DEED REFERENCE: LIBER 22255 FOLIO 374.
- 4) THE EXISTING TOPOGRAPHY ON SITE IS BASED ON A FIELD RUN SURVEY CONDUCTED BY JNM ENGINEERING IN JANUARY, 2025. OFFSITE TOPOGRAPHY IS BASED ON HOWARD COUNTY GIS.
- 5) ADJUSTMENTS TO THE SEPTIC AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
- 6) SOIL TYPES SHOWN ON THIS PLAN ARE FROM THE USDA WEB SOIL SURVEY.
- 7) THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
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- 15) ALL WELLS SHOWN ON THIS PLAN HAVE BEEN FIELD LOCATED AND ARE ACCURATELY SHOWN.

LEGEND

	EX. PROP. LINE
	EX. FENCE
	PROP. DRIVEWAY
	APPROVED SEWAGE DISPOSAL AREA
	SOIL BOUNDARY
	EX. 2' CONTOUR
	EX. 10' CONTOUR
	WELL (EX. OR PROP.)
	BUILDING RESTRICTION LINE
	PASSED PERC TEST
	EX STEEP SLOPES
	WELL BOX



SEPTIC SIZING

System Requirements (1 Initial and 2 replacements)
 Proposed Number of Bedrooms: 6
 Design Load: 900 Gal/Day
 Initial System:
 Effective Start Depth: 3.0'
 Maximum Bottom Trench Depth: 8'
 Inlet Depth: 2.5'
 Absorption Area Required: 900/0.8=1125
 1125/3=375
 (5/12)375=156.25
 Total Trench Length Required: 157-feet (Four at 40')
 Replacement System 1:
 Effective Start Depth: 3.0'
 Maximum Bottom Trench Depth: 7'
 Inlet Depth: 2.5'
 900 GPD
 900/0.8=1125
 1125/3=375
 375x0.416 (4.0' Sideslope)=156.0 LF Required
 (Install 4 - 39' long trenches)
 Replacement System 3:
 Effective Start Depth: 4.0'
 Maximum Bottom Trench Depth: 7'
 Inlet Depth: 2.5'
 900 GPD
 900/0.8=1125
 1125/3=375
 375x0.50 (3.0' Sideslope)=187.5 LF Required
 (Install 4 - 47' long trenches)

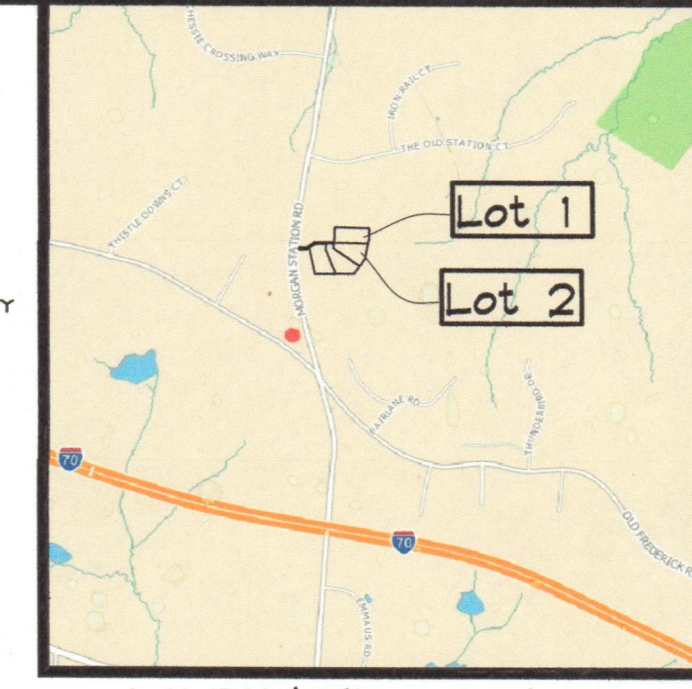
SOILS DATA TABLE

SYMBOL	SOIL	HYDRIC	K-FACTOR	ERODIBLE	WET SEASON
PtC	Fluor loam, 8-15% Slopes	NO	0.28	NO	NO
GgB	Glenelg loam, 3%-8% Slopes	NO	0.24	NO	NO

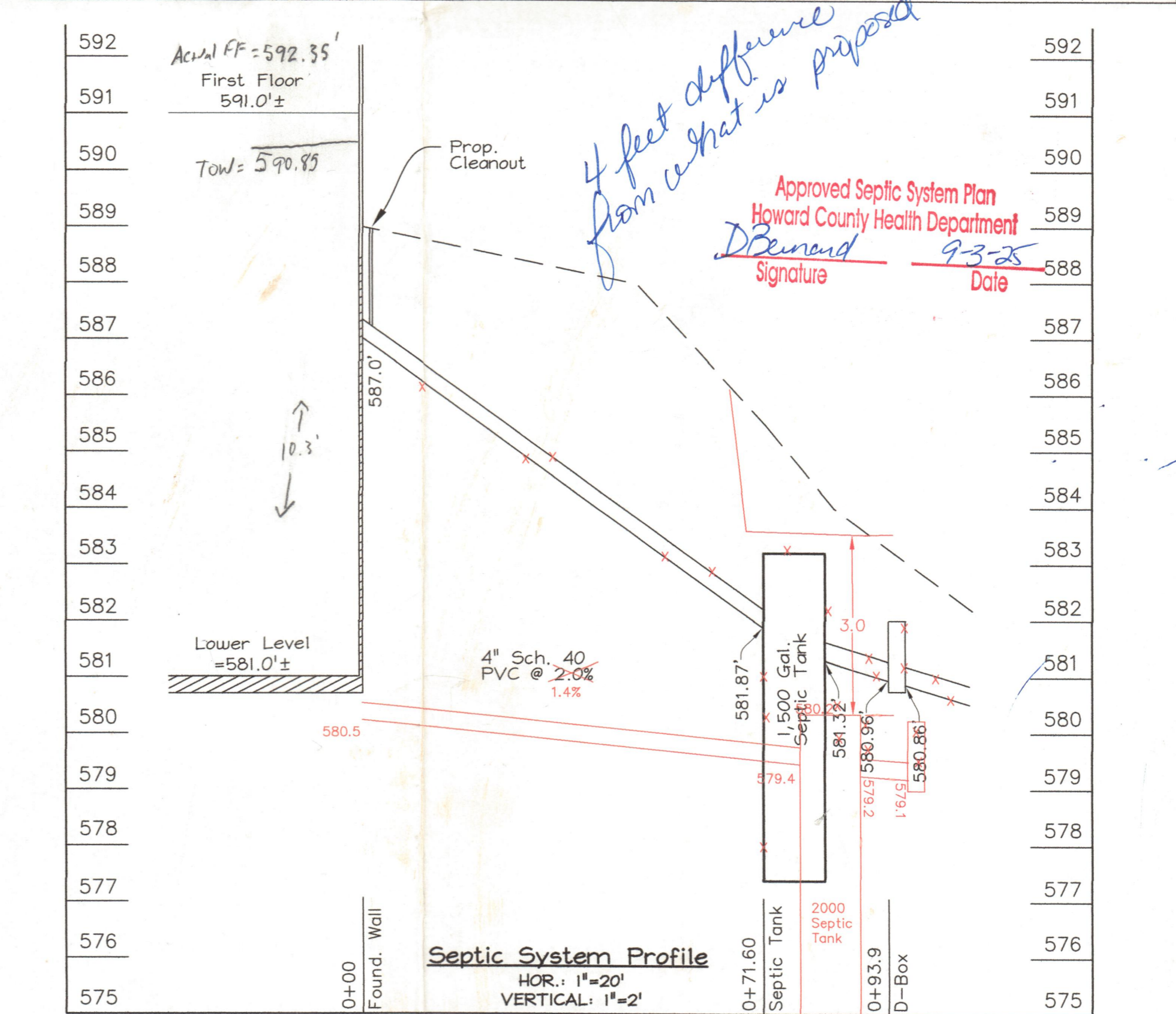
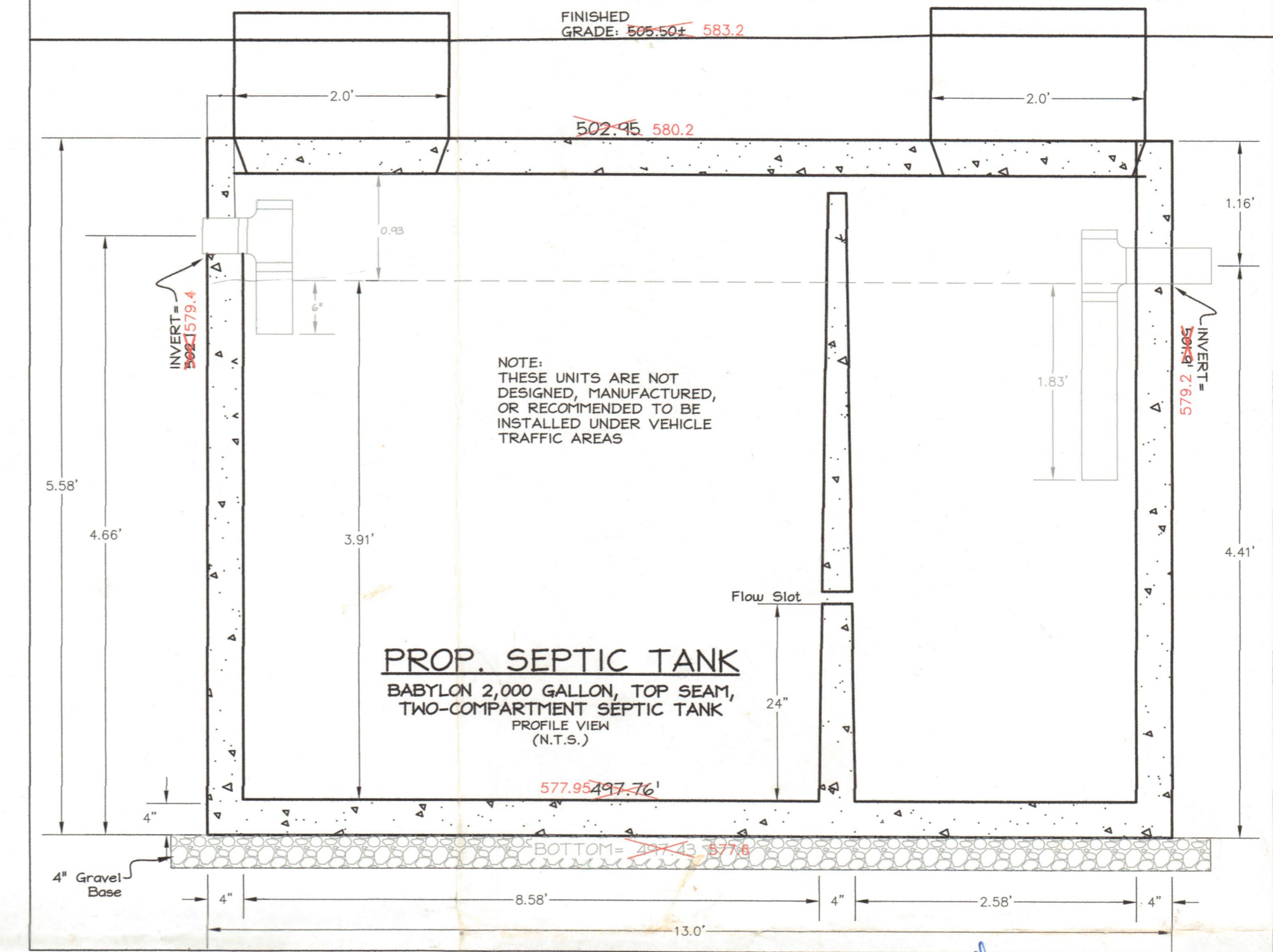
- SOILS INFORMATION TAKEN FROM USDA WEB SOIL SURVEY WEBSITE
 NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 1% OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'Kt' GREATER THAN 0.36 WITH A SLOPE GREATER THAN 5 PERCENT.



PROFESSIONAL CERTIFICATION:
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21931, EXPIRATION 12/18/2024.
 JAMES WINTER, P.E.
 1/20/2025
 DATE



VICINITY MAP



857 MORGAN STATION ROAD
 WOODBINE, MD 21797
 LOT 2, PLAT 18989, MAP 8
 GRID 2, 48,494SF, ACCT#04-593623
 ONSITE SEWAGE DISPOSAL
 SYSTEM DESIGN PLAN

OWNER/DEVELOPER:
 MEGHAN AND JOSEPH AMES
 16801 COLTON COURT
 WOODBINE, MD 21797

JNM ENGINEERING, LLC
 CIVIL ENGINEERING, SURVEYING, LAND PLANNING,
 ENVIRONMENTAL, ARBORICULTURE, LEED PROFESSIONALS
 105 LEAFY HOLLOW CIRCLE, MOUNT AIRY, MD 21771
 (301) 514-2808, JNMEENGINEERING.LLC.COM

857 MORGAN STATION RD
 TAX MAP 8, LOT 2, PLAT 18989, 48,494SF
 ELECT. DIST. 4, HOWARD COUNTY, MARYLAND

ONSITE SEWAGE DISPOSAL DESIGN PLAN

DATE	BY	REVISION
03/23	JWW	PROJECT
03/23	JWW	ILLUSTRATION
03/23	JWW	ENGINEERING
03/23	JWW	APPROVAL

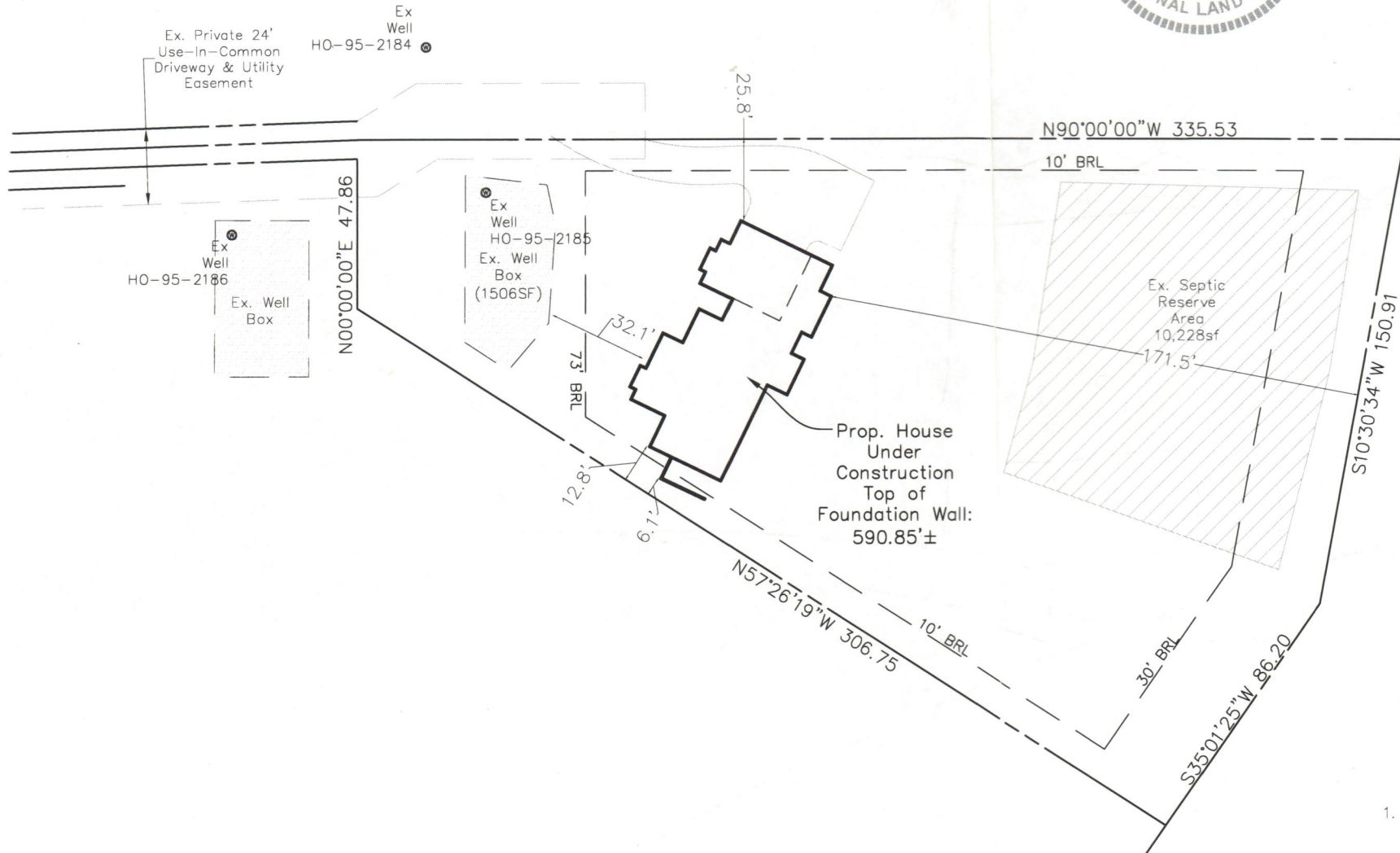
SCALE: 1"=20'



Surveyor's Certificate

"The information shown hereon has been based upon the results of a field inspection pursuant to the deed or plat of record. I hereby certify that this location survey was prepared or approved by me, and I am a duly licensed professional surveyor under the laws of the state of MD, license number 21931, expiration December 18, 2026.

Jim Witmer
James W. Witmer, Professional Land Surveyor
Maryland reg. No. 21931



*11/19/25
Wall check
okay. -H.D.*

1. Property lines shown hereon are based upon plat and field checked by JNM Engineering. The level of horizontal accuracy for this drawing should be taken to be no greater than plus or minus 0.1-feet.
2. The BRL's shown are based on current zoning.
3. Elevations shown are top of foundation wall elevations.



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Graphic Scale
1 Inch = 50 Feet

WALL CHECK FOR: 857 MORGAN STATION ROAD

Field Survey Conducted 8/15/25
Wall Check Completed 8/17/25

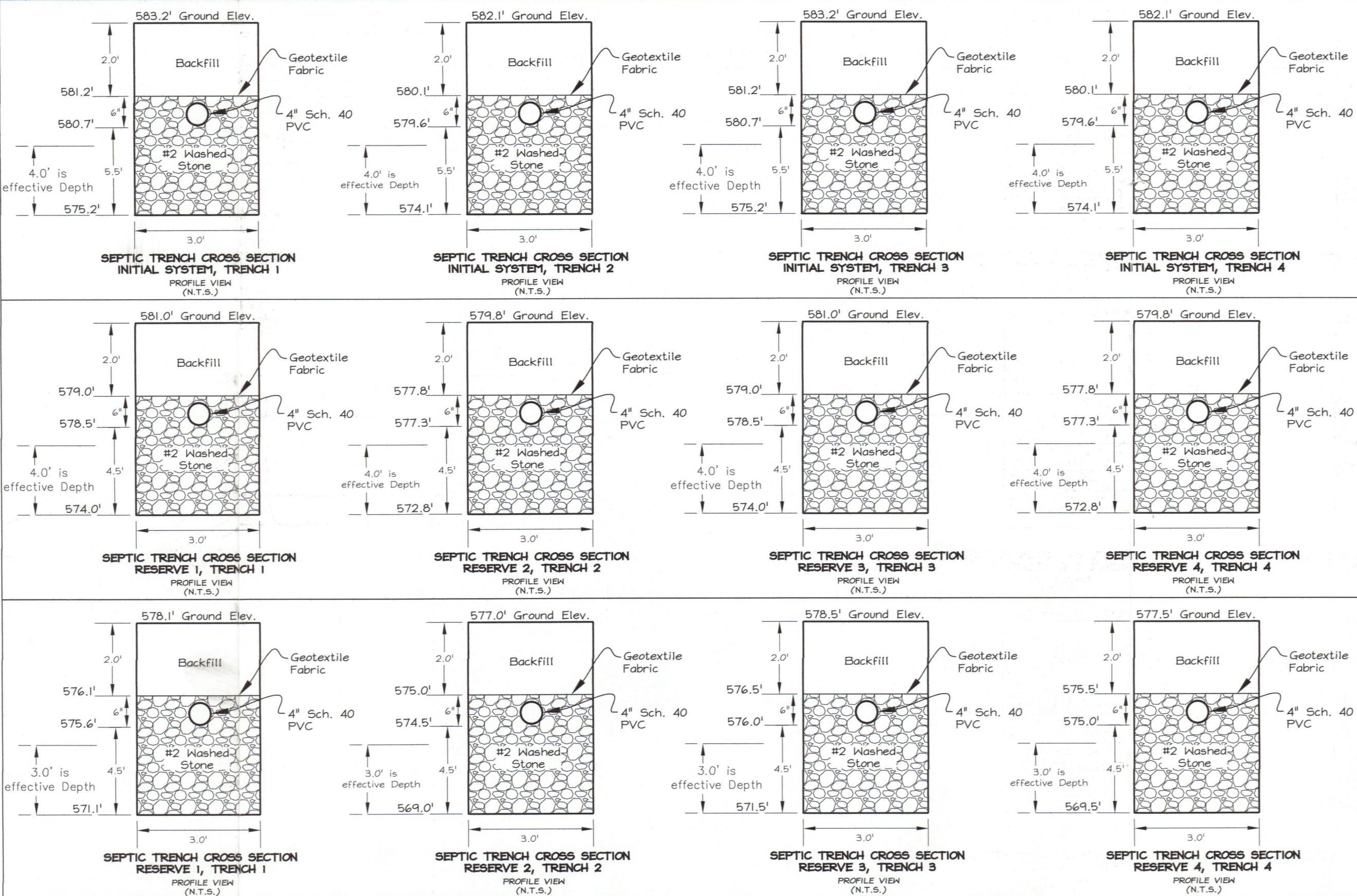
Scale:	1" = 50'
Date:	8/17/25
Field By:	JWW
Drawn By:	JWW
File No.:	xxxx
Page No.:	1 of 1

GENERAL NOTES

- THIS PROPERTY IS ZONED RC-DEO.
- THE PROPERTY BOUNDARY SHOWN IS BASED ON CURRENT PLAT.
- DEED REFERENCE: LIBER 22255 FOLIO 374.
- THE EXISTING TOPOGRAPHY ON SITE IS BASED ON A FIELD RUN SURVEY CONDUCTED BY JNM ENGINEERING IN JANUARY, 2025. OFFSITE TOPOGRAPHY IS BASED ON HOWARD COUNTY GIS.
- ADJUSTMENTS TO THE SEPTIC AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
- SOIL TYPES SHOWN ON THIS PLAN ARE FROM THE USDA WEB SOIL SURVEY.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- ALL EXISTING WELLS AND SEWERAGE DISPOSAL AREAS AND COMPONENTS WITHIN 100- FEET OF THE PROPERTY BOUNDARIES AND ALL EXISTING/PROPOSED WELLS 200' DOWN GRADIENT FROM EXISTING OR PROPOSED SEPTIC SYSTEMS HAVE BEEN SHOWN FROM THE BEST AVAILABLE INFORMATION.
- THIS LOT WAS CREATED BY PLAT (18989) IN 2011.
- SEPTIC TANK AND PUMP CHAMBERS COVER DEPTHS SHALL NOT EXCEED 3- FEET UNLESS DESIGNED AND APPROVED NOTING A TRAFFIC BEARING LID.
- 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 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 SHOWN ON THIS PLAN HAVE BEEN FIELD LOCATED AND ARE ACCURATELY SHOWN.

LEGEND

- EX. PROP. LINE
- EX. FENCE
- PROP. DRIVEWAY
- APPROVED SEWAGE DISPOSAL AREA
- SOIL BOUNDARY
- EX. 2' CONTOUR
- EX. 10' CONTOUR
- WELL (EX. OR PROP.)
- BUILDING RESTRICTION LINE
- PASSED PERC TEST
- EX STEEP SLOPES
- WELL BOX



SEPTIC SIZING

System Requirements (1 initial and 2 replacements)
 Proposed Number of Bedrooms: 6
 Design Load: 900 Gal/Day
 Initial System:
 Effective Start Depth: 3.0'
 Maximum Bottom Trench Depth: 8'
 Inlet Depth: 2.5'
 Absorption Area Required: 900/0.8=1125
 1125/3= 375sf
 (5/10)375= 156.25
 Total Trench Length Required: 157-feet (Four at 40', one at 37')

Replacement System 1
 Effective Start Depth: 3.0'
 Max. Bottom Trench Depth: 7'
 Inlet Depth: 2.5'
 900 GPD
 900/0.8= 1125
 1125/3= 375
 375x0.416 (4.0' Sidewall)= 156.0 LF Required
 (Install 4- 39' long trenches)

Replacement System 3
 Effective Start Depth: 4.0'
 Max. Bottom Trench Depth: 7'
 Inlet Depth: 2.5'
 900 GPD
 900/0.8= 1125
 1125/3= 375
 375x0.50 (3.0' Sidewall)= 187.5 LF Required
 (Install 4- 47' long trenches)

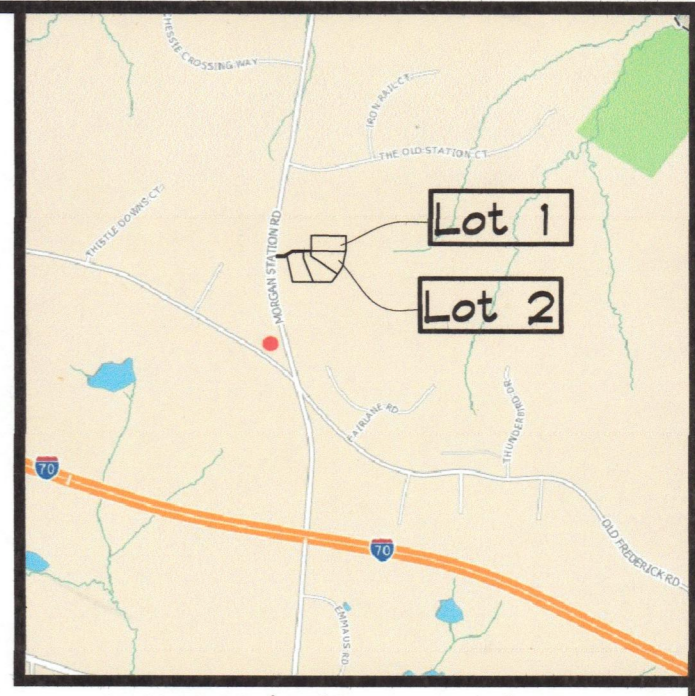
SOILS DATA TABLE

SYMBOL	SOIL	HYDRIC	K-FACTOR	ERODIBLE	WET SEASON
M _{10C}	Minor loam, 6-15% Slopes	NO	0.25	NO	NO
G _{10B}	Glentig Loam, 38-6% Slopes	NO	0.24	NO	NO

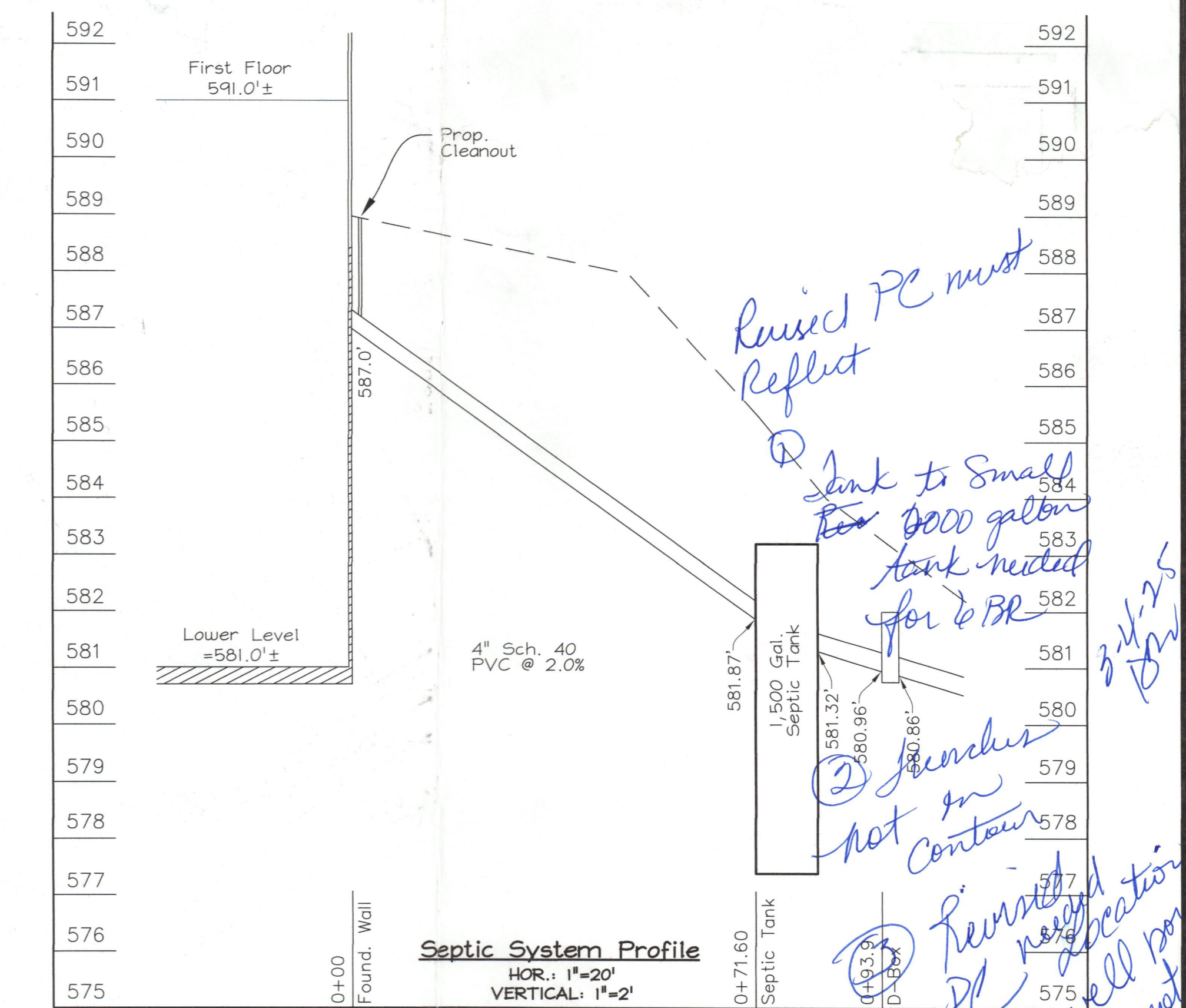
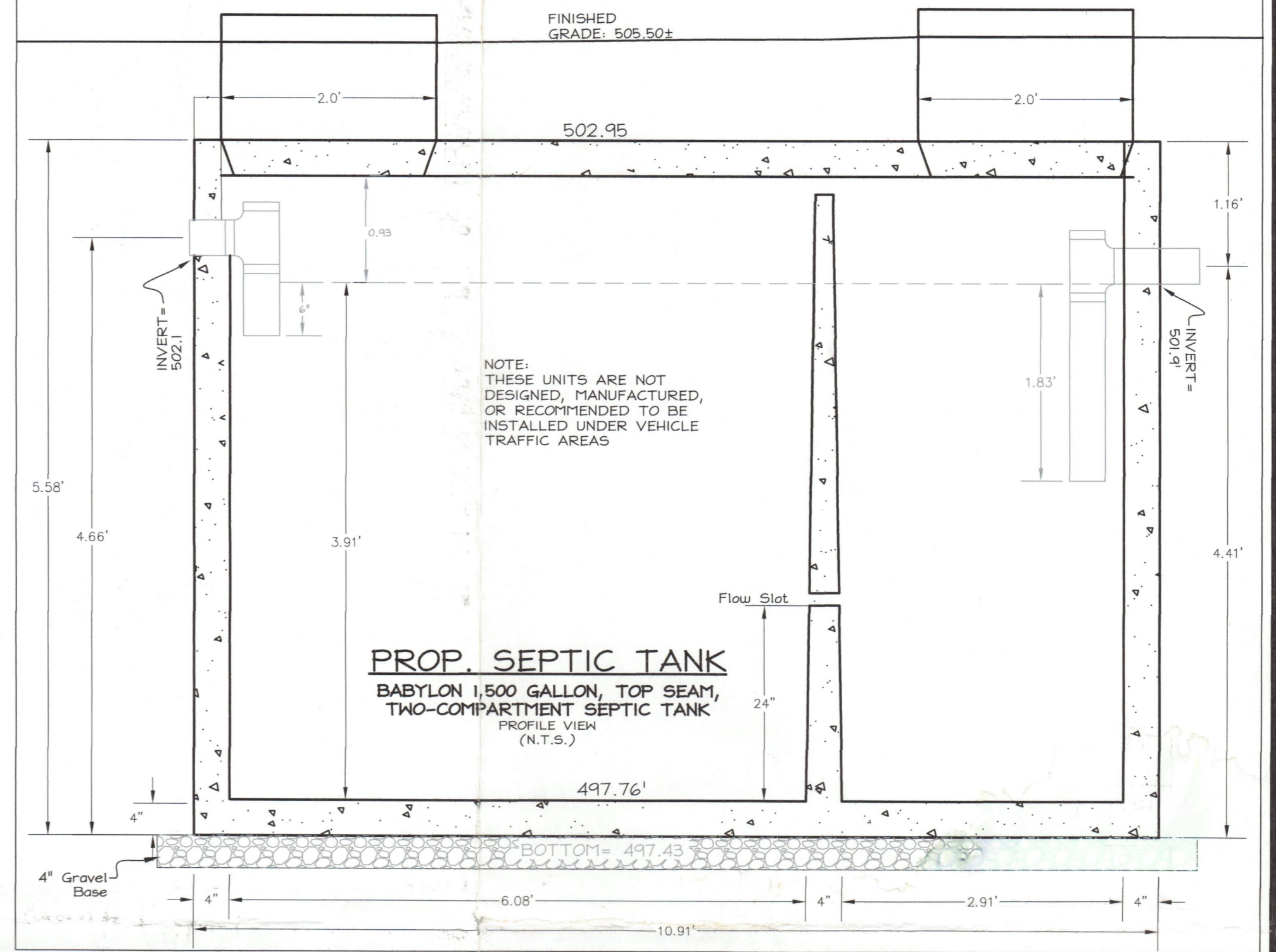
- SOILS INFORMATION TAKEN FROM USDA WEB SOIL SURVEY WEBSITE
 NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15% OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR *K* GREATER THAN 0.35 WITH A SLOPE GREATER THAN 5 PERCENT.



PROFESSIONAL CERTIFICATION:
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21931, EXPIRATION 12/18/2024.
 JAMES W. MILLER, P.E.
 1/20/2025
 DATE



VICINITY MAP



OWNER/DEVELOPER:
 MEGHAN AND JOSEPH AMES
 16801 COLTON COURT
 WOODBINE, MD 21797

857 MORGAN STATION ROAD
 WOODBINE, MD 21797
 LOT 2, PLAT 18989, MAP 8
 GRID 2, 48,494SF, ACCT#04-593623
ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

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 1105 LEAFY HOLLOW CIRCLE, MOUNT AIRY, MD 21771
 (301) 514-2809, JNMEENGINEERINGLLC.COM

857 MORGAN STATION RD
 TAX MAP 8, LOT 2, PLAT 18989, 48,494SF
 ELECT. DIST. 4, HOWARD COUNTY, MARYLAND
ONSITE SEWAGE DISPOSAL DESIGN PLAN

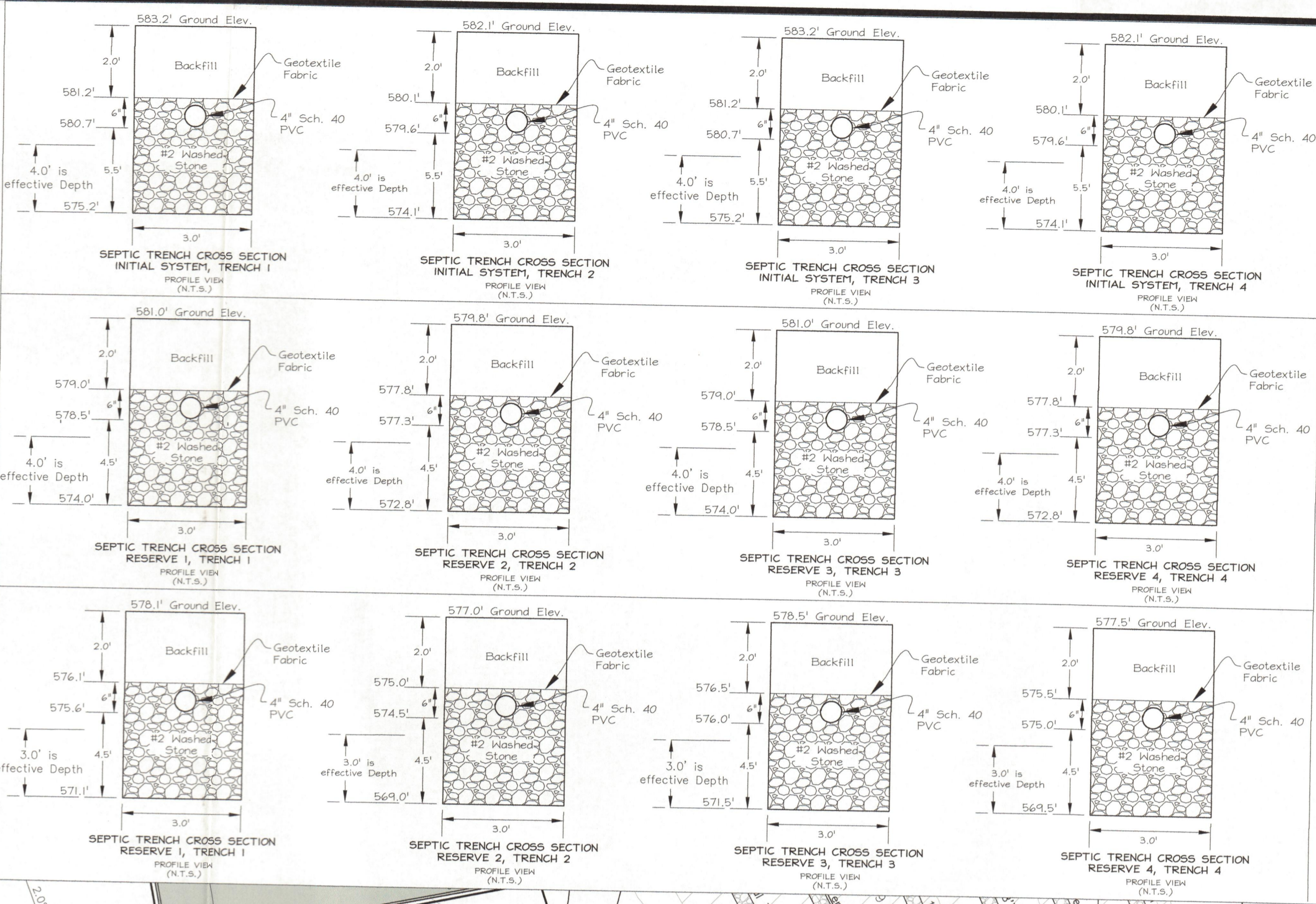
DATE: 1/20/25
 REVISION: 1
 PROJECT: 22-0812
 DATE: 03/23
 ILLUSTRATION: JWW
 ENGINEERING: JWW
 APPROVAL: JWW
 SCALE: 1"=20'

GENERAL NOTES

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- PROP. DRIVEWAY
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- SOIL BOUNDARY
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 (Install 4- 39' long trenches)

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 Inlet Depth: 2.5'
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 1125/3= 375
 375x0.50 (3.0' Sideload)= 187.5 LF Required
 (Install 4- 47' long trenches)

SOILS DATA TABLE

SYMBOL	SOIL	HYDRIC	K-FACTOR	ERODIBLE	WET SEASON
M3C	Mander loam, 8-15% Slopes	NO	0.28	NO	NO
GgB	Glennig loam, 35-8% Slopes	NO	0.24	NO	NO

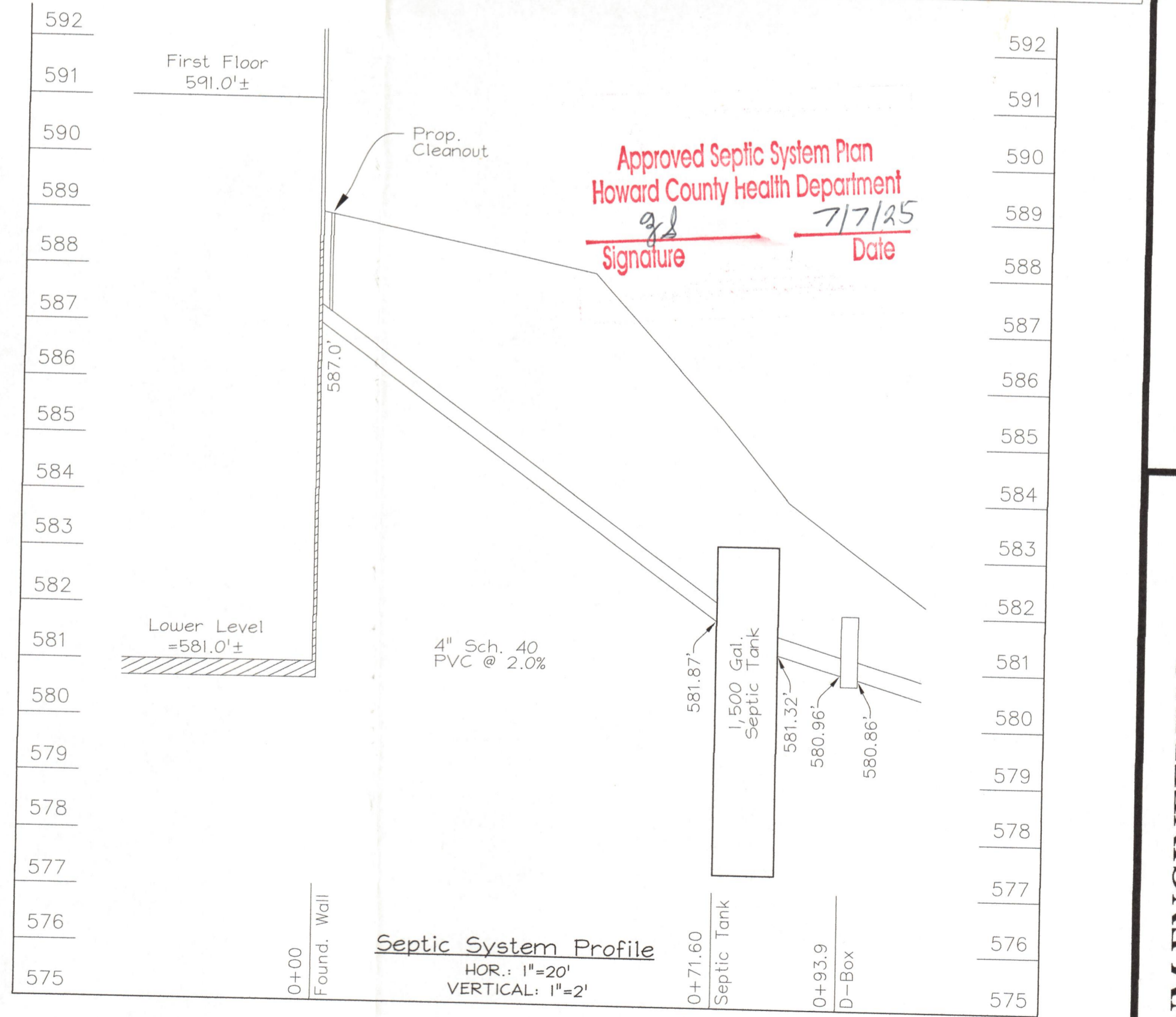
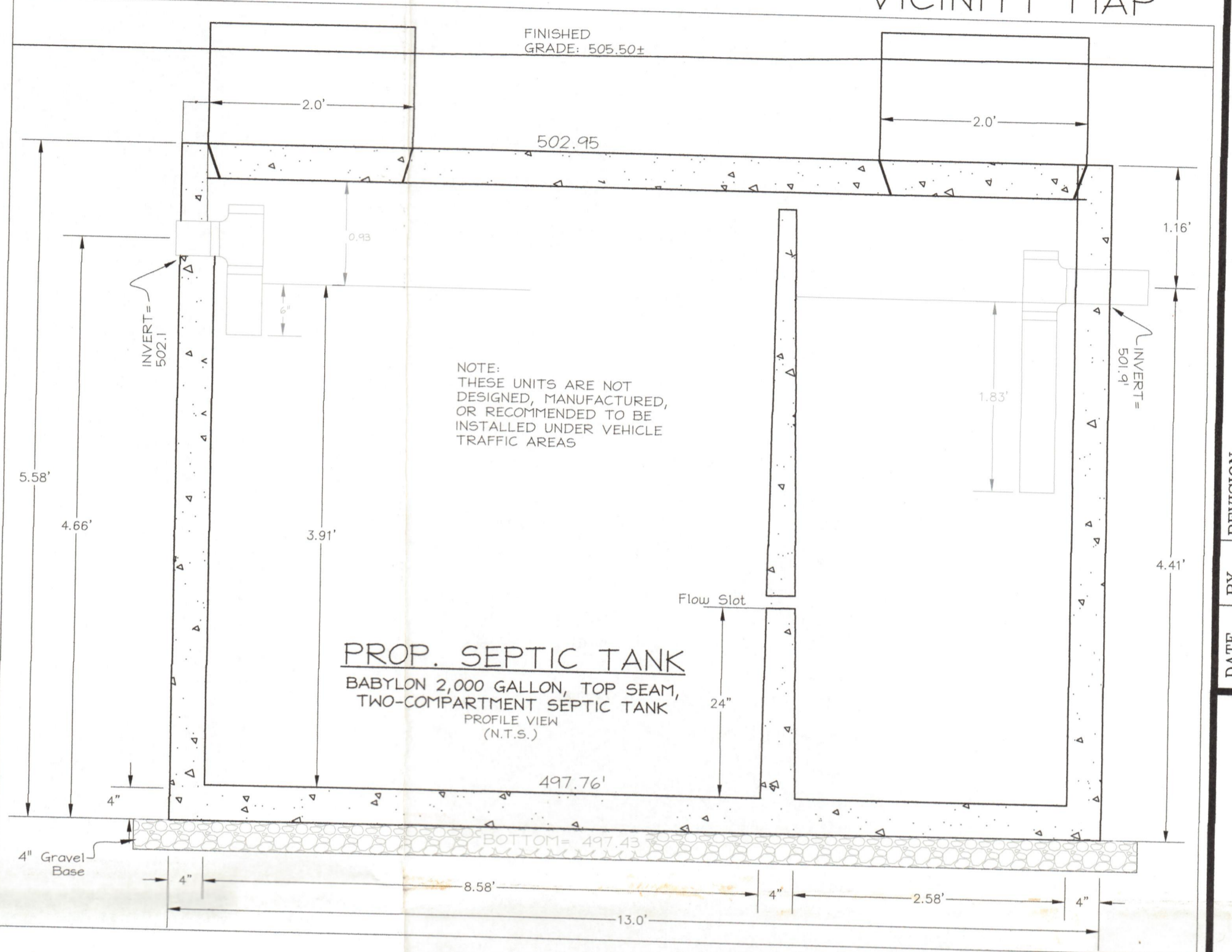
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 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21931, EXPIRATION 12/18/2024.
 DATE: 7/20/2025
 SIGNATURE: [Signature]



VICINITY MAP



Approved Septic System Plan
 Howard County Health Department
 Signature: [Signature]
 Date: 7/7/25



OWNER/DEVELOPER:
 MEGHAN AND JOSEPH APRES
 16801 COLTON COURT
 WOODBINE, MD 21797

857 MORGAN STATION ROAD
 WOODBINE, MD 21797
 LOT 2, PLAT 18989, MAP 8
 GRID 2, 48,494SF, ACCT#04-593623
 ONSITE SEWAGE DISPOSAL
 SYSTEM DESIGN PLAN

DATE	03/23
PROJECT	22-0812
ILLUSTRATION	JWW
ENGINEERING	NA
APPROVAL	JWW
SCALE	1" = 20'

DATE	BY	REVISION

857 MORGAN STATION RD
 TAX MAP 8, LOT 2, PLAT 18989, 48,494SF
 ELECT. DIST. 4, HOWARD COUNTY, MARYLAND
 ONSITE SEWAGE DISPOSAL DESIGN PLAN

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