

APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____

AP 555716

AGENCY REVIEW: _____

DATE 1-21-15

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 5+ 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) The Estate of Joseph Shears

DAYTIME PHONE 443-805-7714 CELL 202-230-1503 FAX _____

MAILING ADDRESS 423 Drury Lane, Baltimore Maryland 21229
STREET CITY/TOWN STATE ZIP

APPLICANT Sean Carney

DAYTIME PHONE 443-805-7714 CELL 202-230-1503 FAX _____

MAILING ADDRESS 423 Drury Lane Baltimore, Maryland 21229
STREET CITY/TOWN STATE ZIP

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

PROPERTY LOCATION
SUBDIVISION/PROPERTY NAME Poplar Height Subdivision LOT NO. 41-44 **2**

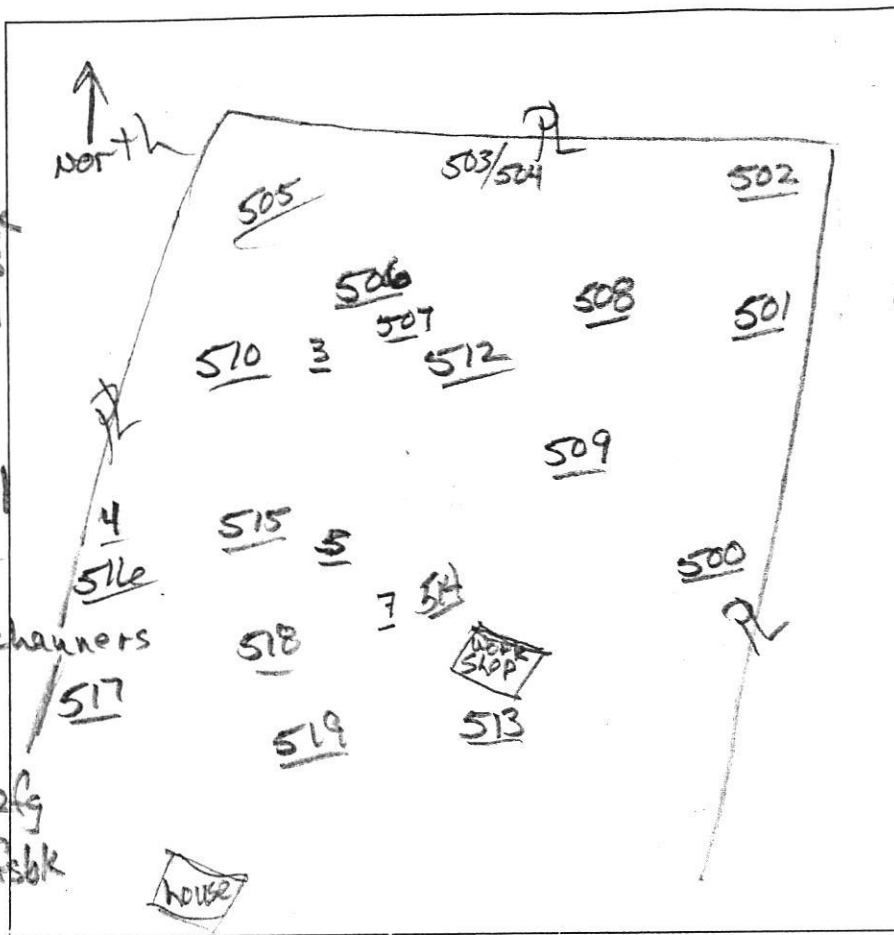
PROPERTY ADDRESS 17034 Hardy Road Mt Airy, Maryland 21771
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 7 GRID 8 PARCEL(S) 31 PROPOSED LOT SIZE 1.89 +/-

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 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



502
 0.5' dk brn sil
 2 vfsbk
 1' brn sil, 2 vfsbk
 few channers
 1' yel-brn chsil
 2msbk
 1.5' yel-brn chsil
 1msbk
 2' ht brn vch sil
 0m
 8' red vfl sil
 >50 flags & channers
 11'

501
 0.4' dk brn sil
 2 vfsbk
 1' brn sil
 1 vfsbk
 1' yel-brn chsil
 2msbk
 to 7msbk
 yellow &
 yellow brn
 chsil, 0m
 4' red vch sil
 50% flags &
 channers
 8' brn vfl sil
 >50% flags
 & channers
 10'

509
 0.8' dk brn sil, 2fg
 brn sil, 1 vfsbk
 brn chsil
 2msbk
 1.5' brn to red
 vch sil, 0m
 4' yellow & brn
 vch sil, 0m
 9' brn chsil, 0m
 11'

500
 1.5' dk brn sil, 2fg
 to brn sil, 1 vfsbk
 3.3' yel-brn
 chsil, dense
 brn sil
 pale yellow
 vch sil, 0m
 35% rock frag.
 10.5' brn vfl sil
 >50% rock
 frag

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
10/30/14	502	22 1/8"	2:07	2:14	2:31	17	P
10/30/14	501	3 1/8"	2:23	2:26	2:34	8	P
10/30/14	509	4 1/11"	2:45	2:48	2:54	8	P
10/30/14	508	11"	Visual	Sidewall 2.3' to 7' 0.8 gpd/cu'			P
10/30/14	500	10.5'	Visual	Sidewall 3.5' to 6.5' 0.8 gpd/cu'			P

508
 0.8' dk brn sil
 2 vfsbk to 1 vfsbk
 2.3' brn sil
 2 vfsbk to 1msbk
 red, yellow
 & pale brn
 sil 0m
 few channers
 10' brn vfl sil
 40-45% rock
 11'

REMARKS #500, back off from # side
 SANITARIAN R Bricker BACKHOE Jeff Allen OTHERS Sean Carney
 TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____
 TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

A/P _____

514

0.7' dk brn sil
2 v/sbk to 7/sbk

1.7' yel-brn sil
2/sbk few
channers

3.3' red & yel-brn
ch sil 7msbk

8' red, yellow
& brn vch sil
35% rock frag.

brn v/sil
>50 rock frag

515 5

514



500

519

513

513

1' dk brn hix
brn L, 7/sbk

25' yel-brn
ch sil, 7/sbk

35' dense red & brn
ch sil, 4m

6' red, yellow
& brn ch sil

9' brn vch sil
4m, 40% rock
frag.

10' brn v/sil
50% rock frag

brn v/sil
>50% rock
frag

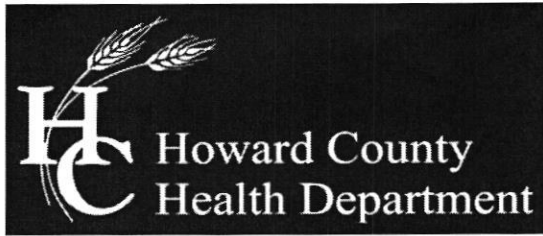
DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
10/30/14	514	8'	Visual	sidewall	0.8 gnd	1.7'-4'	P
10/30/14	513	10'	Visual	sidewall	0.8 gnd	3.5'-6'	P

REMARKS _____

SANITARIAN R Bricker BACKHOE Jeff Allen OTHERS Sean Carney

TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____

TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

Main: 410-313-2640 | 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

SEWAGE DISPOSAL SYSTEM SPECIFICATIONS WORKSHEET

Address: 17034 Hardy Road

Subdivision: SHEARS PROPERTY Lot: 2
(ex. house)

^{513' x 500'}	Initial system:	Application rate: <u>0.8</u>	Effective area beginning depth: <u>3.5</u>	Bottom maximum depth: <u>6</u>
^{500' x 500'}	1st Replacement:	Application rate: <u>0.8</u>	Effective area beginning depth: <u>3.5</u>	Bottom maximum depth: <u>6.5</u>
^{500'}	2nd Replacement:	Application rate: <u>0.8</u>	Effective area beginning depth: <u>3.5</u>	Bottom maximum depth: <u>7</u>
^{501' x 512'}	<i>Lower SDA</i>	<u>0.8</u>	<u>3.5</u>	<u>4</u>

Design Flow = 150 gallons per day per bedroom

Design flow ÷ application rate = square footage of drainfield required

Linear length of trench required = drainfield square footage x sidewall reduction percentage ÷ trench width

Sidewall reduction credit formula:

$$\frac{W + 2}{W + 1 + 2D} \times 100 = \text{Percent of length of standard trench where } W = \text{trench width and } D = \text{depth between effective area beginning depth and trench bottom.}$$

Standard design requirements:

- All trenches must be equal length unless low pressure dosed
- All trenches must be on contour
- Minimum trench spacing: 10' for all trenches utilizing sidewall reduction credit. Additional spacing may be necessary for any trench using over 3.5' of effective sidewall. In those cases, the spacing formula is 2D + W up to a maximum spacing of 18'.
- Minimum trench spacing for trenches with no sidewall credit (bottom area only) is 6' for a 2' wide trench and 9' for a 3' wide trench (spacing is measured edge to edge)
- Maximum trench length is 100'
- Maximum pipe depth is 4'

Additional requirements:

*Septic Tank (1000 gal, 2-chamber) for 3-bedroom SFD.
Low-Pressure Distribution for all drainfields, and*

Properly sized Pump Chamber and Pump.

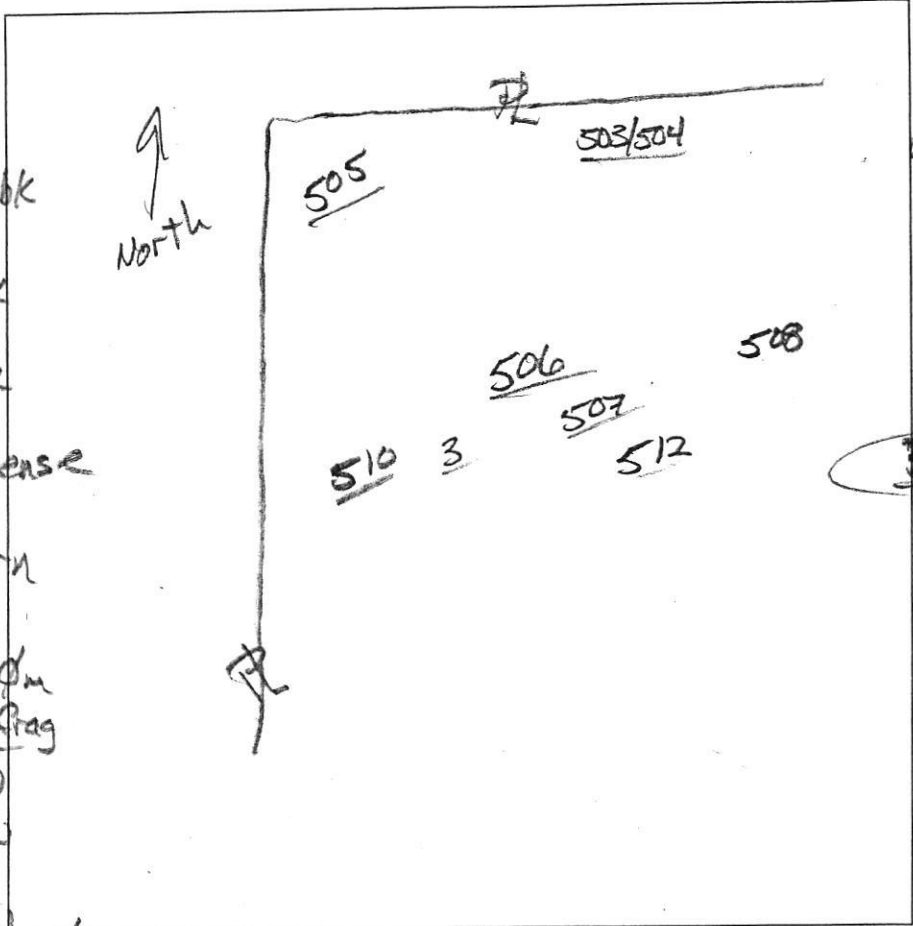
Pump & Abandon existing Septic Tank and Dry Well.

Approved: R Bricker Date: 3/27/2015

A/P

506
 0.7' dk brn sil / 2 vlsbk to 7fsbk
 red brn ch sil, 2fsbk
 2' red brn chsil, 1fsbk
 3' yel-brn chsil, ϕ m, dense
 3.5' yel-brn + brn chsil, ϕ m
 6.5' brn vlsil, ϕ m ~40% rock frag
 7.7' red, yellow & pale yellow
 9' vch sil

North ↑



503/504
 dk brn sil / 2fsbk → 2fsbk
 0.8' brn chsil
 1.1' 2fsbk
 brn chsil 1msbk
 2' yel-brn chsil
 ϕ m, dense
3.5' yellow, red & pale yellow chsil, ϕ m
 few frags
 9' red vlsil
 40-45% rock incl. channers
 11'

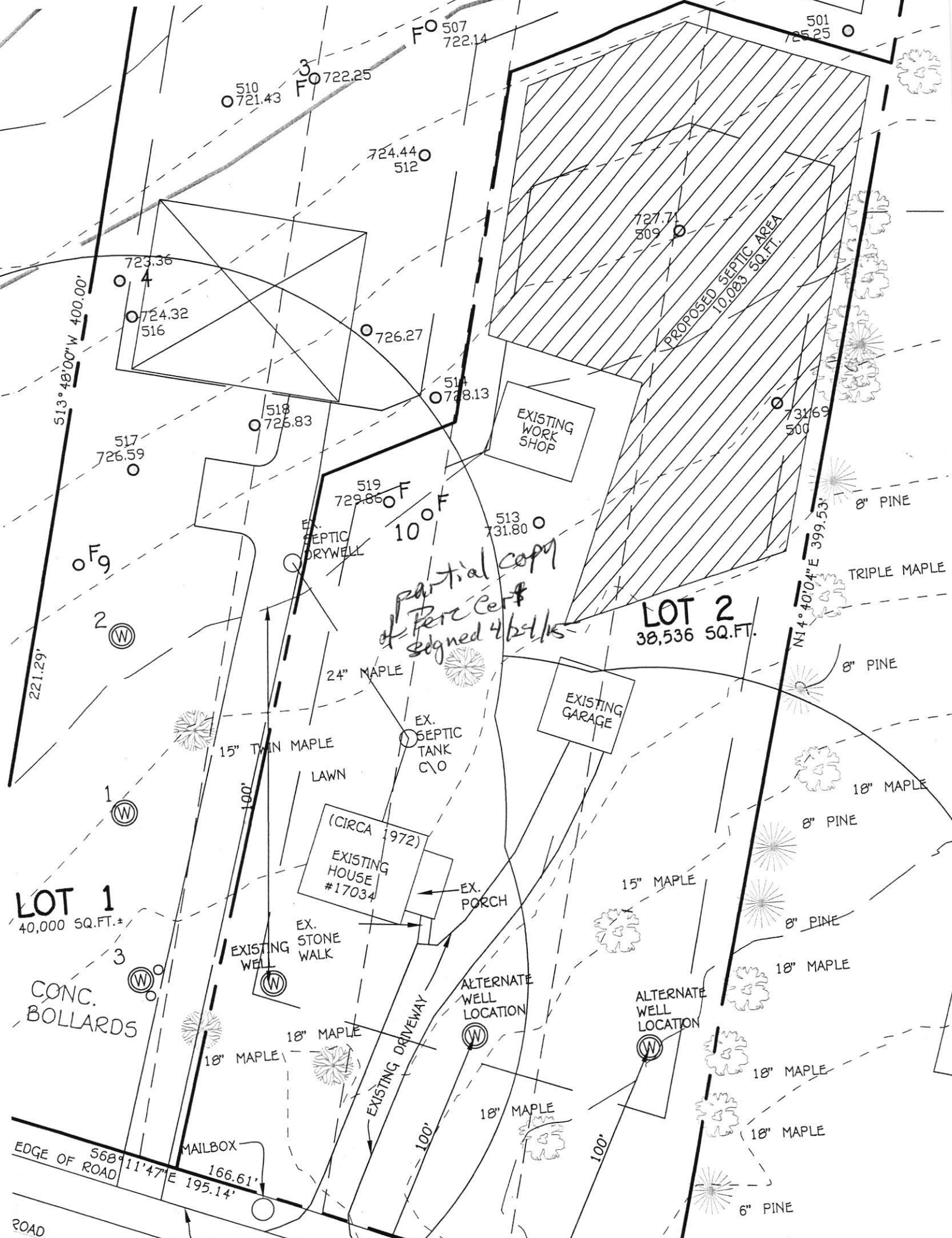
brn vlsil w/ many channers
 60% rock fragments
 10'

505
 0.7' dk brn sil / 2fsbk to 7fsbk
 brown chsil
 2' 2msbk
 red-brn chsil, thin platy
 2.5' brn chsil
 ϕ m, dense
 3.5' red, yellow & pale yellow
 ch sil
 9' brn vlsil
 40% rock frag.
 incl. channers
 11'

512
 dk brn sil / 2 vlsbk to 7fsbk
 0.7' yel-brn chsil, 2fsbk
 1.5' red-brn chsil, 1msbk
 2.2' brn vchsil
 ϕ m, dense
 3.5' red, yellow & brn vchsil
 40% rock frag.
 10' brn vlsil
 >50% rock frag.

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
10/30/14	507	3.6' / 7'	12:45	1:00	little movement		
10/30/14	503 504	5' / 11'	12:49	12:52	12:58	6	P
10/30/14	506	9'	Visual		sidewall	3.5' - 5'	P
10/30/14	505	3.7' / 11'	1:22	1:33	2:03	30	P
10/30/14	505	11'	Visual		3.5' - 7'		P
10/30/14	512	10'	Visual		3.5' - 6'		P

REMARKS #512 moved to near #507; #506 moved to near #507
 SANITARIAN R. Bricker BACKHOE Jeff Allen OTHERS Sean Carney
 TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____
 TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____



LOT 1
40,000 SQ.FT.±

LOT 2
38,536 SQ.FT.

partial copy
of Perc Cert
signed 4/25/15

PROPOSED SEPTIC AREA
10,083 SQ.FT.

(CIRCA 1972)
EXISTING HOUSE
#17034

EXISTING WORK SHOP

EXISTING GARAGE

CONC. BOLLARDS

EDGE OF ROAD
568° 11' 47" E 166.61'
195.14'

MAILBOX

ALTERNATE WELL LOCATION

ALTERNATE WELL LOCATION

8" PINE

TRIPLE MAPLE

8" PINE

18" MAPLE

8" PINE

8" PINE

18" MAPLE

18" MAPLE

18" MAPLE

6" PINE

24" MAPLE

LAWN

15" TWIN MAPLE

18" MAPLE

18" MAPLE

18" MAPLE

15" MAPLE

513° 48' 00" W 400.00'

N 14° 40' 04" E 399.53'

F 507 722.14

F 722.25

510 721.43

724.44 512

727.71 509

501 725.25

723.36 516

726.27

514 728.13

518 725.83

517 726.59

519 729.86

513 731.80

F 9

2 (W)

1 (W)

3 (W)

10" F

EX. SEPTIC DRYWELL

EX. SEPTIC TANK C/O

EXISTING WELL

ALTERNATE WELL LOCATION

ALTERNATE WELL LOCATION

ROAD

EV

LEGEND

- EXISTING 2' CONTOURS
- EXISTING 10' CONTOURS
- EXISTING TREE LINE
- SOIL LINES AND TYPES
- ⊙ DENOTES PROPOSED WELL
- ⊠ DENOTES PROPOSED HOUSE
- F DENOTES FAILED PERC
- DENOTES PASSED PERC

Minimum Lot Size Chart

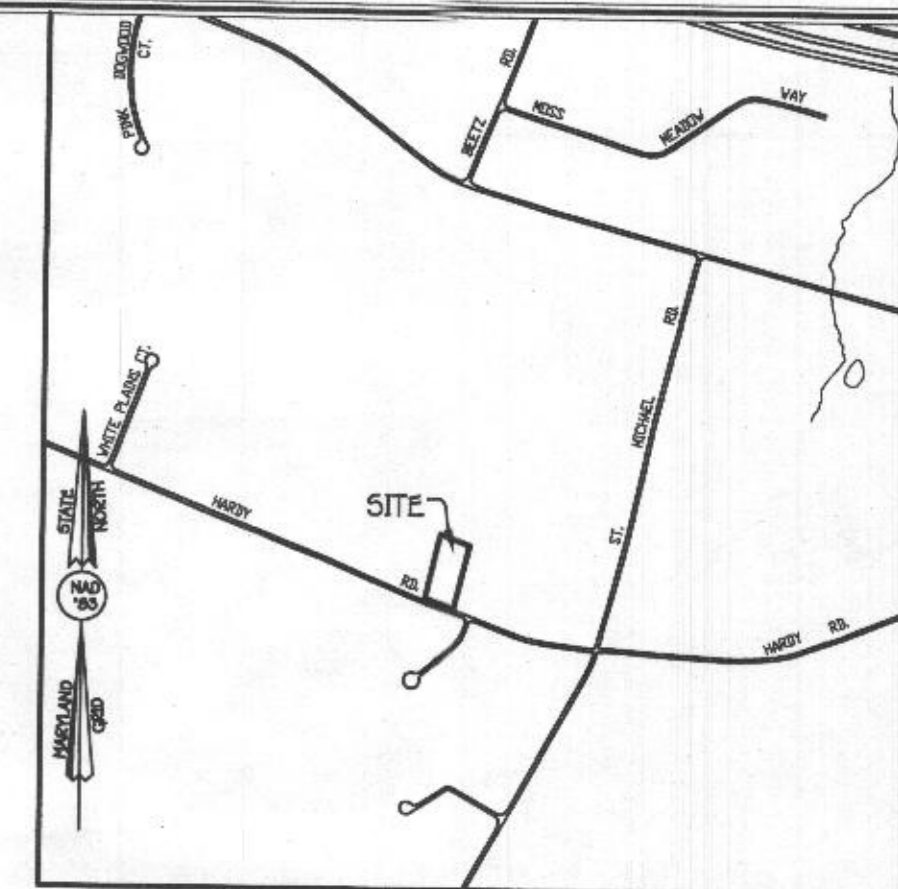
LOT No.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
2	40,531 SQ.FT.	7,519 SQ.FT.	33,012 SQ.FT.

SOILS LEGEND

SOIL	NAME	CLASS
GgA	Glenelg loam, 0 to 3 percent slopes	B
GgB	Glenelg loam, 3 to 8 percent slopes	B
GgC	Glenelg loam, 8 to 15 percent slopes	B
GnB	Glenville-Baile silt loams, 0 to 8 percent slopes	C

NOTES:

- Hydric soils and/or contains hydric inclusions
- May contain hydric inclusions
- † Generally only within 100-year floodplain areas



VICINITY MAP
SCALE: 1" = 1200'
MAP PAGE 4691 GRID B6

GENERAL NOTES:

1. THIS AREA DESIGNATES A PRIVATE SEWAGE AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL FOR LOTS CREATED PRIOR TO MARCH OF 1972 IT PROVIDES AT LEAST ENOUGH AREA TO ACCOMMODATE AN INITIAL AND TWO REPLACEMENT SEPTIC SYSTEMS AS REQUIRED BY THE HOWARD COUNTY HEALTH DEPARTMENT. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS AREA 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 AREA. RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.
2. ALL WELLS TO BE DRILLED PRIOR TO HEALTH DEPARTMENT APPROVAL OF THE PROPOSED RE-SUBDIVISION OF POPLAR HEIGHTS LOTS 41-44.
3. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREAS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
4. ANY CHANGES TO A PRIVATE SEWAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
5. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
6. FIELD TOPOGRAPHY SURVEY ON LOTS 1 AND 2 AND 50 FEET OFF SITE PERFORMED BY FISHER, COLLINS & CARTER, INC. ON MARCH 25, 2010 WITH A VERTICAL TOLERANCE OF 6". CONTOUR TOPOGRAPHY OUTSIDE LOT 1 AND LOT 2 IS BASED ON HOWARD COUNTY GIS TOPOGRAPHY AT 2' CONTOUR INTERVAL.
7. BOUNDARY OUTLINE BASED ON A FIELD RUN SURVEY PREPARED BY FISHER, COLLINS AND CARTER, DATED APRIL 12, 2012.
8. ⊠ DENOTES EXISTING PRIVATE SEWAGE EASEMENT.
9. LOTS 41 THRU 44 RECORDED UNDER THE POPLAR HEIGHTS SUBDIVISION PLAT BOOK 3, FOLIO 26 TO BE REMOVED UPON RECORDATION OF NEW DEED CREATING LOTS 1 AND 2 OF THE SHEARS PROPERTY.
10. IN ACCORDANCE WITH SECTION 16.102(c)(3) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS THE DEPARTMENT OF PLANNING AND ZONING MAY PERMIT RESUBDIVISIONS WHICH ARE NOT IN ACCORDANCE WITH THE MINIMUM LOT SIZE REQUIREMENTS OF THE ZONING REGULATIONS IF THE RESUBDIVISION IMPROVES THE COMPLIANCE OF THE EXISTING LOTS THAT DO NOT MEET CURRENT ZONING BULK REGULATIONS BY BRINGING THE NON-COMPLYING LOTS AS CLOSE TO ZONING COMPLIANCE AS POSSIBLE; AND, THE REMAINDER OF THE PARCEL AFTER THE RESUBDIVISION IS IN ACCORDANCE WITH THE ZONING REGULATIONS.
11. THE EXISTING DRY WELL WHICH HAS SERVED 17034 HARDY ROAD MUST BE ABANDONED AND REPLACED PRIOR TO HEALTH DEPARTMENT APPROVAL OF THE PROPOSED RE-SUBDIVISION OF (POPLAR HEIGHTS SUBDIVISION) LOTS 41-44.
12. LOW-PRESSURE DISTRIBUTION OR EQUIVALENT DRAINFIELD DESIGN WILL BE REQUIRED FOR ALL DRAINFIELDS INSTALLED ON BOTH LOTS 1 AND 2, AS ILLUSTRATED ON THIS PLAN.

PERC CERTIFICATION

I certify that the location of the proposed wells are based on field locations done under my direct supervision and are distributed in accordance with my professional knowledge and belief.

Signature of Professional Land Surveyor: *Terrell A. Fisher* 4/17/15 Date

Terrell A. Fisher, Professional Land Surveyor No. 10692

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT.

Signature for *Maura Reisman* 4/24/2015 DATE

COUNTY HEALTH OFFICER

red-line revision 5/8/15, well location Lot 1
6/1/15, Alt. well location Lot 2

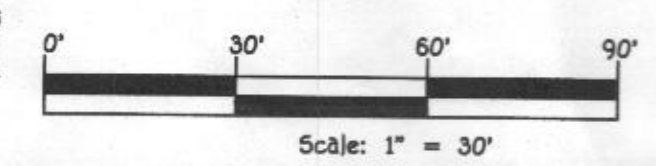
PERCOLATION CERTIFICATION PLAN
SHEARS PROPERTY
LOTS 1 & 2
A RESUBDIVISION OF POPLAR HEIGHTS SUBDIVISION
LOT 41-44 AS RECORDED IN THE LAND RECORDS
AS PLAT No. 3, FOLIO 26

TAX MAP #7 GRID: B PARCEL: 31
4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1"=30' DATE: APRIL 17, 2015

PC 554648

1:200505075\dwg\05075-6002 Revised Perc Cert-3.dwg, 4/17/2015 1:54:50 PM, 130

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 18272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
4107 451 - 2999



OWNER AND DEVELOPER
MR. JOSEPH SHEARS
1704 HARDY ROAD
MT. AIRY MARYLAND 21771
40-489-4310