

1 2 3 6
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS) FILL IN THIS FORM COMPLETELY PLEASE TYPE COUNTY NUMBER **13**

ST/CO USE ONLY DATE Received **MM/DD/YY** **10/28/25** DATE WELL COMPLETED **MM-DD-YY** **10-3-25** Depth of Well **240** (TO NEAREST FOOT) PERMIT NO. FROM "PERMIT TO DRILL WELL" **40-25-0093**

OWNER **Bethmann, Karl + Katherine** last name first name TOWN **211011 City MD**
WELL SITE ADDRESS **8580 W Sunset Dr** SECTION LOT

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Top Soil	0	1	
Red Sand	1	8	
Bin Sand	8	15	
Grey Rock	15	30	
Bin Rock	30	80	
Dark Bin Rock	80	240	

2 closed loops

GROUTING RECORD (Circle appropriate Box) **Y** **N**

WELL HAS BEEN GROUTED (Circle Appropriate Box)

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT **CM** BENTONITE CLAY **BC**

NO. OF BAGS **240** NO. OF POUNDS **600**

GALLONS OF WATER **2400**

DEPTH OF GROUT SEAL (to nearest foot)
from **48** TOP **52** ft. to **54** BOTTOM **58** ft.
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
ST STEEL **CO** CONCRETE
PL PLASTIC **OT** OTHER

MAIN CASING TYPE
Nominal diameter top (main) casing (nearest inch)! Total depth of main casing (nearest foot)
60 **61** **63** **64** **66** **70**

OTHER CASING (if used)
A C H C A S I N G diameter inch depth (feet) from to

SCREEN RECORD
screen type or open hole insert appropriate code below
ST STEEL **BR** BRASS **HO** OPEN HOLE
PL PLASTIC **OT** OTHER

C 3

PUMPING TEST

HOURS PUMPED (nearest hour) **8** **9**

PUMPING RATE (gal. per min.) **11** **15**

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)
BEFORE PUMPING **17** **20** ft.
WHEN PUMPING **22** **25** ft.

TYPE OF PUMP USED (for test)
A air **P** piston **T** turbine
C centrifugal **R** rotary **O** other (describe below)
J jet **S** submersible

NUMBER OF UNSUCCESSFUL WELLS: **0**

WELL HYDROFRACTURED **Y** **N**

CIRCLE APPROPRIATE LETTER
A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
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, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. **MD 598**
Wesley D. Wolfe
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)
LIC. NO. **D**

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

C 2

DEPTH (nearest ft.)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T (E.R.O.S.) **W Q**

TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES OR NO) **YES** **NO**

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. **29**

CAPACITY: GALLONS PER MINUTE (to nearest gallon) **31** **35**

PUMP HORSE POWER **37** **41**

PUMP COLUMN LENGTH (nearest ft.) **43** **47**

CASING HEIGHT (circle appropriate box and enter casing height)
+ above } LAND SURFACE
- below } (nearest foot)

LATITUDE **39.22868**
LONGITUDE **76.80235**
(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. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or state law.

02-225441

EMERGENCY/TEMP NO. IF ANY

B 1	94826	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type	STATE PERMIT NUMBER HO - 25 - 0043 fill in this form completely
-----	-------	-----------------------------	--	---

Date Received (APA) _____

OWNER INFORMATION

8 MM DD YY 13
Bethmann Karl and Katherine
15 Last Name Owner First Name 34
8380 Sunset Dr W
36 Street or RFD 55
Ellicott City MD 21043
57 Town 70 State 72 Zip 76

B 3 **LOCATION OF WELL**

Howard
8 COUNTY 21
23 SUBDIVISION 42
SECTION 44 46 LOT 48 50
Ellicott City
52 NEAREST TOWN 71

DRILLER INFORMATION

Wesley Wolfe MWD 558
76 License No. 81
Allied Drilling LLC
Firm Name
PO Box 129 Annapolis Junction MD 21501
Address
Wesley A Wolfe 09/03/25
Signature Date

B 4 **SOURCES OF DRILLING WATER**

8380 W Sunset Dr
11 STREET ADDRESS 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH
WEST EAST
SOUTH
34 50+ 37
DISTANCE FROM ROAD
ENTER FT OR MI 38 39
TAX MAP: 0031 BLK: _____ PARCEL 0597

1. 0311
2. 10/13/2025
3. Driller onsite finish 1st bore hole & has 40' left on second bore hole.

B 2 **WELL INFORMATION**

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

USE FOR WATER (CIRCLE APPROPRIATE BOX)

DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
 FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
 INDUSTRIAL, COMMERCIAL, DEWATERING
 PUBLIC WATER SUPPLY WELL
 TEST, OBSERVATION, MONITORING
 OPEN LOOP GEOTHERMAL
 CLOSED LOOP GEOTHERMAL

10/16/2025 - chemical grout, some grout displaced, but 2 brass set to top off. 2 loops

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard county 13
COUNTY NAME COUNTY NO.
STATE SIGNATURE _____ INSERT S → 41
DATE ISSUED 9/11/2025
43 MM DD YY 48 CO SIGNATURE EXP. DATE
DON: 10/13/2025 006:10/13/2025

APPROXIMATE DEPTH OF WELL 240 FEET
24 28

APPROXIMATE DIAMETER OF WELL 6 INCH
NEAREST INCH

METHOD OF DRILLING (circle one)

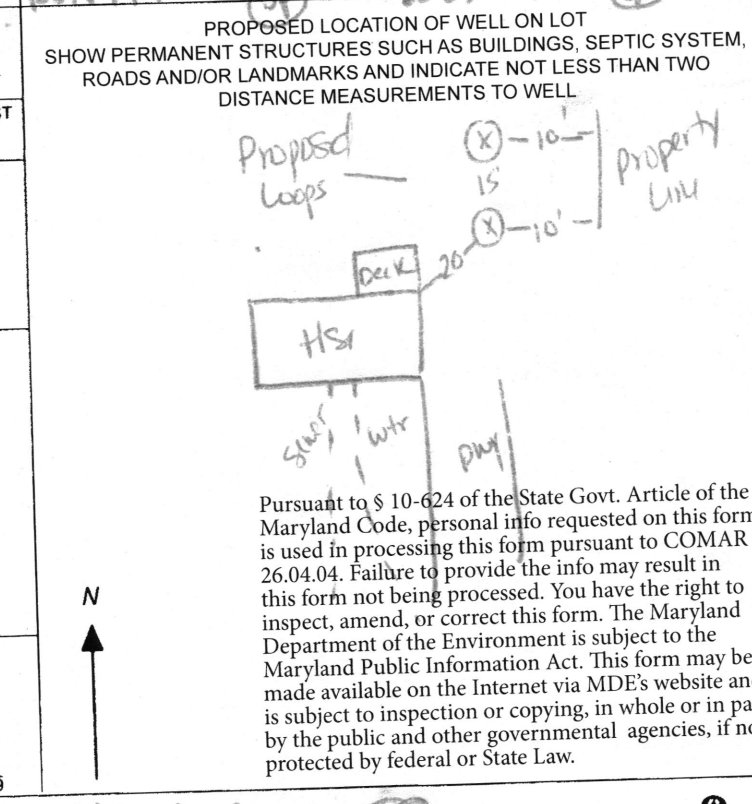
BORED (or Augered) JETTED Jetted & DRIVEN
30 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)
37 CABLE REVERSE-ROTary DRIVE-POINT
other _____

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

THIS WELL WILL NOT REPLACE AN EXISTING WELL
 THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
39 THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
 THIS WELL WILL DEEPEM AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 _____ 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROX. PERMIT NUMBER _____ G _____
PERMIT No. HO - 25 - 0043
70 71 72 73 74 75 76 77 78 79

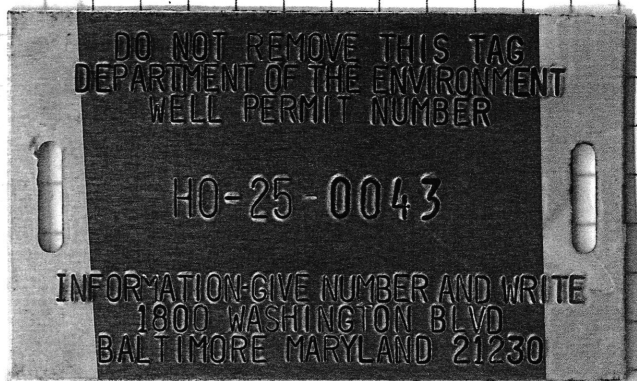


Pursuant to § 10-624 of the State Govt. Article of the Maryland Code, personal info requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or State Law.

SPECIAL CONDITIONS Please notify office of Drilling & Grout. (P)



8380 Sunset DRIVE
 Ellicott City Md
 2 wells @ 240' each
 closed loop geothermal



Sediment Control Protocol: SILT Fence

Distance From House: 20'
 From Septic: N/A
 From Sewer: 50' + (COURT FRONT)
 From Property Line: 10' +/-
 From Street: 50' +

Trees Nearby: Yes But OK!
 Utility Issues: NO
 Mats Needed: YES
 Access For H/U: By others
 Neighboring Tags: See Comps

Comments: _____

Person Completing Form: Wes Work

Maura J. Rossman, M.D., Health Officer

TO ALL INTERESTED PARTIES

When submitting a well permit application for a proposed well for new construction, please indicate one of the following:

Well Site Location:

_____ 1 8380 W Sunset Dr
Subdivision/Property Name Lot # Road Name

The well site has been staked by Wesley Wolfe
(professional land surveyor or company employing professional land surveyors)
on 08/28/25 (date)

The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

Revised 9/20/21

HOWARD COUNTY GROUTING PROCEDURE

Boreholes will be grouted from the bottom to the top via a tremie pipe and positive displacement pump. Bentonite grout, known as Quik-Grout will be used according to the manufacturer's specifications to achieve a consistency of at least 20% solids (24 gallons potable water/50 lb. sack of grout) and a permeability no more than $2.5 \text{ E}(-08) \text{ cm/sec}$. Grouting will be completed immediately after installing the geothermal loop and no later than twenty-four (24) hours after installing the geothermal loop. Open boreholes/annular space will be protected as necessary to prevent the entry of surface water or pollutants.

GRADE

EACH BORE HOLE (TYP.)

MINIMUM

HORIZONTAL BURY
DEPTH 4 FT

FOR CONT.
SEE PLANS

HORIZONTAL
PIPING

BORE DEPTH

GROUT ENTIRE ANNULAR
SPACE AND VERTICAL
U-TUBE WITH (BENTANITE)
GROUT.

DEPTH MARKINGS IN FEET TO
INDICATE DEPTH OF INSERTION

TYPICAL VERTICAL U TUBE
PINCHES

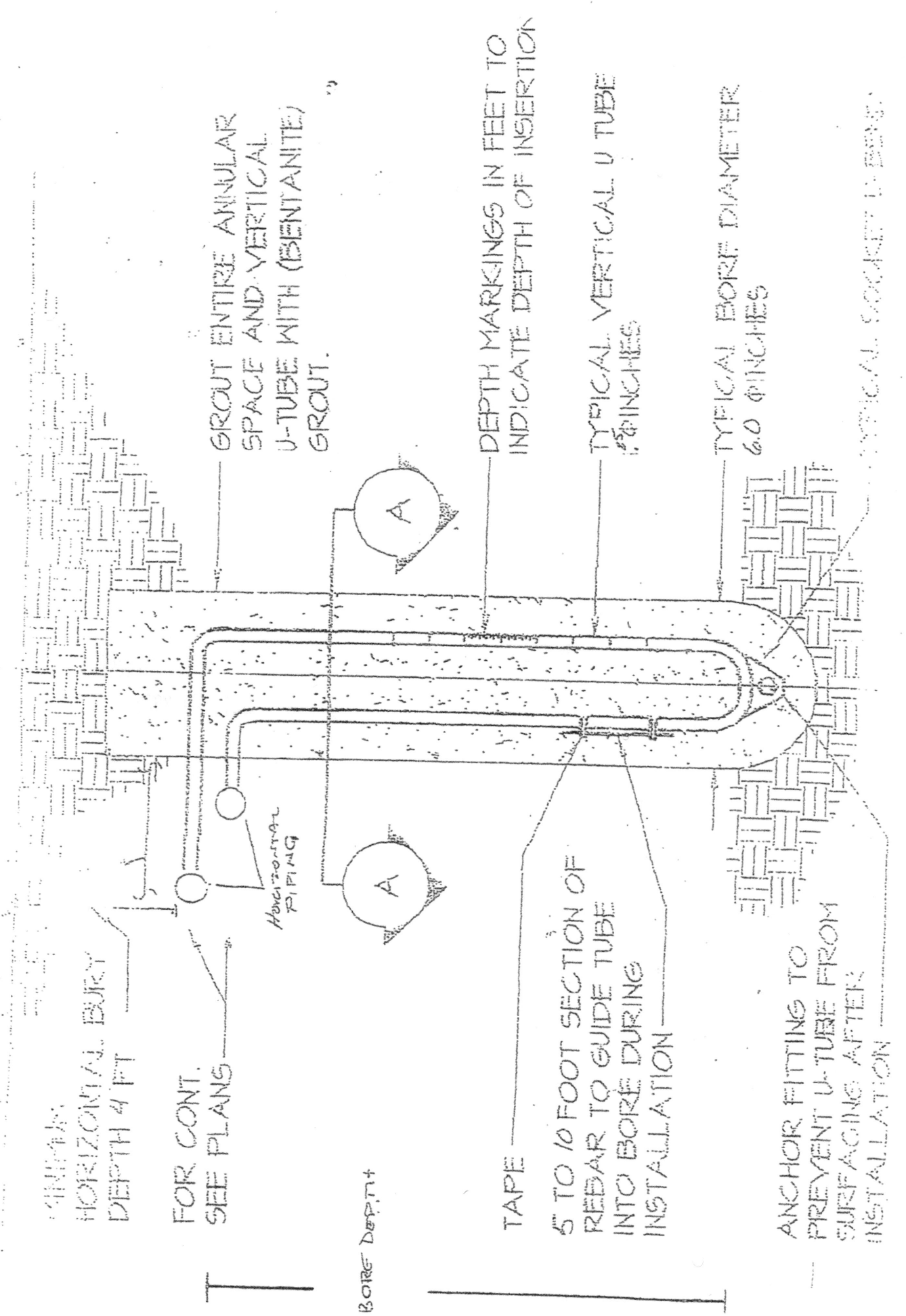
TYPICAL BORE DIAMETER
6.0 INCHES

TYPICAL SOCKET D-BEND

TAPE

5 TO 10 FOOT SECTION OF
REBAR TO GUIDE TUBE
INTO BORE DURING
INSTALLATION

ANCHOR FITTING TO
PREVENT U-TUBE FROM
SURFACING AFTER
INSTALLATION



Page, Shepsura

From: Page, Shepsura
Sent: Friday, September 12, 2025 8:35 AM
To: Donna Perez
Cc: Wes Wolfe; Andy Capelle
Subject: RE: 8380 Sunset Drive- Well Permit Status

Great, your permit is up front ready for pick up.
Shep

From: Donna Perez <dperez@alliedwells.com>
Sent: Friday, September 12, 2025 7:25 AM
To: Page, Shepsura <spage@howardcountymd.gov>
Cc: Wes Wolfe <weswolfe@alliedwells.com>; Andy Capelle <acapelle@alliedwells.com>
Subject: Re: 8380 Sunset Drive- Well Permit Status

WARNING!!!

This email originated from someone outside of Howard County
DO NOT CLICK LINKS OR OPEN ATTACHMENTS
unless you recognize the sender and know for sure that the content is safe

We will pick it up.

Thanks!

On Thu, Sep 11, 2025 at 1:43 PM Page, Shepsura <spage@howardcountymd.gov> wrote:

Good Afternoon,

I've just finished the site inspection and your stakes matches the plan. Via a conversation with the homeowner, the property line is in line with the driveway and pole at the back of the house, the flagged location is within these boundaries.

I'll be issuing your permit shortly, would you like to receive by mail or pick up in our office?

Thanks,

Shepsura Page, EH Specialist

Well & Septic Program

Howard County Health Department

8930 Stanford Blvd.

Columbia, MD 21045

410-313-1789 (Office)

410-313-2648 (Fax)

www.hchealth.org

spage@howardcountymd.gov



twitter.com/HoCoHealth



facebook.com/HoCoHealth



instagram.com/hocohealth

CONFIDENTIALITY NOTICE

This message and the accompanying documents are intended only for the use of the individual or entity to which they are addressed and may contain information that is privileged, confidential, or exempt from disclosure under applicable law. If the reader of this email is not the intended recipient, you are hereby notified that you are strictly prohibited from reading, disseminating, distributing, or copying this communication. If you have received this email in error, please notify the sender immediately and destroy the original transmission.

From: Page, Shepsura

Sent: Wednesday, September 10, 2025 9:00 AM

To: Wes Wolfe <weswolfe@alliedwells.com>; Andy Capelle <acapelle@alliedwells.com>; Donna Perez

<dperez@alliedwells.com>

Subject: 8380 Sunset Drive- Well Permit Status

Good Morning,

I'm currently reviewing your well permit for 8380 Sunset Drive. Your plan meets all setbacks. Are there any indicators for property lines onsite? I'll visit the site soon to confirm the flagged location.

Thanks,

Shepsura Page, EH Specialist

Well & Septic Program

Howard County Health Department

8930 Stanford Blvd.

Columbia, MD 21045

410-313-1789 (Office)

410-313-2648 (Fax)

www.hchealth.org

spage@howardcountymd.gov



twitter.com/HoCoHealth



facebook.com/HoCoHealth



instagram.com/hocohealth

CONFIDENTIALITY NOTICE

This message and the accompanying documents are intended only for the use of the individual or entity to which they are addressed and may contain information that is privileged, confidential, or exempt from disclosure under applicable law. If the reader of this email is not the intended recipient, you are hereby notified that you are strictly prohibited from reading, disseminating, distributing, or copying this communication. If you have received this email in error, please notify the sender immediately and destroy the original transmission.

--

Donna Perez
Allied Drilling LLC
301-776-8370
dperez@alliedwells.com
www.alliedwells.com

Look us up on Google and give us a review of your experience.