

C1 26185 SEQUENCE NO. (MDE USE ONLY)
 1 2 3 6
 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

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

ST/CO USE ONLY
 DATE RECEIVED
 MM DD YY
 8 13

DATE WELL COMPLETED
 MM DD YY
 11 7 14

Depth of Well
 22 350 26
 (TO NEAREST FOOT)

PERMIT NO.
 FROM "PERMIT TO DRILL WELL"
 HO-95-2679
 28 29 30 31 32 33 34 35 36 37

OWNER Land Design + Development
 WELL SITE ADDRESS last name Scaggsville RD first name TOWN Fulton
 SUBDIVISION Fulton Manor Valley SECTION LOT 1

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	
Red clay	6	24	
Brown shale	24	57	
Med Gray Rock	57	350	✓
		200	✓
		310	✓

Well # 1 - 300' Dry (backfilled)
 300-40' Drill cuttings
 40-0' cement

GROUTING RECORD
 WELL HAS BEEN GROUTED (Circle Appropriate Box)
 YES Y NO N
 44 44

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

NO. OF BAGS ^{45 46} 17 NO. OF POUNDS ^{45 48} 318
 GALLONS OF WATER 102
 DEPTH OF GROUT SEAL (to nearest foot)
 from 0 ft. to 60 ft.
 48 TOP 52 54 BOTTOM 58 ft.
 (enter 0 if from surface)

CASING RECORD
 casing types insert appropriate code below

<input checked="" type="checkbox"/> ST STEEL	<input type="checkbox"/> CO CONCRETE
<input type="checkbox"/> PL PLASTIC	<input type="checkbox"/> OT OTHER

MAIN CASING TYPE
 Nominal diameter top (main) casing (nearest inch)! Total depth of main casing (nearest foot)
 PL 6 60
 60 61 63 64 66 70

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

SCREEN RECORD
 screen type or open hole insert appropriate code below

<input checked="" type="checkbox"/> ST STEEL	<input type="checkbox"/> BR BRASS	<input type="checkbox"/> HO OPEN HOLE
<input type="checkbox"/> PL PLASTIC	<input type="checkbox"/> BR BRONZE	<input type="checkbox"/> OT OTHER

NUMBER OF UNSUCCESSFUL WELLS: 1
 WELL HYDROFRACTURED yes Y no 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. M S D 066

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

C 2 DEPTH (nearest ft.)
 1 Ho 60 350
 E A C H C A S I N G
 1 8 9 11 15 17 21
 2 23 24 26 30 32 36
 3 38 39 41 45 47 51
 E N
 SLOT SIZE 1 2 3
 DIAMETER OF SCREEN (NEAREST INCH)
 56 60
 from to

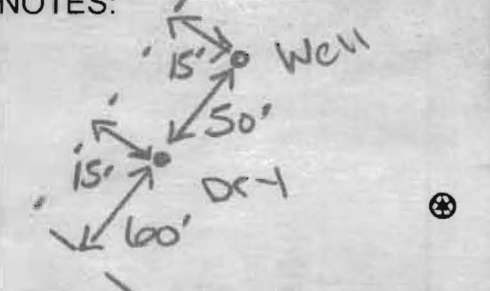
GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

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

C 3 PUMPING TEST
 1 2
 HOURS PUMPED (nearest hour) 6
 8 9
 PUMPING RATE (gal. per min.) 1.13
 11 15
 METHOD USED TO MEASURE PUMPING RATE Submersible
 WATER LEVEL (distance from land surface)
 BEFORE PUMPING 18 ft.
 17 20
 WHEN PUMPING 301 ft.
 22 25
 TYPE OF PUMP USED (for test)
 A air P piston T turbine
 C centrifugal R rotary O other (describe below)
 J jet 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
 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 } 1 (nearest foot)
 49 50 51

LATITUDE 39.15556
 LONGITUDE 76.92960
 (DEFAULT COORD. WGS 84)





MICHAEL BARLOW WELL DRILLING & SERVICE, INC.

522 Underwood Lane
(410) 838-6910

Bel Air, Maryland 21014
Fax (410) 838-3582

WELL YIELD REPORT

Date Test Completed:	November 6, 2014		
Well Depth:	350	feet	
Customer	Land Design & Development	Permit #	HO-95-2679
Road	Fulton Estates Court	Subdivision	Fulton Manor Valley
City	Fulton	Section	
State	Maryland	Lot #	1

Time	Water Level feet	Time to Fill 1-gallon bucket seconds	G.P.M.
7:45 AM	18	4	15.00
8:00 AM	150	4	15.00
8:15 AM	279	45	1.33
8:30 AM	300	52	1.15
8:45 AM	301	53	1.13
9:00 AM	301	53	1.13
9:15 AM	301	53	1.13
9:30 AM	301	53	1.13
9:45 AM	301	53	1.13
10:00 AM	301	53	1.13
10:15 AM	301	53	1.13
10:30 AM	301	53	1.13
10:45 AM	301	53	1.13
11:00 AM	301	53	1.13
11:15 AM	301	53	1.13
11:30 AM	301	53	1.13
11:45 AM	301	53	1.13
12:00 PM	301	53	1.13
12:15 PM	301	53	1.13
12:30 PM	301	53	1.13
12:45 PM	301	53	1.13
1:00 PM	301	53	1.13
1:15 PM	301	53	1.13
1:30 PM	301	53	1.13
1:45 PM	301	53	1.13
2:00 PM	301	53	1.13
2:15 PM	301	53	1.13
2:30 PM	301	53	1.13

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.

B 1 20067

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO 98-95-2679 fill in this form completely

546308 please type

Date Received (APA) 04/11/14

OWNER INFORMATION

Land Design + Development 5300 Dorsey Hall Drive, Suite 102 Ellicott City MD 21043

LOCATION OF WELL

Howard COUNTY Fulton Manor Valley SECTION 2 LOT 1 Part 1 Fulton NEAREST TOWN

DRILLER INFORMATION

Michael Barlow MWD 355 Barlow Well Drilling 522 Underwood Lane 21014 4/10/14

SOURCES OF DRILLING WATER

1. Well

Scaggsville Road STREET ADDRESS

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)



34 Loop 37 DISTANCE FROM ROAD

ENTER FT OR MI

TAX MAP: 41 BLK: PARCEL 78

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 3 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 750

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard COUNTY NAME A535210 COUNTY NO. 13

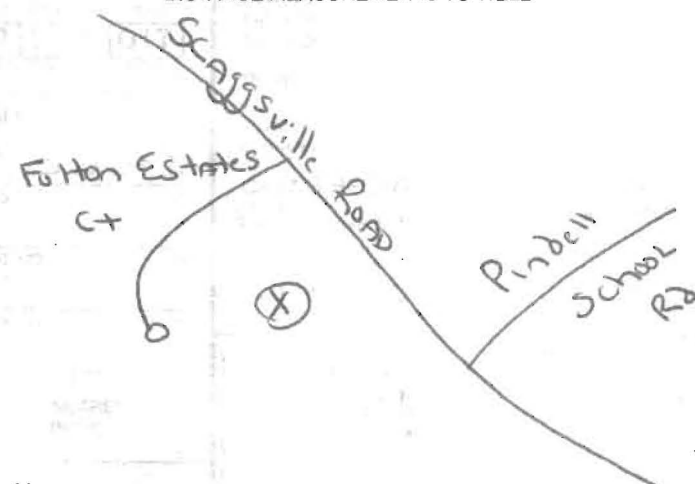
STATE SIGNATURE INSERT S

DATE ISSUED 04/15/2014 CO SIGNATURE EXP. DATE 4/15/14

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

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



APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary) 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 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 DEEPEEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41

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

APPROP. PERMIT NUMBER G

PERMIT No. H6-95-2679

SPECIAL CONDITIONS

NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

C 1 26153 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
8 13

DATE WELL COMPLETED
MM DD YY
07 04 14

Depth of Well
22 350 26
(TO NEAREST FOOT)

PERMIT NO.
FROM "PERMIT TO DRILL WELL"
HO - 95 - 2679

OWNER LAND Design + Developmat
WELL SITE ADDRESS Scaggsville Rd TOWN Fulton
SUBDIVISION Fulton Manor Valley 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	
Soil	0	6	
Red clay	6	24	
Brown shale	24	57	
med Gray Rock	57	350	✓
		200	✓
		310	✓

Well #1 - 300' DRY (backf. 60)
300-40 Drill Cuttings
40-0 cement
160 (1.5) = 240

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) YES NO
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT BENTONITE CLAY
NO. OF BAGS 17 NO. OF POUNDS 1348
GALLONS OF WATER 102
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
STEEL CONCRETE
PLASTIC 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 insert appropriate code below
STEEL BRASS OPEN HOLE
PLASTIC OTHER
DEPTH (nearest ft.)
1 60 2 350

NUMBER OF UNSUCCESSFUL WELLS: 0
WELL HYDROFRACTURED YES NO

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)
Marty Diver

LIC. NO. MS D 0666
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

E A C H C A S I N G	DEPTH (nearest ft.)	
	1	2
1	<u>60</u>	<u>350</u>
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60		

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 2

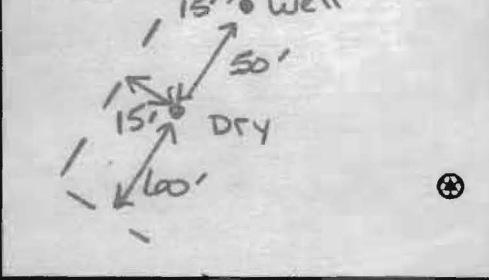
MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T (E.R.O.S.) _____ W Q _____

70 _____ 72 _____ 74 75 76
TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3
PUMPING TEST
HOURS PUMPED (nearest hour) 6
PUMPING RATE (gal. per min.) 1.11
METHOD USED TO MEASURE PUMPING RATE Submersible
WATER LEVEL (distance from land surface)
BEFORE PUMPING 25 ft.
WHEN PUMPING 185 ft.
TYPE OF PUMP USED (for test)
 air piston turbine
 centrifugal rotary other (describe below)
 jet submersible

PUMP INSTALLED
DRILLER INSTALLED PUMP 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 39.15556
LONGITUDE 76.92960
(DEFAULT COORD. WGS 84)





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

Not approved
 11/15/14
 AK

WELL YIELD REPORT

Date Test Completed: August 4, 2014

Well Depth: 350 feet

Customer Land Design & Development Permit # HO-95-2679
 Road Fulton Estates Court Subdivision Fulton Manor Valley
 City Fulton Section _____
 State Maryland Lot # 1

500 = per 2W3

Time	Water Level feet	Time to Fill 1-gallon bucket seconds	G.P.M.
8:30 AM	25	4	15.00
8:45 AM	116	5	12.00
9:00 AM	182	45	1.33
9:15 AM	185	54	1.11
9:30 AM	185	54	1.11
9:45 AM	185	54	1.11
10:00 AM	185	54	1.11
10:15 AM	185	54	1.11
10:30 AM	185	54	1.11
10:45 AM	185	54	1.11
11:00 AM	185	54	1.11
11:15 AM	185	54	1.11
11:30 AM	185	54	1.11
11:45 AM	185	54	1.11
12:00 PM	185	54	1.11
12:15 PM	185	54	1.11
12:30 PM	185	54	1.11
12:45 PM	185	54	1.11
1:00 PM	185	54	1.11
1:15 PM	185	54	1.11
1:30 PM	185	54	1.11
1:45 PM	185	54	1.11
2:00 PM	185	54	1.11
2:15 PM	185	54	1.11
2:30 PM	185	54	1.11
2:45 PM	185	54	1.11
3:00 PM	185	54	1.11
3:15 PM	185	54	1.11

6

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.

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2648**

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: NATIONAL WATER SVC Telephone #: 301-854-1333
Address: P.O. BOX 158
ASHTON, MD 20861

(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 RYCKE License# PI 0145

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

Name of Property Owner: DOUGLAS HOMES Telephone #: _____
Subdivision: FULTON MANOR Lot #: 1 Well Tag #: HO-95-2679 ✓
Site Address: 11805 COLLE CT
FULTON, MD

<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> </u>
Model #: _____	Model#: <u>PA 500</u>	Screened, vented well cap: <u> </u> ✓
Pump Capacity _____ GPM	Depth: <u>48"</u> (36" min)	Cap secured to casing: <u> </u> ✓
Well Yield: _____ GPM	NSF approved: <u> </u> ✓	Conduit min 18" B.G.: <u> </u> ✓
Depth of well encountered at time of pump installation: <u>350</u> (feet)		Conduit secured to well cap: <u> </u> ✓
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4		
Torque arrestors or Cable guards are required - Must circle one		
Safety rope, if used, attached to inside of well casing with eye bolt <u> </u>		

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>Poly</u>	PVC sleeved to undisturbed soil at wall penetration: <u> </u> YES
PSI: <u>160</u> (160 psi min)	Approximate length of sleeve: <u>5'</u>
Depth of supply line: <u>4'</u> (36" min)	Sleeve caulked and sealed properly: <u> </u> 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 _____ date 12-6-14

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

Date Insp. Requested: 12/7/16 Date Insp. Approved: 12/16/16 SC/XC

Inspection Data: Pitless adapter and water supply line at least 36" below grade	<u> </u> ✓
Two piece cap installed and attached to casing securely	<u> </u> ✓
Elec. conduit extends at least 18" below grade/attached to cap properly	<u> </u> ✓
Safety rope installed inside of well casing	<u> </u> ✓
Correct well tag attached properly and casing 8" above finished grade	<u> </u> ✓
Water supply line sleeved adequately at house connection	<u> </u> ✓
Adequate grout observed below pitless adapter	<u> </u> ✓



FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #: 112970 Account #: 3123
Reference: Fulton Manor Lot 1 Company: National Water Servicing
Location: 11805 Collie Court Requested By: Dave Rycke
Fulton, MD 20759 Source: Well Water
Date/ Time Collected: 2/17/2017 1000 Site: Pressure Tank
Date/Time Rec'd: 2/17/2017 1252 Treatment: Sediment Filter**
Chlorine ppm: Free: ND Total: ND pH: 6.8
Collected By: J. Yeager 6176JY Well #: HO-95-2679

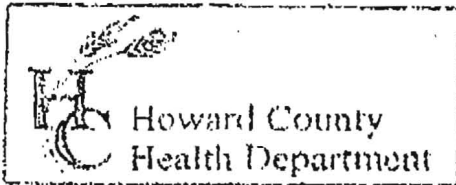
PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	2/18/2017 / 0800 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	2/18/2017 / 0800 / CCH
Nitrate	3.97	mg/L	10	601	2/17/2017 / 1630 / CRS
Turbidity	1.85	NTU	<10	SM18 2130B	2/17/2017 / 1645 / CRS
Sand	NS	mg/L	5	Visual/Gravimetric	2/17/2017 / 1645 / CRS

NOTES

- 1 **Sample collected prior to Sediment Filter
- 2 mg/L = milligrams per liter (also, parts per million)
- 3 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 4 NS = None Seen (NS indicates less than 5 mg/L)
- 5 NTU = Nephelometric Turbidity Units
- 6 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 7 ND:None Detected
- 8 Visual well check: Sealed, vented cap
- 9 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy
Building Permit # : B16000177

Date Reported: 2/20/2017



3525 H Ellicott Mills Drive, Ellicott City, MD 21043
 (410) 313-2640 Fax (410) 313-2648
 TDD (410) 313-2323 Toll Free 1-866-313-6300
 website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., 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:

Fulton Manor Valley Lots 1 thru 9

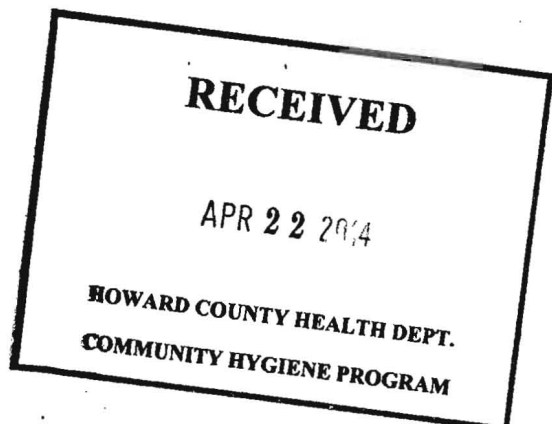
- The well site has been staked by Fisher Collins + Carter,
 (professional land surveyor or company employing professional land surveyors)
 on 4/21/14 (date) and does not require a site inspection.
- The well driller, builder or property owner will call the Health Department to schedule a time to meet 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.

Revised 6/10/03

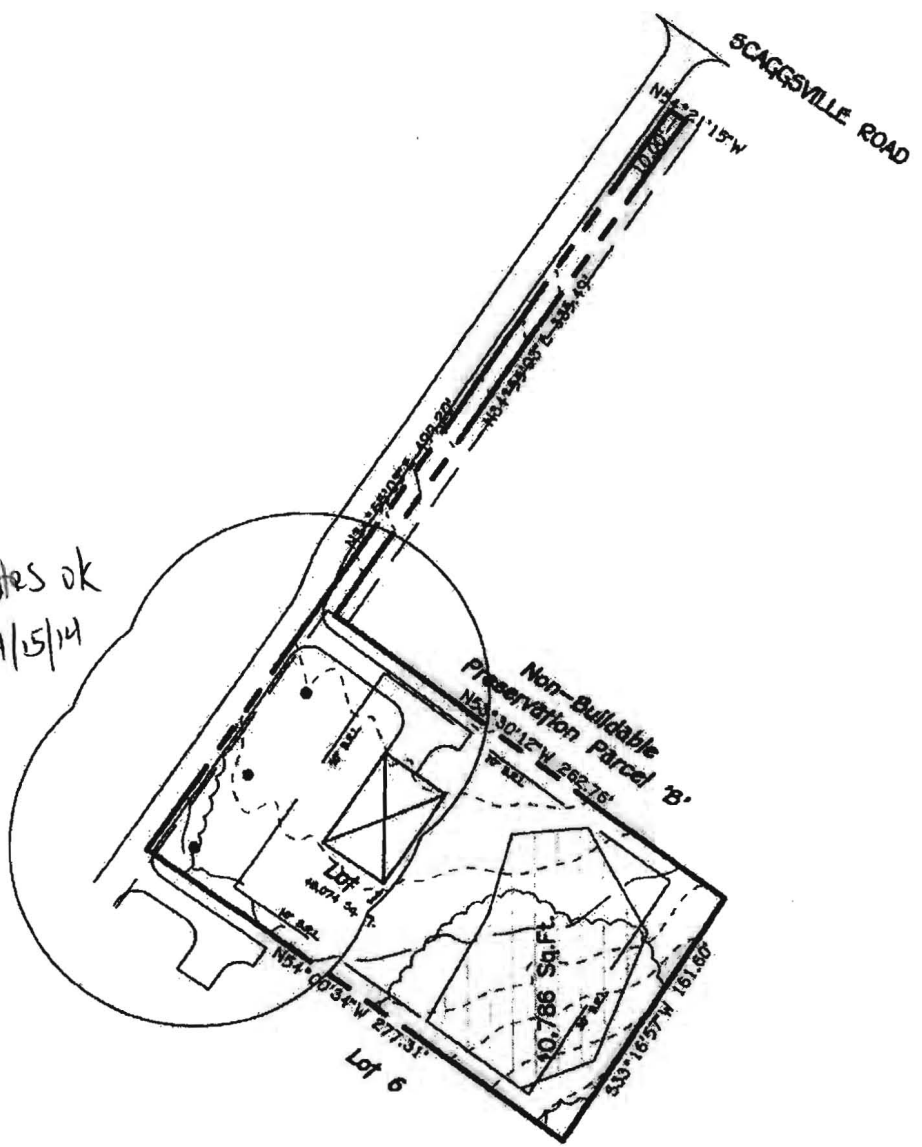
Michael Ison

Barlow Well Drilling



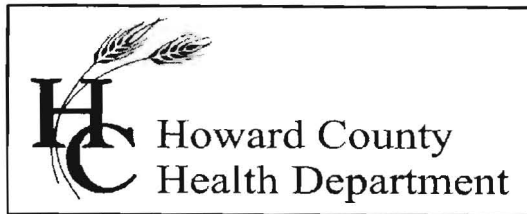
I:\2014\11015\dwg\11015-001 Well Exhibit Lot 1.dwg, Model, 4/3/2014 10:28:24 AM, 1:100

Well sites OK
RR 4/15/14



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 1
 FULTON MANOR VALLEY - PART ONE
 Lots 1 Thru 5, Buildable Preservation Parcel 'A',
 Non-Buildable Preservation
 Parcel 'B' And Bulk Parcels 'C'
 And 'D'
 TAX MAP 41 PARCEL 78
 HOWARD COUNTY, MARYLAND
 SCALE 1"=100'
 DATE April 3, 2014



Bureau of Environmental Health

8930 Stanford Blvd., Columbia, MD 21045
Main: 410-313-2640 | Fax: 410-313-2648
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org

Facebook: www.facebook.com/hocohealth
Twitter: HowardCoHealthDep

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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – AUGUST 21, 2017

February 21, 2017

Homeowner
11805 Collie Court
Fulton, MD 20759

**RE: Fulton Valley Manor, Lot 1
11805 Collie Court
Building Permit: B16000177
Well Permit: HO-95-2679**

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 **2/1/2017**. Final approval of the well line connection to the dwelling was granted on **12/16/2016**. The well construction was completed on **11/7/2014**. Water samples were collected on **2/17/2017**.

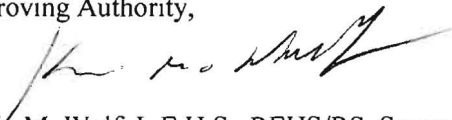
The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking. This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-95-2679. 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>

Approving Authority,

A handwritten signature in black ink, appearing to read "Kevin M. Wolf", written over a horizontal line.

Kevin M. Wolf, L.E.H.S., REHS/RS, Supervisor
Groundwater Management Section
Well & Septic Program

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

THE EXISTING WELL SHOWN ON LOT 1 TAG NO. HO-95-2679 HAS BEEN FIELD LOCATED BY ROBERT H. VOGEL ENGINEERING, INC., AND IS ACCURATELY SHOWN.

BUILDING OF LOT 1 FLOOR AREAS:

BASEMENT FLOOR AREA: _____

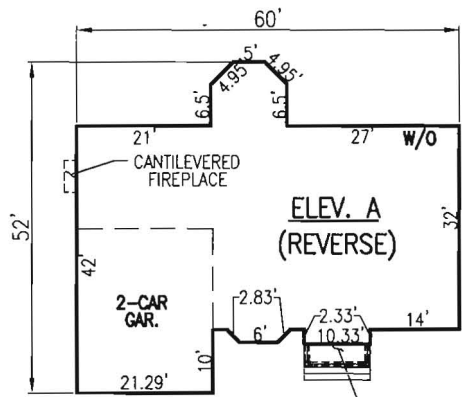
FIRST FLOOR AREA: _____

SECOND FLOOR AREA: _____

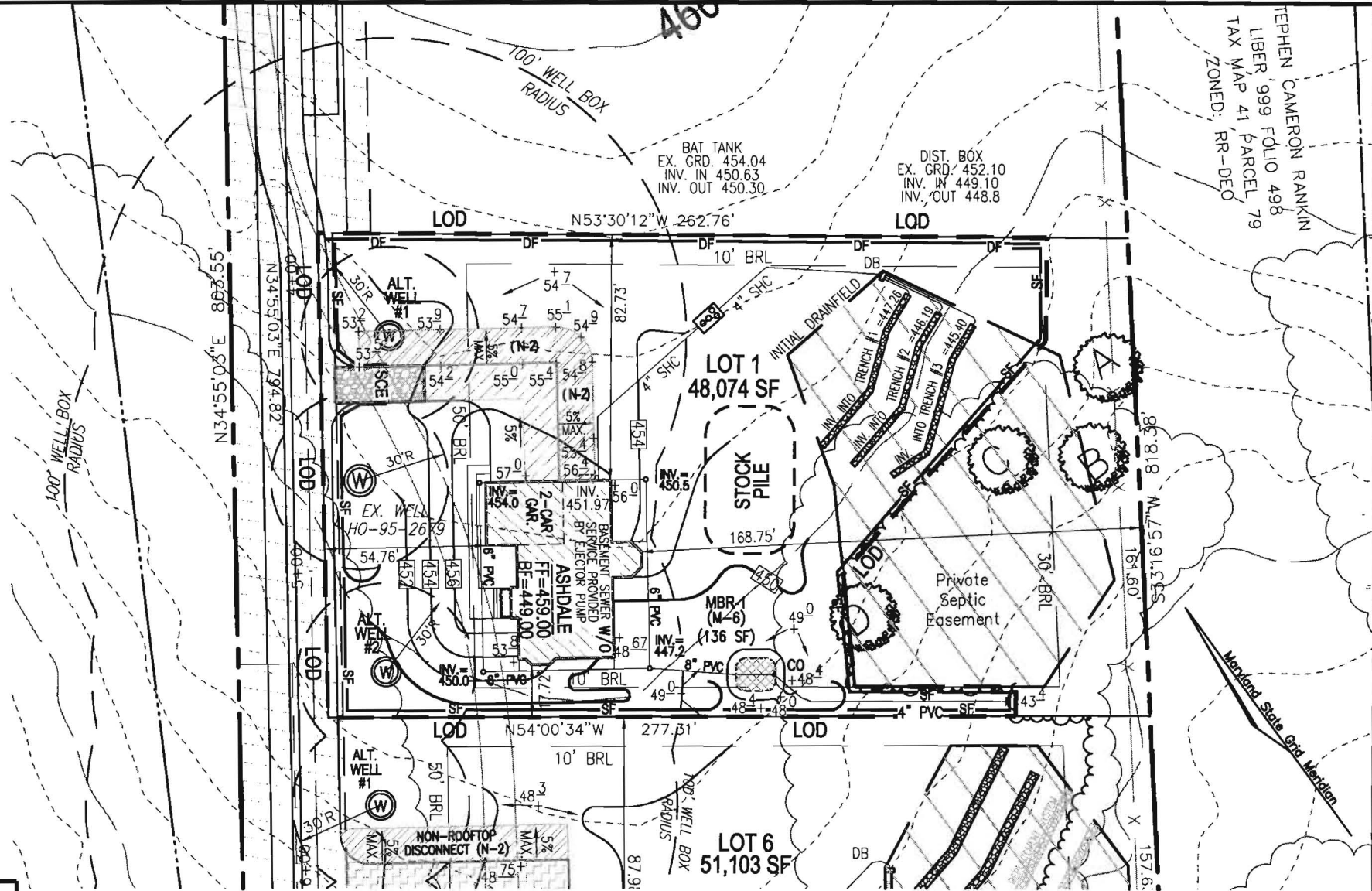
BEDROOMS: _____

NOTE: STORMWATER MANAGEMENT (WQv AND CPv) IS PROVIDED BY A MICRO BIO-RETENTION FACILITY (M-6), AND NON-ROOFTOP DISCONNECTION CREDIT (N-2)

BUILDING PERMIT NO. _____



THE ASHDALE
W/ SIDING AND STONE VENEER
SCALE: 1"=30'



SCALE: AS SHOWN
DRAWN BY: JMR
CHECKED BY: RHV
DATE: JANUARY 2016
PROJECT #: 14-24
SHEET#: 1 OF 2

PLOT PLAN
FULTON MANOR VALLEY
LOT 1
REF: GP-15-053
TAX MAP 41 PARCEL 78 & 456
BLOCK 19
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



NON-ROOFTOP DISCONNECT (N-2)



DRAINAGE AREA TO NON-ROOFTOP DISCONNECT (N-2) (1,115 SF)



DRAINAGE AREA TO MICRO-BIORETENTION (M-6) (2,281 SF)

SCALE
1"=50'

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

OWNER

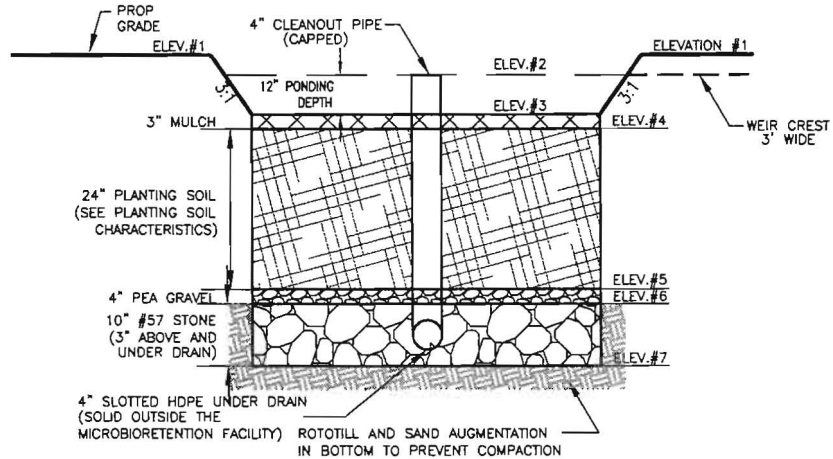
COLLIE, LLC.
5300 DORSEY HALL DR., SUITE 102
ELLICOTT CITY, MARYLAND 21042
ATTN: MR. DONALD R. REUWER, JR.
443-367-0422

ADDRESS

11805 COLLIE COURT
FULTON, MD 20759

Appendix B.4. Construction Specifications for Environmental Site Design Practices

Table B.4.1 Materials Specifications for Micro-Bioretention, Rain Gardens & Landscape Infiltration-			
Material	Specification	Size	Notes
Plantings	see Appendix A, Table A.4	n/a	plantings are site-specific
Planting soil [2' to 4' deep]	loamy sand (60 - 65%) & compost (35 - 40%) or sandy loam (30%), coarse sand (30%) & compost (40%)	n/a	USDA soil types loamy sand or sandy loam; clay content < 5%
Organic content	Min. 10% by dry weight (ASTM D 2974)		
Mulch	shredded hardwood		aged 6 months, minimum; no pine or wood chips
Pea gravel diaphragm	pea gravel: ASTM-D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	
Curtain drain	ornamental stone: washed cobbles	stone: 2" to 5"	
Geotextile		n/a	PE Type I nonwoven
Gravel (underdrains and infiltration berms)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" to 3/4")	
Underdrain piping	F 758, Type PS 28 or AASHTO M-278	4" to 6" rigid schedule 40 PVC or SDR35	Slotted or perforated pipe; 3/8" perf. @ 6" on center, 4 holes per row; minimum of 3" of gravel over pipes; not necessary underneath pipes. Perforated pipe shall be wrapped with 1/4-inch galvanized hardware cloth
Poured in place concrete (if required)	MSHA Mix No. 3; $f_c = 3500$ psi @ 28 days, normal weight, air-entrained; reinforcing to meet ASTM-615-60	n/a	on-site testing of poured-in-place concrete required: 28 day strength and slump test; all concrete design (cast-in-place or pre-cast) <i>not using previously approved State or local standards</i> requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland - design to include meeting ACI Code 350.R/89; vertical loading [H-10 or H-20]; allowable horizontal loading (based on soil pressures); and analysis of potential cracking
Sand	AASHTO-M-6 or ASTM-C-33	0.02" to 0.04"	Sand substitutions such as Diabase and Graystone (AASHTO) #10 are not acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.



DETAIL - MICRO-BIORETENTION (M-6)
NOT TO SCALE

**OPERATION AND MAINTENANCE SCHEDULE FOR
LANDSCAPE INFILTRATION (M-3), MICRO-BIORETENTION (M-6),
RAIN GARDENS (M-7), BIORETENTION SWALE (M-8),
AND ENHANCED FILTERS (M-9)**

1. THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUME II, TABLE A.4.1 AND 2.
2. THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.
3. THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.
4. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

MICRO-BIORETENTION FACILITY ELEVATIONS (M-6)

LOT #	FACILITY	1	2	3	4	5	6	7	4" INV.	4" INV. OUTFALL	FACILITY SIZE
LOT 1	MBR-1 (M-6)	448.40	448.00	447.00	446.75	444.75	444.42	443.59	443.84	443.40	136 SF

**HOWARD COUNTY - OPERATION AND MAINTENANCE SCHEDULE FOR
PRIVATELY OWNED AND MAINTAINED DISCONNECTION OF ROOFTOP RUNOFF (N-1),
DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)**

- A. MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE OWNER SHALL ENSURE THE AREAS RECEIVING RUNOFF ARE PROTECTED FROM FUTURE COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

SCALE: AS SHOWN
DRAWN BY: JMR
CHECKED BY: RHV
DATE: JANUARY 2016
PROJECT #: 14-24
SHEET#: 2 OF 2

PLOT PLAN
FULTON MANOR VALLEY
LOT 1
REF: GP-15-053
TAX MAP 41 PARCEL 78 & 456
BLOCK 19
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

MBR-1
ROOFTOP = 2,281 SF
 $P_e = 1" \quad R_v = 0.95$
 $ESDV = A(P_e)(R_v)/12 =$
 $ESDV = 2,281 SF(1")(0.95)/12 = 181 CF$
 $MBR = (181 CF)(0.75) = 136 SF \text{ ABOVE MULCH}$

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8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8961

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