

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: 5/11/2023 **ONSITE SEWAGE DISPOSAL SYSTEM**

P 57419

APPROVAL DATE: 11/28/2024 **PERMIT: CONSTRUCTION**

A _____

PROPERTY ADDRESS: 4890 Castlebridge Road

SUBDIVISION: Carroll Ziegler Property LOT: 5 TAX ID: _____

CONTRACTOR: Young Septic EMAIL: randy@youngseptic.com

CONTRACTOR ADDRESS: 1802 Baltimore Blvd, Westminster, MD 21157 PHONE: 443 277 5854

PROPERTY OWNER: Shahed and Parul Siddiqi EMAIL: _____

OWNER ADDRESS: 8871 Goose Landing Circle, Columbia, MD 21045 PHONE: 301-613-2138

SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: Babylon Vault

PUMP MODEL: N/A 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>156</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>11</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	Install 3 x 52' trenches <u>Install 4 x 39' trenches</u> <i>Siddiqi shahed @ gmail.com</i>	

ISSUED BY: Hank Oswald ISSUE DATE: 7/26/2018 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 DOWNGRAIENT 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: 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

8/11/2023 met w/ Felt (Luke Knowles and Paul Case) on site. Found man described not as bad as indicated SPA statement was significantly diff. Will reuse PC + add plan. (SP)

11/8/2023 - Met contractor onsite for layout trench 1 obstructed by bushes & trench 2 has stones on top side not start trench 1 or 2. Shot elevation for trench 3, has 2" difference, straight per plan. Do not start trench 3 in this trench 2 needs to be moved. D-box moved 4' on to start install of outlet to d-box & trench 4. (SP)

11/27/2023 - Met w contractor. line from tank to d-box, installed & trench 4. trench 1, 2, & 3 laid out while onsite. All trenches on contour & lengths per plan. (SP)

11/28/2023 - trench 1, 2, & 3 finished. met @ 4' per plan. leveled d-box while onsite. on to backfill. (SP)

See separate sheet for As-built

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	4'	8'
NUMBER OF TRENCHES		4
TOTAL LENGTH		161
ABSORPTION AREA		483 ft ³
DISTRIBUTION BOX LEVEL		yes
DISTRIBUTION BOX BAFFLE		yes
DISTRIBUTION BOX PORT		yes

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL	yes
MANUFACTURER	W24109
CAPACITY	2000 GAL
SEAM LOC	Top
TANK LID DEPTH	2.5' - 3'
BAFFLES	6" front & 9" back
BAFFLE FILTER	-
MANHOLE LOC	Front & back
6" PORT LOC	-
WATERTIGHT TEST	-
SLOTTED	yes
DATE ON LID	7/11/2023
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	-

PRE-CONSTRUCTION:

7/6/2023 - hung sewer not coming out of house yet. Tank, D-box, & trenches staked, no SOA staked. Tank met 90' setbacks from house & 100' from well. Moved tank slightly away from driveway; 4' from driveway (driveway closer than plan). Gave OK to set tank, respect to layout trenches. (SP) 7/11/2023 - SOA staked, trench B laid out. trench A & C not laid out. (SP)

INSTALLATION: 7/11/2023 - onsite during tank install. Tank had no cracks; good condition. Part of front line installed. Saw part of sleeve under driveway. Sewer coming out of house installed. Respect for baffles, connection from front line to tank inlet, rest of sleeve under driveway. Contractor should not be installing trench & D-box yet. (SP)

7/21/2023 - installer not onsite for inspection. Front line finished. 6" sleeve under driveway. Adequate fall to tank. S40D 40 PVC used. Insulated tank to house. Gave installer verbal OK to backfill. (SP) 7/21/2023 see email dated 7/17/2023 to owner. Revisions needed before installer in continue. Everything on hold. (SP)

FINAL INSPECTOR S. Page DATE OF APPROVAL 11/28/2024

NOT TO SCALE
1" ≈ 30'

4890

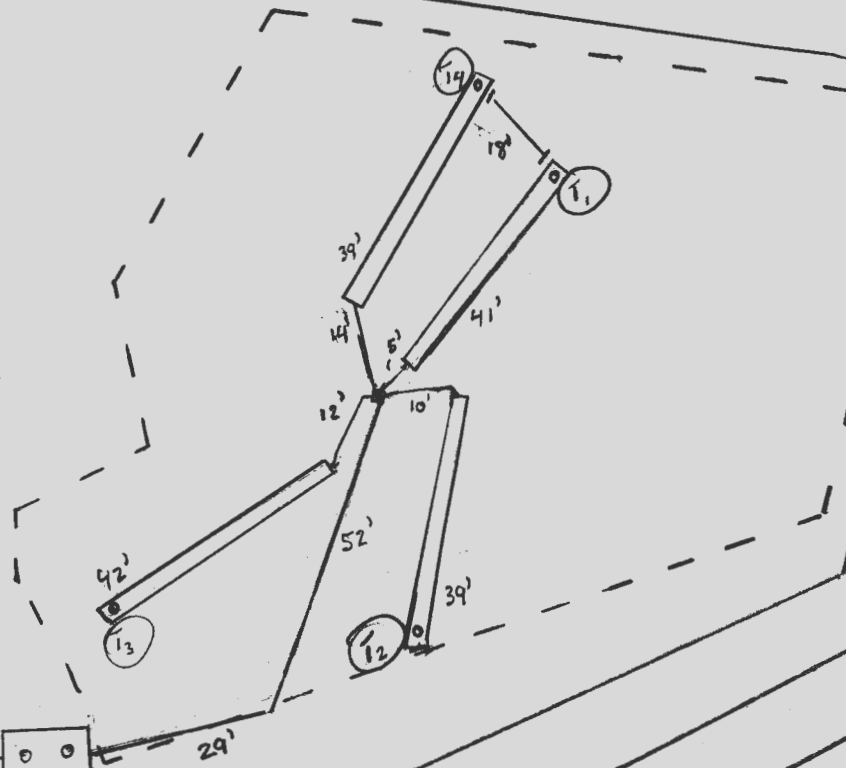
Castlebridge rd

HO-95-1736

Driveway

6" steel

Castlebridge rd



- 1enK - A: 57'
- 1enK - D: 69'
- D-box - A: 120'
- D-box - B: 117'
- 1₂ - B: 117'
- 1₂ - C: 108'
- 1₃ - B: 60'
- 1₃ - C: 69'

*** SHORT
TERMS ***

HOME LAND LABS

270597 Due Date: 11/11/1111
Client: Shaded Sid

Phone: (443) 505-8375 Email: lab@homelandhealthyhomes.com

1220 E Joppa Rd. Ste C505
Towson, MD 21286
MD Lab # 365

108 Old Solomons Island Road, Ste L2
Annapolis, MD 21401
MD Lab # 106

3430 Rockefeller Court
Waldorf, MD 20602
MD Lab # 139

2216 Commerce Road, Ste 2A
Forest Hill, MD 21050

Please provide completed form with samples. Highlighted fields are required.

Client Name: Home Land Environmental Shaded Siddiqi	Property Address:
Email Address: info@homelandhealthyhomes.com Siddiqishaded@gmail.com	4890 CASTLE BRIDGE RD
Phone Number: 443-995-5385 301-613-2138	ELICOTT CITY, MD 21042

Field Collection Information

Sampler Name: JASON JAMISON	Field pH: 7.96
Sampler ID #: 17750	Field Chlorine (mg/L): 0.0
Date Sampled: 3/24/25 Time Sampled: 1:50pm	Sand: CLEAR
Well Tag Number: NO VISIBLE WELL TAG	Clarity: CLEAR
Compliance sample for public water system? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	If yes, PWS ID #:

Well Casing and Cap Condition

Well Type: Drilled Well Pit Below Grade Artesian Hand Dug N/A Other: _____

Height Above Grade: 15"	Cap Type: 2 piece metal	Casing: 6" metal	Conduit: Secure/PVC
Sample Point: PRESSURE TANK	Water Conditioning: NONE		

Requested Testing: (Please check all that apply)

- | | | |
|--|---|--|
| <input type="checkbox"/> Potability (Bacteria, Nitrate + Nitrite, Turbidity) | <input type="checkbox"/> Chlorides | <input type="checkbox"/> Total Dissolved Solids |
| <input type="checkbox"/> FHA/VA (Bacteria, Nitrate + Nitrite, Turbidity, Lead, Iron) | <input type="checkbox"/> Hardness | <input type="checkbox"/> Copper |
| <input type="checkbox"/> Bacteria | <input type="checkbox"/> Arsenic | <input type="checkbox"/> VOCs |
| <input type="checkbox"/> Lead | <input type="checkbox"/> Cadmium | <input checked="" type="checkbox"/> Other: GROSS BETA |
| <input type="checkbox"/> Nitrate + Nitrite | <input checked="" type="checkbox"/> Gross Alpha | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Iron | | |
| <input type="checkbox"/> Turbidity | | |

List rush samples below
Refer to table for rush turnaround times and fees

Release Signatures

Released By: [Signature] Date/Time: 3/24/25 14:50

Released By: _____ Date/Time: _____

Released By: _____ Date/Time: _____

Received in lab by: Alexy Gou Date/Time: 3/24/25 14:50

Samples received on ice?

Yes No

Temperature: 11.3°C

Understanding the Results

This narrative is intended to help the recipient understand the results. The information listed below is for tests commonly sampled or analyzed by Home Land Environmental Labs. For a full list of the Environmental Protection Agency's (EPA) Primary and Secondary Drinking Water Standards, please visit www.epa.gov. For more information on the services we offer, please visit www.homelandhealthyhomes.com.

Definitions and Acronyms

Maximum Contamination Level (MCL): A level established by the EPA which is the "highest level of a contaminant that is allowed in drinking water." Any level that exceeds the MCL is considered unsafe for human consumption. Secondary MCL (SMCL) is used for Secondary Drinking Water Standards.

Action Level: A measure of the effectiveness of the corrosion control treatment in water systems.

Not Detected (ND): Any level below the reporting limit.

Analyst: Refers to the individual who conducted the test.

Method: The type of analysis used to determine the results.

Reporting Limit (RL): The lowest level that can be detected by the method used for the analysis.

Primary Drinking Water Standard: Enforceable standards developed by the EPA. Levels that exceed the MCL for a particular standard are considered too unsafe for human consumption.

Secondary Drinking Water Standard: Standards developed by the EPA. Secondary standards are generally not considered to be dangerous to human health. They may cause aesthetic or cosmetic problems to the water quality or plumbing distribution system.

This table is for informational purposes only. See first page of report for your results.

Parameter	MCL/SMCL	Type	Effects	Source	Common Treatment Options
Total Coliform Bacteria	Present or 1 MPN/100mL	Primary	Used to indicate whether potentially harmful bacteria are present	Naturally Present	Well Repair and Chlorination, UV light
E. Coli Bacteria	Present or 1 MPN/100mL	Primary	Stomach illness	Human and animal fecal waste	Well Repair and Chlorination, UV light
Nitrates	10.0 mg/L	Primary	Blue-Baby Syndrome	Fertilizers and sewage	Reverse Osmosis System
Nitrites	1.0 mg/L				
Lead	Action Level of 0.015 mg/L	Primary	Slowed mental development, kidney problems, high blood pressure	Corrosion of household plumbing systems; erosion of natural deposits	Acid Neutralizer, Chemical Feeder (Soda Ash), Pipe Replacement
Radium Gross Alpha	15.0 pCi/L	Primary	Increased risk of cancer	Naturally occurring	Water Softener
Radium 226 & 228	5.0 pCi/L				
Volatile Organic Compounds (VOCs)	Varies	Primary	Increased risk of cancer	Gas and chemical leaks	Charcoal Filter
Arsenic	0.010 mg/L	Primary	Skin Damage, circulatory problems, cancer	Natural deposits, orchards, industrial waste	Reverse Osmosis System
Cadmium	0.005 mg/L	Primary	Kidney damage	Pipes, natural deposits, industrial waste	Reverse Osmosis System, Water Softener
Copper	Action Level of 1.3 mg/L	Primary	Gastrointestinal distress, liver or kidney damage	Corrosion of household plumbing systems, erosion of natural deposits	Acid Neutralizer, Reverse Osmosis System, Pipe Replacement
	1.0 mg/L	Secondary	Metallic taste; blue-green staining		
Turbidity (Public Water Systems)	1.0 NTU	Primary	Water treatment interference, possible bacteria indicator	Varies	Filtration, Source Protection
Turbidity (Private Wells)	10.0 NTU (MD COP Requirement)	Primary	Possible bacteria indicator	Surface water, iron, other	Filtration, Source Protection
Iron	0.3 mg/L	Secondary	Possible staining on plumbing fixtures and laundry	Naturally occurring	Water Softener
Chlorides	250 mg/L	Secondary	Salty taste, plumbing corrosion	Salt water intrusion, road salts	Source Protection, Whole House Reverse Osmosis System
pH	Outside of 6.5-8.5 (Neutral range)	Secondary	Low pH: Bitter metallic taste, corrosion High pH: Slippery feel, soda taste, Deposits	Naturally occurring	Acid Neutralizer

HOME LAND LABS

271872 Due Date: 04/28/2025
Client: Shahed Sid

Phone: (443) 505-8375 Email: lab@homelandhealthyhomes.com

1220 E Joppa Rd. Ste C505
Towson, MD 21286
MD Lab # 365

108 Old Solomons Island Road, Ste L2
Annapolis, MD 21401
MD Lab # 106

3430 Rockefeller Court
Waldorf, MD 20602
MD Lab # 139

2216 Commerce Road, Ste 2A
Forest Hill, MD 21050

Please provide completed form with samples. Highlighted fields are required.

Client Name: Home Land Environmental LG 4/15 L Shahed Siddiqi	Property Address:
Email Address: info@homelandhealthyhomes.com LG 4/15 Siddiaishahed@gmail.com	4890 CASTLEBRIDGE RD
Phone Number: 443-995-5385 LG 4/15 301-613-2138	ELLCOTT CITY, MD 21042

Field Collection Information

Sampler Name: JASON JAMISON	Field pH: 7.84
Sampler ID #: (1755)	Field Chlorine (mg/L): 0.0
Date Sampled: 4/14/25 Time Sampled: 11:00am	Sand: CLEAR
Well Tag Number: 10-95-1736	Clarity: CLEAR
Compliance sample for public water system? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	If yes, PWSID #:

Well Casing and Cap Condition

Well Type: Drilled Well Pit Below Grade Artesian Hand Dug N/A Other: _____



Height Above Grade: 13"	Cap Type: 2 Piece metal	Casing: 6" metal	Conduit: Secure / PVC
Sample Point: 1st floor POWDER ROOM SINK	Water Conditioning: (3) s/f & w/s		

Requested Testing: (Please check all that apply)

- | | | |
|--|--------------------------------------|--|
| <input type="checkbox"/> Potability (Bacteria, Nitrate + Nitrite, Turbidity) | <input type="checkbox"/> Chlorides | <input type="checkbox"/> Total Dissolved Solids |
| <input type="checkbox"/> FHA/VA (Bacteria, Nitrate + Nitrite, Turbidity, Lead, Iron) | <input type="checkbox"/> Hardness | <input type="checkbox"/> Copper |
| <input type="checkbox"/> Bacteria | <input type="checkbox"/> Arsenic | <input type="checkbox"/> VOCs |
| <input type="checkbox"/> Lead | <input type="checkbox"/> Cadmium | <input checked="" type="checkbox"/> Other: PADWUM |
| <input type="checkbox"/> Nitrate + Nitrite | <input type="checkbox"/> Gross Alpha | 226/228 |
| <input type="checkbox"/> Iron | | |
| <input type="checkbox"/> Turbidity | | |

List rush samples below
Refer to table for rush turnaround times and fees

Release Signatures

Released By: 	Date/Time: 4/14/25 12:45pm	Samples received on ice? <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No LG
Released By: _____	Date/Time: _____	
Released By: _____	Date/Time: _____	Temperature: 2.3°C 9.8°C
Received in lab by: 	Date/Time: 4/14/25 12:45	

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

**AGREEMENT FOR APPROVAL OF AN INDIVIDUAL DRINKING WELL WITH AN
ON-SITE TREATMENT SYSTEM**

This agreement is entered into by and between the Howard County Health Department ("the Health Department") and Shahed M Siddiqi ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 4890 Castlebridge Rd., Ellicott City and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 23, Block # 5, Parcel # 130, Deed Reference # 16764/00481 and Tax Account # 355179 ("the Property").

WHEREAS, the Property lacks an available public drinking water source and is required to have and individual well as the source of drinking water for the residence of the property.

WHEREAS, the Owner has installed a residential drinking well under well permit 530290 that has been tested by the Health Department (or a private laboratory certified to perform testing) for radionuclide particles. The results of the tests have shown that the gross alpha particle content and/or the gross beta particle content and/or the combined radium 226/228 levels exceeds the standards of 15 picocuries per liter (pCi/L), 4 millirems per year (mrem/yr) and/or 5pCi/L respectively.

WHEREAS, The Maryland Department of the Environment (MDE) has promulgated rules and regulations under which a Certificate of Potability may be issued and has delegated the authority to issue such Certificate to the Health Department.

WHEREAS, MDE regulations permit the Health Department to issue as a special condition, a permanent deviation to the Certificate of Potability for individual wells where treatment has been installed to meet the maximum contaminate levels (MCL's) for radionuclides.

WHEREAS, MDE has determined that radium can be effectively removed from the drinking water by the use of treatment devices (e.g., ion exchange or reverse osmosis).

WHEREAS, the Owner is requesting that the Health Department issue a Certificate of Potability contingent upon installation and maintenance of a water treatment device to reduce radionuclides.

WHEREAS, neither the Owner nor the Health Department has knowledge of an alternative safe source of water for the Property.

NOW THEREFORE, the parties have agreed to the following terms and conditions:

1. The Owner will record this Agreement among the Land Records of Howard County, Maryland and provide confirmation to the Health Dept.
2. The Owner agrees to install and maintain a water treatment device, which effectively reduces the gross alpha, gross beta and radium levels to below their respective MCL. The Health Department shall verify that the treatment device is operating effectively and the Owner agrees to allow access to the Health Department to collect a follow-up sample(s).

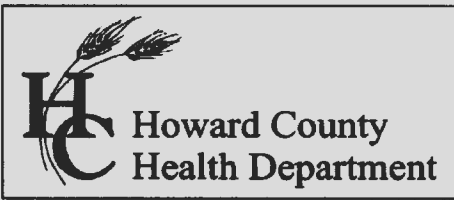
3. The Health Department shall issue a Certificate of Potability for the well once follow-up sampling shows acceptable gross alpha, gross beta (short and long term) and radium 226 / 228 levels.
4. The Owner agrees that there shall be no liability on part of the Health Department for any immediate or long term impacts to health or property, under any circumstance or including, but not limited to, treatment device failure, improper maintenance or installation, or defect. The Health Department does not warranty or guarantee that the device will adequately or properly function and the Owner agrees to implement and pay for any necessary changes or corrections.
5. The Owner acknowledges and agrees that neither the Health Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system or treatment device.
6. This Agreement shall not be construed to limit any authority of the Health Department to protect the public health, safety or enjoyment of property or to issue any other orders to take any other action, which is now or may hereafter be within its authority.
7. This agreement contains the entire agreement and understanding between the Health Department and the Owner. There are no additional terms other than as contained in this Agreement. This Agreement may not be modified except in writing signed by each of the parties or their authorized representatives.
8. The Agreement shall run with the land and binds the Owner, his heirs, successors, and assigns. The owner agrees to provide a copy of this agreement to any purchaser or lessee of the property.
9. The laws of the State of Maryland govern the provisions of all transactions.

The parties have signed this Agreement on the dates set forth below.

Shahed M. Siddiqi	4/8/2025	N/A	
Owner	Date	Buyer	Date

Parvez A Siddiqi	4/8/2025		
Owner	Date	Buyer	Date

	4/11/25
Howard County Health Department	Date



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Facebook: www.facebook.com/hocohealth

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

RECEIPT DATE: 5/11/23 ONSITE SEWAGE DISPOSAL SYSTEM P 574119

APPROVAL DATE: PERMIT: CONSTRUCTION A

PROPERTY ADDRESS: 4890 Castlebridge Road

SUBDIVISION: Carroll Ziegler Property LOT: 5 TAX ID:

CONTRACTOR: Young Septic EMAIL:

CONTRACTOR ADDRESS: 1802 Baltimore Boulevard, Westminster, MD 21157 PHONE: 443-277-5854

PROPERTY OWNER: Shahed and Paul Siddiqi EMAIL: 301-613-2138

OWNER ADDRESS: 8871 Goose Landing Circle, Columbia, MD 21045 PHONE:

SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: Babylon

PUMP MODEL: n/a PUMP SIZE n/a PUMP TANK CAPACITY: n/a

DISTRIBUTION SYSTEM: [X] GRAVITY [] PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE: 0.8

Table with 2 columns: Field Name (TRENCHES, LOCATION, NOTES) and Field Value (Linear feet required: 156, Inlet depth: 4, etc.)

ISSUED BY: Spencer Freemon ISSUE DATE: 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
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

TRENCH/DRAINFIELD DATA

WIDTH INLET BOTTOM

NUMBER OF TRENCHES _____

TOTAL LENGTH _____

ABSORPTION AREA _____

DISTRIBUTION BOX LEVEL _____

DISTRIBUTION BOX BAFFLE _____

DISTRIBUTION BOX PORT _____

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL _____

MANUFACTURER _____

CAPACITY _____ GAL

SEAM LOC _____

TANK LID DEPTH _____

BAFFLES _____

BAFFLE FILTER _____

MANHOLE LOC _____

6" PORT LOC _____

WATERTIGHT TEST _____

SLOTTED _____

DATE ON LID _____

PUMP/SEPTIC TANK LEVEL _____

MANUFACTURER _____

CAPACITY _____ GAL

SEAM LOC _____

TANK LID DEPTH _____

BAFFLES _____

BAFFLE FILTER _____

MANHOLE LOC _____

6" PORT LOC _____

WATERTIGHT TEST _____

SLOTTED _____

DATE ON LID _____

ROAD NAME

SEPTIC CONTRACTOR ONSITE INSTALLING SYTEM: _____

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

PRE-CONSTRUCTION NOTES:

11/8/2023 - MET Contractor onsite for layout. Trench 1 obstructed by bush
(no not start trench 1 or 2)

+ trench 2 has stones on top. Shot elevation for trench 4, has 2" difference, mixed end slight curved.

OK to install trench 4, shot elevation for trench 3, has 2" difference, straight per plan. do not start trench

3 in case trench 2 needs to be moved. D-box moved 4'. OK to start install of outlet to D-box + trench 4. (S)

INSTALLATION NOTES: 11/27/2023

11/27/2023 - Tank to D-box installed, 2 trenches installed, starting 30' x 4' v. at @ 3.5-4' x 3' or 2' x 6' x 1' (S)

CONTROL PANEL DATA

CONTROL PANEL HEIGHT _____

(MIN 30")

INSPECTION DATE _____

INSPECTION: PASS/FAIL (CIRCLE ONE)

FINAL INSPECTOR _____ DATE OF APPROVAL _____

Wolf, Kevin

From: Wolf, Kevin
Sent: Tuesday, August 1, 2023 12:12 PM
To: 'Luke Groom'
Cc: Paul Cavanaugh; Frank Manalansan II; Oswald, Hank; Silvast, Zackary; Jennifer Wellen; ksiddiqi45@hotmail.com
Subject: RE: 30560 - 4890 Castlebridge rd, Ellicott City Septic Area concern
Attachments: 30560 Lot 5 Trench Exhibit.pdf; 30560 Lot 5 2023 Perc Recert.pdf; [Untitled].pdf

Luke,

Has the SDA been re-staked by you all? I am asking because I am comparing what you have submitted to the original approved PC/OSDS plan and I see slight differences to what was staked in the field when we were last on site with the installer. I have revised the plan you submitted in your last email to reflect the area I believe has been compromised. The severity of the soil that was cut/taken out is deep enough rendering it unusable. The first replacement system will in deed need to be modified as such. I would also show the septic tank location as this has been installed per the original approved OSDS plan. The tank, if you recall, sits inside the SDA so the 249 sq ft additional area you show may not be available. You may consider moving 5ft towards the property line to gain more sq ft of sda but I would have to check with Jeff here that is still applicable in this situation. I will await the paper copies with the included notations mentioned above.

Kevin

From: Luke Groom <L.groom@fcc-eng.com>
Sent: Tuesday, August 1, 2023 10:24 AM
To: Wolf, Kevin <KWolf@howardcountymd.gov>
Cc: Paul Cavanaugh <PaulC@fcc-eng.com>; Frank Manalansan II <frankm@fcc-eng.com>; Oswald, Hank <hoswald@howardcountymd.gov>; Silvast, Zackary <zsilvast@howardcountymd.gov>; Jennifer Wellen <Jwellen@fcc-eng.com>; ksiddiqi45@hotmail.com
Subject: FW: 30560 - 4890 Castlebridge rd, Ellicott City Septic Area concern

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

Kevin,

We are submitting paper prints of the attached Perc Recertification Plan and Trench Exhibit to your attention. The Perc Recertification Plan now has field-run 1-foot contours in the area of the sewage disposal area (SDA).

We have revised the sewage disposal area (SDA) to remove the compromised SW corner and add additional area to maintain >10,000 square feet. The Trench Exhibit is to demonstrate the revised SDA fitting three systems.

Thanks,
Luke

Luke A. Groom, P.E.
Project Manager
Fisher, Collins and Carter, Inc.
10272 Baltimore National Pike - Ellicott City, MD 21042
Office: 410.461.2855 x555

From: Shahed Siddiqi <ksiddiqi45@hotmail.com>
Sent: Wednesday, July 19, 2023 2:52 AM
To: Paul Cavanaugh <PaulC@fcc-eng.com>
Cc: Shahed Siddiqi <siddiqishahed@gmail.com>
Subject: Fwd: 4890 Castlebridge rd, Ellicott City Septic Area concern

Hello Mr. Paul

It was nice to meet you in your office, I am forwarding to you Mr. Kevin Wolf's observation notes, we need your help to resolve this.

Thanks
Shahed Siddiqi

Begin forwarded message:

From: "Wolf, Kevin" <KWolf@howardcountymd.gov>
Subject: RE: 4890 Castlebridge rd, Ellicott City Septic Area concern
Date: July 17, 2023 at 10:59:53 AM EDT
To: Shahed Siddiqi <ksiddiqi45@hotmail.com>
Cc: "Oswald, Hank" <hoswald@howardcountymd.gov>, "Silvast, Zackary" <zsilvast@howardcountymd.gov>, "Page, Shepsura" <spage@howardcountymd.gov>

Siddiqi,

Based on our field investigation for the pre-construction meeting onsite with Young Septic, there were several issues found that need to be resolved before you can proceed further with the septic installation:

1. The sewage disposal area (SDA) was not properly staked according the approved OSDS plan/wall check survey plan.
2. The initial trench location elevations were shot in the field at the time of layout inspection with Young Septic. All 3 initial trenches (1A, 1B, 1C) were off contour by 8-12" respectively. We also measured the stakes and were found to be different lengths. We could not shift the trench locations per the approved OSDS plan so this will need to corrected. My recommendation is to have a 'field-run' topo performed along with 1 foot contours.
3. The area to the SW corner of the SDA has been compromised. Approximately 4-5 feet of native soil has been removed/cut out from this area which has now impacted the second replacement system trenches. The percolation plan (PC) will need to be revised with this area removed. The engineer will need to show a minimum 10,000 sq ft SDA that fits 3 systems. The site is very tight and space is limited so it will take some engineering to redesign.

Let me know if you have questions about any of this or want to meet up to discuss.

Thanks,

Kevin M. Wolf, LEHS, REHS/RS
Groundwater Mgmt. Sec. Supervisor
Well & Septic Program
Howard County Health Department

8930 Stanford Blvd.
Columbia, MD 21045
410-313-2645 (Office)
410-313-2648 (Fax)
www.hchealth.org
kwolf@howardcountymd.gov



twitter.com/HoCoHealth



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From: Shahed Siddiqi <ksiddiqi45@hotmail.com>
Sent: Monday, July 17, 2023 10:32 AM
To: Wolf, Kevin <KWolf@howardcountymd.gov>
Subject: 4890 Castlebridge rd, Ellicott City Septic Area concern

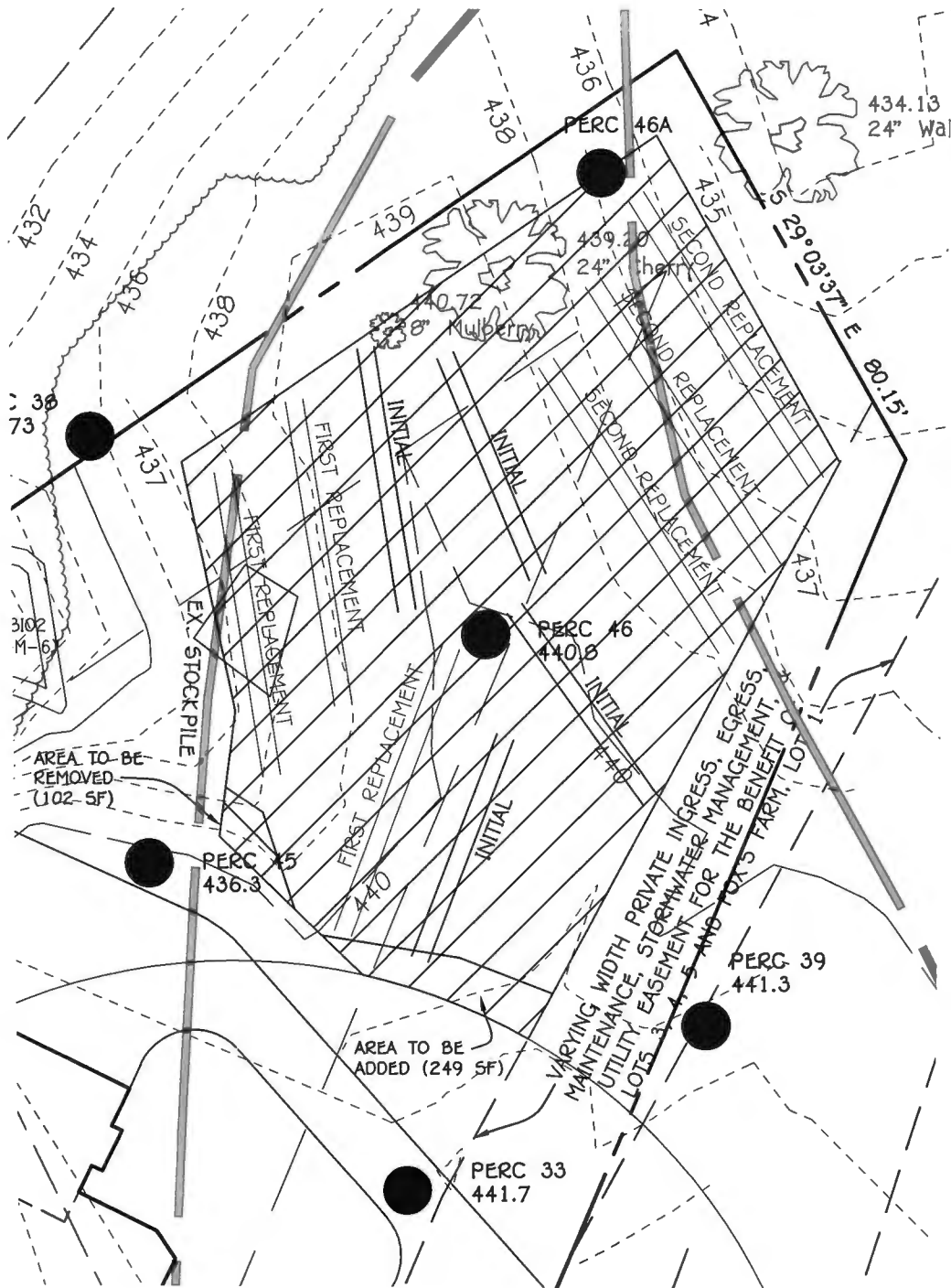
[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Good morning Mr. Kevin M. Wolf

This is Shahed Siddiqi owner of the property, please email me with your notes regarding trench area observations. So we can start working on to resolve the issue. Needs your help to complete this project, we are greatly suffering with this project in the past.

Thanks
Shahed Siddiqi

Sent from my T-Mobile 5G Device



SEWAGE DISPOSAL SYSTEM DATA - INITIAL SYSTEM

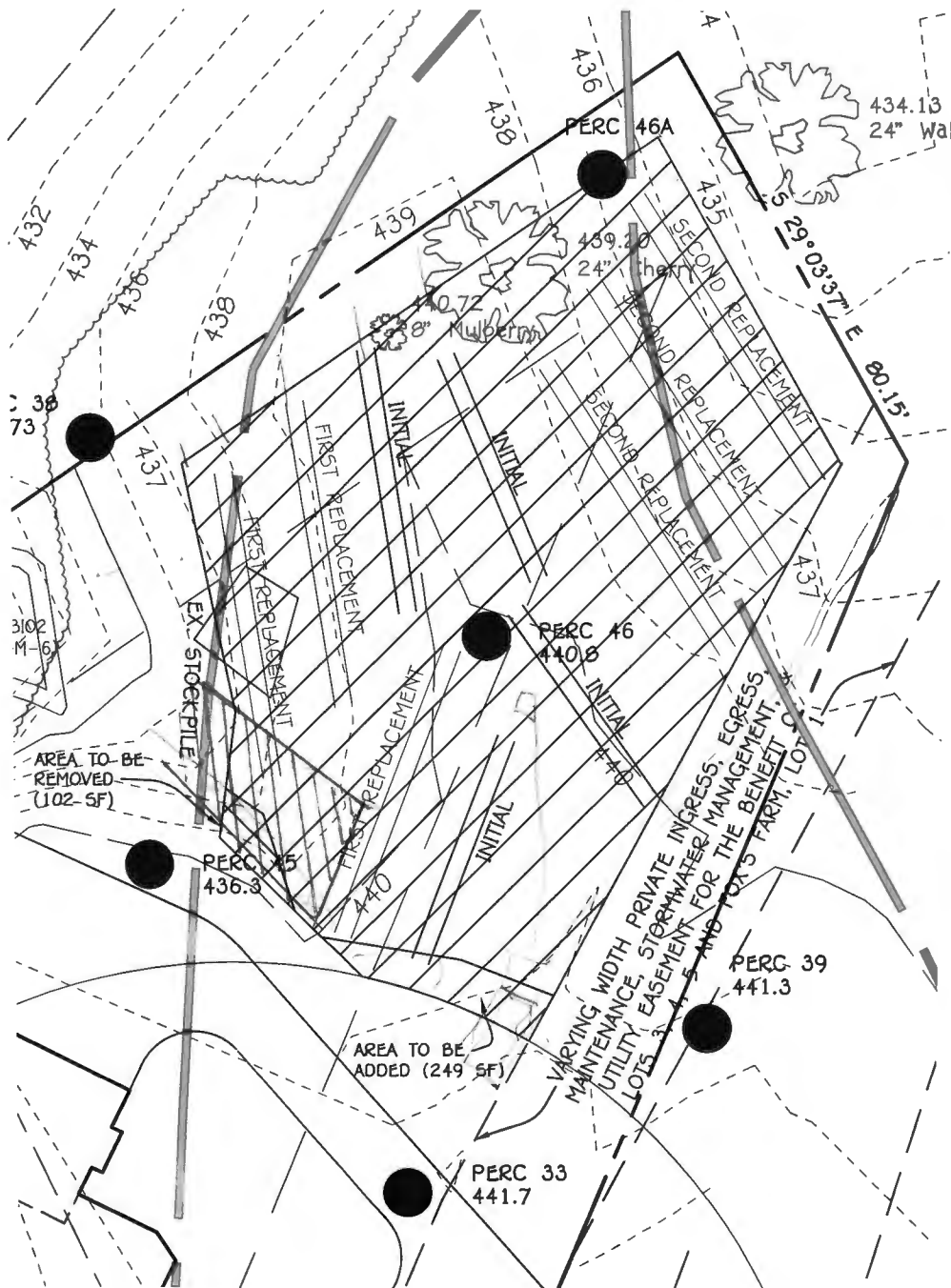
6 BEDROOMS

LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
 APPLICATION RATE = 0.8
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET
 TRENCH DEPTH = 8 FEET
 TRENCH WIDTH (W) = 3 FEET
 EFFECTIVE DEPTH (D) = 4 FEET
 SF OF DRAINFIELD = 900 GPD / 0.8 = 1125 SF
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =
 $(W+2)/(W+1+2D)=(3+2)/(3+1+(2 \times 4))=0.416$
 TRENCH LENGTH = 1125 SF x 0.416 / 3 = 156 SF
 TRENCH SPACING = 2D+W = ((2*4) + 3) = 11'
 USE 4 TRENCHES AT 39.0'

SEWAGE DISPOSAL SYSTEM DATA - REPLACEMENT SYSTEMS

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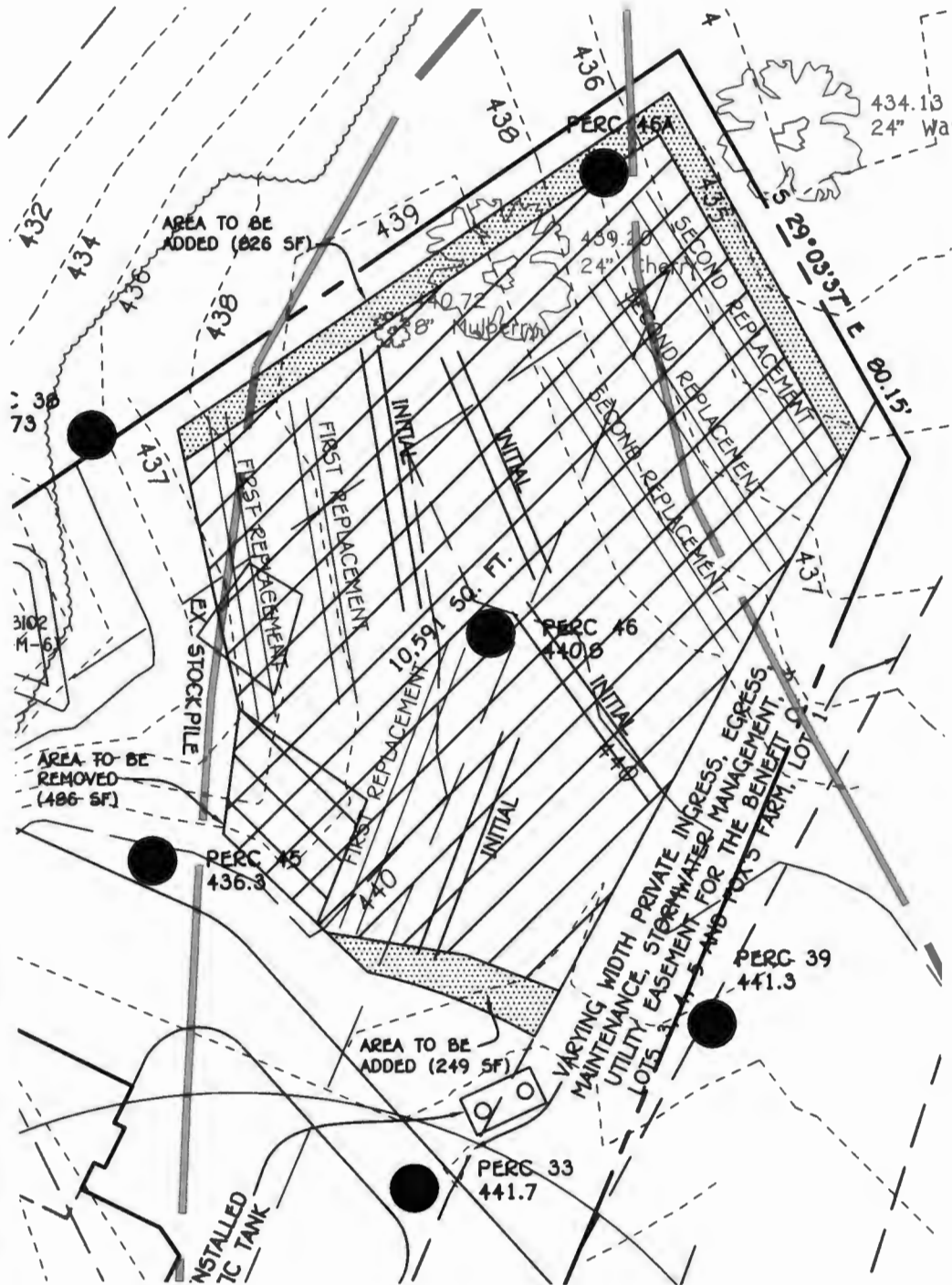
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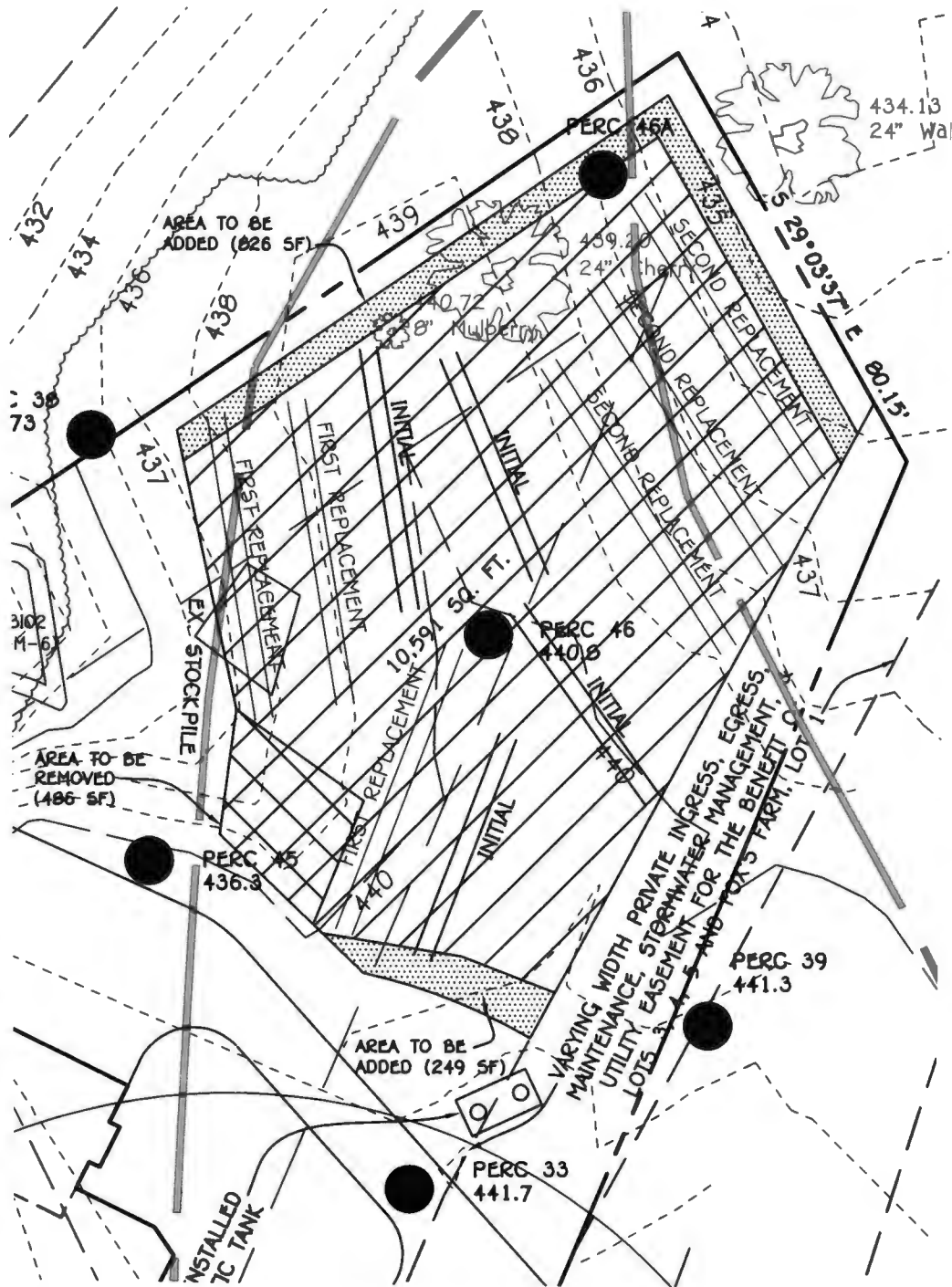


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Bureau of Environmental Health
8930 Stanford Blvd | Columbia, MD 21045
410.313.2640 - Voice/Relay
410.313.2648 - Fax
1.866.313.6300 - Toll Free

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

MEMORANDUM

TO: Fisher, Collins & Carter, Inc.
10272 Baltimore National Pike
Ellicott City, MD 21042

FROM: Hank Oswald, L.E.H.S.
Well & Septic Program

RE: 4890 Castlebridge
Carroll-Ziegler Property, Lot 5

Date: June 22, 2018

The OSDS Plan for has been reviewed with the following comments:

- 1.) Utilize area near perc test holes 38 & 45.
- 2.) Avoid area near perc test hole 46A.
- 3.) Move tank to the corner of the SDA.
- 4.) Show sleeve on pipe underneath driveway.
- 5.) Add address to plan.

Oswald, Hank

From: Oswald, Hank
Sent: Friday, June 22, 2018 12:26 PM
To: Stephanie Tuite (Stephanie@fcc-eng.com)
Subject: OSDS Plan_4890 Castlebridge Road
Attachments: OSDS Plan_Example Layout.pdf; OSDS Memo To FCC__2018.pdf

Hi Stephanie:

Attached, please find comments pertaining to the OSDS Plan for 4890 Castlebridge Road. I moved trenches around a bit (See example) but I don't know if it will work. Let me know what you think.

Thanks,

Hank

Hank Oswald
Licensed Environmental Health Specialist
Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
8930 Stanford Boulevard
Columbia, MD 21045
410.313.1786 (Office)
hoswald@howardcountymd.gov

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I am somewhat at a break point but maybe squeeze a couple feet. Could I show 10 ft off easement and 5 from driveway with the note (steel casing & bollards/rock/barrier)?

Steph

Stephanie Tuite, RLA, PE, LEED AP BD&C
FISHER, COLLINS & CARTER, INC.

From: Williams, Jeffrey [<mailto:jewilliams@howardcountymd.gov>]
Sent: Tuesday, February 20, 2018 4:02 PM
To: Stephanie Tuite <Stephanie@fcc-eng.com>
Subject: RE: Carroll Ziegler Property, Lot 5 - 4890 Castlebridge Road

We're hesitant to do a reduced setback to a circular driveway given the increased likelihood of a car veering off and hitting the well. Can you let me know how far away you can get while staying 10' off the easement? We could maybe go less than 10' if we had a note requiring steel well casing a bollards or a big rock between the well and driveway. We didn't like the original proposal with the well right on the edge of the drive. How many feet away can you get it?

From: Stephanie Tuite [<mailto:Stephanie@fcc-eng.com>]
Sent: Tuesday, February 20, 2018 9:33 AM
To: Williams, Jeffrey
Subject: RE: Carroll Ziegler Property, Lot 5 - 4890 Castlebridge Road

This driveway is actually outside the easement to the right, so I didn't feel 10 foot would be necessary since the driveway is so far from the well. If I squeeze 10 foot can we resolve to 5' from our circular drive with a note that bollards or equivalent protective devices be provided upon using the that alternate well?

Steph

Stephanie Tuite, RLA, PE, LEED AP BD&C
FISHER, COLLINS & CARTER, INC.

From: Williams, Jeffrey [<mailto:jewilliams@howardcountymd.gov>]
Sent: Tuesday, February 20, 2018 9:29 AM
To: Stephanie Tuite <Stephanie@fcc-eng.com>
Subject: RE: Carroll Ziegler Property, Lot 5 - 4890 Castlebridge Road

I thought the grading by the turnaround was lower in elevation, making it look like an outfall. With the elevation labeled, we are fine with no setback to that other than the 10' to the prop line. When an easement is an egress easement, we need to be 10' off of it (or 15' if it serves multiple lots) because the driveway can be anywhere within that easement. That should be a standard comment from us on these issues.

From: Stephanie Tuite [<mailto:Stephanie@fcc-eng.com>]
Sent: Tuesday, February 20, 2018 8:55 AM
To: Williams, Jeffrey
Subject: RE: Carroll Ziegler Property, Lot 5 - 4890 Castlebridge Road

I am not sure I understand your comments. The ingress/egress is just an easement not a road/driveway, although it is for the driveway. I have moved the circular drive to provide more separation to the alternate well to give it approx. 6' to the easement and approx. 6' to the driveway, which if they ever need to drill this alternate well, bollards could be added to provide protection.

There is no stormwater outfall near the t-turnaround that I know of. There is a stockpile of dirt (I have labeled it) that was not removed when they constructed the driveway and the well box sits higher than all of it. See attached.

Hope this will be acceptable to you. Thanks

Steph

Stephanie Tuite, RLA, PE, LEED AP BD&C
FISHER, COLLINS & CARTER, INC.

From: Williams, Jeffrey [<mailto:jewilliams@howardcountymd.gov>]
Sent: Friday, February 16, 2018 10:30 AM
To: Stephanie Tuite <Stephanie@fcc-eng.com>
Cc: Tony Fertitta <tonyf@fcc-eng.com>
Subject: RE: Carroll Ziegler Property, Lot 5 - 4890 Castlebridge Road

I reviewed the perc cert and I noticed that there is the 30' ingress/egress easement. Now I know why you were putting the alt well sites higher up. We need to stay 10' from an ingress easement (15' if it is for a right-of-way to multiple other properties). Additionally, we need to stay 50' from the apparent Stormwater outflow by the T turnaround. They need to either move the house or get rid of the circular driveway unless there is another solution I am not seeing.

Jeff

From: Stephanie Tuite [<mailto:Stephanie@fcc-eng.com>]
Sent: Monday, January 29, 2018 12:59 PM
To: Williams, Jeffrey
Cc: Tony Fertitta
Subject: RE: Carroll Ziegler Property, Lot 5 - 4890 Castlebridge Road

These are 32 feet apart and 3 feet off the driveway. Closest is over 58 ft from the existing well. Worst case we could add bollards, but could use something decorative in the 3 foot that would still protect the well if one is ever drilled.

Steph

Stephanie Tuite, RLA, PE, LEED AP BD&C
FISHER, COLLINS & CARTER, INC.

From: Williams, Jeffrey [<mailto:jewilliams@howardcountymd.gov>]
Sent: Monday, January 29, 2018 10:53 AM
To: Stephanie Tuite <Stephanie@fcc-eng.com>
Cc: Tony Fertitta <tonyf@fcc-eng.com>
Subject: RE: Carroll Ziegler Property, Lot 5 - 4890 Castlebridge Road

The SDA revision is fine. The well locations are not ideal with the proximity to the driveway and the decreased distance between. Does the SWM device in the rear corner need to be there? That would be an ideal place for a well box or replacement sites.

From: Stephanie Tuite [<mailto:Stephanie@fcc-eng.com>]
Sent: Thursday, January 25, 2018 10:18 AM
To: Williams, Jeffrey
Cc: Tony Fertitta
Subject: Carroll Ziegler Property, Lot 5 - 4890 Castlebridge Road
Importance: High

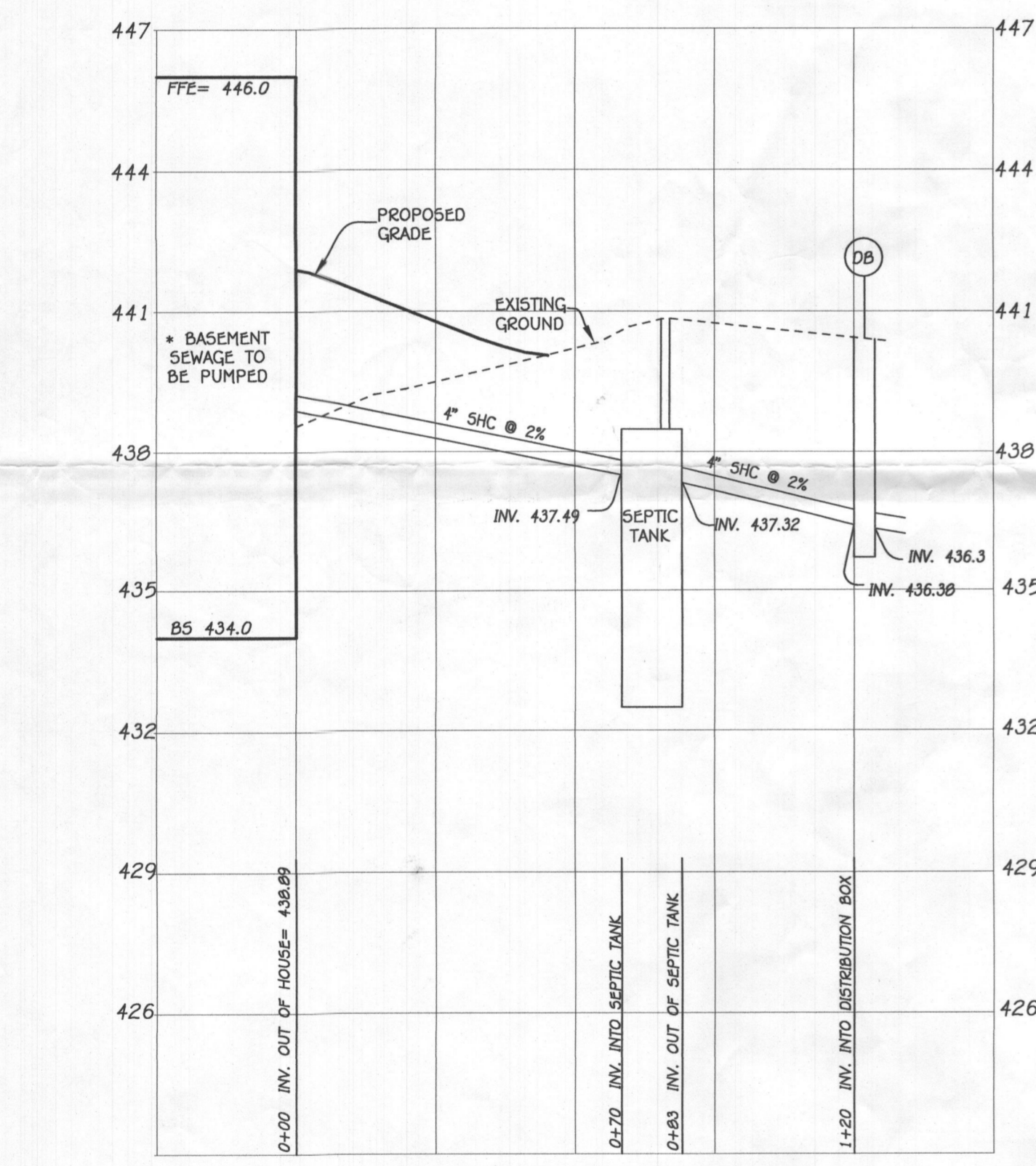
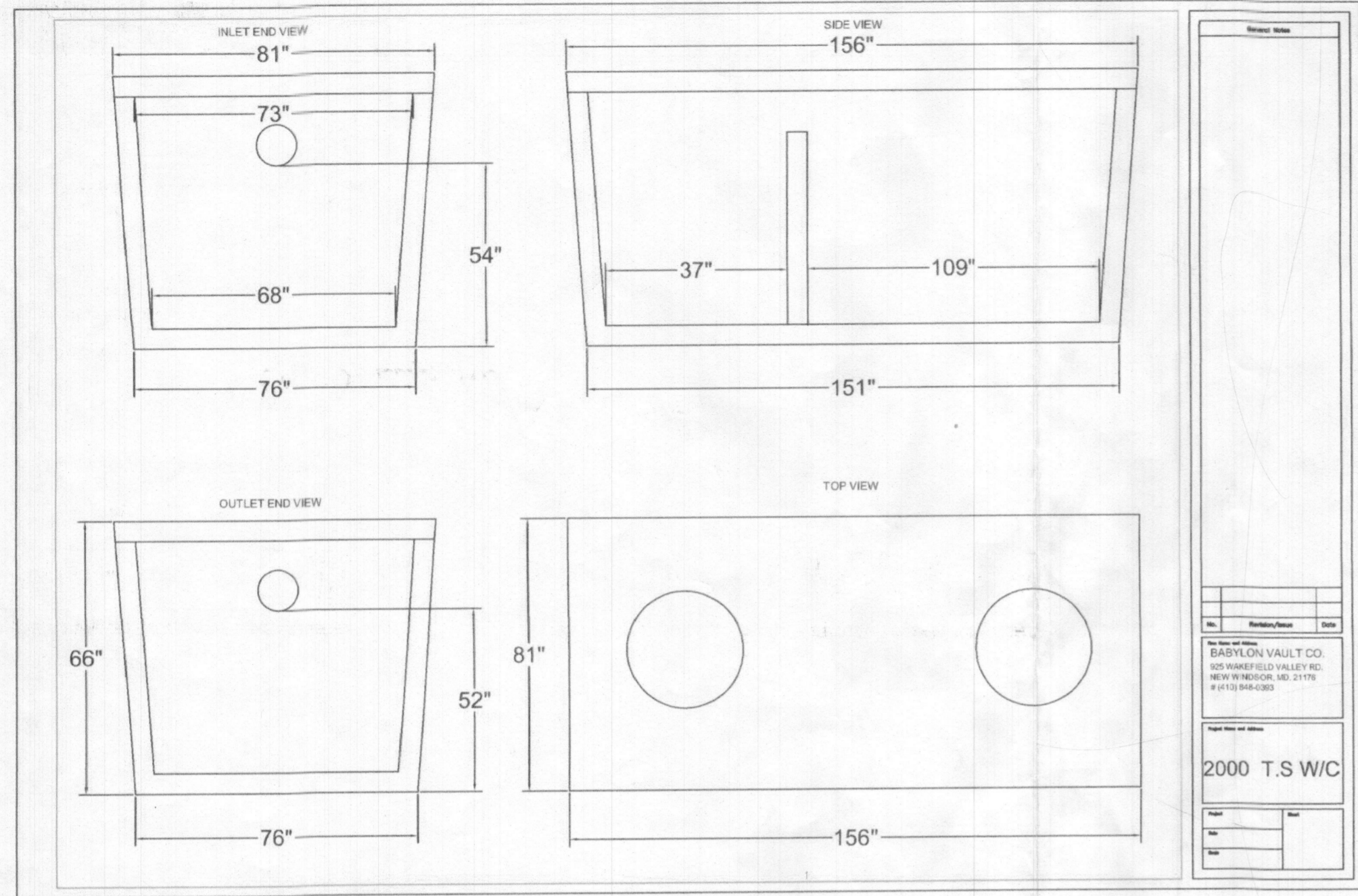
Jeff,

Tony had to leave the office so I was hoping to get this over to you to consider.

Please see the attached. He had asked about alternate well locations and we are somewhat wedged in with SWM and septic. Please see if you would consider what I am proposing. We would like to show the one alternate well site approx. 32 feet from the existing well and the other another 48 feet beyond that. Hoping you will find this acceptable. There is an easement in the front of the property that we are trying to miss as well as septic and SWM. Thanks.

Steph

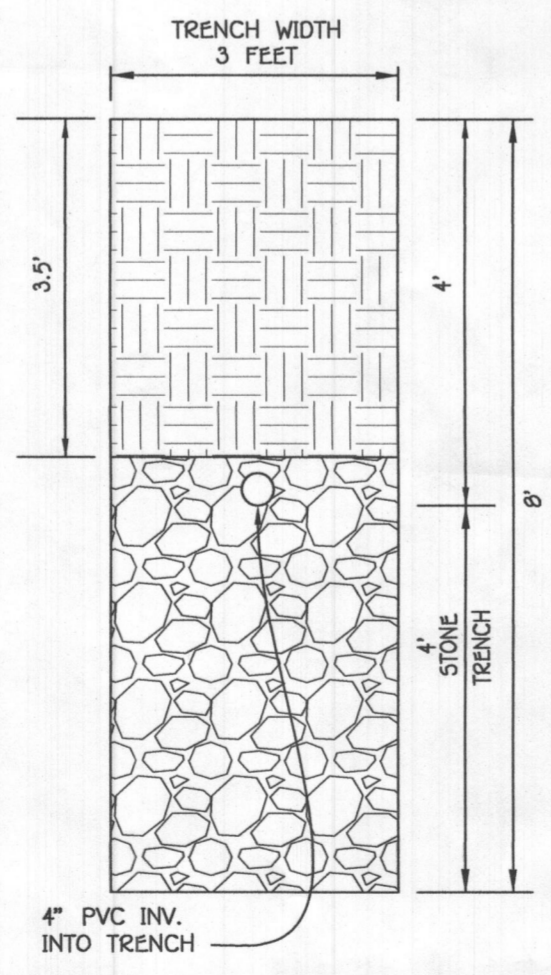




SEPTIC PROFILE
HORIZONTAL SCALE: 1"=30'
VERTICAL SCALE: 1"=3'

TRENCH	GROUND ELEV.	TOP OF STONE ELEV.	PIPE INVERT ELEV.	DEPTH TO STONE FROM GROUND	DEPTH OF STONE (FT)	BOTTOM OF TRENCH ELEV.	EFFECTIVE DEPTH STARTS AT	EFFECTIVE DEPTH (D)	WIDTH OF TRENCHES (W)	TRENCH SPACING
A	439.9	436.4	435.9	3.5'	4.0'	431.9	4.0'	4.0'	3.0'	11'
B	439.9	436.4	435.9	3.5'	4.5'	431.9	4.0'	4.0'	3.0'	11'
C	440.3	436.8	436.3	3.5'	4.5'	432.3	4.0'	4.0'	3.0'	11'

SOIL	NAME	CLASS	K FACTOR
GbB	Gladstone loam, 3 to 8 percent slopes	B	0.20
GbC	Gladstone loam, 8 to 15 percent slopes	B	0.20
GmB	Glenville silt loam, 3 to 8 percent slopes	C	0.37
GnB	Glenville-balle silt loams, 0 to 8 percent slopes	C	0.37



INITIAL TRENCH DETAIL
SCALE: 1"=2'

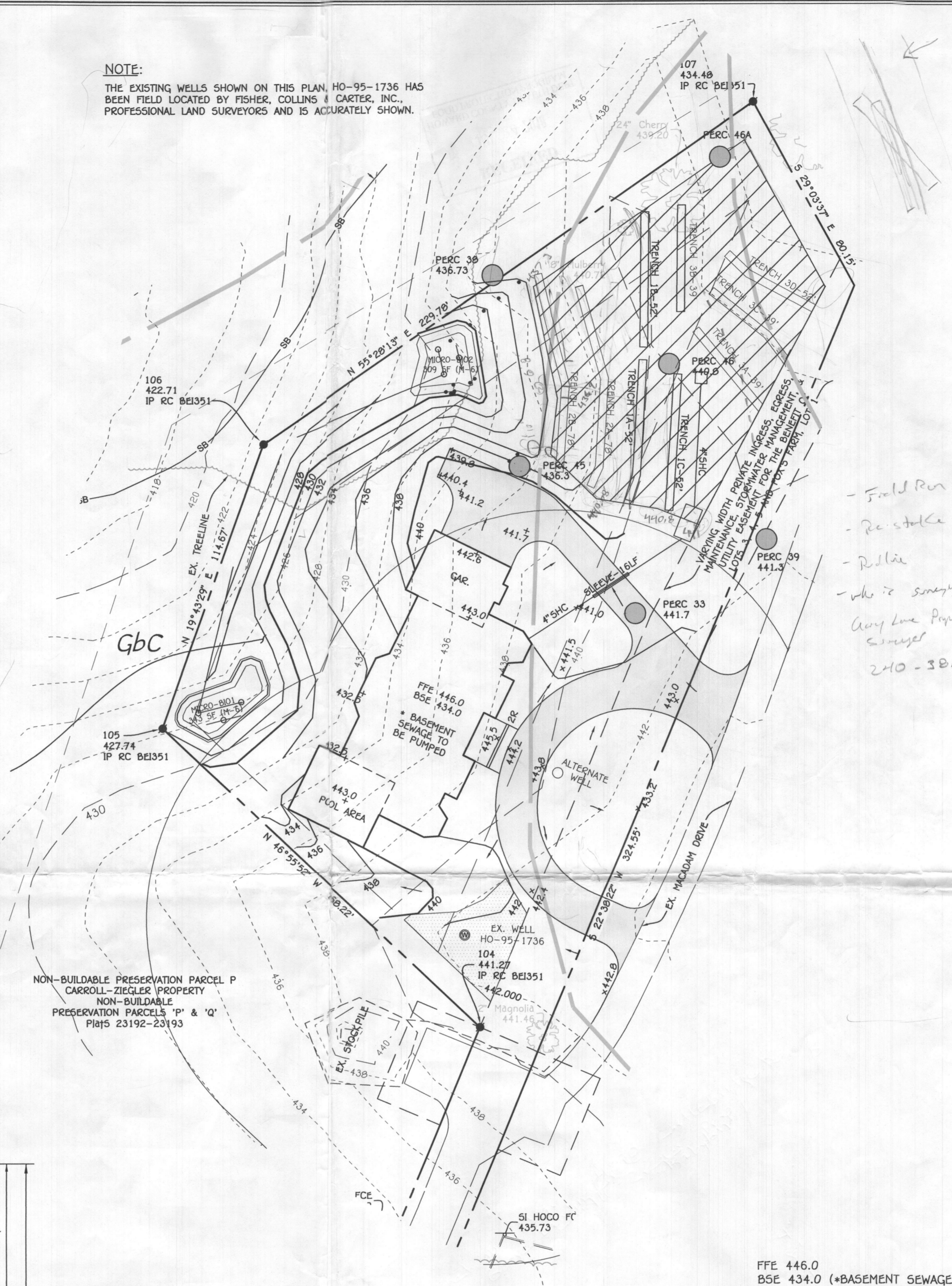
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38386, EXPIRATION DATE: 01/12/2020.
Signature of Professional Engineer 7/24/18
DATE



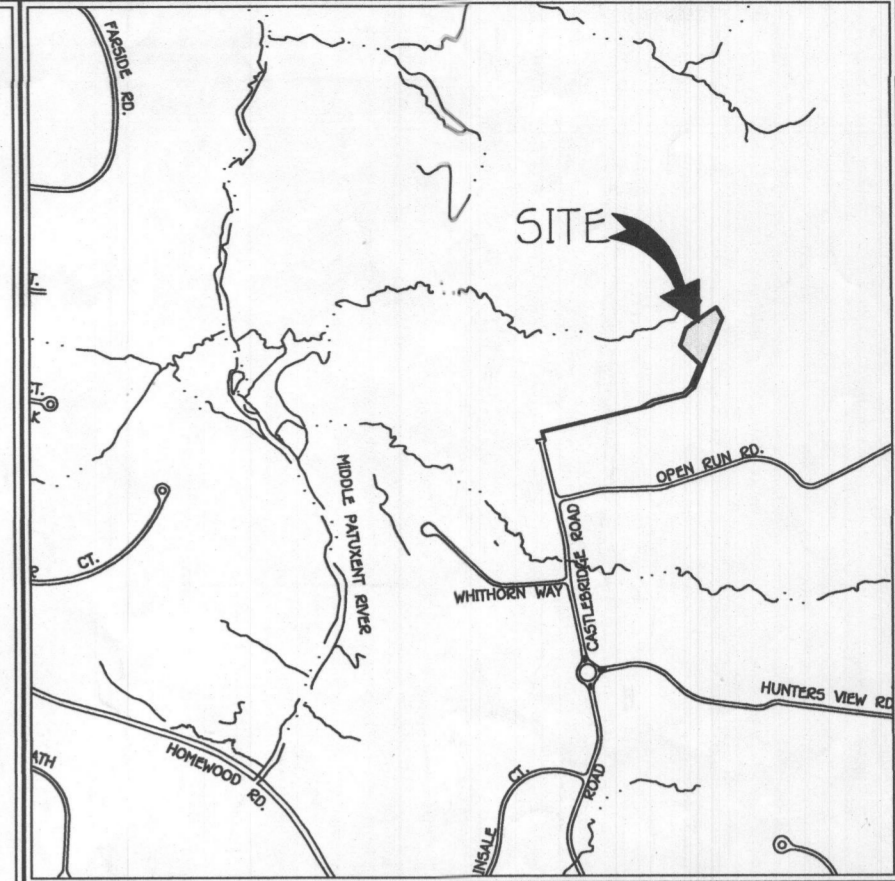
OWNER/DEVELOPER
(LOT 5 & PRES. PARCEL P)
SHAHED M. SIDDIQI & PARUL A. SIDDIQI
2871 GOOSE LANDING CIRCLE
COLUMBIA, MD 21045
301-613-2138

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PLACE
ELICOTT CITY, MARYLAND 21042
(410) 461-8295

NOTE:
THE EXISTING WELLS SHOWN ON THIS PLAN, HO-95-1736 HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.



- LEGEND**
- EXISTING 2' CONTOURS
 - EXISTING 10' CONTOURS
 - EXISTING TREE LINE
 - SOIL LINES AND TYPES
 - DENOTES EXISTING WELL
 - DENOTES PROPOSED TRENCH
 - DENOTES ALTERNATE WELL BOX AREA
 - PASSED PERC HOLES
 - FAILED PERC HOLES



VICINITY MAP
SCALE: 1" = 1200'

- GENERAL NOTES:**
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS 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 SEWERAGE EASEMENT. RECORDED OF A MODIFIED SEWERAGE EASEMENT SHALL NOT BE NECESSARY.
 - TOPOGRAPHY SHOWN IN THE AREA OF THE LOT BEING DISTURBED IS BASED ON A TOPOGRAPHIC SURVEY BY FISHER, COLLINS & CARTER, INC. IN APRIL, 2017 AND SUPPLEMENTED WITH HOWARD COUNTY GIS TOPOGRAPHY AT 2' CONTOUR INTERVAL.
 - BOUNDARY OF LOT BASED ON PLAT #21057.
 - ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERC CERTIFICATION PLAN.
 - DEED REFERENCE: LIBER 16964 FOLIO 481.
 - SUBJECT PROPERTY ZONED: RC-DEO
 - TOTAL AREA OF PROPERTY: 66,753 SQ.FT. OR 1.53 AC. (LOT 5)
 - WETLANDS, STREAMS, THEIR BUFFERS, FLOODPLAIN, AND STEEP SLOPES DO NOT EXIST ON THIS LOT.
 - SOILS SHOWN HEREON ARE BASED ON NRCS WEB SOIL SURVEY AND HOWARD COUNTY SOILS MAP 17.
 - NOTE THAT OWNER OF LOT 5 ALSO OWNS NON-BUILDABLE PRESERVATION PARCEL P WHERE GRADING / EXCAVATION FOR A POND IS SHOWN.
 - ADJUSTMENTS TO SEPTIC EASEMENT 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.
 - ALL WELLS AND SEPTIC SYSTEMS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND 200 FEET DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
 - ANY CHANGES 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 COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
 - IN THE FUTURE, IF ALTERNATE WELLS ARE DRILLED WITHIN 10 FEET OF THE DRIVEWAY, BOLLARDS SHALL BE INSTALLED TO PROTECT WELL.

Field Per
Re-stake 50ft
Rollie
Very Low Property Line
240-381-8372

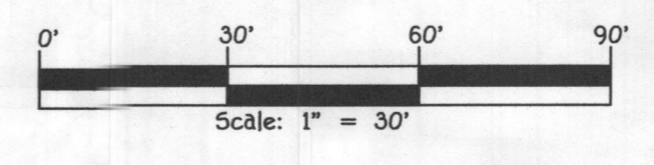
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FFE 446.0
BSE 434.0 (*BASEMENT SEWAGE TO BE PUMPED)
INV. OUT OF HOUSE = 438.89
EX. GROUND AT SEPTIC TANK = 440.7
COVER OVER TANK = 2.21 FEET
TOP OF SEPTIC TANK = 438.49
INV. INTO SEPTIC TANK = 437.49
INV. OUT OF SEPTIC TANK = 437.32
EX. GROUND AT DISTRIBUTION BOX = 440.5
INV. INTO DISTRIBUTION BOX = 436.38
INV. OUT OF DISTRIBUTION BOX = 436.3

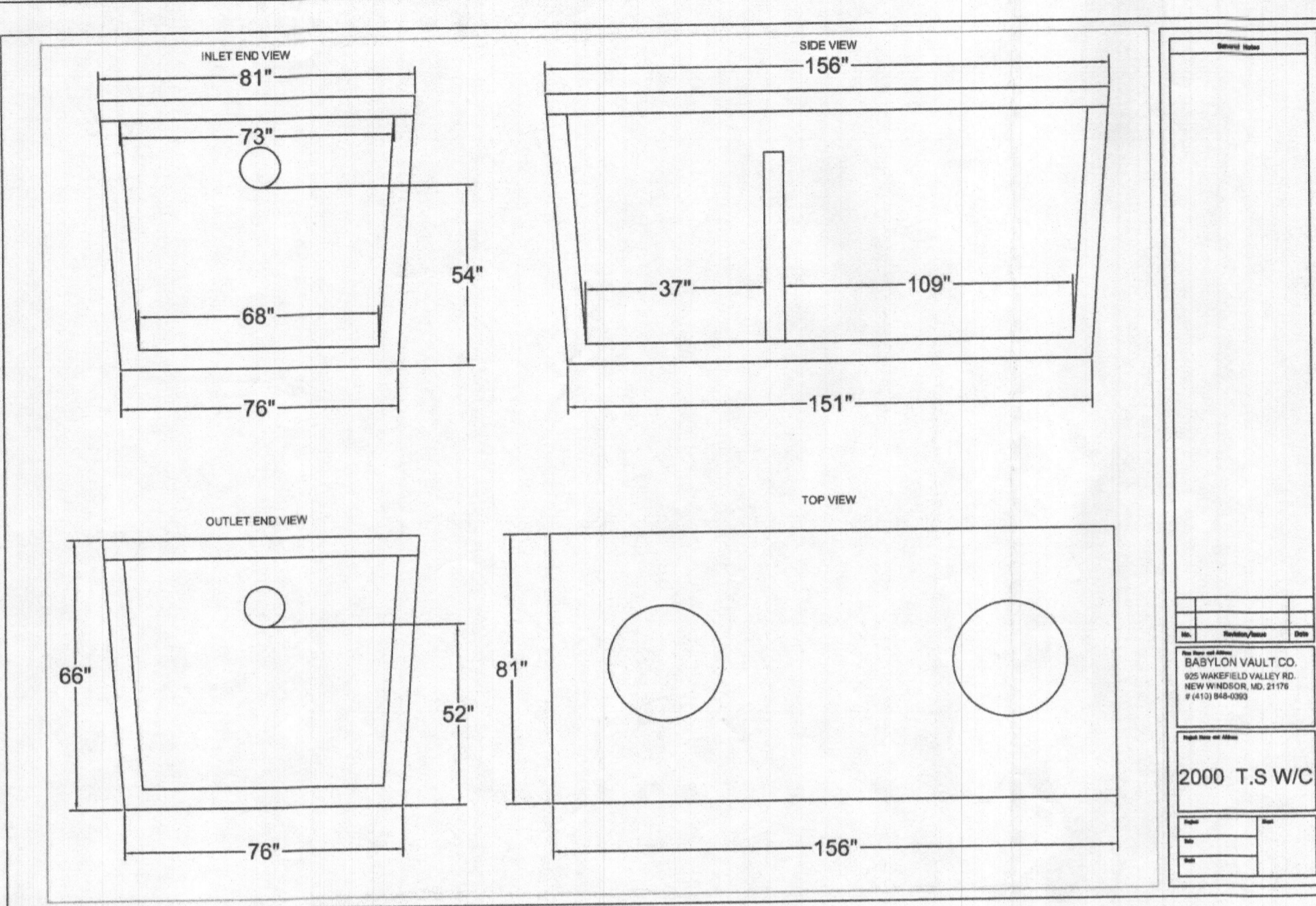
Approved Septic System Plan
Howard County Health Department
Signature 7/24/18
Date

SEPTIC PLAN
CARROLL-ZIEGLER PROPERTY, LOT 5
4890 CASTLEBRIDGE ROAD
ZONED: RC-DEO
TAX MAP NOS: 23 & 29 GRID NOS: 21, 22 & 3, 4 PARCEL NO: 29
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JUNE, 2018
SHEET 1 OF 1

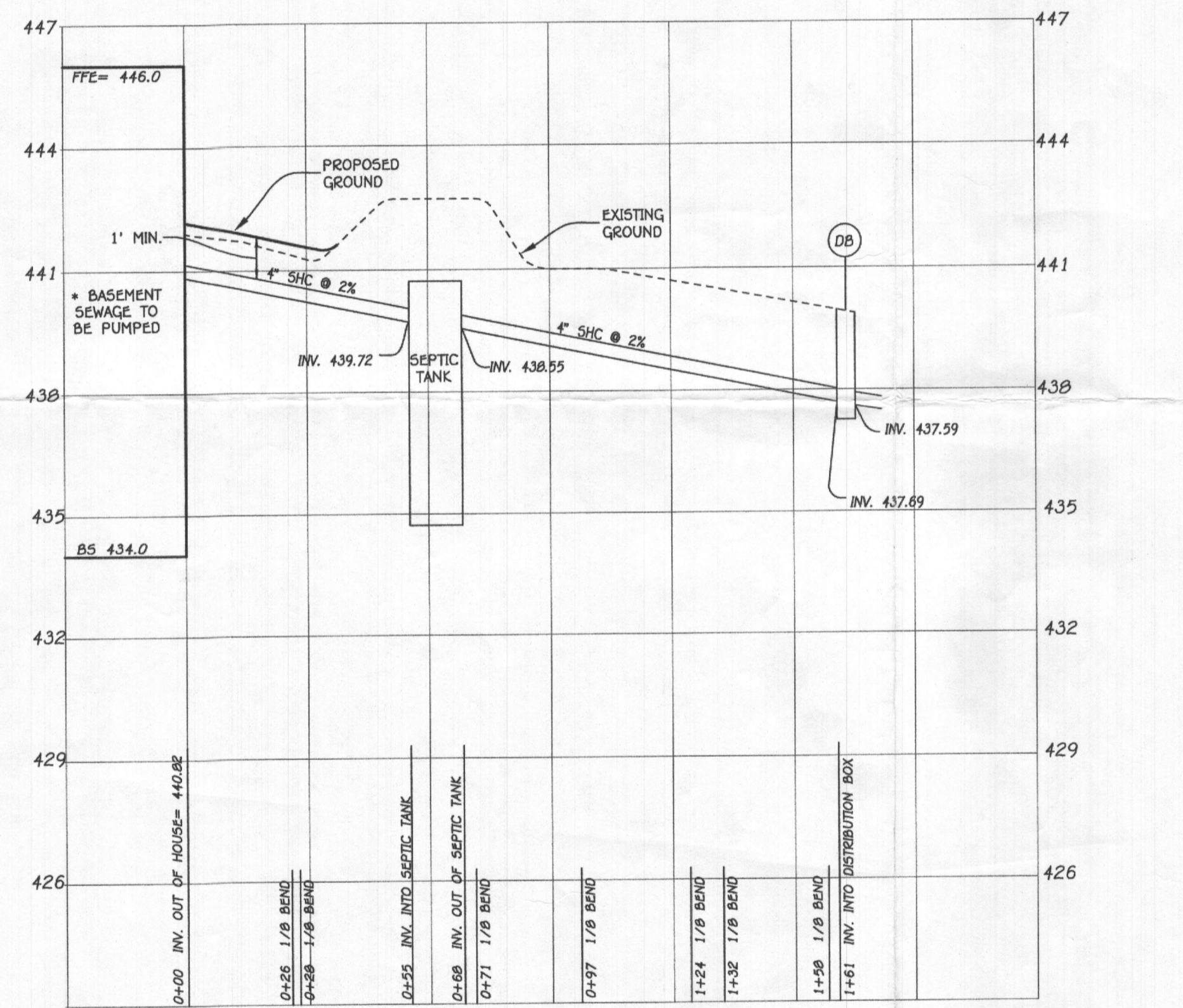


Scale: 1" = 30'

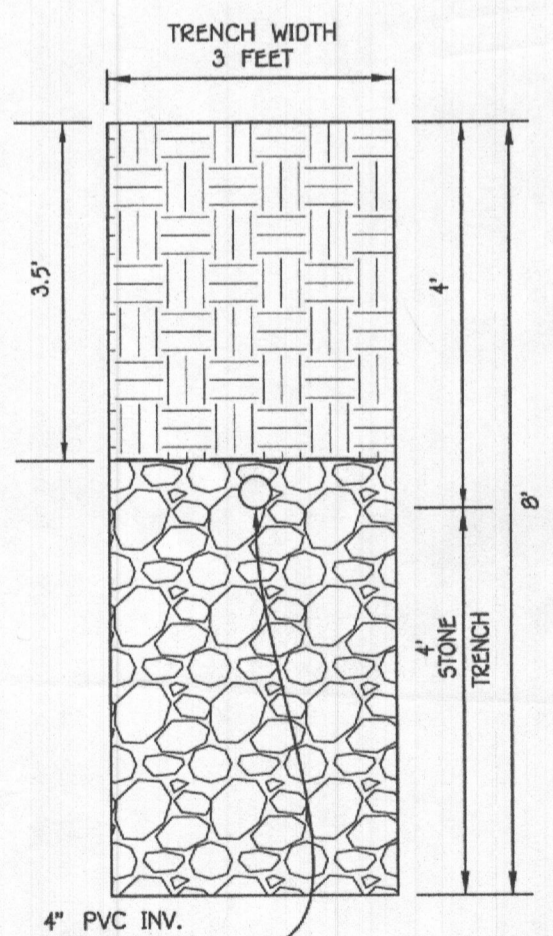
K:\SD\KPC\105650\105650.dwg, Septic Plan.dwg, 7/24/2018 1:37:01 PM, 1:1



NO.	DESCRIPTION
1	2000 T.S.W.C.



SEPTIC PROFILE
 HORIZONTAL SCALE: 1"=30'
 VERTICAL SCALE: 1"=3'



INITIAL TRENCH DETAIL
 SCALE: 1"=2'

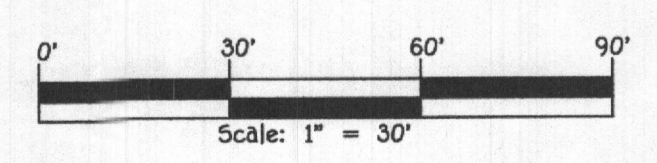
SOIL	NAME	CLASS	K FACTOR
GbB	Cladstone loam, 3 to 8 percent slopes	B	0.20
GbC	Cladstone loam, 8 to 15 percent slopes	B	0.20
GmB	Glenville silt loam, 3 to 8 percent slopes	C	0.37
GmB	Glenville-Baile silt loams, 0 to 8 percent slopes	C	0.37

FFE 446.0
 BSE 434.0
 INV. OUT OF HOUSE = 440.82
 EX. GROUND AT SEPTIC TANK = 442.72
 COVER OVER TANK = 2 FEET
 TOP OF SEPTIC TANK = 440.72
 INV. INTO SEPTIC TANK = 439.72
 INV. OUT OF SEPTIC TANK = 438.55
 EX. GROUND AT DISTRIBUTION BOX = 439.96
 INV. INTO DISTRIBUTION BOX = 437.69
 INV. OUT OF DISTRIBUTION BOX = 437.59

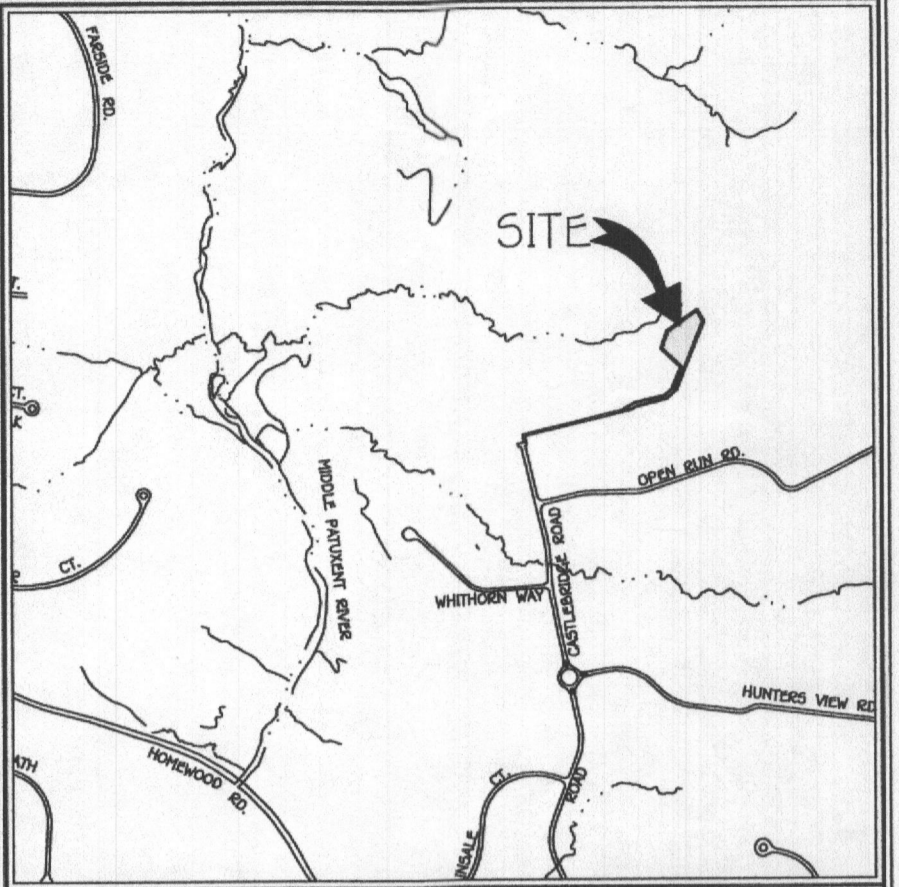
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 46091, EXPIRATION DATE: 05/14/2025.



Signature: *Luke Brown*
 DATE: 10-30-23



- LEGEND**
- EXISTING 2' CONTOURS
 - EXISTING 10' CONTOURS
 - EXISTING TREE LINE
 - SOIL LINES AND TYPES
 - ⊙ DENOTES EXISTING WELL
 - DENOTES PROPOSED TREELINE
 - DENOTES ALTERNATE WELL SITE
 - DENOTES PASSED PERC HOLES
 - DENOTES FAILED PERC HOLES
 - DENOTES PROPOSED STOCKPILE
 - DENOTES STORMWATER MANAGEMENT EASEMENT
 - DENOTES FOREST CONSERVATION EASEMENT
 - DENOTES WELL BOX



GENERAL NOTES:

- THIS AREA DESIGNATES A PRIVATE SEWAGE DISPOSAL AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS 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.
- TOPOGRAPHY SHOWN IN THE AREA OF THE LOT BEING DISTURBED IS BASED ON A TOPOGRAPHIC SURVEY BY FISHER, COLLINS & CARTER, INC. IN APRIL, 2017 AND JULY, 2023 AND SUPPLEMENTED WITH HOWARD COUNTY GIS TOPOGRAPHY AT 2' CONTOUR INTERVAL.
- BOUNDARY OF LOT BASED ON PLAT #21057.
- ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA SHALL REQUIRE A REVISED PERC CERTIFICATION PLAN.
- DEED REFERENCE: LIBER 16964 FOLIO 481.
- SUBJECT PROPERTY ZONED: RC-DEO
- TOTAL AREA OF PROPERTY: 66,753 SQ.FT. OR 1.53 AC. (LOT 5)
- WETLANDS, STREAMS, THEIR BUFFERS, FLOODPLAIN, AND STEEP SLOPES DO NOT EXIST ON THIS LOT.
- SOILS SHOWN HEREON ARE BASED ON NRCS WEB SOIL SURVEY AND HOWARD COUNTY SOILS MAP 17.
- NOTE THAT OWNER OF LOT 5 ALSO OWNS NON-BUILDABLE PRESERVATION PARCEL P WHERE GRADING / EXCAVATION FOR A POND IS SHOWN.
- ADJUSTMENTS TO 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.
- ALL WELLS AND SEPTIC SYSTEMS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND 200 FEET DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
- ANY CHANGES 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 COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
- IN THE FUTURE, IF ALTERNATE WELLS ARE DRILLED WITHIN 10 FEET OF THE DRIVEWAY, BOLLARDS SHALL BE INSTALLED TO PROTECT WELL.
- THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
- THE WELL HO-95-1736 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
- THE ENGINEER IS REGISTERED WITH MDE TO PROVIDE ONSITE WASTEWATER SERVICES IN MARYLAND.
- BASEMENT REQUIRES THE INSTALLATION OF AN EJECTOR PUMP TO UTILIZE SEPTIC SYSTEM.

SEWAGE DISPOSAL SYSTEM DATA - INITIAL SYSTEM

6 BEDROOMS
 LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
 APPLICATION RATE = 0.8
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET
 TRENCH DEPTH = 0 FEET
 TRENCH WIDTH (W) = 3 FEET
 EFFECTIVE DEPTH (D) = 4 FEET
 SF OF DRAINFIELD = 900 GPD / 0.8 = 1125 SF
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =
 $(W+2)/(W+1+2D) = (3+2)/(3+1+(2*4)) = 0.416$
 TRENCH LENGTH = 1125 SF x 0.416 / 3 = 156 SF
 TRENCH SPACING = 2D+W = ((2*4) + 3) = 11'
 USE 4 TRENCHES AT 39.0'

SEWAGE DISPOSAL SYSTEM DATA - REPLACEMENT SYSTEMS

6 BEDROOMS
 LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
 APPLICATION RATE = 0.8
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET
 TRENCH DEPTH = 0 FEET
 TRENCH WIDTH (W) = 3 FEET
 EFFECTIVE DEPTH (D) = 4 FEET
 SF OF DRAINFIELD = 900 GPD / 0.8 = 1125 SF
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =
 $(W+2)/(W+1+2D) = (3+2)/(3+1+(2*4)) = 0.416$
 TRENCH LENGTH = 1125 SF x 0.416 / 3 = 156 SF
 TRENCH SPACING = 2D+W = ((2*4) + 3) = 11'
 USE 3 TRENCHES AT 52.0'

DAILY STABILIZATION NOTE:
 CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORKING DAY. STABILIZATION SHE BE AS FOLLOWS:
 1. FOR AREAS TO BE PAVED, THAT APPLICATION OF STONE BASE.
 2. FOR AREAS TO BE VEGETATIVELY STABILIZED:
 A. PERMANENT SEED AND SOIL STABILIZATION MATTING OR 500 FOR ALL STEEP SLOPES, CHANNELS OR SWALES.
 B. PERMANENT SEED AND MULCH FOR ALL OTHER AREAS.
 ANY AREAS WHICH CAN NOT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON THE DOWN SLOPE SIDE.

Approved Septic System Plan
 Howard County Health Department
 Signature: *Robert J. ...* 11/2/2023
 Date

SEPTIC INSTALL PLAN
CARROLL-ZIEGLER PROPERTY, LOT 5
 4890 CASTLEBRIDGE ROAD

ZONED: RC-DEO
 TAX MAP NOS.: 23 & 29 GRID NOS.: 21, 22 & 3, 4 PARCEL NO: 29
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: OCTOBER, 2023
 SHEET 1 OF 1