

C152056

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.

COUNTY
NUMBER

PERMIT NO.
FROM "PERMIT TO DRILL WELL"

ST/CO USE ONLY
DATE RECEIVED
DATE WELL COMPLETED
Depth of Well
OWNER
WELL SITE ADDRESS
SUBDIVISION

DATE RECEIVED
DATE WELL COMPLETED
Depth of Well
OWNER
WELL SITE ADDRESS
SUBDIVISION

WELL LOG
Not required for driven wells
STATE THE KIND OF FORMATIONS PENETRATED, THEIR
COLOR, DEPTH, THICKNESS AND IF WATER BEARING

WELL LOG
Not required for driven wells
STATE THE KIND OF FORMATIONS PENETRATED, THEIR
COLOR, DEPTH, THICKNESS AND IF WATER BEARING

GROUTING RECORD
WELL HAS BEEN GROUTED
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT
BENTONITE CLAY
NO. OF BAGS
NO. OF POUNDS
GALLONS OF WATER
DEPTH OF GROUT SEAL (to nearest foot)

GROUTING RECORD
WELL HAS BEEN GROUTED
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT
BENTONITE CLAY
NO. OF BAGS
NO. OF POUNDS
GALLONS OF WATER
DEPTH OF GROUT SEAL (to nearest foot)

CASING RECORD
casing types
insert appropriate code below
MAIN CASING TYPE
Nominal diameter top (main) casing (nearest inch)!
Total depth of main casing (nearest foot)

CASING RECORD
casing types
insert appropriate code below
MAIN CASING TYPE
Nominal diameter top (main) casing (nearest inch)!
Total depth of main casing (nearest foot)

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

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

SCREEN RECORD
screen type or open hole
insert appropriate code below
STEEL
BRASS
OPEN HOLE
BRONZE
PLASTIC
OTHER

SCREEN RECORD
screen type or open hole
insert appropriate code below
STEEL
BRASS
OPEN HOLE
BRONZE
PLASTIC
OTHER

DEPTH (nearest ft.)

DEPTH (nearest ft.)

WELL HYDROFRACTURED

WELL HYDROFRACTURED

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

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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.

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. 1
DRILLERS SIGNATURE
LIC. NO. 1

DRILLERS LIC. NO. 1
DRILLERS SIGNATURE
LIC. NO. 1

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

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

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

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

MDE USE ONLY
(NOT TO BE FILLED IN BY DRILLER)

MDE USE ONLY
(NOT TO BE FILLED IN BY DRILLER)

TELESCOPE CASING

TELESCOPE CASING

LOG INDICATOR

LOG INDICATOR

OTHER DATA

OTHER DATA

PUMPING TEST
HOURS PUMPED (nearest hour)
PUMPING RATE (gal. per min.)
METHOD USED TO MEASURE PUMPING RATE
WATER LEVEL (distance from land surface)
BEFORE PUMPING
WHEN PUMPING
TYPE OF PUMP USED (for test)

PUMPING TEST
HOURS PUMPED (nearest hour)
PUMPING RATE (gal. per min.)
METHOD USED TO MEASURE PUMPING RATE
WATER LEVEL (distance from land surface)
BEFORE PUMPING
WHEN PUMPING
TYPE OF PUMP USED (for test)

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)
PUMP HORSE POWER
PUMP COLUMN LENGTH (nearest ft.)
CASING HEIGHT (circle appropriate box and enter casing height)
LAND SURFACE
below

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)
PUMP HORSE POWER
PUMP COLUMN LENGTH (nearest ft.)
CASING HEIGHT (circle appropriate box and enter casing height)
LAND SURFACE
below

LATITUDE 39.240189
LONGITUDE 77.000908
(DEFAULT COORD. WGS 84)

LATITUDE 39.240189
LONGITUDE 77.000908
(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.

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EMERGENCY/TEMP NO. IF ANY

TAG: 9/23/2019

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL

SEQUENCE NO. (MDE USE ONLY)
52381

STATE PERMIT NUMBER
HO-18-0095

DATE RECEIVED (APA)
06/10/19

OWNER INFORMATION
KEENY DEVIN
14043 HOWARD ROAD
DAYTON, MD 21036

DRILLER INFORMATION
George F. Easterday
L. Franklin Easterday, Inc.
9265 Brown Church Rd., Mt. Airy, Md. 21771
Signature: George F. Easterday Date: 6/7/2019

WELL INFORMATION
APPROX. PUMPING RATE (GAL. PER MIN.)
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY)

USE FOR WATER (CIRCLE APPROPRIATE BOX)
[D] DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
[F] FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
[I] INDUSTRIAL, COMMERCIAL, DEWATERING
[P] PUBLIC WATER SUPPLY WELL
[T] TEST, OBSERVATION, MONITORING
[O] OPEN LOOP GEOTHERMAL
[C] CLOSED LOOP GEOTHERMAL

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 DEEPEINED WELLS (CIRCLE APPROPRIATE BOX)
[N] THIS WELL WILL NOT REPLACE AN EXISTING WELL
[Y] THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
[S] THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
[D] THIS WELL WILL DEEPEIN AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE)

Not to be filled in by driller (MDE OR COUNTY USE ONLY)
APPROX. PERMIT NUMBER
PERMIT No. HO-18-0095

SPECIAL CONDITIONS
NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

LOCATION OF WELL
Howard
8 COUNTY 21
23 SUBDIVISION 42
SECTION 44 48 LOT 3 48 50
Dayton
52 NEAREST TOWN 71

SOURCES OF DRILLING WATER
1. wells
2.
3.

14041 Howard Road
11 STREET ADDRESS 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH
WEST EAST
SOUTH
34 600 37
DISTANCE FROM ROAD Ft.
ENTER FT OR MI 38 39
TAX MAP: 27 BLK: - PARCEL 94

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL
Howard
COUNTY NAME 13 COUNTY NO.
STATE SIGNATURE INSERT S 41
DATE ISSUED 6/21/19 CO SIGNATURE 6/21/20 EXP. DATE
43 MM DD YY 48
Dan: 07/09/2019 Doc: 7/19/2019 Day: 7/22/2019

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
07/09/2019
~80' Deep
BR @ 48'
60' eastward Rd
Linthicum Rd
Twin Oaks
7/19/2019
owner informs
g may Done on
7/15/19

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[illegible]

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WELL & SEPTIC PROGRAM
TEL: (410)313-1771 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: Michael Runk Plumbing Telephone #: 410-781-6797
Address: P.O. Box 1453
Sykesville, 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): Michael Runk License# 9698

***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: Devin Keeny Telephone #: 443-677-4886
Subdivision: _____ Lot #: 3 Well Tag #: HO-18-0095
Site Address: 14641 Howard Rd.
Dayton, MD. 21036

Submersible Pump Data

Make: 6041d5
Model #: 106515
Pump Capacity 10 GPM
Well Yield: 12 GPM

Pitless Adapter

Make: B.T.
Model#: P-100-55
Depth: 48" (36" min)
NSF/WSC approved: ☒

Well Cap and Electric Conduit

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

Depth of well encountered at time of pump installation: 600 (feet)
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4

Torque arrestors Cable guards, or other acceptable method used- Must circle one

Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing ☒

Piping to house

Type: Poly
PSI: 300 (160 psi min)
Depth of supply line: 48" (36" min)

House Connection

PVC sleeve to undisturbed soil at wall penetration: ☒
Length of sleeve (5' minimum from foundation): 10ft
Sleeve sealed properly: ☒

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

1/21/2020

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

Date Insp. Requested: 2/4/20 Date Insp. Approved: 2/4/20 Inspector: RR
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 ☒

INTERIM CERTIFICATE OF POTABILITY**Expiration Date – April 23, 2020**

April 23, 2020

Homeowner
14041 Howard Road
Datyon, MD 21036**RE: Harman Property, Lot 3
14041 Howard Road
Building Permit: B19002518
Well Permit: HO-18-0095**

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 **10/31/2020**. Final approval of the well line connection to the dwelling was granted on **2/4/2020**. The well construction was completed on **7/12/2019**. Water samples were collected on **4/15/2020**.

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-18-0095. 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,

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 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #:	136783	Account #:	7559
Reference:	Bill Becker	Company:	W.R. Becker LLC
Location:	14041 Howard Road	Requested By:	Bill Becker
	Dayton, MD 21036	Source:	Well Water
Date/ Time Collected:	4/15/2020 1045	Site:	Pressure Tank
Date/Time Rec'd:	4/15/2020 1314	Treatment:	Prior to Sediment Filter
Chlorine ppm:	Free: ND Total: ND	pH:	6.6
Collected By:	J. Yeager 0819JY	Well #:	HO-18-0095

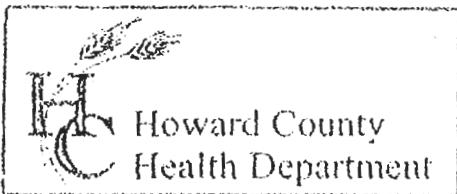
PARAMETER	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	4/16/2020 / 0815 / RER
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	4/16/2020 / 0815 / RER
Nitrate	✓ 4.98	mg/L	10	601	4/16/2020 / 1450 / CRS
Turbidity	✓ 1.48	NTU	<10	SM20 2130B	4/16/2020 / 1000 / CRS
Sand	✓ NS	mg/L	5	Visual/Gravimetric	4/16/2020 / 1000 / CRS

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 NS = None Seen (NS indicates less than 5 mg/L)
- 4 NTU = Nephelometric Turbidity Units
- 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 Visual well check: Sealed, vented cap
- 8 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy
Building Permit # : B19002518

Date Reported: 4/16/2020



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:

- ☒ The well site has been staked by Surveyor,
(professional land surveyor or company employing professional land surveyors)
on 6-1-19 (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

Devin Reeny
14041 Howard Rd

WATER WELL ABANDONMENT-SEALING REPORT FORM

SUBMIT COPIES OF COMPLETED FORM TO:

- * COUNTY ENVIRONMENTAL AGENCY (contact MDE, WMA if address needed)
- * WELL OWNER
- * MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: JULY 12, 2019 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any)

* PERMIT NUMBER OF REPLACEMENT WELL:

* PERSON ABANDONING WELL: Jerry MillerWELL DRILLER'S LICENSE NUMBER: AWD 060* OWNER'S NAME: DEVIN KeenyCIRCLE: MWD / MSD / MGD

* WELL LOCATION:

COUNTY: HowardNEAREST TOWN: Dayton

TAX MAP

BLOCK

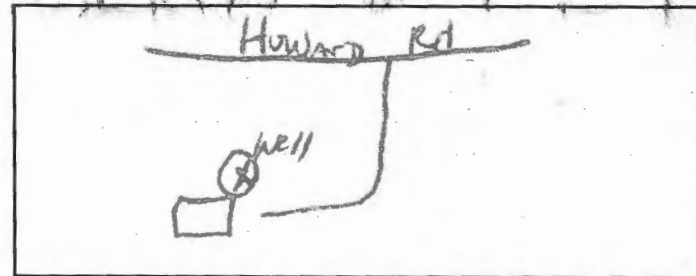
PARCEL

SUBDIVISION: HARMAN

SECTION:

LOT: 3STREET ADDRESS: 14041 HOWARD RDLATITUDE 39.240183LONGITUDE 77.001222

SITE LOCATION MAP



LOG OF SEALING MATERIAL

MATERIAL	FEET	
	FROM	TO
Bentonite	140	0

VOLUME OF MATERIAL USED

600# mixed AS Slurry

* TYPE OF WELL BEING ABANDONED:

- ☒ DRILLED ☐ JETTED
☐ BORED ☐ HAND DUG
☐ OTHER (specify) _____

* USE CODE:

- ☒ DOMESTIC ☐ MUNICIPAL/PUBLIC
☐ IRRIGATION ☐ INDUSTRIAL
☐ TEST/OBSERVATION ☐ GEOTHERMAL

* TYPE OF CASING:

- ☒ STEEL ☐ PLASTIC
☐ CONCRETE ☐ OTHER (specify) _____

SIZE OF CASING: 6 INCHES IN DIAMETERDEPTH OF WELL: 140 FEET DEEPWAS ANY CASING REMOVED? YES ☒ NO

If yes, length removed, in feet: _____

WAS CASING RIPPED OR PERFORATED? YES ☒ NOSIGNATURE: George F. Easterday LICENSE# 040CIRCLE ONE MWD / MSD / MGSDATE 7/25/19

COUNTY

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Wolf, Kevin

From: Wolf, Kevin
Sent: Wednesday, June 19, 2019 11:00 AM
To: Sara Easterday
Cc: SHARON KEENY; devin.keeny@gmail.com
Subject: RE: 14041 HOWARD ROAD

Sara,

I can make the additions to the green well permit application for this one to help expedite the process but I will need a revised well site plan. And I apologize for the delayed response. Our "playing catch-up" days should be coming to a close soon hopefully.

Kevin

From: Sara Easterday <saraeasterday@verizon.net>
Sent: Wednesday, June 19, 2019 10:50 AM
To: Wolf, Kevin <KWolf@howardcountymd.gov>
Cc: SHARON KEENY <sharon.keeny@Inf.com>; devin.keeny@gmail.com
Subject: Re: 14041 HOWARD ROAD

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

Thanks Kevin,

Wish you had let me know sooner.

Sara

Devin & Sharon,

Please see below.

*Sara V Easterday
Administrative Assistant
L. Franklin Easterday, Inc.
9265 Brown Church Road
Mt. Airy, Md. 21771
301-829-1640
301-829-2667-fax*

Saraeasterday@verizon.net

On Wednesday, June 19, 2019, 10:27:38 AM EDT, Wolf, Kevin <KWolf@howardcountymd.gov> wrote:

Sara,

The site plan you submitted with the well permit application is not to scale. In all actuality, I can't determine anything from it (looks as though it has been printed and copied numerous times and nothing is legible). You will need to get an appropriate well site plan from the engineer to accompany the well permit application. This plan must be to scale and must match the approved percolation certification plan if one has been generated. We have been lenient on this in the past but now we are pulling too far away from the policy.

<https://www.howardcountymd.gov/LinkClick.aspx?fileticket=4M3PrfBZnYs%3d&tabid=1399&portalid=0>

Also, I know this has come up in the past, but please be reminded that all information needs to be complete on the well permit application. This includes (but not limited to):

- the tax map/block/parcel info,
- Location of well information
- Proposed location of well on lot with not less than two distances to well

MDE is reviewing all well applications, completion reports, abandonment reports as we send them in. If we send back a well permit application because something is either missing or not complete, it is because MDE WILL return this to us as incorrect and will need to be fixed. Let me know if you have any questions on this.

Kevin

From: Sara Easterday <saraeasterday@verizon.net>

Sent: Wednesday, June 19, 2019 8:22 AM

To: Wolf, Kevin <KWolf@howardcountymd.gov>; Martin, Sharhonda <smmartin@howardcountymd.gov>

Subject: 14041 HOWARD ROAD

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

Good morning,

Do you have an update on the status of the permit for 14041 HOWARD ROAD for Devin Keeny?

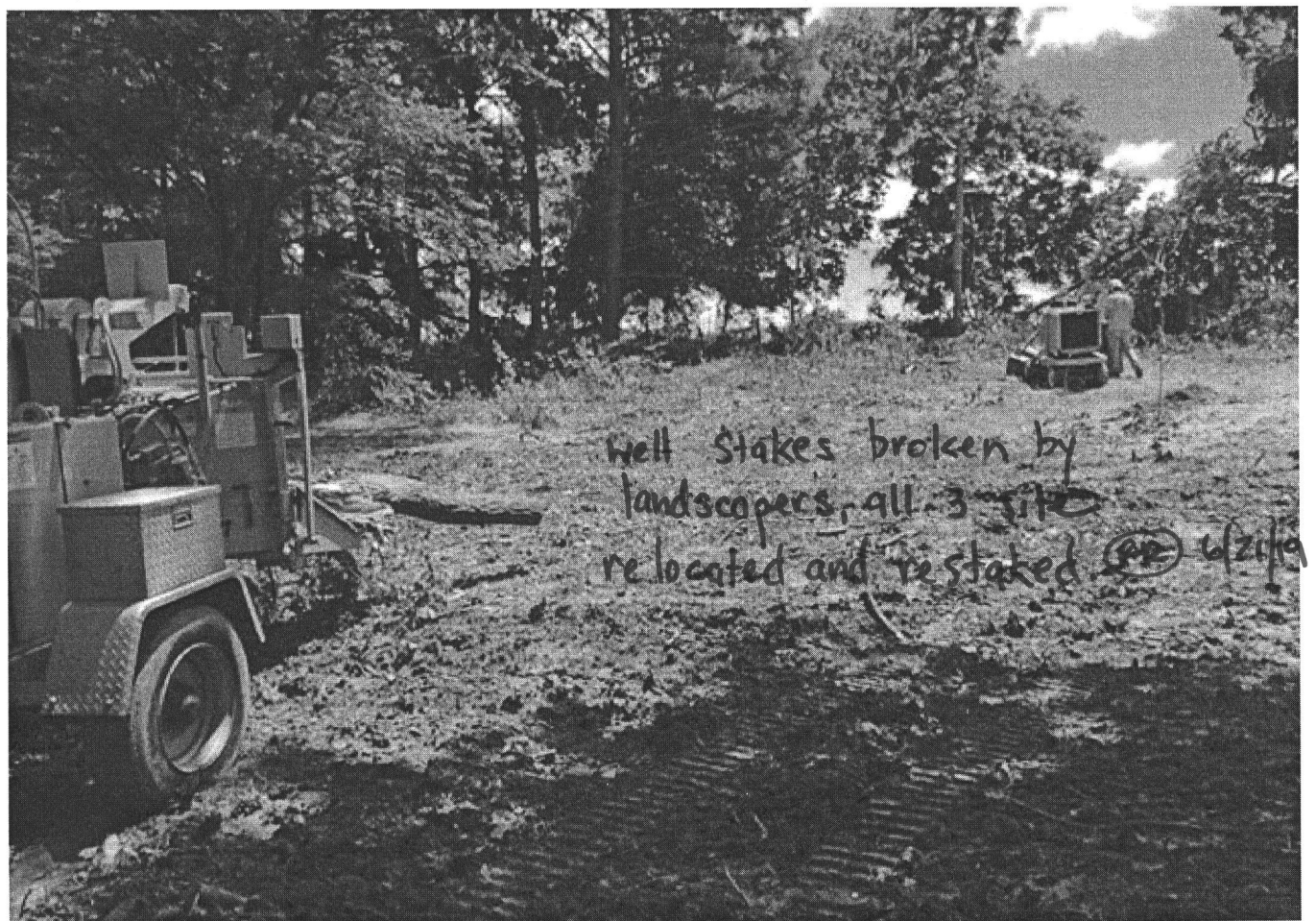
Thanks,

Sara

*Sara V Easterday
Administrative Assistant
L. Franklin Easterday, Inc.*

*9265 Brown Church Road
Mt. Airy, Md. 21771
301-829-1640
301-829-2667-fax*

Saraeasterday@verizon.net



BENCHMARK

ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS

ENGINEERING, INC.

8480 Baltimore National Pike • Suite 315 • Ellicott City, Maryland 21043
410-465-6105 410-465-6644 (Fax)

LETTER OF TRANSMITTAL

TO: HOWARD COUNTY
HEALTH DEPT.

DATE <u>1/15/19</u>	PROJECT No. <u>2914</u>
ATTENTION <u>HANK OSWALD</u>	
RE: <u>14041 HOWARD RD.</u>	
<u>PERC CERT</u>	

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via _____ the following items

☐ Photocopies ☒ Prints ☐ Originals ☐ Samples

☐ Specifications ☐ Invoices ☐ Change Order ☐ Other _____

COPIES of	No. of SHEETS	DESCRIPTION
<u>3</u>	<u>1</u>	<u>PERC CERT</u>

THESE ARE TRANSMITTED as checked below

☐ For Comment ☐ For your use ☒ For Approval

☐ For Review ☐ As requested ☐ Other _____

REMARKS:

COPY TO: 

RECEIVED BY: _____

SIGNED: 

If enclosures are not as noted, kindly notify us at once.

Well field located 1/17/19 by J.L. ... (H.O.)
14049 Howard Road



14041

PERMIT

SEWAGE DISPOSAL SYSTEM

MARYLAND STATE DEPARTMENT OF HEALTH

P 34474-A

A REPAIR

1/30/86
9:30 AM

HOWARD COUNTY
BUREAU OF ENVIRONMENTAL HEALTH

461-9933

05-352355

INDEXED

ELLICOTT CITY

DISTRICT 5th

DATE 1/29/86

Emerson Feaga

IS PERMITTED TO INSTALL _____ ALTER X

ADDRESS _____

PHONE _____

SUBDIVISION _____

ROAD 14045 Howard Road

LOT _____

PROPERTY OWNER _____

Lowell K. Harman

Stoney Lane Farm

ADDRESS _____

14045 Howard Road

IF GARBAGE GRINDER IS USED INCREASE SEPTIC TANK CAPACITY BY 50% AND ABSORPTION AREA BY 22%.

GARBAGE GRINDER? YES _____ NO _____

SEPTIC TANK CAPACITY _____ GALLONS NUMBER OF BEDROOMS _____

PERCOLATION TEST TO ESTABLISH SUFFICIENT AREA TO ALLOW FOR FUTURE REPAIRS TO EXISTING SEPTIC SYSTEM.

PLANS APPROVED BY _____

C. Williams

DATE 1/29/86

COVER NO WORK UNTIL INSPECTED AND APPROVED.

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.

NOTE: IF TRENCH IS USED CALL FOR INSPECTION BEFORE AND AFTER PLACING GRAVEL IN TRENCH.

NOTE: NO DRY WELL SHALL EXCEED 15 FOOT IN DIAMETER. NO ABSORPTION TRENCH TO EXCEED 100 FEET IN LENGTH.

NOTE: ALL PIPE FROM HOUSE TO SEPTIC TANK MUST BE CAST IRON OR SCHEDULE 40 PVC OR ABS.

PERMIT VOID AFTER THREE YEARS.

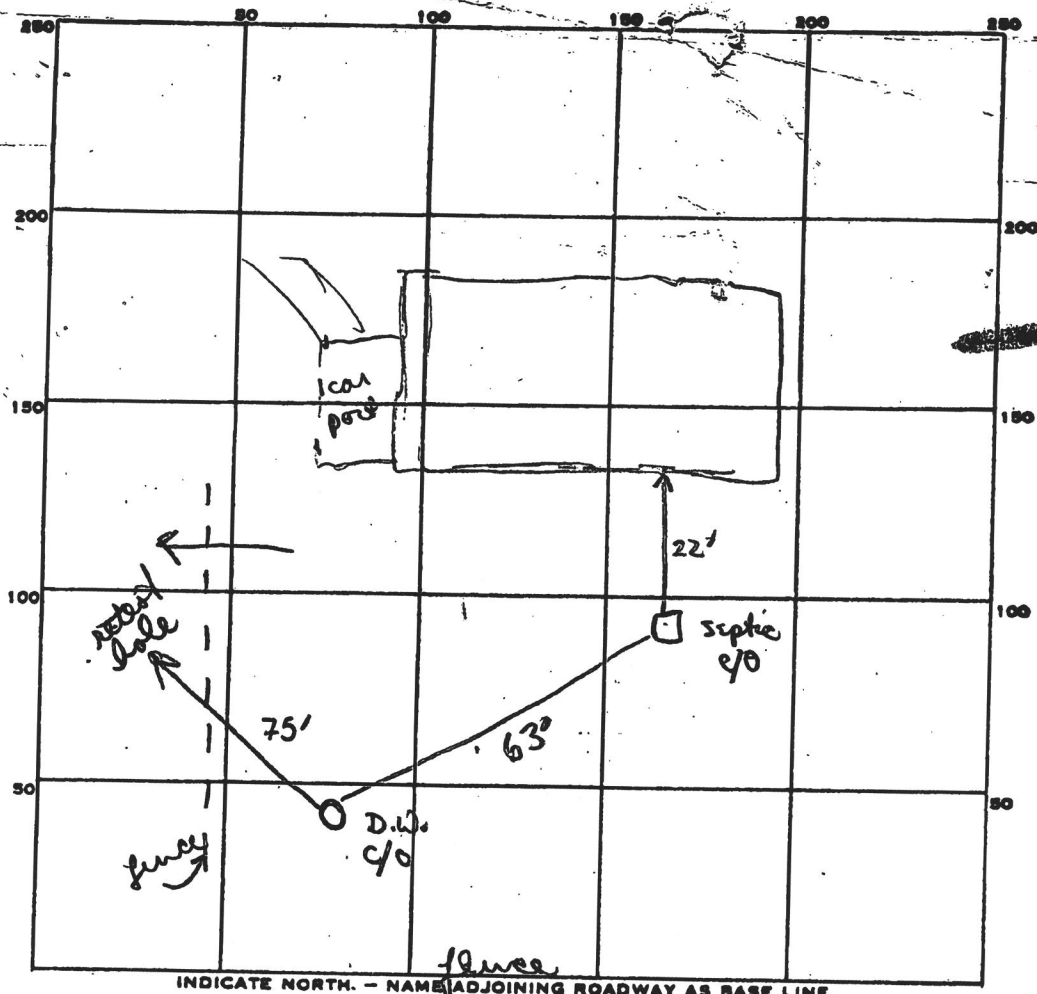
NOTE: INSTALL STAND PIPE ON SEPTIC TANK AND DRY WELL. STAND PIPES MUST BE 6 INCHES IN DIAMETER. CAST IRON, CONCRETE OR TERRA COTTA, OR PVC OR ABS ACCEPTED. IF TOP OF SEPTIC TANK IS DEEPER THAN 3 FEET MANHOLE TO GRADE REQUIRED.

***INSTALLER IS RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT**

OR INSPECTION OF SEPTIC SYSTEMS.

EH - 2-1082

34474-A



PERMIT CARD _____

SEPTIC TANK, LEVEL _____ CLEANOUTS _____

DISTRIBUTION BOX, LEVEL _____

TILE FIELD, DEPTH _____ FT. TRENCH WIDTH _____ FT.

GRAVEL DEPTH _____ IN. TOTAL LENGTH _____ FT.

NUMBER OF TRENCHES _____ TOTAL BOTTOM AREA _____

SEEPAGE PITS, INSIDE DIAMETER _____ FT. DEPTH BELOW INLET _____ FT.

ABSORBENT AREA _____ SQ. FT.

REMARKS 1/31/86 visual hole dug for purposes of establishing
 repair area for septic field. Original system
 still functioning fine.
13' hole: soil fine tan/brown powdery soil. little
or no clay layer. 5%-10% small rock fragments
mixed in

area
OK
BR

DATE SYSTEM APPROVED 1/31/86 INSPECTOR D. N. Fox

PERMIT

P 17031A 13990

SEWAGE DISPOSAL SYSTEM

MARYLAND STATE DEPARTMENT OF HEALTH
HOWARD COUNTY

ELLICOTT CITY

DISTRICT 5DATE 5/18/72

INDEXED

Lowell Harman

IS PERMITTED TO INSTALL ☒ ALTER ☐ADDRESS 12916 Claxton Drive, Laurel, Md.PHONE 725-2474

A SEWAGE DISPOSAL SYSTEM LOCATED AT _____

SUBDIVISION

Harman Subdivision

ROAD

Howard Rd. (see appl. LOT 3 for better directions)

PROPERTY OWNER

~~Same as above~~John & Elyse Parsons

ADDRESS _____

SPECIFICATIONS - 3 bedrooms

DRAIN FIELD _____ DEPTH _____ FEET, BOTTOM AREA _____ SQ. FT.

SEEPAGE PITS _____ ABSORBENT SIDE-WALL AREA _____ SQ. FT.

SEPTIC TANK CAPACITY 1,000 GALLONS

FOR GARBAGE GRINDER, INCREASE DISPOSAL AREA 22% & TANK CAPACITY 50%.

OTHER Dry well - 300 sq. ft. below the inlet pipe of absorbent sidewall area.Maximum depth of dry well 11 ft. Location 40 ft. off right rear corner of houseLeft 100 ft. as seen from facing lot standing on Howard Road.

NOTE: ALL PIPE FROM HOUSE TO SEPTIC TANK MUST BE CAST IRON.

PERMIT VOID AFTER THREE YEARS.

NOTE: INSTALL STAND PIPE ON SEPTIC TANK AND DRY WELL.

PLANS APPROVED BY James T. Wright, DATE 11/13/68

FILL SEPTIC TANK AND DISTRIBUTION BOX WITH WATER BEFORE CALLING FOR AN INSPECTION. COVER NO WORK UNTIL INSPECTED AND APPROVED.

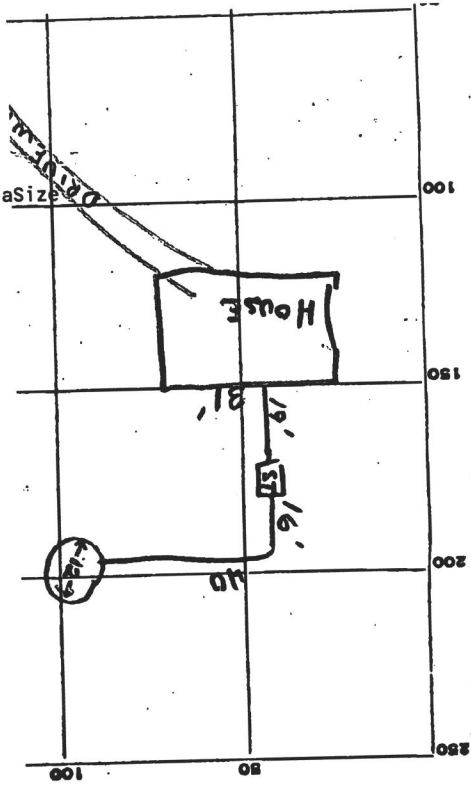
NEITHER THE HOWARD COUNTY COMMISSIONERS NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.

A 13990

PCL XL error

Warning:

IllegalMediaSize



Re-test

APPLICATION

SEWAGE DISPOSAL TESTING

MARYLAND STATE DEPARTMENT OF HEALTH

HOWARD COUNTY

ELLICOTT CITY

DISTRICT 5th

DATE 9/5/72

See permit for specs.

TO: THE COUNTY HEALTH OFFICER
ELLICOTT CITY, MARYLAND

I, HEREBY, APPLY FOR THE NECESSARY TESTS IN ORDER TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

PROPERTY OWNER Lowell Harman

ADDRESS 12916 Claxton Drive, Laurel, Md.

PHONE 725-2474

PROPERTY LOCATION:

SUBDIVISION _____ LOT NO. K

ROAD AND DESCRIPTION Howard Road- West on Rt. 32, North on Ten Oaks Rd., West on Howard Road out of Dayton. Property about 1 mile down Howard Rd. on left.

OCCUPANT _____ PHONE _____

PERSON TO CONSTRUCT SYSTEM _____

ADDRESS _____ PHONE _____

SIZE OF LOT 5.000 acres TYPE BLDG. 3 bedrooms
NUMBER OF BEDROOMS

IF NOT SINGLE RESIDENCE DESCRIBE _____

SIGNATURE OF APPLICANT /s/ Alyce W. Harman

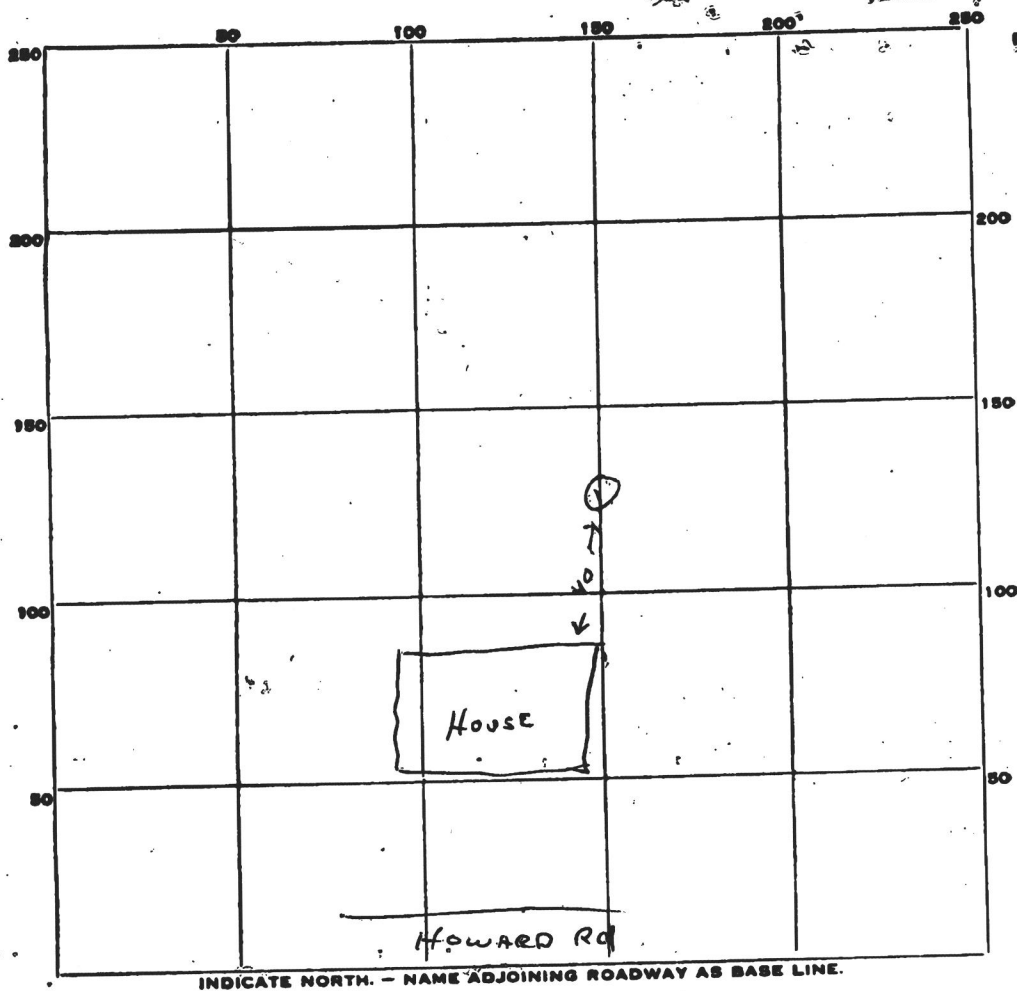
APPROVED BY R. Fine FOR Ouy Wall DATE 9/8/72
(KIND OF SYSTEM)

REJECTED BY _____ FOR _____ DATE _____
(KIND OF SYSTEM)

HOLD PENDING FURTHER TESTS _____ DATE _____

REASONS FOR REJECTION OR HOLDING _____

THIS IS NOT A PERMIT



DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
9/17/72	1	10 1/2 ft.	11 08	11 11	11 11	11 18	2 min
	1A	3 1/2 ft.	11 18	11 20	11 20	11 23	3 min
		Tested in same area as shown on					
		application in 1971					

SOIL AUGER FINDING

TESTED BY R. Tone.

REMARKS

APPLICATION

SEWAGE DISPOSAL TESTING

Harmon

A 13990

P _____

MARYLAND STATE DEPARTMENT OF HEALTH

HOWARD COUNTY Septic tank to be 750 galls ELLICOTT CITY

Dry well: 300 sq ft below the inlet pipe
of apartment sidewalk area. Maximum depth
of dry well 11 ft. Location 150 ft from front lot line and
170 ft from left lot line as seen from facing lot standing
on Howard Rd

DISTRICT 5

DATE 10/3/68

TO: THE COUNTY HEALTH OFFICER
ELLICOTT CITY, MARYLAND

I, HEREBY, APPLY FOR THE NECESSARY TESTS IN ORDER TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

PROPERTY OWNER Kathryn E. Thompson et al

Louise H. Adams

ADDRESS Clarksville, Maryland PHONE 531-5458

PROPERTY LOCATION:

SUBDIVISION _____ LOT NO. K

ROAD AND DESCRIPTION Howard Road - West on Rt. 32, North on Ten Oaks Road, West
on Howard Road out of Dayton. Property about 1 mile down Howard Rd. on
left.

OCCUPANT _____ PHONE _____

PERSON TO CONSTRUCT SYSTEM _____

ADDRESS _____ PHONE _____

SIZE OF LOT 5.00 acres TYPE BLDG. 3 or 4

NUMBER OF BEDROOMS

IF NOT SINGLE RESIDENCE DESCRIBE _____

SIGNATURE OF APPLICANT /s/ Louise H. Adams

APPROVED BY James T. Wright FOR Dry well DATE 11/13/68

(KIND OF SYSTEM)

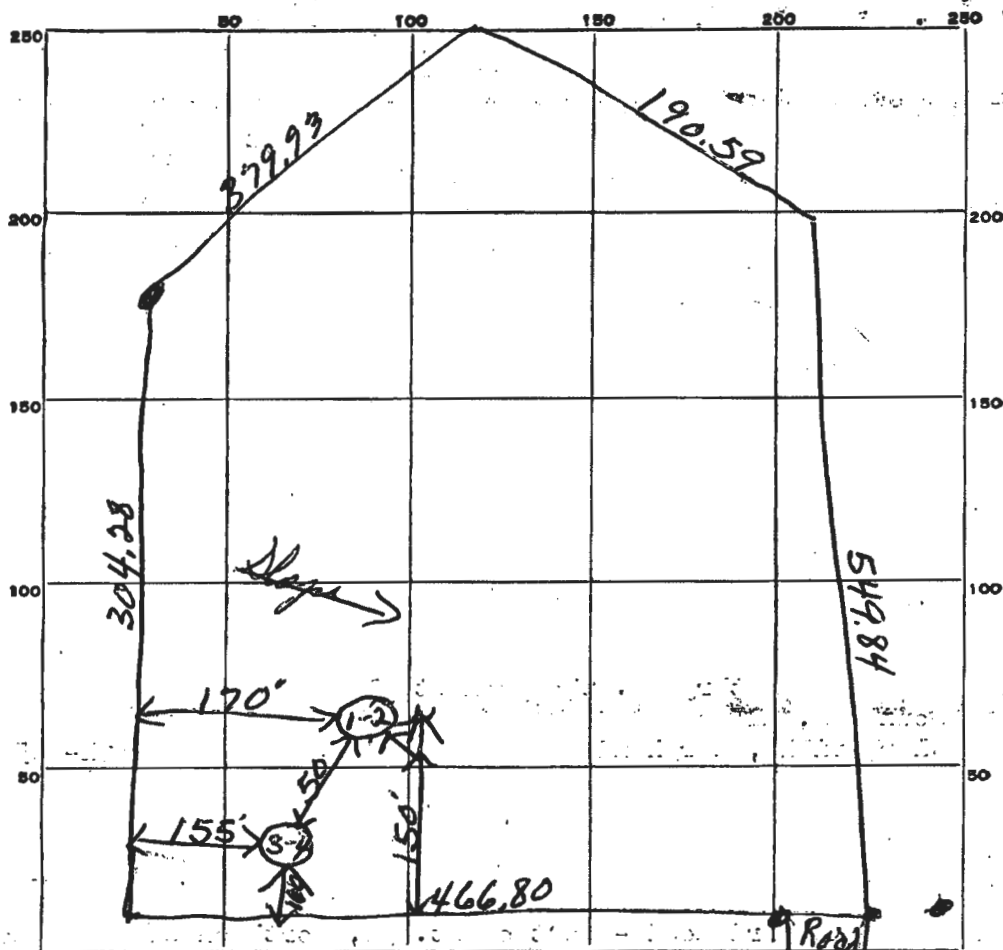
REJECTED BY _____ FOR _____ DATE _____

(KIND OF SYSTEM)

HOLD PENDING FURTHER TESTS _____ DATE _____

REASONS FOR REJECTION OR HOLDING _____

THIS IS NOT A PERMIT



INDICATE NORTH. - NAME ADJOINING ROADWAY AS BASE LINE.

Howard Rd

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
10/4/68	1	10'	10 ¹⁰	10 ¹¹	10 ¹¹	10 ¹⁷	6 min
	2	3 1/2'	10 ¹⁰	10 ¹¹	10 ¹¹	10 ¹⁶	5 min
	3	10	10 ¹⁴	10 ¹⁶	10 ¹⁶	10 ²⁰	4 min
	4	3 1/2'	10 ¹⁵	10 ²⁰	10 ²⁰	10 ²⁸	8 min

23
6 min AV

Det K

SOIL AUGER FINDING

TESTED BY

REMARKS

APPLICATION

SEWAGE DISPOSAL TESTING

MARYLAND STATE DEPARTMENT OF HEALTH

HOWARD COUNTY

ELLICOTT CITY

DISTRICT 5

DATE 4/14/71

TO: THE COUNTY HEALTH OFFICER
ELLICOTT CITY, MARYLAND

I, HEREBY, APPLY FOR THE NECESSARY TESTS IN ORDER TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

PROPERTY OWNER Lowell K. Harman

ADDRESS 12916 Claxton Dr., Laurel, Md.

982-2189 - office

PHONE 725-2474 - home

PROPERTY LOCATION:

SUBDIVISION _____ LOT NO. K

ROAD AND DESCRIPTION Howard Road (see original application)

OCCUPANT _____ PHONE _____

PERSON TO CONSTRUCT SYSTEM _____

ADDRESS _____ PHONE _____

SIZE OF LOT 5.00 acres

TYPE BLDG. 3

NUMBER OF BEDROOMS

IF NOT SINGLE RESIDENCE DESCRIBE _____

SIGNATURE OF APPLICANT /s/ Lowell K. Harman

APPROVED BY _____ FOR _____ DATE _____

(KIND OF SYSTEM)

REJECTED BY _____ FOR _____ DATE _____

(KIND OF SYSTEM)

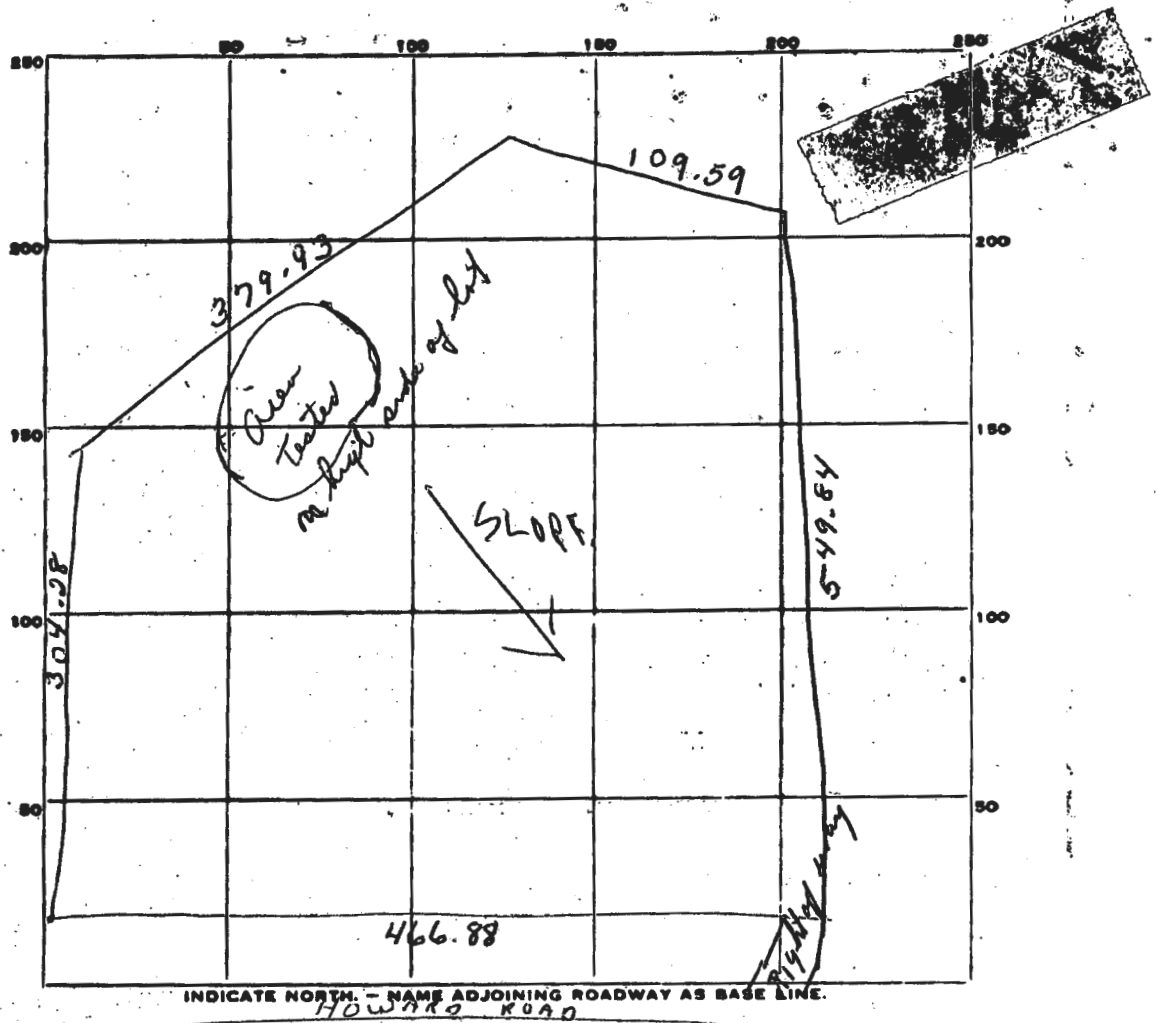
HOLD PENDING FURTHER TESTS _____ DATE _____

REASONS FOR REJECTION OR HOLDING 4/21/71 Belzoni holes are on

light side of lot

R. Tove

THIS IS NOT A PERMIT



DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
4/20/71	1	3 ft.	10 ¹⁶	10 ¹⁸	10 ¹⁸	10 ²⁰	2 min
	1A	10 ft.	10 ¹⁸	10 ²¹	10 ²¹	10 ²⁵	4 min
	2	3 1/2 ft.	10 ²⁴	10 ²⁶	10 ²⁶	10 ²⁹	3 min
	2A	10 ft.	10 ²⁵	10 ²⁸	10 ²⁸	10 ³⁴	6 min

SOIL AUGER FINDING _____

TESTED BY R. Toner

REMARKS No stakes posted to determine lot line
Will have to receive plat from certified engineer
showing location of holes. R. T.

April 6, 1971

Howard County Health / Sanitation Dept
P.O. Box 476
Ellicott City, Maryland 21043

Dear Sir:

Enclosed is a check for five dollars in application for a repercolation test on parcel K of the land owned by Thompson et al, located on Howard Road in Howard County, North of Dayton, Md.

We understand from the Broker's agent, Mrs. Louise Adams, that a successful percolation test was performed on the land. The reason for this reperc test is to assure that the land will perc at the planned building site, which is slightly above the 540' contour line, near the Northeast corner of the "K" parcel. The house will contain three bedrooms.

Sincerely yours,

Lowell K Harman
12916 Claxton Dr.
Laurel, Md.

Ph: office 982-~~2184~~
home 725-2474

69⁰⁵

C 1 07519
 1 2 3 (SEQ. NO.) 6
 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

SEQUENCE NO.
(DWR USE ONLY)

STATE OF MARYLAND
 DEPARTMENT OF WATER RESOURCES
 STATE OFFICE BLDG., ANNAPOLIS, MD 21401
 WELL COMPLETION REPORT..

THIS REPORT MUST BE SUBMITTED WITH-
 IN 30 DAYS AFTER WELL COMPLETION
 FILL IN THIS FORM COMPLETELY

COUNTY
 NUMBER 3851

DATE RECEIVED
(DWR USE ONLY)

9/5/72

DEPTH OF WELL

150

22 (TO NEAREST FOOT) 28

PERMIT NO. FROM "PERMIT TO DRILL WELL"

40-73-0013

28 29 30 31 32 33 34 35 36 37

DRILLERS IDENTIFICATION NO. 209

OWNER HARMAN

LOWELL K

LAST NAME

STREET OR RFD 14651 HOWARD RD

POST OFFICE DAYTON MD

FIRST NAME

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

DESCRIPTION (USE ADDITIONAL SHEETS IF NECESSARY)	FEET		CHECK IF WATER BEARING
	FROM	TO	
BOULDERS	0	60	
Mica Rock	60	150 X	

WELL DESCRIPTION

GROUTING RECORD YES NO
 WELL HAS BEEN GROUTED ☒ 44 ☐ 44
 (CIRCLE APPROPRIATE BOX)
 TYPE OF GROUTING MATERIAL (CIRCLE BOX)
 CEMENT ☒ BENTONITE CLAY ☐
 45 46 48 48
 NO. OF BAGS 10 NO. OF POUNDS 970
 GALLONS OF WATER 100
 DEPTH OF GROUT SEAL (TO NEAREST FOOT)
 FROM 0 FT. TO 60 FT.
 (ENTER 0 IF FROM SURFACE) 48 52 54 58

CASING RECORD
 INSERT APPROPRIATE CODE BELOW
 (CIRCLE TYPE)
 STEEL ☒ CONCRETE ☐
 PLASTIC ☐ OTHER ☐
 MAIN CASING TYPE
 NOMINAL DIAMETER TOP (MAIN) CASING (NEAREST INCH)
 TOTAL DEPTH OF MAIN CASING (NEAREST FOOT)
 ST 6 60
 60 61 63 64 66 70

OTHER CASING (IF USED)
 DIAMETER (INCH) DEPTH (FEET)
 FROM TO
 60 61 63 64 66 70

SCREEN RECORD
 SCREEN TYPE OR OPEN HOLE
 INSERT APPROPRIATE CODE BELOW
 (CIRCLE TYPE)
 STEEL ☒ BRASS OR BRONZE ☐ OPEN HOLE ☐
 PLASTIC ☐ OTHER ☐
 C 2

DEPTH (NEAREST WHOLE FOOT)
 FROM TO
 1 8 9 11 15 17 21
 2 23 24 26 30 32 36
 3 38 39 41 45 47 51
 SLOT SIZE 1, 2, 3

DIAMETER OF SCREEN (NEAREST INCH)
 FROM TO
 56 60

GRAVEL PACK

IF WELL DRILLED WAS A FLOWING WELL CIRCLE BOX ☐ F

OWNER USE ONLY (NOT TO BE FILLED IN BY DRILLER)
 (E.R.O.S.)
 T 70 W Q
 TELESCOPE CASING LOG INDICATOR OTHER DATA AVAILABLE

PUMPING TEST
 1 2 3 (SEQ. NO.) 6
 HOURS PUMPED (TO NEAREST HOUR) 6
 PUMPING RATE (GALLONS PER MINUTE TO NEAREST GALLON) 3
 METHOD USED TO MEASURE PUMPING RATE TIME
 WATER LEVEL (DISTANCE FROM LAND SURFACE)
 BEFORE PUMPING 30 (NEAREST FOOT)
 WHEN PUMPING 120 (NEAREST FOOT)
 TYPE OF PUMPED USED (CIRCLE APPROPRIATE BOX) (FOR PUMPING TEST)
 AIR ☒ PISTON ☐ TURBINE ☐
 CENTRIFUGAL ☐ ROTARY ☐ OTHER (DESCRIBE BELOW) ☐
 JET ☐ SUBMERSIBLE ☐

PUMP INSTALLED
 TYPE OF PUMP (WRITE APPROPRIATE LETTER IN BOX - SEE ABOVE: A, C, J, P, R, S, T, O)
 DRILLER WILL INSTALL PUMP (CIRCLE APPROPRIATE BOX)
 CAPACITY:
 GALLONS PER MINUTE (TO NEAREST GALLON) 31 35
 PUMP HORSE POWER 37 41
 PUMP COLUMN LENGTH (NEAREST FOOT) 43 47
 CASING HEIGHT (CIRCLE APPROPRIATE BOX AND ENTER CASING HEIGHT)
 ABOVE ☒ BELOW ☐
 LAND SURFACE (NEAREST FOOT) 2

LOCATION OF WELL ON LOT
 SHOW PERMANENT STRUCTURE SUCH AS BUILDINGS, SEPTIC TANKS, AND/OR OTHER LAND MARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL).

HOUSE

FRONT

x well

CIRCLE APPROPRIATE BOXES

- ☐ 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 I HAVE COMPLIED WITH ALL CONDITIONS STATED ON THE ABOVE-CAPTIONED "PERMIT TO DRILL WELL", AND THAT INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

DRILLERS NAME

(PLEASE PRINT) HOWARD DILLON

SIGNATURE Howard Dillon

OWNER	HARVAN LOWELL	K
COL 15 LAST NAME		FIRST NAME COL 34
STREET OR RFD	14051 HOWARD	ROAD
COL 36		COL 55
POST OFFICE	DAYTON	MO
COL 57		COL 76

B 1		CONTINUED		DRILLER INFORMATION	
1	2	3	(SEQ. NO.)	6	
DATE		7/12/72		LICENSE NUMBER 209	
				77	
FIRST NAME		DRILLER		LAST NAME	
HOWARD		DILLON			
SIGNATURE		Howard Dillon			

B 3				LOCATION OF WELL			
1	2	3	(SEQ. NO.)	6			
COUNTY				HEWARD (DO NOT ABBREVIATE COUNTY NAME)			
SUBDIVISION				23 42			
SECTION				44 46 LOT K 48 50			
NEAREST TOWN				DAYTON 52 71			
MILES FROM TOWN (ENTER 0 IF INTOWN)				4 73 76 77 78 M 1			

B	2			WELL INFORMATION	
1	2	3	(SEQ. NO.)	6	
MAXIMUM PUMPING RATE (GALLONS PER MINUTE)					<div style="border-bottom: 1px solid black; width: 100px; text-align: center;">5</div> <div style="display: flex; justify-content: space-between; width: 100px;"> 8 12 </div>
AVERAGE DAILY QUANTITY NEEDED (GALLONS PER DAY)					<div style="border-bottom: 1px solid black; width: 100px; text-align: center;">700</div> <div style="display: flex; justify-content: space-between; width: 100px;"> 14 20 </div>
USE FOR WATER (CIRCLE APPROPRIATE BOX)					
<input checked="" type="radio"/> DOMESTIC, HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)					
<input type="radio"/> FARMING, AGRICULTURE, IRRIGATION					
<input type="radio"/> INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOVERNMENT.					
<input type="radio"/> MUNICIPAL WATER SUPPLY					
<input type="radio"/> PRIVATE WATER COMPANY					
<input type="radio"/> TEST					

B	[]				
1	2	3	(SEQ. NO.)	6	
<input type="radio"/> N NORTH	<input type="radio"/> E EAST	<input type="radio"/> NE NORTHEAST	<input type="radio"/> SE SOUTHEAST		
<input type="radio"/> S SOUTH	<input checked="" type="radio"/> W WEST	<input type="radio"/> NW NORTHWEST	<input type="radio"/> SW SOUTHWEST		
8	8	8 9	8 9		
NEAR WHAT ROAD <div style="text-align: center; font-size: large; margin-top: -10px;">HOWARD</div> <hr style="border: none; border-top: 1px solid black; height: 1px;"/>					
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)		<input type="radio"/> NORTH <input type="radio"/> S 32	<input checked="" type="radio"/> SOUTH <input type="radio"/> S 32	<input type="radio"/> EAST <input type="radio"/> E 32	<input type="radio"/> WEST <input type="radio"/> W 32
DISTANCE FROM ROAD (ENTER "DISTANCE AND CIRCLE APPROPRIATE BOX")		1000		<input type="checkbox"/> FT. <input type="checkbox"/> MI. <small>38.33</small>	
		34		37	MI.

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS, ROADS AND STREAMS WITH NORTH IN THE DIRECTION OF THE ARROW, AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION OR STREAM CROSSING SHOWN ON THE SKETCH. ALSO SHOW, BY MEANS OF AN 'X', THE WELL LOCATION IN THE BOX BELOW, AND THE BOX NUMBER FROM THE WELL LOCATION MAP.

APPROXIMATE DEPTH OF WELL 150 FEET

APPROXIMATE DIAMETER OF WELL 6 (NEAREST INCH)

METHOD OF DRILLING USED (CIRCLE APPROPRIATE METHOD)

<u>BORED</u> (OR AUGERED)	<u>JETTED</u>	<u>DRIVEN</u>
30-37 <u>AIR-ROTARY</u>	<u>AIR-PERCUSSION</u>	<u>ROTARY</u> (HYDRAULIC ROTARY)
<u>CABLE</u>	<u>REVERSE ROTARY</u>	<u>DRIVE - POINT</u>
<u>OTHER (DESCRIBE)</u>		

REPLACEMENT OR DEEPEENED WELLS (CIRCLE APPROPRIATE BOX)

☒ **N** THIS WELL WILL NOT REPLACE AN EXISTING WELL

☐ **Y** THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED

☐ **S** THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY

☐ **D** THIS WELL WILL DEEPEEN AN EXISTING WELL

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

41 _____ 42

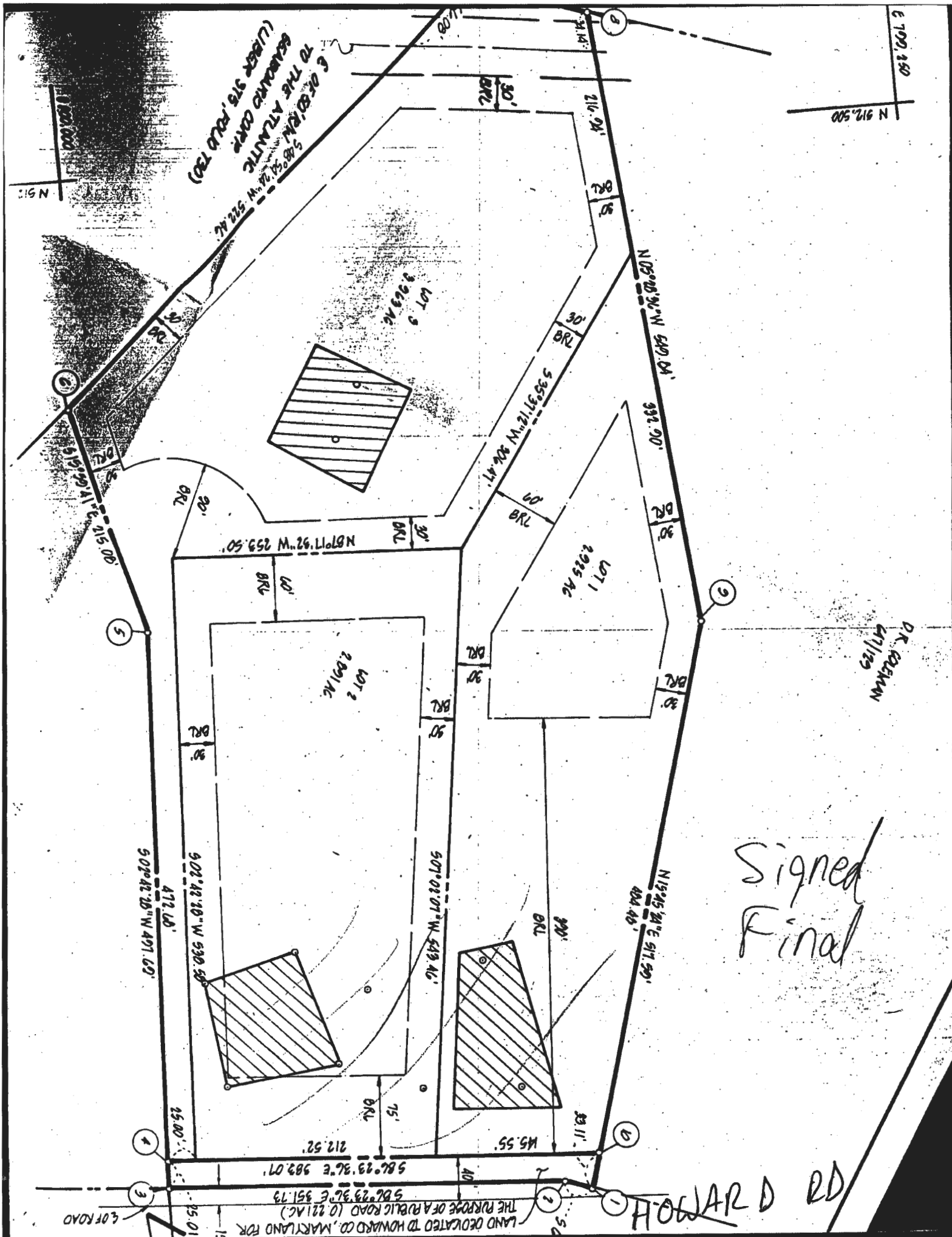
NOT TO BE FILLED IN BY DRILLER (DWR USE ONLY)																
G A P																
APPROPRIATION PERMIT NUMBER															ENGINEER REVIEW DISTRIC.TNO.	
	54													63		
FORCE			WRITE INITIALS IN BOX												A E N S G W Q C L U	65
	67	68													CONDITIONS	
															70 71 72 73 74 75 76 77 78 79	

B	4	CONTINUED		HEALTH DEPARTMENT APPROVAL	
1	2	3	(SEQ. NO.)	6	
41		5	STATE HEALTH (CIRCLE BOX)		
			MO. DAY YR.		
DATE			9177		
		43		48	
			HOWARD 2951		
			COUNTY NAME	COUNTY NO.	
			ALMER		
			APPROVED BY DIRECTOR		

NORTH		<div style="display: flex; justify-content: space-around;"> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> </div>					
COORDINATE		<div style="display: flex; justify-content: space-around;"> <div>90 DEL</div> <div>51</div> <div>52</div> <div>53</div> <div>54</div> <div>55</div> </div>					
EAST		<div style="display: flex; justify-content: space-around;"> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>					
COORDINATE		<div style="display: flex; justify-content: space-around;"> <div>57</div> <div>58</div> <div>59</div> <div>60</div> <div>61</div> <div>62</div> <div>63</div> </div>					
ELEVATION AT WELL HEAD (FEET)		<div style="display: flex; justify-content: space-around;"> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> </div>					
		<div style="display: flex; justify-content: space-around;"> <div>65</div> <div>66</div> <div>67</div> <div>68</div> </div>					

B	5	SPECIAL CONDITIONS 8-63										(DWR USE ONLY)										65	66	67	68	0/0	5/0																	
1	2	3	(SEQ. NO.)	6																																								

HEALTH



PUB. SEWER STATUS VERIFIED BY _____

ISSUE DATE:

10/21/11

PERMIT

P 536012

APPROVAL DATE:

10/25/11 (KMD)

A REPAIR

Septic Repair

ON-SITE SEWAGE DISPOSAL SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH

~~Howard County~~ Fogle's

IS PERMITTED TO INSTALL ☐ ALTER ☒

ADDRESS: 588 Obrecht Road Sykesville, MD 21784

PHONE NUMBER: 410-277-7326

SUBDIVISION: _____

LOT NUMBER: _____

ADDRESS: 14055 Howard Road

PROPERTY OWNER: Sean and Johanna McGuire

SEPTIC TANK CAPACITY (GALLONS): N/A

PUMP CHAMBER CAPACITY (GALLONS): N/A

NUMBER OF BEDROOMS: 3

SQUARE FEET OF HOUSE: —

LINEAR FEET OF TRENCH REQUIRED: 160 LF

* If plans to
upgrade S.T. A 1500g
2 compartment tank may
be installed 100' from
ex. well.

TRENCHES:	2' wide Inlet @ 2' below grade Bottom @ 6' below grade
LOCATION:	Install new Dbox ~75' off corner of house.
PURPOSE:	Pump & collapse existing D.W. manhole riser needs to be added on existing S.T.

PLANS APPROVED:

K. Wolf, R.S.

DATE: 10/21/11

NOTE: PERMIT VOID AFTER 2 YEARS

NOTE: CONTRACTOR RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS

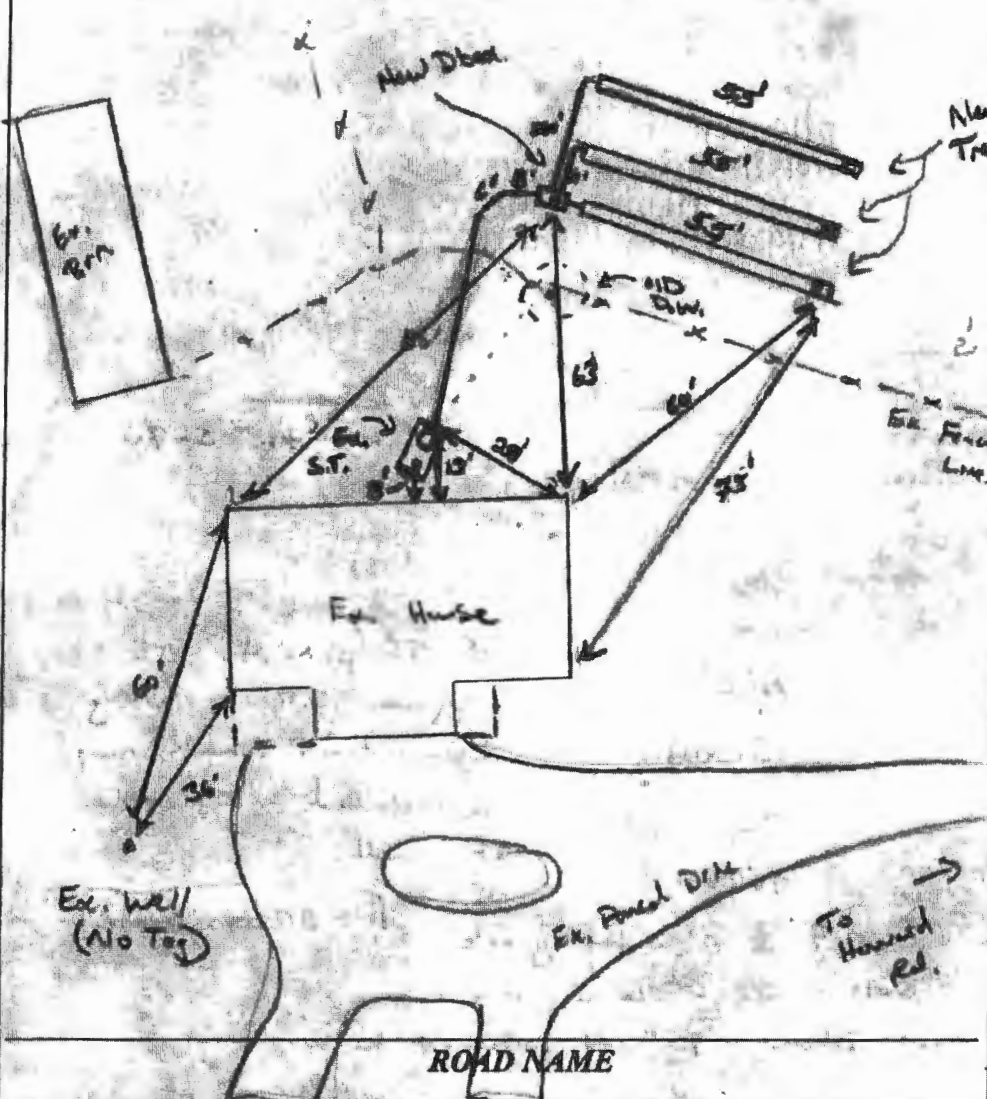
NOTE: WATERTIGHT SEPTIC TANKS REQUIRED

NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL

NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS

NEITHER THE HOWARD COUNTY COUNCIL OR THE HEALTH DEPARTMENT IS
RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM
PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT
CALL 410-313-1771 FOR INSPECTION OF SEPTIC SYSTEM

NOT TO SCALE



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
2'	2'	6'
NUMBER OF TRENCHES		3
TOTAL LENGTH		165'
ABSORPTION AREA		330' x 55'
DISTRIBUTION BOX LEVEL		Yes (hatched)
DISTRIBUTION BOX BAFFLE		Yes
DISTRIBUTION BOX PORT		Yes

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL Existing

MANUFACTURER UNKNOWN

CAPACITY 1250? GAL

SEAM LOC mid

TANK LID DEPTH 4'

BAFFLES new inlet

BAFFLE FILTER

MANHOLE LOC Rear

6" PORT LOC Front

WATERTIGHT TEST ok

SLOTTED no

DATE ON LID N/A

PUMP/SEPTIC TANK LEVEL N/A

MANUFACTURER

CAPACITY GAL

SEAM LOC

TANK LID DEPTH

BAFFLES

BAFFLE FILTER

MANHOLE LOC

6" PORT LOC

WATERTIGHT TEST

SLOTTED

DATE ON LID

PRE CONSTRUCTION:

10/21/11 layout given to contractor on site @ time of pour. See permit for installation (Kw) 11/9/11 owner called to inform that he might be going w/ another contractor. (Kw)

11/11 met w/ Fykes on site. Shot elevations for trenches again. Install 3x55' trenches on compact, between old Dbox and

INSTALLATION: perc test hole just inside fence. New outlet baffle and manhole needed on tank (Kw)

12/2/11 new plumbing installed to new Dbox. Top trench complete starting middle trench (Kw)

12/5/11 Dbox leveled. last trench complete. OK to cover all work (Kw)

FINAL INSPECTOR

1/2. Wally

DATE OF APPROVAL

12/5/11

SITE INSPECTION SHEET

OWNER: Gerherd + Mary Vienna

PHONE #: _____

ADDRESS: 14055 Howard Rd.

CONTRACTOR: Allied Environmental Services

Dayton, MD 21036

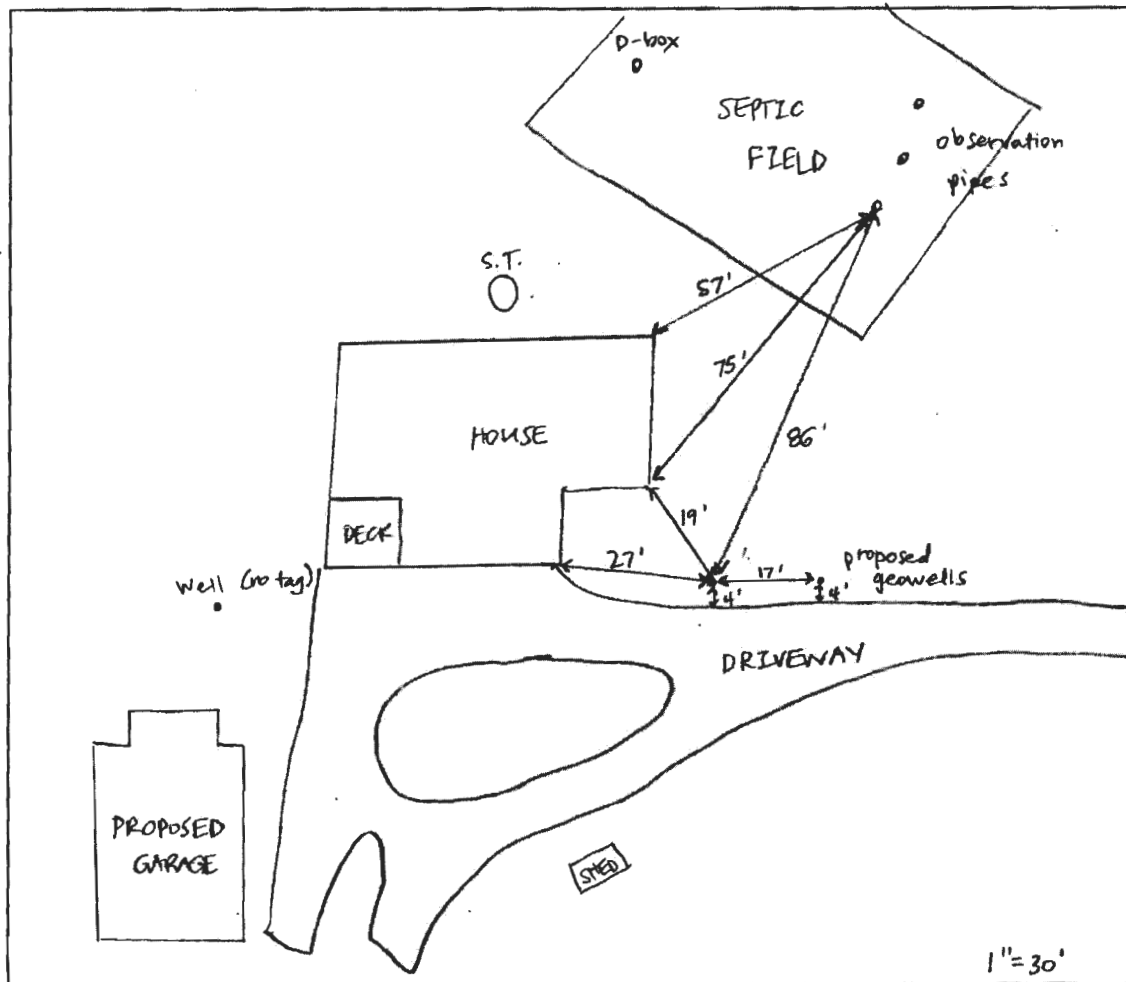
WELL TAG #: _____

SUBDIVISION: _____ LOT: _____

COUNTY #: _____

PROPOSAL: Install 2 geothermal wells

LOCATION DIAGRAM



COMMENTS: Site visit to confirm the proposed locations of two geothermal wells.
Well sites staked by Allied. Locations meet 50' setback from septic field
and 20' setback from house. Looked at septic repair from 2011 - observation
pipes all in good condition, no depressions in the yard.

DATE: 2/2/15

INSPECTOR: Sarah Collins





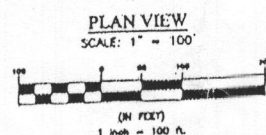
LEGEND

- PROPERTY BOUNDARY
- - - ADJACENT PROPERTY BOUNDARY
- 410 --- 420 --- 430 --- 440 --- 450 --- 460 --- 470 --- 480 --- 490 --- 500 --- 510 --- 520 --- 530 --- 540 --- 550 --- 560 --- 570 --- 580 --- 590 --- 600 --- 610 --- 620 --- 630 --- 640 --- 650 --- 660 --- 670 --- 680 --- 690 --- 700 --- 710 --- 720 --- 730 --- 740 --- 750 --- 760 --- 770 --- 780 --- 790 --- 800 --- 810 --- 820 --- 830 --- 840 --- 850 --- 860 --- 870 --- 880 --- 890 --- 900 --- 910 --- 920 --- 930 --- 940 --- 950 --- 960 --- 970 --- 980 --- 990 --- 1000 --- 1010 --- 1020 --- 1030 --- 1040 --- 1050 --- 1060 --- 1070 --- 1080 --- 1090 --- 1100 --- 1110 --- 1120 --- 1130 --- 1140 --- 1150 --- 1160 --- 1170 --- 1180 --- 1190 --- 1200 --- 1210 --- 1220 --- 1230 --- 1240 --- 1250 --- 1260 --- 1270 --- 1280 --- 1290 --- 1300 --- 1310 --- 1320 --- 1330 --- 1340 --- 1350 --- 1360 --- 1370 --- 1380 --- 1390 --- 1400 --- 1410 --- 1420 --- 1430 --- 1440 --- 1450 --- 1460 --- 1470 --- 1480 --- 1490 --- 1500 --- 1510 --- 1520 --- 1530 --- 1540 --- 1550 --- 1560 --- 1570 --- 1580 --- 1590 --- 1600 --- 1610 --- 1620 --- 1630 --- 1640 --- 1650 --- 1660 --- 1670 --- 1680 --- 1690 --- 1700 --- 1710 --- 1720 --- 1730 --- 1740 --- 1750 --- 1760 --- 1770 --- 1780 --- 1790 --- 1800 --- 1810 --- 1820 --- 1830 --- 1840 --- 1850 --- 1860 --- 1870 --- 1880 --- 1890 --- 1900 --- 1910 --- 1920 --- 1930 --- 1940 --- 1950 --- 1960 --- 1970 --- 1980 --- 1990 --- 2000 --- 2010 --- 2020 --- 2030 --- 2040 --- 2050 --- 2060 --- 2070 --- 2080 --- 2090 --- 2100 --- 2110 --- 2120 --- 2130 --- 2140 --- 2150 --- 2160 --- 2170 --- 2180 --- 2190 --- 2200 --- 2210 --- 2220 --- 2230 --- 2240 --- 2250 --- 2260 --- 2270 --- 2280 --- 2290 --- 2300 --- 2310 --- 2320 --- 2330 --- 2340 --- 2350 --- 2360 --- 2370 --- 2380 --- 2390 --- 2400 --- 2410 --- 2420 --- 2430 --- 2440 --- 2450 --- 2460 --- 2470 --- 2480 --- 2490 --- 2500 --- 2510 --- 2520 --- 2530 --- 2540 --- 2550 --- 2560 --- 2570 --- 2580 --- 2590 --- 2600 --- 2610 --- 2620 --- 2630 --- 2640 --- 2650 --- 2660 --- 2670 --- 2680 --- 2690 --- 2700 --- 2710 --- 2720 --- 2730 --- 2740 --- 2750 --- 2760 --- 2770 --- 2780 --- 2790 --- 2800 --- 2810 --- 2820 --- 2830 --- 2840 --- 2850 --- 2860 --- 2870 --- 2880 --- 2890 --- 2900 --- 2910 --- 2920 --- 2930 --- 2940 --- 2950 --- 2960 --- 2970 --- 2980 --- 2990 --- 3000 --- 3010 --- 3020 --- 3030 --- 3040 --- 3050 --- 3060 --- 3070 --- 3080 --- 3090 --- 3100 --- 3110 --- 3120 --- 3130 --- 3140 --- 3150 --- 3160 --- 3170 --- 3180 --- 3190 --- 3200 --- 3210 --- 3220 --- 3230 --- 3240 --- 3250 --- 3260 --- 3270 --- 3280 --- 3290 --- 3300 --- 3310 --- 3320 --- 3330 --- 3340 --- 3350 --- 3360 --- 3370 --- 3380 --- 3390 --- 3400 --- 3410 --- 3420 --- 3430 --- 3440 --- 3450 --- 3460 --- 3470 --- 3480 --- 3490 --- 3500 --- 3510 --- 3520 --- 3530 --- 3540 --- 3550 --- 3560 --- 3570 --- 3580 --- 3590 --- 3600 --- 3610 --- 3620 --- 3630 --- 3640 --- 3650 --- 3660 --- 3670 --- 3680 --- 3690 --- 3700 --- 3710 --- 3720 --- 3730 --- 3740 --- 3750 --- 3760 --- 3770 --- 3780 --- 3790 --- 3800 --- 3810 --- 3820 --- 3830 --- 3840 --- 3850 --- 3860 --- 3870 --- 3880 --- 3890 --- 3900 --- 3910 --- 3920 --- 3930 --- 3940 --- 3950 --- 3960 --- 3970 --- 3980 --- 3990 --- 4000 --- 4010 --- 4020 --- 4030 --- 4040 --- 4050 --- 4060 --- 4070 --- 4080 --- 4090 --- 4100 --- 4110 --- 4120 --- 4130 --- 4140 --- 4150 --- 4160 --- 4170 --- 4180 --- 4190 --- 4200 --- 4210 --- 4220 --- 4230 --- 4240 --- 4250 --- 4260 --- 4270 --- 4280 --- 4290 --- 4300 --- 4310 --- 4320 --- 4330 --- 4340 --- 4350 --- 4360 --- 4370 --- 4380 --- 4390 --- 4400 --- 4410 --- 4420 --- 4430 --- 4440 --- 4450 --- 4460 --- 4470 --- 4480 --- 4490 --- 4500 --- 4510 --- 4520 --- 4530 --- 4540 --- 4550 --- 4560 --- 4570 --- 4580 --- 4590 --- 4600 --- 4610 --- 4620 --- 4630 --- 4640 --- 4650 --- 4660 --- 4670 --- 4680 --- 4690 --- 4700 --- 4710 --- 4720 --- 4730 --- 4740 --- 4750 --- 4760 --- 4770 --- 4780 --- 4790 --- 4800 --- 4810 --- 4820 --- 4830 --- 4840 --- 4850 --- 4860 --- 4870 --- 4880 --- 4890 --- 4900 --- 4910 --- 4920 --- 4930 --- 4940 --- 4950 --- 4960 --- 4970 --- 4980 --- 4990 --- 5000 --- 5010 --- 5020 --- 5030 --- 5040 --- 5050 --- 5060 --- 5070 --- 5080 --- 5090 --- 5100 --- 5110 --- 5120 --- 5130 --- 5140 --- 5150 --- 5160 --- 5170 --- 5180 --- 5190 --- 5200 --- 5210 --- 5220 --- 5230 --- 5240 --- 5250 --- 5260 --- 5270 --- 5280 --- 5290 --- 5300 --- 5310 --- 5320 --- 5330 --- 5340 --- 5350 --- 5360 --- 5370 --- 5380 --- 5390 --- 5400 --- 5410 --- 5420 --- 5430 --- 5440 --- 5450 --- 5460 --- 5470 --- 5480 --- 5490 --- 5500 --- 5510 --- 5520 --- 5530 --- 5540 --- 5550 --- 5560 --- 5570 --- 5580 --- 5590 --- 5600 --- 5610 --- 5620 --- 5630 --- 5640 --- 5650 --- 5660 --- 5670 --- 5680 --- 5690 --- 5700 --- 5710 --- 5720 --- 5730 --- 5740 --- 5750 --- 5760 --- 5770 --- 5780 --- 5790 --- 5800 --- 5810 --- 5820 --- 5830 --- 5840 --- 5850 --- 5860 --- 5870 --- 5880 --- 5890 --- 5900 --- 5910 --- 5920 --- 5930 --- 5940 --- 5950 --- 5960 --- 5970 --- 5980 --- 5990 --- 6000 --- 6010 --- 6020 --- 6030 --- 6040 --- 6050 --- 6060 --- 6070 --- 6080 --- 6090 --- 6100 --- 6110 --- 6120 --- 6130 --- 6140 --- 6150 --- 6160 --- 6170 --- 6180 --- 6190 --- 6200 --- 6210 --- 6220 --- 6230 --- 6240 --- 6250 --- 6260 --- 6270 --- 6280 --- 6290 --- 6300 --- 6310 --- 6320 --- 6330 --- 6340 --- 6350 --- 6360 --- 6370 --- 6380 --- 6390 --- 6400 --- 6410 --- 6420 --- 6430 --- 6440 --- 6450 --- 6460 --- 6470 --- 6480 --- 6490 --- 6500 --- 6510 --- 6520 --- 6530 --- 6540 --- 6550 --- 6560 --- 6570 --- 6580 --- 6590 --- 6600 --- 6610 --- 6620 --- 6630 --- 6640 --- 6650 --- 6660 --- 6670 --- 6680 --- 6690 --- 6700 --- 6710 --- 6720 --- 6730 --- 6740 --- 6750 --- 6760 --- 6770 --- 6780 --- 6790 --- 6800 --- 6810 --- 6820 --- 6830 --- 6840 --- 6850 --- 6860 --- 6870 --- 6880 --- 6890 --- 6900 --- 6910 --- 6920 --- 6930 --- 6940 --- 6950 --- 6960 --- 6970 --- 6980 --- 6990 --- 7000 --- 7010 --- 7020 --- 7030 --- 7040 --- 7050 --- 7060 --- 7070 --- 7080 --- 7090 --- 7100 --- 7110 --- 7120 --- 7130 --- 7140 --- 7150 --- 7160 --- 7170 --- 7180 --- 7190 --- 7200 --- 7210 --- 7220 --- 7230 --- 7240 --- 7250 --- 7260 --- 7270 --- 7280 --- 7290 --- 7300 --- 7310 --- 7320 --- 7330 --- 7340 --- 7350 --- 7360 --- 7370 --- 7380 --- 7390 --- 7400 --- 7410 --- 7420 --- 7430 --- 7440 --- 7450 --- 7460 --- 7470 --- 7480 --- 7490 --- 7500 --- 7510 --- 7520 --- 7530 --- 7540 --- 7550 --- 7560 --- 7570 --- 7580 --- 7590 --- 7600 --- 7610 --- 7620 --- 7630 --- 7640 --- 7650 --- 7660 --- 7670 --- 7680 --- 7690 --- 7700 --- 7710 --- 7720 --- 7730 --- 7740 --- 7750 --- 7760 --- 7770 --- 7780 --- 7790 --- 7800 --- 7810 --- 7820 --- 7830 --- 7840 --- 7850 --- 7860 --- 7870 --- 7880 --- 7890 --- 7900 --- 7910 --- 7920 --- 7930 --- 7940 --- 7950 --- 7960 --- 7970 --- 7980 --- 7990 --- 8000 --- 8010 --- 8020 --- 8030 --- 8040 --- 8050 --- 8060 --- 8070 --- 8080 --- 8090 --- 8100 --- 8110 --- 8120 --- 8130 --- 8140 --- 8150 --- 8160 --- 8170 --- 8180 --- 8190 --- 8200 --- 8210 --- 8220 --- 8230 --- 8240 --- 8250 --- 8260 --- 8270 --- 8280 --- 8290 --- 8300 --- 8310 --- 8320 --- 8330 --- 8340 --- 8350 --- 8360 --- 8370 --- 8380 --- 8390 --- 8400 --- 8410 --- 8420 --- 8430 --- 8440 --- 8450 --- 8460 --- 8470 --- 8480 --- 8490 --- 8500 --- 8510 --- 8520 --- 8530 --- 8540 --- 8550 --- 8560 --- 8570 --- 8580 --- 8590 --- 8600 --- 8610 --- 8620 --- 8630 --- 8640 --- 8650 --- 8660 --- 8670 --- 8680 --- 8690 --- 8700 --- 8710 --- 8720 --- 8730 --- 8740 --- 8750 --- 8760 --- 8770 --- 8780 --- 8790 --- 8800 --- 8810 --- 8820 --- 8830 --- 8840 --- 8850 --- 8860 --- 8870 --- 8880 --- 8890 --- 8900 --- 8910 --- 8920 --- 8930 --- 8940 --- 8950 --- 8960 --- 8970 --- 8980 --- 8990 --- 9000 --- 9010 --- 9020 --- 9030 --- 9040 --- 9050 --- 9060 --- 9070 --- 9080 --- 9090 --- 9100 --- 9110 --- 9120 --- 9130 --- 9140 --- 9150 --- 9160 --- 9170 --- 9180 --- 9190 --- 9200 --- 9210 --- 9220 --- 9230 --- 9240 --- 9250 --- 9260 --- 9270 --- 9280 --- 9290 --- 9300 --- 9310 --- 9320 --- 9330 --- 9340 --- 9350 --- 9360 --- 9370 --- 9380 --- 9390 --- 9400 --- 9410 --- 9420 --- 9430 --- 9440 --- 9450 --- 9460 --- 9470 --- 9480 --- 9490 --- 9500 --- 9510 --- 9520 --- 9530 --- 9540 --- 9550 --- 9560 --- 9570 --- 9580 --- 9590 --- 9600 --- 9610 --- 9620 --- 9630 --- 9640 --- 9650 --- 9660 --- 9670 --- 9680 --- 9690 --- 9700 --- 9710 --- 9720 --- 9730 --- 9740 --- 9750 --- 9760 --- 9770 --- 9780 --- 9790 --- 9800 --- 9810 --- 9820 --- 9830 --- 9840 --- 9850 --- 9860 --- 9870 --- 9880 --- 9890 --- 9900 --- 9910 --- 9920 --- 9930 --- 9940 --- 9950 --- 9960 --- 9970 --- 9980 --- 9990 --- 10000

HEALTH DEPARTMENT SPEC SHEET INFORMATION - LOT 3 - 1ST			
System	Application Rate	Effective Depth	Bot De
Initial	0.8	3.0	8

INITIAL SYSTEM	
Number of Bedrooms	4
Application Rate	0.8 gpd/sf
Effective Area Beginning Depth	3.0 ft
Bottom Max Depth	8.0 ft
Design Flow	600 gpd
Drainage Field square footage	750 sf
Sidewall Reduction Credit	0.36
Trench width	3 ft
Effective Area Depth	5 ft
Trench Spacing	13 ft
Linear Length of trench Required	89 ft

TRENCH DATA - LOT 3 - 1ST SYSTEM	
INITIAL SYSTEM	
TRENCH 3 (T-1)	
LENGTH	89 ft
GROUND ELEVATION	525.0
INVERT ELEVATION	522.0
MAX BOTTOM ELEVATION	517.0



BOULDER CHART - BOULDER SURVEY HOWARD COUNTY, MARYLAND					
SOIL	SYMBOL	HYDRO	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME
Q10					CLAY LOAM, 8 TO 10 PERCENT BLOOM
Q11					CLAY LOAM, 10 TO 12 PERCENT BLOOM
Q12					CLAY LOAM, 12 TO 14 PERCENT BLOOM
Q13					CLAY LOAM, 14 TO 16 PERCENT BLOOM
Q14					CLAY LOAM, 16 TO 18 PERCENT BLOOM
Q15					CLAY LOAM, 18 TO 20 PERCENT BLOOM
Q16					CLAY LOAM, 20 TO 22 PERCENT BLOOM
Q17					CLAY LOAM, 22 TO 24 PERCENT BLOOM
Q18					CLAY LOAM, 24 TO 26 PERCENT BLOOM
Q19					CLAY LOAM, 26 TO 28 PERCENT BLOOM
Q20					CLAY LOAM, 28 TO 30 PERCENT BLOOM
Q21					CLAY LOAM, 30 TO 32 PERCENT BLOOM
Q22					CLAY LOAM, 32 TO 34 PERCENT BLOOM
Q23					CLAY LOAM, 34 TO 36 PERCENT BLOOM
Q24					CLAY LOAM, 36 TO 38 PERCENT BLOOM
Q25					CLAY LOAM, 38 TO 40 PERCENT BLOOM
Q26					CLAY LOAM, 40 TO 42 PERCENT BLOOM
Q27					CLAY LOAM, 42 TO 44 PERCENT BLOOM
Q28					CLAY LOAM, 44 TO 46 PERCENT BLOOM
Q29					CLAY LOAM, 46 TO 48 PERCENT BLOOM
Q30					CLAY LOAM, 48 TO 50 PERCENT BLOOM
Q31					CLAY LOAM, 50 TO 52 PERCENT BLOOM
Q32					CLAY LOAM, 52 TO 54 PERCENT BLOOM
Q33					CLAY LOAM, 54 TO 56 PERCENT BLOOM
Q34					CLAY LOAM, 56 TO 58 PERCENT BLOOM
Q35					CLAY LOAM, 58 TO 60 PERCENT BLOOM
Q36					CLAY LOAM, 60 TO 62 PERCENT BLOOM
Q37					CLAY LOAM, 62 TO 64 PERCENT BLOOM
Q38					CLAY LOAM, 64 TO 66 PERCENT BLOOM
Q39					CLAY LOAM, 66 TO 68 PERCENT BLOOM
Q40					CLAY LOAM, 68 TO 70 PERCENT BLOOM
Q41					CLAY LOAM, 70 TO 72 PERCENT BLOOM
Q42					CLAY LOAM, 72 TO 74 PERCENT BLOOM
Q43					CLAY LOAM, 74 TO 76 PERCENT BLOOM
Q44					CLAY LOAM, 76 TO 78 PERCENT BLOOM
Q45					CLAY LOAM, 78 TO 80 PERCENT BLOOM
Q46					CLAY LOAM, 80 TO 82 PERCENT BLOOM
Q47					CLAY LOAM, 82 TO 84 PERCENT BLOOM
Q48					CLAY LOAM, 84 TO 86 PERCENT BLOOM
Q49					CLAY LOAM, 86 TO 88 PERCENT BLOOM
Q50					CLAY LOAM, 88 TO 90 PERCENT BLOOM
Q51					CLAY LOAM, 90 TO 92 PERCENT BLOOM
Q52					CLAY LOAM, 92 TO 94 PERCENT BLOOM
Q53					CLAY LOAM, 94 TO 96 PERCENT BLOOM
Q54					CLAY LOAM, 96 TO 98 PERCENT BLOOM
Q55					CLAY LOAM, 98 TO 100 PERCENT BLOOM

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

1/23/2019
DATE
HOWARD COUNTY HEALTH OFFICER

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS
BASED ON FIELD WORK PERFORMED BY ME OR UNDER
MY DIRECT SUPERVISION, AND IS CORRECT, TO THE
BEST OF MY KNOWLEDGE AND BELIEF.

PLUM PREPARED
MARK POTTER
FOR BENCHMARK ENGINEERING INC.