

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS) FILL IN THIS FORM COMPLETELY PLEASE TYPE
 ST/CO USE ONLY DATE Received MM 08 DD 04 YY 13 DATE WELL COMPLETED MM 07 DD 12 YY 20 APPROVED POS 3/1/2022 22 300 26 Depth of Well (TO NEAREST FOOT) PERMIT NO. FROM "PERMIT TO DRILL WELL" HD 20-1192 28 29 30 31 32 33 34 35 36 37

OWNER Sharveth John (last name) 3377 Diamond Dr (first name) TOWN Glenwood MD
 SUBDIVISION SECTION LOT 13

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	
Brn Sand + clay	0	40	
Brn Rock	40	300	
wh @ 200			

GROUTING RECORD yes no
 WELL HAS BEEN GROUTED (Circle Appropriate Box) **Y** **N**
 TYPE OF GROUTING MATERIAL (Circle one)
 CEMENT **C** BENTONITE CLAY **B**
 NO. OF BAGS 40 NO. OF POUNDS 8000
 GALLONS OF WATER 1000
 DEPTH OF GROUT SEAL (to nearest foot)
 from 0 ft. to 300 ft.
 (enter 0 if from surface)

CASING RECORD
 casing types insert appropriate code below

S STEEL	C CONCRETE
P PLASTIC	O OTHER

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

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

SCREEN RECORD
 screen type or open hole insert appropriate code below

S STEEL	B BRASS	H OPEN HOLE
	R BRONZE	O HOLE
	P PLASTIC	T OTHER

 DEPTH (nearest ft.)

NUMBER OF UNSUCCESSFUL WELLS: _____
 WELL HYDROFRACTURED yes no **Y** **N**

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

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. 1 M S D 038
 Michael J Kohler
 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)
 LIC. NO. 1 M S D 038
 Michael J Kohler

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

C 2

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
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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
 HOURS PUMPED (nearest hour) 8 9
 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 (describe below)
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. 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 (nearest foot)
- below }

LATITUDE 39.28248
 LONGITUDE 77.00950
 (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.

04-355105

EMERGENCY/TEMP NO. IF ANY

B 1	SEQUENCE NO. (MDE USE ONLY) 00028	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 571577B	STATE PERMIT NUMBER Ho - 20 - 0197 <small>fill in this form completely</small>
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OWNER INFORMATION

Date Received (APA) 06/03/22
8 MM DD YY 13

15 Last Name Owner First Name 34
Skarvelis John + Christine

36 Street or RFD 55
3377 Danmark Drive

57 Town 70 State 72 Zip 76
Glenwood MD 21738

LOCATION OF WELL

8 COUNTY 21
Howard

23 SUBDIVISION 42
Choi Property

SECTION 44 46 LOT 48 50
13

52 NEAREST TOWN 71
Glenwood

DRILLER INFORMATION

Driller's Name 76 License No. 81
Michael Kohler M SD 028

Firm Name
Allied Well Drilling

Address
PO Box 129 Annapolis Junction MD 20701

Signature Date
Michael J. Kohler 05/31/22

SOURCES OF DRILLING WATER

1. Public
2.
3.

11 STREET ADDRESS 30
3377 Danmark Dr

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

34 37
DISTANCE FROM ROAD
ENTER FT OR MI 38 39

TAX MAP: 0014 BLK: PARCEL 0106

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)

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 2 Loops

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

COUNTY NAME COUNTY NO.
Howard

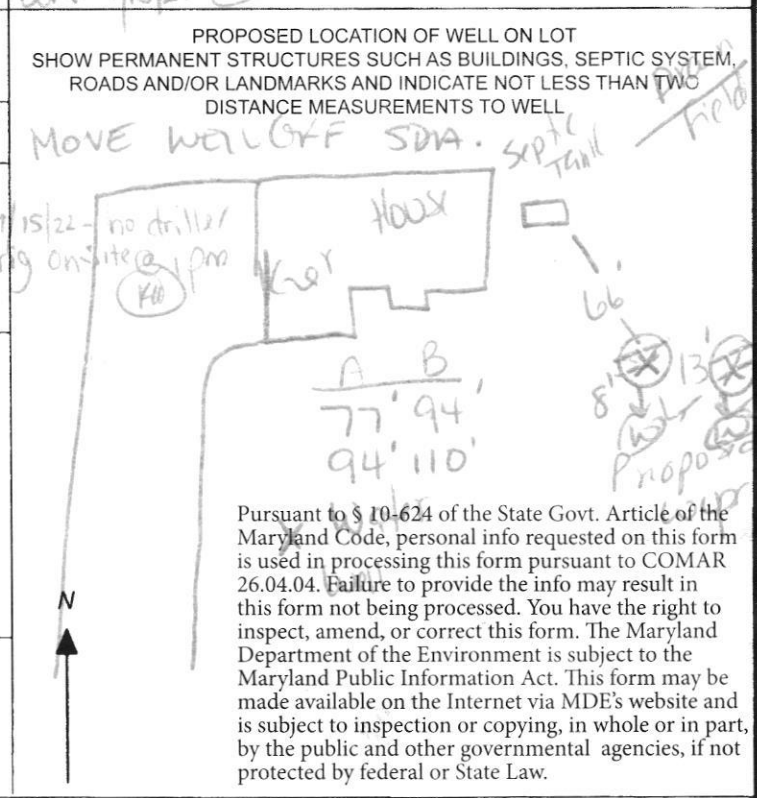
STATE SIGNATURE INSERT S 41

DATE ISSUED 07/14/2022 EXP. DATE 07/14/2023
43 MM DD YY 48 CO SIGNATURE

DN: 7/15/22

APPROXIMATE DEPTH OF WELL 24 28 FEET
320

APPROXIMATE DIAMETER OF WELL NEAREST INCH
6



METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN

30 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)

37 CABLE REVERSE-ROTary DRIVE-POINT

other

REPLACEMENT OR DEEPEINED WELLS (CIRCLE APPROPRIATE BOX)

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 DEEPEIN AN EXISTING WELL

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

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

APPROX. PERMIT NUMBER --- G ---

PERMIT No. Ho - 20 - 0197
70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS
NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED
CALL IN DRILLING/ABOUT

DO NOT REMOVE THIS TAG
DEPARTMENT OF THE ENVIRONMENT
WELL PERMIT NUMBER

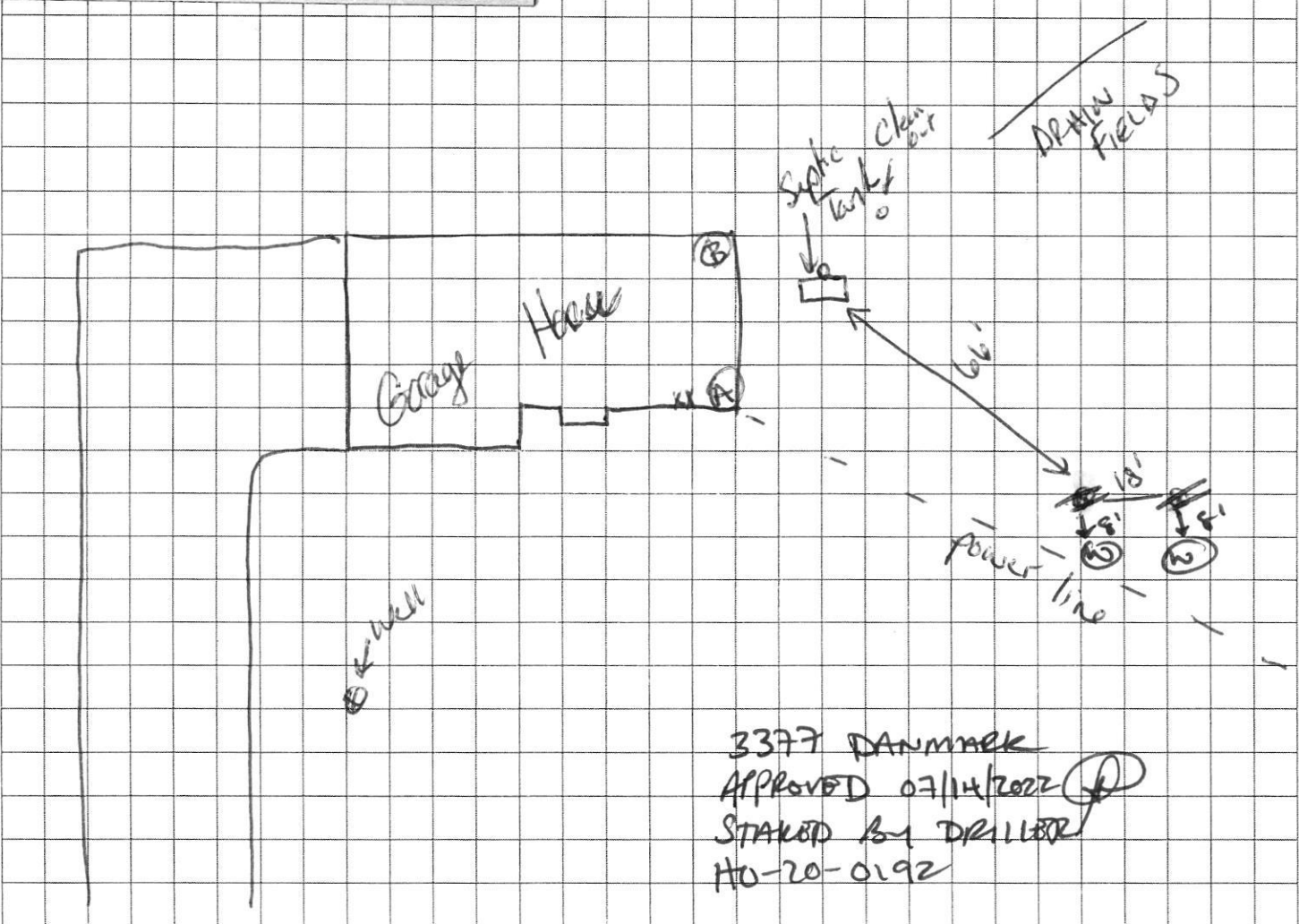
HO-20-0192

INFORMATION - GIVE NUMBER AND WRITE
1800 WASHINGTON BLVD
BALTIMORE MARYLAND 21230

Allied
WELL DRILLING
SITE PLAN

3377 Danmark Drive
Glenwood Md

2 wells @ 320'
closed loop geo



Sediment Control Protocol: SILT Fence

Distance From House: 77'

From Septic: 66'

From Sewer: N/A

From Property Line: 65'

From Street: 68'

Trees Nearby: Yes

Utility Issues: Nearby Electric

Mats Needed: Yes for Rig

Access For H/U: Yes

Neighboring Tags: See Comp

Comments: Rig Access from Street, Trucks Stay on Street

Person Completing Form: Wes Wolfe

EACH BORE HOLE (TYP.)

GRADE

MINIMUM
HORIZONTAL BURY
DEPTH 4 FT

FOR CONT.
SEE PLANS

HORIZONTAL
PIPING

BORE DEPTH

TAPE
5 TO 10 FOOT SECTION OF
REBAR TO GUIDE TUBE
INTO BORE DURING
INSTALLATION

ANCHOR FITTING TO
PREVENT U-TUBE FROM
SURFACING AFTER
INSTALLATION

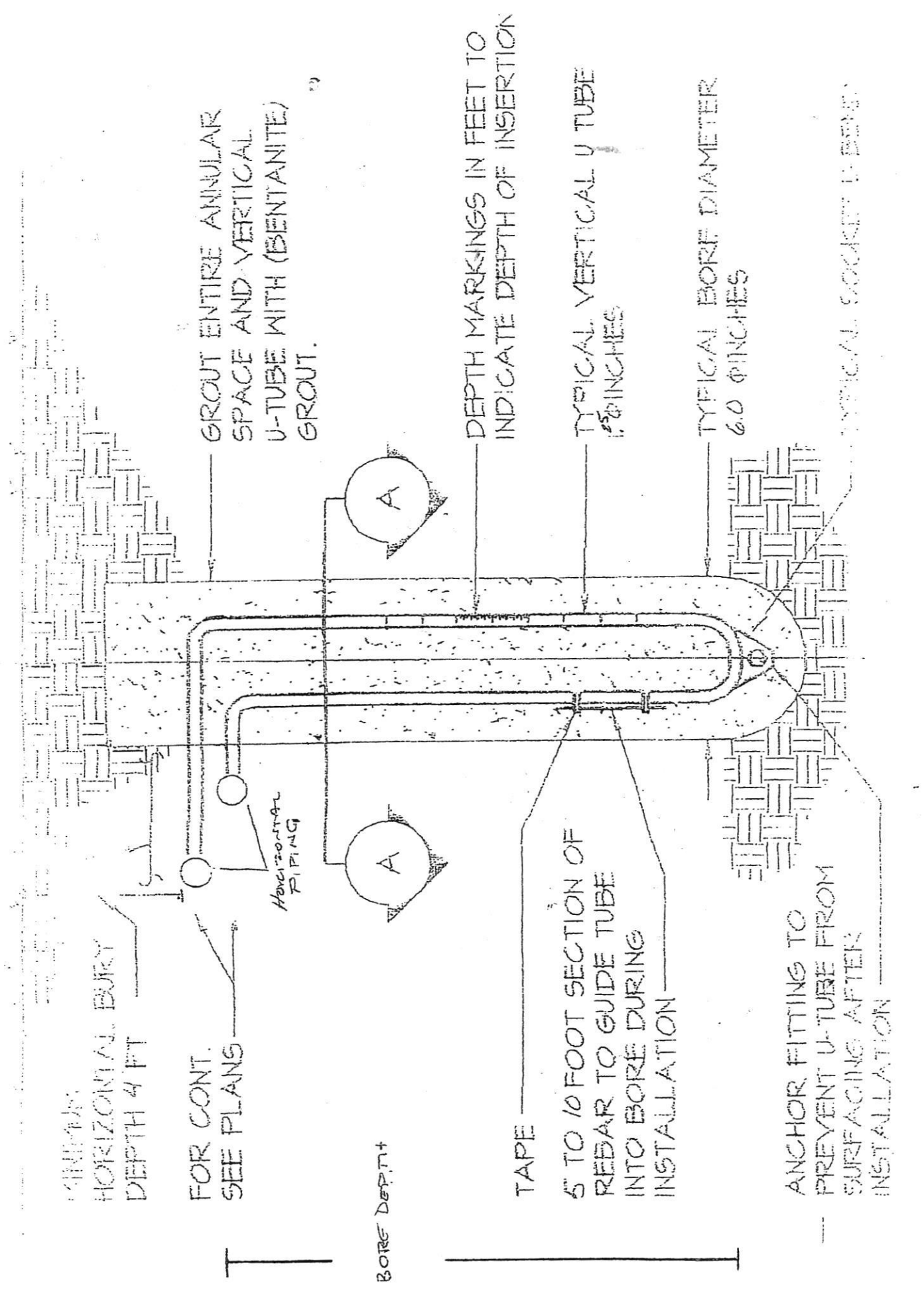
GROUT ENTIRE ANNULAR
SPACE AND VERTICAL
U-TUBE WITH (BENTONITE)
GROUT.

DEPTH MARKINGS IN FEET TO
INDICATE DEPTH OF INSERTION

TYPICAL VERTICAL U TUBE
1.5 INCHES

TYPICAL BORE DIAMETER
6.0 INCHES

TYPICAL SOCKET U-BEND



HOWARD COUNTY GROUTING PROCEDURE

Boreholes will be grouted from the bottom to the top via a tremie pipe and positive displacement pump. Bentonite grout, known as Quik-Grout will be used according to the manufacturer's specifications to achieve a consistency of at least 20% solids (24 gallons potable water/50 lb. sack of grout) and a permeability no more than $2.5 \text{ E}(-08) \text{ cm/sec}$. Grouting will be completed immediately after installing the geothermal loop and no later than twenty-four (24) hours after installing the geothermal loop. Open boreholes/annular space will be protected as necessary to prevent the entry of surface water or pollutants.