



APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____

AP 529467

AGENCY REVIEW: _____

DATE 7/1/08

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 UNKNOWN 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) WARREN MILES

DAYTIME PHONE 301 854 2777 CELL N/A FAX N/A

MAILING ADDRESS 6520 PAPER PLACE HIGHLAND MD 20777
STREET CITY/TOWN STATE ZIP

APPLICANT RYAN MCWHORTER

DAYTIME PHONE 410 984 5813 CELL 410 984 5813 FAX 301 854 3449

MAILING ADDRESS 4911 BUFFALO RD MT AIRY MD 21771
STREET CITY/TOWN STATE ZIP

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

PROPERTY LOCATION
SUBDIVISION/PROPERTY NAME BRIGHTON FARMS ESTATES LOT NO. 2

PROPERTY ADDRESS N/A 13590 Brighton Dam Rd. CLARKSVILLE, MD 21029
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 34 GRID 14 PARCEL(S) 108 PROPOSED LOT SIZE 3.05 AC

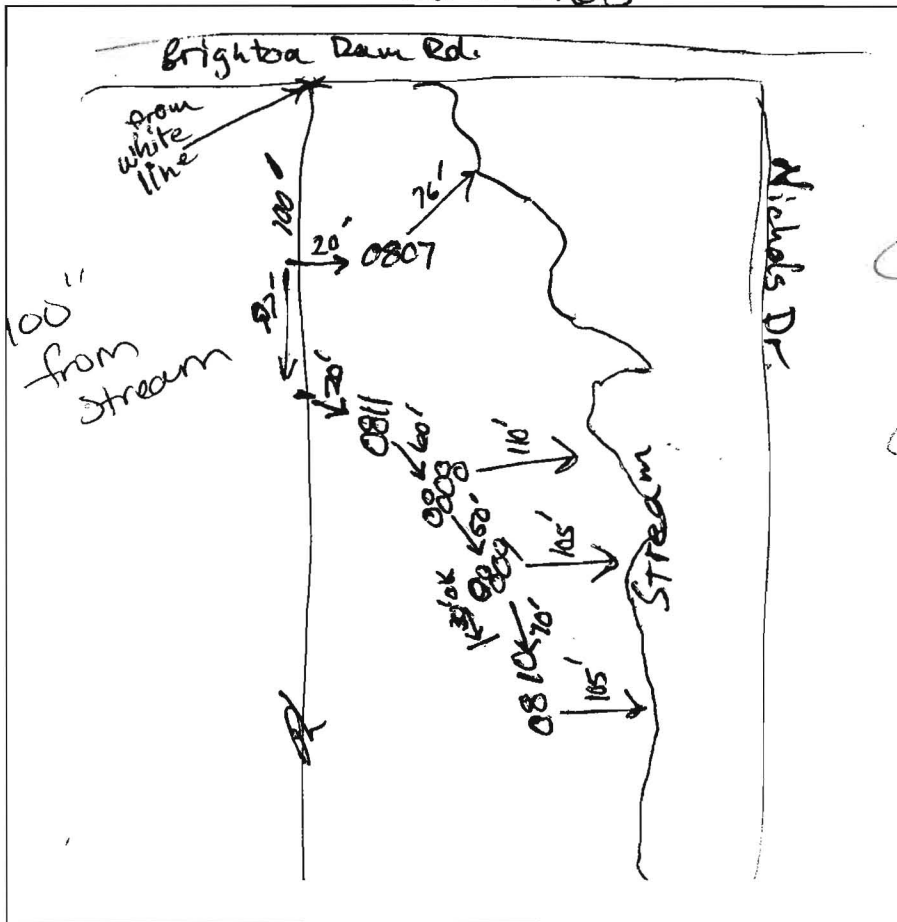
AS APPLICANT, I UNDERSTAND THE FOLLOWING: THE SYSTEM INSTALLED SUBSEQUENT TO THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS APPLICATION IS COMPLETE WHEN ALL APPLICABLE FEES AND A SUITABLE SITE PLAN HAVE BEEN RECEIVED. I ACCEPT THE RESPONSIBILITY FOR COMPLIANCE WITH ALL M.O.S.H.A.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

TEST RESULTS WILL BE MAILED TO APPLICANT.

Ryan McWhorter
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

13785 Nichols



0807

6" dk brn l sbk
Sticky org brn sc l sbk

24" yellow brn sc l f sbk

stick gray sc l (mottled)

H₂O @ 7"

0810

4" dk brn sl few boulders & flags & gravel

brn sl boulders & flaggy

20" brn fld

30" H. brn ls 3 cpl, dense channery & flaggy

58" R

#0808
18% slope below 28%

#0809
13% slope below 25%

#0810
25% slope

#0811
13% slope below 33%

0808

5" dk grey brn sl, many roots

brn sl 7 f sbk

10" Common roots

16" brn sl

few med fine roots

36" 2 repl roots

40" rock layer schist - mica zone discontinuous

brn ls few flags few fine roots

2 repl

96" ↓

0809

Same as 0808

but without rock layer at 36"

0811

4" brn sl few mica

11" dk brn sl few mica

16" brn sl 7 f sbk common mica

36" brn sl heavy 2 w sbk

58" brn chsl

96" brn chsl

122" ↓ 4 el brn grsl moist

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
7/10/08	0801	6"	10:50	11:02	11:23	21	P
7/10/08	0801	2'	11:37	< 60 min			F
7/10/08	0801	3'	1:31	1:35	1:42	7	P
7/10/08	0807	1'	3:24	3:29	3:38	9	PH*
7/11/08	0808	52"	0	45 min	16.5	12 min	P
7/11/08	0809	48"	0	75 min	30 min	22.5 min	P
7/11/08	0811	48"	2:56	3:08	3:31	24	P
7/11/08	0810	Visual, 58"					F

REMARKS

SANITARIAN RB / HS BACKHOE Ryan MacWhorter OTHERS

TEST HOLES USED IN SDA 0808, 0809, 0811, AVG. PERC TIME 19.5 min. SQ. FT/BR 250

TRENCH WIDTH 2 INLET DEPTH 2 MAX. BOT DEPTH 4 EFFECTIVE SW 2

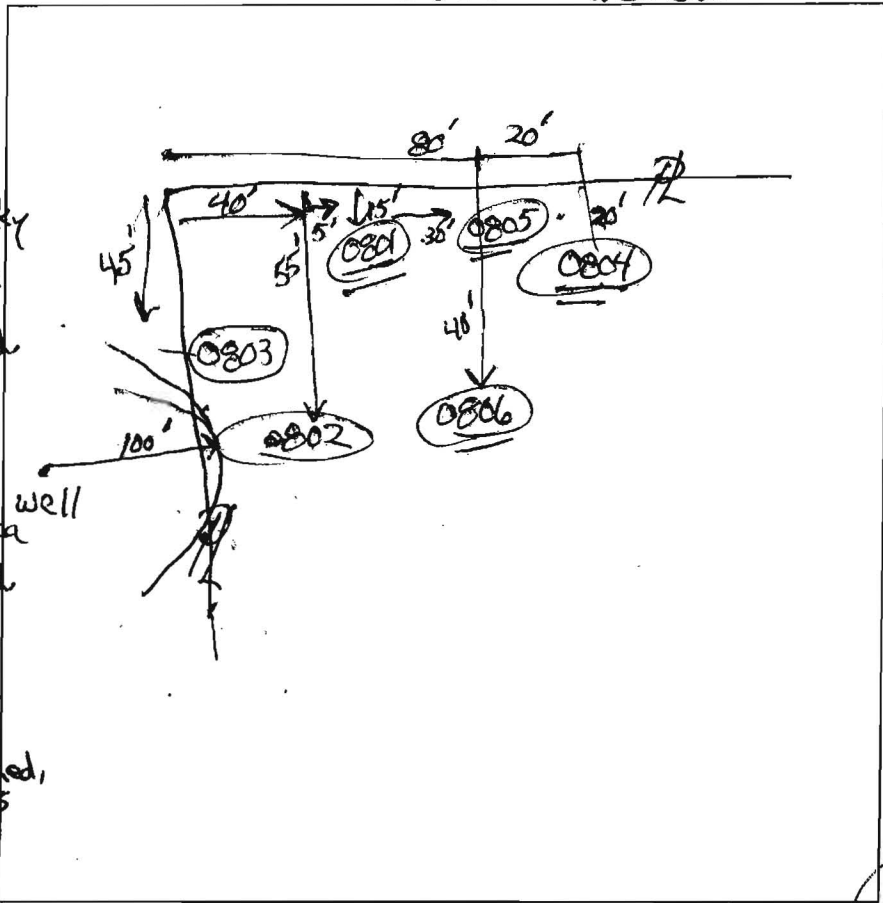
4BR = 285 linear Ft. (TOTAL)

specs for bwer septic area

13785 Nichols

0803

A/P



0801
 dk grey-brn sl
 6" 20% gravel
 brn scl - sticky
 30% stone & boulders
 1 msbk many coarse & med roots
 20" brn sl, om
 common roots
 30" brn sl, many mica
 3 mpl common coarse & med roots
 52" lt grey & brn ls
 3 epl dense few flags
 common coarse & med, many mica roots
 22" lt grey & brn ls
 2 epl, few flags & stone
 90" no roots
 75"
 0802
 dk brn sl
 few mica
 11 many roots
 brn scl - sticky
 few stone
 24" many roots
 brn sl, om
 common coarse to fine roots
 32" brn sl
 3 mpl. few fine roots
 18" lt grey & brn ls
 dense no roots
 52" R

5" dk brn sl
 brn scl
 20% stone & flags
 18" brn sl
 3 mpl
 24" brn sl
 dense, few boulders
 54" R
 many roots to 12"
 common roots to 24"
 none below
 0804
 dk brn sl
 few mica
 many roots
 5" brn sl heavy
 2 msbk many roots
 14"
 brn sl, 3 mpl
 common med & fine roots
 48" lt grey-brn ls
 3 epl
 few fine & med roots
 86" lt grey-brn ls
 orange & black coatings
 92"
 77"
 0806
 dk grey-brn sl
 many roots
 3" brn scl
 20% gravel & stone
 many roots
 24" brn sl, 2 mpl
 common med & fine roots
 36" lt grey & brn ls
 3 epl, few channels
 11 common roots to 55"
 87"

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
7/10/08	0802	24"	11:03	11:28	12:29	>60	F
7/10/08	0802	10"	0	0.7 min	—	repeat	↓
	0802	repeat	1 min	4 min	7 min	3	P (orig)
7/10/08	0802	24"	11:32	11:37	11:54	17	P
7/10/08	0801	72"	10:50	11:02	11:23	21	P
7/10/08	0804	Visual	DK to	7'	edge of easement		P
7/10/08	0805	36"	10:33	10:50	11:46	56	P (alt)
7/10/08	0803	Visual	very bouldery	refusal at 54"			F

REMARKS
 SANITARIAN RB / HS / DB BACKHOE Ryan MacWhorter OTHERS
 TEST HOLES USED IN SDA 0801, 0804, 0805, 0806 AVG. PERC TIME 31 SQ. FT/BR 250
 TRENCH WIDTH 3 INLET DEPTH 2' MAX. BOT DEPTH 3.5 EFFECTIVE SW 1.5

3' wide: 236 L.F.
 2' wide: 330 L.F.

specs for upper septic area



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 22, 2008

Ryan MacWhorter

RE: Percolation Test Report for 13785 Nichols Drive (Brighton Farms Estates, Lot 2)

Dear Mr. MacWhorter,

Percolation testing was conducted on the referenced property on July 10 and 11, 2008. All percolation tests conducted were standard tests, measuring rate of fall for a pre-wet period followed by measurement and recordation of the time required for the water level to drop 1 inch. The soils tested were primarily those within soil map unit MkF. Percolation Test Results indicate areas of soils' conditions that are both satisfactory and unsatisfactory for onsite wastewater disposal. Subsequently, two very limited areas could be designated as having properties suitable for inclusion in a septic easement.

Eleven test holes were dug for profile description and standard percolation tests. Seven holes 'Passed' (at specific depths), three 'Failed', and one is 'Hold'. The three the failing tests (#802, #803 and #810) define boundaries to soils too shallow for inclusion in the proposed easement. The test on 'Hold' (#807) was placed near a soil unit boundary (MkF-GnB), and proved to be a wet-season soil.

Six of the seven passing tests have very similar profiles. Soil textures range from sandy loam to loamy sand. The soil depth for these locations is limited at greater than about 7-foot depth due to cementation within a layer of loamy sand having common occurrence of black and orange coatings along pore walls and on rock faces. The seventh passing hole (#811) lies between a steep slope and wet-season soils, and has sandy loam textures throughout the profile with at least 11 feet depth to seasonal water table.

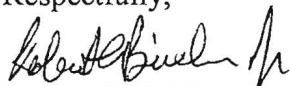
Based on the results, two areas of the subject property may be delineated as suitable for wastewater disposal. Each area is believed to be large enough at least to accommodate one disposal system for a proposed 4-bedroom residence to be constructed on the property. A design utilizing gravity flow of effluent from distribution box to deep trenches (3.5 ft bottom, 1 foot Effective Sidewall) is appropriate for the easement area in the northeast corner of the property. Deep trenches with 2 feet of Effective Sidewall are appropriate for a system just beyond the 100-foot setback to the stream.

The potential of the two areas may not meet the requirement for an initial (drainfield) system and 2 replacement systems (Howard County Code, 3.805.A.2.X), however the COMAR requirement (26.04.02.02.B.1.b.i) for an initial system and one replacement appears to be achievable. [The Brighton Farms Estates subdivision predates the effective date, November 17, 1985, of regulations requiring approval by the Department of Health and Mental Hygiene of septic disposal areas large enough to accommodate an initial system and two repair systems.] Implementation of pre-treatment will likely be required as a condition of approval of any subsequent Building Permit application, or a Use & Occupancy Permit.

Field data collected are shown on the Percolation Test Results Worksheet enclosed with this letter. Recommended Inlet and Trench Bottom depths, and Usable Sidewall are provided for subsequent system design, and all are based on observed soil properties and characteristics at respective test locations as well as the particular soils materials tested. More detailed specification are likely to be developed should this proposed project move forward.

If you have any questions regarding this evaluation or requirements for the Percolation Certification Plan, please contact me at the above address or by calling (410) 313-2691.

Respectfully,



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

Enclosure
Copy: File

ARC	R.	L.	Δ	C	Brg
1	30.00'	41.72'	79°40'23"	38.44'	S59°9'22"E
2	532.25'	88.26'	9°30'2"	88.15'	S76°15'25"E

Existing house

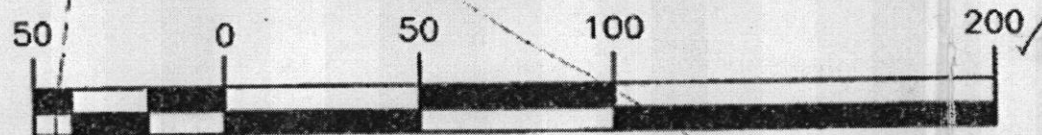
Existing house

Existing house

- NOTES
- ALL EXISTING WELLS ON THE SUBJECT PROPERTY AND WITHIN 100 FEET OF SUBJECT PROPERTY BOUNDARIES ARE REPRESENTED TO THE BEST OF MY KNOWLEDGE AND BELIEF.
 - TWO FOOT INCREMENTAL TOPOGRAPHY ON THIS PLAT IS FROM HOWARD COUNTY GIS (2006) AND IS VERIFIED TO ACCURATELY REPRESENT THE RELATIVE ELEVATION CHANGES ON AND NEAR THE SUBJECT PROPERTY.
 - THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT.
 - ANY CHANGES TO A PRIVATE SEWAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 - THESE AREAS DESIGNATE A PRIVATE SEWAGE EASEMENT AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS EASEMENT ARE RESTRICTED. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A REVISED SEWAGE EASEMENT SHALL NOT BE NECESSARY.
 - THE PURPOSE FOR THIS PERCOLATION CERTIFICATION PLAN IS TO ESTABLISH A SEPTIC EASEMENT AND WELL LOCATIONS TO SERVE A 4-BEDROOM RESIDENCE.
 - THE WELL WILL BE DRILLED AND APPROVED BY THE HEALTH DEPARTMENT PRIOR TO APPROVAL OF THE BUILDING PERMIT APPLICATION.
 - A VARIANCE IS REQUESTED TO REDUCE THE REQUIRED SETBACK AT THE EAST PROPERTY LINE TO 5 FEET.
 - A VARIANCE IS REQUESTED TO THE REQUIREMENT FOR A 25-FOOT SETBACK TO SLOPES GREATER THAN 25%. THE REQUEST HEREIN IS FOR A SETBACK TO AS LITTLE AS 10 FEET AT ELEVATIONS LOWER THAN SLOPES GREATER THAN 25%.
 - FIVE FOOT INCREMENTAL TOPOGRAPHY AND 25% OR GREATER SLOPES SHOWN HERE ARE BASED ON 200 SCALE TOPOGRAPHIC MAP OF HOWARD COUNTY, MARYLAND (KCE ENGINEERING, 2001, PROPOSED PERC CERT).
 - THE AREA AND PROPERTIES OF THE SEPTIC EASEMENT HEREON IS BELIEVED TO BE ADEQUATE TO ACCOMMODATE AN INITIAL SYSTEM AND A REPAIR SYSTEM FOR A 4-BEDROOM SFD.
 - THE 1985 AND 2005 PERCOLATION TEST LOCATIONS ARE APPROXIMATIONS BASED ON BEST FIT OF DATA DESCRIBED BY THE RESPECTIVE SANITARIANS.

- AREA >25% IN SLOPE
- PROPOSED SEPTIC EASEMENT

GRAPHIC SCALE



(IN FEET)
1 inch = 50 ft.

NUMBER	YEAR	RESULTS
0801	2008	PERC TEST PASSED
0802	2008	PERC TEST FAILED
0803	2008	PERC TEST FAILED
0804	2008	PERC TEST PASSED
0805	2008	PERC TEST PASSED
0806	2008	PERC TEST PASSED
0807	2008	PERC TEST HOLD
0808	2008	PERC TEST PASSED
0809	2008	PERC TEST PASSED
0810	2008	PERC TEST FAILED
0811	2008	PERC TEST PASSED
A.05	2005	PERC TEST VISUAL FAIL
B.05	2005	PERC TEST VISUAL FAIL
C.05	2005	PERC TEST VISUAL FAIL
D.05	2005	PERC TEST FAIL
E.05	2005	PERC TEST VISUAL FAIL
1.85	1985	APRIL 1985 PERC TEST
2.85	1985	APRIL 1985 PERC TEST
3.85	1985	APRIL 1985 PERC TEST
4.85	1985	APRIL 1985 PERC TEST
		SOIL TYPE BOUNDARY

PERCOLATION CERTIFICATION PLAN
LOT NO. 2
BRIGHTON FARM ESTATES
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
TAX MAP 34

REVISIONS

NOTES

- INSTALLATION OF PRE-TREATMENT WILL BE REQUIRED (SEE NOTE 11) BEGINNING WITH THE INITIAL SEPTIC SYSTEM.
- THE SEPTIC SYSTEM INSTALLATION MUST BE APPROVED PRIOR TO ISSUANCE OF USE & OCCUPANCY PERMIT.

THOMAS O. NICHOLS, ET.AL.
934/258 68.80 A.
P.60

PERC CERTIFICATE

I CERTIFY THAT THE INFORMATION SHOWN HERON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF

Thomas O. Nichols

8/4/08
DATE

APPROVED FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEM, HOWARD COUNTY HEALTH DEPARTMENT.

for *Michael J. Davis* 8/2/08
COUNTY HEALTH OFFICER rcb DATE

PERCOLATION CERTIFICATION PLAN

SHEET 1 OF 1