

## AOSE/PE Report for

Construction Permit \_\_\_\_\_

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<p style="text-align: center;">Location of property:</p>	<p>Lot <u>  </u> Section <u>  </u>, Subdivision <u>Lewis Ford Estates</u>, <u>Campbell</u>, County</p> <p>GPIN or Tax Map # _____</p> <p>Latitude/Longitude _____ <span style="float: right; font-size: 1.5em;">LOT 3</span></p>
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<p><b>Applicant or Client and address:</b></p>	<p><b>Prepared by AOSE/PE (name and address):</b></p> <p><b>David B. Beahm</b>                  12719-D East Lynchburg-Salem Tnpk                  Forest, VA 24502</p>
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<p><b>Date of Report:</b> <u>2/19/2010</u></p> <p><b>Revision Date:</b> _____, _____</p>	<p><b>AOSE/PE Job Number:</b></p> <p><b>Health Dept. ID. No.:</b></p>
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Contents/Index of this report:<sup>2</sup>

<p>Please refer to Table of Contents on Page 2</p>	
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Certification Statement(s)<sup>3</sup>

<p>I hereby certify that the evaluations and/or designs contained herein were conducted in accordance with the Sewage Handling and Disposal Regulations (12 VAC5-610), the Private Well Regulations (12 VAC5-615), and other applicable policies of the Virginia Department of Health. Furthermore, I certify that my evaluation and/or design contained herein complies with all applicable laws, regulations, and policies implemented by the Virginia Department of Health.</p> <p>I recommend a <u>Subdivision Approval</u></p>	
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<sup>1</sup> Insert appropriate title: "Construction Permit", "Subdivision Approval", "Certification Letter"

<sup>2</sup> Examples include: "Soil Information Summary", "Soil Profile Descriptions", "Water Supply Design Specifications", "Primary/Reserve Design Specifications", "Construction Drawings", "Site Sketch", "Product Specification Sheet"

<sup>3</sup> PE work is regulated by the Department of Professional and Occupational Regulation. This section is considered optional for PEs. <sup>4</sup> Fill in this blank with the appropriate term: "certification letter", "construction permit", or "subdivision approval"

<sup>5</sup> Fill in this blank with the appropriate term: "approved", or "denied"

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Refer to attached Subdivision Drainfield Map (one map)

# Site and Soil Evaluation Report

(For certification letters and subdivisions)

General Information	
Date : <u>2/19/2010</u>	Campbell County Health Department
Applicant: <u>Watt Foster</u>	
Telephone Number:	<u>434-376-2322</u>
Address : <u>P. O. Box 190; Brookneal, Virginia 24528</u>	
Owner : <u>Watt Foster</u>	Address : <u>Same</u>
Location : <u>Campbell County</u>	
Subdivision <u>Lewis Ford Estates</u> Block/Section Lot <u>3</u>	
Soil Information Summary	
1. Position in landscape satisfactory	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Describe : <u>Sidestope</u>
2. Slope <u>5</u> %	
3. Depth to rock/impervious strata (inches) :Max. Min. None	<u>X</u>
4. Free water present	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Range in inches _____
5. Depth to seasonal water table (gray mottling or gray color) <u>none</u>	
6. Soil percolation rate estimated	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Texture group <input type="checkbox"/> I <input checked="" type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV Estimated rate <u>45</u> min/in
7. Percolation test performed (constant head permeameter)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Name and title of evaluator: <u>David B. Beahm, AOSE 000182</u>	
Signature: <u>David B. Beahm</u>	
Department Use	
___ Site approved: Drainfield trench bottoms to be placed at _____ (inches) depth at site designated on permit.	
___ Site disapproved:	
Reasons 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) _____	

# Abbreviated Design Form

This form is for use with gravity, pump to gravity, enhanced flow, and low pressure distribution (LPD) sewage system designs and when applying for a certification letter or subdivision approval.

This abbreviated design covers the  primary and reserve area,  only the primary area,  only the reserve area (check one) for Lewis Ford Estates Lot 3 (property ID).

## Design Basis

Total length of available area (feet): 100 Total width of available area (feet): 55  
Estimated Perc. Rate (min./inch): 45 at 53 in. (depth) Number of bedrooms (or GPD): 4  
Conveyance Method<sup>1</sup>: gravity Distribution method<sup>2</sup> (specify): gravity (conventional)  
Dispersal system basis<sup>3</sup> Table 5.4 LGMI required? No (Yes/No)  
Effluent quality required: Primary (Primary, Secondary, Advanced Secondary)  
Square feet per bedroom: 344 Total trench bottom area required (sq.ft.) 1,376

<sup>1</sup>Gravity, pump, siphon

<sup>2</sup>Enhanced flow, LPD, or Drip Dispersal

<sup>3</sup>Table 5.4 of SHDR or identify the GMP used

## Area Calculations

Number of trenches 5 (Note if a pad is used) Length of pad or trenches (ft.): 100  
Width of pad or trenches (ft.): 3 Center to center spacing (ft.): 9  
Reserve required? no Percent reserve area required: na  
Total width of absorption area required (ft.) 39 Total trench bottom area provided (sq.ft.): 1,500

The required width is calculated by multiplying the center-to-center spacing by one less than the number of trenches and adding 1 trench width plus any required reserve area. If the topography is not uniform across the length of the site the trenches will need to flare apart on one end to maintain contour. When this occurs it is necessary to use a center-to-center spacing that accounts for the flair or the installer will not be able to fit the system within the approved area. It is perfectly acceptable to have more area available, especially up and down the slope, than is required.

### Lot 3 Soil Profile Descriptions

(Refer to Drainfield Map for locations)

#### SB-3

Horizon	Depth (inches)	Description	Texture Group
A	0-6	yellowish-brown 10YR5/4; heavy loam	II
Bt	6-39	Strong brown 7.5YR5/6 with brownish-yellow 10YR6/6 weathered sericite schist coarse fragments; clay loam	III
C	39-72+	Reddish-yellow 7.5YR6/6 with very pale brown 10YR7/4 weathered channers; sericite schist saprolite; very soft; loam to light loam	II

#### SB-4

More limited permeability throughout profile with possible redox features at less than 60-inches below grade surface.

#### SB-17

Horizon	Depth (inches)	Description	Texture Group
A	0-5	Yellowish-brown 10YR5/4; heavy loam	II
Bt1	5-31	Red 2.5YR4/8; heavy clay loam	III
BC	31-38	Yellowish-red 5YR5/8; light clay loam	III
C	38-72+	Reddish-yellow 7.5YR6/6; loam to light loam; very soft	II

#### SB-18

Horizon	Depth (inches)	Description	Texture Group
A	0-5	Yellowish-brown 10YR5/4; heavy loam	II
Bt	5-28	Yellowish-red 5YR5/6; few white 5YR8/1 plagioclase (lithochromic) mottles; clay loam	III
C1	28-41	Yellowish-red 5YR5/6; common white 5YR8/1 plagioclase (lithochromic) mottles; heavy loam to loam; common very fine mica	II
C2	41-72+	Reddish-yellow 7.5YR6/6, yellowish-red 5YR5/6 and brownish-yellow 10YR6/6; common white 5YR8/1 plagioclase (lithochromic) mottles; micaceous light loam; very soft	II

SB-19

Horizon	Depth (inches)	Description	Texture Group
A	0-5	Yellowish-brown 10YR5/4; heavy loam	II
Bt	5-41	Red 2.5YR5/6; clay loam	III
C	41-72+	Yellowish-red 5YR5/6 with reddish-brown 5YR5/3 (lithochromic); heavy loam that grades to loam; very soft	II

# CERTIFICATION STATEMENT

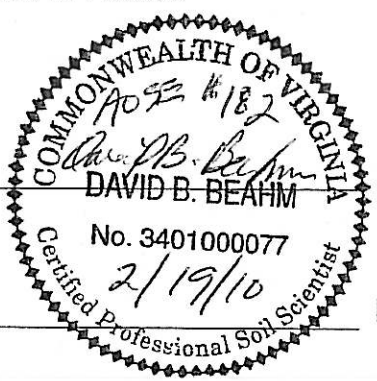
Property Identification: Lewis Ford Estates Lot 3

This is to certify according to § 32.1 – 163.5 of the Code of Virginia that work submitted for the referred property is in accordance to and complies with the Sewage Handling and Disposal Regulations of the Virginia Department of Health.

I recommend subdivision approval

AOSE: \_\_\_\_\_ Date: \_\_\_\_\_

Soil Consultant: \_\_\_\_\_ Date: \_\_\_\_\_



<sup>1</sup> This blank must be filled in with one of the following terms: 'permit', 'certification letter', or 'subdivision approval'.  
<sup>2</sup> This blank must be filled in with the term 'approved' or 'denied'.

If the submission contains a certification by a professional engineer in consultation with an AOSE, the following statement shall be signed and sealed:

I hereby certify that the evaluations and designs contained herein (refer to subdivision, lot, etc.) were conducted in accordance with the Sewage Handling and Disposal Regulations (12 VAC 5-610-10 et seq., the "Regulations") and the policies of the Virginia Department of Health for implementation of those Regulations. Furthermore, I certify that the evaluations and designs comply with the minimum requirements of the Regulations.

I recommend a \_\_\_\_\_ <sup>1</sup> be <sup>2</sup> \_\_\_\_\_

Licensed PE: \_\_\_\_\_ Date: \_\_\_\_\_

<sup>1</sup> This blank must be filled in with one of the following terms: 'permit', 'certification letter', or 'subdivision approval'.  
<sup>2</sup> This blank must be filled in with the term 'approved' or 'denied'.