

DEPARTMENT OF INSPECTIONS, LICENSES & PERMITS 3430 COURT HOUSE DRIVE ELLICOTT CITY, MD 21043 PERMITS (410) 313-2455 INSPECTIONS (410) 313-1850	HOWARD COUNTY RESIDENTIAL HEATING-VENTILATION-AIR CONDITIONING AND REFRIGERATION PERMIT APPLICATION	HVACR PERMIT # <u>M10000761</u> BUILDING PERMIT #
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BUILDING ADDRESS: SUITE/APT: <u>6894 HAVILAND MILL ROAD</u> <u>CLARKSVILLE, MD 21029</u> SUBDIVISION: CENSUS TRACT: SECTION: AREA: LOT: TAX MAP: PARCEL: BLOCK: ZONE: PROPERTY ID: MAP COORDINATES: <u>362822</u> <u>40-1-4</u> TYPE OF IMPROVEMENTS: REPL. USE: <u>RES</u>	OWNERS NAME: <u>EDWARD ORLANDO</u> ADDRESS: <u>6894 HAVILAND MILL ROAD</u> CITY: <u>CLARKSVILLE</u> STATE: <u>MD</u> ZIP CODE: <u>21029-1309</u> HOME PHONE: <u>410-564-4715</u> WORK PHONE:
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CHECK ONE	HOW MANY	COMPANY NAME: Ground Loop Heating & Air Cond., Inc.
SINGLE FAMILY DWELLING <input checked="" type="checkbox"/>	<u>2</u> ZONES	LICENSEE NAME: Michael E. Cullum
SINGLE FAMILY TOWNHOUSE <input type="checkbox"/>	___ ZONES	ADDRESS: 1701 Whiteford Road
MULTI-FAMILY / HOTEL/MOTEL <input type="checkbox"/>	___ ROOMS	CITY: Darlington
ASSISTED LIVING HOMES (16 OR FEWER RESIDENTS) <input type="checkbox"/>	___ ROOMS	STATE: MD ZIP CODE: 21034 PHONE: 410-836-1706 HVACR LICENSE NO: 6539

New Heating and Air Conditioning
 New Geo Thermal System
 Replacement Heating
 Replacement Air Conditioning
 Replacement Heating and Air Conditioning

Heating System Only
 Ductless Mini Splits
 Other Work (Describe):
 Thru The Wall Systems

Additions and Alterations
 Heating
 Air Conditioning
 Heating and Air Conditioning

****Replacement Geo Thermal Systems are not required; However, if a tax credit is being sought a permit is required****

Zones Permit Fee = # of Zones x \$40 = <u>80.00</u> Technology Fee (10% of Permit Fee) = <u>8.00</u> Plus Application Fee <u>\$50.00</u> Total Fees Due = <u>\$138.00</u>	Rooms Permit Fee = # of Rooms x \$80 = _____ Technology Fee (10% of Permit Fee) = _____ Plus Application Fee \$50 <u>\$50.00</u> Total Fees Due = _____
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I HAVE CAREFULLY EXAMINED AND READ THIS APPLICATION AND KNOW IT IS TRUE AND CORRECT. THE WORK DESCRIBED HEREIN WILL BE PERFORMED BY A STATE HVACR LICENSED PERSON(S), AND ALL WORK WILL BE PERFORMED IN COMPLIANCE WITH APPLICABLE CODES AND STANDARDS OF HOWARD COUNTY THE STATE OF MARYLAND.

Michael Cullum 7-26-10
 SIGNATURE OF LICENSEE DATE

MICHAEL CULLUM
 PRINT NAME OF LICENSEE

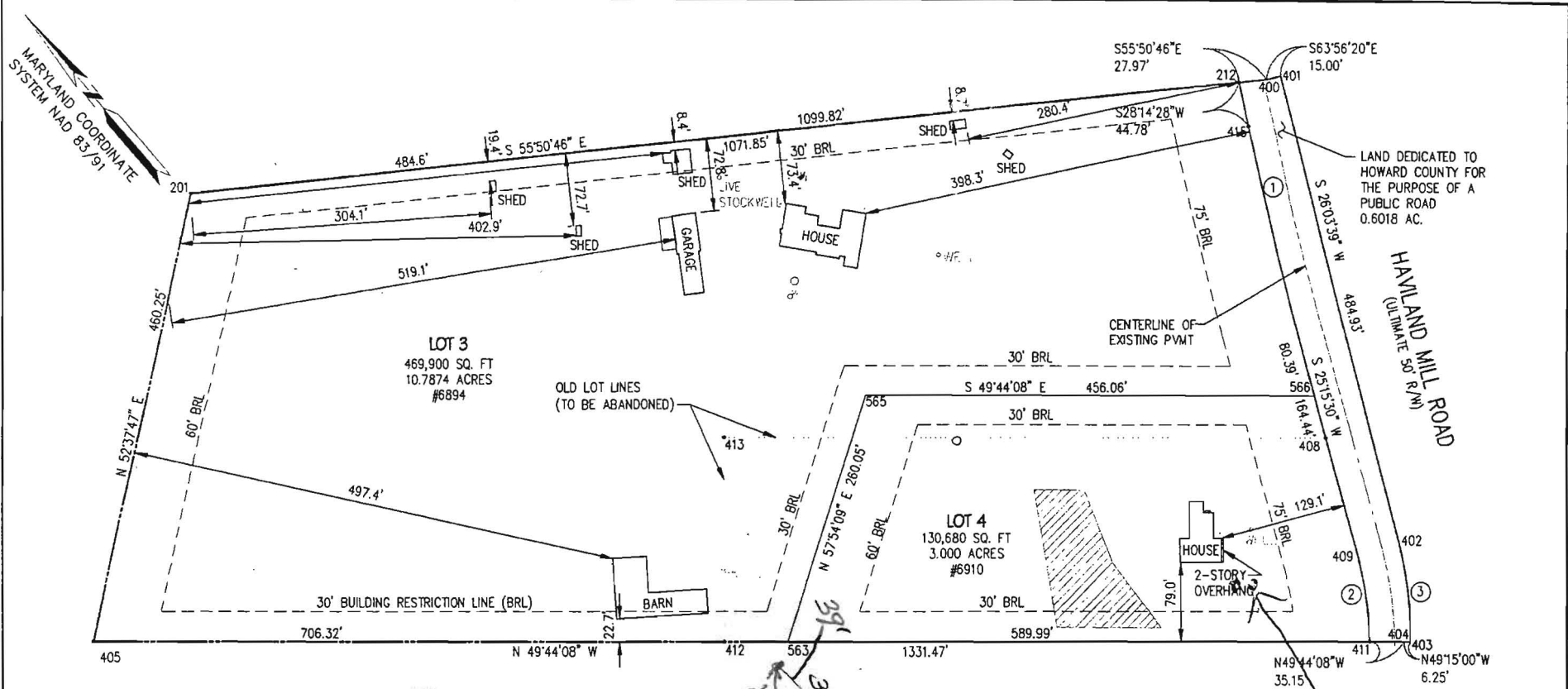
linda @ ground loop . com
 Email Address

Validation Check Number: <u>14914</u> Cash: _____ Receipt Number: <u>214226</u>

Make check payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY

Word doc: T:\Updated Forms\hvac application
 Rev:10.2009

VERTICAL LOOPS - WELL or SEPTIC

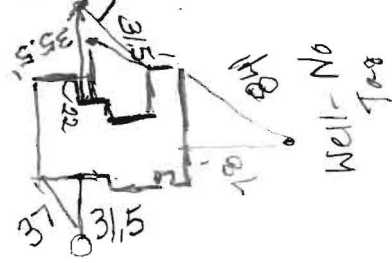


LOCATION NOTE

THIS IS TO CERTIFY THAT I HAVE LOCATED THE IMPROVEMENTS ON THE PROPERTY SHOWN HEREON, AND THAT SAID IMPROVEMENTS EXIST, AND THAT SAID IMPROVEMENTS LIE ENTIRELY WITHIN THE BOUNDARIES, EXCEPT WHERE SHOWN.



C. Alley
4/28/10



GEO BORES

M1000761

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

KCI
TECHNOLOGIES

2601 MARL LANE BOLLING
SUITE 150
FARMERS, MD 20779
TELEPHONE (410) 792-8086
FAX (410) 792-7419

FINAL CERTIFICATION PLAT LOTS 3 AND 4
NEARING'S SUBDIVISION
TAX MAP #40 PARCEL 4
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARY. AND

SCALE: 1" = 100' APRIL 27, 2010 SHEET 1 OF 1

HOME OWNER:
EDWARD ORLANDO
6894 HAVILAND MILL ROAD
CLARKSVILLE, MD 21029

HVAC CONTRACTOR:
MICHAEL CULLUM, HVAC LICENSE #6539
GROUND LOOP HEATING & AIR CONDITIONING, INC.
1701 WHITEFORD ROAD, DARLINGTON, MD 21034

ORLANDO

M/0000/01

WaterFurnace Energy Analysis				
ASHRAE Single Zone Load Calculation Ver. 8.3				
Dealer-	Ground Loop Heating & Air Cond		Client- Orlando	
	1701 Whiteford Rd			
	Darlington Md 21034			
Design Conditions-	Winter	Summer	Daily	
Outside Temp:	10 ° F	95 ° F	Range:	
Inside Temp:	70 ° F	75 ° F	23	
Difference:	60 ° F	20 ° F	° F	
General Information-			Exposed Ducts:	100%
Glass Type:	0 Clear		Duct Loss Factor:	0.15
Roof Color:	0 Dark		Duct Gain Factor:	0.15
Occupancy:	4 People			
Light/Appliance:	2000 btuh			
Infiltration Evaluation:	Qty	Code		
Fireplace:	1	1	Std-Damper	
Fans/Vents:	2	1	W/ Damper	
Attic Access:	1	1	Well Sealed	
Window AC:	0	0		
Fossil Furnace:	0	0		
Fossil DHW Heater:	0	0		
Exposed Duct System:		0	Poorly Sealed	
Building # Stories:		1		
Wind Shielding:		2	Moderate	
BUILDING LOAD SUMMARY - WHOLE HOUSE				
	AREA	LOSS	GAIN	
WALLS/PARTITIONS-				
EXT. WALL- R11	1386	11460	3666	
CONC SLAB-2" INSUL				
WINDOWS/DOORS-				
D.H./SLDG-WOOD-DOUBLE	282	15641	12119	
D.H./SLDG-WOOD-DOUBLE				
DOOR-WOOD-STRM	20	719	209	
SLDG DR-WOOD-DOUBLE	96	6293	3273	
CEILINGS/FLOORS-				
FRAME CEILING-R19	2736	5448	3607	
CONC SLAB-1.5" INSUL	36	497		
PEOPLE			1200	
LIGHT/APPLIANCE			2000	
EXPOSED DUCT SYSTEM	100%	6009	3911	
MOISTURE REMOVAL			8996	
OTHER LOSS/GAIN-		0	0	
TOTAL LOAD (BTU/HR)		46066	38981	

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SURFACES

				NORTH					
----- WALLS/PARTITIONS -----				TYPE	CNSTR	INFILT	HEIGHT	LENGTH	EXPOSE
1	EXT. WALL- R11	1	2	2	8	36	0		
2	CONC SLAB-2" INSUL	15	4	2					
3									
4									
5									
----- WINDOWS/DOORS -----				TYPE	CNSTR	INFILT	HEIGHT	WIDTH	DIRECT SHADE WALL
6	D.H./SLDG-WOOD-DOUBLE	6	3	2	4	6.8	1	1	1
7	D.H./SLDG-WOOD-DOUBLE	6	3	2					
8	DOOR-WOOD-STRM	10	2	2					
9	SLDG DR-WOOD-DOUBLE	9	3	2	4	8	1	1	1
10									
11									
----- CEILINGS/FLOORS -----				TYPE	CNSTR	INFILT	LENGTH	WIDTH	EXPOSE
12	FRAME CEILING-R19	11	4	2	36	76	1		
13									
14	CONC SLAB-1.5" INSUL	15	3	2	36	76	1		
15									
16									

01/11/11

EAST					SOUTH					WEST				
HEIGHT	LENGTH	EXPOSE			HEIGHT	LENGTH	EXPOSE			HEIGHT	LENGTH	EXPOSE		
8	76	0			8	35	0			8	76	0		
HEIGHT	WIDTH	DIRECT	SHADE	WALL	HEIGHT	WIDTH	DIRECT	SHADE	WALL	HEIGHT	WIDTH	DIRECT	SHADE	WALL
2.8	28	3	1	1	2.8	20	5	1	1	3	40	3	1	1
3	6.8	3	1	1	4	8	5	1	1	4	8	3	1	1
LENGTH	WIDTH	EXPOSE			LENGTH	WIDTH	EXPOSE			LENGTH	WIDTH	EXPOSE		

HOME OWNER:
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 6894 HAVILAND MILL ROAD
 CLARKSVILLE, MD 21029

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