

C1 04806

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.

COUNTY NUMBER

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

8 13

15 20

22 240 26 (TO NEAREST FOOT)

OK 4/19/15 SC 40-14-0093

OWNER Mixon Toronney C STREET OR RFD 11827 Chapel Woods Ct TOWN Clarksville SUBDIVISION 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 FROM TO

check if water bearing

fill dirt 0 2 limestone/broken rock 2 56 Gray rock 56 290

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) Y N

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM BENTONITE CLAY BC

NO. OF BAGS 22 NO. OF POUNDS 1100

GALLONS OF WATER 550

DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 240 ft.

CASING RECORD

ST CO PL OT STEEL CONCRETE PLASTIC OTHER

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

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

SCREEN RECORD

ST BR HO PL OT STEEL BRASS OPEN HOLE PLASTIC OTHER

DEPTH (nearest ft.)

Table with 3 columns (1, 2, 3) and 4 rows (E, A, C, H, S, R, E, N) for well depth and slot size.

DIAMETER OF SCREEN (NEAREST INCH)

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

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 J jet S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or 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)

LAND SURFACE (nearest foot)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURES AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

Diagram showing well location on lot with distances 39.22997, 70.95169, 39.22996, 76.93167.

NUMBER OF UNSUCCESSFUL WELLS:

WELL HYDROFRACTURED Y N

CIRCLE APPROPRIATE LETTER 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. MW D 553

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. JS D 144

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

B 1 37378
1 2 3 6

SEQUENCE NO.
(MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
554605C please type

STATE PERMIT NUMBER

Ho-14-0093
70 fill in this form completely 79

Date Received (APA)
09/02/14

OWNER INFORMATION

8 MM DD YY 13
Mixon Toronney C
15 Last Name Owner First Name 34
11829 Chapel Woods Court
36 Clarksville MD 21029 55
57 Town 70 State 72 Zip 76

B 3

LOCATION OF WELL

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

DRILLER INFORMATION

C. John Hess M W D 553
Driller's Name 76 License No. 81
Allied Environmental Services
Firm Name
P.O. Box 129 Annapolis Junction MD
Address
C. John Hess 09/28/14 2014
Signature Date

B 4

SOURCES OF DRILLING WATER

1. Public
2.
3.

11827 Chapel Woods Ct
11 STREET ADDRESS 30
ON WHICH SIDE OF ROAD
(CIRCLE APPROPRIATE BOX)
NORTH
WEST EAST
SOUTH
34 37
DISTANCE FROM ROAD
ENTER FT OR MI 38 39
TAX MAP: 0029 BLK: 0013 PARCEL: 0354

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 2 Loops

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL

Howard (13) A34816
COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S
DATE ISSUED 9/11/14
43 MM DD YY 48 CO SIGNATURE Kim M. Wolf 9/11/14 EXP. DATE

APPROXIMATE DEPTH OF WELL 240 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST

METHOD OF DRILLING (circle one)

- BORED (or Augered) AIR-ROTary
- JETTED AIR-PERCussion
- Jettted & DRIVEN ROTARY (Hydraulic Rotary)
- CABLE REVerse-ROTary
- Drive-POINT
- other

REPLACEMENT OR DEEPEMED WELLS
(CIRCLE APPROPRIATE BOX)

- THIS WELL WILL NOT REPLACE AN EXISTING WELL
- THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
- 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 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)

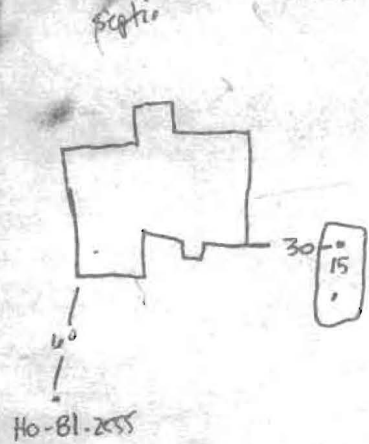
APPROX. PERMIT NUMBER G

PERMIT No. Ho-14-0093
70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS

NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED.
Grout holes bottom to top.

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





Load Short Form
Entire House
Supreme Air

Job: 125
 Date: Jun 06, 2014
 By: Supreme Air

M1400812

4401 Eastern ave. Bldg. 49A suite B, Baltimore, MD 21224 Phone: 410 788 1114 Fax: 410 522 1178 Email: alex@supremeairllc.com Web: www.supremeairllc.com

Project Information

For: Tony Mixon
 11827 Chapel Woods Court, Clarksville, MD 21029

Design Information

	Htg	Clg	Method	Infiltration
Outside db (°F)	17	91		Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	53	16	Fireplaces	0
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	44	35		

HEATING EQUIPMENT

Make WaterFurnace
 Trade ENVISION NZ SERIES DUAL CAPACI...
 Model NDZ038A1
 AHRI ref 1296152

Efficiency 4.88 COP
 Heating input 11.3 kW
 Heating output 38555 Btuh
 Temperature rise 59 °F
 Actual air flow 596 cfm
 Air flow factor 0.023 cfm/Btuh
 Static pressure 0 in H2O
 Space thermostat

COOLING EQUIPMENT

Make WaterFurnace
 Trade ENVISION NZ SERIES DUAL CAPACI...
 Model NDZ038A1
 Coil NAH036*
 AHRI ref 1296152

Efficiency 20.16 EER
 Sensible cooling 23897 Btuh
 Latent cooling 10242 Btuh
 Total cooling 34139 Btuh
 Actual air flow 596 cfm
 Air flow factor 0.045 cfm/Btuh
 Static pressure 0 in H2O
 Load sensible heat ratio 0.92

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Room3	1800	25682	13104	596	596
Entire House	1800	25682	13104	596	596
Other equip loads		0	0		
Equip. @ 0.96 RSM			12579		
Latent cooling			1131		
TOTALS	1800	25682	13710	596	596

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



Project Summary
Entire House
Supreme Air

Job: 125
 Date: Jun 06, 2014
 By: Supreme Air

4401 Eastern ave. Bldg. 49A suite B, Baltimore, MD 21224 Phone: 410 788 1114 Fax: 410 522 1178 Email: alex@supremeairllc.com Web: www.supremeairllc.com

Project Information

For: Tony Mixon
 11827 Chapel Woods Court, Clarksville, MD 21029

Notes:

Design Information

Weather: Washington National AP, DC, US

Winter Design Conditions

Outside db 17 °F
 Inside db 70 °F
 Design TD 53 °F

Summer Design Conditions

Outside db 91 °F
 Inside db 75 °F
 Design TD 16 °F
 Daily range M
 Relative humidity 50 %
 Moisture difference 35 gr/lb

Heating Summary

Structure 25682 Btuh
 Ducts 0 Btuh
 Central vent (0 cfm) 0 Btuh
 Humidification 0 Btuh
 Piping 0 Btuh
 Equipment load 25682 Btuh

Sensible Cooling Equipment Load Sizing

Structure 13104 Btuh
 Ducts 0 Btuh
 Central vent (0 cfm) 0 Btuh
 Blower 0 Btuh
 Use manufacturer's data n
 Rate/swing multiplier 0.96
 Equipment sensible load 12579 Btuh

Infiltration

Method Simplified
 Construction quality Average
 Fireplaces 0

	Heating	Cooling
Area (ft ²)	1800	1800
Volume (ft ³)	14400	14400
Air changes/hour	0.38	0.20
Equiv. AVF (cfm)	91	48

Latent Cooling Equipment Load Sizing

Structure 1131 Btuh
 Ducts 0 Btuh
 Central vent (0 cfm) 0 Btuh
 Equipment latent load 1131 Btuh
 Equipment total load 13710 Btuh
 Req. total capacity at 0.70 SHR 1.5 ton

Heating Equipment Summary

Make WaterFurnace
 Trade ENVISION NZ SERIES DUAL CAPACI...
 Model NDZ038A1
 AHRI ref 1296152

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 Heating output 38555 Btuh
 Temperature rise 59 °F
 Actual air flow 596 cfm
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 Static pressure 0 in H2O
 Space thermostat

Cooling Equipment Summary

Make WaterFurnace
 Trade ENVISION NZ SERIES DUAL CAPACI...
 Cond NDZ038A1
 Coil NAH036*
 AHRI ref 1296152

Efficiency 20.16 EER
 Sensible cooling 23897 Btuh
 Latent cooling 10242 Btuh
 Total cooling 34139 Btuh
 Actual air flow 596 cfm
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Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



Right-Suite® Universal 2013 13.0.12 RSU16744

...Ross Martin\Sold\Tony Mixon\Mixon Heat load.rup Calc = MJ8 Front Door faces: N

2014-Sep-24 13:31:44

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Right-J® Worksheet

Entire House

Supreme Air

Job: 125
 Date: Jun 06, 2014
 By: Supreme Air

4401 Eastern ave. Bldg. 49A suite B, Baltimore, MD 21224 Phone: 410 788 1114 Fax: 410 522 1178 Email: alex@supremeairllc.com Web: www.supremeairllc.com

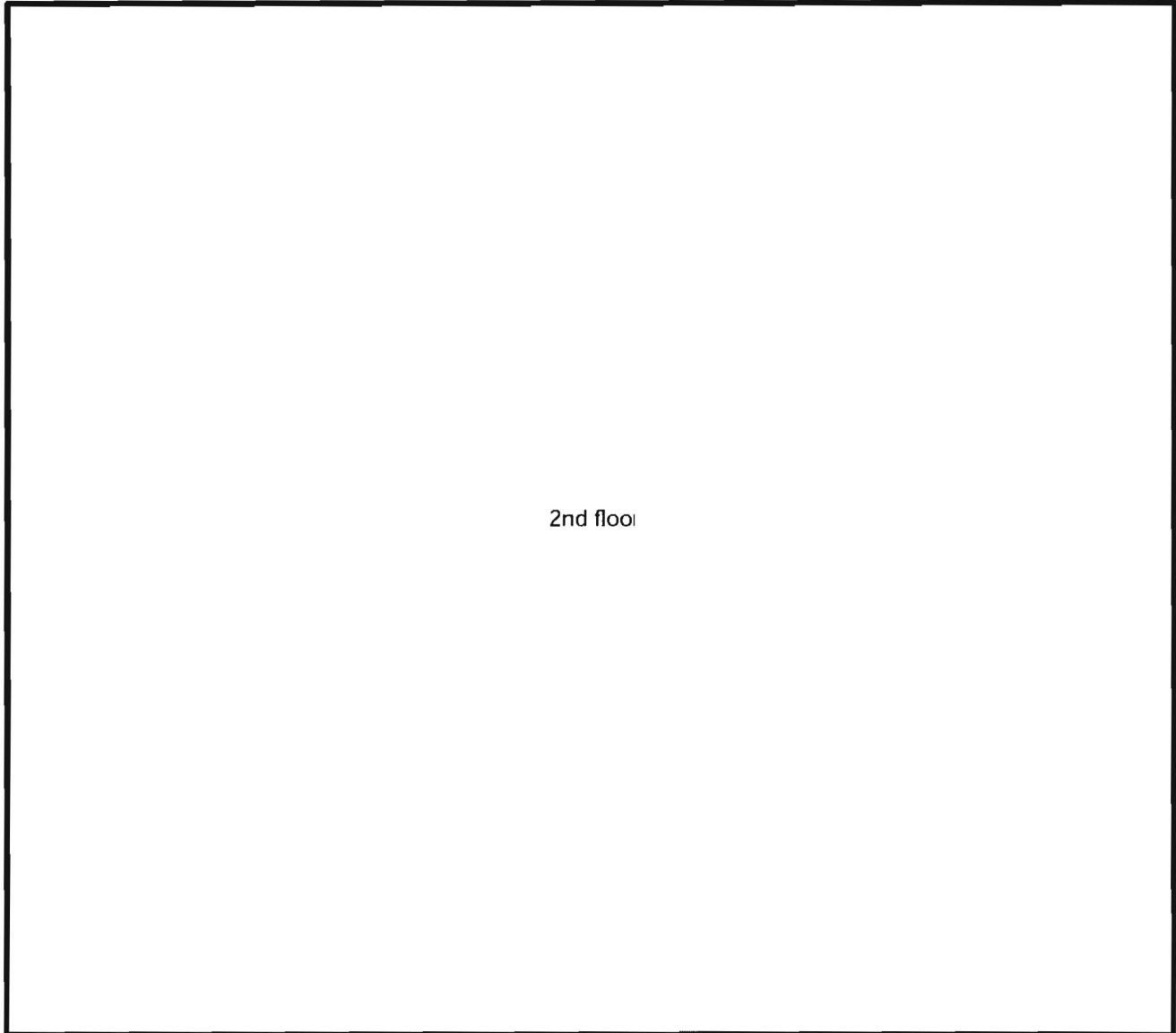
1 Room name		Entire House		Room3										
2 Exposed wall		170.0 ft		170.0 ft										
3 Room height		8.0 ft		8.0 ft										
4 Room dimensions				45.0 x 40.0 ft										
5 Room area		1800.0 ft²		1800.0 ft²										
6	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)	
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool
11	W	12A-0sw	0.240	n	12.72	6.84	360	336	4274	2298	360	336	4274	2298
	G	4A5-2ow	0.470	n	24.91	13.62	24	0	598	327	24	0	598	327
		12A-0sw	0.240	e	12.72	6.84	320	320	4070	2189	320	320	4070	2189
	W	12A-0sw	0.240	s	12.72	6.84	360	336	4274	2298	360	336	4274	2298
	G	4A5-2ow	0.470	s	24.91	19.46	24	0	598	467	24	0	598	467
		12A-0sw	0.240	w	12.72	6.84	320	320	4070	2189	320	320	4070	2189
C	16B-38ad	0.026	-	1.38	1.35	1800	1800	2480	2434	1800	1800	2480	2434	
6	c) AED excursion								57				57	
	Envelope loss/gain							20365	12259			20365	12259	
12	a) Infiltration							5317	845			5317	845	
	b) Room ventilation							0	0			0	0	
13	Internal gains:		Occupants @	230			0		0	0			0	
			Appliances/other						0				0	
	Subtotal (lines 6 to 13)							25682	13104			25682	13104	
	Less external load							0	0			0	0	
	Less transfer							0	0			0	0	
	Redistribution							0	0			0	0	
14	Subtotal							25682	13104			25682	13104	
15	Duct loads						0%	0%	0	0	-0%	0%	0	
	Total room load							25682	13104			25682	13104	
	Air required (cfm)							596	596			596	596	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.





basement



2nd floor

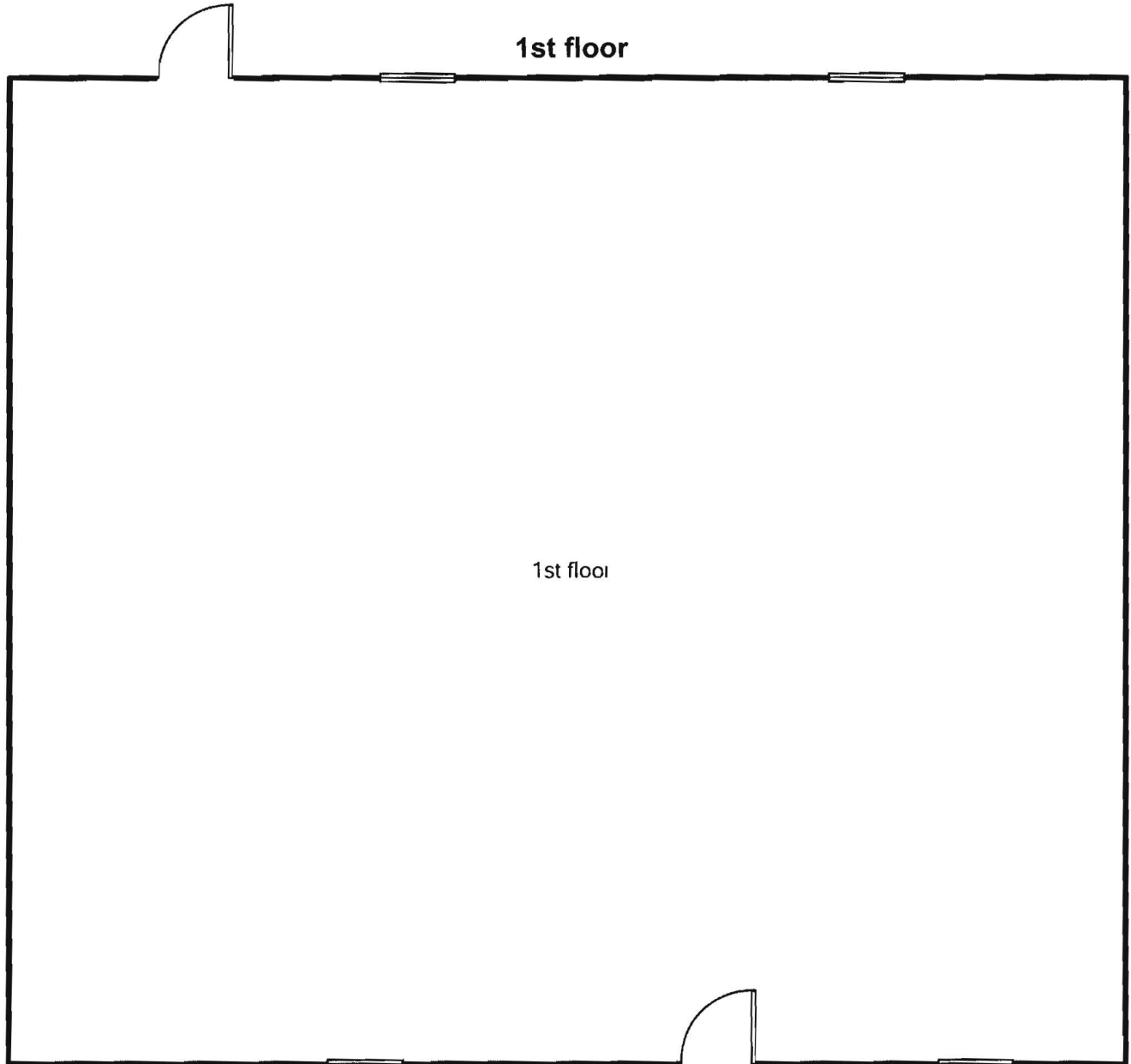
Job #: 125
Performed by Supreme Air for:
Tony Mixon
11827 Chapel Woods Court
Clarksville, MD 21029

Supreme Air
4401 Eastern ave. Bldg. 49A suite B
Baltimore, MD 21224
Phone: 410 788 1114 Fax: 410 522 1178
www.supremeairllc.com alex@supremeairllc.com

Scale: 1 : 75
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1st floor



1st floor

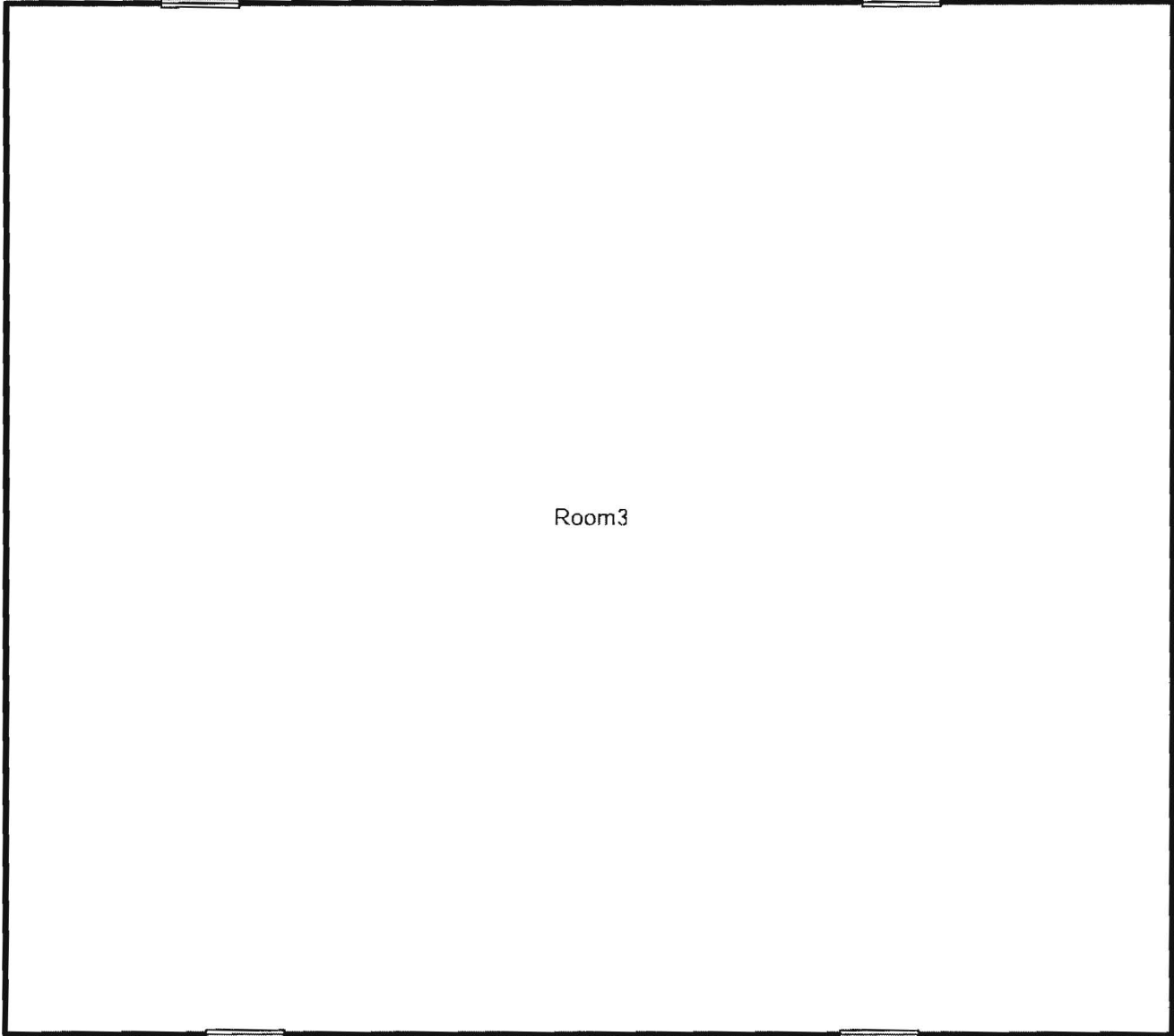
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Scale: 1 : 75
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2nd floor



Room3

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2014-Sep-24 13:32:10
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Rappaport, Ryan

From: DILP@howardcountymd.gov
Sent: Monday, October 13, 2014 9:26 AM
To: hscott@howardcountymd.gov; Bernard, Dana; Bricker, Robert; Williams, Jeffrey; Martin, Sharhonda; ILPadministrator
Subject: New On Line HVAC Permit Ready for Health Dept Review

This email is to inform you that HVAC Permit #M14000912 is ready for review. Please check your quick query and process accordingly.

11827 Chapel Woods Ct.

Denny Kougiaris
Supreme Air
cell (443) 324-7995

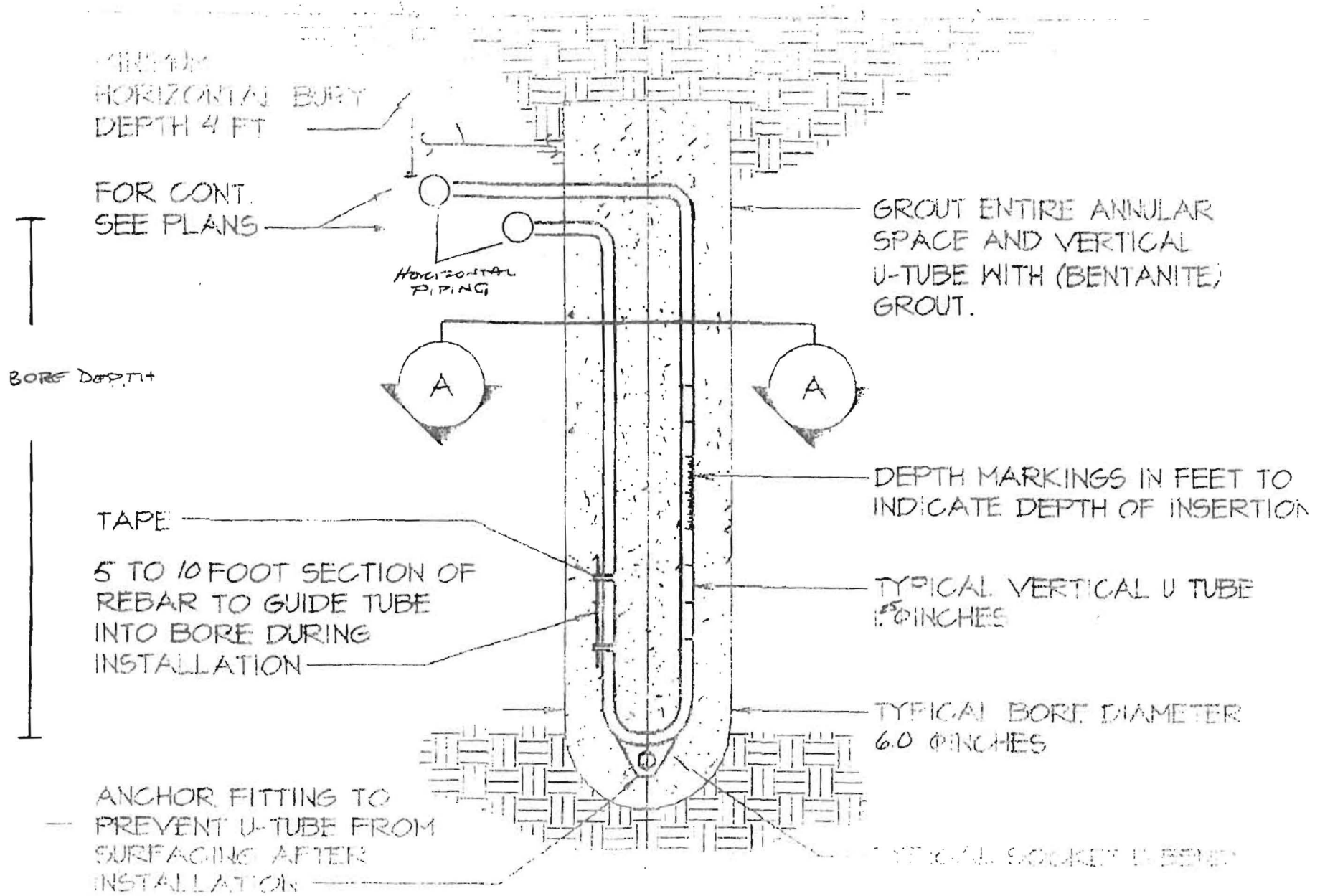
~~11827 Chapel Woods Ct.~~

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.

GRADE

EACH BORE HOLE (TYP.)



HORIZONTAL BURY
DEPTH 4 FT

FOR CONT.
SEE PLANS

HORIZONTAL
PIPING

GROUT ENTIRE ANNULAR
SPACE AND VERTICAL
U-TUBE WITH (BENTONITE)
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
15 INCHES

TYPICAL BORE DIAMETER
60 INCHES

ANCHOR FITTING TO
PREVENT U-TUBE FROM
SURFACING AFTER
INSTALLATION

TYPICAL SOCKET U-BEND

