



# County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

March 8, 2022

Keven McClaugherty Carr Tr  
501 Stephen Cir SW  
Vienna, VA 22180

RE: Sewage Disposal System Certification Letter for 9565 Edmonston Drive, Great Falls, VA  
22066; Carrwood Estates, Lot 14; Tax Map: 4-3-005-14

Dear Keven McClaugherty Carr Tr,

This certification letter is issued in accordance with § 32.1-163, et seq. of the Code of Virginia and is issued in response to your application for a certification letter submitted pursuant to § 32.1-163.5 of the Code of Virginia. The Code of Virginia allows the Fairfax County Health Department to accept site and soil evaluations as well as designs from an Onsite Soil Evaluator (OSE) or a Professional Engineer (PE) working in consultation with an OSE (OSE/PE). An application received on January 31, 2022, from Nicholas George Gorshenin, AOSE, License #1940001486, certified that the footprint shown on the attached surveyed plat complies with the current laws, regulations and policies administered by the Virginia Department of Health (VDH).

A level two site evaluation was performed by this office on February 15, 2022 and concurs with the site plan and location of the profiles submitted as part of the application.

The design submitted by your engineer concludes that the footprint shown on the attached surveyed plat will treat and disperse .1836 gallons per square foot per day of Treatment Level 3 effluent at 6 inches below the ground surface in the active area, and will treat and disperse .1824 gallons per square foot per day of Treatment Level 3 effluent at 6 inches below the ground surface in the reserve area for a 6 bedroom house in accordance with the Code of Virginia Chapter 613 Regulations For Alternative Onsite Sewage Systems.

This letter certifies that the Fairfax County Health Department will issue a permit to construct the sewage disposal system as designed when such application can be approved in accordance with all local building codes and regulations provided there has been no substantial physical changes to the footprint area.

**Fairfax County Health Department**

*Division of Environmental Health*

10777 Main Street, Suite 100, Fairfax, VA 22030

Phone: 703-246-2201 TTY: 711 Fax: 703-653-9448

[www.fairfaxcounty.gov/health](http://www.fairfaxcounty.gov/health)





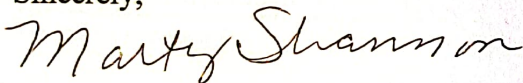
Keven McClaugherty Carr Tr  
March 8, 2022  
Page 2

This certification does not expire and shall convey with the title to the property until a construction permit is issued within the approved area. This certification letter and accompanying survey plat showing the footprint's location may be recorded in the Fairfax County land records by the clerk of the circuit court.

In accordance with § 32.1-164.1 of the Code of Virginia, owners can only apply for a sewage disposal construction permit when they are ready to begin construction. The property owner can convert this letter into a construction permit by making application for a building permit to Fairfax County, Department of Public Works and Environmental Services, along with submitting the proper site/grading plans and architectural drawings to the health department for review. No additional state fees shall be charged if this letter is converted to a construction permit within 18 months from the issue date of this letter. If more than 18 months elapse, then the Fairfax County Health Department shall impose any applicable state fees and local fees that may apply.

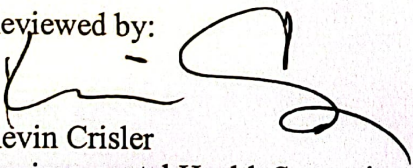
The footprint shown on the plat is specific and must not be disturbed or encroached upon. This letter is null and void if any substantial physical change in the site or soil conditions occurs where the footprint is shown. This certification letter is null and void if conditions are changed from those shown on your application or if conditions are changed from those certified by Nicholas George Gorshenin, License #1940001486, Alternative Onsite Soil Evaluator. The Fairfax County Health Department may revoke or modify any certification letter if it finds that the site and soil conditions do not substantially comply with the Regulations or if a future sewage disposal system would threaten public health or the environment.

Sincerely,



Marty Shannon, MAOSE, License #194001038  
Environmental Health Specialist

Reviewed by:



Kevin Crisler  
Environmental Health Supervisor

Enclosed: copy of designs

cc: Department of Tax Administration  
Soils Inc



### OSE/PE Report For:

- Construction Permit     Repair Permit     Voluntary Upgrade Permit     Certification Letter     Minor Modification     Subdivision Approval

**Property Location:**  
911 Address: 9565 Edmonston Drive      City, State, Zip: Great Falls, VA, 22066  
Lot: 14      Section: \_\_\_\_\_      Subdivision: Dranesville Dist. # 1  
GPIN or Tax Map #: 0043 05 0014      Health Dept. ID #: \_\_\_\_\_  
Latitude: \_\_\_\_\_      Longitude: \_\_\_\_\_

**Owner:**  
Name: Keven McClaugherty Carr Tr  
Address: 501 Stephen Cir SW      Vienna, VA, 22180

**Prepared by:**  
OSE Name: Nicholas G. Gorshenin      License # 1940001486  
Address: 8331 West Main Street, Marshall, VA 20115  
PE Name: \_\_\_\_\_      License # \_\_\_\_\_  
Address: \_\_\_\_\_

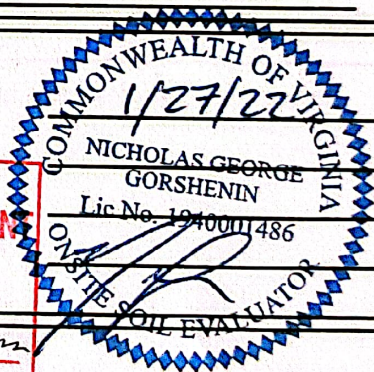
**OWNERS COPY**

Date of Report: 1/27/2022      Date of Revision #1: 3/7/2022  
OSE/PE Job # T3620      Date of Revision #2: \_\_\_\_\_

**Contents/Index of this report:**

<u>1. Cover Sheet</u>	<u>8 - 9. Site Sketches</u>
<u>2 - 4. Soil Summaries &amp; Profiles</u>	<u>10. Plat</u>
<u>5 - 6. Abbreviated Designs</u>	
<u>7. Percolation Waiver Form</u>	

**APPROVED**  
FAIRFAX COUNTY HEALTH DEPARTMENT  
3-8-2022 Marty Stamm  
Date      Health Official



**Certification Statement**

I hereby certify that the evaluations and/or designs contain herein were conducted in accordance with the applicable provisions of the Sewage Handling & Disposal Regulations (12VAC5-610), the Private Well Regulations (12VAC5-630), the Regulations for Alternative Onsite Systems (12VAC5-613) and all other applicable laws, regulations, and policies implemented by the Virginia Department of Health. I further certify that I currently possess any professional license required by the laws and regulations of the Commonwealth that have been duly issued by the applicable agency charged with licensure to perform the work contained herein. The potential for both conventional and alternative onsite sewage systems has been discussed with the owner/applicant.

The work attached to this cover page has been conducted under an exemption to the practice of engineering, specifically the exemption in Code of Virginia Section 54.1-402.A.11

I recommend that a:  Construction Permit     Subdivision Approval    be:  **Issued**  
 Certification Letter     Repair Permit     Voluntary Upgrade     **Denied**  
 Minor Modification

OSE/PE Signature: [Signature]      Date: 1/27/2022



**SOIL SUMMARY REPORT**

**GENERAL INFORMATION**

Date: 1/27/2022 Submitted to: Fairfax County Health Department  
 Owner: Keven McClaugherty Carr Tr Telephone Number: 917-541-5877  
 Address: 501 Stephen Cir SW Vienna, VA, 22180  
 Agent: Soils Inc. Address: 8331 W. Main Street Marshall, VA 20115  
 Property Location: 9565 Edmonston Drive Tax Map/GPIN: 0043 05 0014  
 Subdivision: Dranesville Dist. # 1 Blk/Sec: \_\_\_\_\_ Lot: 14

1. Position in Landscape Satisfactory:  Yes  No  
 Describe: sideslope
2. Slope: 5 %
3. Depth to Rock or Impervious Strata: Max. 98" Min. 26" None
4. Depth to seasonal water table (gray mottling or gray color): Not Observed  Yes  12
5. Free Water Present?  No  Yes Range: \_\_\_\_\_ inches
6. Soil Percolation rate estimated:  Yes  No Texture Group: I  II  III  IV   
 Estimated rate: 90 mpi
7. Permeability Test Performed?  No  Yes  
 If yes, note type of test performed and attached results. Test Type: NA

- Site Approved. Drainfield to be placed at 6 " depth at site designated on permit.  
 Site Disapproved. See reasons for rejection.

Reasons for rejection:

- 1 Position in Landscape subject to flooding or periodic saturation.  
 2 Insufficient depth of suitable soil over hard rock.  
 3 Insufficient depth of suitable soil to seasonal water table.  
 4 Rates of absorption too slow.  
 5 Insufficient area of suitable soil for drainfield and/or reserve area.  
 6 Proposed system too close to well.  
 7 Other (Specify Below. Add additional pages if necessary)

Additional Notes: Site # 1 Primary and Reserve DF - UV+TL-3 Alternative Drip



## Soil Profiles 9565 Edmonston Dr.

## Profile 1

Horizon	Depth (in)	Texture Class	Description
Ap	0-3	IIb	Dark Yellowish Brown (10yr 4/4) Loam, Granular Structure.
Bt1	3-12	III	Yellowish Brown (10yr 5/6) Silt Loam, Sub Angular Blocky Structure, Few Faint Clay Films.
Bt2	12-20	III	Yellowish Brown (10yr 5/6) Silt Loam, Common Distinct Mottles, Sub Angular Blocky Structure, Few Faint Clay Films, 5% Rock Fragments..
C	20-30	III	Yellowish Brown (10yr 5/6) Silt Loam, Common Distinct Mottles, Sub Angular Blocky Structure, 5% Rock Fragments,
Cr	30+		

## Profile 2

Horizon	Depth (in)	Texture Class	Description
Ap	0-6	IIb	Dark Yellowish Brown (10yr 4/4) Loam, Granular Structure
Bt1	6-16	III	Yellowish Brown (10yr 5/6) Silt Loam, Sub Angular Blocky Structure, Few Faint Clay Films, 5% Rock Fragments
Bt2	16-33	III	Yellowish Brown (10yr 5/6) Silt Loam, Common Distinct Mottles, Sub Angular Blocky Structure, Few Faint Clay Films, 5% Rock Fragments
C	33-48	III	Yellowish Brown (10yr 5/6) Silt Loam, Common Distinct Mottles, Sub Angular Blocky Structure, 5% Rock Fragments
Cr	48+		

## Profile 3

Horizon	Depth (in)	Texture Class	Description
Ap	0-3	IIb	Dark Yellowish Brown (10yr 3/4) Loam, Granular Structure.
E	3-6	III	Dark Yellowish Brown (10yr 4/4) Silt Loam, Granular Structure.
Bt1	6-14	III	Yellowish Brown (10yr 5/6) Silt Loam, Sub Angular Blocky Structure, Few Faint Clay Films.
Bt2	14-20	III	Yellowish Brown (10yr 5/6) Silt Loam, Common Distinct Mottles, Sub Angular Blocky Structure, Few Faint Clay Films, 5% Rock Fragments.



C	20-26	III	Yellowish Brown (10yr 5/6) Silt Loam, Common Distinct Mottles, Sub Angular Blocky Structure, 5% Rock Fragments.
Cr	26+		

**Profile 4**

Horizon	Depth (in)	Texture Class	Description
Ap	0-3	IIb	Dark Yellowish Brown (10yr 4/4) Loam, Granular Structure.
Bt1	3-12	III	Yellowish Brown (10yr 5/6) Silty Loam, Sub Angular Blocky Structure, Few Faint Clay Films.
Bt2	12-20	III	Yellowish Brown (10yr 5/6) Silty Loam, Common Distinct Mottles, Sub Angular Blocky Structure, Few Faint Clay Films, 5% Rock Fragments.
C	20-30	III	Yellowish Brown (10yr 5/6) Silty Loam, Common Distinct Mottles, Sub Angular Blocky Structure, 5% Rock Fragments.
Cr	30+		

**Profile 5**

Horizon	Depth (in)	Texture Class	Description
Ap	0-2	IIb	Dark Yellowish Brown (10yr 3/4) Loam, Granular Structure.
E	2-7	III	Dark Yellowish Brown (10yr 4/4) Silt Loam, Granular Structure.
Bt1	7-14	III	Yellowish Brown (10yr 5/6) Silt Loam, Sub Angular Blocky Structure, Few Faint Clay Films, 5% Rock Fragments..
Bt2	14-20	III	Yellowish Brown (10yr 5/6) Silty Loam, Common Distinct Mottles, Sub Angular Blocky Structure, 5% Rock Fragments.
C	20-31	III	Yellowish Brown (10yr 5/6) Silt Loam, Common Distinct Mottles, Sub Angular Blocky Structure, 15% Rock Fragments.
Cr	31+		



## Abbreviated Design - TL-3+UV to Drip Disposal 9565 Edmonston Drive - Site 1 - Primary Design

A.	a. Estimated percolation rate. (minutes per inch)	90		
	b. Recommended drip tubing installation. (inches)	6		
	c. Depth to impervious strata/ or water table/ or limit of evaluation. (inches)	26	12	98
	d. Minimum separation distance required. (inches)	6	6	6
	e. Separation distances in inches provided in design (Ac-Ab).	20	6	92
	f. Slope (percentage)	5		
	g. Is the slope greater than 10, 20 or 30%?	No		
	i. If Ag is Yes, does 24 inches or greater to rock/impervious strata exist below Ab?	No		
	j. If no to Ai, add 17% more area for 10-19% slope, 33% for 20-29% slope, or 50% for 30-39% slope. If yes to Ai, add 17% more area for 20-29% slope, 33% for 30-39% slope, or 50% for 40-50% slope.	0		
B.	a. Design Type?	TL-3 + UV		
	b. Gallons per day per square foot (GMP 147)	0.1836		
C.	a. Number of bedrooms.	6		
	b. Gallons per day in design	900		
D.	a. Length of run. (feet) *Avg	114		
	b. Length of available area. (feet)	*		
E.	Width of drip tubing. (inch)	1		
F.	Number of runs.	22		
G.	Center-to-center spacing. (feet)	2		
H.	a. Width required $(G(F-1)+1)$ (feet)	43		
	b. Width of available area. (feet)	43		
I.	a. Total square footage required	4902		
	b. Total square footage with slope increase $Ia \times Aj$	4902		
	c. Total square footage in design $(Da \times Ha)$	4902		
J.	a. Linear feet of drip tubing required	2451		
	b. Linear feet of drip tubing provided	2451		
K.	a. Is a reserve area required? Yes	x	No	
	b. Percent required	100%		
	c. Percent available	100%		
	Notes: see attached abbreviated design for reserve			



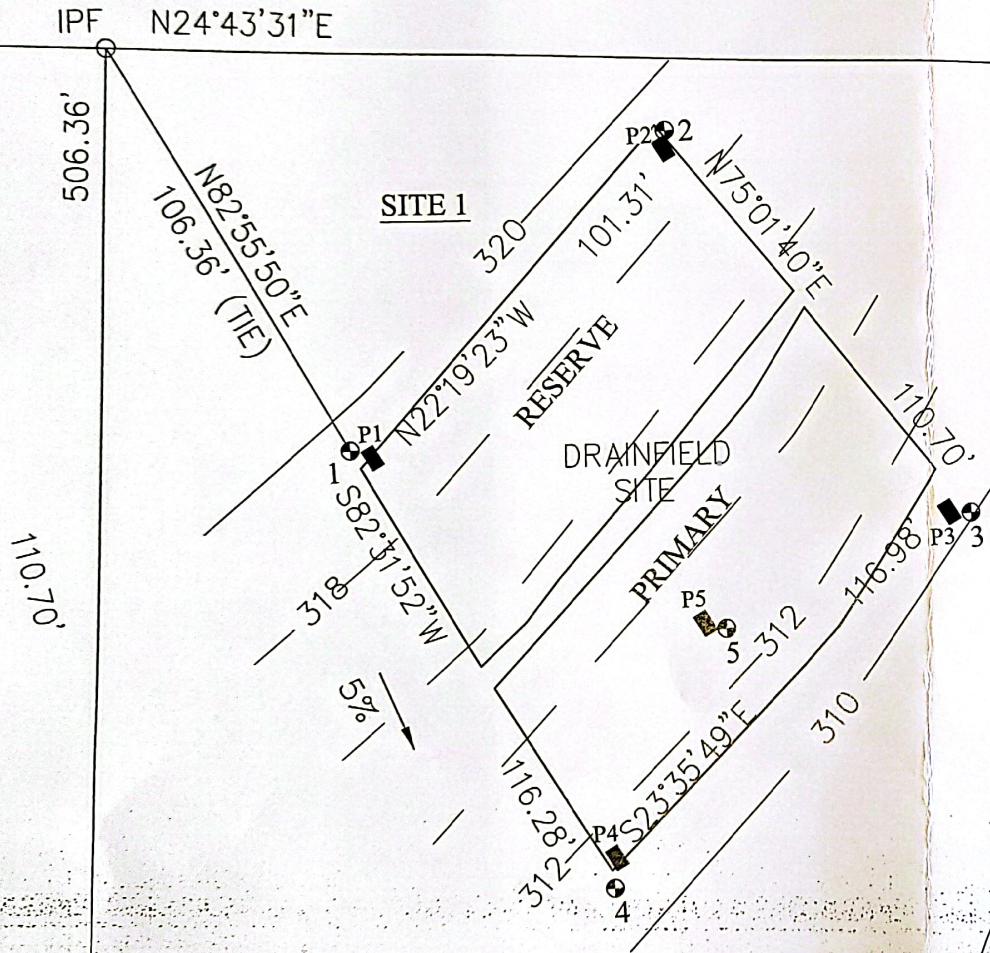
**Abbreviated Design - TL-3+UV to Drip Disposal  
9565 Edmonston Drive - Site 1 - Reserve Design**

A.	a. Estimated percolation rate. (minutes per inch)	90		
	b. Recommended drip tubing installation. (inches)	6		
	c. Depth to impervious strata/ or water table/ or limit of evaluation. (inches)	26	12	98
	d. Minimum separation distance required. (inches)	6	6	6
	e. Separation distances in inches provided in design (Ac-Ab).	20	6	92
	f. Slope (percentage)	5		
	g. Is the slope greater than 10, 20 or 30%?	No		
	i. If Ag is Yes, does 24 inches or greater to rock/impervious strata exist below Ab?	No		
	j. If no to Ai, add 17% more area for 10-19% slope, 33% for 20-29% slope, or 50% for 30-39% slope. If yes to Ai, add 17% more area for 20-29% slope, 33% for 30-39% slope, or 50% for 40-50% slope.	0		
B.	a. Design Type?	TL-3 + UV		
	b. Gallons per day per square foot (GMP 147)	0.1824		
C.	a. Number of bedrooms.	6		
	b. Gallons per day in design	900		
D.	a. Length of run. (feet) *Avg	105		
	b. Length of available area. (feet)	*		
E.	Width of drip tubing. (inch)	1		
F.	Number of runs.	24		
G.	Center-to-center spacing. (feet)	2		
H.	a. Width required $(G(F-1)+1)$ (feet)	47		
	b. Width of available area. (feet)	47		
I.	a. Total square footage required	4934		
	b. Total square footage with slope increase $1a \times A_j$	4934		
	c. Total square footage in design $(D_a \times H_a)$	4935		
J.	a. Linear feet of drip tubing required	2467		
	b. Linear feet of drip tubing provided	2467.5		
K.	a. Is a reserve area required? Yes	x	No	
	b. Percent required	100%		
	c. Percent available	100%		
	Notes:			



HERRICK PROPERTY DIVISION  
LOT 8

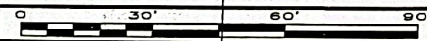
HERRICK PR



**PRIMARY DF (SITE 1):**  
 6 BEDROOM/ 900 GPD  
 TL-3 TREATMENT W/UV DISINFECTION  
 ESTIMATED 20 RATE @ 6"  
 ACTIVE LOADING RATE = 0.1836 GPD/FT2  
 114' (AVG.) X 43', ON CONTOUR  
 DRIP

**RESERVE DF (SITE 1):**  
 6 BEDROOM/ 900 GPD  
 TL-3 TREATMENT W/UV DISINFECTION  
 ESTIMATED 20 RATE @ 6"  
 ACTIVE LOADING RATE = 0.1824 GPD/FT2  
 105' (AVG.) X 47', ON CONTOUR  
 DRIP

LOT 14  
 5.0000 ACRES  
 TAX MAP #  
 0043-05-0014  
 565 EDMONSTON DRIV



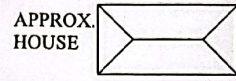
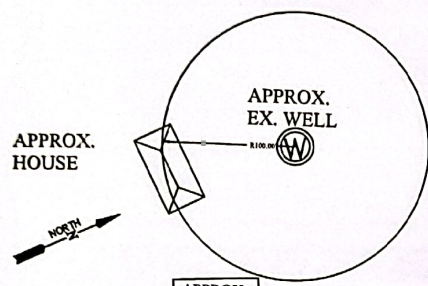
JOB NUMBER: T3620  
 March 7, 2022  
 DRAWN BY: mhj

- # PERC HOLE #
- ⊕ BORE #
- PIT #
- SLOPE DIRECTION
- (A-F) DRAINFIELD CORNERS
- ⊗ PROPOSED IIB WELL

ALL KNOWN WELLS & DRAINFIELD SITES WITHIN 200' OF THE PROPOSED DRAINFIELDS ARE SHOWN.

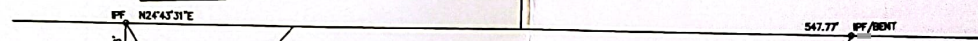
R10





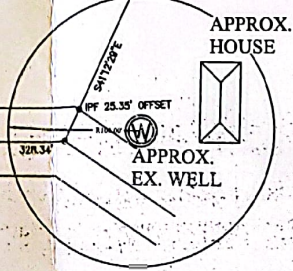
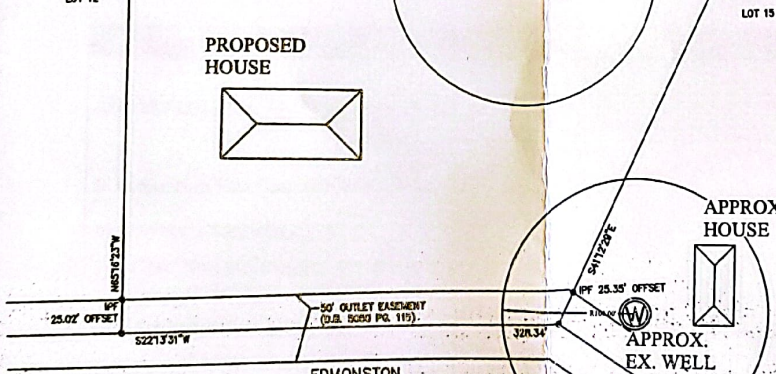
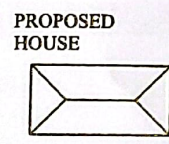
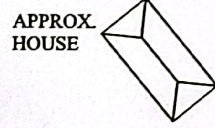
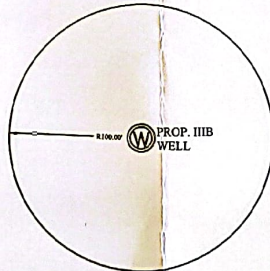
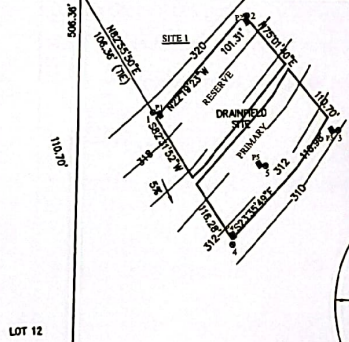
APPROX. DF AREA  
PROPERTY DIVISION LOT 8

HERRICK PROPERTY DIVISION LOT 9



APPROX. DF AREA

LOT 14  
5.0000 ACRES  
TAX MAP #  
0043-05-0014  
#9565 EDMONSTON DRIVE



JOB NUMBER: T3620  
March 7, 2022  
DRAWN BY: mhj

- PERC HOLE #
- ⊙ BORE #
- PIT #
- SLOPE DIRECTION
- (A-F) DRAINFIELD CORNERS
- ⊙ PROPOSED III B WELL

ALL KNOWN WELLS & DRAINFIELD SITES WITHIN 200' OF THE PROPOSED DRAINFIELDS ARE SHOWN.





Soil Evaluation Form

Fairfax County Soil Evaluation Form

Fairfax County Health Department, Division of Environmental Health

General Information

Date: February 15, 2022

Project #: 201700296

Applicant Soils Inc

Telephone No. 540-364-1122

Applicant Address: 8399 W. Main Street Marshall, VA 20115

Owner: Keven McClaugherty Carr Tr

Address: 501 Stephen Cir SW Vienna, VA 22180

Evaluation Location: 9565 Edmonston Drive Great Falls, VA 22066

Subdivision: Dranesville District #1

Block/Section: NA

Lot: 14

Site: tax map # 4-3-005-14

Site Assessment

1. Purpose of Soil Evaluation: New SDS  100% Reserve , Relocation , Certification Letter X

2. Position in Landscape Satisfactory: Yes  No  Describe: east facing side slope

3. Site Slope: 9% active; 9% reserve

4. Is Site Impacted by Private Water Wells? Yes  No

5. Topographic Limitations to Site: Yes  No  Describe: Stay within profiled area

6. Depth to H.E.S.W.T. (RFM's ): Yes  No  Describe: Per Soils Inc 12"

7. Depth to Impervious Soil Materials and/or Bedrock: Yes  No  Describe: 24" WMS; 26" Soils Inc

8. Free Water Present: Yes  No  Describe: 19" WMS

Soil Evaluation Conclusion

Site Approved: Yes  No  Describe: Drip design at 6" deep

9. Percolation Test Required: Yes  No

a) How many Test Holes: 3-5

10. If Test Rate is Estimated: 90 MPI at 6" for both active and reserve

OWNERS COPY

Name and title of evaluator: Marty Shannon

Environmental Health Specialist II, AOSE

Signature

Marty Shannon

Date: 2/15/2022



Profile Description

**SOIL EVALUATION REPORT**

Date of Evaluation 2/15/2022 9565 Edmonston Drive Great Falls, VA 22066

Hole #	Horizon	Depth (in.)	Description of color, texture, etc.	Texture %/MP
			Soils Inc profiles STK1-5 located on EAST facing side slope 9% primary area and 9% in reserve area. Perc waiver granted as proposed installation is less than 18" and is contained in a soil horizon of less than 7". Agree with estimation 90 mpi in the horizon of 18" which contains loam to 10" and silty clay loam to 19" with tightness in structure at >19". Restrictive at 24-26" with hard igneous intruded rock.. Advised Nick via Kevin Crisler that loading rate for drip must reflect actual. .19 specified for both active and reserve but based on drainfield drip design .18 should be reserve area and .14 should be primary area. Nick will discuss with Brian. Will send e-mail.	
WMS1	A	0-3	7.5 yr 4/6 2.5/2 black to strong brown loam friable	IIB
	Bw	3-10	7.5 yr 4/6 strong brown loam friable	IIB
	Bt2	10-26	7.5 yr 7/1,8/1 light pinkish grey depleted silty clay loam with 6/8 iron segregation at 19" with platy and tight structure at 19"	III
	Bt3	26-33	7.5 yr 4/6 strong brown silty clay loam tight	III
	Cr	33-	Rock- igneous intruded- teeth of backhoe grinding on rock and just chipping away. Restrictive	Cr
WMS2	A	0-3	7.5 YR 2.5/2 black loam friable	IIB
		3-18	7.5 yr 5/3 br silty clay loam friable 2 sbk	III
		18-23	7.5 YR 7/1,8/1 depleted silty clay loam platy and weak sbk with 6/8 iron segregation	III
		Cr	igneous intruded rock hard. Backhoe teeth grinding on rock	Cr

*Marty Shamm*

*2-15-22*



Soils, Inc.

Footprint Sketch

9565 Edmonston Drive, Fairfax County, VA

8331 West Main Street, Marshall, VA 20115. 844-447-SOIL (7645); FAX 540-364-2060

HERRICK PROPERTY DIVISION  
LOT 8

HERRICK PR

IPF N24°43'31"E

506.36'

N82°55'50"E  
106.36' (TIE)

320

N75°01'40"E  
.19 vs  
.18 vs

SITE 1

.14 vs  
.19

LOT 14  
5.0000 ACRES  
TAX MAP #  
0043-05-0014  
#9565 EDMONSTON DRIV

110.70'

S82°37'52"W  
318

5%

RESERVE  
DRAINFIELD

PRIMARY

310

312

4

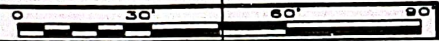
110.40'

P3 3

JOB NUMBER: T3620  
January 27, 2022  
DRAWN BY: mhj

- PERC HOLE #
- ⊙ BORE #
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- SLOPE DIRECTION
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R10