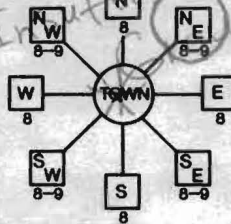
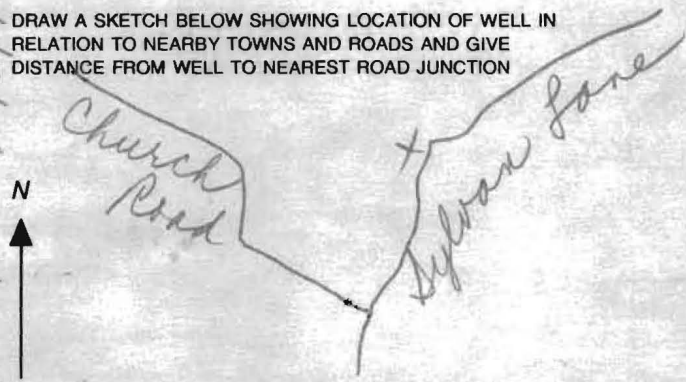


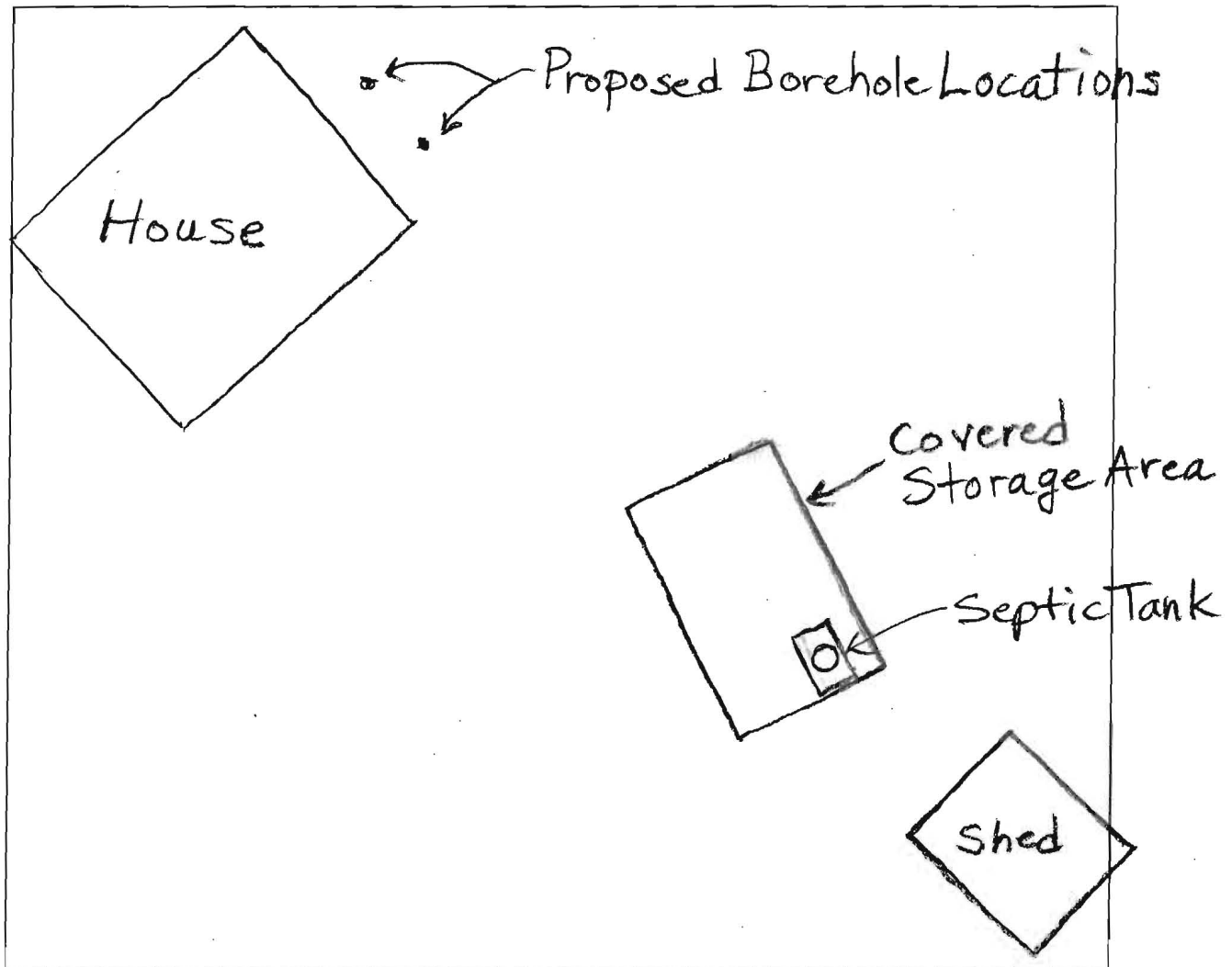
C 1 01944		SEQUENCE NO. (MDE USE ONLY)		STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE		THIS REPORT MUST BE SUBMITTED AFTER WELL IS COMPLETED.	
1 2 3 6						COUNTY NUMBER	
ST/CO USE ONLY DATE Received MM DD YY 8 13		DATE WELL COMPLETED MM DD YY 2-15-10		Depth of Well 22 450 26 (TO NEAREST FOOT)		PERMIT NO. FROM "PERMIT TO DRILL WELL" 40-75-1853	
OWNER Kyles, Charles		STREET OR RFD 3370 Sylvan Ln		TOWN Ellicott City		SUBDIVISION	
SECTION		LOT					
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 (Circle Appropriate Box) yes Y no N 44 44 TYPE OF GROUTING MATERIAL (Circle one) CEMENT C BENTONITE CLAY BC NO. OF BAGS 45 15 NO. OF POUNDS 45 150 GALLONS OF WATER 375 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 450 ft. (enter 0 if from surface)		C 3 1 2 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 27 27 27 C centrifugal R rotary O other (describe below) 27 27 27 J jet S submersible 27 27			
DESCRIPTION (Use additional sheets if needed)		FEET FROM TO Sandy Clay 1 20 Soft Weathered Rock 20 30 Hard light grey Rock 30 300 Hard Drk Grey Rock 300 450		CASING RECORD casing types insert appropriate code below ST STEEL CO CONCRETE PL PLASTIC OT OTHER MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch)! 6 Total depth of main casing (nearest foot) 30 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		PUMP INSTALLED DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES 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) + above - below LAND SURFACE (nearest foot) 49 50 51	
NUMBER OF UNSUCCESSFUL WELLS:		C 2 1 2 DEPTH (nearest ft.) E 1 8 9 11 15 17 21 A 23 24 26 30 32 36 C 38 39 41 45 47 51 S R E E N SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH) 56 60 from to		SCREEN RECORD screen type or open hole insert appropriate code below ST STEEL BR BRASS HO OPEN HOLE PL PLASTIC OT OTHER		LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURES AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL) Front X Geos	
WELL HYDROFRACTURED yes Y no 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 D 106		DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)		LIC. NO. 1 K S D 204			
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)		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					

B 1	1927	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 532476 please type	STATE PERMIT NUMBER HO-95-1853 fill in this form completely
Date Received (APA) 8 MM DD YY 13 <i>Kyle Charles</i>		OWNER INFORMATION 15 Last Name Owner First Name 34 <i>3570 Sylvan Lane</i> 36 Street or RFD 55 <i>Ellicott City Md 21043</i> 57 Town 70 State 72 Zip 76		
DRILLER INFORMATION Driller's Name 76 License No. 81 <i>Marshall Arnette M 5 D 106</i> Firm Name <i>Alled Environmental Services</i> Address <i>PO Box 1242, Millersville Md 21108</i> Signature Date <i>Marshall Arnette 12/9/09</i>		LOCATION OF WELL B 3 8 COUNTY 21 <i>Howard</i> 23 SUBDIVISION 42 SECTION 44 46 LOT 48 50 <i>Ellicott City</i> 52 NEAREST TOWN 71 MILES FROM TOWN (enter 0 if in town) 73 76 77 78 <i>0</i>		
B 2 WELL INFORMATION 1 2 APPROX. PUMPING RATE (GAL. PER MIN.) 8 12 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20		B 4 1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)  ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH WEST EAST SOUTH 34 150 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39 TAX MAP: 25 BLK: 8 PARCEL: 242		
USE FOR WATER (CIRCLE APPROPRIATE BOX) 22 ☐ 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 <i>3 Closed Loops</i>		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL <i>Howard</i> (13) P59026-A COUNTY NAME COUNTY NO. STATE SIGNATURE INSERT S 41 DATE ISSUED <i>1/6/2010 Brian Baker 7/6/2011</i> 43 MM DD YY 48 CO SIGNATURE EXP. DATE NORTH GRID 524 000 EAST GRID 858 000 50 55 57 63		
APPROXIMATE DEPTH OF WELL 24 28 FEET <i>300</i>		SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X SOURCES OF DRILLING WATER 1. <i>Driller Well</i> 2. 3.		
APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST INCH		WRITE THE BOX NUMBER FROM THE MAP HERE E 858 N 5204		
METHOD OF DRILLING (circle one) 30 BORED (or Augered) JETTED Jetted & DRIVEN AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary) 37 CABLE REVERSE-ROTary DRIVE-POINT other		DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION 		
REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX) 39 ☒ 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 DEEPMEN 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-95-1853 70 71 72 73 74 75 76 77 78 79				
SPECIAL CONDITIONS NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED <i>Use 1/2" Pipe From Bottom of Well (Borehole) Upwards When Adding Bentonite</i>				

SITE INSPECTION SHEET

OWNER: Charles Kyler PHONE #: _____
ADDRESS: 3570 Sylvan Lane CONTRACTOR: Allied Environmental
WELL TAG #: H0-95-1853
SUBDIVISION: _____ LOT: _____ COUNTY #: P59026-A
PROPOSAL: Drill Geothermal Bores

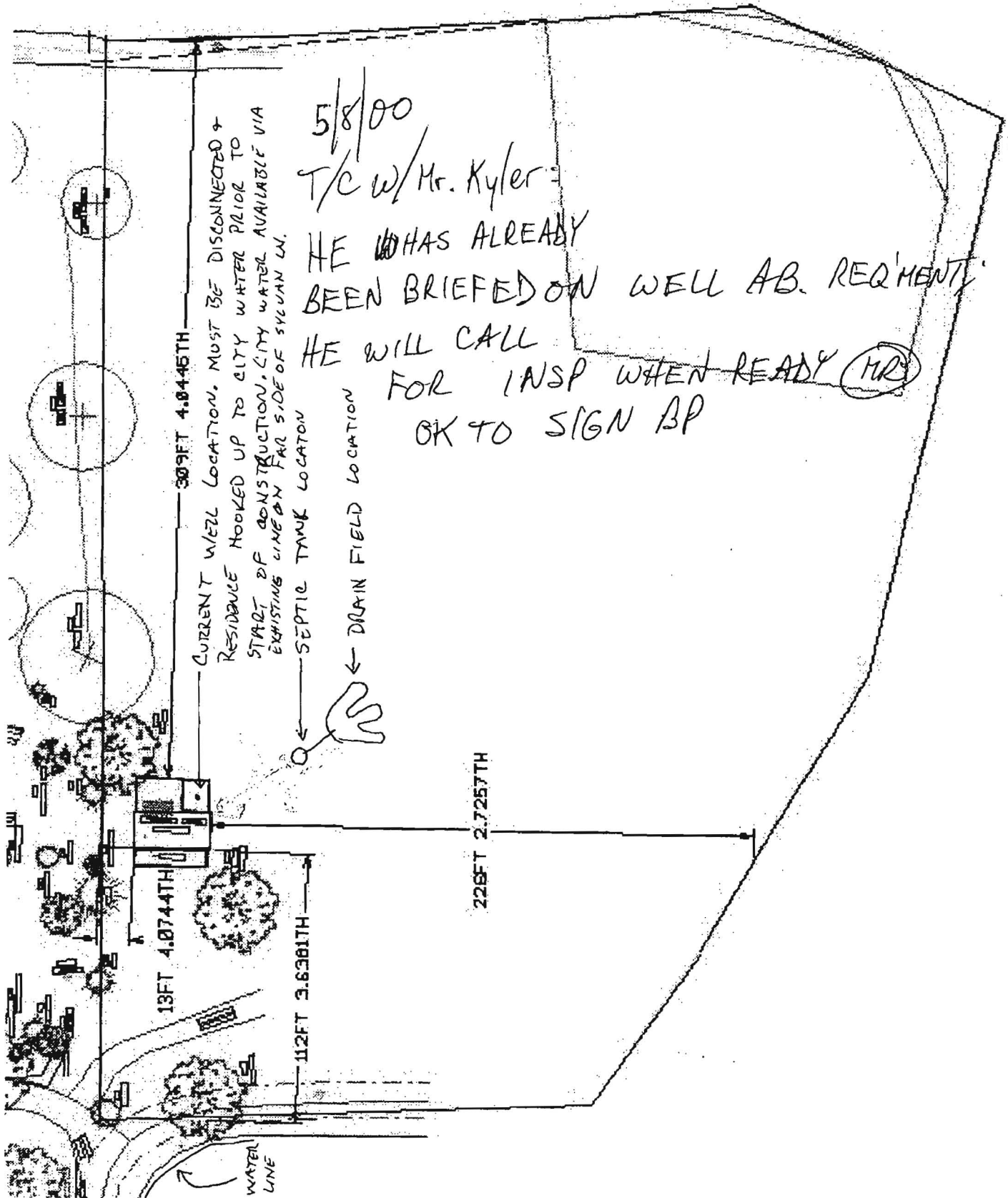
LOCATION DIAGRAM



COMMENTS: _____

DATE: 1/6/2010 INSPECTOR: B. Baber

SUCKER BRANCH



FROM START OF DRIVE TO PARKING AREA DROP IS 54' OVER A 200' RUN

1/6/2010 Met Bill

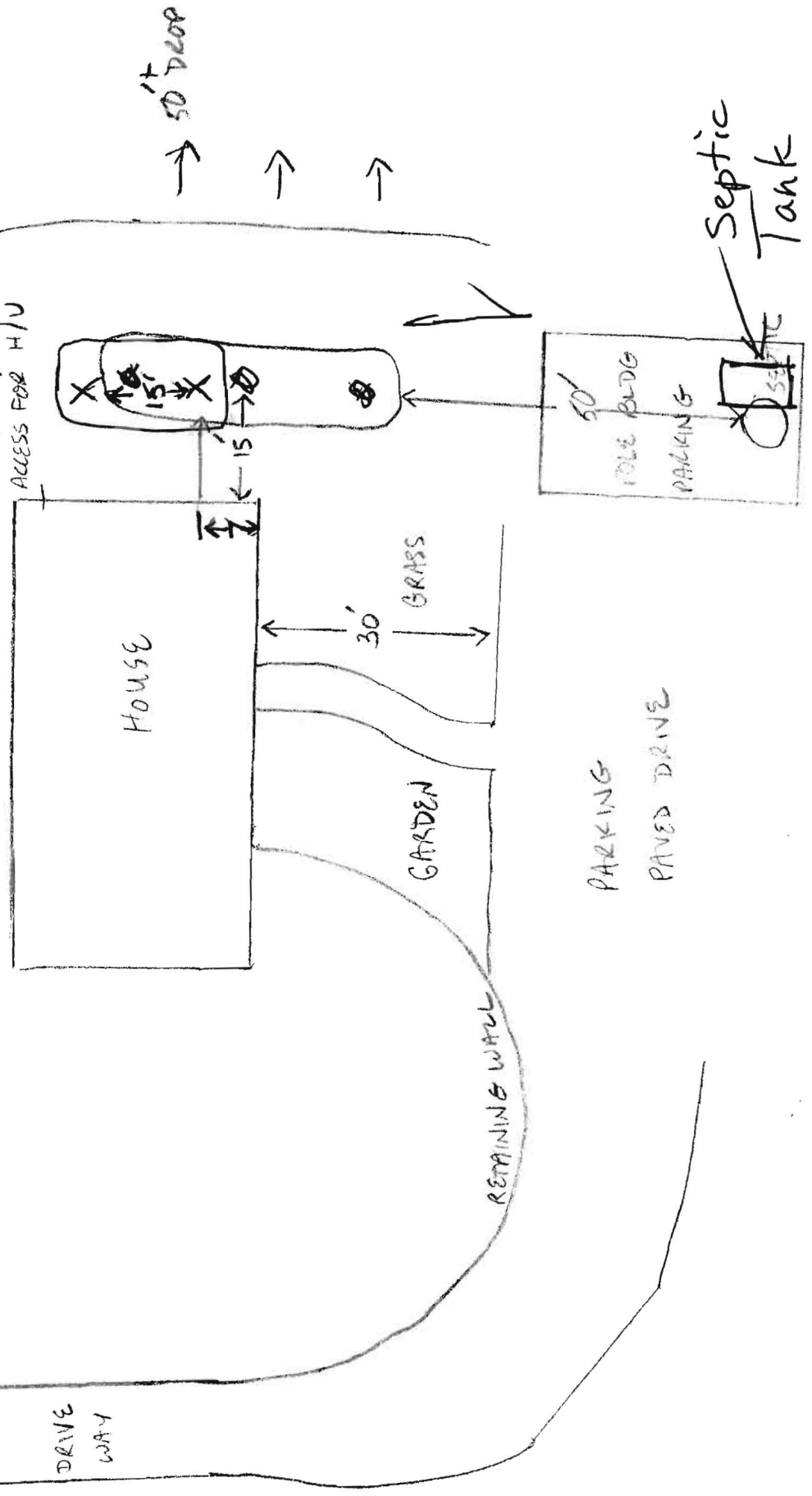
from Allied on Site.

(BB)

1/6/2010 Changed to 2

450' boreholes. Boreholes.

moved to keep maximum distance from any septic repairs, (BB)

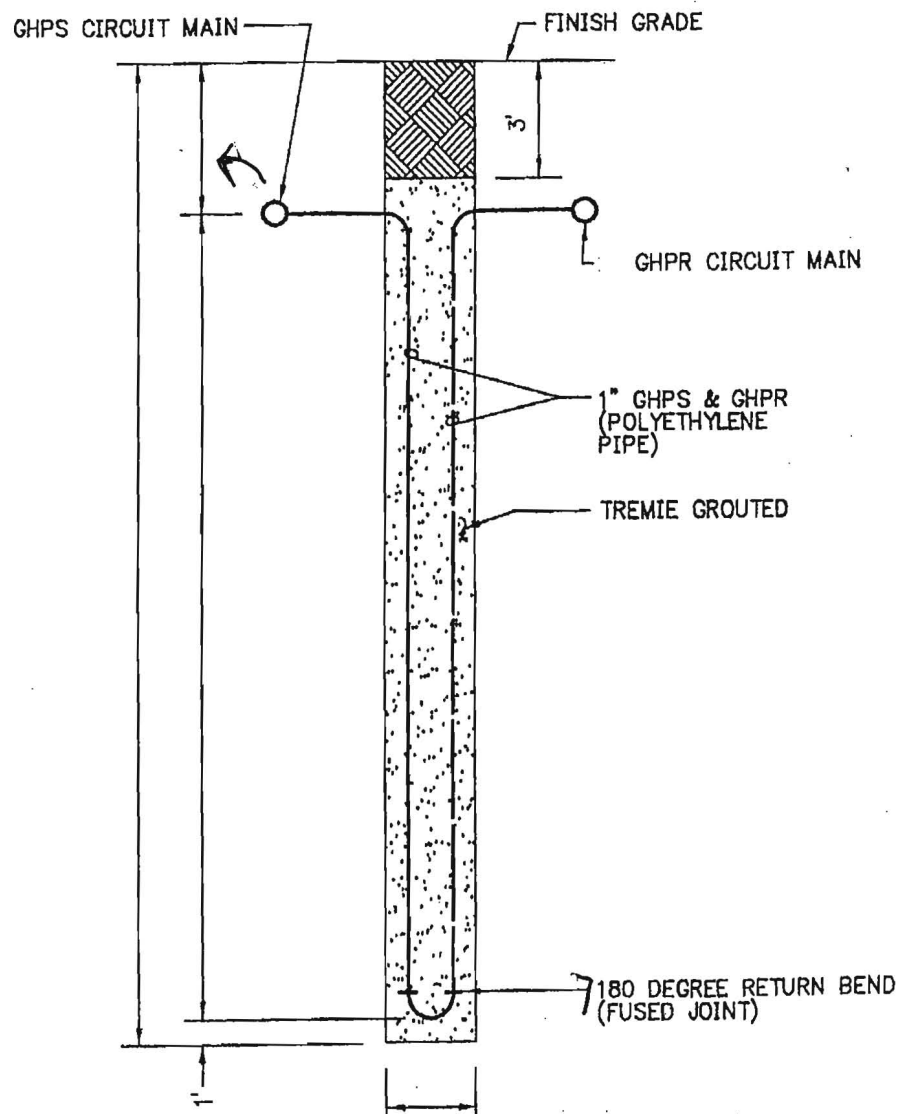


DETAIL

1
MO.1

TYPICAL GHPS/GHPR CIRCUIT MAINS BELOW GRADE

NOT TO SCALE



DETAIL

2
MO.1

TYPICAL VERTICAL BOREHOLE

NOT TO SCALE