

APPLICATION

PERCOLATION TESTING

Fee Not Required - continuation of original evaluation / per A 5/17322

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
3525-H ELLICOTT MILLS DRIVE/ELLICOTT CITY, MARYLAND 21043
TELEPHONE: 313-2640

lot of record
No approved perc area,
Needs evaluation for
Alternative System Design
App 4/16/01

P _____

DISTRICT _____

DATE 4/16/01

TO: THE COUNTY HEALTH OFFICER
ELLICOTT CITY, MARYLAND

I HEREBY APPLY FOR THE NECESSARY TEST PRIOR TO APPLICATION FOR PERMIT TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

PROPERTY OWNER Stewart M Smith

ADDRESS 1391 Underwood Rd PHONE 410 442 2103

AGENT OR PROSPECTIVE BUYER _____

ADDRESS _____ PHONE _____

PROPERTY LOCATION:

SUBDIVISION Ridgeway LOT NO. 6

ROAD AND DESCRIPTION Next to 1391 Underwood Rd

TAX MAP 9 PARCEL # 32

SIZE OF LOT 1.08 Acre TYPE BLDG. SFD - 3 BR
(SINGLE FAMILY DWELLING OR COMMERCIAL)

THE SYSTEM INSTALLED UNDER THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC FACILITIES BECOME AVAILABLE. I FULLY UNDERSTAND THE FEE CONNECTED WITH THE FILING OF THIS PERC TEST APPLICATION IS NON-REFUNDABLE UNDER ANY CIRCUMSTANCES. I ALSO AGREE TO COMPLY WITH ALL M.O.S.H.A. REQUIREMENTS IN TESTING THIS LOT.

[Signature]
(SIGNATURE OF APPLICANT)

APPROVED BY _____ FOR _____ DATE _____

DISAPPROVED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____

REASONS FOR REJECTION OR HOLDING _____

PERCOLATION TEST PLAT/PRELIMINARY PLAT - TITLE OR I.D. # _____ DATE _____

SITE DEVELOPMENT PLAN/FINAL PLAT - TITLE OR I.D. # _____ DATE _____

THIS IS NOT A PERMIT



HOWARD COUNTY HEALTH DEPARTMENT

Diane L. Matuszak, M.D., M.P.H., County Health Officer

April 19, 2001

Mr. Stewart M. Smith
1391 Underwood Road
Sykesville, Maryland 21784

RE: **Percolation Test Date**

Proposal: Establish septic reserve area to serve existing non-buildable lot
Property ID: Ridgeway, Lot #6
Underwood Road
Tax Map: 9 Parcel #32

*fee not required -
this is a
continuation
of initial
evaluation
9/19/01
AMK/DK*

Dear Mr. Smith:

"Wet season" percolation testing for innovative and alternative septic system design has been tentatively scheduled for the above referenced property for **Friday, May 18, 2001 at 10:00 a.m.** Upon receipt of this letter, it shall be necessary for you to submit the necessary percolation test fee (\$225) to this office in order reserve this test date.

Please be advised that while percolation test dates have been assigned for spring wet season, 2001, due to severely depressed groundwater levels, you may wish to postpone percolation testing until a bonafide spring wet season - see attached for further explanation. Upon receipt of this letter, please contact this office at (410) 313-2640 to accept or decline the assigned percolation test date(s).

You shall be responsible for having a contractor on site to excavate the percolation test holes (to a **minimum depth of 14 feet**) as proposed and as required by the Health Department representative at the time of testing.

In the event of uncertain weather (i.e., precipitation or extremes of temperature), please contact this office prior to 9:00 a.m. on the test date to determine whether or not percolation testing can be performed on that date. If it is not feasible to perform the test, a new test date shall be assigned.

Percolation test results may be expected by mail two to three weeks after the completion of the percolation testing. Thank you in advance for your cooperation in this matter.

Sincerely,

Donna K. Clark, R.S.
Water and Sewerage Program
DKC
cc: file

A-17377
COUNTY #

Ridgway lot 6 Underwood Road

SOIL PROFILE C

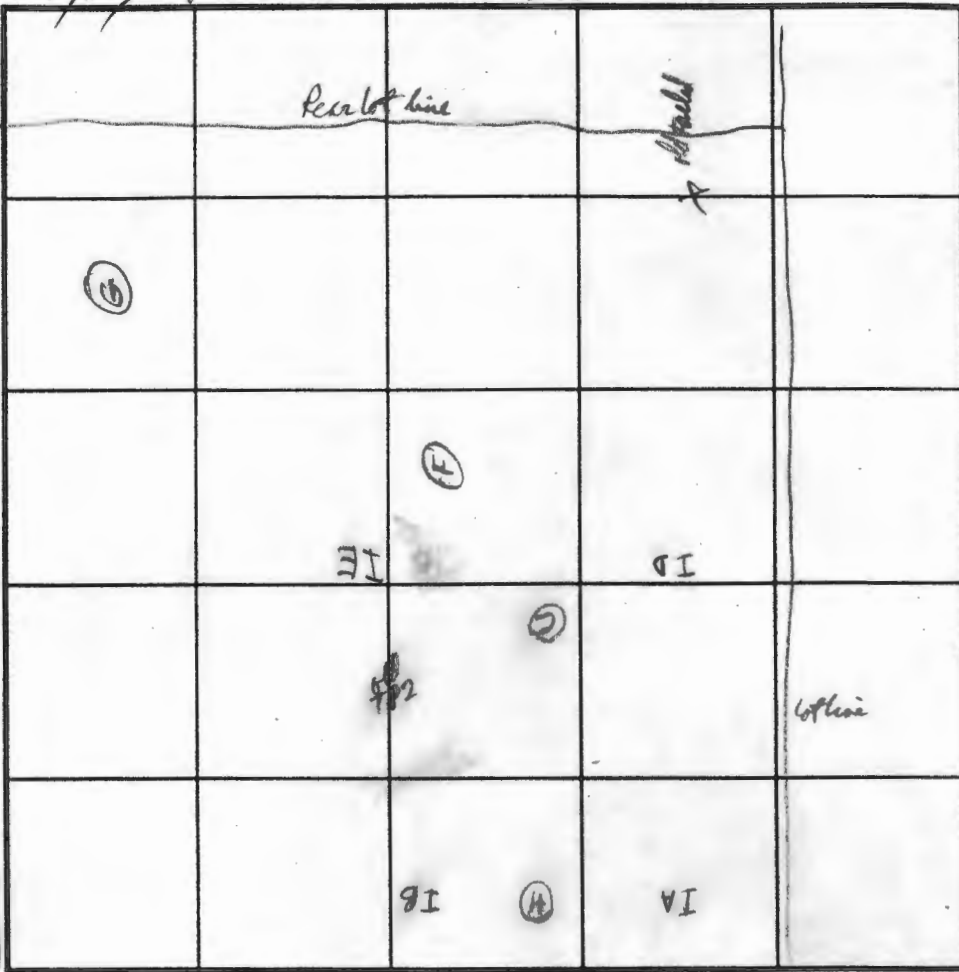
0' dk brn SL (gran)
6" stry. yellow SL
12" 7.5YR 5/8 CL (2m-5sbk)
-14" (m-pi - m-h) Mod. dense
3' 7.5YR 5/8-4/6 H. mic L-SL (moist) massive separate
-46" Same mic SL 2 m P-d old + broken Mn + Fe conc. wet (separate) soil hot No carbonaceous + casing
9 1/2'

F

10" 10YR 4/6 L
10YR 5/8 CL (2.5-m sbk)
21" 7.5YR 5/8 CL-SL (1m sbk) moist
42" 10YR 5/8-4/4 (moist) (brn)
46" H. mic L-SL (massive separate)

G

12" dk. brn yellow SL
10YR 5/8 H-L-CL-SL (1m sbk) moist
20" 10YR 5/8 CL-SL 2m-5sbk) moist m. clay skins
35" 7.5YR 5/8 HSL-SL (m-p sbk) moist
4' 2.5' 10YR 5/8 with in next hole



SOIL PROFILE H

0' dk brn SL
12" Y brn CL-SL
32" yellow (moist) HSL (mic)
-46" (massive separate)
4'

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE. Underwood

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1' DROP		TIME
			START	STOP	START	STOP	
7/6/01	C	66"	11:02	11:16	11:16	11:43	17 min
	F	46"	2:08:00	2:22:00	2:22	2:48	26 min
	H	48"	2:33	3:18	3:18	3:48	45 min
	G	48"	2:49:00	3:11:00	3:11	3:42	30 min

REMARKS _____
 TYPE OF SOIL _____
 TESTED BY ALM, RJP ALSO PRESENT _____
 (LPD design only) (sand lined?)
 TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME 45 min TRENCH WIDTH 3
 INLET DEPTH _____ MAXIMUM BOTTOM DEPTH 4 1/2 (change 5ft with 2ft sand pit in trench) SQ. FT/BEDROOM

TEST DATA

NAME <u>Ridgeview lot 6</u>	FILE NO <u>A17377</u>
LOCATION <u>Underwood Rd</u>	COUNTY <u>Howard</u>
	DATE <u>5/18/01</u>
	GRID _____ E
RECORDED BY <u>R. P. Mally</u>	_____ N

catch is 1hr 20 min Star

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
TP2	I3	14-19'	12:04:00 12:21:00 12:57:00 1:28:00 2:31:00	<i>3/8" in 130 min</i> <i>Too Slow</i> <i>estimate 270 mps</i>	$7 \frac{15}{16}$ " <i>Top</i> $7 \frac{12}{16}$ " <i>(11 1/4")</i> $7 \frac{8}{16}$ " <i>(11 5/16")</i> $7 \frac{6}{16}$ " <i>(11 1/2")</i> $7 \frac{4}{16}$ " <i>(11 5/8")</i>	
TP2	I4	15-20"	12:15:30 12:31:00 1:01:00 1:30:00 2:07:00	<i>1/4" in 96 min</i> <i>est 380 mps</i> <i>Too Slow</i>	$12 \frac{11}{16}$ " $12 \frac{14}{16}$ " 13" even 13" even 13 1/4"	

TEST DATA

NAME <u>Stewart Smith</u>	FILE NO <u>A 17377</u>
LOCATION <u>Ridgeway lot 6</u>	COUNTY <u>Howard</u>
	DATE <u>7/6/01</u>
	GRID _____
RECORDED BY <u>ALM</u>	

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
	A	16"	10:45 11:00 11:15 11:30 11:45 12:00 12:15 12:30 1:15 3:29		7" 6 ¹⁴ / ₁₆ 6 ¹³ / ₁₆ 6 ^{12.5} / ₁₆ 6 ^{12.5} / ₁₆ 6 ¹² / ₁₆ 6 ¹² / ₁₆ 6 ¹² / ₁₆ 6 ¹⁰ / ₁₆ 6 ⁸ / ₁₆	
					<i>less than 1" in 285 min</i> <u>Too Slow</u>	
	B	15"	10:59 11:14 11:29 11:44 11:59 12:14 12:29 1:19 3:20		7" 6 ¹² / ₁₆ 6 ¹⁰ / ₁₆ 6 ⁸ / ₁₆ 6 ⁶ / ₁₆ 6 ³ / ₁₆ 6 ¹ / ₁₆ 5 ¹⁰ / ₁₆ 4 ¹⁰ / ₁₆	
					<i>2 hrs for 1"</i> <u>Too Slow</u>	

TEST DATA

NAME <u>Stewart Smith</u>	FILE NO <u>A 17377</u>
LOCATION <u>Ridge way lot 6</u>	COUNTY <u>Howard</u>
<u>Underwood Rd</u>	DATE <u>7/6/01</u>
RECORDED BY <u>R/P. Kelly</u>	GRID _____

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
TP2	I1	18-22"	11:30:00		7"	
			11:36:30		6"	
			11:46:30		5"	
		Kopana	11:48:00		7"	
			11:58:00		6"	
			12:25:00		4 1/2"	
			12:50:00		3 1/2"	
				9/8" in 25" ≈ 21 psi OK		
TP2	I2	16-20"	11:53:00		7"	
			11:59:30		6 15/16"	
			12:29:00		6 19/16"	
			12:55:00		6 13/16"	
			1:26:00		6 13/16"	
			2:00		6 29/32"	
				3/32" in 9 3/4" ≈ est 900 psi Too Slow		

TEST DATA

NAME Ridgeway lot 6 Stewart Smith FILE NO A17377
 LOCATION Underwood Rd. COUNTY Howard
 DATE 7/6/01
 GRID _____ E
 RECORDED BY [Signature] _____ N

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
	D	21"	11:28 11:43 12:13 12:28 1:24 3:43		7.0' 6 15/16' 6 14.5/16' 10 135/16' 6 10/16' 6 7/16'	
				1/2" in 4 hrs	480 rpm Too Slow	
	E		11:57 12:12 12:27 1:29 3:16		7.0 6 13/16 6 11/16 6 6/16 5 13/16	
				Stopped 1" in 3 hrs	180 rpm Too Slow	

File Copy



HOWARD COUNTY HEALTH DEPARTMENT

Diane L. Matuszak, M.D., M.P.H., County Health Officer

October 10, 2001

Mr. Stewart M. Smith
1391 Underwood Road
Sykesville, MD 21784

RE: Percolation Test Results
Application # (s) A 17377
Recorded Lot
Property ID: Ridgeway lot # 6
Underwood Road
TM 9
Parcel # 32

Dear Mr. Smith:

Percolation testing conducted May 18 and July 6, 2001 on the above referenced property indicated unsatisfactory soil conditions for a conventional sewage disposal system. Limiting conditions were variable percolation rates and a history of seasonally high water tables. Copies of the percolation test results are enclosed.

Percolation rates in the upper two feet of soil were also too slow for sand mound type septic systems. However, as a lot of record, soil profiles and percolation rates from 3 to 7 feet below grade, indicate this site could be suitable for an alternative type of septic system. Such a design is called a Low Pressure Dosing System (LPD for short). A special condition would require a 2 foot sand fill in the bottom of the LPD trenches to ensure adequate sewage treatment before entering the ground water. Your engineer should contact me for specifics of the design parameters which I feel would best suit this site condition. Also there may be a problem locating a suitable well location, an off site easement may help solve this problem.

Further review is contingent upon submission by a licensed surveyor of a percolation certification plat showing actual locations and elevations of all excavated test holes and a suitable house and well site. The plat should also include the location of all existing wells and septic systems on the property as well as the location of any other relevant features such as streams, swales, or existing structures. A note must be included certifying that all wells and septic systems within 100' of property boundaries have been shown. This plan can be combined with the LPD septic system design plan which will be required prior to release of any building permit application.

This should be submitted within sixty (60) days to allow field verification if necessary. If you have any questions regarding this matter, please feel free to contact me at the above address or by calling 313-2640.

Very truly yours,

Ronald J. Pinkley, R.S.
Water and Sewerage Program

*8/24/02
Site eval by Phil Boris
and Jim Chase to familiar
Engineer prior to Design Plan
Submitted - OK: RP*

dc:
Enclosures
cc: File