

C1 46116

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

COUNTY NUMBER

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED MM DD YY

Depth of Well 22 480 26 (TO NEAREST FOOT)

OK 8/26/16 SC

PERMIT NO. FROM "PERMIT TO DRILL WELL" Ho - 15 - 0281

OWNER Dong Xiaoyu WELL SITE ADDRESS 4070 Roxmill Ct TOWN Glennwood SUBDIVISION SECTION LOT 19

WELL LOG Table with columns: DESCRIPTION (Use additional sheets if needed), FEET (FROM, TO), check if water bearing. Includes handwritten entries: Topsoil silt, Sandy gravel, Boulder gneiss.

GROUTING RECORD Form: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL (CEMENT CM, BENTONITE CLAY BC), NO. OF BAGS 32, NO. OF POUNDS 1600, GALLONS OF WATER 608, DEPTH OF GROUT SEAL 0 to 480 ft.

CASING RECORD Form: casing types insert appropriate code below (ST STEEL, CO CONCRETE, PL PLASTIC, OT OTHER), MAIN CASING TYPE PL, Nominal diameter 6, Total depth 32.

OTHER CASING (if used) Form: diameter inch, depth (feet) from to.

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

DEPTH (nearest ft.) Form: 1 2 HO 30 480, 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 77 78 79 80

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

PUMPING TEST Form: HOURS PUMPED 8 9, PUMPING RATE 11 15, METHOD USED TO MEASURE PUMPING RATE, WATER LEVEL (distance from land surface) BEFORE PUMPING 17 20, WHEN PUMPING 22 25, TYPE OF PUMP USED (for test) A air, P piston, T turbine, C centrifugal, R rotary, O other, J jet, S submersible.

PUMP INSTALLED Form: DRILLER INSTALLED PUMP YES NO, IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS, TYPE OF PUMP INSTALLED, 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 2 (nearest foot).

LATITUDE 39.260692 LONGITUDE 77.099146 (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 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 WD 572 1 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. 1 WR 0064 1

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

B 1
46383

SEQUENCE NO.
(MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please type

STATE PERMIT NUMBER
40-15-0281
fill in this form completely

OWNER INFORMATION
Date Received (APA) 07 19 16
8 MM DD YY 13
15 Last Name Dong Owner First Name Xiaoyu
36 4020 Roxmill Court Street or RFD 55
57 Glenwood Town 70 State 72 Zip 76

LOCATION OF WELL
B 3
8 COUNTY Prince Georges Howard 21
23 SUBDIVISION 0000 42
SECTION 44 46 LOT 19 48 50
52 NEAREST TOWN Glenwood 71

DRILLER INFORMATION
Driller's Name Samuel A. Connelly M WD 572 76 License No. 81
Firm Name Connelly & Associates
Address 260 Interstate Ct., Frederick, MD 21704
Signature Samuel A. Connelly Date 7/19/16

SOURCES OF DRILLING WATER
B 4
1. 4020 Roxmill Court 11 STREET ADDRESS 30
2. Private
3.
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH
WEST EAST
SOUTH
34 600 37
DISTANCE FROM ROAD ENTER FT OR MI 38 39
TAX MAP: 21 BLK: 14 PARCEL 201

WELL INFORMATION
B 2
1 2 APPROX. PUMPING RATE (GAL. PER MIN.) 8 12
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)
D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
22 I INDUSTRIAL, COMMERCIAL, DEWATERING
P PUBLIC WATER SUPPLY WELL
T TEST, OBSERVATION, MONITORING
O OPEN LOOP GEOTHERMAL
X CLOSED LOOP GEOTHERMAL

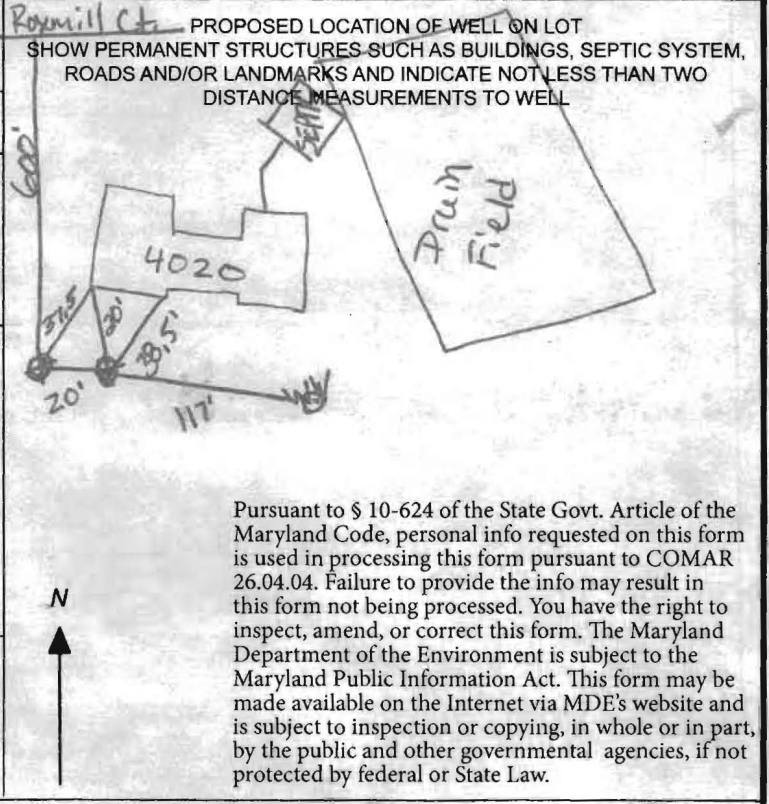
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
Howard 13 COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S 41
DATE ISSUED 7/22/16
43 MM DD YY 48 CO SIGNATURE Sam A. Connelly EXP. DATE 7/22/17

APPROXIMATE DEPTH OF WELL 480 24 28 FEET
APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST INCH

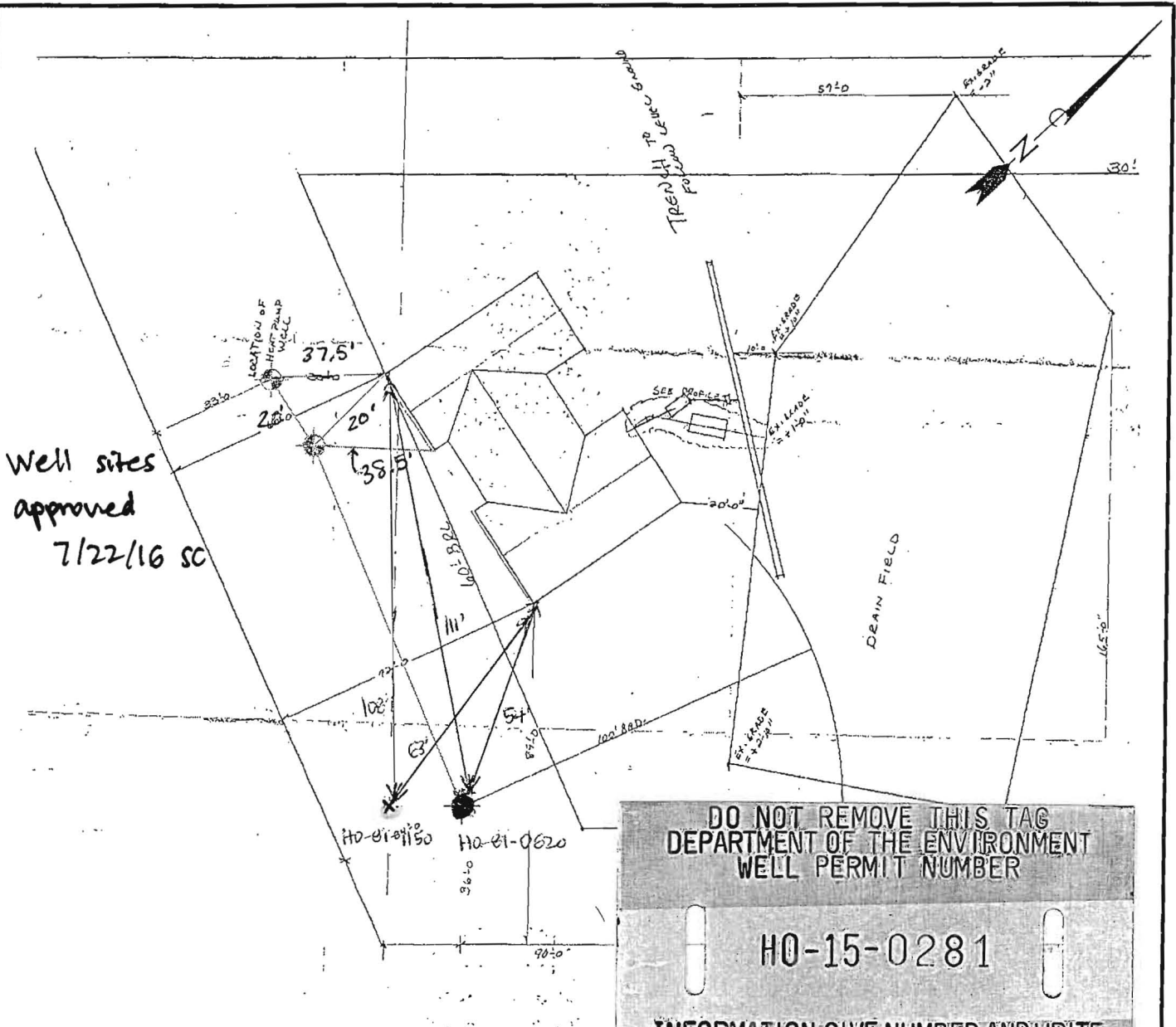
METHOD OF DRILLING (circle one)
BORED (or Augered) JETTED Jetted & DRIVEN
30 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)
37 CABLE REVERSE-ROTary DRIVE-POINT
other

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)
X THIS WELL WILL NOT REPLACE AN EXISTING WELL
Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
39 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 DEEPEMED 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. 40-15-0281
70 71 72 73 74 75 76 77 78 79



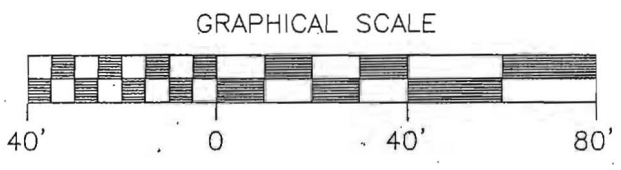
SPECIAL CONDITIONS
NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED
40-81-1150 must be sealed.
COUNTY



DO NOT REMOVE THIS TAG
 DEPARTMENT OF THE ENVIRONMENT
 WELL PERMIT NUMBER
 HO-15-0281
 INFORMATION-GIVE NUMBER AND WRITE
 1800 WASHINGTON BLVD
 BALTIMORE MARYLAND. 21230

L E G E N D

- EXISTING HEAT PUMP WELL LOCATION (TO BE DEEPEINED)
- PROPOSED GEOTHERMAL WELL LOCATION
- APPROXIMATE DOMESTIC WELL LOCATION (HO-81-0620)
- APPROXIMATE SANITARY WATER HOUSE CONNECTION



X Existing heat pump well TO BE SEALED (HO-81-1150)

F:\Geothermal\2016 Projects\Supreme Air\4020 Roxmill Court\Documents\Proposed Geothermal Well Location Plan.dwg



260 Interstate Court (301) 696-8820
 Frederick, Maryland 21704 (301) 696-0327 fax

DONG RESIDENCE
 4020 ROXMILL COURT, GLENWOOD, MARYLAND

PROPOSED GEOTHERMAL WELL LOCATION PLAN		Scale: AS SHOWN	Fig. 1
Date: JULY 2016	Drawn By: J.A.	Checked By: E.S.	Project No.: 00000

Collins, Sarah

From: Collins, Sarah
Sent: Monday, August 01, 2016 9:40 AM
To: 'Josh April'
Subject: RE: 4020 Roxmill Court

Hi Josh,

The homeowners may keep the heat pump well, HO-81-1150, as an irrigation well. A pump must be installed in the well and there can be no cross connection with the potable well. Let me know if you have any questions.

Thanks,
Sarah

From: Josh April [<mailto:josh@connellygeothermal.com>]
Sent: Friday, July 29, 2016 4:31 PM
To: Collins, Sarah
Subject: RE: 4020 Roxmill Court

No problem, thank you.

Josh

From: Collins, Sarah [<mailto:SCollins@howardcountymd.gov>]
Sent: Friday, July 29, 2016 3:55 PM
To: Josh April <josh@connellygeothermal.com>
Subject: RE: 4020 Roxmill Court

Hi Josh,

Sorry for the delay- I was out of the office yesterday. I'll look over the completion report for the heat pump well and get back to you next week.

Have a good weekend,
Sarah

From: Josh April [<mailto:josh@connellygeothermal.com>]
Sent: Wednesday, July 27, 2016 4:22 PM
To: Collins, Sarah
Subject: RE: 4020 Roxmill Court

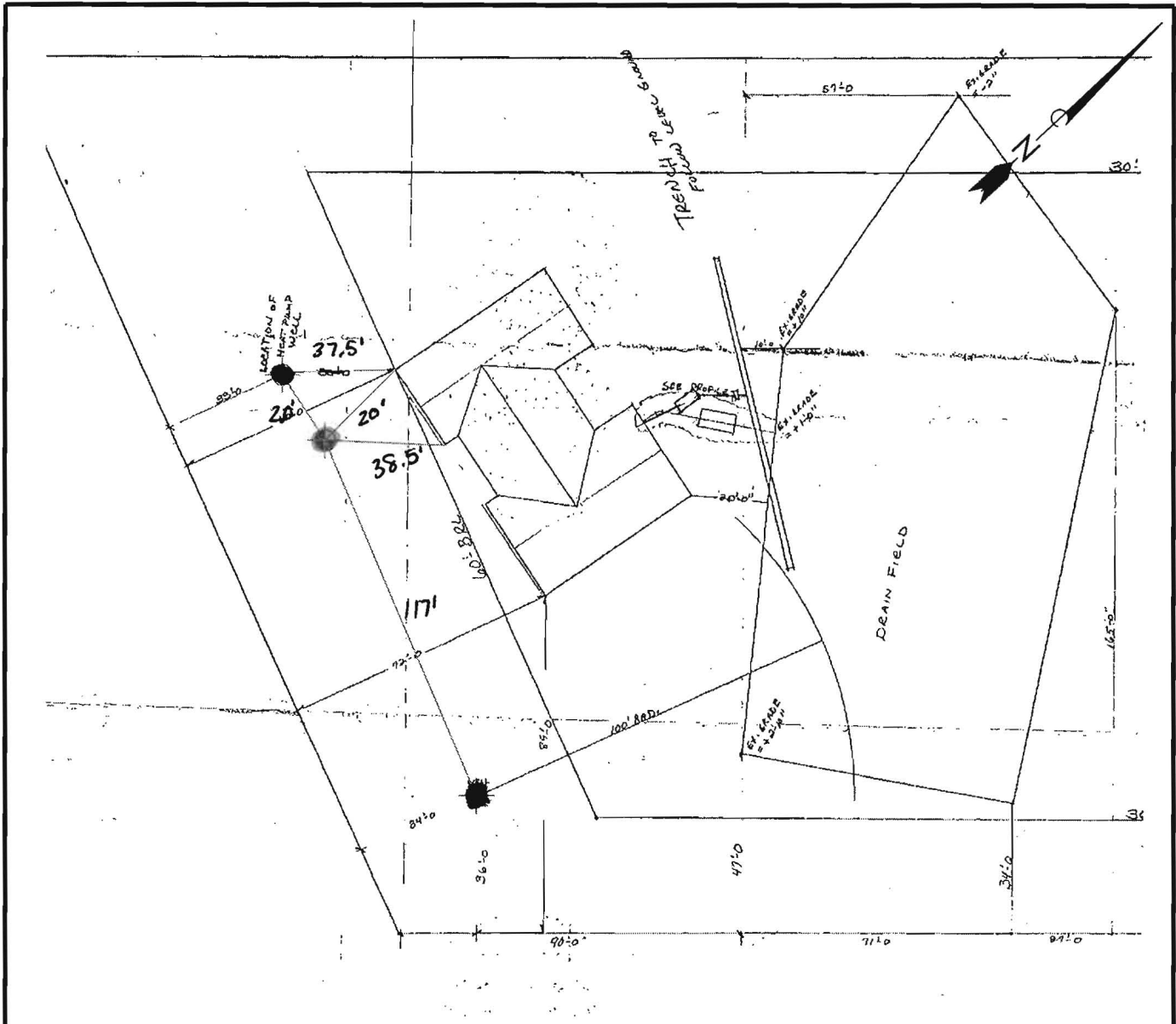
Hi Sarah,

If the home owner chooses to convert the current heat pump well (open loop) to an irrigation well, would there be any conditions before proceeding?





Thanks,

Josh

000



L E G E N D

-  EXISTING HEAT PUMP WELL LOCATION (TO BE DEEPEMED)
-  PROPOSED GEOTHERMAL WELL LOCATION
-  APPROXIMATE DOMESTIC WELL LOCATION
-  APPROXIMATE SANITARY WATER HOUSE CONNECTION

GRAPHICAL SCALE



F:\Geothermal\2016 Projects\Supreme Air\4020 Roxmill Court\Documents\Proposed Geothermal Well Location Plan.dwg



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DONG RESIDENCE
 4020 ROXMILL COURT, GLENWOOD, MARYLAND

PROPOSED GEOTHERMAL WELL
 LOCATION PLAN

Scale:
 AS SHOWN

Fig.

Date:
 JULY 2016

Drawn By:
 J.A.

Checked By:
 E.S.

Project No.:
 00000

1