

# APPLICATION

PERCOLATION TESTING

A 515011

P \_\_\_\_\_

*subdivision*

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

DISTRICT \_\_\_\_\_

DATE 3/28/01

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 David E Yingling

ADDRESS 12336 Howard Lodge Rd PHONE 410-442-5559

AGENT OR PROSPECTIVE BUYER Heritage Land DEVELOPMENT

ADDRESS 3060 Washington Road PHONE 410-984-4851

PROPERTY LOCATION:

SUBDIVISION \_\_\_\_\_ LOT NO. 7A+7B

ROAD AND DESCRIPTION 32 to (R) on river Rd to (R) on Howard Lodge

TAX MAP 9 PARCEL # 306

SIZE OF LOT 7A 1.214; 7B 1.392 TYPE BLDG. SINGLE FAMILY DWELLING  
(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. David E. Yingling 3-27-01  
(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

COUNTY #

SOIL PROFILE

203

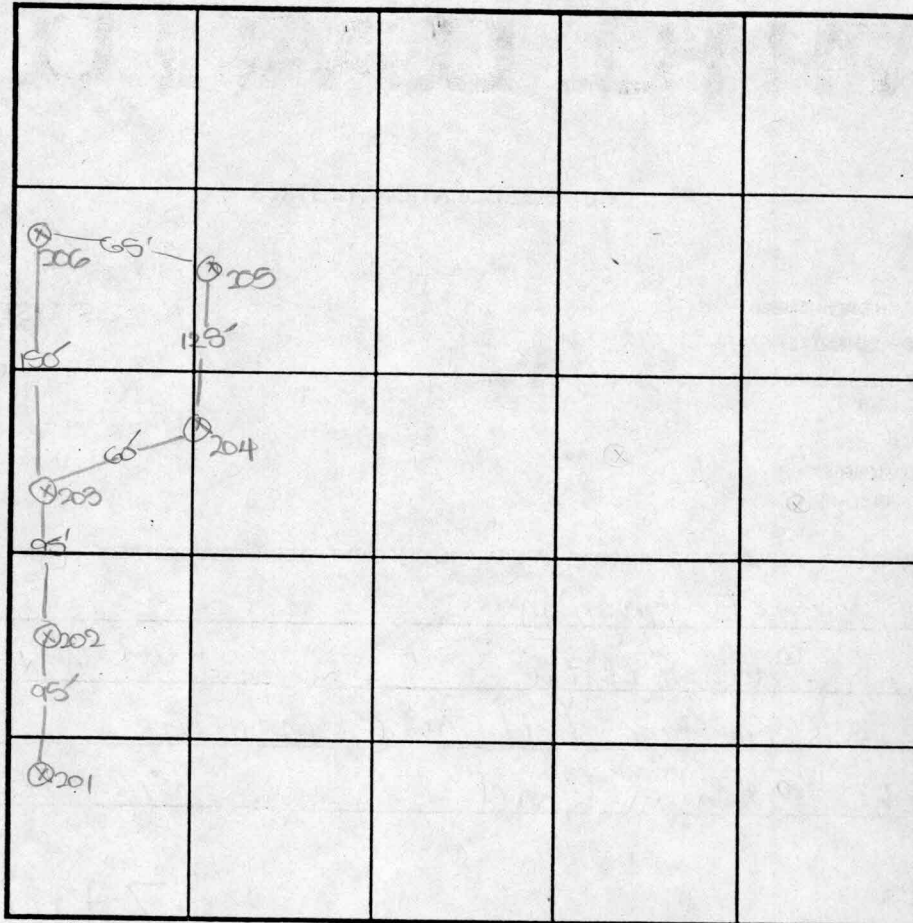
0' topsoil  
 1' dull red org brn c l m  
 to  
 7.5' dull org brn sa c l m mottles  
 9'8" cave-in seepage  
 12'0" water

202/201

0' topsoil  
 1' dull org brn c l m to med brn sa c l m  
 7' seepage cave-in  
 12.5' water

204

0' topsoil  
 1' dull red org brn c l m  
 5' water seepage  
 7.5' mottles cave in  
 12.5' water



SOIL PROFILE

205

0' topsoil  
 1' dull red brn c l m to dull org brn sa c l m  
 6.5' cave-in seepage  
 11' water

202

0' topsoil  
 1' dull red brn c l m  
 4' med org brn sa c l m  
 12.5' water

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

Common Drive → Howard Lodge Road

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
5-2-01	201	12.5'D	Water	(seepage @ 7')			FAIL
	202	12.5'D	Water	(seepage @ 7')			FAIL
	203	12'8"D	Water	(seepage @ 9'8")			FAIL
	204	12.5'D	Water	(seepage @ 5')			FAIL
	205	11.0'D	Water	(seepage @ 6.5')			FAIL
	206	12.5'D	Water	- see profile			FAIL

REMARKS holes not started - tested in open field

TYPE OF SOIL \_\_\_\_\_

TESTED BY TJC ALSO PRESENT T. Feaga, G. Jeff

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME \_\_\_\_\_ TRENCH WIDTH \_\_\_\_\_

INLET DEPTH \_\_\_\_\_ MAXIMUM BOTTOM DEPTH \_\_\_\_\_ SQ. FT/BEDROOM \_\_\_\_\_

TEST DATA

NAME _____	FILE NO <u>A 515011</u>
LOCATION <u>Wiesensel Property - lot 7A</u>	COUNTY <u>Howard</u>
<u>Howard Lodge Road B</u>	DATE <u>8-10-01</u>
RECORDED BY <u>DKC</u>	GRID _____ E
	N

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
S1		17"	10:22		8"	
			11:00		7 2/32	
			11:20		6 20/32	8/32
			11:40		6 20/32	9/32
			12:00		6 20/32	0/32
			12:20			
			12:40			FAIL
S2A		17"	10:28		7"	
			11:02		5 14/32	
			11:22		4 30/32	10/32
			11:42		4 18/32	12/32
			12:02		4 19/32	12/32
			12:22			
			12:42			X = 40mpi
S2B		20"	10:28		8"	
hand dug			11:03		7 4/32	
			11:23		7 0/32	
			11:43		6 20/32	
			12:03		6 24/32	
			12:23			
			12:43			FAIL

TEST DATA

NAME _____	FILE NO <u>A 515011</u>
LOCATION <u>Wiesensel Property - lot 7A</u>	COUNTY <u>Howard</u>
<u>Howard Lodge Road</u>	DATE <u>8-10-01</u>
RECORDED BY <u>DKC</u>	GRID _____ E
	N

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)	
93		21"	10:30		8"		
			11:03		5 <sup>20</sup> /32		
			11:23		4 <sup>20</sup> /32	16/32	
			11:43		3 <sup>18</sup> /32	12/32	
			12:03		2 <sup>20</sup> /32	30/32	
			12:23				$\bar{x} = 19 \text{ mpi}$
			12:42				
94		19"	10:37		7"		
			11:04		5 <sup>28</sup> /32		
			11:24		5 <sup>12</sup> /32	110/32	
			11:44		5 <sup>0</sup> /32	12/32	
			12:04		4 <sup>20</sup> /32	12/32	
			12:24				$\bar{x} = 40 \text{ mpi}$
12:44							

TEST DATA

NAME _____	FILE NO <u>A515011</u>
LOCATION <u>Wiesensel Property - lot 7A</u>	COUNTY <u>Howard</u>
<u>Howard Lodge Road</u>	DATE <u>8-10-01</u>
RECORDED BY <u>DKC</u>	GRID _____ E N

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
55	plastic	18"	10:46		8"	
			11:06		7 <sup>18</sup> /32	
			11:26		7 <sup>12</sup> /32	6/32
			11:46		7 <sup>8</sup> /32	4/32
			12:06		7 <sup>4</sup> /32	4/32
36	plastic	22"	10:45		7"	
			11:07		5 <sup>24</sup> /32	
			11:27		4 <sup>28</sup> /32	28/32
			11:47		4 <sup>6</sup> /32	22/32
			12:07		3 <sup>18</sup> /32	20/32
			12:27			$\bar{x} = 27 \text{mpi}$
		12:47				

TEST DATA

NAME _____	FILE NO <u>A 515011</u>
LOCATION <u>Wiesensel Property - lot 7A</u>	COUNTY <u>Howard</u>
<u>Howard Lodge Road</u>	DATE <u>8-10-01</u>
RECORDED BY <u>DJC</u>	GRID _____ E N

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
56	2	17"	12:35		8"	
			1:10		6 <sup>21</sup> /32	
			1:30		6 <sup>16</sup> /32	14/32
			1:50		5 <sup>28</sup> /32	10/32
			2:10		5 <sup>18</sup> /32	10/32
			2:30		5 <sup>19</sup> /32	9/32
57		17"	12:40		7"	
			1:11		6 <sup>10</sup> /32	
			1:31		6 <sup>4</sup> /32	8/32
			1:51		5 <sup>28</sup> /32	6/32
			2:11		5 <sup>22</sup> /32	6/32
			2:31		5 <sup>14</sup> /32	6/32
					$\bar{x} = 98 \text{ mpi}$	
58		17"	12:40		8"	
			1:12		6 <sup>21</sup> /32	
			1:32		6 <sup>0</sup> /32	24/32
			1:52		5 <sup>10</sup> /32	22/32
			2:12		4 <sup>27</sup> /32	20/32
			2:32		4 <sup>4</sup> /32	18/32
					$\bar{x} = 31 \text{ mpi}$	

Approved Calc 2 4/17/02

**SANITARY/ENVIRONMENTAL ENG., INC.**

Consulting Engineers  
1414 Washington Road  
WESTMINSTER, MARYLAND 21157  
(410) 876-7740  
FAX (410) 840-9924

JOB LOT 7 A (SECOND PARCEL)

SHEET NO. YINGLING PROPERTY

CALCULATED BY \_\_\_\_\_ DATE \_\_\_\_\_

CHECKED BY \_\_\_\_\_ DATE 6/28/02

SCALE \_\_\_\_\_

5 BEDROOMS X 150 = 750 GPD SLOPE - 7% OK  
750 / 1.2 = 625 Sq. Ft. SAND BED REQUIRED  
12' X 52' SAND BED = 624 Sq. Ft. ✓

UPSIDE SAND DEPTH = 24" ✓  
DOWN SIDE SAND = 24" + (0.07 x 144") = 34" ✓

UP SLOPE SETBACK = (24" + 22") (3) (0.83) = 115" = 9'-7" ✓  
DOWN SLOPE SETBACK = (34" + 22") (3) (1.27) = 213" = 17'-9" ✓  
SIDE SLOPE SETBACK =  $\frac{(24" + 34")}{2} + 28" (3) = 171" = 14'-3" ✓$

REQUIRED BASAL AREA = 750 / 0.5 = 1500 Sq. Ft. ✓  
AREA PROVIDED = (12' + 17.75') (52') = 1547 Sq. Ft.

MOUND LENGTH = 52' + 14'-3" + 14'-3" = 80'-6" ✓  
MOUND WIDTH = 12' + 9'-7" + 17'-9" = 39'-4" ✓

PUMP RATE = 6 x 7 PERFORATIONS x 1.63 = 68 GPM <sup>(68%<sub>16</sub>)</sup>

DOSE - 5 x 6 LATERALS @ 23.83' = 715' - 1 1/4" @ 7.86 / 100' ✓  
7.15 x 7.8 = 58.8 GAL OK  
PLUS 260' - 2" @ 17.4 GAL / 100' = 2.6 x 17.4 = 45.25 GAL  
58.8 + 45.25 = 104 GAL

DOSE = 750 / 6 = 125 GAL 125 GAL / 7.48 = 16.7 cu ft  
PUMP CHAMBER FLOOR AREA = 60.6 Sq. Ft.  
16.7 cu ft / 60.6 Sq. Ft. = 0.28' = 3.4" (3 1/2") OK

EMERGENCY STORAGE = 60.6 Sq. Ft. x 2.29' = 139 cu ft  
139 cu ft x 7.48 = 1,039 GAL OK

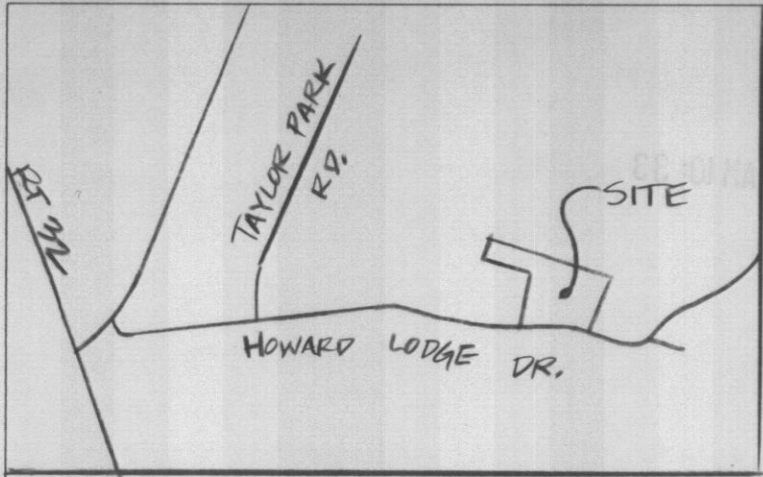
TDH - CLEV. DIFFERENCE = 563.66' - 539.2' = 24.5' ✓  
DISTAL HEAD 2.0' ✓

F - 2" EQ. LENGTH  
6' + VALVE + L + UNION + L + L + 260' + L + T  
6' + 1.3' + 7' + 2' + 7' + 7' + 260' + 7' + 10' = 307'  
F = 7' - 100' = 7' x 3.07 = 21.5' TDH = 48' OK  
GOULDS PUMP 3885 - WE 15 H OR EQUAL (1 1/2 HP) OK

Approved Septic System Plan  
Howard County Health Department

*Ronald P. Kelly*  
Signature

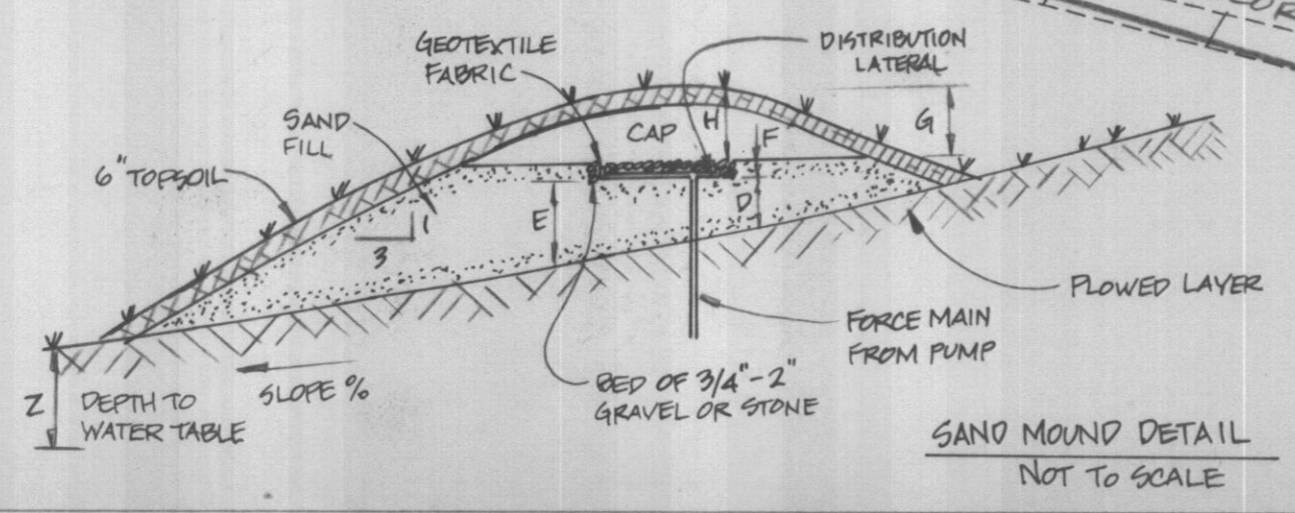
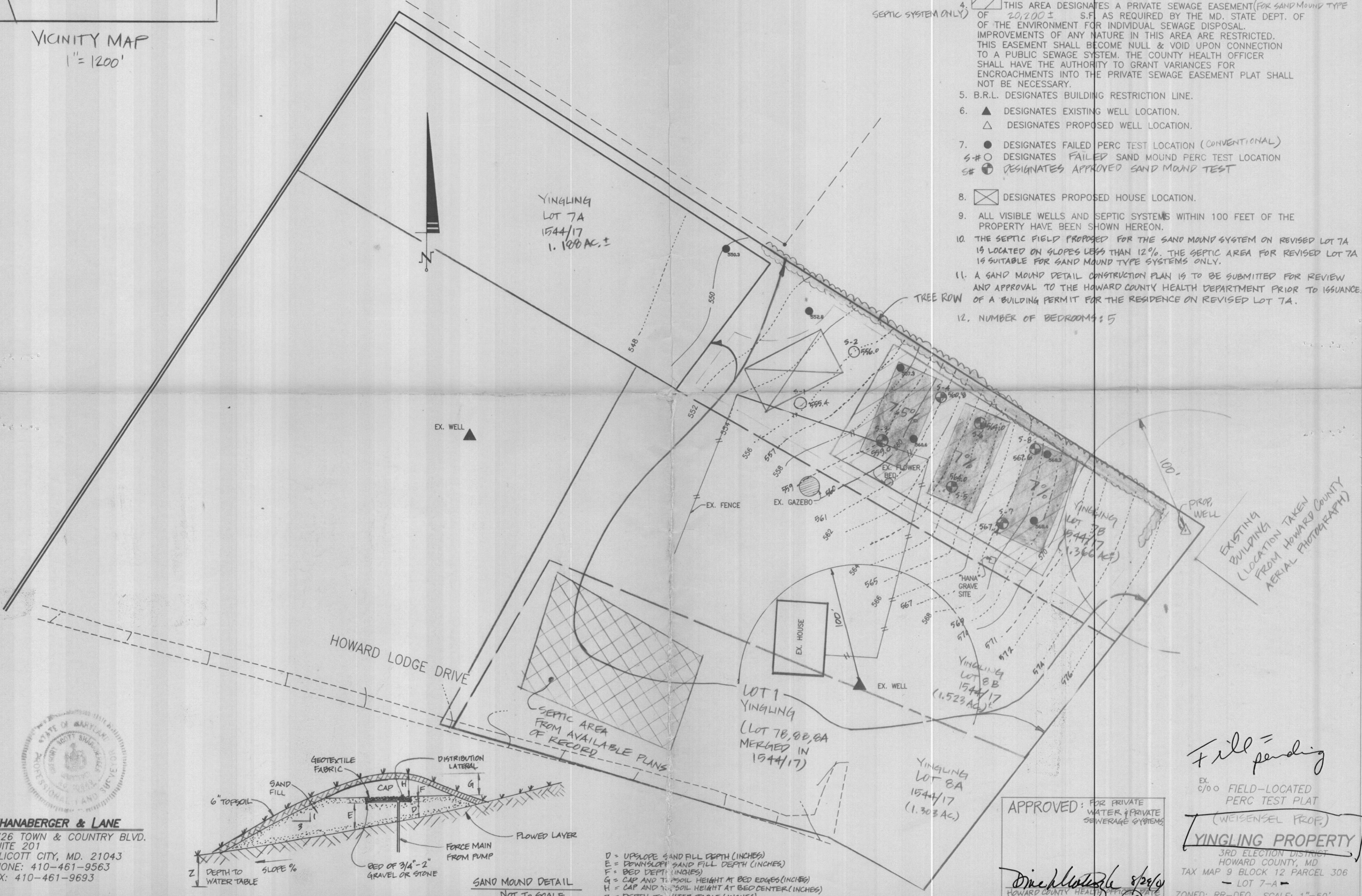
7/18/02  
Date



VICINITY MAP  
1" = 1200'

**PERC CERTIFICATION**  
 I CERTIFY THAT THE LOCATIONS SHOWN (●) HEREON ARE BASED ON FIELD-LOCATIONS DONE UNDER MY DIRECT SUPERVISION, AND ARE CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE & BELIEF.  
*Scott Shanaberger*  
 G. SCOTT SHANABERGER  
 PROFESSIONAL LAND SURVEYOR # 10849  
 DATE 7/11/2001, 8/28/2001

- NOTES:**
- SUBJECT PROPERTY IS ZONED RR-DEO.
  - THE TOPOGRAPHY SHOWN HEREON WAS FIELD RUN BY SHANABERGER & LANE IN JUNE AND JULY OF 2001.
  - THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH & LOT AREA AS REQUIRED BY THE MD. STATE DEPT. THE ENVIRONMENT.
  - THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT (FOR SAND MOUND TYPE OF 20,200 ± S.F. AS REQUIRED BY THE MD. STATE DEPT. OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED. THIS EASEMENT SHALL BECOME NULL & VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENTS INTO THE PRIVATE SEWAGE EASEMENT PLAT SHALL NOT BE NECESSARY.
  - B.R.L. DESIGNATES BUILDING RESTRICTION LINE.
  - ▲ DESIGNATES EXISTING WELL LOCATION.  
△ DESIGNATES PROPOSED WELL LOCATION.
  - DESIGNATES FAILED PERC TEST LOCATION (CONVENTIONAL)  
S# ○ DESIGNATES FAILED SAND MOUND PERC TEST LOCATION  
S# ⊕ DESIGNATES APPROVED SAND MOUND TEST
  - ⊠ DESIGNATES PROPOSED HOUSE LOCATION.
  - ALL VISIBLE WELLS AND SEPTIC SYSTEMS WITHIN 100 FEET OF THE PROPERTY HAVE BEEN SHOWN HEREON.
  - THE SEPTIC FIELD PROPOSED FOR THE SAND MOUND SYSTEM ON REVISED LOT 7A IS LOCATED ON SLOPES LESS THAN 12%. THE SEPTIC AREA FOR REVISED LOT 7A IS SUITABLE FOR SAND MOUND TYPE SYSTEMS ONLY.
  - A SAND MOUND DETAIL CONSTRUCTION PLAN IS TO BE SUBMITTED FOR REVIEW AND APPROVAL TO THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR THE RESIDENCE ON REVISED LOT 7A.
  - NUMBER OF BEDROOMS: 5



APPROVED: FOR PRIVATE WATER & PRIVATE SEWERAGE SYSTEMS  
*Dine...* 8/28/01  
 HOWARD COUNTY HEALTH DEPARTMENT

Fill = pending  
 EX. C/O FIELD-LOCATED PERC TEST PLAT  
 (WEISENSEL PROP.)  
**YINGLING PROPERTY**  
 3RD ELECTION DISTRICT  
 HOWARD COUNTY, MD  
 TAX MAP 9 BLOCK 12 PARCEL 306  
 - LOT 7-A -  
 ZONED: RR-DEO SCALE: 1" = 50'  
 JULY 11, 2001 REV. 8/28/01  
 PC 515011

**SHANABERGER & LANE**  
 8726 TOWN & COUNTRY BLVD.  
 SUITE 201  
 ELLICOTT CITY, MD. 21043  
 PHONE: 410-461-9563  
 FAX: 410-461-9693

