



# HOWARD COUNTY HEALTH DEPARTMENT

64747

DATE 2/11/19

05

Received From

Chesapeake Proptoria Inc.

PHONE #

410-899-5020

For

Well Permit 17831

Harriet Tubman

lane

CASH

CHECK

NO.

39383

One hundred sixty

Dollars

\$

160.00

Received By

J. King

C1 53265

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

FILL IN THIS FORM COMPLETELY PLEASE TYPE

COUNTY NUMBER XIN

ST/CO USE ONLY DATE RECEIVED MM 00 DD 28 YR 19

DATE WELL COMPLETED MM 03 DD 17 YR 19 Depth of Well 320 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" Hi-18-0011

OWNER PASS WELL SITE ADDRESS 9831 Harriett Tubman TOWN Columbia SUBDIVISION PASS PROPERTY SECTION 1 LOT 2

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes handwritten entries: Moist silt, Brown fine mica, Weathered rock (10-18), Weathered rock (18-320).

GROUTING RECORD form with fields: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL (CM, BC), NO. OF BAGS (15), NO. OF POUNDS (30), GALLONS OF WATER (30), DEPTH OF GROUT SEAL (0-320).

CASING RECORD form with fields: MAIN CASING TYPE (ST, CO, PL, OT), Nominal diameter top (main) casing, Total depth of main casing.

OTHER CASING (if used) form with fields: diameter inch, depth (feet) from to.

SCREEN RECORD form with fields: screen type or open hole (ST, BR, HO, PL, OT), DEPTH (nearest ft.)

PUMPING TEST form with fields: HOURS PUMPED, PUMPING RATE, METHOD USED TO MEASURE PUMPING RATE, WATER LEVEL (distance from land surface) BEFORE PUMPING, WHEN PUMPING, TYPE OF PUMP USED.

PUMP INSTALLED form with fields: DRILLER INSTALLED PUMP (YES/NO), TYPE OF PUMP INSTALLED PLACE, CAPACITY: GALLONS PER MINUTE, PUMP HORSE POWER, PUMP COLUMN LENGTH, CASING HEIGHT.

NUMBER OF UNSUCCESSFUL WELLS: 0 WELL HYDROFRACTURED: Y (yes) N (no)

CIRCLE APPROPRIATE LETTER: A (WELL WAS ABANDONED AND SEALED), E (ELECTRIC LOG OBTAINED), P (TEST WELL CONVERTED TO PRODUCTION WELL)

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT...

DRILLERS LIC. NO. MWD 580 DRILLERS SIGNATURE [Signature] LIC. NO. D

DEPTH (nearest ft.) table with columns 1-21 and rows A-C, S-R, E-E, N-N. Includes SLOT SIZE and DIAMETER OF SCREEN.

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q 70 72 74 75 76

LATITUDE 39.188055 LONGITUDE 76.888111 (DEFAULT COORD. WGS 84)

Pursuant to §10-624 of the State Govt. Article of the Maryland Code personal info. requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info. may result in this form not being processed.

B 1  
64107

SEQUENCE NO.  
(MDE USE ONLY)

STATE OF MARYLAND  
APPLICATION FOR PERMIT TO DRILL WELL  
please type

STATE PERMIT NUMBER  
HO-18-0011  
fill in this form completely

OWNER INFORMATION  
Date Received (APA) 02/19/19  
8 MM DD YY 13  
15 Last Name Pass Owner Bryan First Name  
36 77K Softok Way Street or RFD  
57 Hanover MD 21076  
70 Town 72 State 74 Zip 76

LOCATION OF WELL  
B 3  
8 COUNTY Howard  
23 SUBDIVISION Pass Property  
SECTION 44 46 LOT 2  
52 NEAREST TOWN Columbia

DRILLER INFORMATION  
Driller's Name Ed Gross MWD 580  
76 License No. 81  
Firm Name Chesapeake Geosystems  
Address 6720 Fort Smallwood Rd. Balt MD 21224  
Signature [Signature] Date 2/18/19

SOURCES OF DRILLING WATER  
B 4  
11 Public  
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)  
34 600 37 DISTANCE FROM ROAD FT  
ENTER FT OR MI 38 39  
TAX MAP: 35 BLK: 23 PARCEL 117

WELL INFORMATION  
B 2  
APPROX. PUMPING RATE (GAL. PER MIN.) 8 12  
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)  
D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION  
F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)  
I INDUSTRIAL, COMMERCIAL, DEWATERING  
P PUBLIC WATER SUPPLY WELL  
T TEST, OBSERVATION, MONITORING  
O OPEN LOOP GEOTHERMAL  
C CLOSED LOOP GEOTHERMAL 4x Geothermal

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL  
Howard 13 COUNTY NAME COUNTY NO.  
STATE SIGNATURE INSERT S  
DATE ISSUED 2/26/19 Sch. L.L. 2/26/20  
43 MM DD YY 48 CO SIGNATURE EXP. DATE  
DON: 3/6/19 DOG: 3/8/19 DOY: N/A

APPROXIMATE DEPTH OF WELL 320' FEET  
24 28  
APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)  
BORED (or Augered) JETTED Jetted & DRIVEN  
30 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)  
37 CABLE REVerse-ROTary Drive-POINT  
other

REPLACEMENT OR DEEPEINED WELLS (CIRCLE APPROPRIATE BOX)  
N THIS WELL WILL NOT REPLACE AN EXISTING WELL  
Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED  
S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS  
D THIS WELL WILL DEEPEIN AN EXISTING WELL  
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE) 41 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY)  
APPROP. PERMIT NUMBER G  
PERMIT No. HO-18-0011  
70 71 72 73 74 75 76 77 78 79

PROPOSED LOCATION OF WELL ON LOT  
SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL  
3/1  
- 1st bore drilled @ 100' on 2nd - not hitting much water  
3/8 - 2nd bore drilled 320', minimal H2O  
#1 bore grouted - 14 bags to Rd  
#2 - loop dropped to be grouted today  
20' casing to be removed.  
3/11  
- 3rd bore drilled loop installed  
- drillers installing loop on 4th bore  
- 3rd hole partially grouted  
- little water hit during drilling  
House  
15' apart  
210'  
Property Line  
Harriet Tubman Ln

SPECIAL CONDITIONS  
NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED  
Drill cuttings and water must be contained and cannot enter drainage swale.

METER 1 - 30 FT L

457 LF CREDII

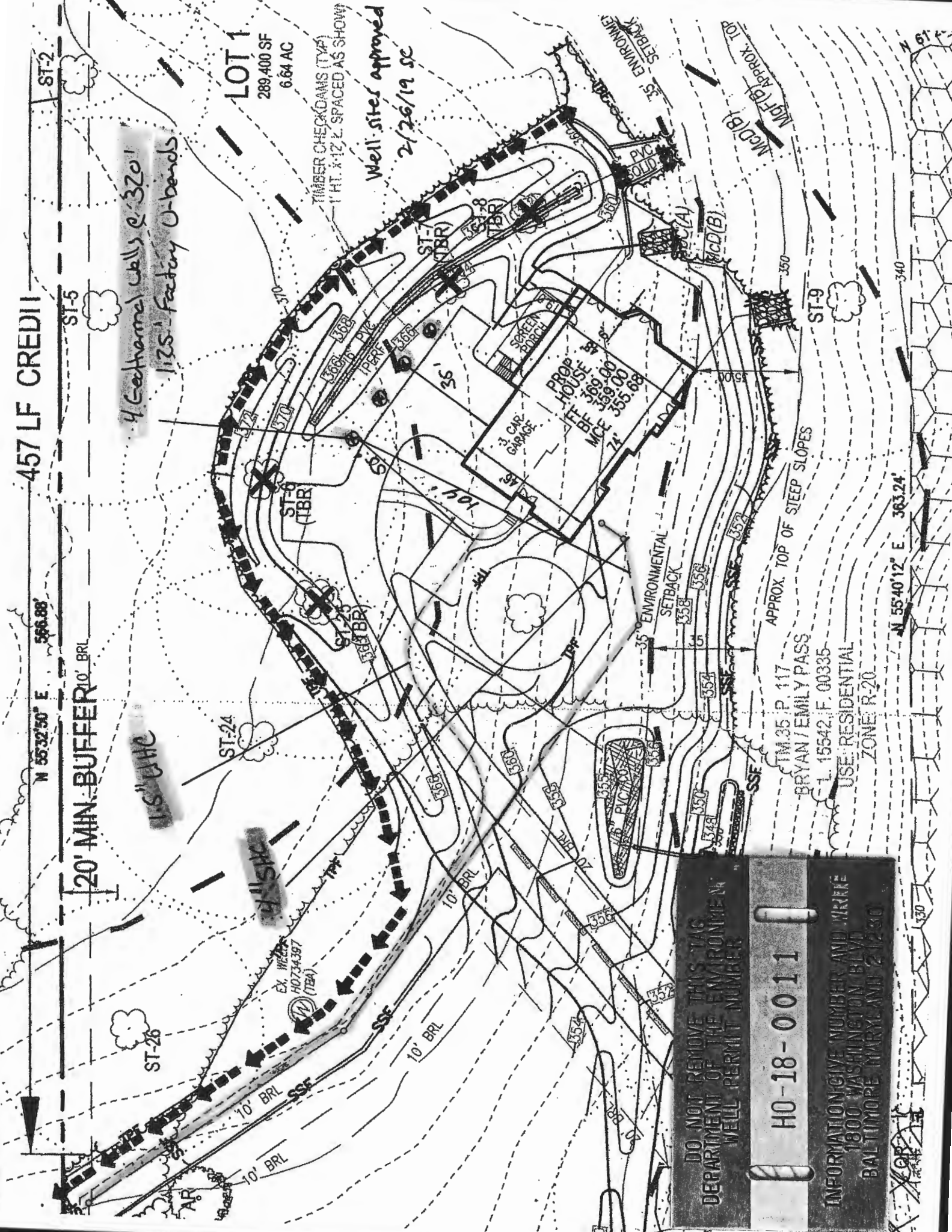
N 55°32'50" E 566.88'

20' MIN. BUFFER 10' BRL

4 Geothermal Wells @ 320'  
135' Factory U-bends

LOT 1  
289,400 SF  
6.64 AC

TIMBER CHECKDAMS (TYP)  
1 HT. X 12' L SPACED AS SHOWN  
Well sites approved  
2/26/19 SC



DO NOT REMOVE THIS TAG  
DEPARTMENT OF THE ENVIRONMENT  
WELL PERMIT NUMBER

**H0-18-0011**

INFORMATION NUMBER AND WRITE  
1800 WASHINGTON BLVD  
BALTIMORE MARYLAND 21201

TM 35 P. 117  
BRYAN / EMILY PASS  
C.L. 15542 F. 00335  
USE RESIDENTIAL  
ZONE R-20

N 55°40'12" E 363.24'

340

350

360

370

380

390

400

410

420

430

440

450

460

470

480

490

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2000

WATER WELL ABANDONMENT SEALING REPORT FORM

SUBMIT COPIES OF COMPLETED FORM TO:

- \* COUNTY ENVIRONMENTAL AGENCY (contact MDE, WMA if address needed)
- \* WELL OWNER
- \* MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: 10-12-17 (month/day/year)

\* PERMIT NUMBER OF ABANDONED WELL (if any)

HO 73-4397

\* PERMIT NUMBER OF REPLACEMENT WELL:

- N/A -

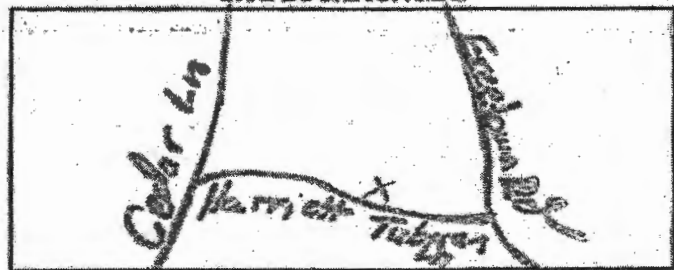
\* PERSON ABANDONING WELL: Andrew Houseman WELL DRILLER'S LICENSE NUMBER: 224

CIRCLE: MWD / MSD / MGS

\* OWNER'S NAME: Bryan Ross

SITE LOCATION MAP

\* WELL LOCATION:  
 COUNTY: Howard  
 NEAREST TOWN: Columbia  
 TAX MAP 0035 BLOCK 0023 PARCEL 0117  
 SUBDIVISION:  
 SECTION: LOT:  
 STREET ADDRESS: 7831 Harriett Tubman



LATITUDE 3 9.187732

LONGITUDE 7 6.889015

LOG OF SEALING MATERIAL

\* TYPE OF WELL BEING ABANDONED:

- DRILLED
- BORED
- OTHER (specify)
- JETTED
- HAND DUG

MATERIAL	FEET	
	FROM	TO
<u>Bentonite</u>	<u>260</u>	<u>0</u>

\* USE CODE:

- DOMESTIC
- IRRIGATION
- TEST/OBSERVATION
- MUNICIPAL/PUBLIC
- INDUSTRIAL
- GEOTHERMAL

VOLUME OF MATERIAL USED

2750 lb. Bentonite

\* TYPE OF CASING:

- STEEL
- CONCRETE
- PLASTIC
- OTHER (specify)

SIZE OF CASING: 6" INCHES IN DIAMETER

DEPTH OF WELL: 260' FEET DEEP

WAS ANY CASING REMOVED?  YES  NO  
 If yes, length removed, in feet: 2

WAS CASING RIPPED OR PERFORATED?  YES  NO

SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN Andrew Houseman LICENSE# 724

CIRCLE ONE MWD / MSD / MGS DATE 10-12-17 \*

COUNTY

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# WELL SCHEMATIC FORM

**GROUND SURFACE**

**PERMANENT OUTER CASING (if area contaminated)**

MATERIAL \_\_\_\_\_

DIAMETER \_\_\_\_\_

LENGTH \_\_\_\_\_

DEPTH INTO CONFINING UNIT \_\_\_\_\_

**PERMANENT OUTER CASING**

**TUBE CASING (if not regular, single loop)**

ATTACH HORIZONTAL SCHEMATIC \_\_\_\_\_

NUMBER OF TUBES PER BOREHOLE \_\_\_\_\_

DIAMETER OF TUBES \_\_\_\_\_

MATERIAL \_\_\_\_\_

SHAPE AND LENGTH \_\_\_\_\_

TUBE CONNECTION METHOD \_\_\_\_\_

TUBE CONNECTION MATERIAL \_\_\_\_\_

**CONFINING UNIT**

**LOOP PIPE CASING (regular, single loop)**

MATERIAL HDPE? YES  NO

DIAMETER 1.75"

LENGTH 320' (640' Total)

**GROUT**

MATERIAL Bentonite

PERMEABILITY  $1 \times 10^{-7}$

WATER / GROUT RATIO 24 gal / 50 lbs

PERCENT SOLIDS 50%

TREMIE GROUTED FROM BOTTOM OF BOREHOLE? YES  NO

USING A POSITIVE DISPLACEMENT PUMP? YES  NO

DEPTH TO THE BOTTOM OF HOLE 320'

DIAMETER OF BOREHOLE 5.75"

WELL ADDRESS  
7831 Harriet Tubman Ln  
Columbia, MD 21044

LOT NUMBER: 2

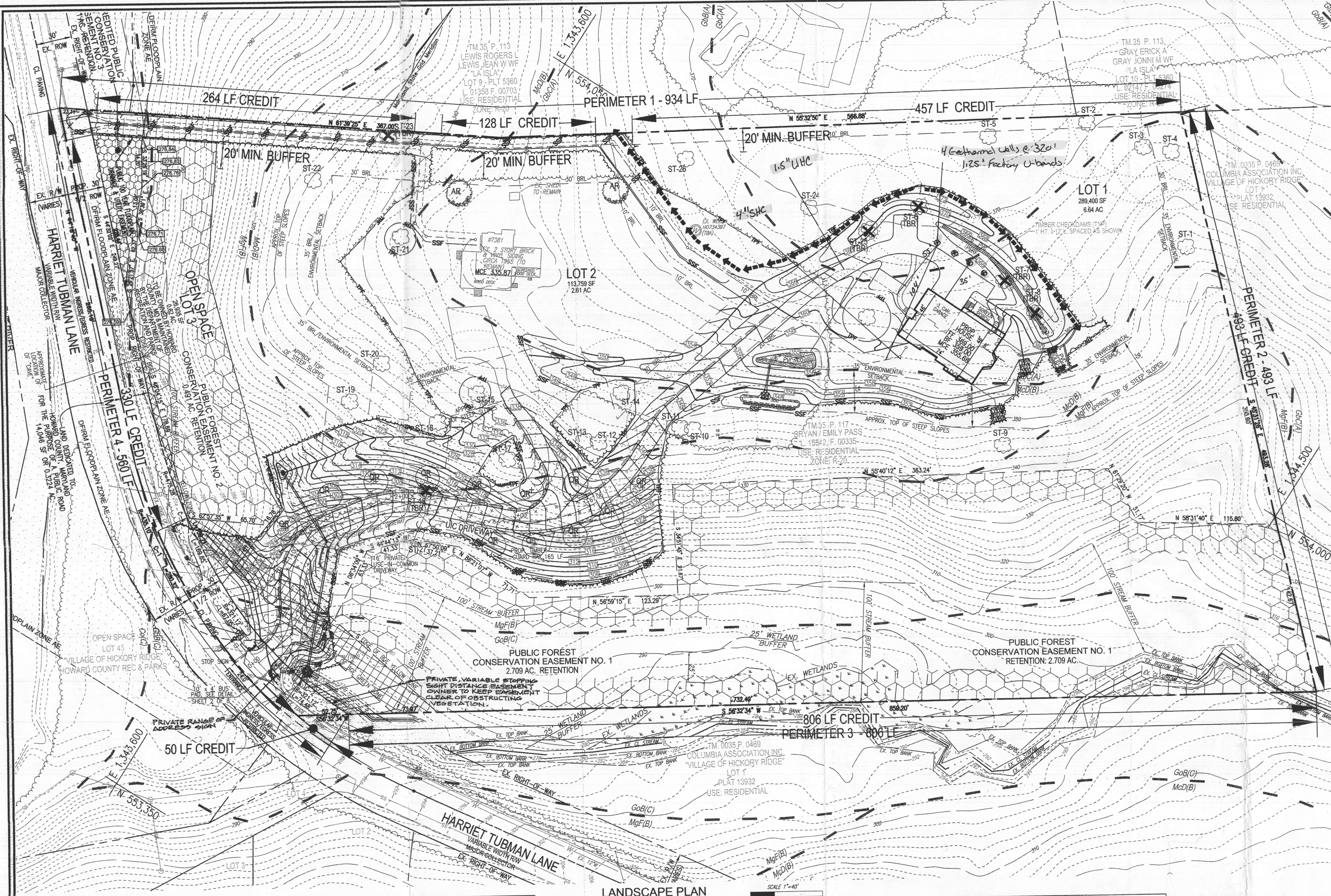
SQUARE NUMBER: \_\_\_\_\_

WELL OWNER:  
Bryan Pass

OWNER ADDRESS:  
7715 Saffolkway  
Hammer MD. 21076

\_\_\_\_\_

\_\_\_\_\_



### LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- CENTERLINE OF EXISTING STREAM
- EXISTING CURB AND GUTTER
- EXISTING CURB AND GUTTER
- EXISTING TREELINE
- TREELINE
- SPECIMEN TREE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANSUIT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- SOILS
- 10' CONTOUR
- 2' CONTOUR
- SPOT ELEVATION
- EXISTING WETLANDS
- PRIVATE USE-IN-COMMON ACCESS EASEMENT
- FOREST CONSERVATION EASEMENT (RETENTION)
- DFRM FLOODPLAIN
- PUBLIC STORMWATER MANAGEMENT, DRAINAGE AND UTILITY EASEMENT
- LIMIT OF DISTURBANCE
- TREE PROTECTION FENCE
- MICRO-BIOPRETENTION FACILITY (M-6)
- DRY WELL (M-5)
- SHADE TREES
- EVERGREEN TREES
- SHRUB
- SPECIMEN TREE CRITICAL ROOT ZONE
- SPECIMEN TREE TO BE REMOVED

**OWNER/DEVELOPER**  
 BRYAN AND EMILY PASS  
 7715 SUFFOLK WAY  
 HANOVER, MD 21076  
 240-481-6971

NO.	REVISION	DATE

**FINAL PLAN**  
**LANDSCAPE PLAN**  
**PASS PROPERTY**  
 7831 HARRIET TUBMAN LANE  
 COLUMBIA, MD 21044  
 ZONED: R-20

TAX MAP 35 GRID 23 PARCEL 117  
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL ENGINEERS • SURVEYORS • PLANNERS**  
 8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8961

**PROFESSIONAL CERTIFICATE**

DESIGN BY: RHVE  
 DRAWN BY: KOGIAH  
 CHECKED BY: RHV  
 DATE: JULY 2017  
 SCALE: AS SHOWN  
 W.O. NO.: 14-15

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. 18183, EXPIRES DATE 07-27-2018

5 SHEET OF 8

**SCHEDULE 'A' PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO PERIMETER AND ROADWAYS	TOTAL
PERIMETER/FRONTAGE DESIGNATION	1 2 3 4	A B
LANDSCAPE TYPE	A A A B	A B
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	934 LF 493 LF 806 LF 560 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	YES YES YES **YES	
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	No No No No	
NUMBER OF PLANTS REQUIRED (*)	15 LF 0 LF 0 LF 0 LF	2
SHADE TREES	1:60 2 - - -	
EVERGREEN TREES	- - - -	
SHRUBS	- - - -	
NUMBER OF PLANTS PROVIDED	2 - - -	2
SHADE TREES	- - - -	
EVERGREEN TREES	- - - -	
EX SHADE TREES	- - - -	
OTHER TREES (2:1 SUBSTITUTION)	- - - -	
SHRUBS (10:1 SUBSTITUTION)	- - - -	
DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	- - - -	

**LANDSCAPE SCHEDULE**

SYMBOL	KEY	QUAN.	BOTANICAL NAME	SIZE	REMARKS
○	AR	2	ACER RUBRUM 'RED SUNSET' RED SUNSET RED MAPLE	2 1/2"-3" CAL.	B & B

**SPECIMEN TREE REPLACEMENT SCHEDULE**

SYMBOL	KEY	QUAN.	BOTANICAL NAME	SIZE	REMARKS
⊗	QR	12	QUERCUS RUBRA RED OAK	2 1/2"-3" CAL.	B & B

**MAPPED SOILS TYPES - HOWARD COUNTY SOIL MAP #17 CLARKSVILLE NE**

SYMBOL NAME / DESCRIPTION	GROUP	HYDRC	TIME	K FACTOR	PERCENT	CRS. SLOPE
GbB GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES	A	NO	NO	0.28	YES	NO
GbC GLADSTONE LOAM, 8 TO 15 PERCENT SLOPES	A	NO	NO	0.28	YES	NO
MbD MANOR LOAM, 15 TO 25 PERCENT SLOPES, VERY ROCKY	B	NO	NO	0.28	NO	YES
MbP MANOR-BANNERTOWN SANDY LOAMS, 25 TO 65 PERCENT SLOPES, ROCKY	B	NO	NO	0.20	NO	YES
GbB GLENVILLE - CORDURUS - SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	NO	NO	0.43	YES	YES
Cc CORDURUS AND HARBORO SILT LOAMS, 0 TO 3 PERCENT SLOPES	C	NO	YES	0.32	NO	NO

**NOTE:**  
 THE LANDSCAPING FOR LOTS 1 & 2 IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURVEY IN THE AMOUNT OF \$44,200.00 FOR THE REQUIRED 14 SHADE TREES (\$600 FOR PERIMETER LANDSCAPING AND \$3,800 FOR SPECIMEN TREE REPLACEMENT) WILL BE PAID WITH THE BUILDER'S GRADING PERMIT. FINAL APPROVAL OF THE LANDSCAPING PLAN WILL BE DEFERRED TO THE SITE DEVELOPMENT PLAN.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DATE: 9-22-17

DATE: 9-25-17

**NOTE:**  
 REFER TO SHEET 7 OF 8 FOR LANDSCAPING NOTES AND DETAILS.

**NOTE:**  
 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

**NOTE:**  
 FOR SOILS ON SITE THAT WOULD BE CONSIDERED HIGHLY ERODIBLE BY THE HOWARD COUNTY CONSERVATION DISTRICT, MORE STRINGENT SEEDING AND STABILIZATION METHODS MAY BE EXPECTED AT SITE DEVELOPMENT STAGE