



**SOIL AND ENVIRONMENTAL TECHNOLOGY, INC**  
 111 N. Franklin Street, Christiansburg, VA 24073  
 Phone: (540) 381-0309 Fax: (540) 381-9430  
 E-mail: setec@soilandenvironmentaltechnology.com

**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, +/- 0.2 miles to property on right  
 Subdivision: Short Cut Dr Lot: 5  
 Tax Map ID: 4918-41-A (15.3285 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 65 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 1620 square feet of absorption area for the primary drainfield and 810 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

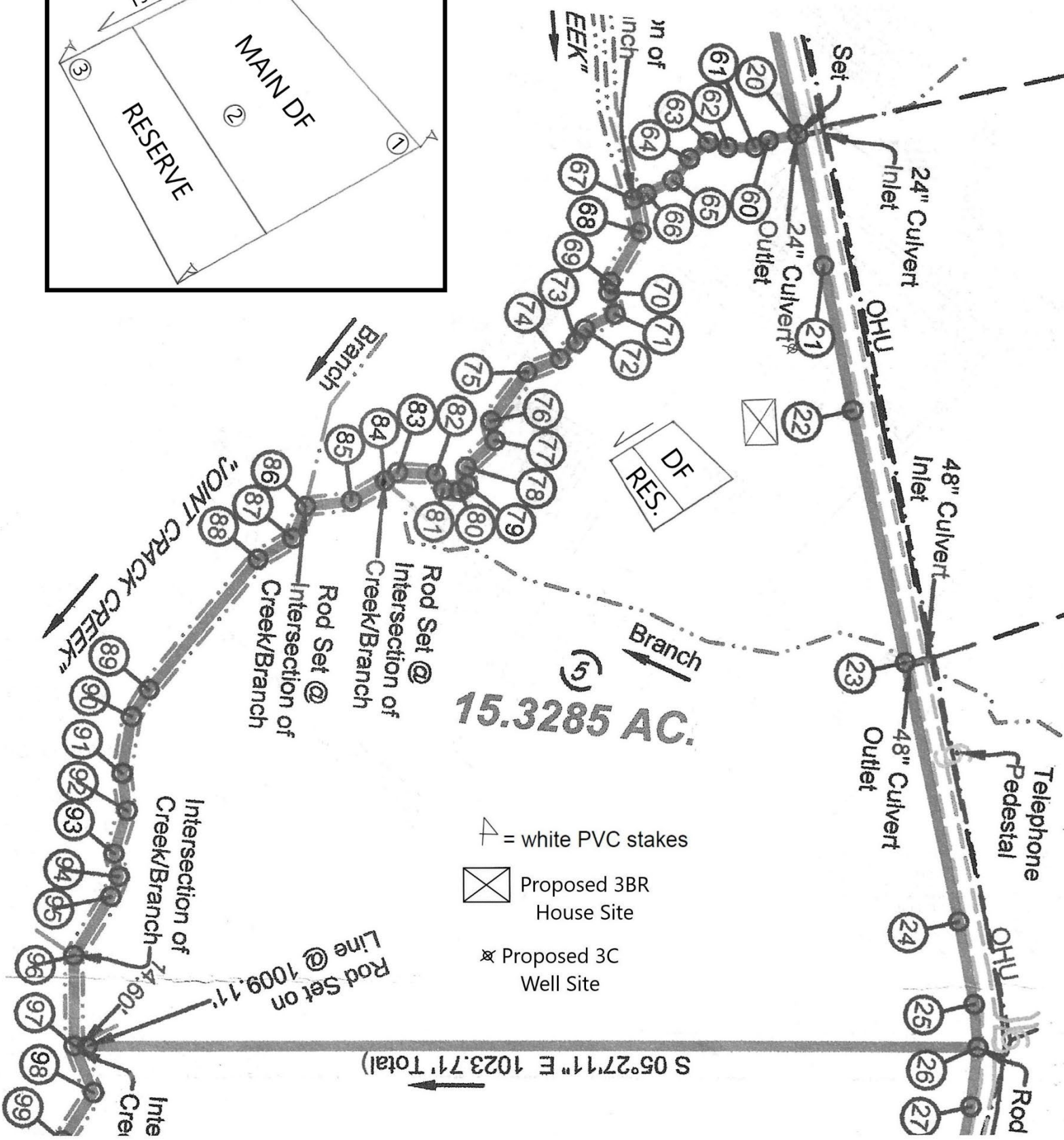
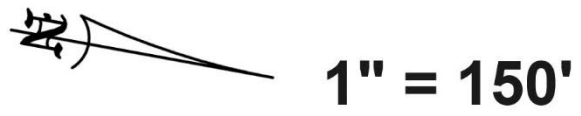
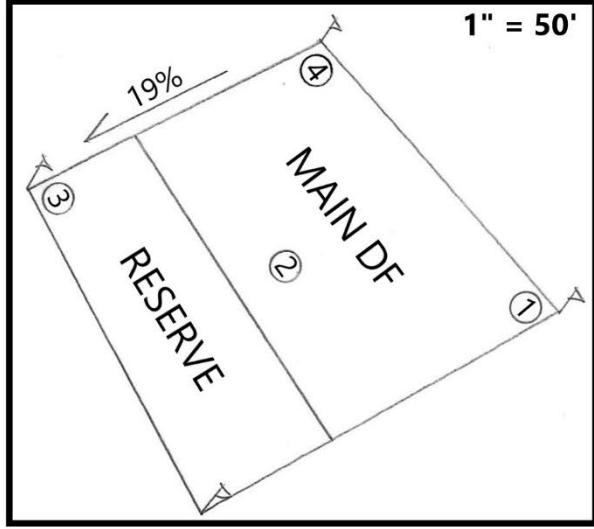
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


Hole #	Horizon	Depth (in)	Description	Texture Group
Auger 1	Ap	0-6	Brown (10YR 4/3) Loam	2
	BA	6-12	Red (2.5YR 4/6) Loam	2
	Bt	12-24	Red (2.5YR 5/6) Clay Loam	3
	BC	24-60	Strong Brown (7.5YR 5/8) Loam	2
Auger 2	Ap	0-3	Brown (10YR 4/3) Loam	2
	BA	3-6	Red (2.5YR 4/6) Loam	2
	Bt1	6-16	Red (2.5YR 5/6) Clay Loam	3
	Bt2	16-30	Red (2.5YR 4/6) Clay Loam	3
	Bt3	30-60	Dark Red (2.5YR 3/6) Clay Loam	3
Auger 3	Ap	0-3	Brown (10YR 4/3) Loam	2
	BA	3-6	Red (2.5YR 4/6) Loam	2
	Bt1	6-16	Red (2.5YR 5/6) Clay Loam	3
	Bt2	16-30	Red (2.5YR 4/6) Clay Loam	3
	Bt3	30-60	Dark Red (2.5YR 3/6) Clay Loam	3
Auger 4	Ap	0-3	Brown (10YR 4/3) Loam	2
	BA	3-6	Red (2.5YR 4/6) Loam	2
	Bt1	6-16	Red (2.5YR 5/6) Clay Loam	3
	Bt2	16-30	Red (2.5YR 4/6) Clay Loam	3
	Bt3	30-60	Dark Red (2.5YR 3/6) Clay Loam	3

**DRAINFIELD RECOMMENDATIONS, DESIGN BASIS, & AREA CALCULATIONS****Subdivision:** Short Cut Dr **Lot:** 5**TM#:** 4918-41-A (15.3285 acre portion on Short Cut Dr)

<b>Main DF</b>		<b>Reserve DF</b>	
Type of system	Gravity	Reserve Area Required	Yes
EPR	65	Type of Reserve	Gravity
Slope %	19	EPR	65
# 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	496	Total Square Ft. of Trench Bottom Required	744
Total Square Ft. of Trench Bottom per BR in Design	540	Total Square Ft. of Trench Bottom in Design	810
Total Square Ft. of Trench Bottom Required	1488	# Lines of Reserve	3
Total Square Ft. of Trench Bottom in Design	1620	Line Length (ft.)	90
# Lines Installed	6	Installed <24" from Rock or Other Impervious Strata	No
Length of Line Installed (ft.)	90	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

**DRAINFIELD ENLARGEMENT**



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