KATHERINE A. KLAUSMEIER
County Executive

HORACIO TABLADA, *Director*
Department of Environmental Protection and Sustainability

March 16, 2026

Stephanie Brown
3 Shawan Rd
Cockeysville, MD 21030

RE: 2707 Spring Hill Rd, District 3

Dear Ms. Brown,

At your request, this office reviewed the information on file for the above-referenced property to determine if the prior approval to install an onsite sewage disposal system (OSDS) can be revalidated.

Our records indicate this property was initially approved in 2006, with the most recent Master Plan dated 9/19/2013. Please be advised, no calculations supporting this plan could be located on file, there is grading shown in the 25' non-disturbance area below the proposed repair mound, and a proposed well location is depicted directly downgradient from the repair mound.

Therefore, prior to re-validation of the percolation tests, a hard copy of a revised site plan drawn to scale no greater than 1"= 60', signed and sealed by a licensed engineer, surveyor or landscape architect, must be submitted to this office for review and include the following:

- Sand mound footprints for the initial and one repair system, along with preliminary calculations. The footprints must include the 25' non-disturbance area below the toe of each mound (for a stacked mound layout, measured from the toe of the upper mound to the top of the stone bed of the lower mound). Be advised 24" of sand must be used, and at-grade mounds are not acceptable for this site. Compete, final plans and specifications for the initial mound must be submitted and approved prior to issuance of any building permits.

- Proposed tank and pump chamber location.

- Proposed house location.

- Proposed driveway/access to house.

- Proposed well location.

Be advised of the following:

- The sewage disposal system will be a sand mound system. Said system shall be designed and plans drawn up by the owner's engineer/designer at owner's expense. Said plans and specifications shall be submitted to this office for review and approval. Plans shall be approved prior to the issuance of building permits.

- The owner and designer of the final sand mound plans must sign acknowledgement of responsibility forms.

- Prior to building permit approval for the lot, the entire septic reserve area (SRA) must be located by survey and fenced off by high visibility orange fencing and a pre-construction meeting must be scheduled with our office at least 48 hrs. before sand/at-grade mound construction begins.

- **NO GRADING, FILLING, CUTTING OR VEHICULAR TRAFFIC WILL BE PERMITTED IN THE SEPTIC RESERVE AREA. ANY VIOLATIONS OF THIS OR INCURSIONS INTO THE DESIGNATED SEPTIC RESERVE AREAS MAY CAUSE REVOCATION OF THE SOIL PERCOLATION TEST APPROVAL AND DENIAL OF ANY BUILDING PERMITS ON THE SUBJECT PROPERTY.**

- Please note that construction of sand mounds may be delayed until soil conditions are acceptable for installation, typically summer and early fall. Soil moisture must be low enough during construction to prevent compaction and smearing of the soils critical for the long-term functioning of the system. The installer or designer must contact Ground Water Management for approval of soil moisture conditions at least 24 hours prior to the start of construction.

Attached is a copy of the original soil evaluation data for the above-referenced lots. Also attached is a list of design consultants for your reference.

Please be advised that any future approval letters issued based on the revised plan for this property will only affirm that the plan meets the state and county regulatory requirements for wells and septic systems. It does not guarantee that a building permit will be issued by Baltimore County. If you have any questions regarding this matter, please contact this office at 410-887-2762.

Sincerely,

Miranda Clifford

Miranda Clifford, L.E.H.S.
Soil Evaluation Program
Ground Water Management-EPS

OSDS Design Consultants: New Construction

1. Name of Company: Barton and Loguidice, D.P.C.
   Contact: Amy M. Parrish, L.E.H.S., P.G.
   Phone Number: 410-795-4626, aparrish@bartonandloguidice.com
   Location: Eldersburg, Maryland 21784

2. Name of Company: Bay Area Environmental/Dwayne C. Jones Contracting, Inc.
   Contact: Dwayne C. Jones
   Phone Number: 410-836-9206
   Location: Jarrettsville, Maryland 21014

3. Name of Company: Charles P. Johnson & Associates, Inc
   Contact: Ewald F. Schwarzenegger, P. E.
   Phone Number: 301-208-9573 x304 or 301-926-4551 (fax) or 518-965-1203 (cell)
   Location: Quakertown, PA 18951
   Website: ewald@cpja.com

4. Name of Company: CLSI - Engineers, Surveyors, Landscape Architects & Environmental Consultants
   Contact: Linda Alexander
   Phone Number: 410-848-1790
   Location: Westminster, Maryland 21157
   Website: http://www.clsi-civileng.com/

5. Name of Company: Frederick Ward Associates, Inc.
   Contact: William Baker, P.E., wbaker@fredward.com
   Bruce T. Beasman, P.E., bbeasman@fredward.com
   Phone Number: 410-838-7900
   Location: Belair, Maryland 21014

6. Contact: J. Robert Powell, L.E.H.S./R.S.
   Phone Number: 443-900-3169
   Location: Catonsville, Maryland 21228

7. Name of Company: Penn's Trail Environmental, LLC
   Contact: Adam Browning, Certified PA SEO
   Phone Number: 301-829-5022; abrowning@pennstrail.com
   Location: Mount Airy, Maryland 21771
   Website: www.pennstrail.com/

REV. 12/4/25

EPS makes no claim as to the completeness of this list or the quality of work performed. If you are a qualified contractor or installer who wishes to be included on this list, please submit the request in writing along with your credentials and experience in designing alternative onsite sewage disposal systems to Baltimore County Department of Environmental Protection and Sustainability, attn: Groundwater Management, 111 W. Chesapeake Avenue., Rm 319, Towson, Maryland, 21204.

Baltimore County Department of Environmental Protection and Sustainability

Soil Percolation Test Results

Subdivision Name:
Address: 2707 SPRING HILL RD, OWINGS MILLS, MD 21117
Location Description: END OF SPRING HILL RD

Facility Type: Private
District: 3
Tax ID: 2500003370

Lot #	Perc Hole	Test Date	Inspector	Depth (ft.)	Infiltration Rate (min.)	Soil Profile	Comments
	A	11/10/2005	James Powell	7ft.	>30	CLAY 0-6' CVM (SiCL) 6'-11' LOAM (GRANULAR, LOOSE) 11'-13' WATER AT 13'	
	B	11/10/2005	James Powell			CLAY 0-9' CVM (LOAMY SAND, GRANULAR, LOOSE) 9'-13' WATER AT 13'	
	C	11/10/2005	James Powell			CLAY 0-7' CVM (LOAMY SAND, GRANULAR, LOOSE) 7'-10' WATER AT 10'	
	CC	01/12/2006	James Powell	1.17ft. (14")	16	SEE DETAILED SOIL DESCRIPTION	RING TEST
	D	12/22/2005	James Powell	2.42ft. (29")	39	SEE DETAILED SOIL DESCRIPTION	OPEN HOLE
	E	12/22/2005	James Powell	1.83ft. (22")	>120	SEE DETAILED SOIL DESCRIPTION	RING TEST
	F	12/22/2005	James Powell			SEE DETAILED SOIL DESCRIPTION	
	G	12/22/2005	James Powell	2.25ft. (27")	11	SEE DETAILED SOIL DESCRIPTION	RING TEST
	H	01/12/2006	James Powell	1.75ft. (21")	>120	SEE DETAILED SOIL DESCRIPTION	RING TEST
	I	01/12/2006	James Powell	1.67ft. (20")	12	SEE DETAILED SOIL DESCRIPTION	RING TEST
	J	01/12/2006	James Powell	1.67ft. (20")	72	SEE DETAILED SOIL DESCRIPTION	RING TEST
	K	01/12/2006	James Powell			SEE DETAILED SOIL DESCRIPTION	

Overall Comments: EXISTING VACANT LOT OF RECORD. CVM = COCKEYSVILLE MARBLE

Baltimore County Department of Environmental Protection and Sustainability

Soil Percolation Test Results

Subdivision Name:
Address: 2707 SPRING HILL RD, OWINGS MILLS, MD 21117
Location Description: END OF SPRING HILL RD

Facility Type: Private
District: 3
Tax ID: 2500003370

Overall Comments: THE INITIAL SYSTEM WILL BE A SAND MOUND SYSTEM. SAID SYSTEM SHALL BE DESIGNED AND PLANS DRAWN UP BY THE OWNER'S ENGINEER AT OWNER'S EXPENSE. SAID PLANS AND SPECIFICATIONS SHALL BE SUBMITTED TO DEPS FOR REVIEW AND APPROVAL. PLANS SHALL BE APPROVED PRIOR TO THE ISSUANCE OF BUILDING PERMITS. THE PROPERTY OWNER AND DESIGNER OF THE FINAL SAND MOUND PLANS MUST SIGN ACKNOWLEDGEMENT OF RESPONSIBILITY FORMS.

PRIOR TO BUILDING PERMIT APPROVAL FOR THE LOT, THE ENTIRE SEPTIC RESERVE AREA (SRA) MUST BE LOCATED BY SURVEY AND FENCED OFF BY HIGH VISIBILITY ORANGE FENCING AND A PRE-CONSTRUCTION MEETING MUST BE SCHEDULED WITH OUR OFFICE AT LEAST 48 HRS BEFORE CONSTRUCTION BEGINS.

NO GRADING, FILLING, CUTTING OR VEHICULAR TRAFFIC WILL BE PERMITTED IN THE SRA. ANY VIOLATIONS OF THIS OR INCURSIONS INTO THE DESIGNATED SRA MAY CAUSE REVOCATION OF THE SOIL PERCOLATION TEST APPROVAL AND DENIAL OF ANY BUILDING PERMITS ON THE SUBJECT PROPERTY.

PLEASE NOTE THAT CONSTRUCTION OF SAND MOUNDS MAY BE DELAYED UNTIL SOIL CONDITIONS ARE ACCEPTABLE FOR INSTALLATION, TYPICALLY SUMMER AND EARLY FALL. SOIL MOISTURE MUST BE LOW ENOUGH DURING CONSTRUCTION TO PREVENT COMPACTION AND SMEARING OF THE SOILS CRITICAL FOR THE LONG-TERM FUNCTIONING OF THE SYSTEM. THE INSTALLER OR DESIGNER MUST CONTACT GROUND WATER MANAGEMENT FOR APPROVAL OF SOIL MOISTURE CONDITIONS AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION.

THE REPAIR SYSTEM WILL BE SAND MOUND SYSTEM.

Total Number of Perc Holes: 12

BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND RESOURCE MANAGEMENT

SOIL DESCRIPTION SHEET

SITE/LOCATION: 2707 Spring Hill Road, Fedderman Property		DATE: January 12, 2006	NO: CC
SOIL MAP UNIT: BmB2 - Baltimore	GEOLOGIC MATERIAL: Cockeysville Marble	DESCRIBED BY: Rob Powell	

Horizon	Depth In.	Color		Texture	Structure		% Rock Fragments	Notes (Moisture, Density, Biopores, Seepage)
		Matrix	Mottles		Grade	Type		
Ap	0-11"	10YR 3/3		SiL	Mod. - Cr.		10	Many roots
B2t	11"-21"	7.5YR 4/6		v. gr. CL	Mod - SBk		20-25	Roots common
C1	21"-33"	7.5YR 4/6 10YR 4/6		v. gr. co. SL	Granular - Sl. Friable		25-30	
C2	33"-49"	7.5YR 5/8 10YR 5/8	10YR 6/4	gr. L	Massive - firm		15	Mottles - many, medium, distinct // Many Mn stains

INFILTRATION TEST DATA - Depth of Test: Infiltrometer test - 14" to bottom of hole

10" 2:22 9 1/4" 3:02

9 1/4" 2:34

8 1/2" 2:46

10 1/16" 2:49

Infiltration rate (min./in.) 16

WATER TABLE:

LIMITING ZONE:

C2 horizon - 33"-49"

LANDSCAPE POSITION:

Summit ☐ Depression ☐

Shoulder ☐ Sideslope ☒ Upland ☐ Shape ☐

Terrace ☐ Footslope ☐ Floodplain ☐

J:/ Soil Pro. Des., Spring Hill Rd., 2707, Test CC

BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND RESOURCE MANAGEMENT

SOIL DESCRIPTION SHEET

SITE/LOCATION: 2707 Spring Hill Road, Fedderman Property		DATE: December 22, 2005	NO: D
SOIL MAP UNIT: BmB2 - Baltimore	GEOLOGIC MATERIAL: Cockeysville Marble	DESCRIBED BY: Rob Powell	

Horizon	Depth In.	Color		Texture	Structure		% Rock Fragments	Notes (Moisture, Density, Biopores, Seepage)
		Matrix	Mottles		Grade	Type		
Ap	0-9"	10YR 3/4		heavy SiL	Str. -	SBk	10-15	Many roots
B1	9"-11"	10YR 4/4		SiCL	Mod. -	SBk	10-15	Many roots // Sticky
B2t	11"-17"	7.5YR 4/6		gr. SiCL	Mod. -	SBk	15-20	Roots common // Very sticky
B/C	17"-24"	10YR 4/4		v. cob. co. CL	Mod./Weak -	SBk	15-20	Sticky
C1	24"-36"	7.5YR 4/4 5/6	10YR 5/2	gr. co. SC	Weak -	SBk	15	Slightly cemented // Many Mn nodules // Mottles - common, prominent, medium
IIC2	36"-55"+	7.5YR 4/4 5/6	10YR 5/2	Ex. gr. co. LS/CL intermixed	Massive -	Firm	25	Cemented, Dense // Mottles - common, prominent, medium

INFILTRATION TEST DATA - Depth of Test:

19 15/16" 10:54 19 11/16" 11:35

19 7/16' 11:03 19 1/8" 11:57

18 15/16" 11:20

20 3/16" 11:21

Infiltration rate (min./in.) 39"

Open hole - 29" to bottom of hole

Infitrometer ring test was attempted – bottom of hole at 25". Too much stone in horizon, ring couldn't be set properly and consequently ring leaked on outside. An open hole test was then conducted that was entirely in the limiting profile to be tested.

WATER TABLE:

LIMITING ZONE:

!!C2 horizon - 36"-55"+

LANDSCAPE POSITION:

Summit ☐ Depression ☐

Shoulder ☐ Sideslope ☒ Upland ☒ Shape ☐

Terrace ☐ Footslope ☐ Floodplain ☐

J:/ Soil Pro. Des., Spring Hill Rd., 2707, Test D

BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND RESOURCE MANAGEMENT

SOIL DESCRIPTION SHEET

SITE/LOCATION: 2707 Spring Hill Road, Fedderman Property		DATE: December 22, 2005	NO: E
SOIL MAP UNIT: BmB2 - Baltimore	GEOLOGIC MATERIAL: Cockeysville Marble	DESCRIBED BY: Rob Powell	

Horizon	Depth In.	Color		Texture	Structure		% Rock Fragments	Notes (Moisture, Density, Biopores, Seepage)
		Matrix	Mottles		Grade	Type		
Ap	0-7"	10YR 3/4		SiL	Mod./Weak - SBk			Many roots
B2	7"-18"	10YR 4/6		SiL/heavy SiL	Mod./Str. - Blky.		5-10	Roots common
B3	18"-33"	7.5YR 4/6		SiCL	Mod. - SBk		10-15	Sticky
C	33"-50"+	7.5YR 4/6 5/8	10YR 5/2	ex. gr. co. CL	Weak - SBk		25	Sticky // Many, coarse, prominent mottles from 45"-50"+

INFILTRATION TEST DATA - Depth of Test: Infiltrometer test - bottom of hole - 22"

10 1/16" 11:54

10" 12:02

9 7/8" 12:43

Infiltration rate (min./in.) 328

WATER TABLE:

LIMITING ZONE:

C horizon - 33"-50"+

LANDSCAPE POSITION:

Summit ☐ Depression ☐

Shoulder ☐ Sideslope ☒ Upland ☒ Shape ☐

Terrace ☐ Footslope ☐ Floodplain ☐

J:/ Soil Pro. Des., Spring Hill Rd., 2707, Test E

BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND RESOURCE MANAGEMENT

SOIL DESCRIPTION SHEET

SITE/LOCATION: 2707 Spring Hill Road, Fedderman Property		DATE: December 22, 2005	NO: F
SOIL MAP UNIT: BmB2 - Baltimore	GEOLOGIC MATERIAL: Cockeysville Marble	DESCRIBED BY: Rob Powell	

Horizon	Depth In.	Color		Texture	Structure		% Rock Fragments	Notes (Moisture, Density, Biopores, Seepage)
		Matrix	Mottles		Grade	Type		
Ap	0-9"	10YR 3/4		SiL	Mod.	Crumb		Many roots
B1	9"-14"	10YR 5/4		co. L	Mod./Weak	SBk	5-10	Slightly brittle and dense
B2x	14"-24"	10YR 5/6	10YR 6/1 5YR 5/8	gr. L	Weak	Priz./Blky	15-20	10YR 6/1 - mottles - few, medium, prominent 5YR 5/8 - mottles - few, medium, prominent
C	24"-45"	10YR 5/6	10YR 6/3	gr. co. heavy L/CL	Massive	Sl . Firm	15-20	Mottles - many, coarse, distinct

INFILTRATION TEST DATA - Depth of Test:

Infiltration rate (min./in.)

WATER TABLE:

LIMITING ZONE:

B2x horizon - 14"-24"

LANDSCAPE POSITION:

Summit ☐ Depression ☐

Shoulder ☐ Sideslope ☒ Upland ☒ Shape ☐

Terrace ☐ Footslope ☐ Floodplain ☐

J:/ Soil Pro. Des., Spring Hill Rd., 2707, Test F

BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND RESOURCE MANAGEMENT

SOIL DESCRIPTION SHEET

SITE/LOCATION: 2707 Spring Hill Road, Fedderman Property		DATE: December 22, 2005	NO: G
SOIL MAP UNIT: BmB2 - Baltimore	GEOLOGIC MATERIAL: Cockeysville Marble	DESCRIBED BY: Rob Powell	

Horizon	Depth In.	Color		Texture	Structure		% Rock Fragments	Notes (Moisture, Density, Biopores, Seepage)
		Matrix	Mottles		Grade	Type		
Ap	0-9"	10YR 3/6		SiL	Mod.	SBk		Many roots
B2	9"-14"	7.5YR 4/6		heavy SiL/SiCL	Mod.	SBk	5-10	Many roots
B3	14"-23"	7.5YR 4/4		gr. co. CL	Mod.	SBk	15-20	Roots common
C1	23"-28"	7.5YR 4/4		ex. gr. co. CL	Mod./Weak	SBk	20-25	Sticky // Many Mn nodules
C2	28"-48"	7.5YR 4/6 5/6	10YR 6/2	ex. gr. co. CL	Weak - SBk/Massive- Sl. Firm		20-25	Very Sticky // Many Mn nodules // Mottles - common, medium, prominent
C3	48"-60"	7.5YR 5/8		ex. gr. co. CL	Weak - SBk/Massive - Sl. Firm			Many Mn nodules

INFILTRATION TEST DATA - Depth of Test: Infiltrometer Test – bottom of hole – 27"

Tested 1/12/06

10 1/8" 10:01

8 1/8" 10:10

9 9/16' 10:12

4 1/8" 11:00 dry

Infiltration rate (min./in.) 11

WATER TABLE:

LIMITING ZONE:

C2 horizon - 28"-48"

LANDSCAPE POSITION:

Summit ☐ Depression ☐

Shoulder ☒ Sideslope ☐ Upland ☐ Shape ☐

Terrace ☐ Footslope ☐ Floodplain ☐

J:/ Soil Pro. Des., Spring Hill Road, 2707, Test G

BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND RESOURCE MANAGEMENT

SOIL DESCRIPTION SHEET

SITE/LOCATION: 2707 Spring Hill Road - Fedderman Property		DATE: January 12, 2006	NO: H
SOIL MAP UNIT: BmB2 - Baltimore	GEOLOGIC MATERIAL: Cockeysville Marble	DESCRIBED BY: Rob Powell	

Horizon	Depth In.	Color		Texture	Structure		% Rock Fragments	Notes (Moisture, Density, Biopores, Seepage)
		Matrix	Mottles		Grade	Type		
Ap	0-9"	10YR 3/3		SiL	Str. - Crumb		10	Many roots
B1	9"-18"	7.5YR 4/6		SiL	Mod./Str. - SBk		5-10	Many roots
B2t	18"-29"	5YR 4/4		gr. SiCL	Weak - SBk		15-20	Many roots
IIC	29"-60"	7.5YR 4/6		ex. gr. co. SCL/heavy co. SL	Granular - Sl. Friable		25-30	

INFILTRATION TEST DATA - Depth of Test: Infiltrometer test - bottom of hole - 21"

20" 10:53

19 7/8" 11:04

19 23/32" 11:19

19 9/16" 11:41

Infiltration rate (min./in.) 141

WATER TABLE:

LIMITING ZONE:

B2t horizon - 18"-29"

LANDSCAPE POSITION:

Summit ☐ Depression ☐

Shoulder ☐ Sideslope ☒ Upland ☐ Shape ☐

Terrace ☐ Footslope ☐ Floodplain ☐

J:/ Soil Pro. Des., Spring Hill Rd., 2707, Test H

BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND RESOURCE MANAGEMENT

SOIL DESCRIPTION SHEET

SITE/LOCATION: 2707 Spring Hill Road, Fedderman Property		DATE: January 12, 2006	NO: I
SOIL MAP UNIT: BmB2 - Baltimore	GEOLOGIC MATERIAL: Cockeysville Marble	DESCRIBED BY: Rob Powell	

Horizon	Depth In.	Color		Texture	Structure		% Rock Fragments	Notes (Moisture, Density, Biopores, Seepage)
		Matrix	Mottles		Grade	Type		
Ap	0-9"	10YR 3/3		gr. SiL	Str. - Crumb		15	Many roots
B1	9"-19"	10YR 3/3 7.5YR 4/6		SiL	Mod./Str. - SBk		10-15	Many roots
B2t	19"-29"	7.5YR 4/6		gr. SiCL	Mod./Weak - SBk		15	Many roots
IIC1	29"-39"	7.5YR 4/6		ex. gr. SCL/co. heavy SL	Granular - sl. friable		25-30	
IIC2	39"-59"	7.5YR 5/8		gr. CL	Massive - Sl. firm		15	

INFILTRATION TEST DATA - Depth of Test: Infiltrometer test - bottom of hole - 20"

10"	11:32	10"	12:46
8 3/16"	11:51	8 3/4"	12:58
9 1/16"	11:54		
5"	12:43		

Infiltration rate (min./in.) 12

WATER TABLE:

LIMITING ZONE:

IIC2 horizon - 39"-59"

LANDSCAPE POSITION:

Summit ☐ Depression ☐

Shoulder ☐ Sideslope ☒ Upland ☐ Shape ☐

Terrace ☐ Footslope ☐ Floodplain ☐

J:/ Soil Pro. Des., Spring Hill Rd., 2707, Test I

BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND RESOURCE MANAGEMENT

SOIL DESCRIPTION SHEET

SITE/LOCATION: 2707 Spring Hill Road - Fedderman Property		DATE: January 12, 2006	NO: J
SOIL MAP UNIT: BmB2 - Baltimore	GEOLOGIC MATERIAL: Cockeysville Marble	DESCRIBED BY: Rob Powell	

Horizon	Depth In.	Color		Texture	Structure		% Rock Fragments	Notes (Moisture, Density, Biopores, Seepage)
		Matrix	Mottles		Grade	Type		
Ap	0-9"	10YR 3/3		SiL	Str. -	Crumb	5-10	Many roots
B2	9"-14"	7.5YR 4/6 5/8		gr. CL	Mod. -	SBk	15-20	Many roots // Sticky
B2t	14"-20"	7.5YR 4/6		gr. co. CL	Mod./Weak -	SBk	15-20	Some roots // Sticky
IIC1	20"-28"	7.5YR 4/6	10YR 5/4	ex. gr. co. SCL	Weak -	SBk	25-30	Mottles - many, coarse, distinct
IIC2	28"-46"	10YR 5/4	10YR 5/8 7.5YR 6/1	SiCL	Massive -	V. firm	5	10YR 5/8 - mottles - few, medium, distinct // 7.5YR 6/1 - mottles - many, coarse, prominent

INFILTRATION TEST DATA - Depth of Test: Infiltrometer test - bottom of hole - 20"

20" 12:42 18 11/16" 2:10

19 9/16' 1:10

19 3/16" 1:36

18 15/16" 1:52

Infiltration rate (min./in.) 72

WATER TABLE:

LIMITING ZONE:

IIC2 Horizon - 28"-46"

LANDSCAPE POSITION:

Summit ☐ Depression ☐

Shoulder ☒ Sideslope ☐ Upland ☐ Shape ☐

Terrace ☐ Footslope ☐ Floodplain ☐

J:/ Soil Pro. Des., Spring Hill Rd., 2707, Test J

BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND RESOURCE MANAGEMENT

SOIL DESCRIPTION SHEET

SITE/LOCATION: 2707 Spring Hill Road - Fedderman Property		DATE: January 12, 2006	NO: K
SOIL MAP UNIT: BmB2 - Baltimore	GEOLOGIC MATERIAL: Cockeysville Marble	DESCRIBED BY: Rob Powell	

Horizon	Depth In.	Color		Texture	Structure		% Rock Fragments	Notes (Moisture, Density, Biopores, Seepage)
		Matrix	Mottles		Grade	Type		
Ap	0-9"	10YR 3/3		SiL	Str. -	Crumb	5-10	Many roots
B2t	9"-18"	7.5YR 4/6		gr. SiCL	Mod. -	SBk	15-20	Many roots
C1	18"-28"	10YR 4/6		v. gr. CL	Weak -	SBk	25-30	Some roots // Sticky
C2	28"-37"	10YR 4/6	10YR 5/3	gr. SiCL	Massive -	firm	15	Mottles - common, medium, faint
IIC1	37"-60"	7.5YR 4/6		ex. gr. co. SCL/heavy co. SL	granular -	sl. friable	25-30	

INFILTRATION TEST DATA - Depth of Test:

Infiltration rate (min./in.)

WATER TABLE:

LIMITING ZONE:

C2 horizon - 28"-37"

LANDSCAPE POSITION:

Summit ☐ Depression ☐

Shoulder ☐ Sideslope ☒ Upland ☐ Shape ☐

Terrace ☐ Footslope ☐ Floodplain ☐

J:/ Soil Pro. Des., Spring Hill Rd., 2707, Test K

Baltimore County
Department of Environmental Protection and Sustainability
Ground Water Management Section
111 W. Chesapeake Ave, Room 319
Towson, MD 21204
410-887-2762; groundwater@baltimorecountymd.gov

Onsite Sewage Disposal System Design Package Requirements

(Effective July 1, 2017)

1. **In General**
   - The information in the OSDS design packages must be typed (preferable 11 font or larger) and properly referenced (i.e., pages numbers, figures, plans, etc.)
   - Plans, and figures must be original prints from AutoCAD or similar computer-aided drafting software. Hand drawn figures and notes will generally not be accepted as they do not reproduce well and are often difficult to read.
   - Manufacturer information must be original prints (not copies) that are clear and easy to read.
   - Page margins must be 0.5 inches or greater on all submitted materials. Notes and technical information related to the design may not be within the page margin.

Onsite sewage disposal system (OSDS) design packages must include the following:

2. **Project Overview** - Summary of the design assumptions including:
   - Project location (address, subdivision, or facility name as applicable);
   - Property owner name, address, phone number and email address;
   - The type of facility (i.e., residential or commercial). If commercial, provide a brief description of the type of facility to be served;
   - Design Flow (i.e., peak daily design flow based on the number of bedrooms or the approved Water Usage Letter);
   - The soil loading rate along with justification (e.g., perc test data, Tyler Chart, etc.);
   - Strength of wastewater influent (i.e., domestic strength or anticipated BOD, TSS and Nitrogen concentrations);
   - Basic description of the type of system (including pretreatment) that is being proposed including whether the system will be categorized as a conventional, alternative or innovative technology in accordance with Maryland Department of the Environment (MDE) policy;
   - Description of any variances needed to gain approval of the proposed OSDS;
   - Name, Company name, address, phone number and email address of designer.

3. **Site Plan** – Scaled plan (1":20', 1":30', 1":40' or 1":50") prepared by a licensed surveyor, engineer or landscape architect[1] to include:
    - Title block with the title " Onsite Sewage Disposal System Design Plan," property address, and election district;
    - Property boundaries (for large properties, it may be necessary to show the entire property at one scale with an enlarged area for the proposed OSDS);
    - Topography with a contour interval of 2 ft. across the property and 1 ft. field run contours over the sewage disposal area. Areas with slopes in excess of 25% should be identified on the plan and designated as "steep slopes." Areas to be graded must be clearly shown with existing and proposed topography.
    - Streams, springs, floodplains and water bodies onsite and within 100 ft. of the subject property;
    - Existing and proposed structures onsite and within 100 ft. of the subject property (including stormwater management facilities);
    - Existing and proposed wells onsite and within 100 ft. of the subject property (including private and public water line locations);
    - All completed percolation test holes with the corresponding hole ID and "pass" or "fail" symbol;
    - The proposed sewage disposal area and the proposed location of all OSDS components (system components should be neatly identified on the plan). If the plan is for new construction or and addition, repair areas must be delineated and verified to be of reasonable size to support the proposed use.

4. **Cross Sections** – cross-sections must be provided for the following:
    - Proposed septic tanks, pump tanks and treatment tanks as applicable. Tank dimensions must be shown. For pumped systems, pump elevation and float tree settings must be shown along with piping detail from the pump and exiting the tank;
    - Scaled hydraulic profile noting key elevations (ground surface and system components) from the building to be served to the soil absorption system.
    - Construction detail for at-grade mounds, sand mounds and low pressure distribution trenches. For drip dispersal system, the depth of drip tubing should be specified in the **Project Overview.**

5. **Calculations** – Calculations and related assumptions must be shown for the following (as applicable):

[1] For OSDS repairs, the Department may waive the requirement for site plans to be prepared by a licensed surveyor, engineer or landscape architect, provided that a suitably scaled plan is provided which otherwise meets the requirements set forth and is of draftsman quality. These requirements will not be waived for new construction or replacement houses.

- Sand mound dimensions as per MDE Sand Mound Manual.
- At-grade mound dimensions as per MDE At-Grade Mound Manual.
- Trench length, depth (or bottom elevation) and width for low pressure distribution systems.
- Daily dosing per emitter for drip dispersal systems.
- Design flow rates
- Total dynamic head calculations (including friction loss, static head and operating head).
- System dosing calculations.
- System performance curve calculations.
- Pump chamber volume calculations for float tree settings.

6. **Figures and Other Specifications** (as applicable)
   - Pump specifications
   - Pump performance curve (with system performance curve)
   - Observation Ports and/or lateral turn-up detail, as applicable
   - Lateral layout and orifice spacing
   - Control panel specifications

7. **Required Notes**
   - Any change in the locations, or specifications on the approved site plan or within OSDS design package must be approved by the Baltimore County Department of Environmental Protection and Sustainability (EPS) prior to installation[2]. A revised site plan may be required.
   - The maximum earth cover over the septic tank, treatment tank and/or pump chamber is 2 feet. Greater earth cover must be pre-approved by EPS and may require a traffic bearing tank.
   - Electrical work for the installation must be inspected approved under a separate electrical permit.
   - A pre-construction meeting with the designer, contractor (and/or property owner) and a representative of EPS must take place at least 24 hours prior to installation.

   For sand mounds, at-grades and drip systems, include the sequence of construction.

[2] Minor adjustments to the location and system design may be made in the field during installation as deemed necessary by the system designer provided that these modifications are documented and subsequently provided to the Department.

Baltimore County
Department of Environmental Protection and Sustainability
Ground Water Management Section
111 W. Chesapeake Ave, Room 319
Towson, MD 21204
410-887-2762; groundwater@baltimorecountymd.gov

ON-SITE SEWAGE DISPOSAL SYSTEM ACKNOWLEDGEMENT OF RESPONSIBILITY

PROPERTY ADDRESS 2707 SPRING HILL RD

NOTICE TO PROPERTY OWNERS:

Prior to the installation of a pressurized onsite sewage disposal system (OSDS) in Baltimore County, a pre-construction meeting must be held at the subject property to include: a representative from the Ground Water Management Section (GWM) of the Department of Environmental Protection and Sustainability (EPS), the property owner, the design consultant and the OSDS installer. A representative of Maryland Department of Environment (MDE) may also be present. The purpose of the meeting is to assess if site conditions (such as soil moisture levels) are suitable for installation, to verify equipment and materials to be used, to review the system layout, and discuss the sequence of construction.

The property owner is responsible for coordinating with the installer to ensure that a pre-construction meeting is scheduled with Ground Water Management in advance of installation by calling 410-887-2762. Please be advised that failure to conduct a meeting prior to construction may results in issuance of a Stop Work Order by Baltimore County, revocation of any relevant permits, and a requirement to remove any equipment installed on the site.

The property owner is responsible for ensuring that the approved OSDS installation area and repair areas are protected from disturbance (i.e., no grading, filling, storage of material, heavy equipment traffic). It is highly recommended that the entire approved sewage disposal area be partitioned off with high visibility fencing. Failure to protect this area may compromise the approval of the OSDS and associated permits.

The property owner is also responsible to ensure that the OSDS installer obtains an electrical permit in addition to the plumbing permit associated with the approved system and that all necessary inspections are obtained from Baltimore County.

I hereby acknowledge, understand and accept that I am responsible for the requirements stated above with regard to the design and installation of the OSDS at the subject property.

_____

Signature of Property Owner *Date*

_____

Printed Name of Property Owner

Baltimore County
Department of Environmental Protection and Sustainability
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ON-SITE SEWAGE DISPOSAL SYSTEM
ACKNOWLEDGEMENT OF RESPONSIBILITY

PROPERTY ADDRESS 2707 SPRING HILL RD

REQUIREMENTS FOR OSDS DESIGN CONSULTANTS:

Prior to submission of final plans and specifications to Baltimore County Department of Environmental Protection and Sustainability (EPS) for the installation of onsite sewage disposal system (OSDS), the proposed OSDS must be staked in the field to ensure that the submitted design can be installed as designed. The field layout must be located by survey and elevations of the system reflected on the plans.

Prior to the installation of any approved pressurized OSDS, a pre-construction meeting must be held at the subject property to include: a representative from the Ground Water Management Section of EPS, the property owner, the design consultant and the OSDS installer. A representative of Maryland Department of Environment (MDE) may also be present. The purpose of the meeting is to assess if site conditions (such as soil moisture levels) are suitable for installation, to verify equipment and materials to be used, to review the system layout, and discuss the sequence of construction.

Significant changes to the layout, equipment, or specifications on the approved plan or within the approved OSDS design package must be approved by EPS prior to installation. Minor adjustments may be made in the field by the OSDS installer provided they are approved by the OSDS design consultant.

Upon completion of the OSDS, the design consultant must submit a letter to EPS certifying that the OSDS was installed as designed. Any changes or modifications must be noted in the certification letter and accompanied by as-built plans and/or revised design package information as deemed necessary by EPS.

I hereby acknowledge, understand and accept that I am responsible for the requirements stated above with regard to the design and installation of the OSDS at the subject property.

_____

Signature of Design Consultant *Date*

_____

Printed Name of Design Consultant