

**Auction Tract 6**

**SETEC**

**SOIL AND ENVIRONMENTAL TECHNOLOGY, INC**  
111 N. Franklin Street, Christiansburg, VA 24073  
Phone: 540-381-0309

**General Information**

Date: 8/29/02  
Applicant: John Atkinson  
Address: P.O. Box 10879 Southport NC 28461  
Owner:  
Location:  
Subdivision: Stone Ridge Phase I  
Telephone No: Health Department  
Address:  
Lot: 33

**Soil Information Summary**

1. Position in landscape satisfactory Yes ☒ No Describe: Sideslope
2. Slope 30 %
3. Depth to rock\impervious strata: Max. 50+" Min. 29" None
4. Depth to seasonal water table (gray mottling or gray color) No Yes ☒ 27 inches
5. Free water present No ☒ Yes range in inches
6. Soil percolation rate estimated Yes ☒ No Texture group 2  
Estimated rate 45 Min/inch
7. Percolation test performed Yes No ☒ Number of percolation test holes  
Depth of percolation test holes  
Average percolation rate

Name and title of evaluator: Charles Nelson/David Hall/Bill Evans Soil Scientist

Signature: *Charles Nelson*

**Department Use**

Site Approved: depth at site designated on permit.  
Site Disapproved:

**Reason 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 over 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: 8/29/02

Health Department  
Identification No.

x See application sketch

See construction permit

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Hole #	Horizon	Depth	Description	Texture Group
1	Ap	0-10	Brown (10YR 4/3) loam	2
	BA	10-17	Yellowish Brown (10YR 5/4) sandy clay loam	2
	Bt	17-27	Strong Brown (7.5YR 5/8) clay loam	3
	BC	27-36	Reddish Yellow (7.5YR 6/6) clay loam	3
	C	36-41	Brownish Yellow (10YR 6/6) sandy clay loam	2
2	Ap	0-4	Dark Yellowish Brown (10YR 4/4) gravelly loam; 20% coarse fragments	2
	Bt	4-27	Yellowish Brown (10YR 5/8) sandy clay loam	2
	C	27-43	Brownish Yellow (10YR 6/8) clay loam; common Light Brownish Gray (10YR 6/2) mottles	3
3	Ap	0-10	Dark Yellowish Brown (10YR 4/4) gravelly loam; 20% coarse fragments	2
	BA	10-16	Brownish Yellow (10YR 6/6) loam	2
	Bt	16-37	Yellowish Brown (10YR 5/8) sandy clay loam	2
	C	37-50	Brownish Yellow (10YR 6/6) clay loam; common Light Brownish Gray (10YR 6/2) mottles	3
4	Ap	0-6	Dark Yellowish Brown (10YR 4/4) gravelly loam; 15% coarse fragments	2
	Bw	6-29	Yellowish Brown (10YR 5/8) gravelly sandy clay loam; 25% coarse fragments	3
	R	29	Hard Rock	

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**DRAINFIELD RECOMMENDATIONS  
DESIGN BASIS & AREA CALCULATIONS**

Type of system	Drip with MicroFast 500 GPD Pretreatment		
EPR	45	Reserve Area Required	NO
Slope %	30	Type of Reserve	N/A
# Bedrooms	3	Length of Reserve (feet)	N/A
Installed <24" from Rock or Other Impervious Strata	No	# Lines in Reserve	N/A
Area (Sq. ft.) required per bedroom	279	Backfilling Required	YES
Absorption Area Increase %	33	Backfilling Depth (inches)	7
Total Square ft. required (Main DF)	3340	Width required (Main DF)(ft.)	**
# Lines Installed	**	Width of Available Area (Main DF + Reserve) (ft.)	85
Line Length (feet)	**	Length of Available Area (ft.)	45
Installation Depth inches (into natural soil)	5	Square Footage in Design (Main DF + Reserve)	3825
Width of Trench (feet)	N/A		
Centers (feet)	2		

**Notes:**

\*\*See engineering design