

Date: February 24, 2025

To: Matt Shipley

Re: ***Percolation Test Report***
11800 Triadelphia Road
Ellicott City, MD 21042

Percolation tests were conducted at 11800 Triadelphia Road (Tax Map 0016, Parcel 32) on February 18th, 2025. The purpose of conducting percolation tests was to establish a Sewage Disposal Area (SDA) for the existing lot of record in anticipation of a future addition. Tests and profile descriptions were documented for staked locations 1 through 4. The existing septic system was a repair that was completed in 2021 with a perc hole labeled test "A". Perc hole 3 was reshelled at a 6' depth and perc hole 1 was reshelled at a 5.5' depth due to >30-minute rates a foot higher in the soil profile, but both achieved a PASS of 6 minutes. Test hole 2 was repoured due to just under a 2-minute percolation on the first attempt. The perc hole 4 was a visual FAIL due to predominantly clay, very moist soil and >50% rock content in the upper 8'. All holes were dug to a 12' depth and perc testing was carried out at a test depth ranging from 4.5-6' in all test holes. The upper 3 ft. to 4 ft. of soil layers were generally restrictive, and the water table was only observed in hole 3. It will be up to the engineer to design a septic system that meets the project goals. The soil units that were encountered on this site are Gladstone loam (GbB) with a range of 3-8% slopes & Glenville silt loam (GmB) with a range of 3-8% slopes. Field data collected is shown on the Percolation Test Worksheet enclosed with this letter.

All percolation tests conducted were standard tests, measuring rate of fall for a pre-wet period followed by measurement and recordation of the time required for the water level to drop 1 inch. Locations that may be included in the sewage disposal area are represented by test pits having satisfactory soil conditions. The SDA must be large enough to accommodate 3 systems (initial and 2 replacements). There is no guarantee that a suitable SDA can be established based on passing perc holes alone. If 3 systems cannot fit, the Health Dept. may consider allowing 2 systems (initial and 1 replacement) which will require Best Available Technology (BAT). The next step in the process is to have an engineer/consultant submit a finalized percolation certification plan to the Health Dept. for review and signature.

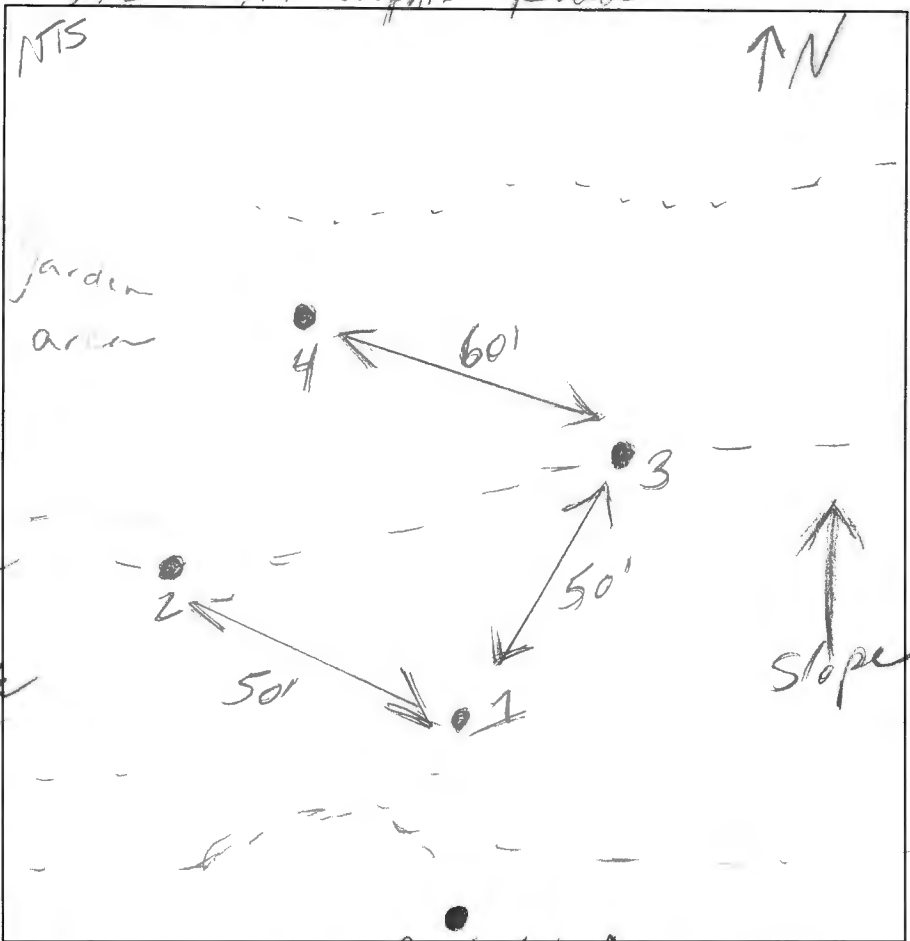
Should you have any questions regarding this evaluation, please contact me. I may be reached at (410) 313-7324 or by email Meshenbaugh@howardcountymd.gov

Respectfully,
Melanie Eshenbaugh

Melanie Eshenbaugh
Bureau of Environmental Health/Well & Septic Program

11800 Triadelphia Road

AVP



2
 Topsoil 0-3"
 CL 3'-11"
 Brown/tan/gray
 SCL 1-2'
 Brown/gray
 40-50% Rock/gravel
 SL 2'-4'
 Brown/orange
 tan/gray
 SL 4'-9'
 Tan/yellow/orange
 gray/white

20-30% quartz
 SL 9'-12'
 Tight SW
 Tan/yellow/white
 Weathered
 Mica @ 11'-12'
 Redox @ 11.5-12'

3
 Topsoil 0-3"
 Loam 3'-11"
 Brown

Clay
 var. fig.
 Red/orange
 Brown/gray
 SCL 3'-4.5'
 Brown/orange
 Tan/gray
 SL 4.5'-10.5'
 Tan/gray/orange
 tight sidewall
 @ 10.5-12'
 Water @ 11.5-12'

SL Tan/yell/orange

4
 0-3" Topsoil
 3'-11" CL
 Brown
 1'-4" Clay
 Red/Br/gray
 Very tight
 4'-5" CL
 Red/tan
 5'-7" SCL
 Clay deposits
 Very friable
 75-80% Rock
 7'-11" SCL

Tan/gray/white
 Tight Sidewall
 from 8'-11"
 Redox @ 11'

1
 0-3" Topsoil
 3'-11" CL
 Brown/gray
 1-2' Clay
 Red/gray/tan
 quartz 10-20%
 2'-2.5" CL
 Red/tan
 2.5'-3.5" SCL

Red/tan
 tight not friable

3 5'-5" SL
 Tan/yellow
 ledge
 Clay deposits
 5-10" SL
 Tan/yellow
 30-40% quartz
 10-20% quartz
 10'-12" SL
 Tan/yellow
 10-20% quartz

Redox @ 12'-12.5'

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
2/1/25	3	5'	10:08	10:30	7:30	mins	F
2/1/25	1	4.5	10:19	10:55	7:30	mins	F
2/1/25	2	5	10:33	10:34	10:36	2 mins	P
2/1/25	2	5	10:37	10:39	10:43	4 mins	P
2/15/25	3	6	10:45	10:48	10:54	6 mins	P
2/15/25	1	5.5	11:01	11:05	11:11	6 mins	P
1-5	4	Visual		Fail			

REMARKS Water observed in hole 3 moist soil in holes 5-10%
 SANITARIAN M. Eshenbaugh BACKHOE S. Carroll M. # OTHERS M. Ke, M. Shipley
 TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____
 TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

Eshenbaugh, Melanie

From: Eshenbaugh, Melanie
Sent: Monday, March 17, 2025 5:54 PM
To: Matt Shipley
Subject: 11800 Triadelphia Road PC

Good afternoon Matt,

I have reviewed the PC received on 2/28/25 and have the following revision comments:

1. Please show the septic on 11791 Triadelphia Road
2. Add note regarding the property being in the Baltimore Gneiss and mentioning that the well will need to have the water tested for gross alpha, beta & radium
3. The well shown on 11801 should be labeled as type of well with either a tag # or labeled no tag & verify location of the well as its seen to be closer to the house on GIS
4. Revise the purpose note to state "the purpose of this plan is to establish an adequate sewage disposal area for the replacement septic area to support a proposed bedroom addition. A previous septic repair designed the existing septic system for four bedrooms, that system will remain."
5. The existing SDA area could be extended towards the repair perc hole keeping 20' off the barn and 10' of the seepage pits since this will allow more room for the replacement systems
6. Will need to show different legend item & pattern for the proposed SDA and label proposed on the area to differentiate between neighboring approved SDA's.

Please let me know if you have any questions and thank you kindly.

Melanie Eshenbaugh
Bureau of Environmental Health
Howard County Health Dept.
8930 Stanford Blvd. Columbia, MD 21045
www.hchealth.org



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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

**APPLICATION
 FOR PERCOLATION TESTING AND SITE EVALUATION**

PROPERTY LOCATION

SUBDIVISION/PROPERTY NAME 11800 Triadelphia Road

PROPERTY ADDRESS 11800 Triadelphia Road Ellicott City 21042
STREET TOWN ZIP

TAX ACCOUNT # 03-280292 TAX MAP 16 GRID 20 PARCEL 32 LOT NO. _____ PROPOSED LOT SIZE (ACRES) _____

ZONING CATEGORY RR-DEO TIER III

PROPERTY OWNER(S) James & Caroline Wagandt

DAYTIME PHONE _____ CELL _____ EMAIL _____

MAILING ADDRESS 11800 Triadelphia Road Ellicott City, Md 21042
STREET CITY, STATE ZIP

APPLICANT CLSI - Matt Shipley

RELATIONSHIP TO OWNER: Agent

DAYTIME PHONE 410-871-4480 CELL _____ EMAIL mshipley@clsimail.com

MAILING ADDRESS 439 E. Main Street Westminster, MD 21157
STREET CITY, STATE ZIP

I HEREBY APPLY FOR THE NECESSARY TESTING/EVALUATION PRIOR TO ISSUANCE OF SEWAGE DISPOSAL SYSTEM PERMIT(S):

PROPERTY:

SUBDIVISION: _____ NUMBER OF LOTS INCLUDING RESIDUE: _____
 SUBDIVISION CLASSIFICATION (PER DEPT. OF PLANNING AND ZONING) MAJOR MINOR
 CONSTRUCT NEW OSDS ON UNDEVELOPED LOT
 REPAIR OR REPLACE FAILING OSDS
 UPGRADE EXISTING OSDS

BUILDING:

RESIDENTIAL WITH 3 EXISTING OR PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE
 COMMERCIAL (PROVIDE DETAIL OF TYPE OF USE AND NUMBERS OF EMPLOYEES/CUSTOMERS ON ACCOMPANYING PLAN)

IS THE PROPERTY WITHIN 2500 FEET OF ANY RESERVOIR?

YES
 NO

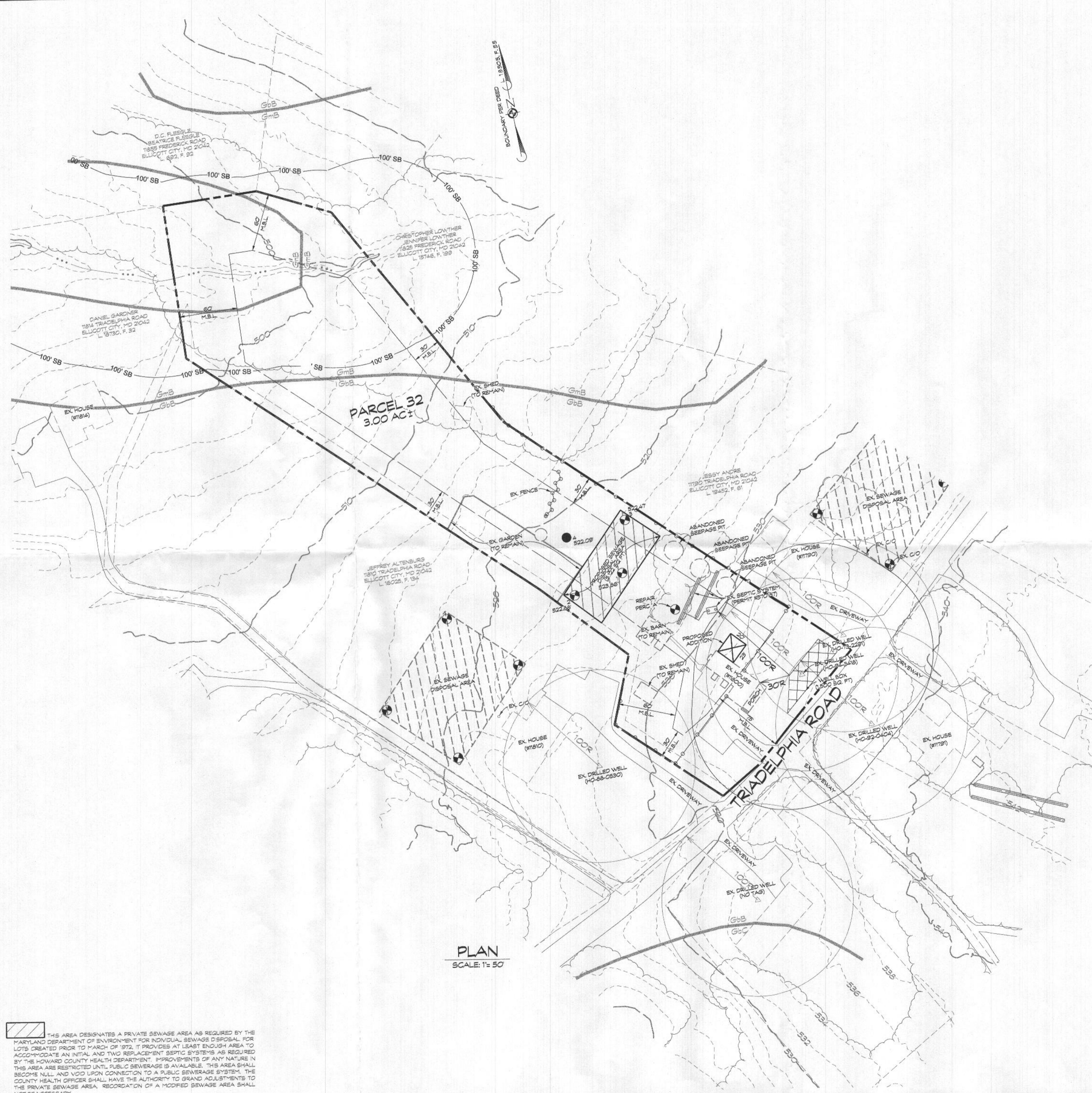
AS APPLICANT, I UNDERSTAND THE FOLLOWING:

- THIS APPLICATION IS VALID FOR TWO(2) YEARS FROM DATE OF FEE PAYMENT AND APPROVAL IS BASED UPON HEALTH OFFICER SIGNATURE OF A PERC CERTIFICATION PLAN PRIOR TO EXPIRATION OF THIS PERMIT.
- THE APPLICATION FEE IS NON-REFUNDABLE
- THIS APPLICATION MUST BE ACCOMPANIED BY ALL APPLICABLE FEES AND A SUITABLE SITE PLAN IN ORDER TO BE PROCESSED
- THIS IS A PUBLIC DOCUMENT

I declare and affirm that to the best of my knowledge, the information contained herein is correct. I declare that I am the owner of the property or duly authorized to make this application on behalf of the owner. I agree to comply with all applicable state and county regulations.

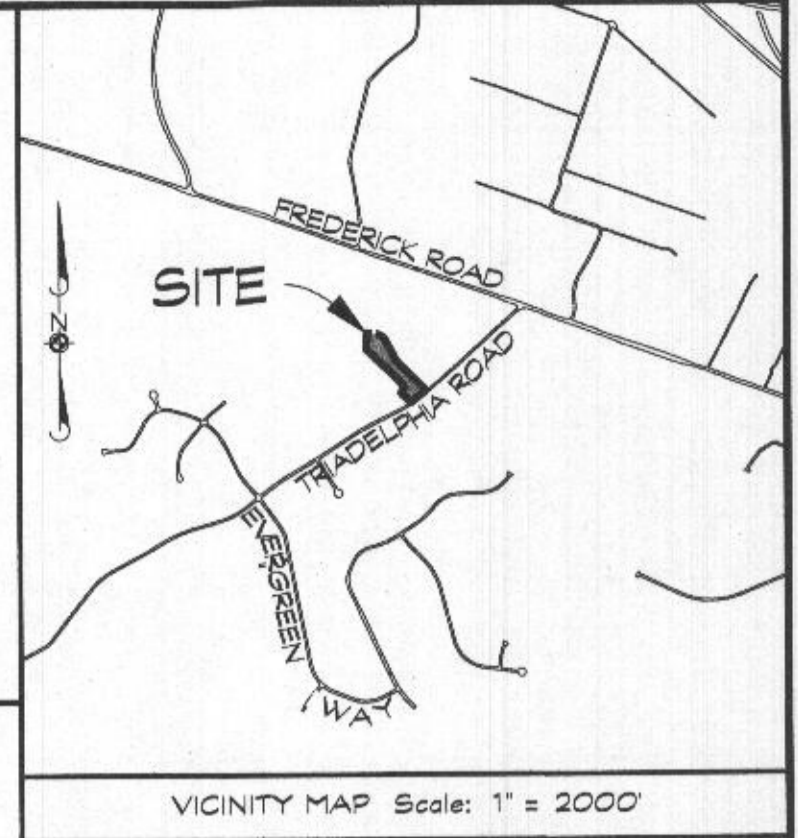
By signature of this application, I hereby grant Howard County Health Department officials the right to enter onto the property for the purpose of inspecting the property as directly related to the requested permit/service.

M. Shipley LETTS 1/16/25
 SIGNATURE OF APPLICANT DATE



LEGEND

- EX. WELL
- FAILED PERC TEST
- PASSING PERC TEST
- 1,500 SQ. FT. WELL BOX
- PROPOSED SCA
- EXISTING SCA
- EX. 10' CONTOUR
- EX. 2' CONTOUR
- EX. STREAM
- 100' SB
- 100' STREAM SETBACK
- EXISTING FENCE
- MINIMUM BUILDING LINE
- SOL LINES
- EX. TREE CANOPY



DATA TABULATIONS
 ZONING DISTRICT: RR-DEO
 GROWTH 'ER: I
 NUMBER OF BUILDING SITES: 1
 TOTAL AREA OF LOT: 3.00 ACRES

- GENERAL NOTES**
- CURRENT TITLE REFERENCE:
 OWNER: JAMES & CAROLINE WAGANDT
 DEED REFERENCE: L. 2059, P. 472
 DATE: OCTOBER 28, 2021
 GRANTOR: JAMES WAGANDT
 - ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 - THE TOPOGRAPHY SHOWN HEREON WAS FIELD RUN BY CLSI IN DECEMBER, 2024.
 - ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
 - THE BOUNDARY SHOWN HEREON IS FROM THE RECORDED DEED (L. 1850S, P. 55). NO BOUNDARY RETRACEMENT SURVEY WAS PERFORMED BY CLSI.
 - THIS PLAN IS A BENEFIT TO THE CUSTOMER ONLY INsofar AS IT IS REQUIRED BY HOWARD COUNTY FOR THE PURPOSE OF THE APPROVAL OF A PERC CERTIFICATION PLAN. IT IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OF BOUNDARY, EASEMENT OR RIGHT-OF-WAY LINES FOR ANY REASON, SUCH AS THE LOCATION OF FENCES, GARAGES, BUILDINGS OR FUTURE IMPROVEMENTS, OFFSETS OF BUILDING OR OTHER EXISTING OR FUTURE IMPROVEMENTS, OFFSETS OF BUILDINGS TO PROPERTY LINE ARE TO THE NEAREST FOOT (1) UNLESS OTHERWISE NOTED.
 - M.B.L. DENOTES MINIMUM BUILDING LINE
 - THIS PROPERTY IS UNDERLAIN BY BALTIMORE GNEISS GEOLOGY, AS SUCH THE EXISTING WELL IS REQUIRED TO BE TESTED FOR GROSS ALPHA AND BETA RADIUM.

THE PURPOSE OF THIS PLAN IS TO ESTABLISH AN ADEQUATE SEWAGE DISPOSAL AREA FOR FUTURE REPLACEMENT SEPTIC SYSTEMS. TO SUPPORT A PROPOSED BEDROOM ADDITION, THE EXISTING SEPTIC SYSTEM IS DESIGNED FOR FOUR BEDROOMS AND WILL REMAIN IN USE.

OWNER/DEVELOPER
 JAMES WAGANDT
 CAROLINE WAGANDT
 11800 TRIADELPHIA ROAD
 ELLICOTT CITY, MD 21042

PERC CERTIFICATION PLAN
11800 TRIADELPHIA ROAD
 ELLICOTT CITY, MD 21042
 TAX ACCOUNT ID: 03 - 280292
 LIBER: 21059 • FOLIO: 472
 TAX MAP: 16" GRID: 20" PARCEL: 32
 3RD ELECTION DISTRICT • HOWARD COUNTY, MD

CLSI
 Civil Engineering & Environmental Consultants
 www.clsi-civileng.com
 439 East Main Street Westminster, MD 21157-5539
 (410) 848-1790 FAX (410) 848-1791

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

[Signature] 4/8/25
 HEALTH OFFICER, HOWARD COUNTY HEALTH DEPT.

1. I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.
[Signature] 3/5/25
 JAVIER MORALES BOLAN, PROFESSIONAL LAND SURVEYOR
 NO. 2465 LICENSE EXPIRES AUGUST 09, 2025

DATE	REVISIONS	DRAWN BY:	MS
3/19/25	ADDRESS HEALTH DEPARTMENT COMMENTS DATED 3/17/25	DESIGNED BY:	MS
		REVIEWED BY:	
		DATE:	DEC., 2024
		SCALE:	1" = 50'
		JOB NO.:	2024277
		SHEET:	1 OF 1

THIS AREA DESIGNATES A PRIVATE SEWAGE AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL FOR LOTS CREATED PRIOR TO MARCH OF 1972. IT PROVIDES AT LEAST ENOUGH AREA TO ACCOMMODATE AN INITIAL AND TWO REPLACEMENT SEPTIC SYSTEMS AS REQUIRED BY THE HOWARD COUNTY HEALTH DEPARTMENT. 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 AREA. RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.

PLAN
 SCALE: 1" = 50'

