

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			
Building number, street name		Unit no.	Lot/con.
Municipality VAUGHAN (WOODBIDGE)	Postal code	Plan number/ other description	
B. Individual who reviews and takes responsibility for design activities			
Name MICHAEL O'ROURKE		Firm HVAC DESIGNS LTD.	
Street address 375 FINLEY AVE		Unit no. 202	Lot/con. N/A
Municipality AJAX	Postal code L1S 2E2	Province ONTARIO	E-mail info@hvacdsgns.ca
Telephone number (905) 619-2300	Fax number (905) 619-2375	Cell number ()	
C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1 OF Division C]			
☐ House ☐ Small Buildings ☐ Large Buildings ☐ Complex Buildings ☒ HVAC – House ☐ Building Services ☐ Detection, Lighting and Power ☐ Fire Protection ☐ Building Structural ☐ Plumbing – House ☐ Plumbing – All Buildings ☐ On-site Sewage Systems			
Description of designer's work HEAT LOSS / GAIN CALCULATIONS DUCT SIZING RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY RESIDENTIAL SYSTEM DESIGN per CSA-F280-12		Model: 4201 - MAPLEWOOD ELEV C Project: PINE VALLEY PH 2	
D. Declaration of Designer			
I, <u>MICHAEL O'ROURKE</u> declare that (choose one as appropriate): (print name)			
☐ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4. of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories. Individual BCIN: _____ Firm BCIN: _____			
☒ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5. of Division C, of the Building Code. Individual BCIN: <u>19669</u> Basis for exemption from registration and qualification: <u>O.B.C SENTENCE 3.2.4.1 (4)</u>			
☐ The design work is exempt from the registration and qualification requirements of the Building Code. Basis for exemption from registration and qualification: _____			
I certify that:			
1. The information contained in this schedule is true to the best of my knowledge. 2. I have submitted this application with the knowledge and consent of the firm.			
April 8, 2022 Date		 Signature of Designer	

NOTE:

- For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d) of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
- Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

SITE NAME: PINE VALLEY PH 2
BUILDING: GOLD PARK HOMES
TYPE: 4201 - MAPLEWOOD
ELEV C
DATE: Apr-22
LO# 96161
GFA: 3006
WINTER NATURAL AIR CHANGE RATE 0.370
SUMMER NATURAL AIR CHANGE RATE 0.124
HEAT LOSS AT °F. 76
HEAT GAIN AT °F. 13
CSA-F280-12
SB-12 PACKAGE A1

ROOM USE	EXP. WALL	CLG. HT.	MBR	ENS	BED-2	BED-3	BED-4	BATH	MEDIA	WINTER NATURAL AIR CHANGE RATE	SUMMER NATURAL AIR CHANGE RATE	HEAT LOSS AT °F.	HEAT GAIN AT °F.
GRS.WALL AREA	36	12	432	220	264	261	316	135	198	0.370	0.124	76	13
GLAZING	20	11	431	220	264	261	316	135	198	0.370	0.124	76	13
NORTH	21.3	16.0	0	0	0	0	0	0	0	0.370	0.124	76	13
EAST	21.3	41.6	0	0	0	0	0	0	0	0.370	0.124	76	13
SOUTH	21.3	24.9	0	0	0	0	0	0	0	0.370	0.124	76	13
WEST	21.3	41.6	37	787	1537	1537	1537	1537	1537	0.370	0.124	76	13
SKYLT.	37.2	101.5	0	0	0	0	0	0	0	0.370	0.124	76	13
DOORS	20.1	3.4	0	0	0	0	0	0	0	0.370	0.124	76	13
NET EXPOSED WALL	4.5	0.8	395	1763	297	193	861	145	145	0.370	0.124	76	13
NET EXPOSED BSMT WALL ABOVE GR	3.6	0.6	0	0	0	0	0	0	0	0.370	0.124	76	13
EXPOSED CLG	1.3	0.6	0	0	0	0	0	0	0	0.370	0.124	76	13
NO ATTIC EXPOSED CLG	2.7	1.3	0	0	0	0	0	0	0	0.370	0.124	76	13
EXPOSED FLOOR	2.6	0.4	0	0	0	0	0	0	0	0.370	0.124	76	13
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0	0	0	0	0.370	0.124	76	13
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0	0	0	0	0.370	0.124	76	13
SUBTOTAL HT LOSS	2550	1834	0	1436	1515	1733	3609	686	1523	0.370	0.124	76	13
LEVEL FACTOR / MULTIPLIER	0.30	0.35	0.30	0.35	0.30	0.35	0.30	0.35	0.30	0.370	0.124	76	13
AIR CHANGE HEAT LOSS	890	164	0	501	529	1244	2590	492	1093	0.370	0.124	76	13
AIR CHANGE HEAT GAIN	0	0	0	0	0	0	0	0	0	0.370	0.124	76	13
DUCT LOSS	0	0	0	0	0	0	0	0	0	0.370	0.124	76	13
DUCT GAIN	0	0	0	0	0	0	0	0	0	0.370	0.124	76	13
HEAT GAIN PEOPLE	240	480	0	0	0	0	0	0	0	0.370	0.124	76	13
HEAT GAIN APPLIANCES/LIGHTS	973	973	0	0	0	0	0	0	0	0.370	0.124	76	13
TOTAL HT LOSS BTU/H	3440	4474	0	1937	2043	2977	6819	1178	2616	0.370	0.124	76	13
TOTAL HT GAIN x 1.3 BTU/H				812	2285	2421	6613	1178	2211	0.370	0.124	76	13

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TOTAL HEAT GAIN BTU/H: 41596 TONS: 3.47 LOSS DUE TO VENTILATION LOAD BTU/H: 1631 STRUCTURAL HEAT LOSS: 69418 TOTAL COMBINED HEAT LOSS BTU/H: 71049

AFUE = 96 %
INPUT (BTU/H) = 88,000
OUTPUT (BTU/H) = 84,500

$$\text{DESIGN CFM} = \frac{1340}{\text{CFM @ .6" E.S.P.}}$$
TEMPERATURE RISE 59

RUN #	25	26
ROOM NAME	BAS	FOY
RM LOSS MBH.	4.88	4.47
CFM PER RUN HEAT	94	86
RM GAIN MBH.	0.79	3.21
CFM PER RUN COOLING	25	104
ADJUSTED PRESSURE	0.16	0.16
ACTUAL DUCT LGH.	33	44
EQUIVALENT LENGTH	140	120
TOTAL EFFECTIVE LENGTH	173	164
ADJUSTED PRESSURE	0.09	0.1
ROUND DUCT SIZE	6	6
HEATING VELOCITY (ft/min)	479	438
COOLING VELOCITY (ft/min)	127	530
OUTLET GRILL SIZE	4X10	4X10
TRUNK	B	C

RETURN AIR #	1	2	3	4	5	6	7	BR	TRUNK V	TRUNK W	TRUNK X	TRUNK Y	TRUNK Z	DROP	0	0.05	0	0	0	8	0
AIR VOLUME	115	120	155	145	320	145	115	0	0	0	0	0	0	0	0	0.05	0	0	0	8	0
PLENUM PRESSURE	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0	0	0	0	0	0	0	0	0.05	17.6	28	0	10	689
ACTUAL DUCT LGH.	46	45	43	17	57	40	36	1	1	1	1	1	1	1	1	0.05	11.9	16	0	8	534
EQUIVALENT LENGTH	225	210	145	185	150	165	235	0	0	0	0	0	0	0	0	0.05	12.1	18	0	8	495
TOTAL EFFECTIVE LH	271	255	188	202	207	205	271	1	1	1	1	1	1	1	1	0.05	17.6	24	0	12	670
ADJUSTED PRESSURE	0.05	0.06	0.08	0.07	0.07	0.07	0.05	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	0.10	0	0	0	0	0
ROUND DUCT SIZE	7	6.8	7	7	9.5	7	7	0	0	0	0	0	0	0	0	7.6	0	0	0	0	0
INLET GRILL SIZE	8	8	8	8	8	8	8	0	0	0	0	0	0	0	0	8	0	0	0	8	0
NET GRILL SIZE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0
NET GRILL SIZE	14	14	14	14	30	14	14	0	0	0	0	0	0	0	0	24	0	0	0	0	0

TYPE: 4201 - MAPLEWOOD
SITE NAME: PINE VALLEY PH 2

LO # 96161
ELEV C

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

COMBUSTION APPLIANCES		9.32.3.1(1)
a)	☒ Direct vent (sealed combustion) only	
b)	☐ Positive venting induced draft (except fireplaces)	
c)	☐ Natural draft, B-vent or induced draft gas fireplace	
d)	☐ Solid Fuel (including fireplaces)	
e)	☐ No Combustion Appliances	

HEATING SYSTEM	
☒ Forced Air	☐ Non Forced Air
☐ Electric Space Heat	

HOUSE TYPE		9.32.1(2)
☒ I	Type a) or b) appliance only, no solid fuel	
☐ II	Type I except with solid fuel (including fireplaces)	
☐ III	Any Type c) appliance	
☐ IV	Type I, or II with electric space heat	
☐	Other: Type I, II or IV no forced air	

SYSTEM DESIGN OPTIONS		O.N.H.W.P.
☐ 1	Exhaust only/Forced Air System	
☐ 2	HRV with Ducting/Forced Air System	
☒ 3	HRV Simplified/connected to forced air system	
☐ 4	HRV with Ducting/non forced air system	
☐	Part 6 Design	

TOTAL VENTILATION CAPACITY		9.32.3.3(1)
Basement + Master Bedroom	2 @ 21.2 cfm	42.4 cfm
Other Bedrooms	3 @ 10.6 cfm	31.8 cfm
Kitchen & Bathrooms	5 @ 10.6 cfm	53 cfm
Other Rooms	3 @ 10.6 cfm	31.8 cfm
Table 9.32.3.A. TOTAL		159.0 cfm

PRINCIPAL VENTILATION CAPACITY REQUIRED		9.32.3.4.(1)
1 Bedroom	31.8	cfm
2 Bedroom	47.7	cfm
3 Bedroom	63.6	cfm
4 Bedroom	79.5	cfm
5 Bedroom	95.4	cfm
TOTAL		79.5 cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	159	cfm
Less Principal Ventil. Capacity	79.5	cfm
Required Supplemental Capacity	79.5	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE V150H	Location: BSMT
79.5 cfm	☒ HVI Approved

PRINCIPAL EXHAUST HEAT LOSS CALCULATION				
CFM	ΔT °F	FACTOR	% LOSS	
79.5 CFM	X 76 F	X 1.08	X	0.25

SUPPLEMENTAL FANS		BY INSTALLING CONTRACTOR		
Location	Model	cfm	HVI	Sones
ENS	BY INSTALLING CONTRACTOR	50	☒	3.5
BATH	BY INSTALLING CONTRACTOR	50	☒	3.5
PWD	BY INSTALLING CONTRACTOR	50	☒	3.5

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE V150H		
150 cfm high	35 cfm low	
75 % Sensible Efficiency	☒ HVI Approved	
@ 32 deg F (0 deg C)		

LOCATION OF INSTALLATION	
Lot:	Concession
Township	Plan:
Address	
Roll #	Building Permit #

BUILDER: GOLD PARK HOMES	
Name:	
Address:	
City:	
Telephone #:	Fax #:

INSTALLING CONTRACTOR	
Name:	
Address:	
City:	
Telephone #:	Fax #:

DESIGNER CERTIFICATION	
I hereby certify that this ventilation system has been designed in accordance with the Ontario Building Code.	
Name:	HVAC Designs Ltd.
Signature:	<i>Michael O'Rourke</i>
HRAI #	001820
Date:	April-22

CSA F280-12 Residential Heat Loss and Heat Gain Calculations																																																																	
Formula Sheet (For Air Leakage / Ventilation Calculation)																																																																	
LO#: 96161		Model: 4201 - MAPLEWOOD		Builder: GOLD PARK HOMES		Date: 2022-04-08																																																											
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House Volume <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Level</th> <th>Floor Area (ft²)</th> <th>Floor Height (ft)</th> <th>Volume (ft³)</th> </tr> </thead> <tbody> <tr> <td>Bsmt</td> <td>1886</td> <td>10</td> <td>18860</td> </tr> <tr> <td>First</td> <td>1886</td> <td>11</td> <td>20746</td> </tr> <tr> <td>Second</td> <td>1589</td> <td>9</td> <td>14301</td> </tr> <tr> <td>Third</td> <td>0</td> <td>9</td> <td>0</td> </tr> <tr> <td>Fourth</td> <td>0</td> <td>9</td> <td>0</td> </tr> <tr> <td colspan="2" style="text-align: right;">Total:</td> <td></td> <td>53,907.0 ft³</td> </tr> <tr> <td colspan="2" style="text-align: right;">Total:</td> <td></td> <td>1526.5 m³</td> </tr> </tbody> </table>					Level	Floor Area (ft²)	Floor Height (ft)	Volume (ft³)	Bsmt	1886	10	18860	First	1886	11	20746	Second	1589	9	14301	Third	0	9	0	Fourth	0	9	0	Total:			53,907.0 ft³	Total:			1526.5 m³	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="text-align: center;">Design Temperature Difference</th> </tr> <tr> <th>Tin °C</th> <th>Tout °C</th> <th>ΔT °C</th> </tr> </thead> <tbody> <tr> <td>Winter DTDh</td> <td>22</td> <td>-20</td> </tr> <tr> <td>Summer DTDc</td> <td>24</td> <td>31</td> </tr> <tr> <td></td> <td></td> <td>ΔT °F</td> </tr> <tr> <td></td> <td></td> <td>42</td> </tr> <tr> <td></td> <td></td> <td>76</td> </tr> <tr> <td></td> <td></td> <td>13</td> </tr> </tbody> </table>					Design Temperature Difference			Tin °C	Tout °C	ΔT °C	Winter DTDh	22	-20	Summer DTDc	24	31			ΔT °F			42			76			13
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5.2.3.1 Heat Loss due to Air Leakage					6.2.6 Sensible Gain due to Air Leakage																																																												
$HL_{airb} = LR_{airh} \times \frac{V_b}{3.6} \times DTD_h \times 1.2$					$HG_{satb} = LR_{airc} \times \frac{V_b}{3.6} \times DTD_c \times 1.2$																																																												
0.370 x 424.02 x 42 °C x 1.2 = 7940 W					0.124 x 424.02 x 7 °C x 1.2 = 449 W																																																												
= 27092 Btu/h					= 1534 Btu/h																																																												
5.2.3.2 Heat Loss due to Mechanical Ventilation					6.2.7 Sensible heat Gain due to Ventilation																																																												
$HL_{vaib} = PVC \times DTD_h \times 1.08 \times (1 - E)$					$HL_{vaib} = PVC \times DTD_h \times 1.08 \times (1 - E)$																																																												
80 CFM x 76 °F x 1.08 x 0.25 = 1631 Btu/h					80 CFM x 13 °F x 1.08 x 0.25 = 275 Btu/h																																																												
5.2.3.3 Calculation of Air Change Heat Loss for Each Room (Floor Multiplier Section)																																																																	
$HL_{airr} = Level Factor \times HL_{airbv} \times \{(HL_{agcr} + HL_{bgcr}) \div (HL_{agclevel} + HL_{bgclevel})\}$																																																																	
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Michael O'Rourke
 BCIN# 19669



HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 4201 - MAPLEWOOD	ELEV C	BUILDER: GOLD PARK HOMES
SFQT: 3006	LO# 96161	SITE: PINE VALLEY PH 2

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-4	OUTDOOR DESIGN TEMP.	88
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	75
		WINDOW SHGC	0.50

BUILDING DATA

ATTACHMENT:	DETACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	EAST	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	3.57	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	AVERAGE	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft³):	53907.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	5
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.27	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	7.0 ft
LENGTH: 68.0 ft	WIDTH: 33.0 ft	EXPOSED PERIMETER:	202.0 ft

2012 OBC - COMPLIANCE PACKAGE

Component	Compliance Package A1	
	Nominal	Min. Eff.
Ceiling with Attic Space Minimum RSI (R)-Value	60	59.22
Ceiling Without Attic Space Minimum RSI (R)-Value	31	27.65
Exposed Floor Minimum RSI (R)-Value	31	29.80
Walls Above Grade Minimum RSI (R)-Value	22	17.03
Basement Walls Minimum RSI (R)-Value	20 ci	21.12
Below Grade Slab Entire surface > 600 mm below grade Minimum RSI (R)-Value	-	-
Edge of Below Grade Slab ≤ 600 mm Below Grade Minimum RSI (R)-Value	10	10
Heated Slab or Slab ≤ 600 mm below grade Minimum RSI (R)-Value	10	11.13
Windows and Sliding Glass Doors Maximum U-Value	0.28	-
Skylights Maximum U-Value	0.49	-
Space Heating Equipment Minimum AFUE	96%	-
HRV/ERV Minimum Efficiency	75%	-
Domestic Hot Water Heater Minimum EF	0.8	-

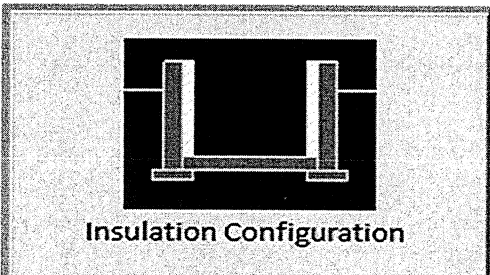
INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE



Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Vaughan (Woodbridge)	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	20.7	 Insulation Configuration
Floor Width (m):	10.1	
Exposed Perimeter (m):	0.0	
Wall Height (m):	3.0	
Depth Below Grade (m):	2.13	
Window Area (m ²):	3.3	
Door Area (m ²):	3.7	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):	1980	

TYPE: 4201 - MAPLEWOOD
LO# 96161

ELEV C

Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario			
Region:	Vaughan (Woodbridge)			
Weather Station Location:	Open flat terrain, grass			
Anemometer height (m):	10			
Local Shielding				
Building Site:	Suburban, forest			
Walls:	Heavy			
Flue:	Heavy			
Highest Ceiling Height (m):	7.92			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	1526.5			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	2034.8 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	37.5	37.5		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.370			
Cooling Air Leakage Rate (ACH/H):	0.124			

TYPE: 4201 - MAPLEWOOD
LO# 96161

ELEV C



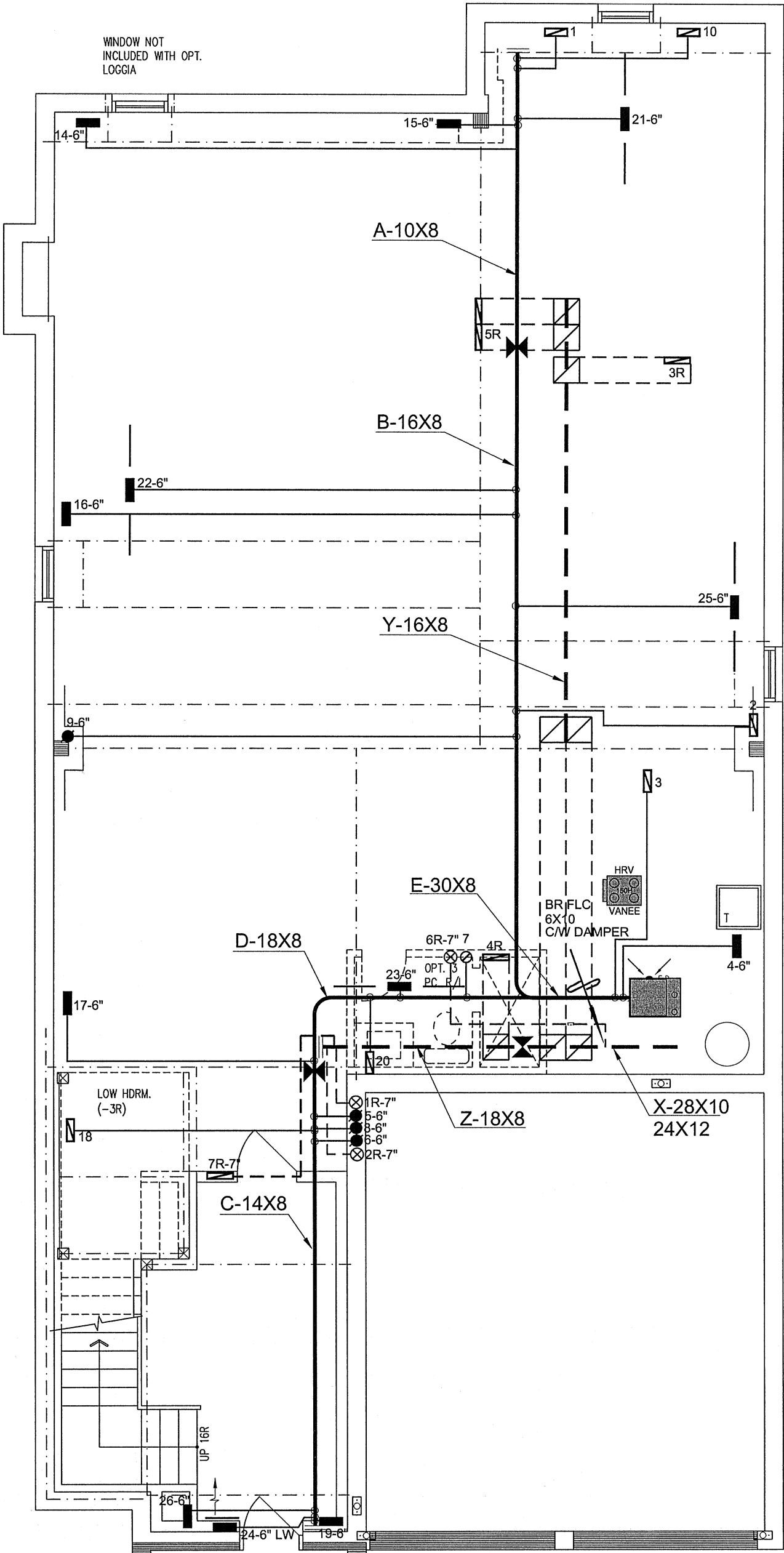
HVAC LEGEND		
SYMBOL	DESCRIPTION	
	SUPPLY AIR GRILLE	
	SUPPLY AIR BOOT ABOVE	
	SUPPLY AIR STACK FROM 2nd FLOOR	
	SUPPLY AIR STACK 2nd FLOOR	
	14"x8" RETURN AIR GRILLE	
	30"x8" RETURN AIR GRILLE	
	FR- FLOOR RETURN AIR GRILLE	
	RETURN AIR STACK ABOVE	
	REDUCER	
REVISIONS		
No.	Description	Date
1.		
2.		
3.		

I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.

Michael O'Rourke
Michael O'Rourke, Techn. 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

BASEMENT PLAN
EL. 'C'



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Client		HVACDESIGNS LTD. 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services	HEAT LOSS 71049 BTU/H		# OF RUNS S/A R/A FANS			Sheet Title	
GOLD PARK HOMES			UNIT DATA		3RD FLOOR			BASEMENT	
Project Name			MAKE		2ND FLOOR			HEATING	
PINE VALLEY PH 2			MODEL		1ST FLOOR			LAYOUT	
VAUGHAN, ONTARIO			ML196UH090XE36C		BASEMENT				
MAPLEWOOD - ELEV C		INPUT		5			Date		
4201		88 MBTU/H		1			APR/2022		
3006 sqft		OUTPUT		0			Scale		
		85.6 MBTU/H		BASEMENT			3/16" = 1'-0"		
		COOLING		5			BCIN# 19669		
		3.5 TONS		1			LO#		
		FAN SPEED		0			96161		
		1340 cfm @ 0.6" w.c.		0					
				ALL S/A DIFFUSERS 4 "x10" UNLESS NOTED OTHERWISE ON LAYOUT. ALL S/A RUNS 5"Ø UNLESS NOTED OTHERWISE ON LAYOUT. UNDERCUT DOORS 1" min. FOR R/A					

I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.


Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.



CSA-F280-12
PACKAGE A1

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GOLD PARK HOMES			FIRST FLOOR HEATING LAYOUT	
Project Name			Date	APR/2022
PINE VALLEY PH 2 VAUGHAN, ONTARIO			Scale	3/16" = 1'-0"
MAPLEWOOD - ELEV C 42013006 sqft			BCIN# 19669	
		LO#	96161	

