

**Auction Tract 10**

**SETEC**

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

**General Information**

Date: 8/20/02  
Applicant: John Atkinson  
Address: P.O. 10879 Southport, NC 28461  
Owner: Address:  
Location:  
Subdivision: Stone Ridge Phase I Lot: 22  
Telephone No: Health Department

**Soil Information Summary**

1. Position in landscape satisfactory Yes ☒ No Describe: Sideslope
2. Slope 24 %
3. Depth to rock\impervious strata: Max. Min. 48" None
4. Depth to seasonal water table (gray mottling or gray color) No ☒ Yes inches
5. Free water present No ☒ Yes range in inches
6. Soil percolation rate estimated Yes ☒ No Texture group 3  
Estimated rate 60 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: 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: 8/20/02

Health Department  
Identification No.

x See application sketch

See construction permit

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Hole #	Horizon	Depth	Description	Texture Group
1	Ap	0-4	Dark Brown (10YR 3/3) loam	2
	Bt	4-30	Yellowish Red (5YR 5/6) gravelly clay loam; moderate medium subangular blocky structure	3
	BC	30-45	Yellowish Red (5YR 5/6) clay loam	3
2	Ap	0-4	Dark Brown (10YR 3/3) loam	2
	BA	4-14	Yellowish Brown (10YR 5/6) clay loam	3
	Bt	14-32	Yellowish Brown (10YR 5/6) silty clay loam; moderate medium subangular blocky structure	3
	C	32-48	Yellowish Red (5YR 5/6) & Brownish Yellow (10YR 6/8) silty clay loam	3
3	Ap	0-8	Dark Brown (10YR 3/3) loam	2
	Bt	8-28	Yellowish Brown (10YR 5/6) gravelly loam	2
	C	28-48	Yellowish Brown (10YR 5/6) gravelly loam; common Pale Brown (10YR 6/3) weathered rock fragments	2
	R	48	Hard Rock	

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**DRAINFIELD RECOMMENDATIONS  
DESIGN BASIS & AREA CALCULATIONS**

Type of system	Low Pressure Distribution		
EPR	60	Reserve Area Required	YES
Slope %	24	Type of Reserve	Puraflo
# Bedrooms	3	Length of Reserve (feet)	55
Installed <24" from Rock or Other Impervious Strata	N/A	# Lines in Reserve	**
Area (Sq. ft.) required per bedroom	325	Square Footage in Reserve	1320
Absorption Area Increase %	N/A	Backfilling Required	NO
Total Square ft. required (Main DF)	975	Backfilling Depth (inches)	N/A
Line Length (feet)	55	Width required (Main DF)(ft.)	59
# Lines Installed	9	Width of Available Area (Main DF + Reserve) (ft.)	83
Installation Depth inches (into natural soil)	26	Length of Available Area (ft.)	55
Width of Trench (feet)	2	Square Footage in Design (Main DF + Reserve)	2805
Centers (feet)	7		

**Notes:**

LPD system needs to be designed by an engineer.

\*\* See engineering design