

# SETEC

**SOIL AND ENVIRONMENTAL TECHNOLOGY, INC**  
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## General Information

Date: 5/31/2024 Patrick County Health Department  
 Applicant: Phone #:  
 Address:  
 Directions to the Property: US-58 W, R on VA-8 N (10.2 mi), R on VA-40 E (4.4 mi), L on Rte 710/Woods Gap Rd (0.6 mi), R on Rte 716/Short Cut Dr, 1st lot on left located on corner of Woods Gap Rd & Short Cut Dr  
 Subdivision: Short Cut Dr Lot: 1  
 Tax Map ID: 4918-41 (12.552 acre portion)

## Soil Information Summary

1. Position in landscape satisfactory Yes ☒ No ☐ Describe: Sideslope
2. Slope 19 %
3. Depth to rock/impervious strata: Max. >60" Min. None
4. Depth to seasonal water table (gray mottling or gray color) No ☒ Yes ☐
5. Free water present No ☒ Yes ☐ range in inches
6. Soil percolation rate estimated Yes ☒ Texture group 3  
 No ☐ Estimated rate 75 Min/inch
7. Percolation test performed Yes ☐ Number of percolation test holes  
 No ☒ Depth of percolation test holes  
 Average percolation rate

Name and title of evaluator: David Hall PSS/AOSE

Signature:



- X** Site Approved: Absorption trenches dispersing septic tank effluent to be placed at 26" depth at site designated. Site provides a total of 1800 square feet of absorption area for the primary drainfield and 900 square feet for reserve.

Site Disapproved:

Reason for rejection: (check all that apply)

- 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 acceptable soil for required drainfield, and/or reserve area
- 6 ☐ Proposed system too close to well
- 7 ☐ Other (Specify)

# **PROFILE DESCRIPTION SOIL EVALUATION REPORT**

Date of Evaluation: 5/16/2024

Patrick County Health Department

x See application sketch

See construction permit

**Subdivision:** Short Cut Dr **Lot:** 1**TM#:** 4918-41 (12.552 acre portion on Short Cut Dr)

Hole #	Horizon	Depth (in)	Description	Texture Group
Pit 1	Ap	0-6	Dark Reddish Brown (2.5YR 3/4) Loam	2
	Bt1	6-20	Yellowish Red (5YR 4/6) Clay Loam; few mica flakes	3
	Bt2	20-36	Yellowish Red (5YR 4/6) Clay Loam; few mica flakes	3
	BC	36-60	Yellowish Red (5YR 4/6) Cobbly Clay Loam; 25% cobbles	3
Pit 3	Ap	0-10	Dark Brown (7.5YR 3/4) Loam	2
	Bt1	10-20	Red (2.5YR 4/6) Clay Loam; few mica flakes	3
	Bt2	20-42	Red (2.5YR 4/6) Clay Loam; Moderate Medium Subangular Blocky Structure	3
	BC	42-60	Red (2.5YR 4/6) Clay Loam; few Very Pale Brown (10YR 7/3) Lithochromic Mottles	3
Pit 3	Ap	0-6	Dark Reddish Brown (2.5YR 3/4) Loam	2
	Bt1	6-20	Yellowish Red (5YR 4/6) Clay Loam; few mica flakes	3
	Bt2	20-36	Yellowish Red (5YR 4/6) Clay Loam; few mica flakes	3
	BC	36-60	Yellowish Red (5YR 4/6) Cobbly Clay Loam; 25% cobbles	3

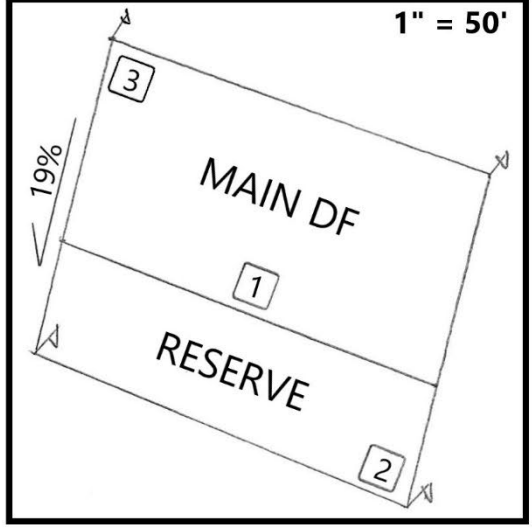
**DRAINFIELD RECOMMENDATIONS, DESIGN BASIS, & AREA CALCULATIONS****Subdivision:** Short Cut Dr **Lot:** 1**TM#:** 4918-41 (12.552 acre portion on Short Cut Dr)

<b>Main DF</b>		<b>Reserve DF</b>	
Type of system	Gravity	Reserve Area Required	Yes
EPR	75	Type of Reserve	Gravity
Slope %	19	EPR	75
# Bedrooms	3	Slope %	19
Gallons/Day	450	Gallons/Day	225
Width of Trench (ft.)	3	Width of Trench (ft.)	3
Total Square Ft. of Trench Bottom Required per BR	596	Total Square Ft. of Trench Bottom Required	894
Total Square Ft. of Trench Bottom per BR in Design	600	Total Square Ft. of Trench Bottom in Design	900
Total Square Ft. of Trench Bottom Required	1788	# Lines of Reserve	3
Total Square Ft. of Trench Bottom in Design	1800	Line Length (ft.)	100
# Lines Installed	6	Installed <24" from Rock or Other Impervious Strata	No
Length of Line Installed (ft.)	100	Centers (ft.)	10
Installed <24" from Rock or Other Impervious Strata	No	Width Required (ft.)	30
Centers (ft.)	10	Width in Design (ft.)	30
Width Required (ft.)	53	Installation Depth (inches into natural soil)	26
Installation Depth (inches into natural soil)	26	Amount of Backfill Required (inches)	N/A
Amount of Backfill Required (inches)	N/A	Type of Well Recommended	3C
		Amount of Casing & Grout (ft.)	20' min

LOT 1  
 TM#: 4918-41  
 12.552 acre portion on Short Cut Dr

1" = 150'

**DRAINFIELD ENLARGEMENT**



- = white PVC stakes
- Proposed 3BR House Site
- Proposed 3C Well Site

