

C1 **56730** SEQUENCE NO. (MDE USE ONLY)
 1 2 3 6
 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)
 ST/CO USE ONLY
 DATE RECEIVED
 MM DD YY
 01 28 19

STATE OF MARYLAND
WELL COMPLETION REPORT
 FILL IN THIS FORM COMPLETELY
 PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
 COUNTY NUMBER **XIII**
 PERMIT NO. FROM "PERMIT TO DRILL WELL"
HO-17-0350

DATE WELL COMPLETED MM DD YY **01 10 19** (APPROVED 02/04/2019) Depth of Well **300** (TO NEAREST FOOT)
 OWNER **Heritage Land Development** last name first name
 WELL SITE ADDRESS **Daisy Road** TOWN **WoodBine**
 SUBDIVISION **Linden Brook** SECTION _____ LOT **16**

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	
Tan Shale	6	25	
Brown Shale	25	56	
Gray Rock	56	300	

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 **25** NO. OF POUNDS **1815**
 GALLONS OF WATER **125**
 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
 ST STEEL **CO** CONCRETE
 PL PLASTIC **OT** OTHER
 MAIN CASING TYPE **PL** Nominal diameter top (main) casing (nearest inch) **6** Total depth of main casing (nearest foot) **600**

OTHER CASING (if used)
 diameter inch _____ depth (feet) from _____ to _____

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

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 _____ (MUST MATCH SIGNATURE ON APPLICATION)
 LIC. NO. **WR 9 113**

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

C 2 DEPTH (nearest ft.)
 1 **HO 100 300**
 2 _____
 3 _____
 4 _____
 5 _____
 6 _____
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 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

C 3 **PUMPING TEST**
 HOURS PUMPED (nearest hour) **3**
 PUMPING RATE (gal. per min.) **7.5**
 METHOD USED TO MEASURE PUMPING RATE **Wash/Bucket**
 WATER LEVEL (distance from land surface)
 BEFORE PUMPING **28** ft.
 WHEN PUMPING **69** 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 **393 ft**

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 _____
 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 **3 9.32877**
 LONGITUDE **7 7.01473**
 (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

B 1 SEQUENCE NO. (MDE USE ONLY) **54286** STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL **503957J** please type STATE PERMIT NUMBER **Ho-17-0350** fill in this form completely

B 2 Date Received (APA) **07/13/18** OWNER INFORMATION
 8 MM DD YY 13
 15 Last Name **Heritage Land Development** Owner First Name 34
 36 Street or RFD **PO Box 482** 55
 57 Town **Hispin MD** 70 State **21765** 72 Zip 76

B 3 LOCATION OF WELL
 8 COUNTY **Howard** 21
 23 SUBDIVISION **Hidden Grove** 42
 SECTION **14** LOT **14**
 44 46 48 50
 52 NEAREST TOWN **Woodbine** 71

B 2 DRILLER INFORMATION
 Driller's Name **Michael Barbow** M W D **355** 76 License No. 81
 Firm Name **Barbow Well Drilling**
 Address **522 Underwood lane 21014**
 Signature **[Signature]** Date **7/10/18**

B 4 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 **1250** 37
 38 DISTANCE FROM ROAD **1000** 39
 ENTER FT OR MI **F**
 TAX MAP: **8** BLK: **7** PARCEL **5**

B 2 WELL INFORMATION
 1 APPROX. PUMPING RATE (GAL. PER MIN.) **5** 12
 2
 8
 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) **750** 14 20

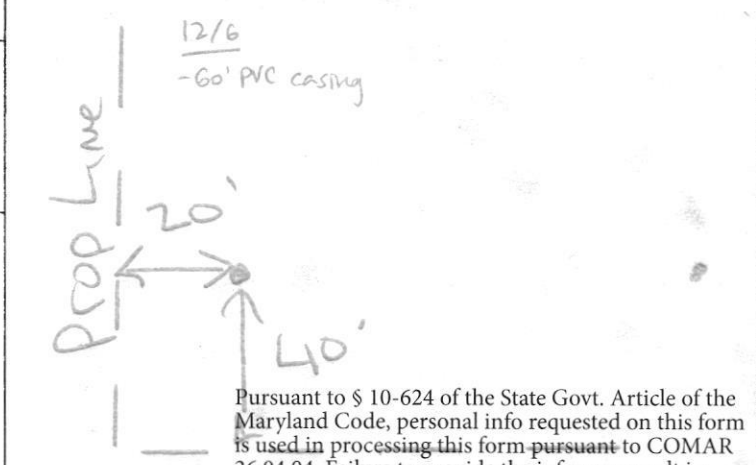
B 2 USE FOR WATER (CIRCLE APPROPRIATE BOX)
 DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
 FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
 INDUSTRIAL, COMMERCIAL, DEWATERING
 PUBLIC WATER SUPPLY WELL
 TEST, OBSERVATION, MONITORING
 OPEN LOOP GEOTHERMAL
 CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
 COUNTY NAME **Howard** COUNTY NO. **XIII**
 STATE SIGNATURE _____ INSERT S → 41
 DATE ISSUED **09/13/18** CO SIGNATURE **[Signature]** EXP. DATE **09/17/19**
 43 MM DD YY 48
 DNI DO N: 12/5/18 DO G: 12/6/18 DNI: 1/10/2019

APPROXIMATE DEPTH OF WELL **300** FEET
 24 28
 APPROXIMATE DIAMETER OF WELL **6** INCH
 NEAREST

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

B 2 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 _____



B 2 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
 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

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Not to be filled in by driller (MDE OR COUNTY USE ONLY)
 APPROP. PERMIT NUMBER **Ho2017G002**
 PERMIT No. **Ho-17-0350**
 70 71 72 73 74 75 76 77 78 79



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 10, 2019
	Well Depth:	300 feet
Customer	<u>Heritage Land Development</u>	Permit # <u>HO-17-0350</u>
Road	<u>Daisy Road</u>	Subdivision <u>Linden Grove</u>
City	<u>Woodbine</u>	Section _____
State	<u>Maryland</u>	Lot # <u>16</u>

Time	Water Level feet PUMP SET AT 100'	Time to Fill 1-gallon bucket seconds	G.P.M.
10:30 AM	28	4	15.00
10:45 AM	75	8	7.50
11:00 AM	74	8	7.50
11:15 AM	74	8	7.50
11:30 AM	73	8	7.50
11:45 AM	73	8	7.50
12:00 PM	72	8	7.50
12:15 PM	71	8	7.50
12:30 PM	71	8	7.50
12:45 PM	71	8	7.50
1:00 PM	71	8	7.50
1:15 PM	70	8	7.50
1:30 PM	70	8	7.50
1:45 PM	69	8	7.50

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 5070
Address: 380 Obrecht Rd
5173ville MD 21784

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 #: MSD226

*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: TDH Brother Telephone #: _____
Subdivision: Wooden Grove Lot #: 16 Well Tag #: HO-17-0350
Site Address: 1410 Heritage Ridge Rd
Woodbine, MD 21797

08/27/2021

Submersible Pump Data

Make: Grufos
Model #: 1550E07180
Pump Capacity: 15
Well Yield: 7.5 gpm
Depth of well encountered at time of pump installation: 300 (feet)

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

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): 6'
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: David C Fogle

date: 8/26/2021

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

Date Insp. Requested: 08/27/2021 Date Insp. Approved: 01/07/2021 Inspector: [Signature]
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade
Two piece cap installed and attached to casing securely
Elec. conduit extends at least 18" below grade/attached to cap properly
Safety rope not outside of well cap/casing
Correct well tag attached properly and casing 8" above finished grade
Water supply line sleeved adequately at house connection
Adequate grout observed below pitless adapter

08/27/2021
54" From TOP
59" From TOP
CALL @ FINAL GRADE

(Revised form 10/24/2018)

ok
01/07/2021

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – July 7, 2022

January 7, 2022

Homeowner
1410 Heritage Ridge Road
Woodbine, MD 21797

RE: Linden Grove, Lot 16
1410 Heritage Ridge Road
Building Permit: B21000419
Well Permit: HO-17-0350

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 **10/22/2021**. Final approval of the well line connection to the dwelling was granted on **1/7/2021**. The well construction was completed on **1/10/2019**. Water samples were collected on **12/20/2021**.

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-17-0350. 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

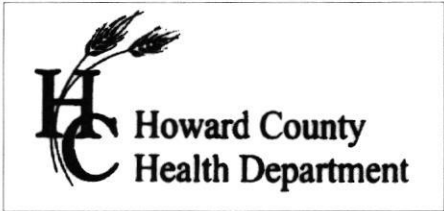
In closing, please refer to our "Homeowner Fact Sheet" which illustrates a better understanding for your Onsite Sewage Disposal System. You will also find a link to Maryland Department of the Environments website which describes in further detail operation and maintenance of your septic system.

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



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 16 Heritage Ridge
 Subdivision/Property Name Lot # Road Name

OLD 32

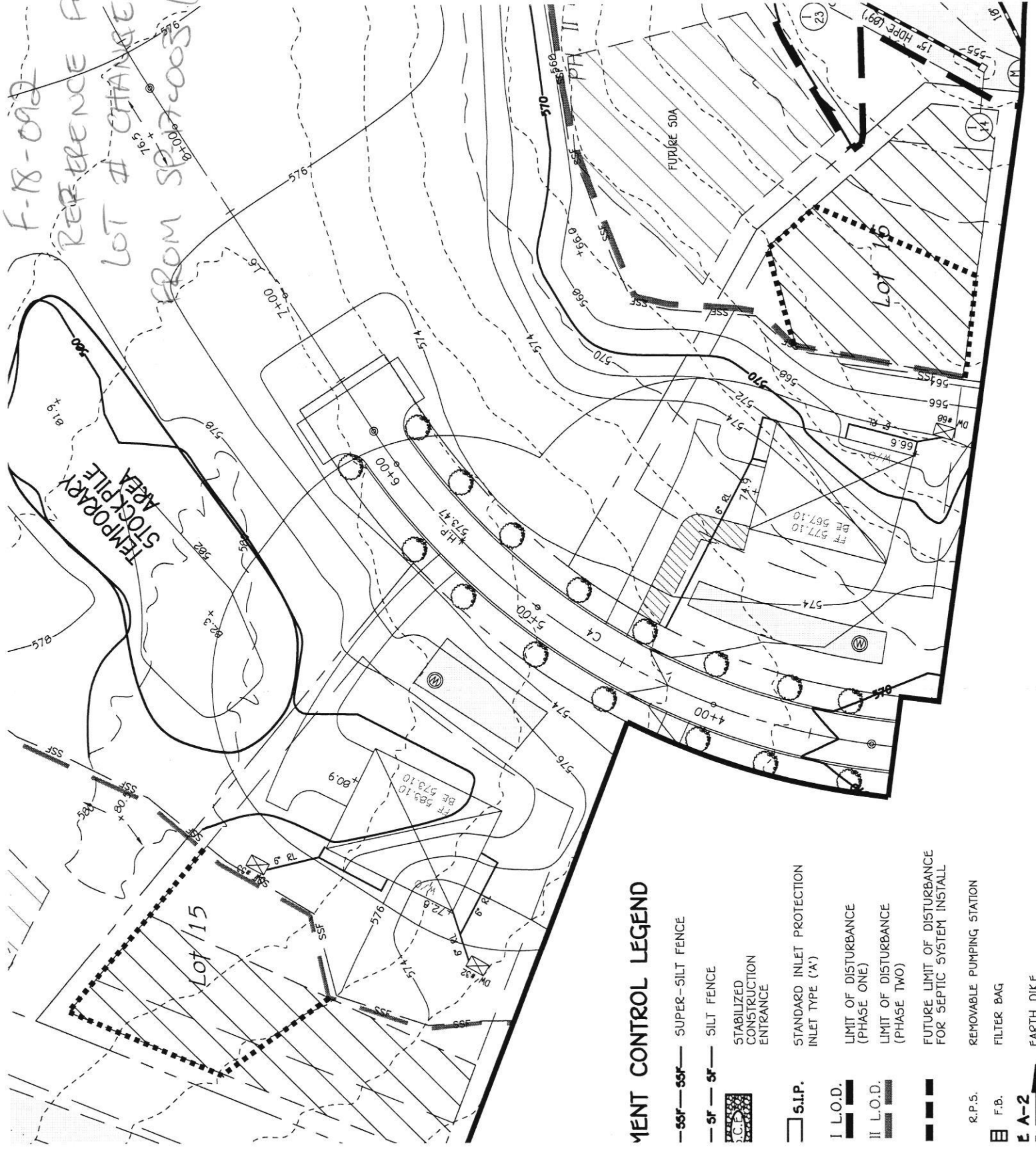
Je 09/14/2018

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.

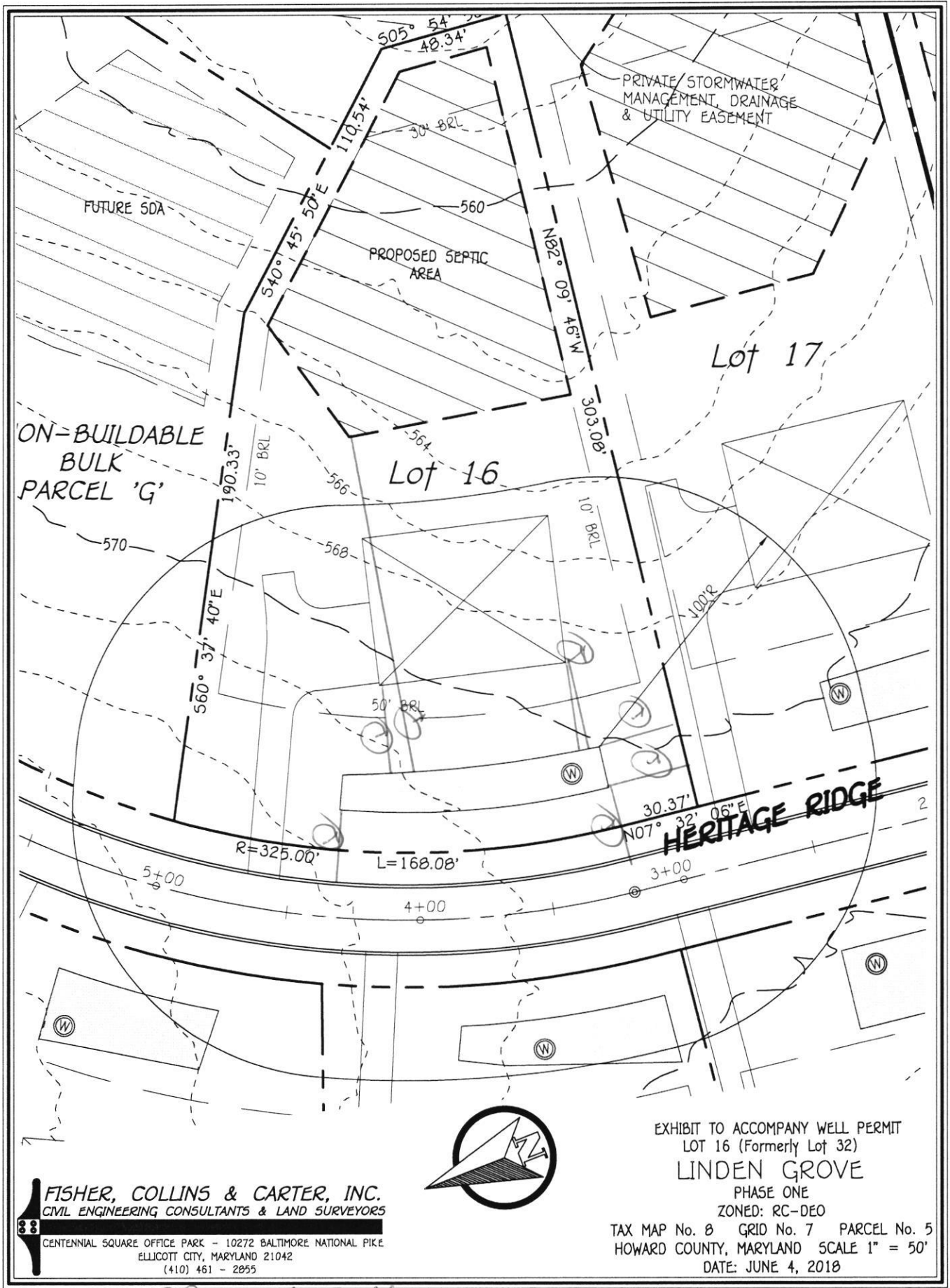
F-18-092
 REFERENCE FOR
 LOT # CHANGE
 FROM S27-003 (S/22/18)



MENT CONTROL LEGEND

- SSF— SUPER-SILT FENCE
- SF— SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- S.I.P. STANDARD INLET PROTECTION INLET TYPE (A)
- I L.O.D. LIMIT OF DISTURBANCE (PHASE ONE)
- II L.O.D. LIMIT OF DISTURBANCE (PHASE TWO)
- FUTURE LIMIT OF DISTURBANCE FOR SEPTIC SYSTEM INSTALL
- R.P.S. REMOVABLE PUMPING STATION
- F.B. FILTER BAG
- A-2 EARTH DIKE

I:\2012\12026\dwg\well exhibits\well exhibit lot 16.dwg, well exhibit lot 16, 7/26/2018 7:14:37 AM, 1:1



ON-BUILDABLE
BULK
PARCEL 'G'

Lot 16

Lot 17

HERITAGE RIDGE

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



EXHIBIT TO ACCOMPANY WELL PERMIT
 LOT 16 (Formerly Lot 32)
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 16
 APPROVED 7/26/2018 @ 0997 VIA SP-17-003 signed 3/22/18
 STAKED BY FCC . F-18-092 accessed 7/26/18

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 149649 Account #: 1933
Reference: Linden Grove Lot 16 Client: Fogle's Well Pump & Treatment
Location: 1410 Heritage Ridge Road Requested By: Dave Fogle
Woodbine, MD 21797 Source: Well Water
Date/ Time Collected: 12/30/2021 1245 Site: Kitchen Sink Tap ✓
Date/Time Rec'd: 12/30/2021 1345 Treatment: None ✓
Chlorine ppm: Free: ND Total: ND pH: 6.1
Collected By: J. Evans 0309JE Well #: HO-17-0350

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	12/31/2021 / 0900 / LLO
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	12/31/2021 / 0900 / LLO
Nitrate	7.08	mg/L	10	Hach 10206	12/30/2021 / 1515 / CRS
Turbidity	<0.30	NTU	<10	SM20 2130B	12/30/2021 / 1530 / TSD
Sand	ND	mg/L	5	Visual/Gravimetric	12/30/2021 / 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 pH and Chlorine level tested in lab (pH tested after recommended holding time)
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 ND:None Detected
- 7 Sample collected by client, analyzed as received
- 8 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy
Building Permit # : B21000419

Date Reported: 1/3/2022