

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

ST/CO USE ONLY DATE RECEIVED DATE WELL COMPLETED Depth of Well PERMIT NO. FROM "PERMIT TO DRILL WELL" APPROVED 02/01/2019 01 12 19 22 300 300 HD 17-0352

OWNER: Heritage Land Development WELL SITE ADDRESS: last name DAVID ROAD first name TOWN Woodbine SUBDIVISION Linden Gate SECTION LOT 18

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	
Soil	0	6	
Brown Shale	6	56	
Med Gray Rock	56	75	
Soft Gray Rock	75	110	
Med Gray Rock	110	300	
	86		
	235		

GROUTING RECORD yes no
WELL HAS BEEN GROUTED (Circle Appropriate Box) Y N
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT CM BENTONITE CLAY BC
NO. OF BAGS 30 NO. OF POUNDS 2750
GALLONS OF WATER 150
DEPTH OF GROUT SEAL (to nearest foot)
from 0 ft. to 60 ft. (enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
MAIN CASING TYPE: PL Nominal diameter top (main) casing (nearest inch): 6 Total depth of main casing (nearest foot): 60
OTHER CASING (if used): PL diameter inch: 4.5 depth (feet) from: 55 to: 115

SCREEN RECORD
screen type or open hole: ST BR HO
insert appropriate code below: PL OT
DEPTH (nearest ft.): 60 300

C 3 PUMPING TEST
HOURS PUMPED (nearest hour): 3
PUMPING RATE (gal. per min.): 10.0
METHOD USED TO MEASURE PUMPING RATE: watch bucket
WATER LEVEL (distance from land surface)
BEFORE PUMPING: 27 ft.
WHEN PUMPING: 61 ft.
TYPE OF PUMP USED (for test): S submersible

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: S
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) LAND SURFACE: + above 49 - below 1 (nearest foot)

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.: M D 355
DRILLERS SIGNATURE: WRO 113
LIC. NO.: D

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

C 2
SLOT SIZE 1 2 3
DIAMETER OF SCREEN (NEAREST INCH): 56 60
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
70 72 74 75 76
TELESCOPE CASING LOG INDICATOR OTHER DATA

LATITUDE 39.32827
LONGITUDE 77.06479
(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.

TAG = 02/06/2019 (2)

B 1	SEQUENCE NO. (MDE USE ONLY) 54300	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL <i>523957K</i> please type	STATE PERMIT NUMBER HO-17-0352 <small>70 79</small> <i>fill in this form completely</i>
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OWNER INFORMATION

Date Received (APA) *07/13/18*

8 MM DD YY 13

15 Last Name *Heritage Land Development* Owner First Name *Heritage Land Development* 34

36 Street or RFD *PO Box 482* 55

57 Town *hisbon* 70 State *MD* 72 Zip *21765* 76

LOCATION OF WELL

8 COUNTY *Howard* 21

23 SUBDIVISION *Linden Grove* 42

SECTION *44* 46 LOT *18* 48 50

52 NEAREST TOWN *Woodbine* 71

DRILLER INFORMATION

Driller's Name *Michael Barbaw* M W D *355* 76 License No. 81

Firm Name *Barbow Well Drilling*

Address *522 Underwood Lane 21014*

Signature *[Signature]* Date *7/10/18*

SOURCES OF DRILLING WATER

1. *well*

2.

3.

11 STREET ADDRESS *Daisy Road* 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

NORTH WEST EAST SOUTH

34 *800* 37

DISTANCE FROM ROAD *FT*

ENTER FT OR MI 38 39

TAX MAP: *8* BLK: *7* PARCEL *5*

WELL INFORMATION

1 2

APPROX. PUMPING RATE (GAL. PER MIN.) *5* 8 12

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) *750* 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

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

COUNTY NAME *HOWARD* COUNTY NO. *24*

STATE SIGNATURE _____ INSERT S → 41

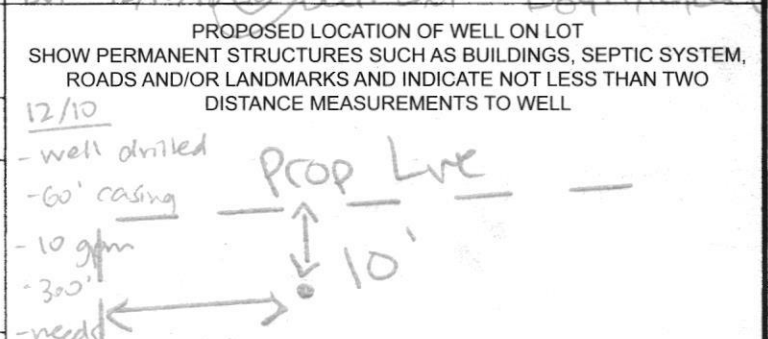
DATE ISSUED *09/17/18* 43 MM DD YY 48

CO SIGNATURE *[Signature]* EXP. DATE *09/17/19*

DON: 12/10/18 @ Don: Don Don: 1/12/20

APPROXIMATE DEPTH OF WELL *300* 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 DEEPEINED 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 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 *HO 2017 G 002*

PERMIT No. *HO-17-0352* 70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS

NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED.

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MICHAEL BARLOW WELL DRILLING & SERVICE, INC.
 522 Underwood Lane Bel Air, Maryland 21014
 (410) 838-6910 Fax (410) 838-3582

WELL YIELD REPORT

Date Test Completed: January 12, 2019

Well Depth: 300 feet

Customer Heritage Land Development
 Road Daisy Road
 City Woodbine
 State Maryland

Permit # HO-17-0352
 Subdivision Linden Grove
 Section _____
 Lot # 18

Time	Water Level feet PUMP SET AT 100	Time to Fill 1-gallon bucket seconds	G.P.M.
10:00 AM	27	4	15.00
10:15 AM	63	6	10.00
10:30 AM	63	6	10.00
10:45 AM	62	6	10.00
11:00 AM	62	6	10.00
11:15 AM	62	6	10.00
11:30 AM	61	6	10.00
11:45 AM	61	6	10.00
12:00 PM	61	6	10.00
12:15 PM	61	6	10.00
12:30 PM	61	6	10.00
12:45 PM	61	6	10.00
1:00 PM	61	6	10.00
1:15 PM	61	6	10.00
This yield test report is for informational purposes only. Please note the yield may increase or decrease over time and the GPM indicated above is not a guarantee.			

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

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: Fogles Well Pump & Water Treatment, LLC Telephone #: 410 795 5670
Address: 359 Oberlin Rd
Sparksville, MD 21151

Must circle one: Licensed Plumber / Licensed Well Driller / Licensed Well Pump Installer

License # and name of individual responsible for the field installation:
Name (Print): David C Fogle License# MSD2226

*A licensed individual must perform the actual installation. Apprentices must be under the supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification. Unlicensed individuals may be reported to the appropriate licensing agency.

Name of Property Owner: Ton Brothers Telephone #: _____
Subdivision: Linden Grove Lot #: 18 Well Tag #: HO-17-0352 (S)
Site Address: 15628 Linden Grove Lane
Woodbine, MD 21797

Submersible Pump Data

Make: Grundfos
Model #: 1356007-180
Pump Capacity: 15
Well Yield: 10

Pitless Adapter

Make: Campbell +
Model#: NA
GPM Depth: 36" (36" min)
GPM NSF/WSC approved: Yes

Well Cap and Electric Conduit

Two piece watertight cap: Yes
Screened, vented well cap: Yes
Cap secured to casing: Yes
Conduit min 18" B.G.: Yes
Conduit secured to well cap: Yes

Depth of well encountered at time of pump installation: 300 (feet)
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4

Must circle one: Torque arrestors / Cable guards / Other acceptable method used
Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing NA

Piping to house

Type: 1" poly pipe
PSI: 200 (160 psi min)
Depth of supply line: 36" (36" min)

House Connection

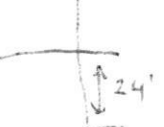
PVC sleeve to undisturbed soil at wall penetration: Yes
Length of sleeve (5' minimum from foundation): 12'
Sleeve sealed properly: Yes

The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation: [Signature] date: 11/11/2021

For Health Department Use Only - Not to be completed by Installer

Date Insp. Requested: 11/2/21 Date Insp. Approved: 11/2/21 Inspector: (30)
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade ✓ 45"
Two piece cap installed and attached to casing securely ✓
Elec. conduit extends at least 18" below grade/attached to cap properly ✓ 43"
Safety rope not outside of well cap/casing ✓
Correct well tag attached properly and casing 8" above finished grade ✓ 33"
Water supply line sleeved adequately at house connection ✓ 5"
Adequate grout observed below pitless adapter ✓



(Revised form 10/24/2018)

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – August 18, 2022

February 18, 2022

Homeowner
15628 Linden Grove Lane
Woodbine, MD 21797

RE: Linden Grove, Lot 18
15628 Linden Grove Lane
Building Permit: B21000664
Well Permit: HO-17-0352

Dear Homeowner:

This is to advise you that the septic system installation and water well construction for the above referenced property have been inspected and approved. Final approval of the septic system was granted on **12/20/2021**. Final approval of the well line connection to the dwelling was granted on **11/2/2021**. The well construction was completed on **1/12/2019**. Water samples were collected on **1/13/2022**.

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking. This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-17-0352. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will be issued. **Failure to submit an additional sample and obtain a Final Certificate of Potability will result in a Notice of Violation and is punishable as a misdemeanor under the *Annotated Code of Maryland, Environment Article, 9-1311*, subject to a fine of up to \$500 or imprisonment not to exceed three months.**

Please contact (410) 313-1773 to schedule a final water sample appointment or contact a Maryland certified water laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:
<http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>



Bureau of Environmental Health
8930 Stanford Blvd | Columbia, MD 21045
410.313.2640 - Voice/Relay
410.313.2648 - Fax
1.866.313.6300 - Toll Free

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

In closing, please refer to our “Homeowner Fact Sheet” which illustrates a better understanding for your Onsite Sewage Disposal System. You will also find a link to Maryland Department of the Environments website which describes in further detail operation and maintenance of your septic system.

Approving Authority,

A handwritten signature in black ink, appearing to read 'Kevin M. Wolf', is written over a light blue horizontal line.

Kevin M. Wolf, LEHS, R.S./REHS, Supervisor
Groundwater Management Section
Well & Septic Program

cc: Howard County Dept. of Inspections, Licenses, and Permits
Community Hygiene Program
File

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554

REPORT OF ANALYSIS

Laboratory ID #: 149864 Account #: 1933
Reference: Linden Grove Lot 18 Client: Fogle's Well Pump & Treatment
Location: 15628 Linden Grove Lane Requested By: Dave Fogle
Woodbine, MD 21797 Source: Well Water
Date/ Time Collected: 1/13/2022 0900 Site: Pressure Tank
Date/Time Rec'd: 1/13/2022 1037 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.1
Collected By: T. Cassell 0767TC Well #: HO-17-0352

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	1/14/2022 / 0930 / TSD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	1/14/2022 / 0930 / TSD
Nitrate	7.10	mg/L	10	Hach 10206	1/13/2022 / 1530 / TSD
Sand	ND	mg/L	5	Visual/Gravimetric	1/13/2022 / 1210 / TSD
Turbidity	<0.30	NTU	<10	SM20 2130B	1/13/2022 / 1520 / TSD

NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 NTU = Nephelometric Turbidity Units
- 4 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 5 Sample collected by client, analyzed as received
- 6 ND:None Detected
- 7 Visual well check: Sealed, vented cap
- 8 pH and Chlorine level tested in lab (pH tested after recommended holding time)

Reason for Test : Use & Occupancy

Building Permit # : B21000664

Date Reported: 1/14/2022

Wolf, Kevin

From: Wolf, Kevin
Sent: Saturday, January 12, 2019 3:31 PM
To: Mike Isom; Martin, Sharhonda; Cabahug, Joseph; Collins, Sarah
Subject: Re: Saturday 1/12

Mike,

I am sorry I was out sick Friday. I am just seeing this email and I know you are aware that we do not allow drilling activities on weekends other than those jobs in particular cases already discussed with the Health Department prior or in emergency "out of water" cases.

Kevin

----- Original message -----

From: Mike Isom <misom@mbwd.us>
Date: 1/11/19 5:23 PM (GMT-05:00)
To: "Martin, Sharhonda" <smmartin@howardcountymd.gov>, "Wolf, Kevin" <KWolf@howardcountymd.gov>, "Cabahug, Joseph" <jcabahug@howardcountymd.gov>, "Collins, Sarah" <SCollins@howardcountymd.gov>
Subject: Saturday 1/12

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

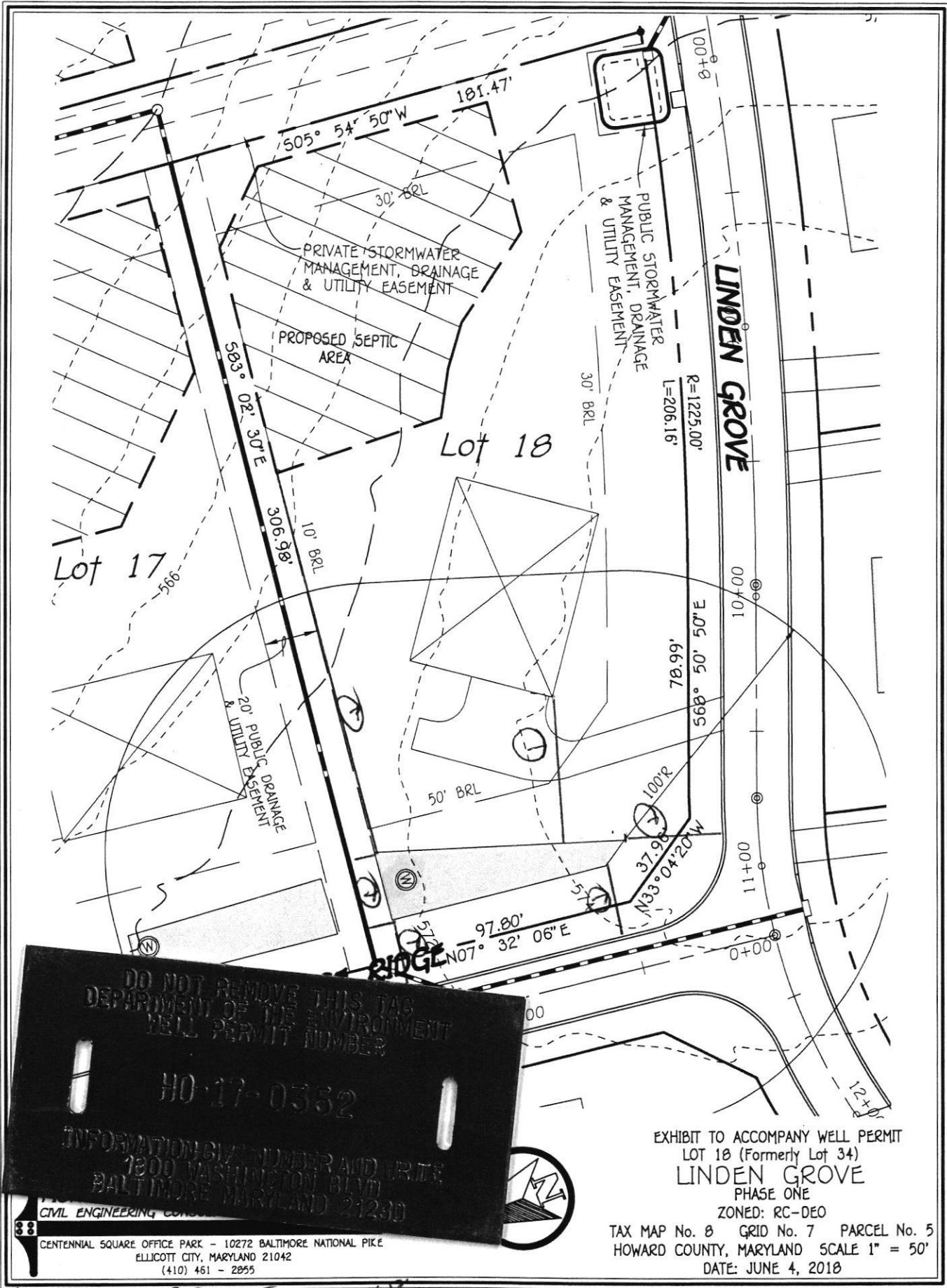
We will be yield testing lots 18, 19 & 22 at Linden Grove tomorrow. Should be on site by 9:30

Given the weather forecast, we will not be yield testing at the Hyman Property on Monday. I will update you on that schedule Monday.

--
Sincerely,

Michael Isom
Project Manager
Michael Barlow Well Drilling Service
Phone: (410) 838-6910
Fax: (410) 838-3582
522 Underwood Lane
Bel Air, MD 21014
www.michaelbarlowwelldrilling.com
www.thermalloopcorp.com
[Click HERE to like us on Facebook!](#)

I:\2012\12026\dwg\well exhibits\well exhibit lot 18.dwg, well exhibit lot 18, 7/26/2018 7:16:09 AM, 1:1



DO NOT REMOVE THIS TAG
 DEPARTMENT OF THE ENVIRONMENT
 WELL PERMIT NUMBER
 HD-17-0352
 INFORMATION BY OWNER AND ARTS
 1300 WASHINGTON BLVD
 BALTIMORE MARYLAND 21230
 CIVIL ENGINEERING CONSULTANTS

EXHIBIT TO ACCOMPANY WELL PERMIT
 LOT 18 (Formerly Lot 34)
 LINDEN GROVE
 PHASE ONE
 ZONED: RC-DEO
 TAX MAP No. 8 GRID No. 7 PARCEL No. 5
 HOWARD COUNTY, MARYLAND SCALE 1" = 50'
 DATE: JUNE 4, 2018

LINDEN GROVE LOT 18
 APPROVED 7/26/2018 \oplus #01997 VIA SP 17-003 (3/22/18)
 STAKED BY FCC F-18-092 Accessed (7/26/2018)



8930 Stanford Blvd, Columbia MD 21045
 (410) 313-6300 Fax (410) 313-2648
 TDD (410) 313-2323 Toll Free 1-866-313-6300
 website: www.askhealth@howardcountymd.gov

Bert Nixon, Director

TO ALL INTERESTED PARTIES

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

Well Site Location:

Linden Grove	18	Heritage Ridge
Subdivision/Property Name	Lot #	Road Name

OLD 34

④
09/14/2018

The well site has been staked by Fisher, Collins and Carter,
 (professional land surveyor or company employing professional land surveyors)
 on 08/23/18 (date) and does not require a site inspection.

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.

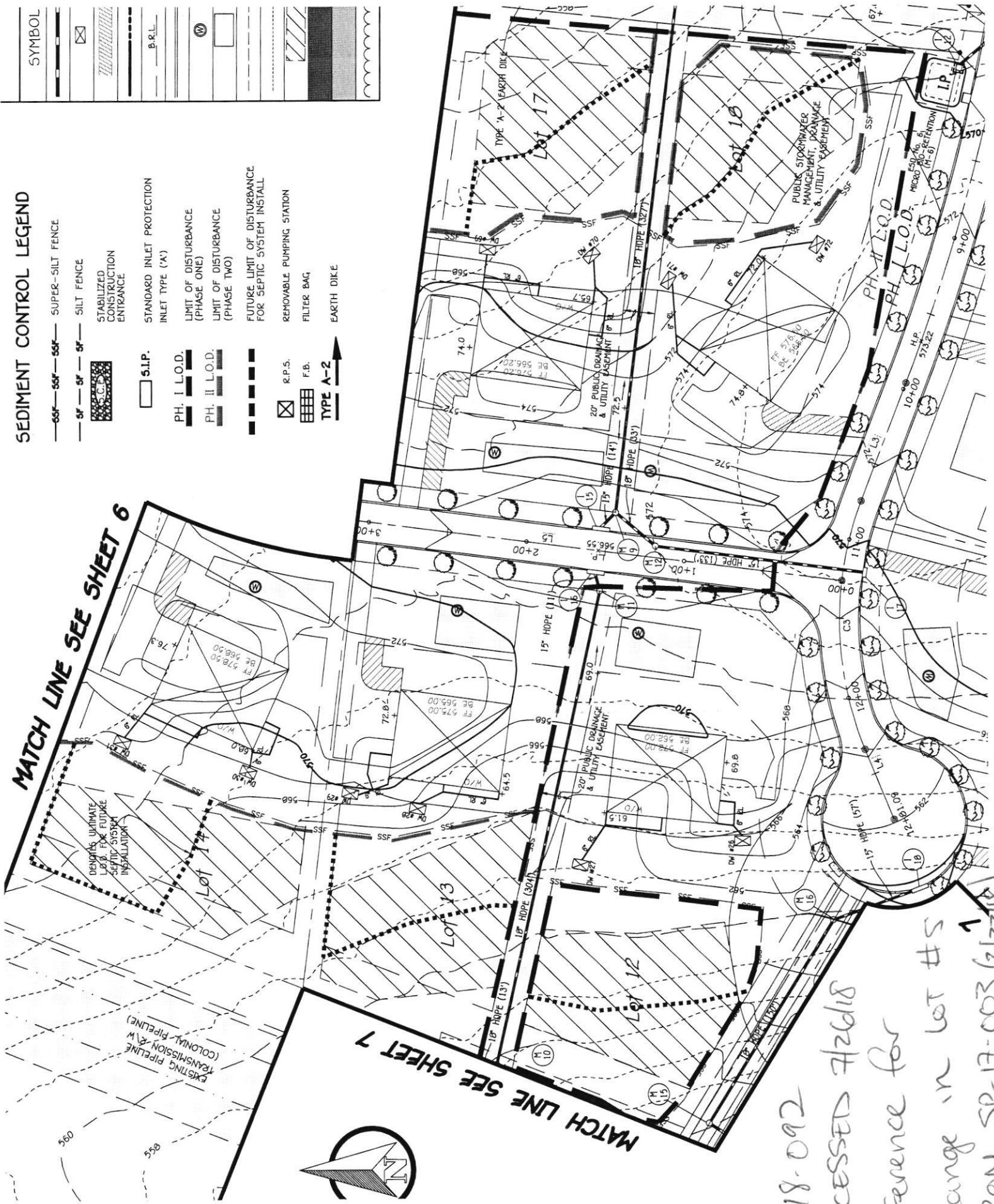
This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

SEDIMENT CONTROL LEGEND

SYMBOL	DESCRIPTION
---SSF---	SUPER-SILT FENCE
---SF---	SILT FENCE
[Hatched Box]	STABILIZED CONSTRUCTION ENTRANCE
[Dashed Line]	STANDARD INLET PROTECTION INLET TYPE (A)
[W in Circle]	PH. I L.O.D.
[Hatched Box]	PH. II L.O.D.
[Dashed Line]	FUTURE LIMIT OF DISTURBANCE FOR SEPTIC SYSTEM INSTALL
[Square with X]	REMOVABLE PUMPING STATION
[Grid Pattern]	FILTER BAG
[Arrow]	TYPE A-2 EARTH DIKE
[Box]	S.I.P.

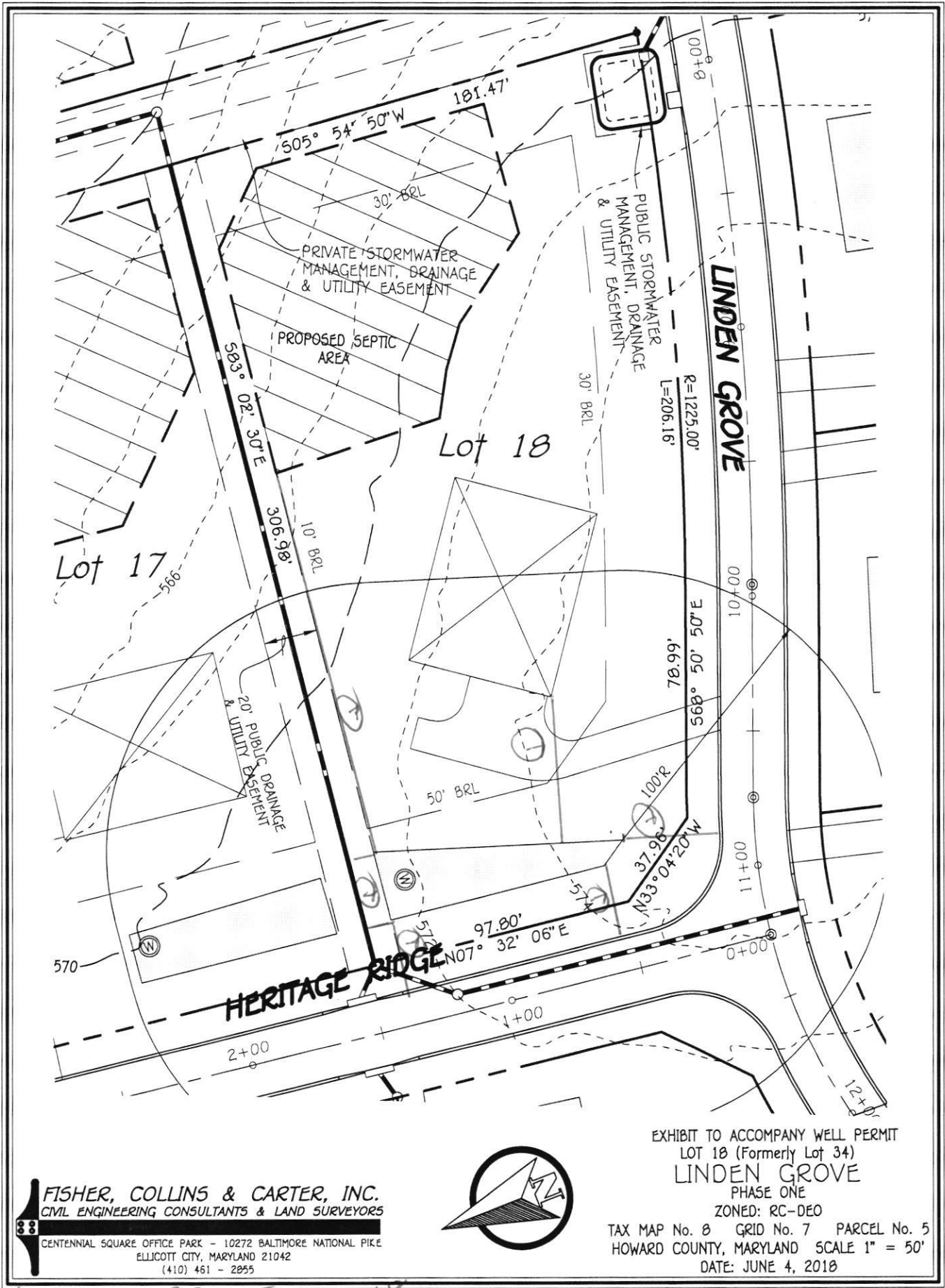
MATCH LINE SEE SHEET 6

MATCH LINE SEE SHEET 7



F-18-092
 ACCESSED 7/26/18
 Reference for
 Change in lot #5
 FROM SP-17-003 (3/22/18)

I:\2012\12026(dwg)\well exhibits\well exhibit lot 18.dwg, well exhibit lot 18, 7/26/2018 7:16:09 AM, 1:1



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461 - 2855

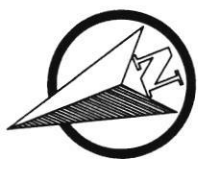


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 STAKED BY FCC F-18-002 Accessed (7/26/2018)