

M&M Soil Consultants, Inc.
P.O. Box 7004
Fredericksburg, Virginia 22404
(540)373-3414

Installation Area Soil Summary Report

GENERAL INFORMATION

Date June 26, 2006 Submitted to Madison County Health Department
 Applicant Graystone Homes, Inc. Telephone (540) 825-1600
 Address 1202 Orange Road., Culpeper, Virginia 22701
 Owner Same as above Address Same as above
 Location From Madison, Rt. 29 South, to left on Rt. 230, to right on Rt. 607, prop., 4/10 mile on right
 Tax Map 57-10 Subdivision Jones Property
 Block Section Lot Lot 2, Site #1-M Install. System type: Conventional Trench (Upper portion)

SOIL INFORMATION SUMMARY

1. Position in landscape satisfactory Yes No
 Describe Open Piedmont Sloping Ridge
2. Slope 8%
3. Depth to rock or impervious strata: Max. Min. None
 4. Depth to seasonal or perched water table indicators No Yes inches
5. Free water present No Yes range in inches
6. Soil percolation rate estimated Yes No Texture group IIA/IIB
 *Estimated Rate 45-50 **All applicable regulations and the specific soil and site conditions (including the trench sidewalls) were taken into consideration when the estimated percolation rate was assigned.*
7. Permeability test performed Yes No
 If yes, note type of test performed and attach:

Site Approved: Primary drainfield to be placed at 54 inch depth at site designated in this package.
 If required, reserve to be placed at 42 inch depth at site designated in this package.

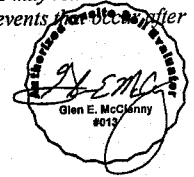
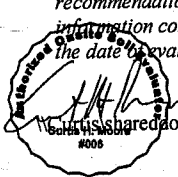
Site Disapproved

Reason(s) for rejection:

1. Position in landscape subject to flooding or periodic saturation.
2. Insufficient depth of suitable soil over hard rock.
3. Insufficient area of acceptable soil for required drainfield, and/or reserve area.
4. Rates of absorption too slow.
5. Insufficient are of acceptable soil for required drainfield, and/or reserve area.
6. Proposed system too close to well.
7. Other Specify:

(attach additional pages if necessary)

The information presented in this submittal package represents the best available information as of the evaluation date noted on the soil profile description report contained in this package. Due to the potential for subsequent events to negatively impact the recommendations made in this package, it is our firm's very strong recommendation to submit this documentation to the local health department for approval as soon as it is received by the client. Failure to do so may render the information contained in this package void. M&M Soil Consultants, Inc., as well as the certifying individual, accept no liability for subsequent events that occur after the date of evaluation.



SOIL PROFILE DESCRIPTION REPORT

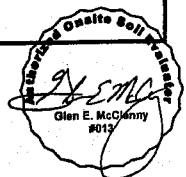
Date of Evaluation: June 2, 2006

Graystone Homes, Inc., Jones Property, Lot 2, Site #1-M

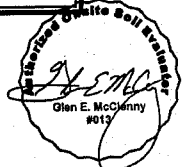
Where the local health department conducts the soil evaluation, the location of the profile holes may be shown on the schematic drawing on the construction permit or the sketch submitted with the application. If soil evaluations are conducted by a private soil scientist, location of profile holes and sketch of the area investigated including all structural features, i.e., sewage disposal systems, wells, etc., within 100 feet of site (See Section 4) and reserve site shall be shown on the reverse side of this page or prepared on a separate page and attached to this form.

See application sketch page See construction permit See sketch attached to this form

| Hole | Horizor | Depth (inches) | Description of color, texture, etc. | Texture Group |
|------|---------|----------------|--------------------------------------------------------------------------------------------------------------|---------------|
| 1 | Ap | 0-6 | 7.5YR 4/6 Heavy Loam, Friable | IIB |
| | Bt | 6-28 | 2.5YR 4/8 Clay Loam, Firm, 2-3 msbk | III |
| | BC | 28-50 | 2.5YR 4/8, 5/8, 5YR 5/8 Light Clay Loam, Friable to Firm, 1-2 msbk | III |
| | C | 50-72 | 2.5YR 5/6, 5/8, 5YR 5/8 Loam, Friable to Very Friable | IIB |
| 2 | Ap | 0-5 | 10YR 4/3 Loam, Friable | IIB |
| | BA | 5-15 | 7.5YR 5/4 Heavy Loam, Friable | IIB |
| | Bt | 15-26 | 2.5YR 4/6, 4/8 Heavy Clay Loam, Firm, 2 msbk | III |
| | BC | 26-48 | 2.5YR 4/8, 5/8 Clay Loam, Friable to Firm, 1-2 msbk | III |
| | C | 48-72 | 2.5YR 4/8, 5YR 5/8, 2.5Y 5/6, 6/6 Loam, Friable to Very Friable | IIB |
| 3 | Ap | 0-4 | 7.5YR 4/4 Loam, Friable | IIB |
| | Bt | 4-17 | 2.5YR 4/6, 5YR 5/8 with common 2.5Y 5/6, 6/6 (parent) mottles; Heavy Clay Loam, Firm, 1-2 msbk | III |
| | BC | 17-28 | Multi-colored 2.5YR 4/6, 5YR 5/8, 2.5Y 5/6, 6/4, 6/6 Light Clay Loam, Firm, many clay flows | III |
| | C | 28-66 | Multi-colored 2.5Y 5/2, 5/3, 5/4, 5/6, 6/6, 7/2, 7/3 (parent), 5YR 5/8 Loam to Fine Sandy Loam, Very Friable | IIA/B |
| 4 | Ap | 0-7 | 10YR 4/3 Loam, Friable | IIB |
| | Bt | 7-24 | 2.5YR 4/6, 4/8, 5YR 5/8 Clay Loam, Firm, 2 msbk, few quartz gravels | III |
| | C | 24-66 | Multi-colored 5YR 5/6, 5/8, 6/6, 7.5YR 6/6, 6/8, 2.5Y 5/6, 6/6 Loam, Very Friable, few quartz cobbles | IIB |
| 5 | Ap | 0-3 | 7.5YR 4/4 Loam, Friable | IIB |
| | Bt | 3-16 | 2.5YR 4/6, 4/8 Clay Loam, Firm, 2 msbk | III |
| | BC | 16-32 | 2.5YR 4/8, 5/8, 5YR 5/8, 6/8, 7.5YR 6/8 Heavy Loam, Friable, 1 msbk | IIB |
| | C | 32-72 | Multi-colored 2.5YR 4/8, 5YR 5/8, 7.5YR 6/8, 2.5Y 5/4, 5/6 Fine Sandy Loam, Very Friable | IIA |



| Installation Area Abbreviated Design Form | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------------------|--------------------|-----------------|--------------------|--------------------------------------------------------|------------|--|--|-----------------------------------------|--|--|----------------|---------------------------------------|--|--|----------------|--------------------------------------------|--|--|--------------------|
| A. System type (Conventional, Drip, Drip Mound, Puraflor pad, Puraflor Trench, Advantex,) | <i>Conventional Trench</i> | | | | | | | | | | | | | | | | | | | | |
| B. Estimated or measured Percolation Rate | <i>47.5 mpi</i> | | | | | | | | | | | | | | | | | | | | |
| C. Slope | <i>8.0 percent</i> | | | | | | | | | | | | | | | | | | | | |
| D. Depth of Evaluation | <i>72 inches</i> | | | | | | | | | | | | | | | | | | | | |
| E. Proposed Installation Depth | <i>54 inches</i> | | | | | | | | | | | | | | | | | | | | |
| F. Installing below restriction? <u>No</u> | | | | | | | | | | | | | | | | | | | | | |
| G. Minimum Installation Depth (factors in slope, system type, etc.) | <i>18 inches</i> | | | | | | | | | | | | | | | | | | | | |
| H. Type of limiting feature <u>None (Depth of Evaluation)</u> | | | | | | | | | | | | | | | | | | | | | |
| I. Depth of limiting feature | <i>72 inches</i> | | | | | | | | | | | | | | | | | | | | |
| J. Minimum required stand-off to limiting feature | <i>18 inches</i> | | | | | | | | | | | | | | | | | | | | |
| K. Stand-off distance provided in design | <i>18 inches</i> | | | | | | | | | | | | | | | | | | | | |
| L. Design based on number of bedrooms | <i>4 bedrooms</i> | | | | | | | | | | | | | | | | | | | | |
| M. Square Footage required per bedroom (per gallon if design based on gpd) | <i>360 sq. ft.</i> | | | | | | | | | | | | | | | | | | | | |
| N. Available Area Across Slope | <i>70 feet</i> | | | | | | | | | | | | | | | | | | | | |
| O. Proposed Width of System (Line length, Pad width, Active Mound width, etc.) | <i>70 feet</i> | | | | | | | | | | | | | | | | | | | | |
| P. Width of Trench | <i>3 feet</i> | | | | | | | | | | | | | | | | | | | | |
| Q. Center spacing increase due to slope | <i>0 feet</i> | | | | | | | | | | | | | | | | | | | | |
| R. Center-to-center spacing (includes correction for slope) | <i>9 feet</i> | | | | | | | | | | | | | | | | | | | | |
| S. Number of Lines | <i>8</i> | | | | | | | | | | | | | | | | | | | | |
| T. Available area Down Slope (includes area for reserve if combined in this site) | <i>140 feet</i> | | | | | | | | | | | | | | | | | | | | |
| U. Down slope distance required for installation | <i>66 feet</i> | | | | | | | | | | | | | | | | | | | | |
| V. Total Square Footage required for installation | <i>1,440.00 sq.ft.</i> | | | | | | | | | | | | | | | | | | | | |
| W. Total Square Footage in Design | <i>1680 sq.ft.</i> | | | | | | | | | | | | | | | | | | | | |
| <table style="width:100%; border: none;"> <tr> <td style="width: 50%;">Does this site require a reserve area?</td> <td style="width: 10%; text-align: center;"><u>Yes</u></td> <td style="width: 30%;">Amount Required</td> <td style="width: 10%; text-align: right;"><i>100 percent</i></td> </tr> <tr> <td>Does this site have a reserve area included within it?</td> <td style="text-align: center;"><u>Yes</u></td> <td></td> <td></td> </tr> <tr> <td>Available area across slope for Reserve</td> <td></td> <td></td> <td style="text-align: right;"><i>70 feet</i></td> </tr> <tr> <td>Available area down slope for Reserve</td> <td></td> <td></td> <td style="text-align: right;"><i>68 feet</i></td> </tr> <tr> <td>Total square footage available for Reserve</td> <td></td> <td></td> <td style="text-align: right;"><i>4760 sq.ft.</i></td> </tr> </table> | | Does this site require a reserve area? | <u>Yes</u> | Amount Required | <i>100 percent</i> | Does this site have a reserve area included within it? | <u>Yes</u> | | | Available area across slope for Reserve | | | <i>70 feet</i> | Available area down slope for Reserve | | | <i>68 feet</i> | Total square footage available for Reserve | | | <i>4760 sq.ft.</i> |
| Does this site require a reserve area? | <u>Yes</u> | Amount Required | <i>100 percent</i> | | | | | | | | | | | | | | | | | | |
| Does this site have a reserve area included within it? | <u>Yes</u> | | | | | | | | | | | | | | | | | | | | |
| Available area across slope for Reserve | | | <i>70 feet</i> | | | | | | | | | | | | | | | | | | |
| Available area down slope for Reserve | | | <i>68 feet</i> | | | | | | | | | | | | | | | | | | |
| Total square footage available for Reserve | | | <i>4760 sq.ft.</i> | | | | | | | | | | | | | | | | | | |
| <p>Notes: <i>To the best of our knowledge and belief, this site complies with all local ordinances such as the CBPA.</i></p> | | | | | | | | | | | | | | | | | | | | | |



Reserve Area Soil Summary Report

GENERAL INFORMATION

Date June 26, 2006 Submitted to Madison County Health Department
Applicant Graystone Homes, Inc. Telephone (540) 825-1600
Address 1202 Orange Road., Culpeper, Virginia 22701
Owner Same as above Address Same as above
Location From Madison, Rt. 29 South, to left on Rt. 230, to right on Rt. 607, prop., 4/10 mile on right
Tax Map 57-10 Subdivision Jones Property
Block ___ Section ___ Lot Lot 2, Site #1-M Res. System type: Conventional Trench (Lower portion)

SOIL INFORMATION SUMMARY

1. Position in landscape satisfactory Yes No

Describe Open Piedmont Sloping Ridge

2. Slope 8%

3. Depth to rock or impervious strata: Max. ___ Min. ___ None

4. Depth to seasonal or perched water table indicators No Yes ___ inches

5. Free water present No Yes ___ range in inches

6. Soil percolation rate estimated Yes Texture group IIA/IIB

No *Estimated Rate 45-50

**All applicable regulations and the specific soil and site conditions (including the trench sidewalls) were taken into consideration when the estimated percolation rate was assigned.*

7. Permeability test performed Yes No

If yes, note type of test performed and attach: _

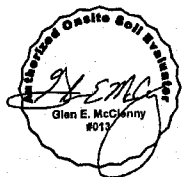
Site Approved: Primary drainfield to be placed at 54 inch depth at site designated in this package.
If required, reserve to be placed at 42 inch depth at site designated in this package.

Site Disapproved

Reason(s) for rejection:

1. Position in landscape subject to flooding or periodic saturation.
2. Insufficient depth of suitable soil over hard rock.
3. Insufficient area of acceptable soil for required drainfield, and/or reserve area.
4. Rates of absorption too slow.
5. Insufficient are of acceptable soil for required drainfield, and/or reserve area.
6. Proposed system too close to well.
7. Other Specify: _____

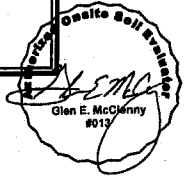
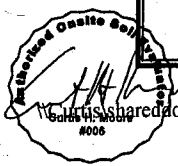
(attach additional pages if necessary)



| Reserve Area Abbreviated Design Form | |
|-----------------------------------------------------------------------------------------|----------------------------|
| A. System type (Conv., Drip, Drip Mound, Puraflor pad, Puraflor Trench, Advantex, etc.) | <i>Conventional Trench</i> |
| B. Estimated or measured Percolation Rate | <i>47.5 mpi</i> |
| C. Slope | <i>8.0 percent</i> |
| D. Depth of Evaluation | <i>66 inches</i> |
| E. Proposed Installation Depth | <i>42 inches</i> |
| F. Installing below restriction? <i>No</i> | |
| G. Minimum Installation Depth (factors in slope, system type, etc.) | <i>18 inches</i> |
| H. Type of limiting feature <i>None (Depth of Evaluation)</i> | |
| I. Depth of limiting feature | <i>66 inches</i> |
| J. Minimum required stand-off to limiting feature | <i>18 inches</i> |
| K. Stand-off distance provided in design | <i>24 inches</i> |
| L. Design based on number of bedrooms | <i>4 bedrooms</i> |
| M. Square Footage required per bedroom (per gallon if design based on gpd) | <i>360 sq. ft.</i> |
| N. Available Area Across Slope | <i>70 feet</i> |
| O. Proposed Width of Reserve (Line length, Pad width, Active Mound width, etc.) | <i>70 feet</i> |
| P. Width of Trench | <i>3 feet</i> |
| Q. Center spacing increase due to slope | <i>0 feet</i> |
| R. Center-to-center spacing (includes correction for slope) | <i>9 feet</i> |
| S. Number of Lines proposed for reserve | <i>8</i> |
| T. Available area Down Slope (does not include installation area) | <i>68 feet</i> |
| U. Down slope distance required for reserve | <i>66 feet</i> |
| V. Total Square Footage required for reserve | <i>1,440.00 sq.ft.</i> |
| W. Total Square Footage in Design | <i>1680 sq.ft.</i> |

| | | | |
|-------------------------------------------------------|------------|-----------------|--------------------|
| Does this lot require a reserve area? | <u>Yes</u> | Amount Required | <i>100 percent</i> |
| Does this site contain both installation and reserve? | <u>Yes</u> | | |
| Available area across slope for Reserve | | | <i>70 feet</i> |
| Available area down slope for Reserve | | | <i>68 feet</i> |
| Total area in square footage available for Reserve | | | <i>4760 sq.ft.</i> |
| Percent of Reserve Available | | | <i>117 percent</i> |

Notes:
To the best of our knowledge and belief, this site complies with all local ordinances such as the CBPA.



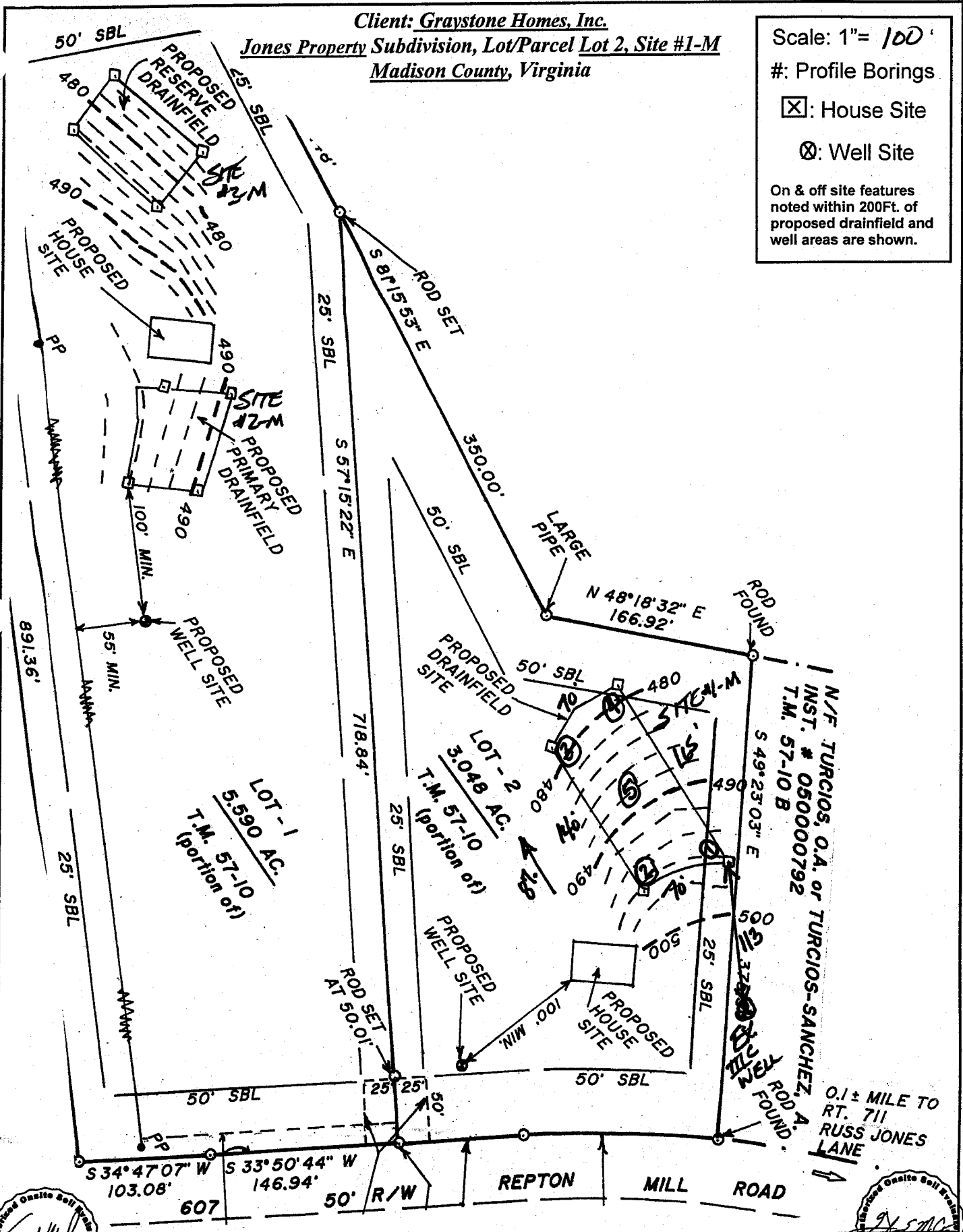
Site Sketch

Client: Graystone Homes, Inc.
Jones Property Subdivision, Lot/Parcel Lot 2, Site #1-M
Madison County, Virginia

Scale: 1" = 100'
 #: Profile Borings

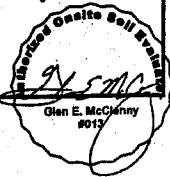
☒: House Site
 ⊗: Well Site

On & off site features noted within 200Ft. of proposed drainfield and well areas are shown.



N/F TURCIOS, O.A. or TURCIOS-SANCHEZ, A.
 INST. # 050000792
 T.M. 57-10 B

0.1 ± MILE TO
 RT. 711
 RUSS JONES LANE



Certification Statement

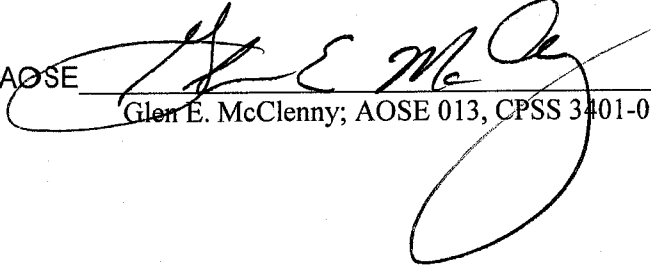
County: Madison County

Date: June 26, 2006

Property Identification: Tax Map 57-10, Jones Property, Lot 2, Site #1-M

Submitted by: Glen E. McClenny; AOSE 013, CPSS 3401-000049

This is to certify according to subsection 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 a Subdivision Approval be approved.

AOSE  Date: June 26, 2006
Glen E. McClenny; AOSE 013, CPSS 3401-000049

The information presented in this submittal package represents the best available information as of the evaluation date noted on the soil profile description report contained in this package. Due to the potential for subsequent events to negatively impact the recommendations made in this package, it is our firm's very strong recommendation to submit this documentation to the local health department for approval as soon as it is received by the client. Failure to do so may render the information contained in this package void. M&M Soil Consultants, Inc., as well as the certifying individual, accept no liability for subsequent events that occur after the date of evaluation.

