

B 1	4673	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type	STATE PERMIT NUMBER HO - 95 - 2026 <small>70 fill in this form completely 79</small>
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OWNER INFORMATION

Date Received (APA) _____

8 MM DD YY 13

15 Last Name Fairway Hills Golf Course Owner First Name 34

36 Street or RFD 5100 Columbia Road 55

57 Town Columbia MD 70 State 72 Zip 21044 76

LOCATION OF WELL

B 3 Howard

8 COUNTY _____ 21

23 SUBDIVISION _____ 42

SECTION _____ 44 46 LOT _____ 48 50

52 NEAREST TOWN Columbia 71

MILES FROM TOWN (enter 0 if in town) 2 M I
73 76 77 78

DRILLER INFORMATION

Driller's Name Michael Barlow MWD 355 License No. 76 81

Firm Name Barlow Well Drilling

Address 322 Underwood Lane 21014

Signature _____ Date 10-5-10

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

11 NEAR WHAT ROAD 5100 Columbia Road 30

34 150 37 DISTANCE FROM ROAD FT

ENTER FT OR MI 38 39

TAX MAP: _____ BLK: _____ PARCEL _____

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) _____ 8 12

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) _____ 14 20

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

G GEO-THERMAL 2 bores x 350' OK

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard COUNTY NAME COUNTY NO. (13)

STATE SIGNATURE _____ INSERT S → 41

DATE ISSUED 10/22/10 CO SIGNATURE Mike Wall EXP. DATE 10/22/11

43 MM DD YY 48 NORTH GRID 511 0 0 0 EAST GRID 0841 0 0 0

50 55 57 63

APPROXIMATE DEPTH OF WELL 350 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

- Well
-
-

WRITE THE BOX NUMBER FROM THE MAP HERE

E 8401

N 5101

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)

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 DEEPEM AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 _____ 52

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

APPROP. PERMIT NUMBER _____ G _____

PERMIT No. HO - 95 - 2026

70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS Grout wells from bottom to top.

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

C1 6668

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

1 2 3 8 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

COUNTY NUMBER

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER FAIRWAY HILLS GOLF COURSE STREET OR RFD 5100 COLUMBIA Rd TOWN COLUMBIA

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, FEET (FROM, TO), check if water bearing. Includes handwritten entries: Soil, Brown shale, Schist, 2 bores x 350'

NUMBER OF UNSUCCESSFUL WELLS:

WELL HYDROFRACTURED YES NO

- CIRCLE APPROPRIATE LETTER A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT...

DRILLERS LIC. NO. 1 MWD 395 DRILLERS SIGNATURE

LIC. NO. 1 MSD 066

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

GROUTING RECORD

WELL HAS BEEN GROUTED (Y) (N) TYPE OF GROUTING MATERIAL (C) (M) (B) (C) NO. OF BAGS 71 NO. OF POUNDS 350

CASING RECORD

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

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

SCREEN RECORD

screen type or open hole (S) (T) (B) (R) (H) (O) (P) (L) (O) (T) (O) (T) DEPTH (nearest ft.)

DEPTH (nearest ft.)

Table with columns: E A C H S R E E N, 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76

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

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

70 72 TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3

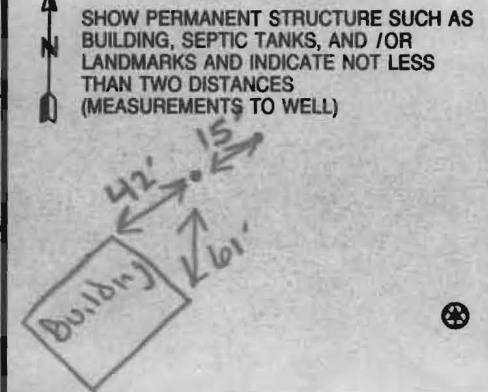
PUMPING TEST

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) A air P piston T turbine C centrifugal R rotary O other J jet S submersible

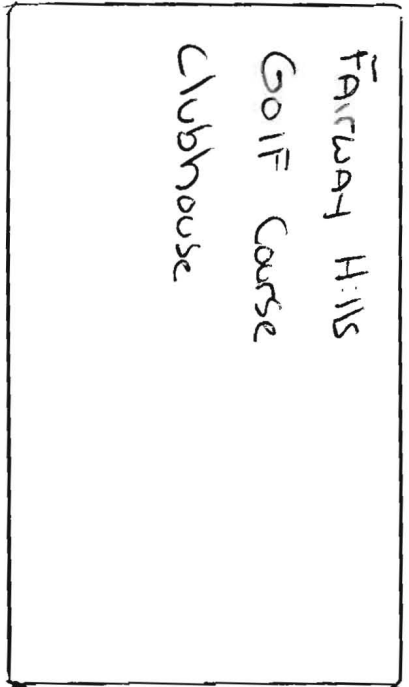
PUMP INSTALLED

DRILLER INSTALLED PUMP (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 (nearest foot)

LOCATION OF WELL ON LOT



10/22/10
Well Luccidians
approved.
Public
H2O &
sewer.
(Kil)



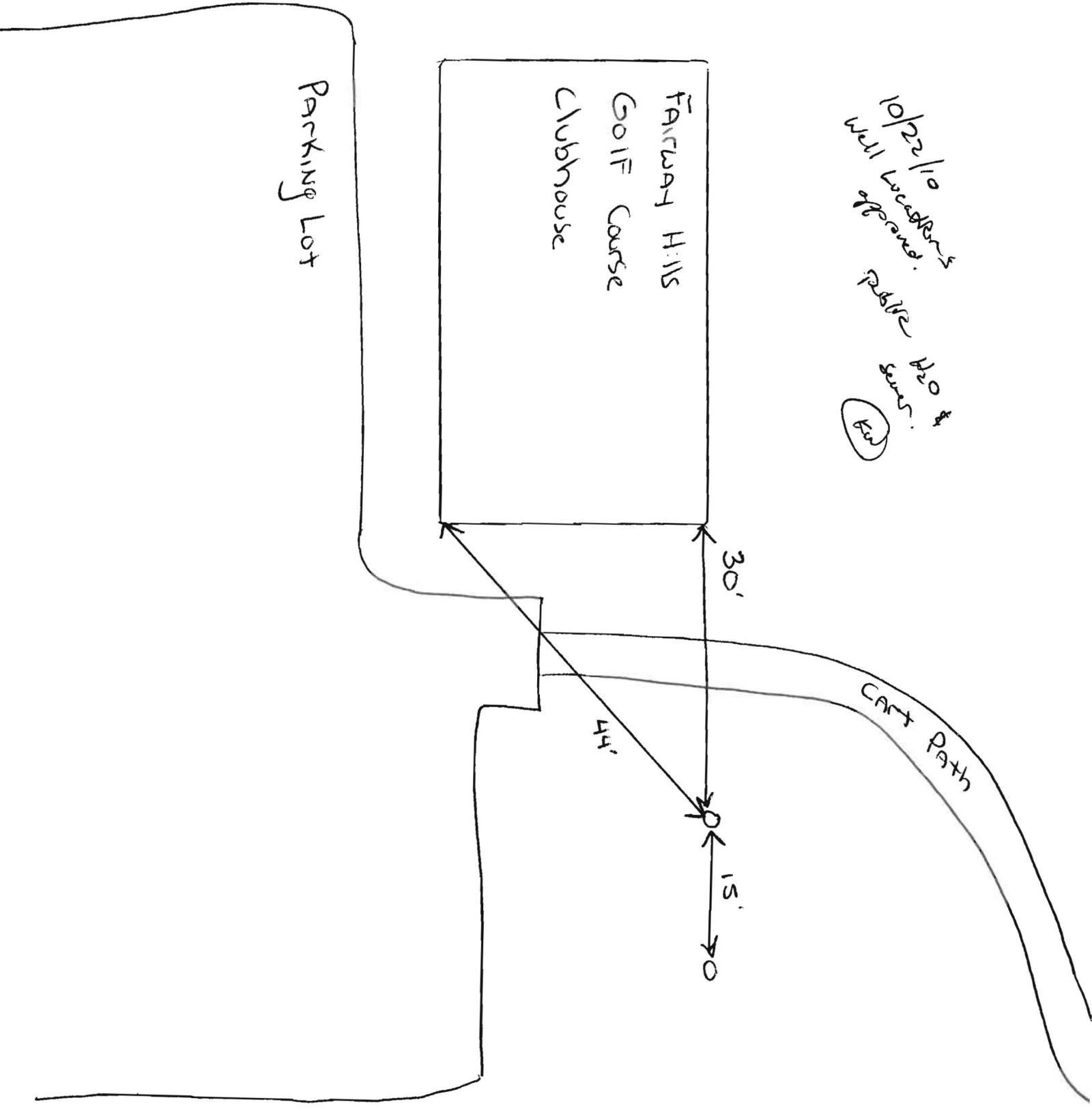
Parking Lot

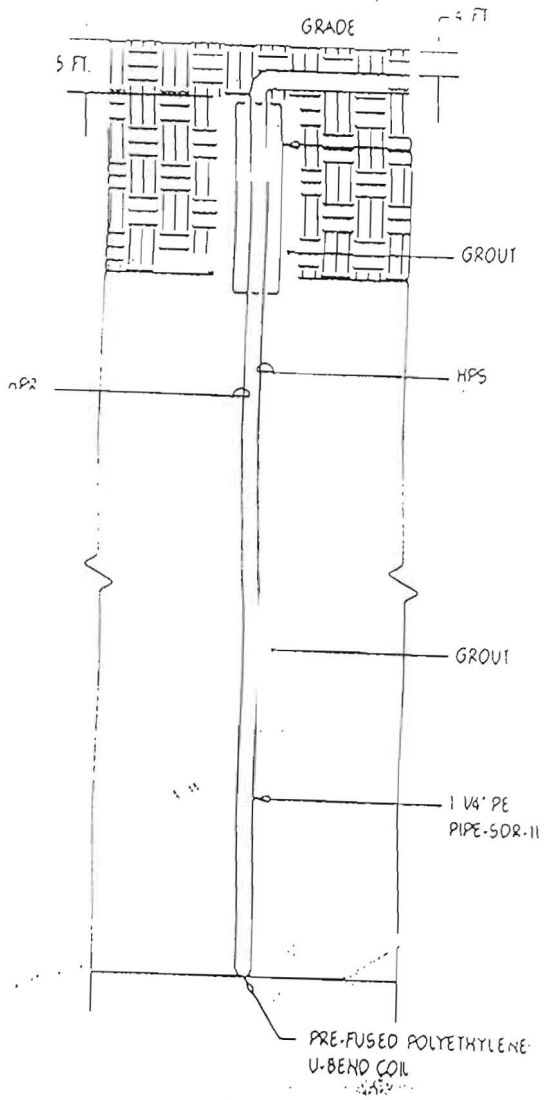
30'

44'

15'

CART Path





4
M1.00
TYPICAL BORE HOLE DETAIL
NOT TO SCALE



Providing Quality Systems for Over 20 Years
Commercial & Residential Water Well Drilling
Test Borings & Consulting • Geothermal Drilling & Systems
NGWA & IGSHPA Certified

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

October 5, 2010

Re: Fairway Hills GC – 5100 Columbia Road

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