

APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____ A/P _____

AGENCY REVIEW: _____ DATE _____

DO NOT WRITE ABOVE THIS LINE

I HEREBY APPLY FOR THE NECESSARY TESTING/EVALUATION PRIOR TO ISSUANCE OF SEWAGE DISPOSAL SYSTEM PERMIT(S) TO:

CHECK AS NEEDED:

- CONSTRUCT NEW SEPTIC SYSTEM(S)
- REPAIR/ADD TO AN EXISTING SEPTIC SYSTEM
- REPLACE AN EXISTING SEPTIC SYSTEM

CHECK AS NEEDED:

- NEW STRUCTURE(S)
- ADDITION TO AN EXISTING STRUCTURE
- REPLACE AN EXISTING STRUCTURE

CHECK ONE:

- CREATE NEW LOT(S)
- BUILD ON AN EXISTING LOT IN A SUBDIVISION
- BUILD ON AN EXISTING PARCEL OF RECORD

IS THE PROPERTY WITHIN 2500' OF ANY RESERVOIR?

- YES
- NO

THE TYPE OF STRUCTURE IS:

- RESIDENTIAL WITH _____ PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE (NOTE UNKNOWN IF APPROPRIATE)
- COMMERCIAL (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/CUSTOMERS ON ACCOMPANYING PLAN)
- INSTITUTIONAL/GOVERNMENT (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/USERS ON ACCOMPANYING PLAN)

PROPERTY OWNER(S) Mary Marilley, David Carney, esq., Representative

DAYTIME PHONE 410-740-4600 CELL _____ FAX 410-730-7729

MAILING ADDRESS 10715 Charter Drive, Suite 200 Columbia MD 21044

STREET CITY/TOWN STATE ZIP

APPLICANT Heritage Land Development

DAYTIME PHONE 410-489-7900 CELL 410-984-0408 FAX 410-489-4754

MAILING ADDRESS P.O. Box 482 Lisbon MD 21765

STREET CITY/TOWN STATE ZIP

APPLICANT'S ROLE DEVELOPER BUILDER BUYER RELATIVE/FRIEND REALTOR CONSULTANT

PROPERTY LOCATION _____

SUBDIVISION NAME _____ LOT NO. 3

PROPERTY ADDRESS 5084 Sheppard Lane Clarksville, MD 21029

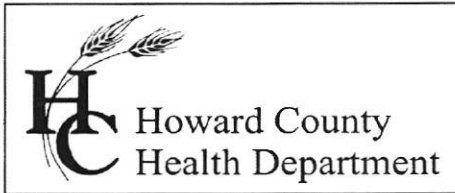
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 28 GRID 18 PARCEL(S) 71 PROPOSED LOT SIZE _____

AS APPLICANT, I UNDERSTAND THE FOLLOWING: THE SYSTEM INSTALLED SUBSEQUENT TO THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC SEWAGE IS AVAILABLE. THIS APPLICATION IS COMPLETE WHEN ALL APPLICABLE FEES AND A SUITABLE SITE PLAN HAVE BEEN RECEIVED. I ACCEPT THE RESPONSIBILITY FOR COMPLIANCE WITH ALL M.O.S.H.A. AND "MISS UTILITY" REQUIREMENTS. APPROVAL IS BASED UPON SATISFACTORY REVIEW OF A PERC CERTIFICATION PLAN. TEST RESULTS WILL BE MAILED TO APPLICANT.


SIGNATURE OF APPLICANT

HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM
7178 COLUMBIA GATEWAY DRIVE, COLUMBIA, MARYLAND 21046 (410) 313-1771 FAX (410) 313-2648
TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

July 15, 2009

Mary Marilley
c/o David Carney, esq.
10715 Charter Drive, Suite 200
Columbia, Maryland 21044

RE: Variance request
Marilley Property
5084 Sheppard Lane
Clarksville, MD 21044

Dear Mary Marilley,

The Health Department submitted a variance request on your behalf for the potential development of the Marilley Property (Howard County Tax map 28, Parcel 71). The Maryland Department of the Environment (MDE) has accepted our recommendation to approve the variance request. This approval will allow for a group of three septic easements to be located at least 200 feet upgrage of an existing well and 5 proposed wells on Walnut Creek subdivision and a proposed well on (proposed Lot 3 of) the Marilley Property.

Consideration of the soil conditions and percolation test results, assumed groundwater flow patterns, landscape position, and type of well construction, were some of the factors used in making our recommendation for approval. A preliminary nitrogen balance calculation was also utilized in the analysis.

Results of the analysis indicates that there is a need to reduce release of nitrogen in order to locate any potable (well) water sources downgrade of the sewage disposal systems. This determination will require installation of advanced pretreatment systems on proposed Lots 2 and 3 to reduce nitrogen by using best available technology (BAT). Additionally, MDE requires that the wastewater be distributed evenly throughout the distribution trenches on Lots 2 and 3. This type of distribution typically is achieved by utilization of a system design known as a pressure manifold or low-pressure dosing (LPD).

The Health Department will enforce these findings as follows:

1. The Building Permit plans for Lots 2 and 3 respectively must include detail design for the low-pressure distribution system and for the locations of other septic system components.
2. Maintenance Agreements for the pre-treatment systems must be filed with Howard County Land Records prior to release of the septic system installation permits for Lots 2 and 3, respectively

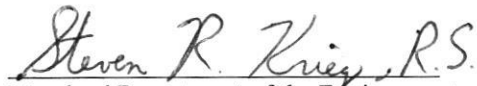
At this time, grant assistance through the Bay Restoration Fund (BRF) may be available for properties similar to Lot 2 or Lot 3. This assistance may (or may not) be available at such time as construction may begin on either lot. The persons who ultimately may develop either Lot 2 or Lot 3 should contact John Boris at MDE for guidance in determining whether the subject property is eligible for a BRF grant. He can be reached at 410-537-3678.

If you have any questions regarding this letter, you may contact me at the above address or by calling (410) 313-1771.

Sincerely,

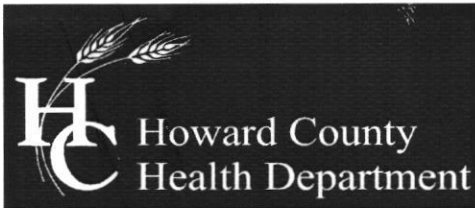


Robert Bricker, R.S.
Well and Septic Program



Steven R. Krieg, R.S.
Maryland Department of the Environment

COPY: Tim Feaga and Jeremy Rutter, Heritage Land Development (Applicant)



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

June 8, 2009

To: Heritage Land Development, applicant
c/o Tim Feaga and Jeremy Rutter

RE: Percolation Test Report, Marilley Property-proposed Lots 2 and 3 (WP-09-145),
5084 Sheppard Lane, Tax Map 28 –Parcel 71, A530988

Percolation testing was conducted on the subject property on June 2, 2009. Profile descriptions were recorded for all test locations observed and percolation test results were recorded for all but one of the described locations. The records of results and observations are the content of the 2 attached Percolation Test Field Worksheets. These records will be kept in a Health Department file for the subject property.

Suitable soil properties occur in the areas represented by test locations 5170 to 5174, the area designated as the septic easement for proposed Lot 2. Test conducted between 3.5 and 4.5 feet depth had moderately rapid to moderate percolation rates. Deep loamy sand subsoils were observed at all test locations. Trench Bottoms on proposed Lot 2 should be no deeper than 5 feet.


The septic easement area proposed for Lot 3 is adversely impacted by topography. Active accelerated erosion occurs in the head of an upland drain that bisects the proposed area. This erosion is expected to continue and may worsen as it is downslope of the driveway proposed to serve Lots 2 and 3. Also, the area proposed for the septic easement is largely on a landscape position immediately above a broad headland that is dominated by fine-textured soils having slow and very slow percolation rates.

The subsoil at test location 5178 has a very slow percolation rate making that area unsuitable. Test locations 5180 and 5181 were added to prove a boundary for the proposed septic easement. Location 5180 had a slow percolation rate and 5181 had a moderate rate. Test location 5176 was shifted 50 feet to the northwest so that the proposed septic easement may be extended in that direction. After adjustments for unsuitable areas, the higher elevations of the proposed septic easement (represented by test locations 5175, 5177 and 5179) have a moderately rapid percolation rate, and the lower portions of the septic easement will have moderate percolation rates (locations 5176 and 5181). Trench Bottoms will need to be as shallow as possible due to the coarse-textured subsoils.

Other concerns regarding the proposed adjinder (WP-09-145) include the connection of a new well, abandonment of 2 wells, and installation of 2 wells. A new well (HO-95-1213) has been drilled to serve the existing residence (5184 Sheppard Lane, Lot 1) and must be connected. Each of the two pit wells that previously served the residence are located within 100 feet of areas that are approvable (and being proposed as) septic easements. These two wells must be abandoned by a Licensed Well-Driller so that the waiver petition may be considered by the Health Department. Also, wells must be established on proposed Lots 2 and 3 respectively after the Percolation Certification Plan is approved.

If you have any questions regarding the content of this report, please contact me at the above address or by calling (410) 313-2691.

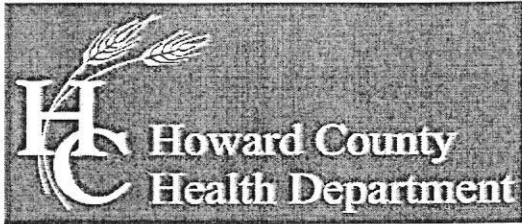
Respectfully,


Robert Bricker, RS, CPSS
Well and Septic Program
Development Coordination Section

Enclosures: Field Worksheets

Copy: file

data to Tony Fertitta, FC&C, Inc.



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

Main: 410-313-2640 | Fax: 410-313-2648

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

SEWAGE DISPOSAL SYSTEM SPECIFICATIONS WORKSHEET

Address: 5102 Clay Circle Lane

Subdivision: Marilley Property Lot: 3

Initial system: Application rate: 0.8 Effective area beginning depth: 3 Bottom maximum depth: 6.5

1st Replacement: Application rate: 0.8 Effective area beginning depth: 3 Bottom maximum depth: 6.5

2nd Replacement: Application rate: 0.8 Effective area beginning depth: 3 Bottom maximum depth: 6.5

Design Flow = 150 gallons per day per bedroom

Design flow + application rate = square footage of drainfield required

Linear length of trench required = drainfield square footage x sidewall reduction percentage + trench width

Sidewall reduction credit formula:

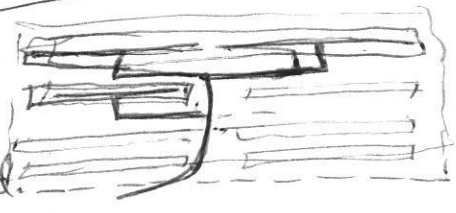
(W + 2) / (W + 1 + 2D) x 100 = Percent of length of standard trench where W=trench width and D= depth between effective area beginning depth and trench bottom.

Standard design requirements:

- All trenches must be equal length unless low pressure dosed
All trenches must be on contour
Minimum trench spacing: 6' for 2' wide trenches, 9' for 3' wide trenches. Additional spacing may be needed for deep trenches using formula: 2D + W
Maximum trench length is 100'
Maximum pipe depth is 4'

Additional requirements:

LPD required; Trench width - 2 ft.
stake SDA corners
stake location of Force Main/mainline

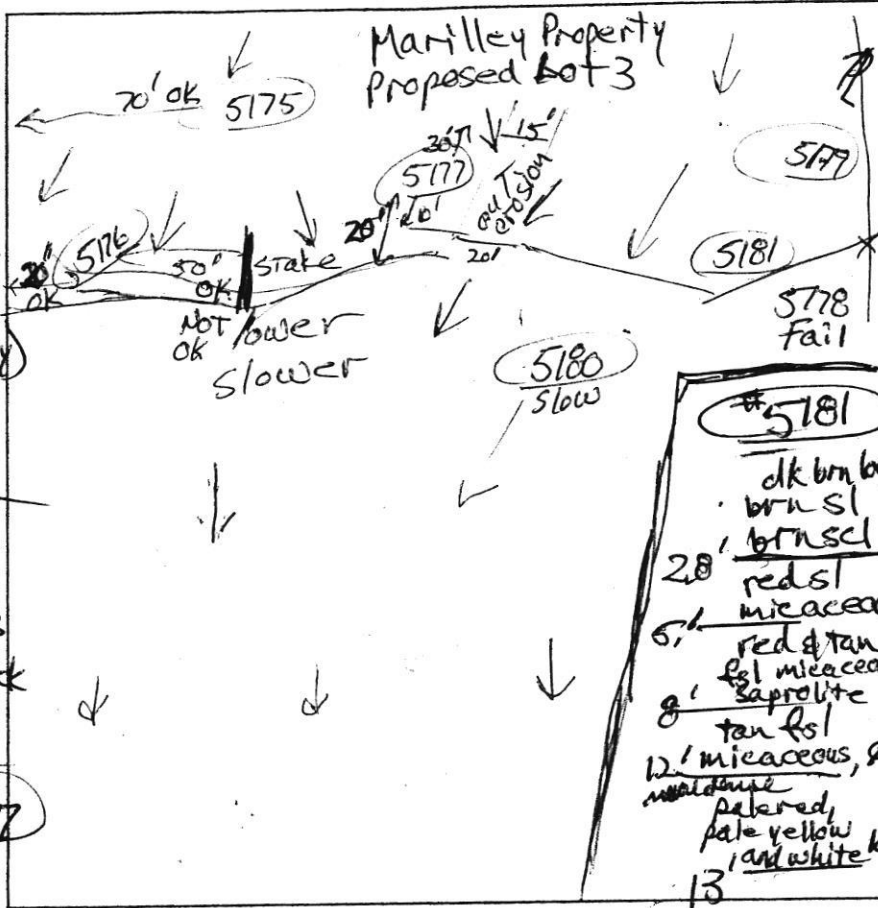


Prob. 2000 gallon (or larger) Pump Tank

#bedrooms unknown
JCB 5/1/14

A/P

Marilley Property
Proposed Lot 3



- 5179
- 0.8' dk brn loam common mica
- 1' brn scl 2msbk common mica few gravel
- 2' brn sl (heavy) 1msbk
- 3' brn sl common mica
- 5' red ls micaceous
- 8.5' red chls micaceous
- 11.5' red, yellow, black ls, 3 mpl saprolite
- 13' 5175 5177
- 0.3' brn sl
- brn to red-brn scl
- 3' red-brn heavy sl
- 4.5' red-brn chls micaceous Saprolite
- 12' 5176
- dk brn loam
- 0.5' to brn sl
- 2.3' brn scl
- brn grsl heavy many mica
- 3.5' red sl many mica
- 8' tan fs! micaceous
- 13'

- 5178
- 1' dk brn loam over dk brn sl
- brn grsl few mica 2msbk
- brn grsl heavy
- 3.5' pale red & tan pale sl & loam
- 6' red, brn & white mica
- 12' brn & blk w/ pale red, yellow & white micaceous
- 13' dk brn sl brn sl
- brn fs! 2msbk
- 2.5' yet-brn fs! 1msbk
- 4.5' yet-brn fs! 2 m pl
- few grey depletions
- 5.5' red ls
- 6' Tan & red (A) micaceous
- 12' brn fs! e2d (grey) depletions
- 13'

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
6/2/09	5179	3.5' / 13'	0	1.8	6.3	4.5	P
6/2/09	5178	4' / 13'	12:13	12:34	1:14	40	F
6/2/09	5180	7' / 12'	12:51	1:05	1:33	28	P
resett	5178	6' / 13'	0	15	45+	>30	F
6/2/09	5175	5' / 12'	27	28.2	31	2.8	P
6/2/09	5176	4.5' / 13'	0	11.0	25	14	P
6/2/09	5177	12'	Visual	OK 4.5'	12'		P
6/2/09	5181	5.8' / 12'	0	10	20	10	P

REMARKS: Lower Septic boundary fixed by top of very slow subsoils

SANITARIAN: RB BACKHOE: Deniss Kato OTHERS: Jeremy Rutter

TEST HOLES USED IN SDA: 5175, 5176, 5177, 5179 Upper: 2.7 SQ. FT/BR: 125

5181 Lower: 12 SQ. FT/BR: 187.5

TRENCH WIDTH: _____ INLET DEPTH: _____ MAX. BOT DEPTH: _____ EFFECTIVE SW: _____

FILE INQUIRY NOTES

For lot 2 & lot 3, Marilley Property

DATE	RESULTS OF REVIEW FOR FILE
7/10/09	See Perc Cert Notes.
	<p>In essence, a Building Permit is not to be issued for this lot until the required Septic System plans are submitted. The Building Permit may be released when the the Environmental Sanitation may reasonably expect a correct plan can be sub submitted.</p> <p>Similarly, An ICOP is not to be issued for this property unless the septic system Installation Permit is approved and an Operation and Maintenance Agreement is Recorded at Howard County Land Records</p>
7/29/09	Well must be drilled and well Completion Report approved prior to Building Permit approval.

8/1/14- Well requires 50' steel casing or 10' into bedrock whichever is deeper.