

C 1 03798

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED AFTER WELL IS COMPLETED.

COUNTY NUMBER

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER Marc David & Deborah STREET OR RFD 6645 Old Washington Rd TOWN Elkridge

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Topsoil, Soft Bin Clay, Hard tan clay sand, and Gray Rock.

GROUTING RECORD form with fields for TYPE OF GROUTING MATERIAL (CEMENT CM, BENTONITE CLAY BC), NO. OF BAGS, NO. OF POUNDS, GALLONS OF WATER, DEPTH OF GROUT SEAL.

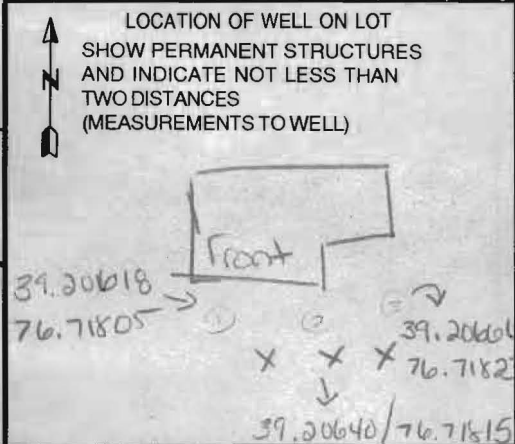
CASING RECORD form with fields for MAIN CASING TYPE, Nominal diameter, Total depth of main casing.

OTHER CASING (if used) form with fields for diameter, depth.

SCREEN RECORD form with fields for screen type, DEPTH (nearest ft.), SLOT SIZE, DIAMETER OF SCREEN.

PUMPING TEST form with fields for HOURS PUMPED, PUMPING RATE, METHOD USED TO MEASURE PUMPING RATE, WATER LEVEL, TYPE OF PUMP USED.

PUMP INSTALLED form with fields for DRILLER INSTALLED PUMP, TYPE OF PUMP INSTALLED, CAPACITY, PUMP HORSE POWER, PUMP COLUMN LENGTH, CASING HEIGHT.



WELL HYDROFRACTURED form with YES/NO options.

CIRCLE APPROPRIATE LETTER form with options A, E, P.

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 553, DRILLERS SIGNATURE, LIC. NO. 95 D 144

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

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) form with fields for T, E.R.O.S., W Q, TELESCOPE CASING, LOG INDICATOR, OTHER DATA.

B 1 25726
1 2 3 6

SEQUENCE NO.
(MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
555311 please type

STATE PERMIT NUMBER

HO -14 -0145
70 fill in this form completely 79

Date Received (APA)

11/2/14
8 MM DD YY 13

OWNER INFORMATION

Marc David + Deborah
15 Last Name Owner First Name 34
6145 Old Washington Road
36 Street or RD 55
Elkridge MD 21075
57 Town 70 State 72 Zip 76

B 3

LOCATION OF WELL

Howard
8 COUNTY 21
23 SUBDIVISION 42
SECTION 44 46 LOT 48 50
Elkridge
52 NEAREST TOWN 71

DRILLER INFORMATION

C John Hess MWD 553
76 License No. 81
Allied Environmental Services
Firm Name
P.O. Box 129 Annapolis Junction MD 20701
Address
C John Hess 11/11/14
Signature Date

B 4

SOURCES OF DRILLING WATER

1. Public
2.
3.

6145 Old Washington Rd
11 STREET ADDRESS 30
ON WHICH SIDE OF ROAD
(CIRCLE APPROPRIATE BOX)
NORTH
WEST 32 EAST
SOUTH
34 37
DISTANCE FROM ROAD
ENTER FT OR MI 38 39
TAX MAP: 0038 BLK: 0009 PARCEL 0189

B 2

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 3 loops

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard 13
COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S 41
DATE ISSUED 12/02/2014
43 MM DD YY 48 CO SIGNATURE EXP. DATE 12/2/15

APPROXIMATE DEPTH OF WELL 320 FEET
24 28

APPROXIMATE DIAMETER OF WELL 6 INCH
NEAREST INCH

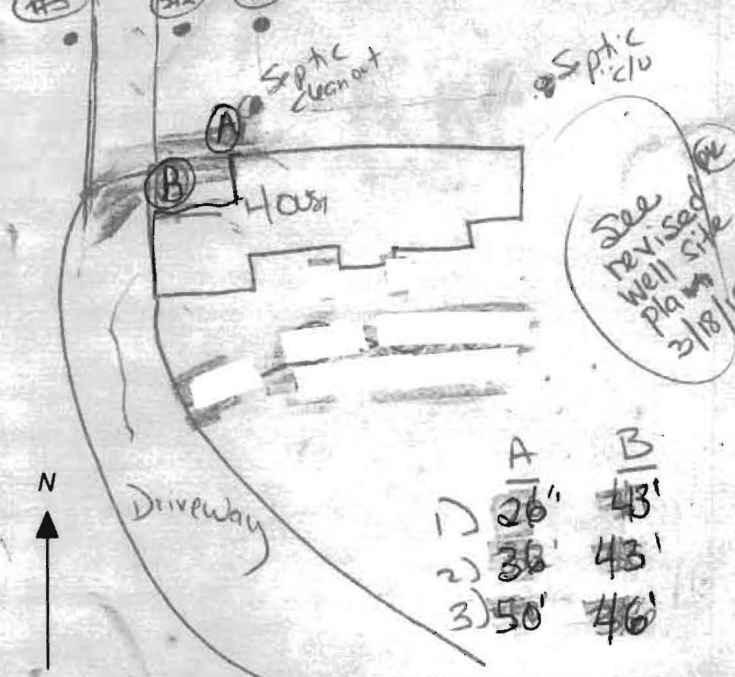
METHOD OF DRILLING (circle one)

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
39 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

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)

APPROP. PERMIT NUMBER G
PERMIT No. HO -14 -0145
70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS Grant all wells from bottom to top and call 24 hours prior to any grouting

RECEIVED

MAR 18 2015

HOWARD COUNTY HEALTH DEPT.
COMMUNITY HYGIENE PROGRAM

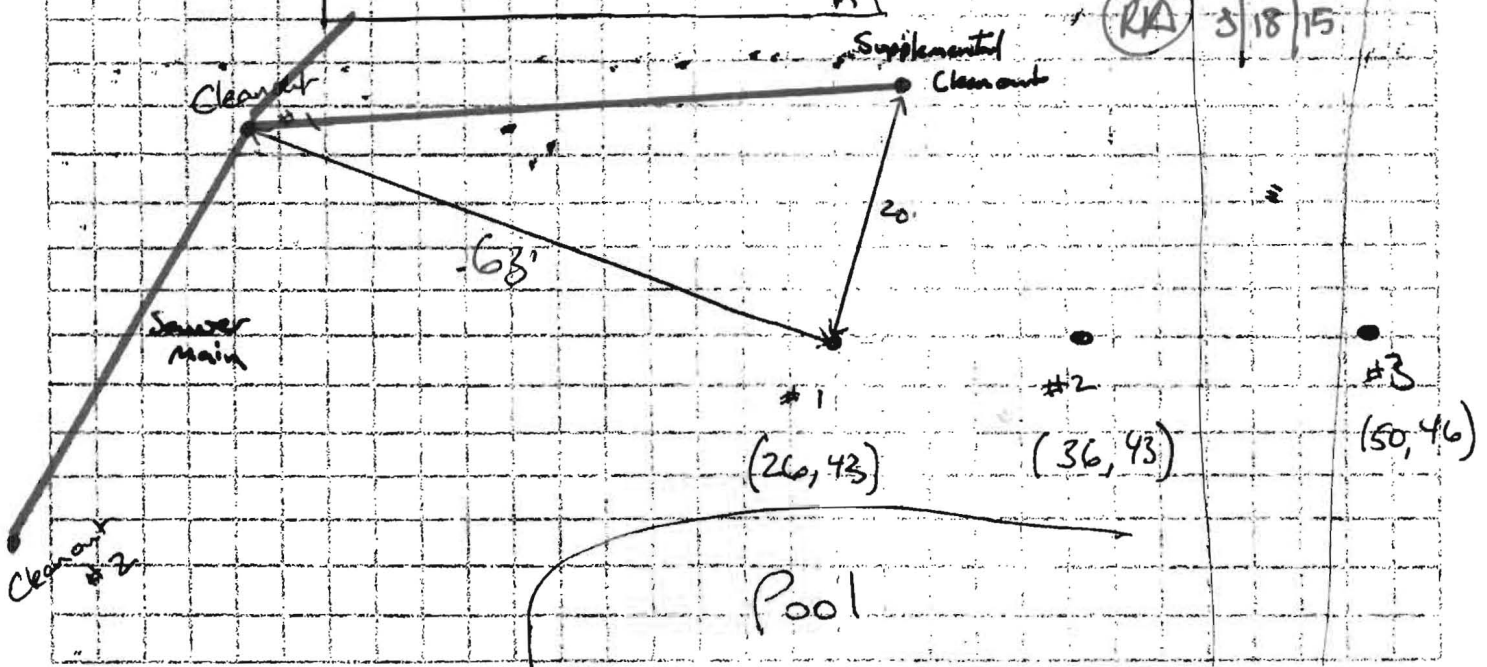


SITE PLAN

* 3/18/15
Revised Site plan
for 3
geo bores *

Revised well
sites approved.

RA 3/18/15



Sediment Control Protocol: _____

Distance From House: 26'
 From Septic: ~~26'~~
 From Sewer: 50+
 From Property Line: 50+
 From Street: 100+

Trees Nearby: yes - NO OH issues
 Utility Issues: no
 Mats Needed: no
 Access For H/U: N/A
 Neighboring Tags: _____

Comments: * Sewer line constructed of solvent welded Sch 40 PVC

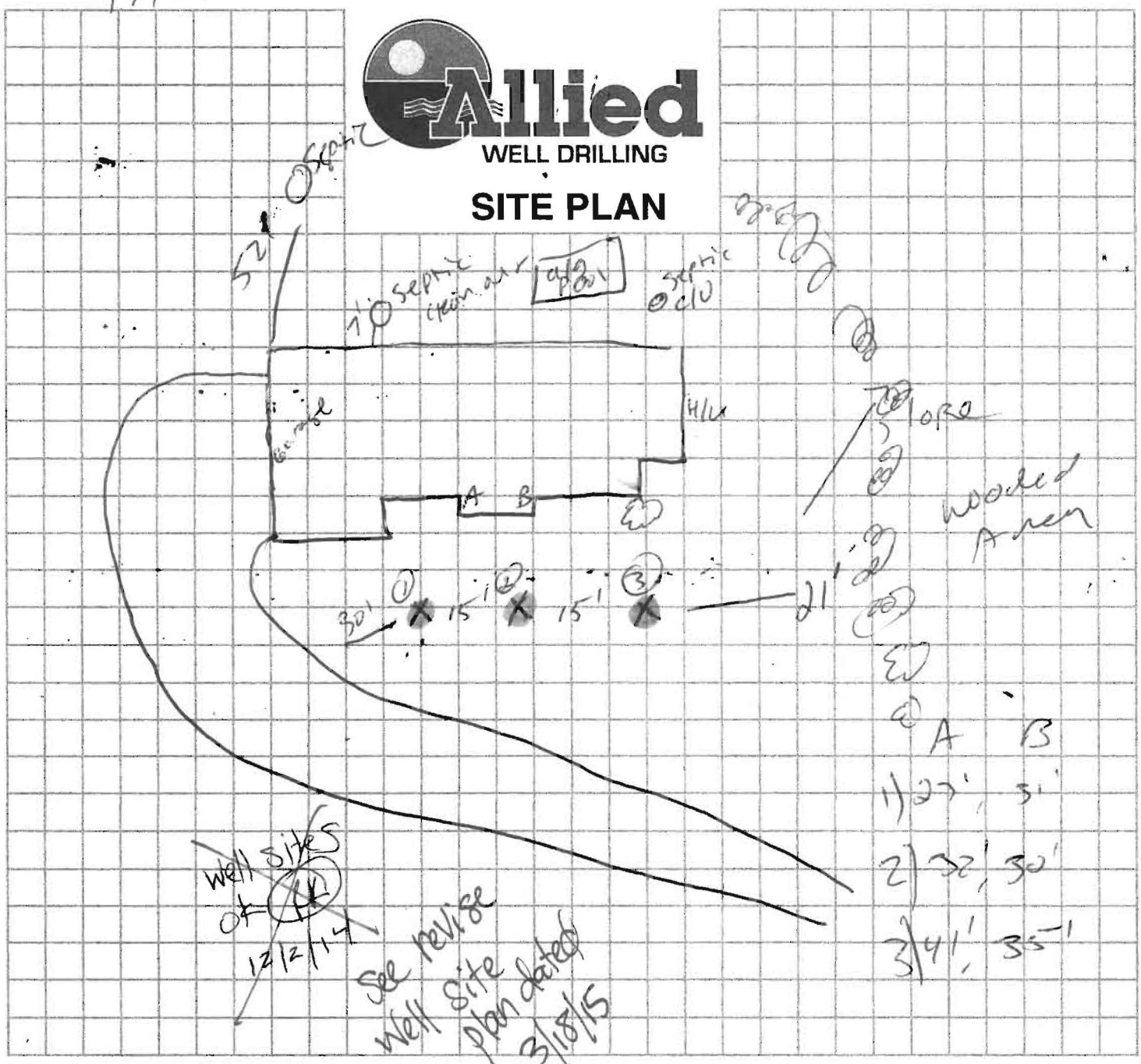
Person Completing Form: _____

11/7/14

6145 Old Washington Rd



SITE PLAN



Sediment Control Protocol: Large Lot

Distance From House: 27'
 From Septic: 50' F
 From Sewer: NTA
 From Property Line: 21' from wooded area
 From Street: 50' F

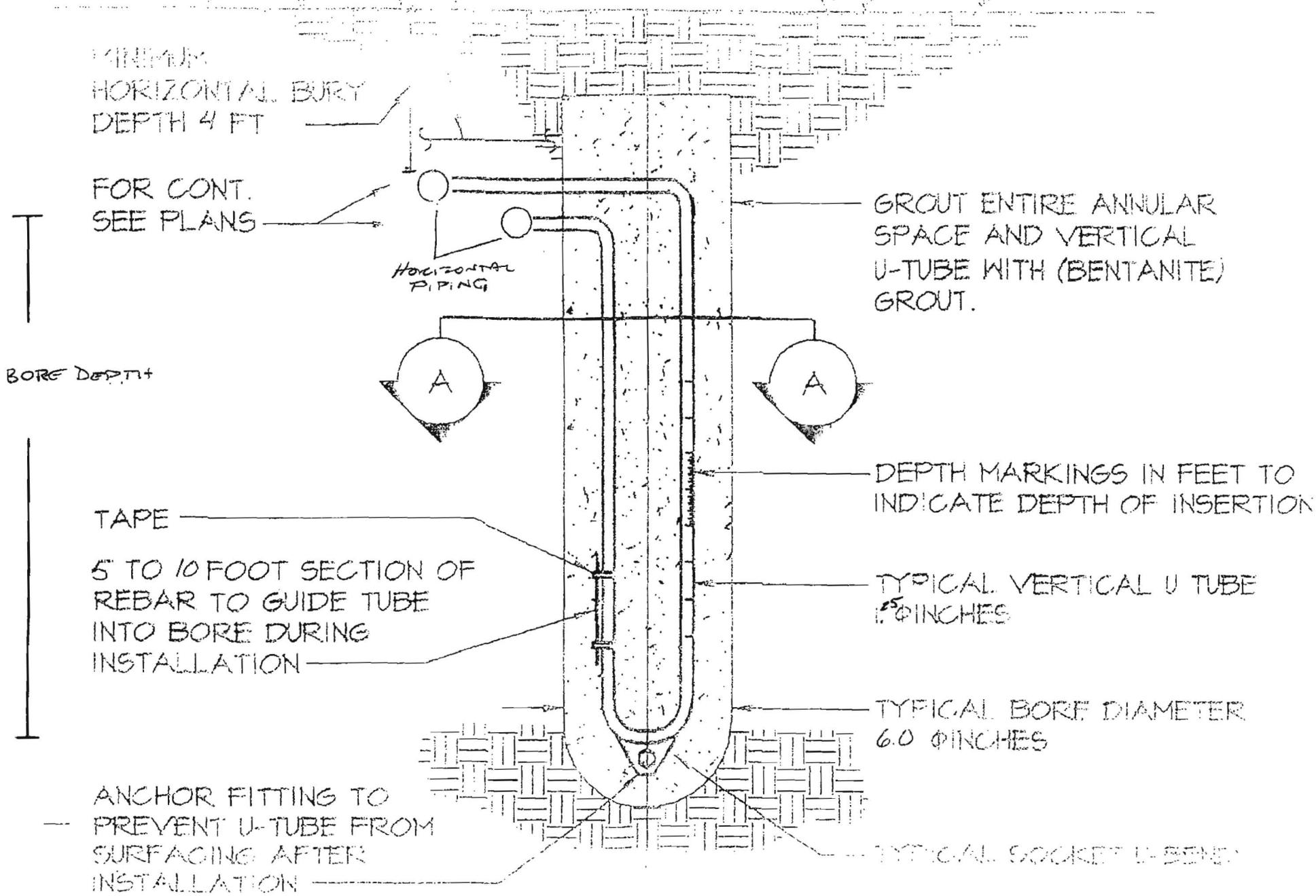
Trees Nearby: May need to trim a few pine tree branches
 Utility Issues: _____
 Mats Needed: yes
 Access For H/U: Right S.H.
 Neighboring Tags: _____

Comments: House is hidden down a long driveway would not find water well

Person Completing Form: _____

GRADE

EACH BORE HOLE (TYP.)



MINIMUM HORIZONTAL BURY DEPTH 4 FT

FOR CONT. SEE PLANS

HORIZONTAL PIPING

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

BORE DEPTH

TAPE

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

DEPTH MARKINGS IN FEET TO INDICATE DEPTH OF INSERTION

TYPICAL VERTICAL U TUBE 1.5 INCHES

TYPICAL BORE DIAMETER 6.0 INCHES

ANCHOR FITTING TO PREVENT U-TUBE FROM SURFACING AFTER INSTALLATION

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.