



SOIL AND ENVIRONMENTAL TECHNOLOGY, INC
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General Information

Date: 4/12/2018 Roanoke County Health Department
 Applicant: Susan Delp Telephone #: (540) 556-5445
 Address: 5445 Woodchuck Lane, Roanoke, VA 24018
 Directions to the Property: US-220 S, Exit for VA-419 N/US-220 BUS/ Franklin Rd (0.8 mi), L on Starkey Rd (1.6 mi), R on Starkey Rd (0.5 mi), R on Merriman Rd (0.2 mi), L on Crystal Creek Dr. (1.1 mi), R on Willow Spring Rd. Property located at end of cul-de-sac up hill & to left of powerline
 Tax Map ID: 086.20-02-07.00-0000 (portion of)

Soil Information Summary

1. Position in landscape satisfactory Yes No Describe: Sideslope
2. Slope 28 %
3. Depth to rock impervious strata: Max. >72" Min. >72" 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 2
 No Estimated rate 45 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: Bill Evans PSS/COSE

Signature:

X Site Approved: Absorption trenches dispersing septic tank effluent to be placed at 48" depth at site designated. Site provides a total of 1080 square feet of absorption area for the drainfield. This site does not require a reserve area.

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: 1/24/2018

Roanoke County Health Department

x See application sketch See construction permit

Applicant: Susan Delp **Tax Map ID:** 086.20-02-07.00-0000 (portion of 15.1 acres on Willow Spring Rd)

Hole #	Horizon	Depth	Description	Texture Group
Auger 1	A	0-3	Brown (7.5YR 4/4) sandy loam	2
	BA	3-18	Strong Brown (7.5YR 5/8) sandy loam	2
	Bt	18-36	Yellowish Red (5YR 5/8) sandy clay loam	2
	BC	36-60	Strong Brown (7.5YR 5/8) sandy clay loam/sandy loam	2
	C	60-72	Reddish Yellow (7.5YR 6/8) sandy loam	2
Auger 2	A	0-5	Brown (7.5YR 4/4) sandy loam	2
	BA	5-12	Brown (7.5YR 5/4) sandy loam	2
	Bt1	12-20	Strong Brown (7.5YR 5/8) sandy clay loam	2
	Bt2	20-36	Yellowish Red (5YR 5/8) clay loam	3
	BC	36-45	Yellowish Red (5YR 5/8) sandy clay loam	2
	C	45-72	Reddish Yellow (5YR 6/8) sandy loam	2
Auger 3	A	0-3	Brown (7.5YR 4/4) sandy loam	2
	BA	3-12	Brown (7.5YR 5/4) sandy loam	2
	Bt	12-45	Strong Brown (7.5YR 5/6) sandy clay loam	2
	C	45-72	Strong Brown (7.5YR 5/8) sandy loam	2
Auger 4	A	0-2	Dark Yellowish Brown (10YR 4/4) sandy loam	2
	BA	2-10	Yellowish Brown (10YR 5/4) sandy loam	2
	Bt	10-25	Strong Brown (7.5YR 5/6) sandy loam	2
	C	25-72	Yellowish Brown (10YR 5/8) sandy loam	2

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**DRAINFIELD RECOMMENDATIONS, DESIGN BASIS, & AREA CALCULATIONS
AND WELL RECOMMENDATION & SPECIFICATIONS**

Main DF		Reserve DF	
Type of system	Gravity-Gravelless Trenches	Reserve Area Required	No
EPR	45	Type of Reserve	N/A
Slope %	28	EPR	N/A
# Bedrooms	4	Slope %	N/A
Gallons/Day	600	Gallons/Day	N/A
Width of Trench (ft.)	3	Width of Trench (ft.)	N/A
Total Square Ft. of Gravelless Trench Bottom Required per BR	258	Total Square Ft. of Trench Bottom Required	N/A
Total Square Ft. of Gravelless Trench Bottom per BR in Design	270	Total Square Ft. of Trench Bottom in Design	N/A
Total Square Ft. of Gravelless Trench Bottom Required	1032	# Lines of Reserve	N/A
Total Square Ft. of Gravelless Trench Bottom in Design	1080	Line Length (ft.)	N/A
# Lines Installed	4	Installed <24" from Rock or Other Impervious Strata	N/A
Length of Line Installed (ft.)	90	Centers (ft.)	N/A
Installed <24" from Rock or Other Impervious Strata	No	Width Required (ft.)	N/A
Centers (ft.)	10	Width in Design (ft.)	N/A
Width Required (ft.)	33	Installation Depth (inches into natural soil)	N/A
Installation Depth (inches into natural soil)	48	Amount of Backfill Required (inches)	N/A
Amount of Backfill Required (inches)	N/A	Type of Well Recommended	3B
		Amount of Casing and Grout (ft.)	50' min.

