

C1 13790 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.

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

COUNTY NUMBER

ST/CO USE ONLY DATE Received MM DD YY 07 30 12

DATE WELL COMPLETED MM DD YY 07 03 12

Depth of Well 300 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-2282

OWNER OWENS, Ed WELL SITE ADDRESS 8934 Mt Patuxent TOWN ELLICOTT CITY SUBDIVISION PATUXENT PARK ESTATES SECTION LOT

WELL LOG

Not required for driven wells

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

Table with columns: DESCRIPTION (Use additional sheets if needed), FEET (FROM, TO), check if water bearing. Rows include SOIL SAND CLAY, Brown Shale, FRACTURED GRAY ROCK, GRAY ROCK.

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES (Y) NO (N)

CIRCLE APPROPRIATE LETTER A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

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. MWD 355

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. MS D 066

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

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) YES (Y) NO (N) TYPE OF GROUTING MATERIAL (Circle one) CEMENT (CM) BENTONITE CLAY (BC) NO. OF BAGS 64 NO. OF POUNDS 3200 GALLONS OF WATER 284 DEPTH OF GROUT SEAL (to nearest foot) from 2 ft. to 300 ft.

CASING RECORD

MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch)! Total depth of main casing (nearest foot) STEEL (ST) CONCRETE (CO) PLASTIC (PL) OTHER (OT)

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

SCREEN RECORD

screen type or open hole (insert appropriate code below) STEEL (ST) BRASS (BR) OPEN HOLE (HO) BRONZE (PL) PLASTIC (PL) OTHER (OT)

DEPTH (nearest ft.)

Table with columns: A, C, H, S, C, R, E, N and rows for slot size and diameter of screen.

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

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

TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3

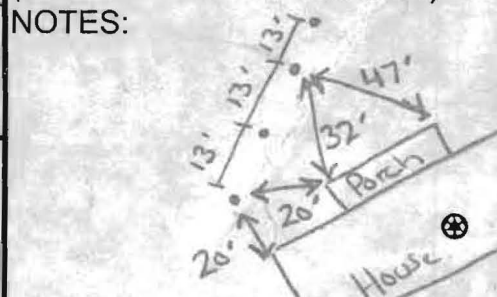
PUMPING TEST

HOURS PUMPED (nearest hour) 8.8 PUMPING RATE (gal. per min.) 11-15 METHOD USED TO MEASURE PUMPING RATE WATER LEVEL (distance from land surface) BEFORE PUMPING 17-20 ft. WHEN PUMPING 22-25 ft. TYPE OF PUMP USED (for test) A air P piston T turbine C centrifugal R rotary O other J jet S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP YES NO (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) LAND SURFACE (nearest foot)

LATITUDE 39.31053 LONGITUDE 76.82666 (DEFAULT COORD. WGS 84)



B 1 11735

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

Ho - 95 - 2282 fill in this form completely

536795 please type

Date Received (APA) 04 05 12

OWNER INFORMATION

Owens ED 8934 MT Patapsco Court Ellicott City MD 21042

LOCATION OF WELL

Howard COUNTY Patapsco Park Estates SUBDIVISION 3 LOT 42 Ellicott City

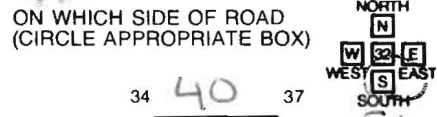
DRILLER INFORMATION

Michael Barlow M W D 355 Barlow Well Drilling 522 Underwood Lane 21014 4/3/12

SOURCES OF DRILLING WATER

1. Well

8934 MT Patapsco Ct STREET ADDRESS



ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) 40 DISTANCE FROM ROAD

ENTER FT OR MI 17 11 PARCEL 330

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 0 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 0

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 3 bores x 400'

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard (13) Public COUNTY NAME COUNTY NO. STATE SIGNATURE INSERT S DATE ISSUED 4/18/2012 Brian Baker 4/18/2013

APPROXIMATE DEPTH OF WELL 400 FEET APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST

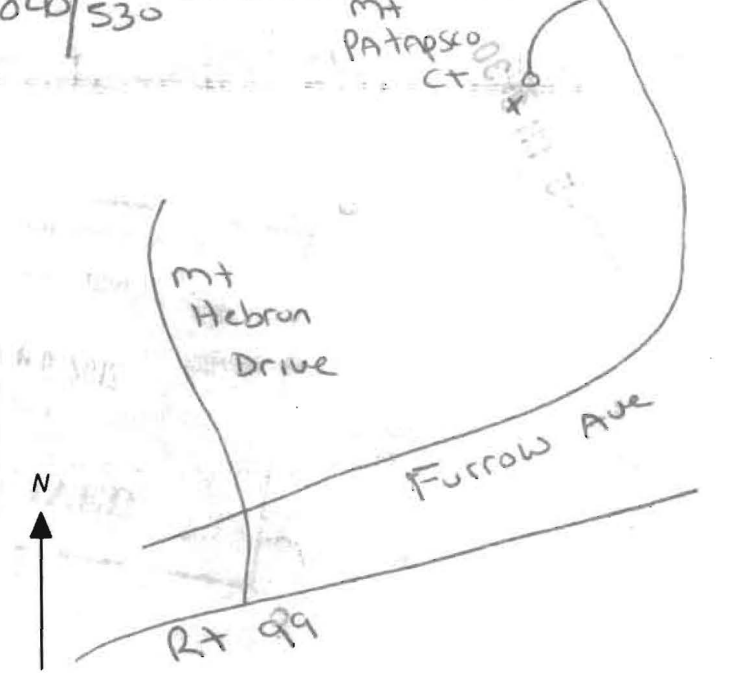
METHOD OF DRILLING (circle one)

- BORED (or Augered) JETTED Jetted & DRIVEN AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary) CABLE REVerse-ROTary DRive-POINT

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

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



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

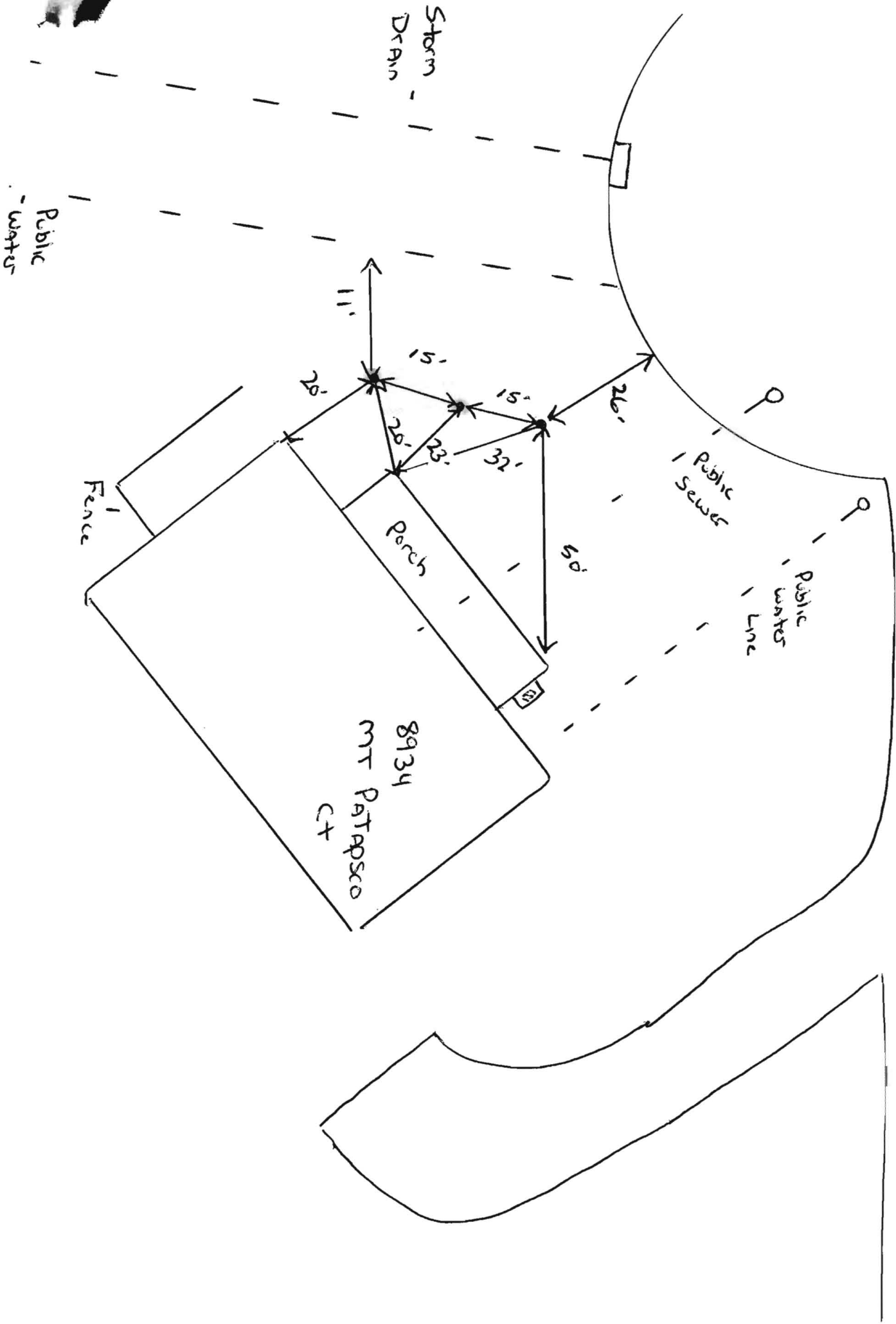
APPROX. PERMIT NUMBER PERMIT No. HO-95-2282

SPECIAL CONDITIONS

NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

-OUT

Private Drive



**MICHAEL BARLOW WELL DRILLING
522 UNDERWOOD LANE
BEL AIR, MD 21014
410-838-6910**

April 3, 2012

Howard County Health Department
7178 Columbia Gateway Drive
Columbia, MD 21046
Fax: 410-313-2648

Re: 8934 Mt. Patapsco Court, Ellicott City

Dear Department of Environment:

Please note unless otherwise specified all geothermal bores installed by our company will be installed as follows:


Grout: Bentonite Grout 20% solids minimum
Manufacture(s): Baroid or Wyo-Ben
Will be grouted from the bottom to the top with grout material

Piping: Polyethylene SDR 11 160 PSI as recommended per IGSHPA
Manufacture: EnDot or Charter Plastics or equal, Size 1" or 1 1/4"
IGSHPA Certification Number 12687

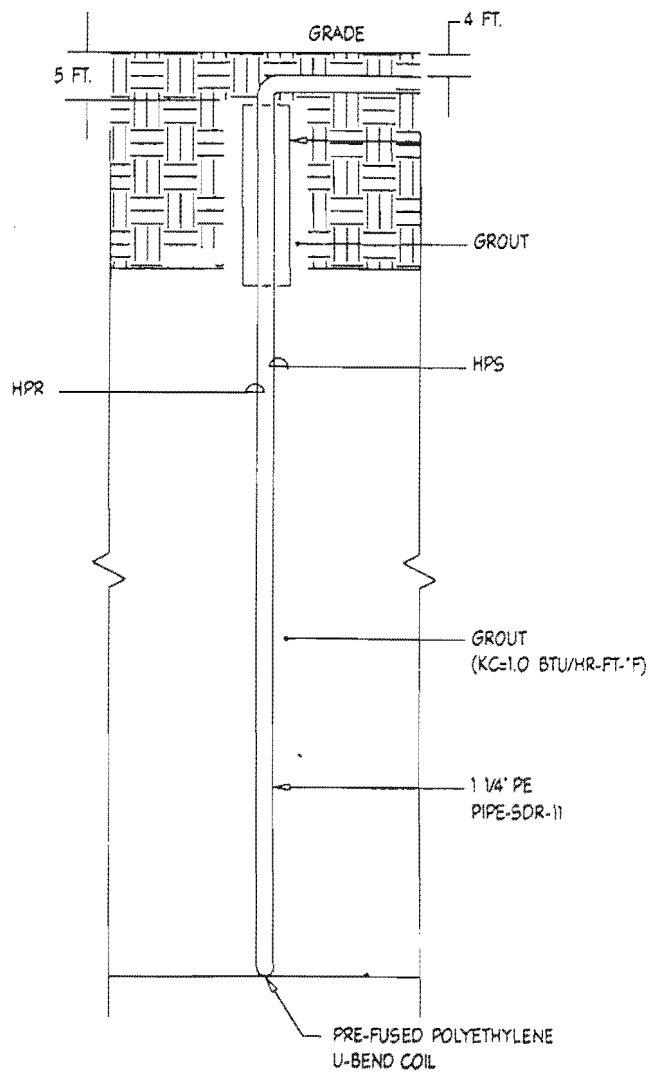
Also attached is a cross section diagram of the bore hole.

We would appreciate your help in getting this permit released as soon as possible so that we can expedite this project. If you have any questions, please do not hesitate to contact me.

Sincerely,



Michael Barlow



4 TYPICAL BORE HOLE DETAIL
 M1.00 NOT TO SCALE

DETAIL:
1"=20'

30' SEWER, UTILITY, STORM
DRAIN AND STORM WATER
MANAGEMENT ACCESS EASEMENT

IRON PIPE
FOUND W/ CAP
"P & J"

GARAGE

LOT 41

Utilities

SEE
DETAIL

MAC.
D/W

LOT 42
(1.045 AC. ±)

20' SEWER AND
UTILITY EASEMENT

1/2" IRON PIPE FOUND



Mark L. Robel 10/02/08
PROFESSIONAL LAND SURVEYOR DATE
REG. # 339

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21112
(410) 461-2855

8934 MT Patapsco Ct

LOT 42
"PATAPSCO PARK ESTATES"
LOTS 35 TO 58
SECTION 3rd AREA 3
PLAT #7859
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

HOUSE LOCATION
DRAWING

FOUNDATION LOCATION: 9/12/08
FINAL LOCATION:
BOUNDARY SURVEY: 9/12/08

SCALE: 1"=60'
DATE: 10/2/08
DRAWN BY: V.L.J.
CHECKED BY: M.L.R.
PROJECT No.: 05040-6002