

APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____

AP 533898

AGENCY REVIEW: _____

DATE 8-26-10

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) MURIEL JANE BERKE, TRUSTEE C/O ELLIOT S. BERKE, SUCCESSOR TRUST

DAYTIME PHONE _____ CELL _____ FAX _____

MAILING ADDRESS 4025 2ND RD, N. ARLINGTON VA 22203-2626
STREET CITY/TOWN STATE ZIP

APPLICANT ROBERT H. VOGEL ENGINEERING, INC.

DAYTIME PHONE 410-401-7000 CELL _____ FAX 410-401-8901

MAILING ADDRESS 8407 MAIN STREET ELLICOTT CITY MD 21113
STREET CITY/TOWN STATE ZIP

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

PROPERTY LOCATION
SUBDIVISION/PROPERTY NAME BERKE PROPERTY LOT NO. _____

PROPERTY ADDRESS ADDISON WAY COOKESVILLE
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 8 GRID 10 PARCEL(S) 79 PROPOSED LOT SIZE 8.04 AC

AS APPLICANT, I UNDERSTAND THE FOLLOWING: THE SYSTEM INSTALLED SUBSEQUENT TO THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC SEWERAGE 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.

Megan Brett
SIGNATURE OF APPLICANT

HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM
7178 COLUMBIA GATEWAY DRIVE COLUMBIA, MARYLAND 21046 (410) 313-2640 FAX (410) 313-2648
TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH

AP _____

Empty rectangular box for notes or data.

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Empty rectangular box for notes or data.

Large empty rectangular box for detailed notes or diagrams.

Empty rectangular box for notes or data.

Empty rectangular box for notes or data.

Empty rectangular box for notes or data.

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H

REMARKS _____

SANITARIAN _____ BACKHOE _____ OTHERS _____

TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____

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

Percolation Information- Berke Property

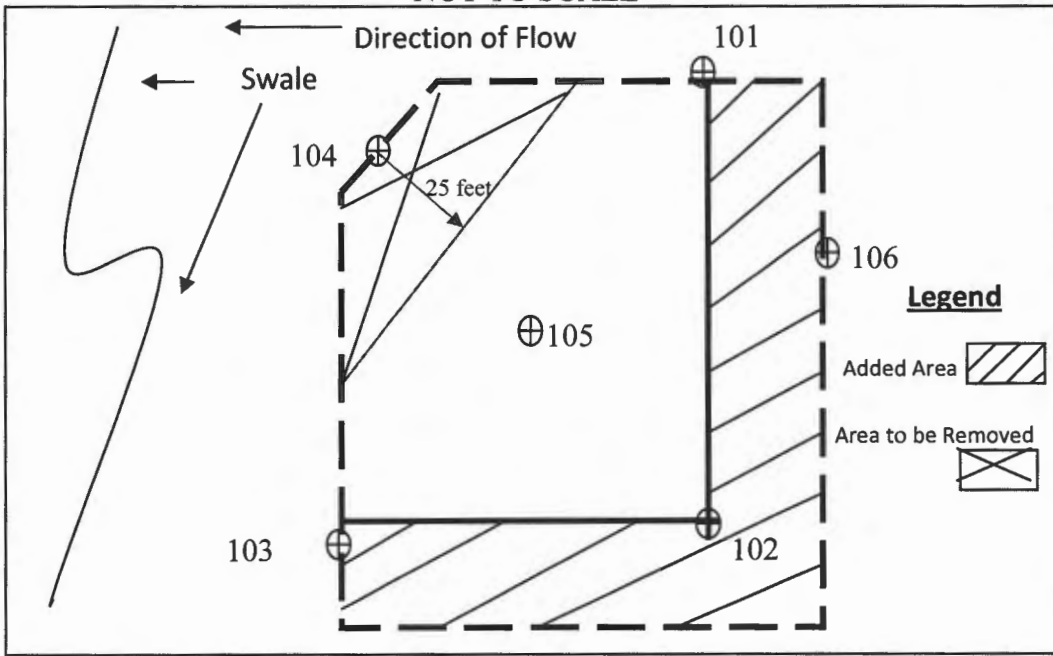
NOT TO SCALE

#101

2sbk , Dk. Brn SCL
-----0.8'

Red-Brown SCL
Much Mica
Strong SBK
-----5.5'

Red-Brown Yellow FSL, Silty
Much Mica
Weak Medium
Sub Angular Blocking
-----10'



#104

Dk. Gray Brown 2 SBK SCL
-----0.8'

Red Brown Medium SCL
Much Mica
Strong SBK
-----8'

Yellow Band Red Brown FSL Silty
-----12'

#102

2sbk , Dk. Brn Grey SCL
-----0.8'

Red-Brown SCL
Strong SBK
-----5.5'

Red-Brown Yellow FSL
Weak Much Mica
10-20% Small Stones
-----10'

Date	Test	Depth	Start	Break 1" Drop	Break 2" Drop	Time of 2 nd Inch	P/F/H
9-22-10	101	10'		Visual	Pass	→	Pass
9-22-10	102	5.5'/10'	10:01	10:06	10:11	5 min.	Pass
9-22-10	103	5.5'/10'	9:31	9:34	9:37	3 min.	Pass
9-22-10	104	12'	Clay			→ 8'	Fail
9-22-10	105	5'/10'	10:45	10:49	10:56	7 min.	Pass
9-22-10	106	5'/10'	11:10	11:23	11:37	14 min.	Pass

#105

2sbk , Dk. Gray Black SCL
-----0.8'

Red-Brown SCL
-----5'

Red-Brown FSL
Much Mica
10% - 20% Small Stones
Few Fe Deposits Scattered
-----10'

#103

2sbk , Dk. Brn SCL
-----0.8'

Red-Brown SCL
Much Mica
-----5.5'

Red-Brown Medium SL
10-15% Small Stones
Much Mica
-----10'

Remarks: Perc area suitable for functional SDA.

Sanitarian D. Bernard Backhoe Others

Test Holes Used in 6 Perc Time 14 min. SQ.FT/BR 4

Trench Width 3' Inlet Depth 5' Max Bot. Depth 6' Effective S/W 2'

August 2009



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: Addison Way

Subdivision: Tax Map 8, Parcel 79 Lot: _____

7.13 Ac. Parcel at end of Addison Way on East Side

105,103,102 Initial system: Application rate: 1.2 Effective area beginning depth: 5 Bottom maximum depth: 6
105,102st Replacement: Application rate: 0.8 Effective area beginning depth: 5 Bottom maximum depth: 6
104,106nd Replacement: Application rate: 0.8 Effective area beginning depth: 5 Bottom maximum depth: 6

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:

$$\frac{W + 2}{W + 1 + 2D} \times 100 = \text{Percent of length of standard trench where } W = \text{trench width and } D = \text{depth between effective area beginning depth and trench bottom.}$$

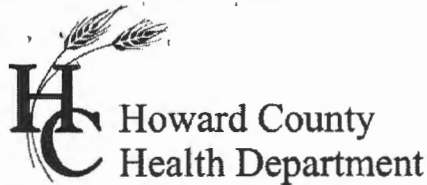
Standard design requirements:

- All trenches must be equal length unless low pressure dosed
- All trenches must be on contour.
- Minimum trench spacing: 10' for all trenches utilizing sidewall reduction credit. Additional spacing may be necessary for any trench using over 3.5' of effective sidewall. In those cases, the spacing formula is 2D + W up to a maximum spacing of 18'.
- Minimum trench spacing for trenches with no sidewall credit (bottom area only) is 6' for a 2' wide trench and 9' for a 3' wide trench (spacing is measured edge to edge)
- Maximum trench length is 100'
- Maximum pipe depth is 4'

Additional requirements:

Approved: R. Brierker

Date: 7/17/2018



7178 Columbia Gateway Drive, Columbia MD 21046
(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

DATE: September 29, 2010

RE: **Percolation Test Results**

Purpose: Create a New Lot and Establish Septic Reserved Area
Property ID: Berke Property
Cooksville, Maryland
Tax Map: 8, Parcel: 79, Grid: 16

TO: Muriel Jane Berke /Trustee
C/o Elliot S. Berke /Successor Trust
4625 2nd Road North
Arlington, Virginia 22203-2626

Percolation testing was recently conducted September 22, 2010 on the above referenced property, in an effort to establish sufficient septic reserve area and create a new lot.

Results indicate satisfactory soil conditions for onsite wastewater disposal and adequate septic reserve area to support the proposed number of bedrooms for a single family dwelling.

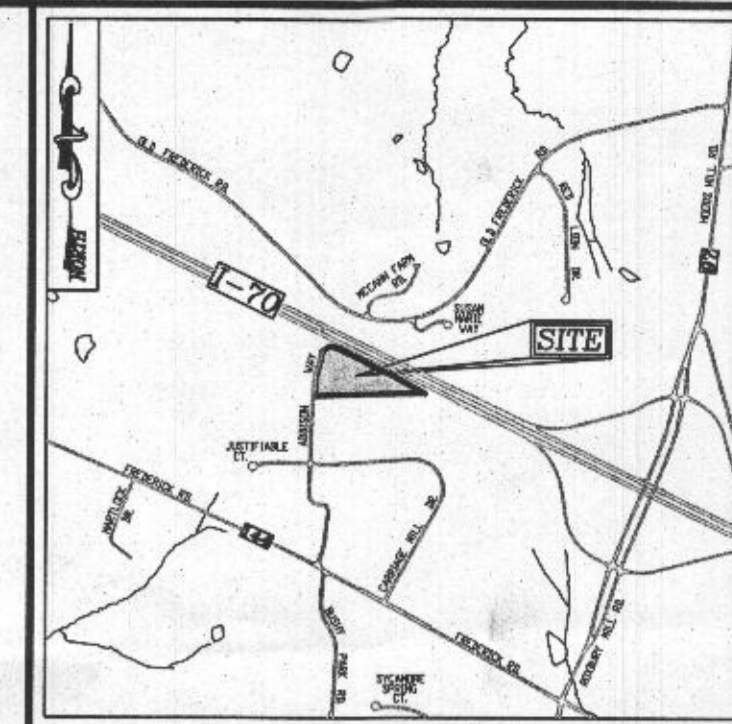
A total of 6 test holes were dug. Field data collected is shown on the Percolation Test Worksheets enclosed with this letter. Test # 104 will not be used to establish a reserve area because of inadequate soil conditions. A new reserve area with 2 repairs was established on the lot and the proposed area was extended out 20 feet to help establish the required 10,000 s.f. Acceptable ranges for recommended inlet and trench bottom depth, and usable sidewall are indicated, and may be confirmed at the time of installation.

The next step in this process is to have your engineer /consultant submit a Percolation Certification Plan. If you have any questions regarding this evaluation or requirements for the Percolation Certification Plan, please contact me at the above address or by telephone at (410) 313-2775.

Respectfully,

Dana Bernard
Dana Bernard, Environmental Sanitarian
Bureau of Environmental Health
Well and Septic Program
Phone (410) 313-2775
E-mail: DBernard@howardcountymd.gov

DLB
Enclosures
cc: Well & Septic program file
Vogel Engineering, Inc.
C/o Robert H. Vogel



VICINITY MAP
SCALE: 1"=2,000'
ADC MAP COORDINATE: 4692 F-8

LEGEND

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- ADJACENT BOUNDARY LINE
- EXISTING CONTOUR
- EXISTING TREELINE
- EXISTING UTILITY POLE
- EXISTING SIGN
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING OVERHEAD LINES
- SHE
- SKC-2
- PROPOSED CONTOUR
- PROPOSED WELL
- EXISTING WELL
- PASSED PERC. TEST LOCATION
- FAILED PERC. TEST LOCATION
- PROPOSED PRIVATE WELL AREA

GENERAL NOTES:

1. THE BOUNDARY INFORMATION SHOWN ON THIS PLAN IS TAKEN FROM HOWARD COUNTY GIS AND DEED PLOTS.
2. ANY CHANGES TO A PRIVATE SEWAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
3. THE TOPOGRAPHY SHOWN ON THIS PLAN IS TAKEN FROM HOWARD COUNTY GIS, AND IS SHOWN IN TWO FOOT INTERVALS. THE TOPOGRAPHY IS VERIFIED TO ACCURATELY REPRESENT THE RELATIVE CHANGES ON THE SUBJECT PROPERTY.
4. TO THE BEST OF OUR KNOWLEDGE ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
5. THE LOT(S) SHOWN HEREON COMPLIES/COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT.
6. ALL WELLS TO BE DRILLED PRIOR TO RECORD PLAT SUBMISSION.

THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF AT LEAST 10,000 SF AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE. IN THIS AREA ARE RESTRICTED. THIS SEWAGE DISPOSAL AREA SHALL BE NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A MODIFIED SEWAGE EASEMENT SHALL NOT BE NECESSARY.

OWNER

MURIEL JANE BERKE, TRUSTEE
C/O ELLIOT S. BERKE, SUCCESSOR TRUST
4625 2ND RD. N.
ARLINGTON, VA. 22203-2626

NO.	REVISION	DATE

PERCOLATION CERTIFICATION PLAN

BERKE PROPERTY

TAX MAP: 8 BLOCK: 16 PARCEL: 79
L. 9731 / F. 185 ZONED: RC-DEO
4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410.461.7666
ELLCOTT CITY, MD 21043 FAX: 410.461.8961

PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE JURISDICTION OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 09-27-2012.

DESIGN BY: RHY
DRAWN BY: JMR/KG
CHECKED BY: RHY
DATE: JANUARY 2011
SCALE: 1"=50'
W.O. NO.: 10-13

APPROVED FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS
B. Wilson for Steen Beilenson 2/3/2011
COUNTY HEALTH OFFICER
PERCOLATION CERTIFICATION:
I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION AND IS CORRECT TO MY BEST KNOWLEDGE AND BELIEF.
Sharon M. Goldsmith 1-24-11
LAND SURVEYOR

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP
GgB	GLENNELG LOAM, 3 TO 8 PERCENT SLOPES	B
UoF	UDORTMENTS, HIGHWAY, 0 TO 65 PERCENT SLOPES	-