



APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____ A/P _____

AGENCY REVIEW: _____ DATE _____

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) Richard and Mary Anderson

DAYTIME PHONE _____ CELL _____ FAX _____

MAILING ADDRESS 13072 Saint Patricks court Highland MD 20777
STREET CITY/TOWN STATE ZIP

APPLICANT Sill, Adcock and Associates LLC

DAYTIME PHONE 443-325-1642 CELL _____ FAX 443-325-1685

MAILING ADDRESS 3300 North Ridge Road suite 160 Ellicott City MD 21043
STREET CITY/TOWN STATE ZIP

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

PROPERTY LOCATION

SUBDIVISION/PROPERTY NAME 13072 Saint Patricks court LOT NO. 23

PROPERTY ADDRESS 13072 Saint Patricks court Highland 20777
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 34 GRID _____ PARCEL(S) 355 PROPOSED LOT SIZE 1.84 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.

[Signature]
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

7

0.2 Very dk brn sil

0.8 dk brn sil

yel-brn chsil

1msbk

many med. roots

1.7 yel-red vchsl

platy, rock-controlled

35% channers

many mica

3 yel-red chsl

20% channers

many mica

5.1 layers alternate

to 8

8 yel-red vflsl

many mica

45% flags

10-15% boulders

10'

6

dk grey-brn

* brn sil

com. mica

yel-brn sil

0.7 10% channers

yel-red chsil

2 vlsbk

2.5 yel-red & yel-brn

vchsl

40% channers

many mica

4 yel-red vflsl

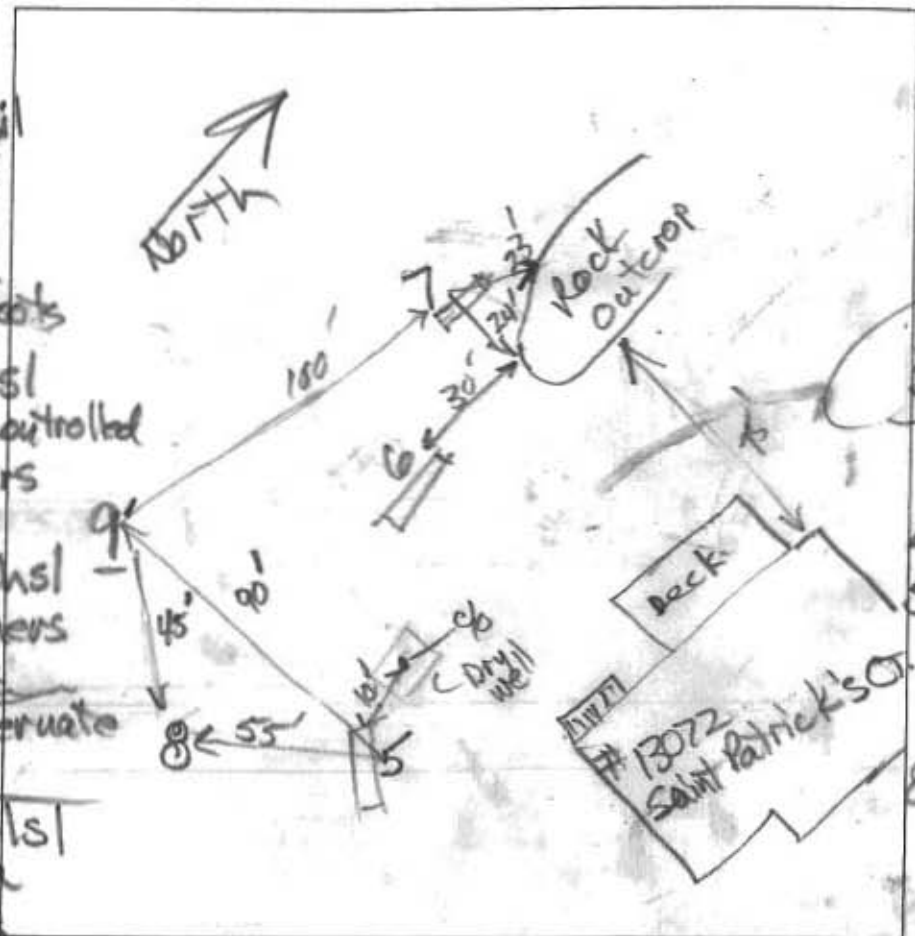
40% flags &

many mica

6 yel-red vchsl

9 yel-red vflsl

North



DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
2/21/14	7	3.6' / 8'	9:46	9:55	10:10	15	P
2/21/14	6	12'	Visual	2.5' to 8'	0.8 gpd / ft ²		P
2/21/14	5	8'	Visual	Sidewall 3' to 4'	0.8 gpd / ft ²		P
2/21/14	5	8'	Visual	Dry well	Fails		
			1)	> 50% rock at 8' to 10' depth			
			2)	Refusal at 12', same depth as dry well			
			* There is not a 4-ft. soil buffer to rock.				
			Well has steel case ~ 22" tall				

REMARKS #5, #6 & #7 dug at stakes
 SANITARIAN R Bricker BACKHOE Bonnie Hope & Kyle
 TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SO. FT/HR _____
 TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

9' brn chls 10% flags
 many mica 12'

5

0.2 dk grey-brn sil

0.8 pale brn sil

brn L. 2msbk

common mica

10% channers

1.8 yel-red L. 1msbk

common mica

12% channers

3 alternating

layers

yel-red chsl

yellow chls

many mica

5.8 brn vchls

40% channers

many mica

8' brn vfls

w/ 20% boulders

165% rock

10' brn vchls

R

11

1-pe Metal Cap

Black plastic pipe

as conduit

tag NO-73-1490

8

dk grey-brnsil
pale brnsil
slightly sticky

brn L,
2msbk to 1msbk

2.8' yel-red chl
many mica

3.5' yel-red chl
common mica

7.5' yel-red L
common mica
Gsp (yellow)
sil

13072 Saint Patrick's Ct

House

Deck

Rock
OutcropStake 5
dry well

Stake 6

Stake 7

100'

North

9

brn L

2.4' yel-red L
com mica

4' yel-reds
com. mica
few channers

8' red ls
many mica
few channers

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
2/20/14	9	12'	Visual	Sidewall	4' to 6'	0.8 gpd/cr	P
2/20/14	8	12'	Visual	Sidewall	3.5' to 7.5'	0.8 gpd/cr	P

REMARKS

#8 & #9 added 'off-plan'

SANITARIAN

R Bricker

BACKHOE

Ronnie Hoop & Kyle

TEST HOLES USED IN SDA

AVG. PERC TIME

SQ. FT/BR

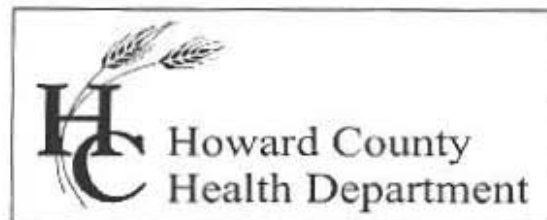
TRENCH WIDTH

INLET DEPTH

MAX. BOT DEPTH

EFFECTIVE S/W

4



Bureau of Environmental Health

8930 Stanford Blvd., Columbia, MD 21045
Main: 410-313-1771 | 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

March 6, 2014

To: Paul Sill, Sill, Adcock and Associates, Applicant
paul@saaland.com

RE: Percolation Test Report; 13072 Saint Patrick's Court

Percolation tests were conducted at 13072 Saint Patrick's Court (Tax Map 34, Parcel 355) on February 21, 2014. Three test locations, '5', '6' and '7', were staked prior to the test date. Two test locations, '8' and '9' were added in the field, their locations referenced to stakes for locations '5' and '7'. Tests were conducted at accessible locations at, or near to, the respective stakes.

All five test locations 'PASS', having soils that are satisfactory for wastewater treatment and disposal in conventional trenches. Locations of percolation tests that 'PASS' are used to define the sewage disposal area (SDA) proposed on the Percolation Certification Plan. The percolation test results and suitable area for wastewater discharge are certified by the Approving Authority's signature of the Percolation Certification Plan.

A portion of the property initially included within the area tested on September 19, 1974 is inappropriate for wastewater disposal due to quartzite rock outcrops. The outcrop area is 24 feet from stake '7', and 30 feet from stake '6'. A setback of 25 feet is required from the outcrop boundary to a trench or potential SDA.

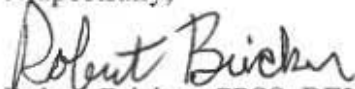
The soil profile for test location '5' is also used for describing the soil profile relative to the profile in which the existing dry well which was installed in November 1976. The depth of the dry well is described as 12 feet, and a field measurement on February 21 confirmed that the dry well is 12 feet deep. The column of solution in the dry well on February 21 was about 5.7 feet deep (from the bottom). The description of the soil profile indicates that the layer between 8 feet and 10 feet from the soil surface is greater than 50 % rock fragments. In addition, the back hoe could not dig beyond 12 feet depth. The dry well is FAILED due to absence of a 4-foot buffer between the bottom of the dry well and rock. (See Field Worksheet enclosed with this letter.)

The septic tank installed in 1976 has a capacity of 1000 gallons, permissible for a 3-bedroom residence. The existing structure is reported to have 4 bedrooms. Therefore a septic system upgrade must include a BAT de-nitrification unit.

Summarizing, the existing septic system must be replaced and abandoned. The replacement system will consist of a BAT unit and trenches adequate to receive the estimated discharge from a 4-bedroom residence. The replacement septic system may be installed after the Percolation Certification Plan is signed by the Approving Authority and all permitting requirements are fulfilled.

If you have any questions regarding this evaluation or requirements for a Percolation Certification Plan or BAT Site Plan, please contact me by email or by calling (410) 313-2691.

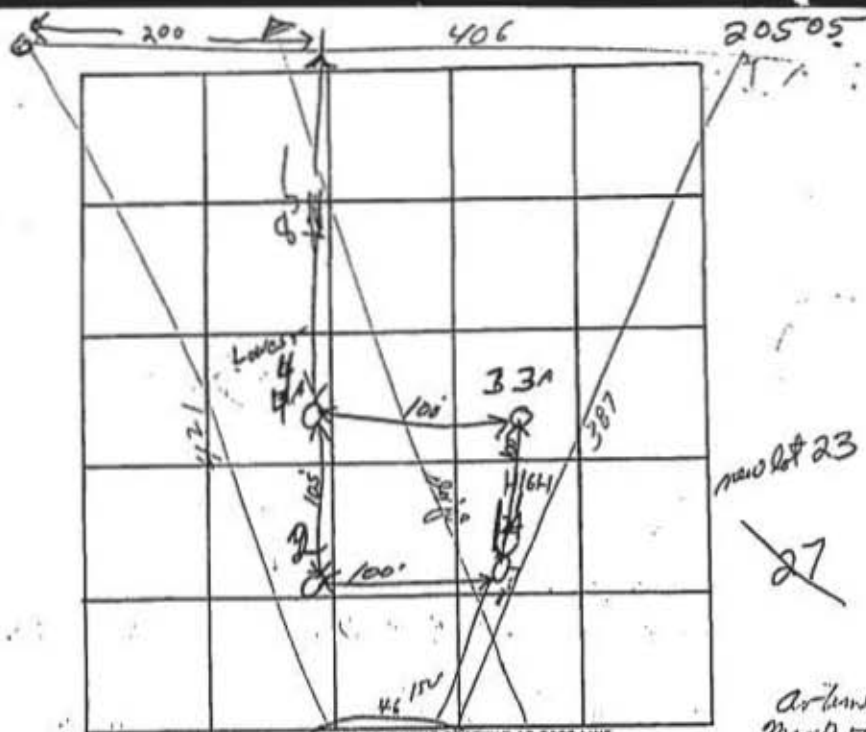
Respectfully,

A handwritten signature in black ink that reads "Robert Bricker". The signature is written in a cursive style with a large, prominent "R" and "B".

Robert Bricker, CPSS, REHS/RS, L.E.H.S.
Environmental Sanitarian II
Well and Septic Program

Enclosures: 1 Perc Test Application with 2 Field Worksheets

Copy: Ken Mauck
file



DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
9-14-74	1/11/14	12 1/2	1037	1038	1031	1036	5"
	1A	5	1037	1038	1031	1036	5"
	2	12'	6000 SOIL AFTER TOP 6'				
	3	12'	1038	1040	1040	1050	10'
	3A	4'	1038	1040	1040	1043	3'
9-14-74	4/11/14	12 1/2	1115	1120	1120	1130	10'
	4A	4'	1113	1123	1123	1154	31' 10" 20" 20"
	4B	6	423	425	425	427	2"

REMARKS

TYPE OF SOIL

TESTED BY

Certify all holes

Sandy loam

RHGHZ

ALSO PRESENT:

Koto

Lot 27

February 14, 2014

Attention: Howard County Department of Environmental Health *Per Application Fee.*

Dear Jeff Williams,

I am requesting the fee that was paid towards the 7506 Lairds Way project be applied to the 13072 St. Patrick's Court project. Thank you in advance for your help with this.

Best Regards,



Ken Mauck

MAUCK CONSTRUCTION
& RENOVATIONS LLC

WWW.MAUCKBUILD.COM

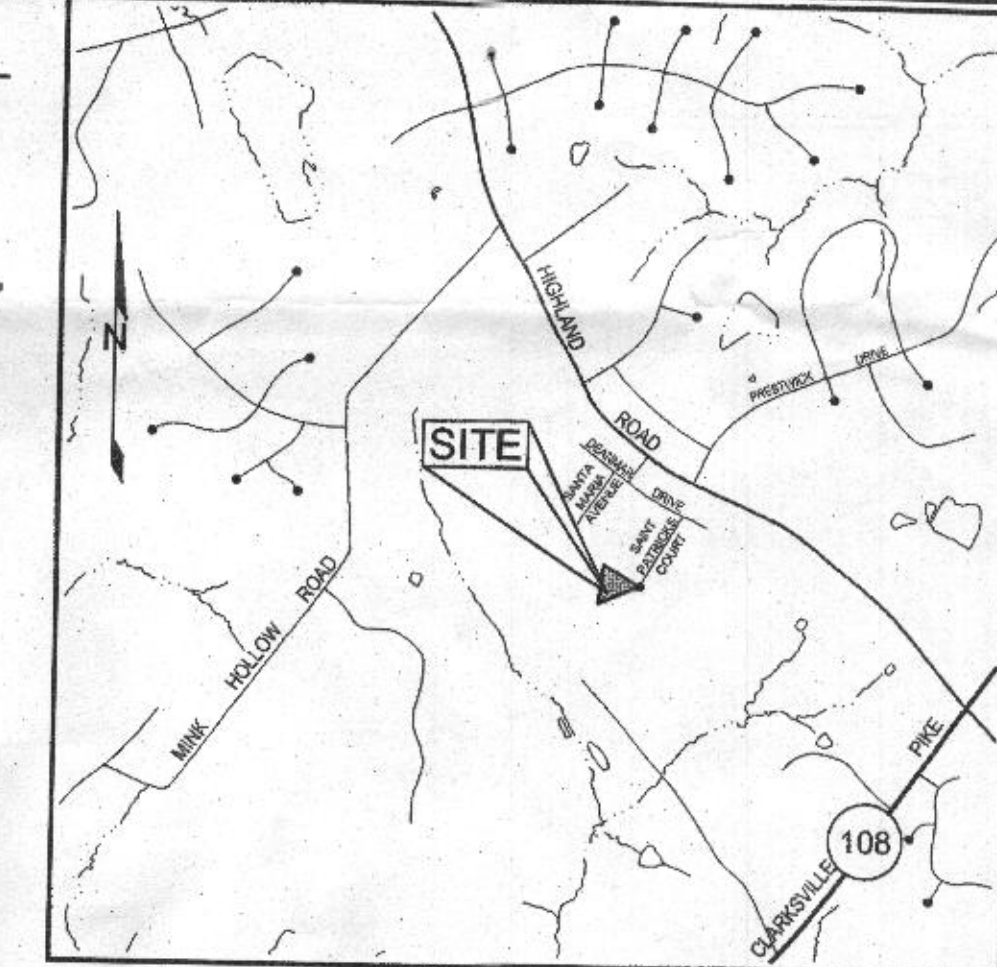
Cc: Paul Sill

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	K' FACTOR
GmB	GLADSTONE LOAM, 3 TO 6 PERCENT SLOPES	B	0.20
GmD	GLENNVILLE SILET LOAM, 3 TO 6 PERCENT SLOPES	C	0.37
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	0.24

NOTES:
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY.
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

LEGEND

EXISTING CONTOUR
 PERCOLATION TEST HOLE, PASSED
 PROPOSED TEST HOLE
 SOIL BOUNDARY
 EXISTING TREE
 EXISTING CLEAN OUT
 PROPOSED WELL AREA
 25% STEEP SLOPES



VICINITY MAP
 SCALE: 1"=200'

GENERAL NOTES

- SUBJECT PROPERTY ZONED RR-DEO PER 02/02/04 COMPREHENSIVE ZONING PLAN.
- TOTAL AREA OF PROPERTY = 1.84 AC.
- PRIVATE WATER AND PRIVATE SEWER WILL BE USED WITHIN THIS SITE.
- THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT, OF AT LEAST 10,000 SF AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL (COMAR 26.04.03). IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A MODIFIED SEWAGE EASEMENT SHALL NOT BE NECESSARY.
- THE BOUNDARY SHOWN HEREON IS BASED ON A RECORD PLAT AND TAX MAP INFORMATION.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY AERIAL TOPOGRAPHY FLOWN IN 2011.
- PROPERTY ADDRESS: 13072 SAINT PATRICK COURT
- REFERENCES: LIBER 4337, FOLIO 527; PLAT BOOK: 30, PLAT PAGE: 51
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- ANY CHANGES TO A PRIVATE SEWAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- ALL EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL EASEMENTS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND ALL EXISTING AND PROPOSED WELLS THAT ARE LOCATED WITHIN 200 FEET DOWN-GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS AND SEWAGE DISPOSAL EASEMENTS HAVE BEEN FIELD LOCATED. LOCATED WELLS WITHOUT A WELL TAG SHOWN DID NOT HAVE ONE.
- THE EXISTING WELL SHOWN ON THIS PLAN (#73-1490) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
- THE PURPOSE OF THIS PLAN IS TO RECORD A PERCOLATION CERTIFICATION PLAN FOR THE EXISTING SEPTIC EASEMENT.

OWNER/DEVELOPER

RICHARD AND MARY ANDERSON
 13072 SAINT PATRICKS COURT
 HIGHLAND MD, 20777

PERCOLATION APPLICATION PLAN

13072 SAINT PATRICK COURT

LOT 23

TAX MAP 34
 5TH ELECTION DISTRICT

PARCEL 355
 HOWARD COUNTY, MARYLAND



Sill · Adcock & Associates · LLC
 Engineers · Surveyors · Planners
 3300 North Ridge Road, Suite 160
 Ellicott City, Maryland 21043
 Phone: 443.325.7682 Fax: 443.325.7685
 Email: info@silladcock.com

DESIGN BY: PS
 DRAWN BY: JT
 CHECKED BY: DS
 SCALE: AS SHOWN
 DATE: NOVEMBER 12, 2014
 PROJECT: 13-1
 SHEET: 1

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR SUPERVISED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 52025, EXPIRATION DATE: 12/31/2018.

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT

DATE

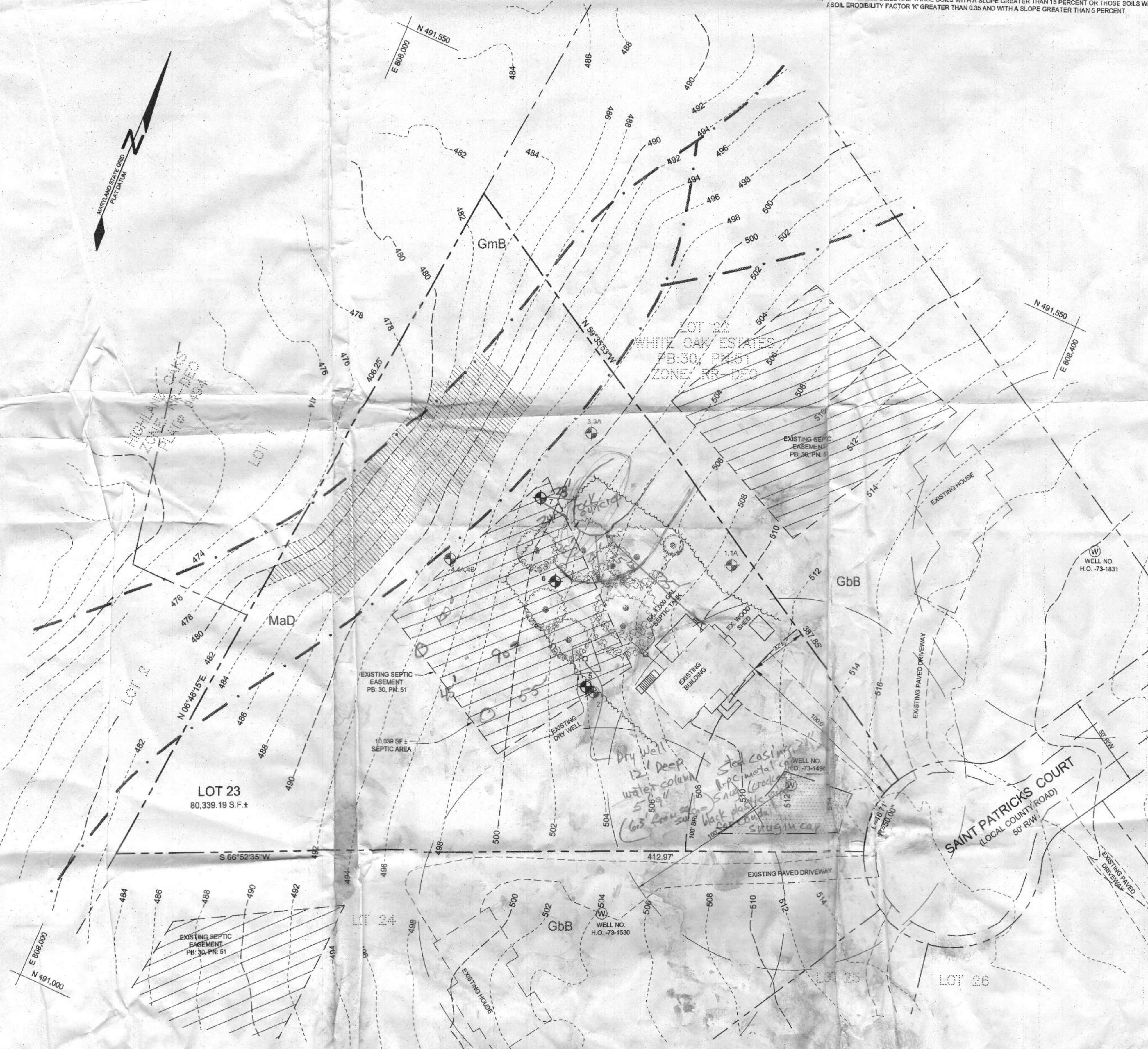
I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AS IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Paul M. Sill
 PAUL M. SILL, PE, LEED AP
 LICENSED PROFESSIONAL ENGINEER #32025

DATE

PLAN VIEW

SCALE: 1"=30'

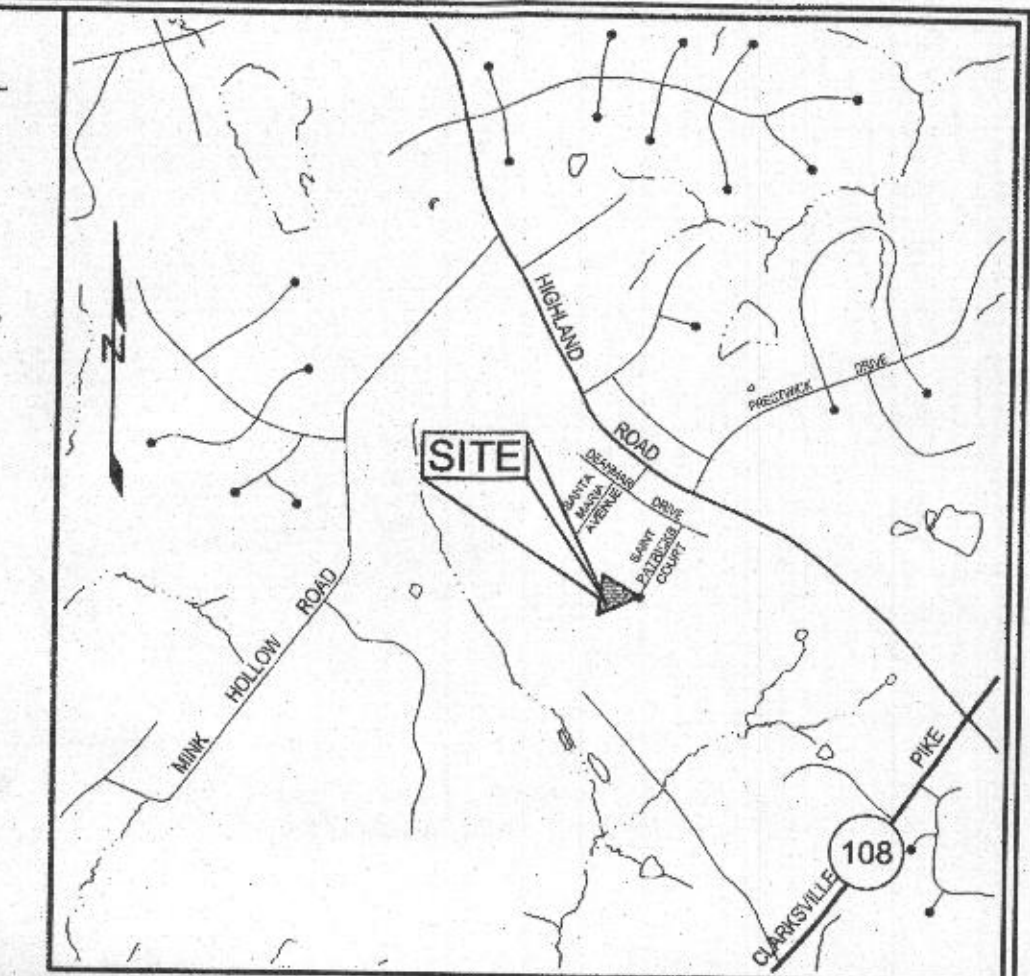


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LEGEND

- EXISTING CONTOUR
 PERCOLATION TEST HOLE, PASSED
 ON 9/19/1974
 PERCOLATION TEST HOLE, PASSED
 ON 2/21/2014
 SOIL BOUNDARY
 EXISTING TREE
 EXISTING CLEAN OUT
 PROPOSED 1,000 SF WELL AREA
 25% STEEP SLOPES

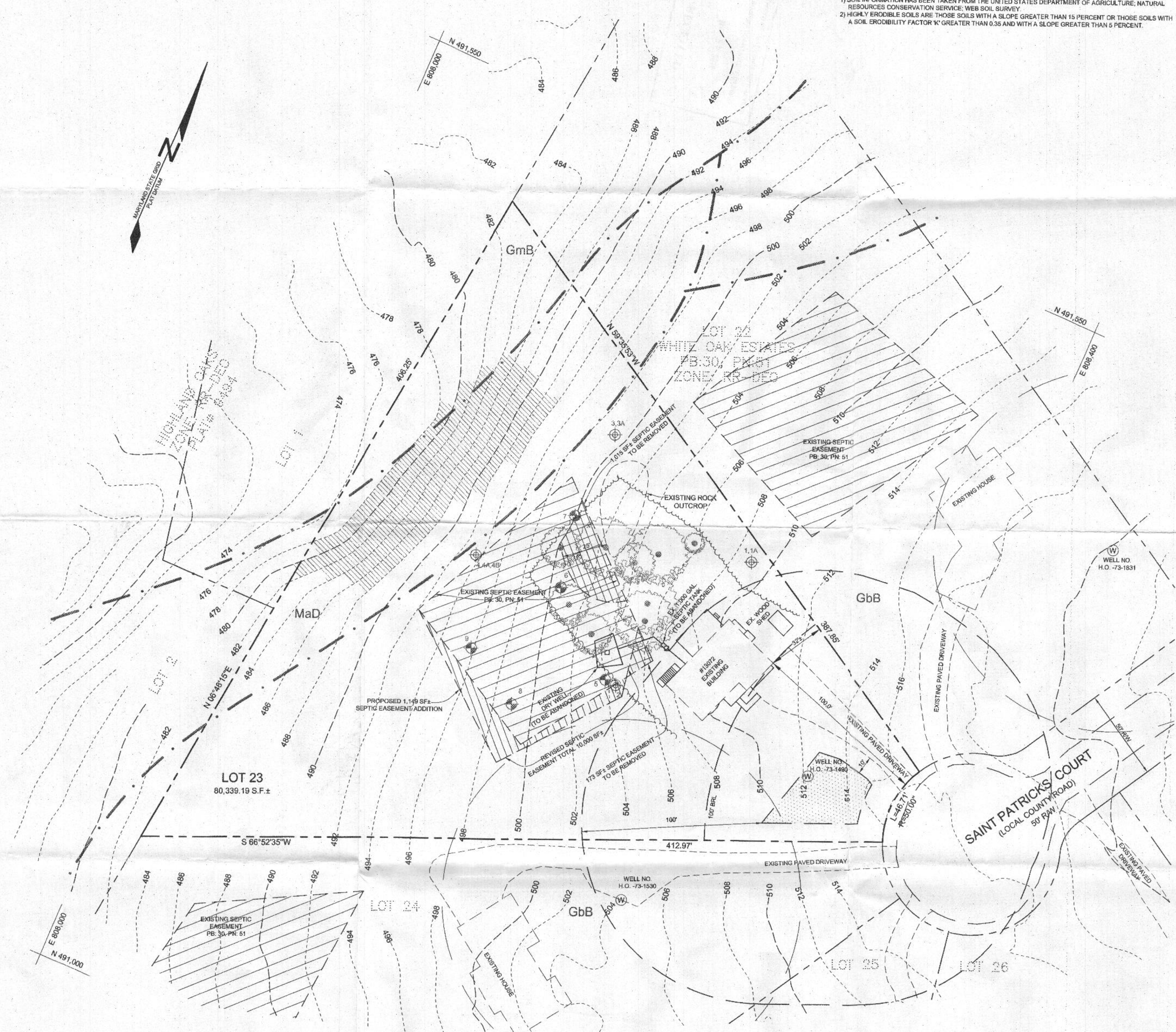


VICINITY MAP
 SCALE: 1"=200'

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- THE EXISTING WELL SHOWN ON THIS PLAN (#73-1490) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
- THE SEPTIC SYSTEM MUST BE REPLACED AND ABANDONED. THE REPLACEMENT SYSTEM WILL CONSIST OF A BAT UNIT AND TRENCHES ADEQUATE TO RECEIVE THE ESTIMATED DISCHARGE FROM A 1,000 GPM RESIDENCE. *The septic system must be upgraded prior to any building permit.*
- THE PURPOSE OF THIS PLAN IS TO RECORD A REVISED PERCOLATION CERTIFICATION PLAN FOR THE EXISTING SEPTIC AREA.

5/16/2014
 Health Dept.
 approved
 any building permit
 PB



PLAN VIEW
 SCALE: 1"=30'

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

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

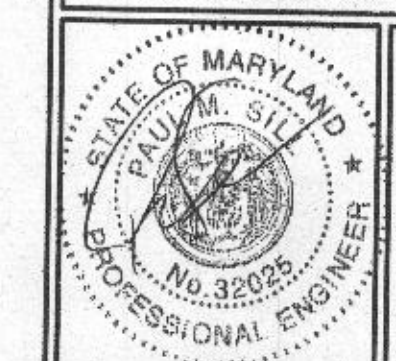
PAUL M. SILL, PE, LEED AP
 LICENSED PROFESSIONAL ENGINEER #32025

DATE

TAX MAP 34
 5TH ELECTION DISTRICT

PERCOLATION CERTIFICATION PLAN 13072 SAINT PATRICK COURT LOT 23

PARCEL 355
 HOWARD COUNTY, MARYLAND



**Sill · Adcock &
 Associates · LLC**
 Engineers · Surveyors · Planners
 3300 North Ridge Road, Suite 160
 Ellicott City, Maryland 21043
 Phone: 443.325.7682 Fax: 443.325.7685
 Email: info@silladcock.com

DESIGN BY: PS
 DRAWN BY: JT
 CHECKED BY: PS
 SCALE: AS SHOWN
 DATE: MAY 5, 2014
 PROJECT #: 13-110
 SHEET #: 1 of 1

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 23, 2015