

<b>B 1</b> 1 2 3 6 <u>36820</u>	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND <b>APPLICATION FOR PERMIT TO DRILL WELL</b> please type <u>5566510</u>	STATE PERMIT NUMBER <u>HO - 15 - 0103</u> 70 fill in this form completely 79
Date Received (APA) <u>07/06/15</u> 8 MM DD YY 13 <b>OWNER INFORMATION</b> 15 Last Name Owner First Name 34 <u>Tiles David + Jennifer</u> 36 <u>10533 Chester Way</u> <u>Woodstock MD 21163</u> 57 Town 70 State 72 Zip 76		<b>B 3</b> <b>LOCATION OF WELL</b> <u>Howard</u> 8 COUNTY 21 <u>GTWS Waverly Woods S-6</u> 23 SUBDIVISION 42 SECTION 44 46 LOT 48 50 <u>Woodstock</u> 52 NEAREST TOWN 71	
<b>DRILLER INFORMATION</b> <u>C John Hess W 553</u> Driller's Name 76 License No. 81 <u>Allied Environmental Services</u> Firm Name <u>10 Bay Rd Annapolis Junction MD 20701</u> Address <u>C John Hess 07/01/15</u> Signature Date		<b>B 4</b> <b>SOURCES OF DRILLING WATER</b> 1. <u>Public</u> 2. 3. <b>ON WHICH SIDE OF ROAD</b> (CIRCLE APPROPRIATE BOX) NORTH [ ] [ ] [ ] [ ] WEST [ ] [ ] EAST SOUTH 34 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39 TAX MAP: <u>0016</u> BLK: <u>0005</u> PARCEL <u>0432</u>	
<b>B 2</b> <b>WELL INFORMATION</b> 1 2 APPROX. PUMPING RATE (GAL. PER MIN.) 8 12 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20		<b>USE FOR WATER</b> (CIRCLE APPROPRIATE BOX) <input type="checkbox"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input checked="" type="checkbox"/> INDUSTRIAL, COMMERCIAL, DEWATERING <input type="checkbox"/> PUBLIC WATER SUPPLY WELL <input type="checkbox"/> TEST, OBSERVATION, MONITORING <input type="checkbox"/> OPEN LOOP GEOTHERMAL <input checked="" type="checkbox"/> CLOSED LOOP GEOTHERMAL <u>3 loops</u>	
APPROXIMATE DEPTH OF WELL <u>488</u> FEET 24 28 APPROXIMATE DIAMETER OF WELL <u>6</u> INCH 24 28		<b>NOT TO BE FILLED IN BY DRILLER</b> <b>HEALTH DEPARTMENT APPROVAL</b> <u>Howard</u> <u>13</u> COUNTY NAME COUNTY NO. STATE SIGNATURE INSERT S → 41 DATE ISSUED <u>07/16/2015</u> <u>RRT</u> <u>7/16/16</u> 43 MM DD YY 48 CO SIGNATURE EXP. DATE	
<b>METHOD OF DRILLING</b> (circle one) BORED (or Augered) JETTED Jetted & DRIVEN 39 <u>AIR-ROTary</u> AIR-PERCussion ROTARY (Hydraulic Rotary) 37 <u>CABLE</u> REVERSE-ROTary DRIVE-POINT other		<b>PROPOSED LOCATION OF WELL ON LOT</b> SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL ① 12' 23' ② 27' 38' ③ 23' 41' House electric B A Driveway Sewer N ① ② ③	
<b>REPLACEMENT OR DEEPEMED WELLS</b> (CIRCLE APPROPRIATE BOX) <input checked="" type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED 39 <input checked="" type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS <input type="checkbox"/> 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 <u>G</u> PERMIT No. <u>HO - 15 - 0103</u> 70 71 72 73 74 75 76 77 78 79	
<b>SPECIAL CONDITIONS</b> NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED <u>Wells must be grouted from bottom to top.</u>			

C 10035

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.

COUNTY  
NUMBER

ST/CO USE ONLY  
DATE Received  
MM DD YY  
8 13

DATE WELL COMPLETED  
MM DD YY  
7 23 15

Depth of Well  
22 490 26  
(TO NEAREST FOOT)

PERMIT NO.  
FROM "PERMIT TO DRILL WELL"  
HO - 15 - 0103  
28 29 30 31 32 33 34 35 36 37

OWNER  
WELL SITE ADDRESS  
SUBDIVISION

last name first name  
Tiles Daniel Jennifer  
10533 Chester Way  
TOWN Woodstock MD  
SECTION LOT

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	
TOP Soil	0	3	
Brown Sand/clay	3	47	
Hard Bm Soil + Rock	47	100	
VOID @ 100'			
Hard Bm Rock	100	129	
Gray Rock	129	490	

GROUTING RECORD  
WELL HAS BEEN GROUTED  
(Circle Appropriate Box)  
yes no  
Y N  
44 44

TYPE OF GROUTING MATERIAL (Circle one)  
CEMENT CM BENTONITE CLAY BC  
NO. OF BAGS 40 NO. OF POUNDS 2000  
GALLONS OF WATER 1000  
DEPTH OF GROUT SEAL (to nearest foot)  
from 48 TOP 52 54 BOTTOM 58 ft.  
(enter 0 if from surface)

CASING RECORD  
casing types insert appropriate code below  
ST CO  
STEEL CONCRETE  
PL OT  
PLASTIC 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)  
EACH CASING diameter inch depth (feet) from to

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

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

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. M 4D 553  
DRILLERS SIGNATURE  
(MUST MATCH SIGNATURE ON APPLICATION)  
LIC. NO. D 144  
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

C 2  
1 2

DEPTH (nearest ft.)  
1 8 9 11 15 17 21  
2 23 24 26 30 32 36  
3 38 39 41 45 47 51  
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

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 } LAND SURFACE (nearest foot)  
- below }  
49 50 51  
LATITUDE 39.31166  
LONGITUDE 76.87860  
(DEFAULT COORD. WGS 84)  
NOTES:  
Driller way  
39.31169  
76.87861  
39.1166  
76.87862

## FILE INQUIRY NOTES

DATE	RESULTS OF REVIEW FOR FILE
7/17/15	Drilling bore #3 first. Silt fence up. Go' down at site visit. Pulling
	out rods to clean out clogged bit. (SC)

RECEIVED

JUL 16 2015

HOWARD COUNTY HEALTH DEPT.  
COMMUNITY HYGIENE PROGRAM

A = Corner Garage  
B = Corner Garage

Revised  
7/16/15

RECEIVED

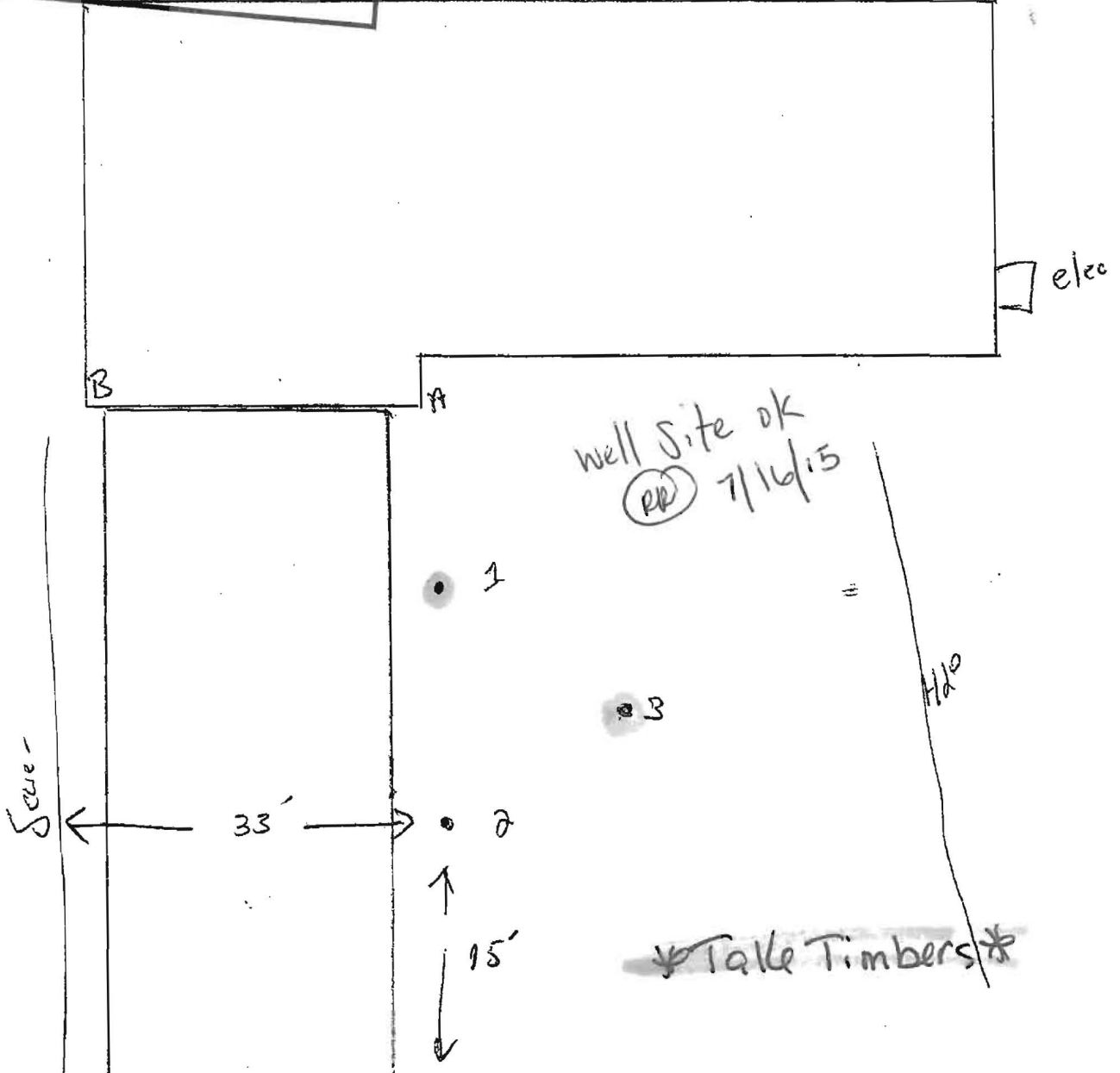
JUL 16 2015

HOWARD COUNTY HEALTH DEPT.  
COMMUNITY HYGIENE PROGRAM

① A 12  
B 23

② A 27  
B 38

③ A 23  
B 41





**Allied Well Drilling**  
P.O. Box 129  
Annapolis Junction, MD 20701  
Office #: 301-776-8370  
Fax #: 301-776-8374

Date: 07/13/2015

**County Health Department.**

Subject: Variance Letter

I, David Tullis  
10533 Chester Way Woodstock am aware, that the Well to be drilled on my property at  
Does not meet County set back requirements,  
due to the limited space available. I hereby authorize Allied Environmental Services, Inc., permission to  
obtain the necessary variances which are required, to obtain a proper Well Permit.

*One borehole is 13' from building foundation*

Signed: *[Signature]*

Special Conditions or Comments:

*Boreholes are 33' off of sewer line*

**RECEIVED**

JUL 16 2015

HOWARD COUNTY HEALTH DEPT.  
COMMUNITY HYGIENE PROGRAM

## Rappaport, Ryan

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**From:** William Guizzardi [wguizzardi@alliedwells.com]  
**Sent:** Tuesday, July 14, 2015 8:08 AM  
**To:** Rappaport, Ryan  
**Subject:** Chester Way

Ryan,

Per our previous phone conversation regarding the geothermal permit for 10533 Chester Way in Woodstock the sewer clean out is constructed of PVC.

A variance letter signed by the homeowner stating they are aware the minimum setbacks are not met.

Please advise if additional information is needed as we are trying to keep the crews working. Please notify our office

Sincerely

--

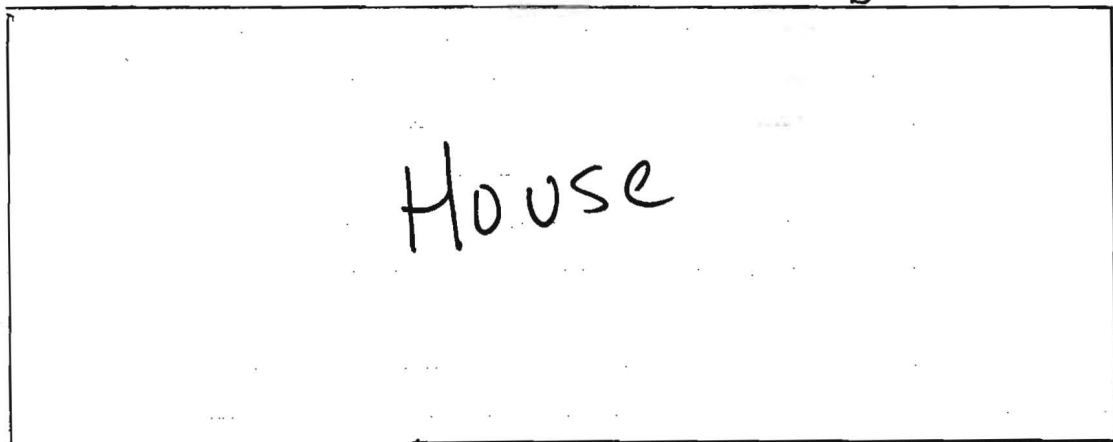
Bill Guizzardi  
Project Manager  
Allied Well Drilling  
301-776-8370 (p)  
301-776-8374 (f)

A = Corner Garage  
B = Corner Garage

① A 12  
B 23

② A 27  
B 38

③ A 23  
B 41



B

A

Driveway

Sewer

Hdlo

1

3

2



15'



## **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  $2.5 \times 10^{-8}$  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.



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

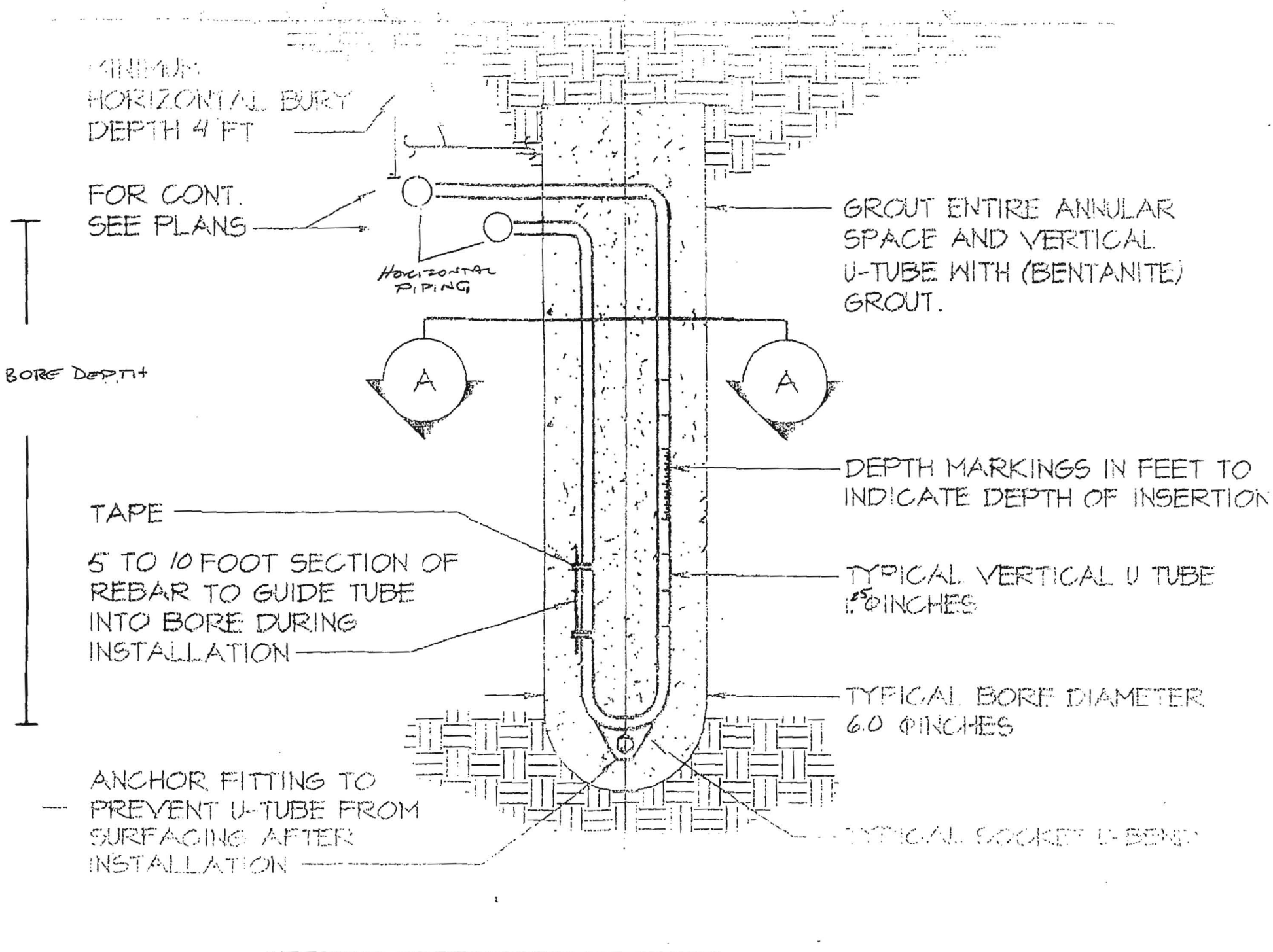
DEPTH MARKINGS IN FEET TO  
INDICATE DEPTH OF INSERTION

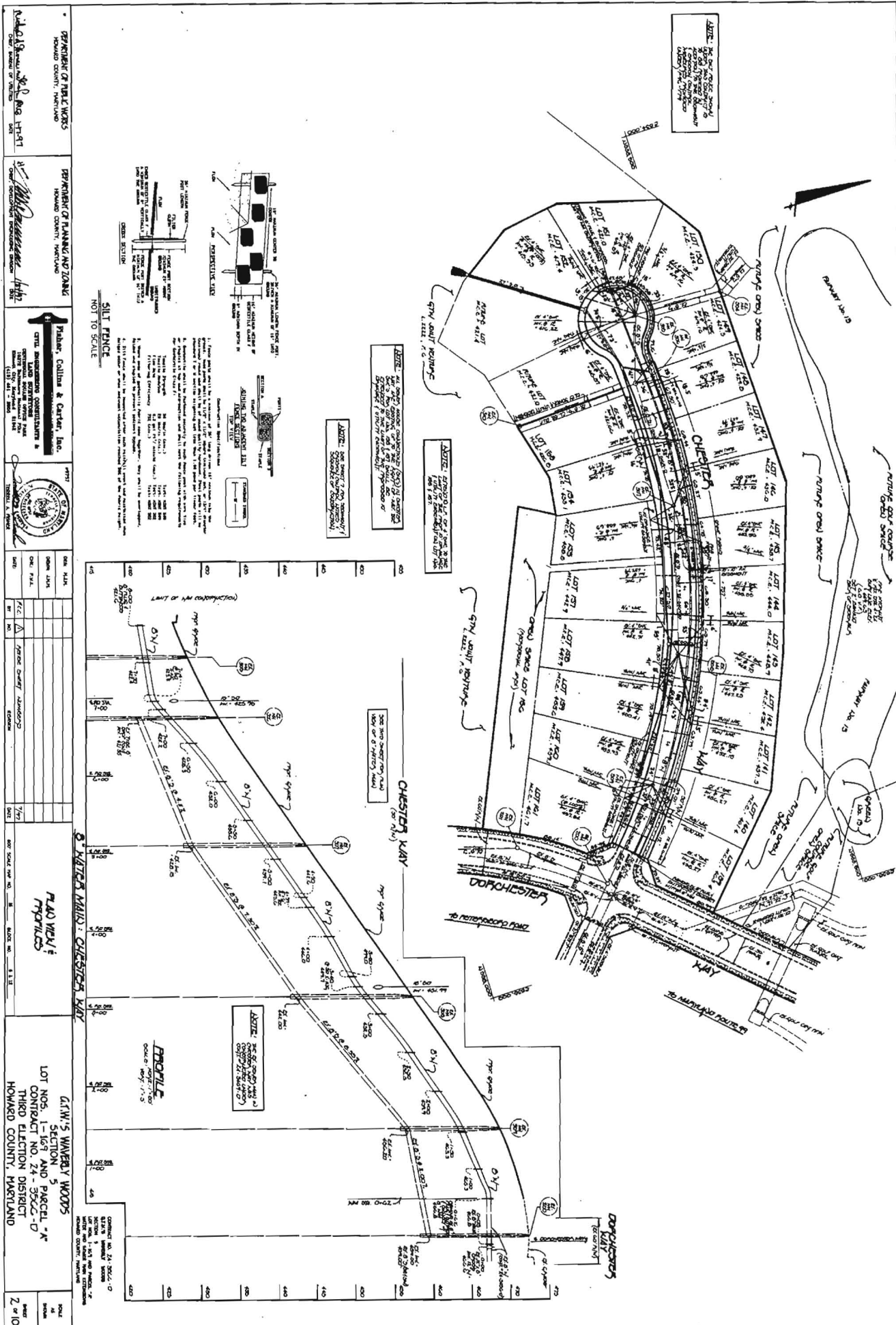
TYPICAL VERTICAL U TUBE  
1.5 INCHES

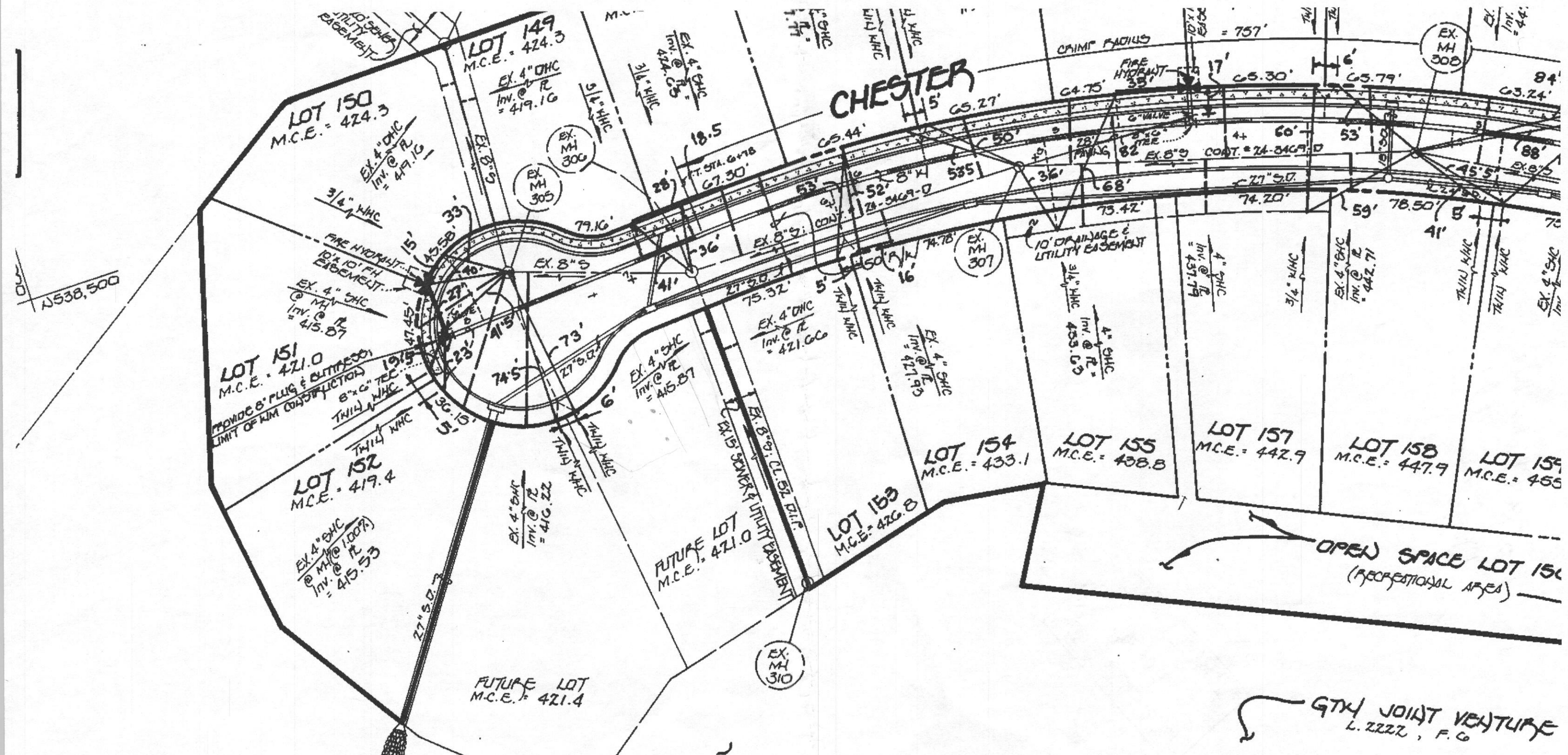
TYPICAL BORE DIAMETER  
6.0 INCHES

ANCHOR FITTING TO  
PREVENT U-TUBE FROM  
SURFACING AFTER  
INSTALLATION

TYPICAL SOCKET U-BEND









# HOWARD COUNTY HEALTH DEPARTMENT

56511

DATE  
7/6/15

015

Received  
From

Allied Environmental

PHONE #

801 716-8370

☐ CASH

☒ CHECK

NO.

11810

For

Well Permit - 10533  
Chester Way

One hundred sixty x

Dollars

\$

160.00

Received By

J Kemp





# HOWARD COUNTY HEALTH DEPARTMENT

56511

DATE  
7/6/15

Received  
From

Allied Environmental

PHONE #

OS  
501 714-8310

For

Well Permit- 10533  
Chester Way

☐ CASH

☒ CHECK

NO.

11810

One hundred sixty x

Dollars

\$

160.00

Received By

J Kemp