

C1 07794 SEQUENCE NO. (MDE USE ONLY)

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.

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

COUNTY NUMBER

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED 02/16/2020 Approved 10/22/2020 Depth of Well 600 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-70-0021

OWNER Heritage Land Development WELL SITE ADDRESS last name first name Heritadge Ridge Rd. TOWN Woodbine SUBDIVISION Linden Grove SECTION LOT 27

WELL LOG Not required for driven wells

Table with columns: DESCRIPTION (Use additional sheets if needed), FEET (FROM, TO), check if water bearing. Rows include SOIL, Brown shale, Soft Gray Rock, MED, GRAY Rock.

GROUTING RECORD yes no

WELL HAS BEEN GROUTED (Circle Appropriate Box) TYPE OF GROUTING MATERIAL (Circle one) CEMENT [CM] BENTONITE CLAY [BC] NO. OF BAGS 26 NO. OF POUNDS 130 GALLONS OF WATER 130 DEPTH OF GROUT SEAL (to nearest foot) from 0 to 15 ft.

CASING RECORD

MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch)! 6 Total depth of main casing (nearest foot) 75

OTHER CASING (if used) diameter inch depth (feet) from to PL 4 12 70 195

SCREEN RECORD

screen type or open hole (insert appropriate code below) [ST] [BR] [HO] [PL] [OT]

C3 PUMPING TEST

HOURS PUMPED (nearest hour) 6 PUMPING RATE (gal. per min.) 2.0 METHOD USED TO MEASURE PUMPING RATE Watch/Rucke WATER LEVEL (distance from land surface) BEFORE PUMPING 38 ft. WHEN PUMPING 305 ft. TYPE OF PUMP USED (for test) [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...

DRILLERS LIC. NO. 1 M W D 355

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. 1 W R O 113

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

C2 DEPTH (nearest ft.)

DEPTH (nearest ft.) HO 75 600

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)

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] [- below] LAND SURFACE 1 (nearest foot)

LATITUDE 39.33005 LONGITUDE 77.06329 (DEFAULT COORD. WGS 84)

NOTES:

TAG: 8/13/20

B 1	68354	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 507894-C	STATE PERMIT NUMBER 40-20-0021 <small>fill in this form completely</small>
Date Received (APA) 07/08/20 8 MM DD YY 13		OWNER INFORMATION		
Heritage Land Development 15 Last Name Owner First Name 34		Howard 8 COUNTY 21		
PO Box 482 36 Street or RFD 55		Linden Grove 23 SUBDIVISION 42		
Lisbon, Md 21765 57 Town 70 State 72 Zip 76		SECTION 44 46 LOT 48 50 47 52 NEAREST TOWN 71		
DRILLER INFORMATION Michael Barlow M D 355 Driller's Name 76 License No. 81		LOCATION OF WELL Heritage Ridge Rd 11 STREET ADDRESS 30		
Barlow Well Drilling Firm Name				
572 Underwood Ln, Bel Air, Md 21014 Address		ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) 34 40 37 DISTANCE FROM ROAD FT ENTER FT OR MI 38 39 TAX MAP: 8 BLK: 7 PARCEL 3		
[Signature] 7-1-2020 Signature Date				
WELL INFORMATION APPROX. PUMPING RATE (GAL. PER MIN.) 5 8 12		SOURCES OF DRILLING WATER 1. Well 2. 9/16/2020 3. Pump 400' level 305 2 GPM state 38		
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 750 14 20				
USE FOR WATER (CIRCLE APPROPRIATE BOX) <input checked="" type="checkbox"/> D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="checkbox"/> F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input type="checkbox"/> I INDUSTRIAL, COMMERCIAL, DEWATERING <input type="checkbox"/> P PUBLIC WATER SUPPLY WELL <input type="checkbox"/> T TEST, OBSERVATION, MONITORING <input type="checkbox"/> O OPEN LOOP GEOTHERMAL <input type="checkbox"/> C CLOSED LOOP GEOTHERMAL		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL Howard 13 COUNTY NAME COUNTY NO. STATE SIGNATURE INSERT S → 41 DATE ISSUED 07/21/20 43 MM DD YY 48 CO SIGNATURE SW Thomas EXP. DATE 07/21/21 Dough: 8/10/20 (ST) Doug: 8/13/20 (AT) Day: 9/16/2020 (S)		
APPROXIMATE DEPTH OF WELL 300 FEET 24 28				
APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST INCH		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 8/11/20 75 casing 8/13 - gravel DN completed before insp @ 3pm @ 20' liner 600' total 2.5 GPM 35' Line PROP		
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) <input checked="" type="checkbox"/> N THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="checkbox"/> Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED 39 <input type="checkbox"/> S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS <input type="checkbox"/> D THIS WELL WILL DEEPEIN AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE) 41 52		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.		
Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER H02017G002 (01) PERMIT No. H0-20-0021 70 71 72 73 74 75 76 77 78 79				
SPECIAL CONDITIONS NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED				

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: Foale's Well Pump + water Treatment, LLC Telephone #: 410 795 1535
 Address: PO Box 63
Woodbine, MD 21797

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 Foale 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: Toll Brothers Telephone #: _____
 Subdivision: Linden Grove Lot #: 27 Well Tag #: HO-20-0021 (SD)
 Site Address: 1429 Heritage Ridge Rd
Woodbine, MD 21797

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Grundfos</u>	Make: <u>Campbell+</u>	Two piece watertight cap: <u>Y/S</u>
Model #: <u>TKS10422</u>	Model #: <u>NA</u>	Screened, vented well cap: <u>Y/S</u>
Pump Capacity: <u>7</u>	GPM Depth: <u>30"</u> (36" min)	Cap secured to casing: <u>Y/S</u>
Well Yield: <u>2</u>	GPM NSF/WSC approved: <u>Y/S</u>	Conduit min 1 1/2" B.G.: <u>Y/S</u>
Depth of well encountered at time of pump installation: <u>606</u> (feet)		Conduit secured to well cap: <u>Y/S</u>

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 restrictors / Cable guards / Other acceptable method used
 Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing NA

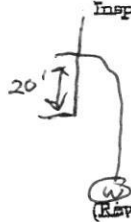
<u>Piping to house</u>	<u>House Connection</u>
Type: <u>1" poly pipe</u>	PVC sleeve to undisturbed soil at wall penetration: <u>Y/S</u>
PSI: <u>200 (160 psi min)</u>	Length of sleeve (5' minimum from foundation): <u>10'</u>
Depth of supply line: <u>36"</u> (36" min)	Sleeve sealed properly: <u>Y/S</u>

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: 5/26/2022

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

Date Insp. Requested: <u>5/27/22</u>	Date Insp. Approved: <u>5/27/22</u>	Inspector: <u>(SD)</u>
Inspection Data:	Pitless adapter watertight & water supply line at least 36" below grade	<u>Y</u> 37"
	Two piece cap installed and attached to casing securely	<u>Y</u>
	Elec. conduit extends at least 1 1/2" below grade/attached to cap properly	<u>Y</u> 36"
	Safety rope not outside of well cap/casing	<u>Y</u>
	Correct well tag attached properly and casing 8" above finished grade	<u>Y</u> 35"
	Water supply line sleeved adequately at house connection	<u>Y</u> 6'
	Adequate grout observed below pitless adapter	<u>Y</u>



(Revised form 10/24/2018)

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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – APRIL 18, 2023

October 18, 2022

Homeowner
1429 Heritage Ridge Road
Woodbine, MD 21797

**RE: Linden Grove, Lot 27
1429 Heritage Ridge Rd
Building Permit: B21002813
Well Permit: HO-20-0021**

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 **10/12/2022**. Final approval of the well line connection to the dwelling was granted on **5/27/2022**. The well construction was completed on **9/16/2020**. Water samples were collected on **10/6/2022**.

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-20-0021. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

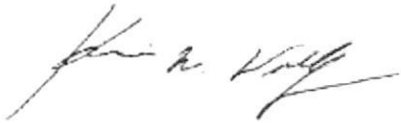
This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will 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>

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 Environment website which describes in further detail operation and maintenance of your septic system.

Approving Authority,



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



7178 Columbia Gateway Dr., Columbia, MD 21046
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

TO ALL INTERESTED PARTIES

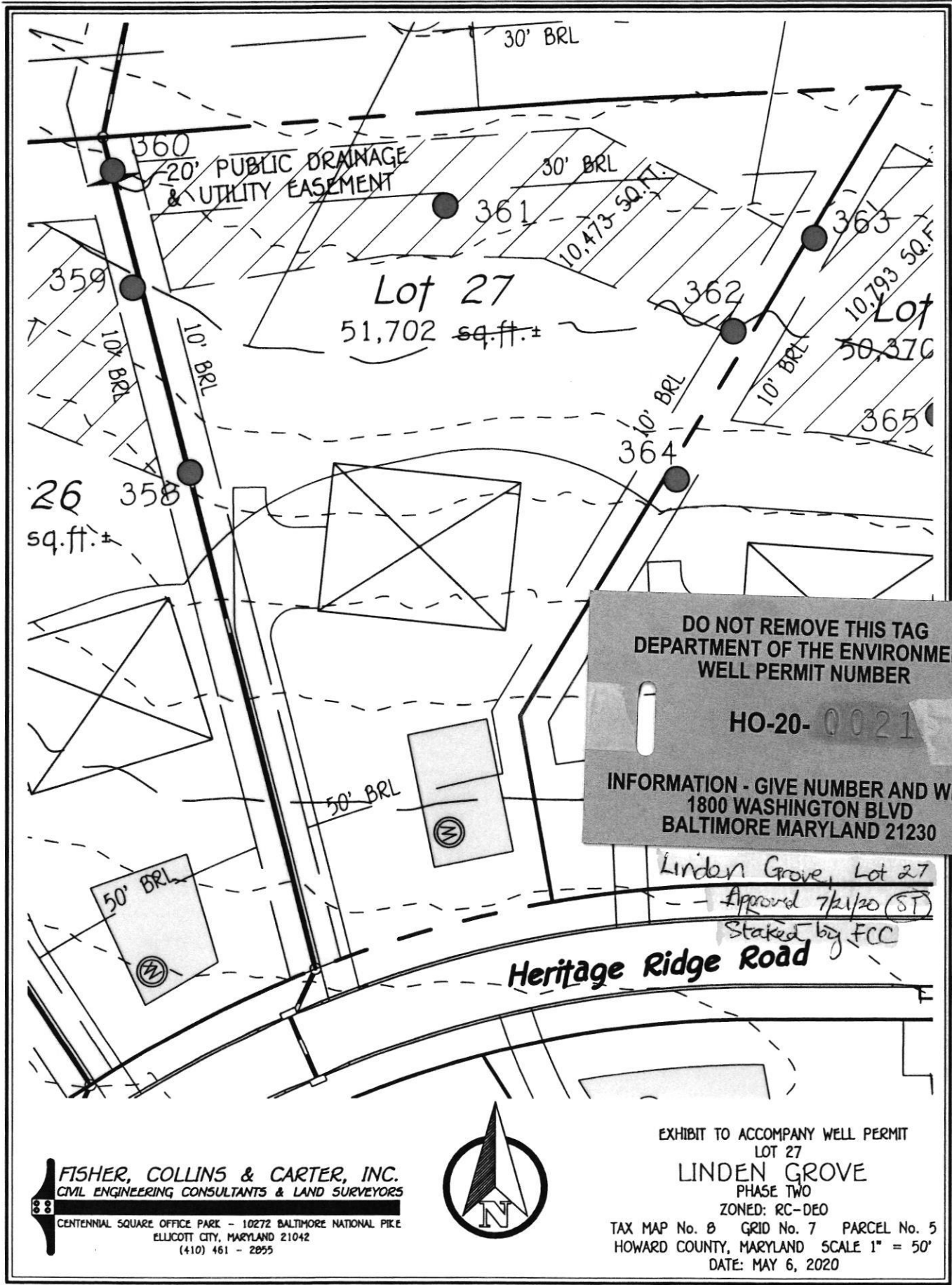
When submitting a well application for a proposed well for new construction, please indicate one of the following:

Well Site Location:

<u>Linden Grove</u>	<u>27</u>	<u>Heritage Ridge Rd.</u>
Subdivision/Property Name	Lot #	Road Name

- The well site has been staked by Fisher, Collins & Carter,
(professional land surveyor or company employing professional land surveyors)
on 06/16/20 (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.



DO NOT REMOVE THIS TAG
 DEPARTMENT OF THE ENVIRONMENT
 WELL PERMIT NUMBER
 HO-20- 0021
 INFORMATION - GIVE NUMBER AND WRITE
 1800 WASHINGTON BLVD
 BALTIMORE MARYLAND 21230

Linden Grove, Lot 27
 Approved 7/2/20 (ST)
 Staked by FCC

Heritage Ridge Road

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461 - 2955



EXHIBIT TO ACCOMPANY WELL PERMIT
 LOT 27
LINDEN GROVE
 PHASE TWO
 ZONED: RC-DEO
 TAX MAP No. 8 GRID No. 7 PARCEL No. 5
 HOWARD COUNTY, MARYLAND SCALE 1" = 50'
 DATE: MAY 6, 2020

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

MEMORANDUM

TO: M. Barlow Well Drilling
522 Underwood Lane
Bel Air, MD 21014

FROM: Susan Thomas
Environmental Health Specialist
Howard County Health Department
Well & Septic Program

RE: Linden Grove Lots 24-37 & 39
Special Conditions for wells

DATE: July 21, 2020

The following comments apply to the above referenced Well Permit Applications. Please read through and complete as needed.

- A. The wells for the Linden Grove subdivision lots 24 thru 37 & 39 were staked with only one selected well site per the approved percolation certification plan signed 09/11/2018. If the well driller cannot confirm a successful well on this one well site, they will need to have the surveyor come back out and stake out the entire well box/alt well sites. This will need to be verified through the Health Department.
- B. Lots 26, 30 & 36 will require samples for Sodium, Chloride and TDS to be collected at the time of the Yield Test.

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 155017 Account #: 1933
Reference: Linden Grove Lot 27 Client: Fogle's Well Pump & Treatment
Location: 1429 Heritage Ridge Road Requested By: Dave Fogle
Woodbine, MD 21797 Source: Well Water
Date/ Time Collected: 10/6/2022 0930 Site: Kitchen Sink Tap
Date/Time Rec'd: 10/6/2022 1019 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.7
Collected By: J. Evans 0309JE Well #: HO-20-0021

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	10/7/2022 / 0815 / CRS
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	10/7/2022 / 0815 / CRS
Nitrate.	4.93	mg/L	10	EPA 300.0	10/6/2022 / 1517 / TSD
Turbidity	0.77	NTU	<10	SM2130B	10/6/2022 / 1545 / TSD
Sand	ND	mg/L	5	Visual/Gravimetric	10/6/2022 / 1345 / 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 pH and Chlorine level tested in lab (pH tested after recommended holding time)
- 8 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy
Building Permit # : 21002813

Date Reported: 10/7/2022