

Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia MD 21046
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-899-313-6300
website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., Health Officer

April 17, 2007

Michael Harris
650 Long Corner Road
Mt. Airy, Maryland 21771

RE: PERCOLATION TEST RESULTS, A-523891

Dear Mr. Harris,

Percolation testing was conducted on the referenced property on April 4, 2007. Field data collected are shown on the Percolation Test 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.

Percolation Test Results indicate soils' conditions that are satisfactory for onsite wastewater disposal. Parameters for system design are shown on the Percolation Test Results worksheet: depth of Inlet is to be 4 feet, with 2 feet of gravel to Trench Bottom at 6 feet. Usable Sidewall is 2 feet. The proposed Trench Width is 3 feet, and the required Trench Length per bedroom is 39 feet.

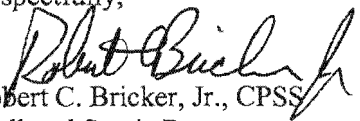
A 1500-gallon septic tank (minimum volume) will be required for a residence having 1500-to-3500 square feet of floor space. A 2000-gallon septic tank will be required if the residence area is greater than 3500 square feet. The septic tank installed in 1975 has only 1000 gallons capacity, and must be replaced for the addition to be approved.

An existing well was observed on the subject property. The well's steel casing extends more than 8" above the soil surface. The one-piece cap has electrical conduit attached, and appears to be sealed. The well is to be protected during all phases of property redevelopment.

The existing septic system consists of a septic tank, dry well (11 feet deep), and trench (15 feet length). No evidence of system failure is apparent. The area proposed as the septic easement lies between the existing system and the 100-foot setback distance to a pond and stream. The integrity of the septic easement is not to be compromised at any time; installation of drainfield trenches is the only acceptable excavation activity that should occur in that area.

Review and approval of an anticipated Building Permit (for addition to the existing residence) is contingent upon submission of a Percolation Certification Plan that meets state and county requirements. The enclosure refers to items that must be added or corrected on the current version of the 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 calling (410) 313-2691.

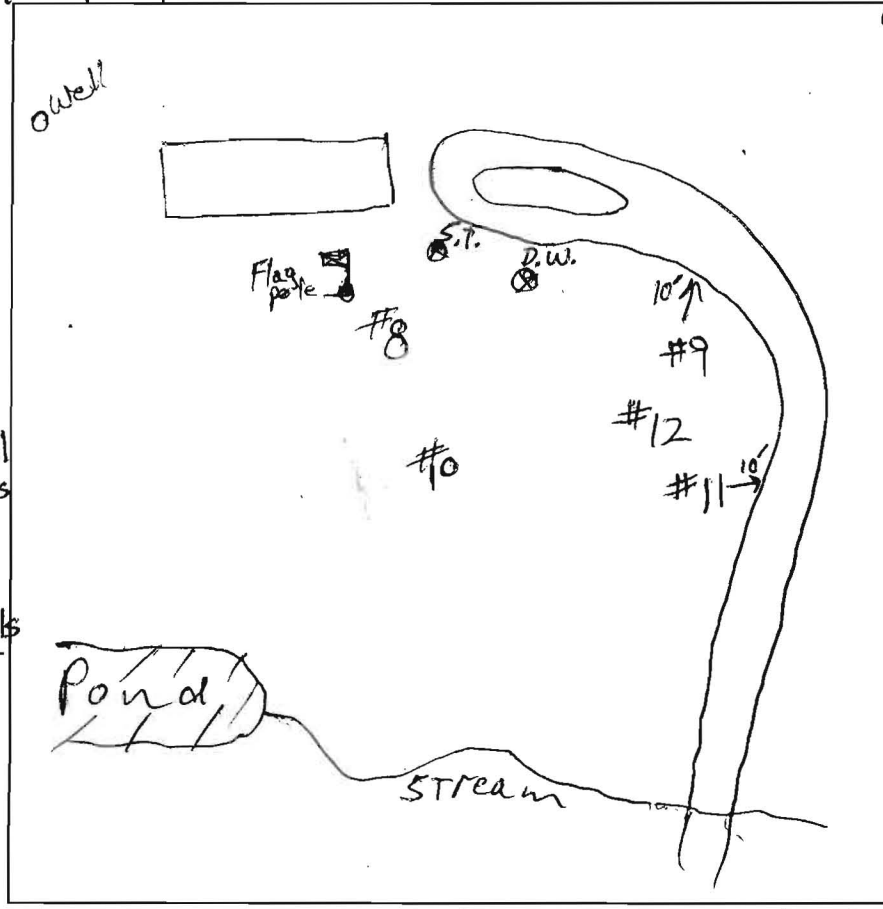
Respectfully,


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

Enclosure

CC: Charles R. Crocken & Assoc., Inc.
File

Tax MAP 8 parcel 245
523891



P12
0.5' brn sl
0.5' pale brn vch sl
1' pale brn sl 1 f pl
2.5' pale brn & blk sl weathered gneiss
4.5' pale brn vch sl black coatings 40% Cr
10.5' saprolite & 60% Cr
11' crushes to chls

P11
0.5' brn sl 2 v f sbk
0.5' red brn & brn loam 1 m sbk
2' pale brn & blk sl saprolite weathered gneiss 20% Cr
10.5' saprolite & 60% Cr
11' ↓

P8
0.5' brn sl 2 f sbk
0.5' brn scl 2 f sbk & m sbk
2.5' brn fsl 0 m
10.5' saprolite
11.5' ↓

P10
0.5' red brn & brn sl 1 v f sbk
pale brn & blk sl saprolite 10% dense pockets fsl
4.5' 76' irregular boundary pale brn & blk fsl dense
1' gneiss saprolite
11' fsl saprolite & 60% Cr crushes to chls
11.5' ↓

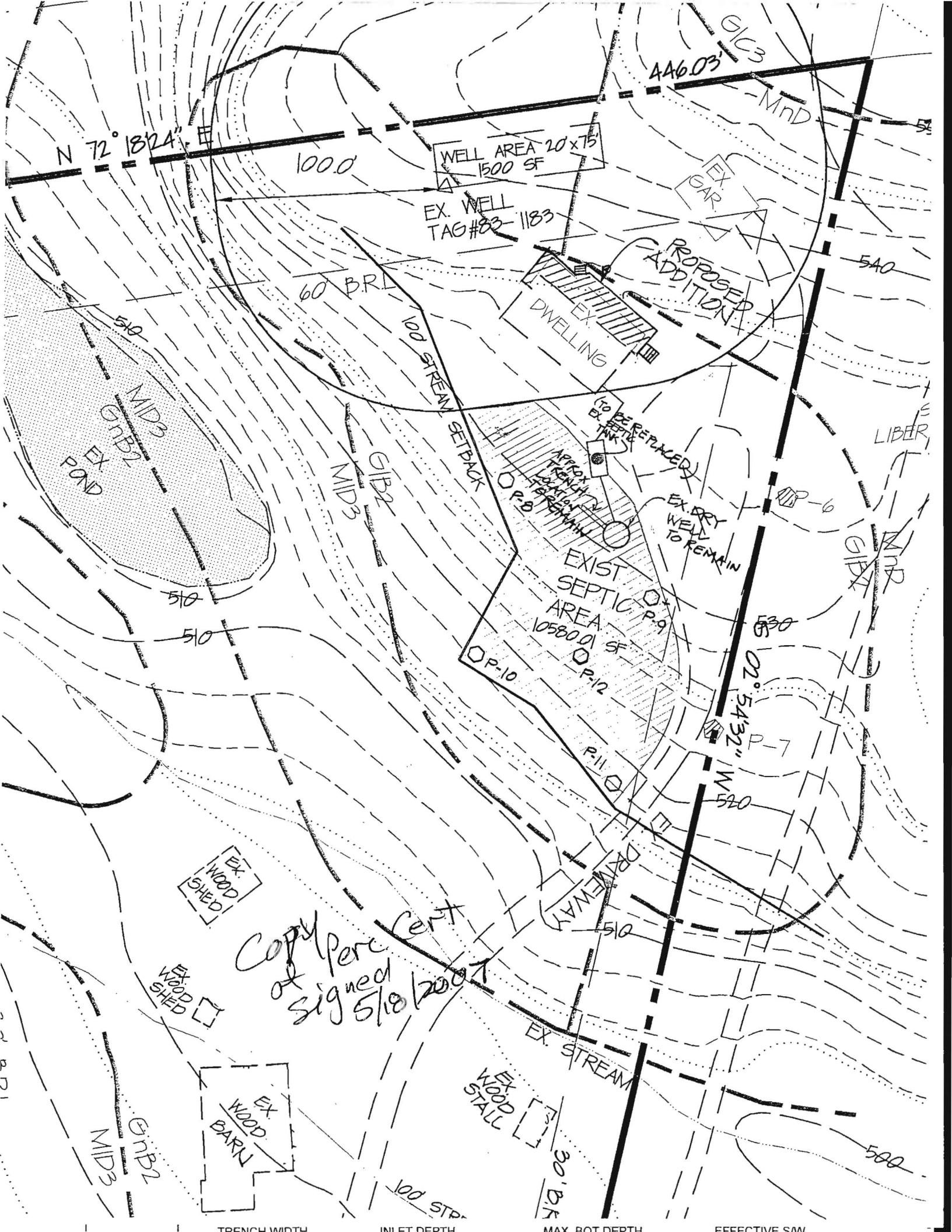
1 minutes

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
4/4/07	P12	5.5' / 11'	0	3.5	9.5	6	P
4/4/07	P11	4.5' / 11'	0	3	10	7	P
4/4/07	P10	6' / 11.5'	0	4	17	13	P
4/4/07	P8	6'	0	1	repair	-	
	P8	6' / 11'	0	1.5	3.5	2	P
4/4/07	P9	11.5'	Visual	gneiss	saprolite		P

P9
0.5' dk brn sl 1 v f sbk
1' brn ch scl 1 f sbk
1' red-brn ch scl 1 m sbk
2' pale brn ch fsl, 0 m 20% channers gneiss saprolite
10.5' saprolite & 40% Cr
11.5' ↓

REMARKS 11.5' depth-capability of backhoe & operator
SANITARIAN RB BACKHOE Brian OTHERS Michael, Bob Harris, Crocker
TEST HOLES USED IN SDA 8, 9, 10, 11, 12 AVG. PERC TIME 7 min SQ. FT/BR 187.5
TRENCH WIDTH 3 INLET DEPTH 4 MAX. BOT DEPTH 6 EFFECTIVE SW 2

39 linear feet per Bedroom



N 72° 18' 24" E

1000

WELL AREA 20' x 75'
1500 SF

EX. WELL
TAG #83-1183

446.03' G/C3
MnD

EX. GAR

PROPOSED
ADDITION

DWELLING

60 BR

100' STREAM
SETBACK

EX. POND
MID3
G/B2

MID3
G/B2

TO BE REPLACED
EX. 60' TANK

EX. DRY
WELL TO REMAIN

EXIST
SEPTIC
AREA
10580.01 SF

P-10 P-12

02° 54' 32" W

EX. WOOD
SHED

EX. WOOD
SHED

Copy Perc
Cert
signed 5/18/2007

DRIVEWAY

EX. WOOD
BARN

EX. WOOD
STALL

EX. STREAM

MID3
G/B2

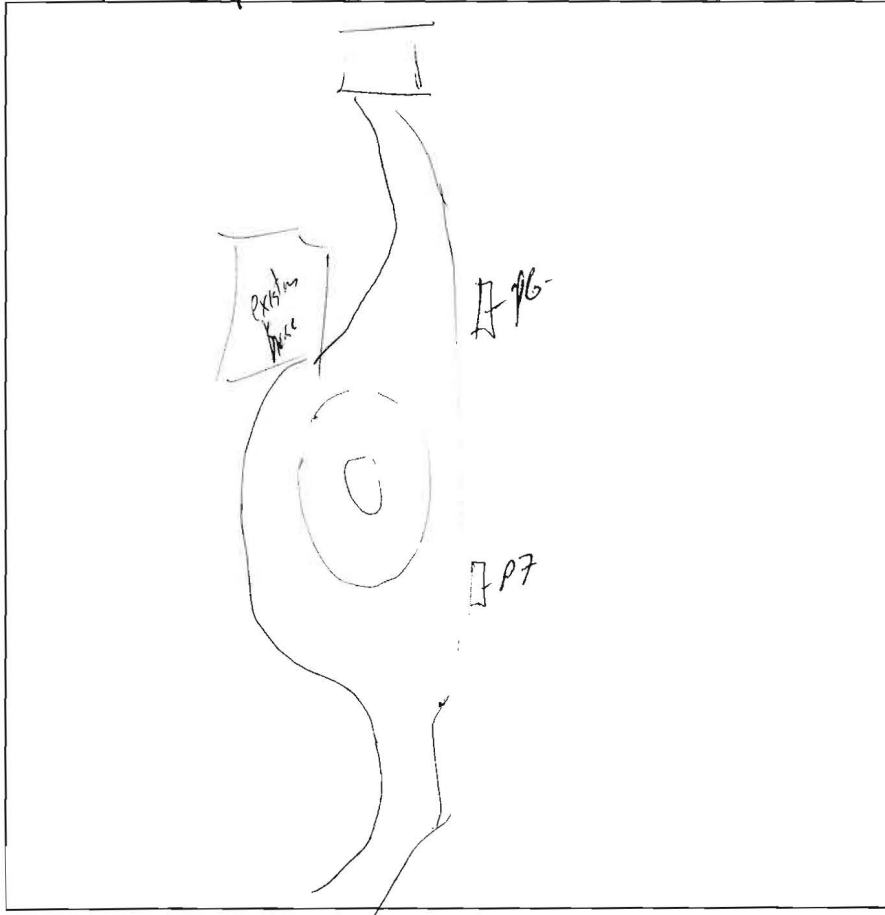
100' STR

30' BR

TRENCH WIDTH INLET DEPTH MAX. BOT DEPTH EFFECTIVE SAW

AVP 523891

Tax map & Parcel 245



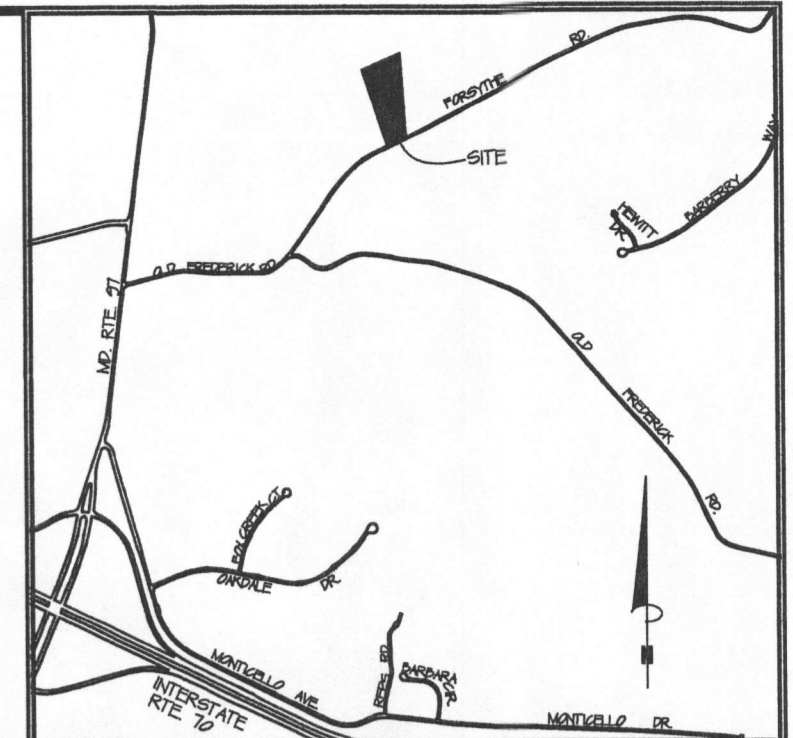
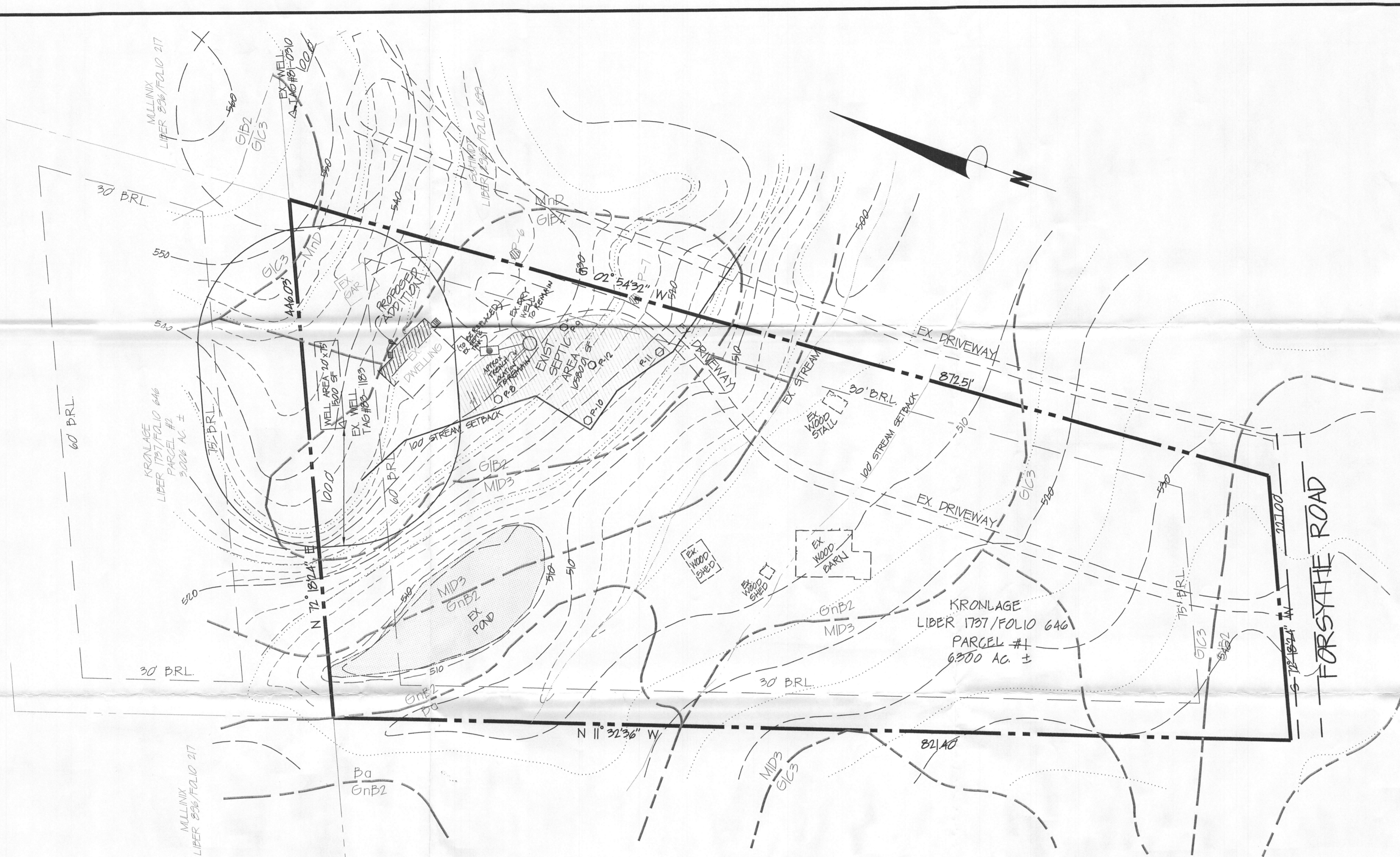
P-6
Brown
↓
Brown/Yellow
scl
4'
Yellow/Brown
sl
w/ 10/20
Rul
13'

P-7
Brown
↓
Yellow/Brown
orange
scl
4'
Yellow/Brown
sl
w/ trace
Rul
12'

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
2-27-06	P-6	4' 13'	2:48	2:52	2:57	5min	P
	P-7	4' 12'	3:00	3:07	3:15	8min	P

REMARKS Existing system seems to be functioning OK.
 SANITARIAN KJB BACKHOE K/K OTHERS Row/homeowner
 TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____
 TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

Locations
not shown
on Perc Cert



SOILS LEGEND

SYMBOL	NAME/DESCRIPTION	SOIL GRP
G1B2	ELENVILLE LOAM, 3 TO 8% SLOPES	D
G1C3	ELENVILLE LOAM, 8 TO 28% SLOPES	D
MID3	MANNERS LOAM, 8 TO 28% SLOPES	A
G1B2	ELENVILLE SILT LOAM, 3 TO 8% SLOPES	D
Pa	DALE SILT LOAM	C

PERCOLATION TEST RESULTS

TEST #	PERCOLATION RATE	RESULT	COMMENTS	DATE
P-4	5 MIN.	PASSED		01/19/06
P-7	8 MIN.	PASSED		01/19/06
P-8	2 MIN.	FAILED	EL: 528.25	4/4/07
P-9	0.95	"	EL: 529.70	"
P-10	1.9 MIN.	"	EL: 518.45	"
P-11	7 MIN.	"	EL: 518.15	"
P-12	6 MIN.	"	EL: 522.62	"

NOTE:
TWO FOOT CONTOURS IN VICINITY OF DWELLING AND SEWAGE EASEMENT ARE BASED UPON FIELD RUN SURVEY CONDUCTED BY CRC & ASSOC. 03/03/07.

SCALE: 1" = 50'

HEALTH DEPARTMENT NOTES

- THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP, WIDTH AND AREA REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- THE AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF AT LEAST 19,000 S.F. FT. AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENTS.
- THERE ARE NO EXISTING WELLS AND SEPTIC SYSTEMS WITHIN 100 FT. OF THE LOT LINES SHOWN HEREON UNLESS NOTED OTHERWISE.
 - DENOTES "PASSED" PERCOLATION TEST (4/4/07)
 - ⊖ DENOTES "FAILED" PERCOLATION TEST
- THE NEAREST WATER INTAKE STRUCTURE IS FIVE MILES+/- AWAY.
- 25% SLOPE, ONLY 25% OR STEEPER SLOPES WITHIN 100± OF SEWAGE EASEMENT HAVE BEEN SHOWN ON PLAN.
- ANY CHANGES TO THE PRIVATE SEWAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.

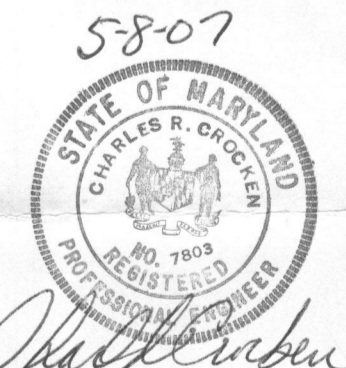
DEED HISTORY PARCEL #1

PINCUS TO PATMAN (1973)
626/003
PATEMAN TO KRONLAGE (1987)
1737/646

GENERAL NOTES:

- AREA OF PROPERTY = 6300 ACRES
- EXISTING USE = SINGLE FAMILY RESIDENTIAL
- PROPOSED USE = AGRICULTURE/1 SINGLE FAMILY RESIDENTIAL
- NUMBER OF UNITS ALLOWED = 1
- NUMBER OF UNITS PROPOSED = 1 UNIT
- BOUNDARY AND TOPOGRAPHY BASED ON AERIAL TOPOGRAPHY BY HOWARD COUNTY DATED 1998, VERIFIED IN FIELD BY CHARLES R. CROCKEN & ASSOC. DATED 3/3/06
- BOUNDARY BASED ON DEED LIBER 1737/FOLIO 646
- SERVICE WATER = PRIVATE, SEWER = PRIVATE
- SOILS SURVEY MAP No. 3
- THERE ARE NO STREAMS, WETLANDS, OR STEEP SLOPES IN THE VICINITY OF THE SEWAGE EASEMENT EXCEPT AS OTHERWISE SHOWN HEREON.
- NO ADDITIONAL SUBDIVISION OF SUBJECT PROPERTY IS REQUIRED FOR BLDG. PERMIT

THE MASTER PLAN OF HOWARD COUNTY
PRESENT ZONING = RC-DEO
PROPOSED USE OF STRUCTURES = SINGLE FAMILY
UNITS ALLOWED = 1
UNITS PROVIDED = 1
OPEN SPACE ON SITE = N/A
HOWARD COUNTY FILE NO: 58-07



APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS
B. Nye for Peter Beilenson, MD 5/18/2007
HOWARD COUNTY HEALTH OFFICER

NO.	DATE	REVISION
PERCOLATION CERTIFICATION PLAT FOR KRONLAGE PROPERTY 1460 FORSYTHE ROAD SINGLE FAMILY DETACHED LIBER 1737/FOLIO 646 RECEIPT # AS23891		
TAX MAP 8, GRID 6, PARCEL # 245 4TH ELECTION DISTRICT		ZONED RC-DEO HOWARD COUNTY, MARYLAND
DES. CRC.	CHK. CHC.	OWNER/DEVELOPER CARL & YVONNE KRONLAGE 1460 FORSYTHE ROAD SYKESVILLE, MD. 21784
DRW. EMV.		
PREPARED BY: CHARLES R. CROCKEN & ASSOCIATES, INC. 2411 WASHINGTON PI. 4TH FLOOR WESTMINSTER, MARYLAND PH: 410-534-3323		
SCALE: 1" = 50'		SHEET 1 OF 1