

B 1	79570	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL	STATE PERMIT NUMBER <u>40-20-0178</u> <small>fill in this form completely</small>
			571524	<small>please type</small>

OWNER INFORMATION

Date Received (APA) 04/20/22

8 MM DD YY 13

15 Last Name BGE Owner First Name 34

36 Street or RFD Po Box 1475 55

57 Town Balt 70 State MD 72 Zip 21203 76

LOCATION OF WELL

8 COUNTY Howard 21

23 SUBDIVISION Chestnut Hill Substation 42

SECTION 44 46 LOT Box # 3 48 50

52 NEAREST TOWN Ellicott City 71

DRILLER INFORMATION

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

Firm Name Barlow Well Drilling

Address 522 UNDERWOOD Lane 2104

Signature [Signature] Date 4/20/2022

SOURCES OF DRILLING WATER

1. Well

11 STREET ADDRESS Baltimore National Pk 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

NORTH
 WEST
 EAST
 SOUTH

34 DISTANCE FROM ROAD 2400 37

ENTER FT OR MI FT 38 39

TAX MAP: BLK: PARCEL:

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 0

8 12

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 0

14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION

FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)

INDUSTRIAL, COMMERCIAL, DEWATERING Electric

PUBLIC WATER SUPPLY WELL Ground Well

TEST, OBSERVATION, MONITORING

OPEN LOOP GEOTHERMAL

CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

COUNTY NAME Howard COUNTY NO. (13)

STATE SIGNATURE [Signature] INSERT S 41

DATE ISSUED 5/17/22

43 MM DD YY 48 CO SIGNATURE [Signature] EXP. DATE 5/17/23

APPROXIMATE DEPTH OF WELL 150 FEET

24 28

APPROXIMATE DIAMETER OF WELL 6 INCH

NEAREST

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

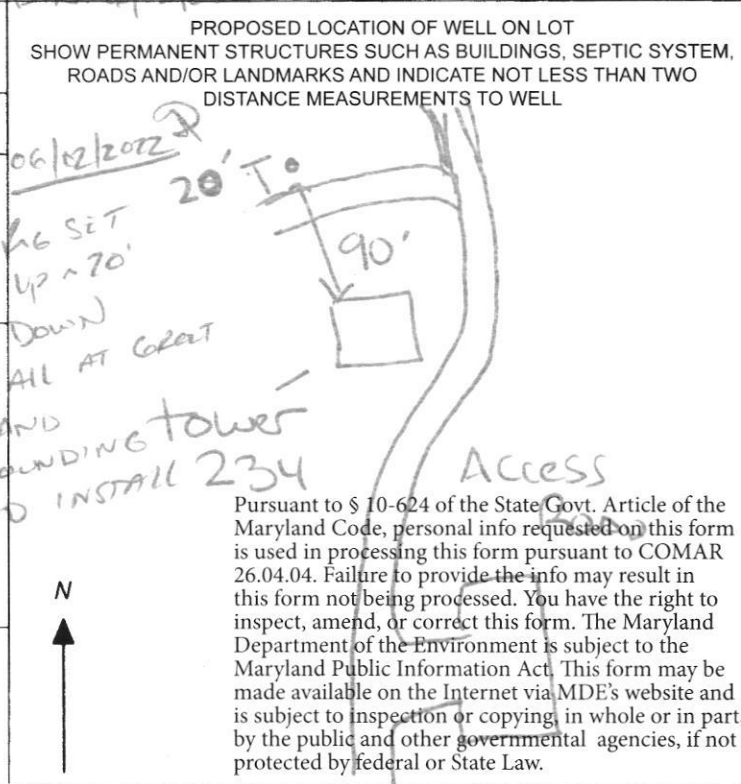
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE) 41 52

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

APPROP PERMIT NUMBER --- **G** ---

PERMIT No. 40-20-0178

70 71 72 73 74 75 76 77 78 79



SPECIAL CONDITIONS

NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS) FILL IN THIS FORM COMPLETELY PLEASE TYPE COUNTY NUMBER

ST/CO USE ONLY DATE Received DATE WELL COMPLETED Depth of Well PERMIT NO. FROM "PERMIT TO DRILL WELL" MM DD YY 2022 APPROVED 10/23/2022 150 26 Ho-20-0178

OWNER BGE WELL SITE ADDRESS last name Baltimore National P.R. first name TOWN Ellicott City SUBDIVISION Chestnut Hill Substation SECTION LOT Box 3

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	
Soil	0	6	
Brown shale	6	41	
Med Gray Rock	41	150	

Hole Filled with Bentonite after the insertion of a Ground Rod

GROUTING RECORD yes no
WELL HAS BEEN GROUTED (Circle Appropriate Box) Y N
TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC
NO. OF BAGS 45 46 12 NO. OF POUNDS 45 46 300
GALLONS OF WATER 300
DEPTH OF GROUT SEAL (to nearest foot) from 0 48 TOP 52 54 BOTTOM 58 ft. to 150 ft. (enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
 ST STEEL CO CONCRETE
 PL PLASTIC OT OTHER

MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch)! Total depth of main casing (nearest foot)
 ST 6 44

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

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

C 2 DEPTH (nearest ft.)

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 74 75 76
TELESCOPE CASING LOG INDICATOR OTHER DATA

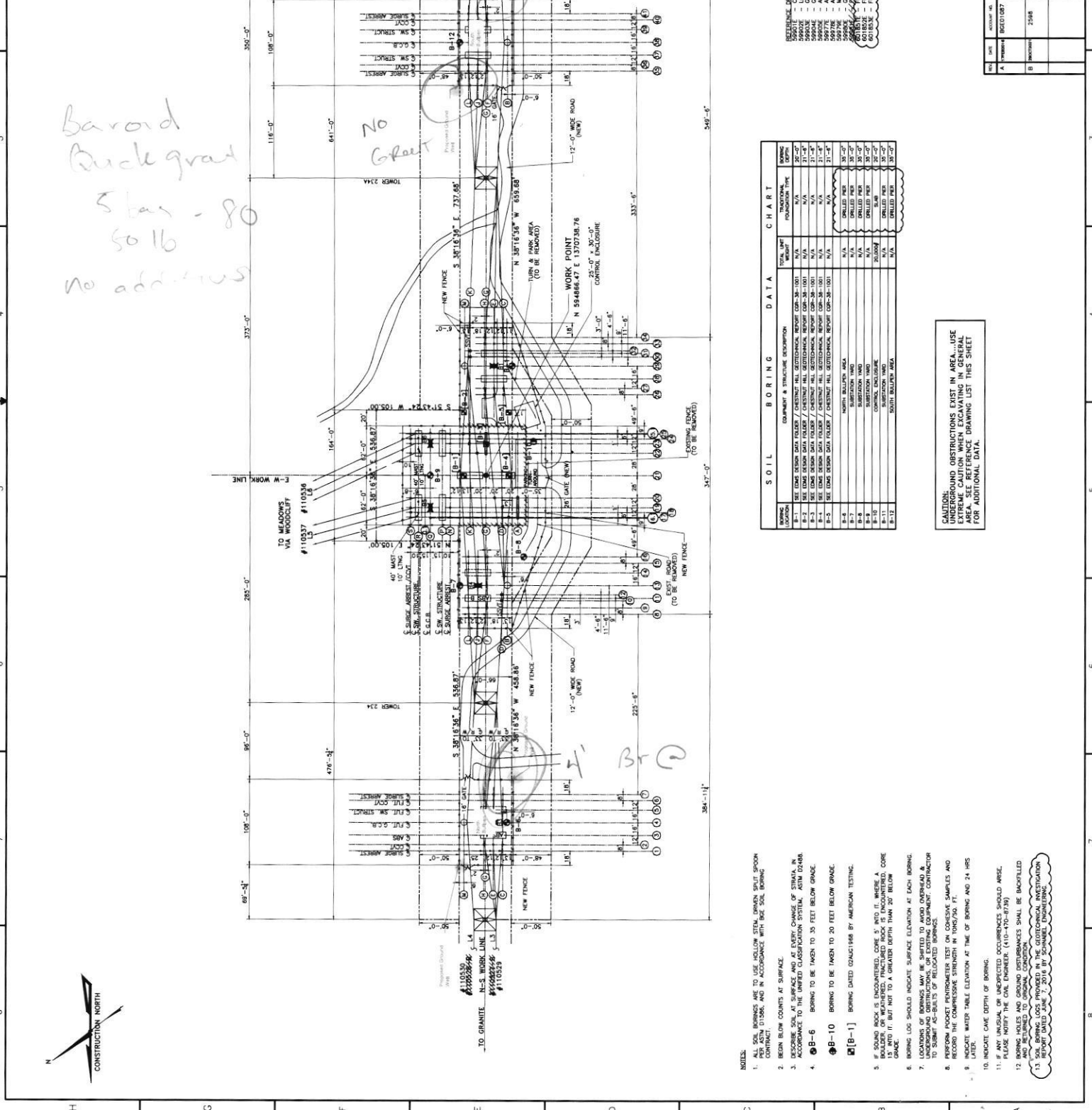
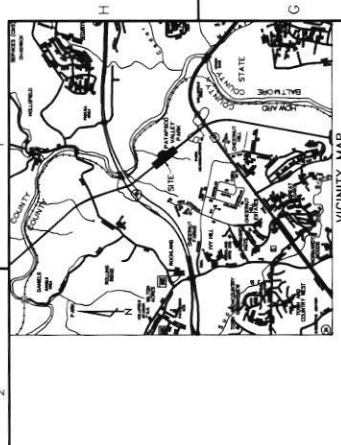
C 3 **PUMPING TEST**
HOURS PUMPED (nearest hour) 8 9
PUMPING RATE (gal. per min.) 11 15
METHOD USED TO MEASURE PUMPING RATE
WATER LEVEL (distance from land surface)
BEFORE PUMPING 17 20 ft.
WHEN PUMPING 22 25 ft.
TYPE OF PUMP USED (for test)
 A air P piston T turbine
 C centrifugal R rotary O other (describe below)
 J jet S submersible

PUMP INSTALLED
DRILLER INSTALLED PUMP (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

LATITUDE 39.300663
LONGITUDE 76.794305
(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.

NUMBER OF UNSUCCESSFUL WELLS: 0
WELL HYDROFRACTURED 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 D 355
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)
LIC. NO. D 113
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)



- REFERENCE DRAWINGS:**
- ONE LINE WORKING DRAWING
 - LOCATION PLAN AND ARRANGEMENT OF OVERHEAD LINES
 - GROUND WIRE SYSTEM CABLE PLAN AND LIGHTING
 - ARRANGEMENT OF EQUIPMENT PLAN AND SECTIONS
 - ARRANGEMENT OF EQUIPMENT SECTIONS
 - GROUND WIRE SYSTEM CABLE PLAN AND LIGHTING
 - FOUNDATION LOCATION PLAN - NORTH BULFIN
 - FOUNDATION LOCATION PLAN - SOUTH BULFIN

SOIL BORING DATA		CHART	
BORING LOCATION	EQUIPMENT & STRUCTURE DESCRIPTION	TOTAL DEPT. FEET	FOUNDATION TYPE
B-1	SEE TIME DESIGN DATA FOLDER / CHESTNUT HILL GEOTECHNICAL REPORT (COP-28-100)	N/A	N/A
B-2	SEE TIME DESIGN DATA FOLDER / CHESTNUT HILL GEOTECHNICAL REPORT (COP-28-100)	N/A	N/A
B-3	SEE TIME DESIGN DATA FOLDER / CHESTNUT HILL GEOTECHNICAL REPORT (COP-28-100)	N/A	N/A
B-4	SEE TIME DESIGN DATA FOLDER / CHESTNUT HILL GEOTECHNICAL REPORT (COP-28-100)	N/A	N/A
B-5	SEE TIME DESIGN DATA FOLDER / CHESTNUT HILL GEOTECHNICAL REPORT (COP-28-100)	N/A	N/A
B-6	SEE TIME DESIGN DATA FOLDER / CHESTNUT HILL GEOTECHNICAL REPORT (COP-28-100)	N/A	N/A
B-7	SEE TIME DESIGN DATA FOLDER / CHESTNUT HILL GEOTECHNICAL REPORT (COP-28-100)	N/A	N/A
B-8	SEE TIME DESIGN DATA FOLDER / CHESTNUT HILL GEOTECHNICAL REPORT (COP-28-100)	N/A	N/A
B-9	SEE TIME DESIGN DATA FOLDER / CHESTNUT HILL GEOTECHNICAL REPORT (COP-28-100)	N/A	N/A
B-10	SEE TIME DESIGN DATA FOLDER / CHESTNUT HILL GEOTECHNICAL REPORT (COP-28-100)	N/A	N/A
B-11	SEE TIME DESIGN DATA FOLDER / CHESTNUT HILL GEOTECHNICAL REPORT (COP-28-100)	N/A	N/A
B-12	SEE TIME DESIGN DATA FOLDER / CHESTNUT HILL GEOTECHNICAL REPORT (COP-28-100)	N/A	N/A

CAUTION: OBSTRUCTIONS EXIST IN AREA. USE EXTREME CAUTION WHEN EXCAVATING IN GENERAL AREA. SEE REFERENCE DRAWING LIST THIS SHEET FOR ADDITIONAL DATA.

- NOTES:**
- ALL SOIL BORINGS ARE TO USE HOLLOW STEM, DRIVEN SHUT SPOON CONTRACT, AND IN ACCORDANCE WITH BSE SIZE BORING CONTRACT.
 - BEIGN BLOW COUNTS AT SURFACE.
 - RECORDE SOIL AT SURFACE AND AT EVERY CHANGE OF STRATA IN ACCORDANCE TO THE UNIFIED CLASSIFICATION SYSTEM, ASTM D2484.
 - BORING TO BE TAKEN TO 35 FEET BELOW GRADE.
 - BORING TO BE TAKEN TO 20 FEET BELOW GRADE.
 - BORING DATED 02/06/1988 BY AMERICAN TESTING.
 - IF SOILS ARE ENCOUNTERED CORRECTION INTO IT, WHERE APPROPRIATE, TO BE MADE TO A GREATER DEPTH THAN 20' BELOW GRADE.
 - BORING LOGS SHOULD INDICATE SURFACE ELEVATION AT EACH BORING.
 - LOCATIONS OF BORINGS MAY BE SHIFTED TO AVOID OVERHEAD LINES AND OBSTRUCTIONS. CONTRACTOR TO SUBMIT AS-BUILTS OF RELOCATED BORINGS.
 - PERFORM POCKET PENETROMETER TEST ON COHESIVE SAMPLES AND RECORD THE COMPRESSIVE STRENGTH IN TONS/SQ. FT.
 - INDICATE WATER TABLE ELEVATION AT TIME OF BORING AND 24 HRS AFTER.
 - INDICATE DEPTH OF BORING.
 - IF SOILS ARE ENCOUNTERED CORRECTION INTO IT, WHERE APPROPRIATE, TO BE MADE TO A GREATER DEPTH THAN 20' BELOW GRADE.
 - BORING HOLES AND GROUND DISTURBANCES SHALL BE BACKFILLED AND RETURNED TO ORIGINAL CONDITION.
 - SOIL BORING LOGS PROVIDED IN THE GEOTECHNICAL INVESTIGATION REPORT DATED JUNE 7, 2016 BY JOHNNAL ENGINEERING.

AS-BUILT

FULL SET OF AS-BUILT DRAWINGS (WITH OR WITHOUT CHANGES) CHANGES REQUIRED (YES / NO / I.C.)

NAME (PRINT) / DATE: _____ / _____

COMPANY: _____

MANAGEMENT MODEL DOCUMENT: _____

MAN-02-1001 FOR COMPLIANCE: _____

NO.	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	DATE
A	1/18/2017	0001027	REVISION TO NOTES AND DESIGNS	[Signature]	1/18/2017
B	1/18/2017	2168	ISSUE FOR CONSTRUCTION	[Signature]	1/18/2017

SOIL BORING LOCATION PLAN

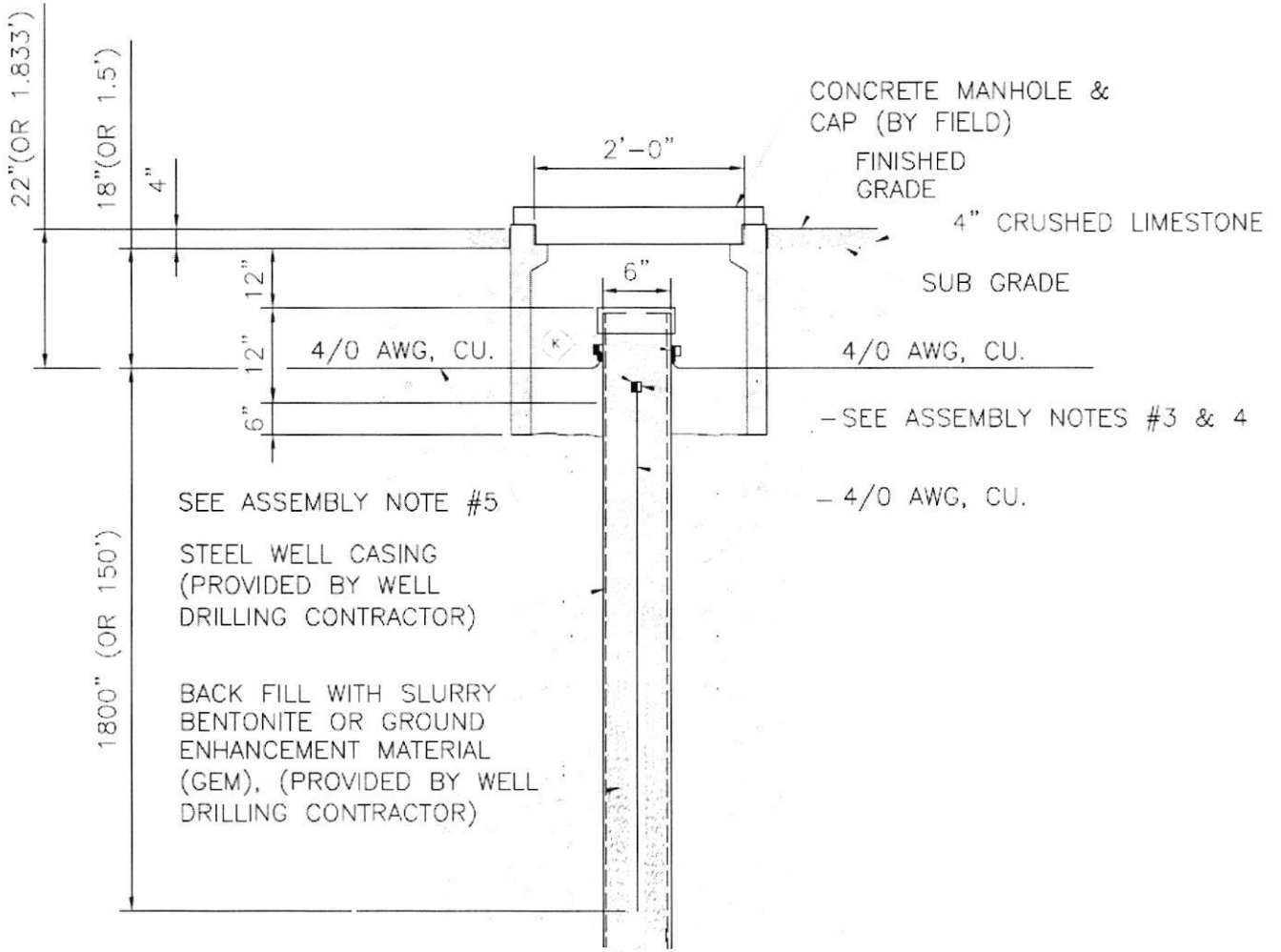
118V OUTDOOR SWING TOWER

CHESTNUT HILL

ELECTRIC SUBSTATION ENGINEERING

DATE: 1/18/2017

NO. 58000E B



GENERAL NOTES