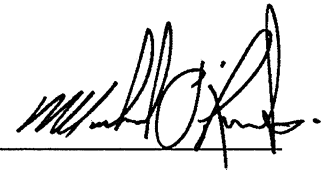


Schedule 1: Designer Information

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 BRAMPTON	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@hvacdesigns.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: 41-6 OPT. 1ST	
			Project: ENCORE	
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.				
<u>March 7, 2017</u>				
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: ENCORE BUILDER: GOLD PARK HOMES										DATE: Mar-17 LO# 72726		WINTER NATURAL AIR CHANGE RATE 0.405 SUMMER NATURAL AIR CHANGE RATE 0.144		HEAT LOSS AT °F. 74 HEAT GAIN AT °F. 14		CSA-F280-12 SB-12 PACKAGE A1	
OPT 1ST TYPE: 41-6										GFA: 4104		BATH		ENS-2		WIC-2	
ROOM USE										BED-3		BED-4		WIC-2		DEN	
EXP. WALL										BED-2		WIC		ENS-2		WIC-2	
CLG. HT.										BED-3		WIC		ENS-2		WIC-2	
FACTORS										BED-3		WIC		ENS-2		WIC-2	
GRS.WALL AREA										BED-3		WIC		ENS-2		WIC-2	
GLAZING										BED-3		WIC		ENS-2		WIC-2	
NORTH										BED-3		WIC		ENS-2		WIC-2	
EAST										BED-3		WIC		ENS-2		WIC-2	
SOUTH										BED-3		WIC		ENS-2		WIC-2	
WEST										BED-3		WIC		ENS-2		WIC-2	
SKYL.T.										BED-3		WIC		ENS-2		WIC-2	
DOORS										BED-3		WIC		ENS-2		WIC-2	
NET EXPOSED WALL										BED-3		WIC		ENS-2		WIC-2	
NET EXPOSED BSMT WALL ABOVE GR										BED-3		WIC		ENS-2		WIC-2	
EXPOSED CLG										BED-3		WIC		ENS-2		WIC-2	
NO ATTIC EXPOSED CLG										BED-3		WIC		ENS-2		WIC-2	
EXPOSED FLOOR										BED-3		WIC		ENS-2		WIC-2	
BASEMENT/CRAWL HEAT LOSS										BED-3		WIC		ENS-2		WIC-2	
SLAB ON GRADE HEAT LOSS										BED-3		WIC		ENS-2		WIC-2	
SUBTOTAL HT LOSS										BED-3		WIC		ENS-2		WIC-2	
SUB TOTAL HT GAIN										BED-3		WIC		ENS-2		WIC-2	
LEVEL FACTOR / MULTIPLIER										BED-3		WIC		ENS-2		WIC-2	
AIR CHANGE HEAT LOSS										BED-3		WIC		ENS-2		WIC-2	
AIR CHANGE HEAT GAIN										BED-3		WIC		ENS-2		WIC-2	
DUCT LOSS										BED-3		WIC		ENS-2		WIC-2	
DUCT GAIN										BED-3		WIC		ENS-2		WIC-2	
HEAT GAIN PEOPLE										BED-3		WIC		ENS-2		WIC-2	
HEAT GAIN APPLIANCES/LIGHTS										BED-3		WIC		ENS-2		WIC-2	
TOTAL HT LOSS BTUH										BED-3		WIC		ENS-2		WIC-2	
TOTAL HT GAIN x 1.3 BTUH										BED-3		WIC		ENS-2		WIC-2	

ROOM USE	LIV	DIN	KTIFM	ENS-3	LAUN	WIR	FOY	FOY-2	REC	NANNY	BAS
EXP. WALL	27	11	75	18	7	7	12	41	36	26	164
CLG. HT.	9	9	9	10	9	12	12	10	10	10	9
FACTORS											
GRS.WALL AREA	243	99	675	180	63	84	144	410	360	260	1000
GLAZING	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN
NORTH	0	0	0	0	0	0	24	0	0	0	9
EAST	0	0	111	0	0	0	0	0	41	20	186
SOUTH	0	36	2300	0	0	7	0	0	850	414	147
WEST	36	746	908	0	0	145	0	0	0	0	0
SKYLT.	746	1508	0	0	0	177	0	0	0	0	0
DOORS	20.7	0	0	0	0	0	20	0	0	0	0
SKYLT.	20.7	0	0	0	0	0	414	0	0	0	0
DOORS	20.7	0	0	0	0	0	838	0	0	0	0
DOORS	20.7	0	0	0	0	0	0	0	0	0	0
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DOORS	20.7	0	0	0	0	0	0	0	0	0	0
DOORS	20.7	0	0	0	0	0	0	0	0	0	0
DOORS	20.7	0	0	0	0	0	0	0	0	0	0
DOORS	20.7	0	0	0	0	0	0	0	0	0	0
DOORS	20.7	0	0	0	0	0	0	0	0	0	0
DOORS	20.7	0	0	0	0	0	0	0	0	0	0
DOORS	20.7										

SITE NAME: ENCORE
BUILDER: GOLD PARK HOMES

OPT 1ST
TYPE: 41-6

DATE: Mar-17

GFA: 4104 LO# 72726

1525		1525	
HEATING CFM	COOLING CFM	HEATING CFM	COOLING CFM
TOTAL HEAT LOSS	TOTAL HEAT GAIN	67,085	47,433
AIR FLOW RATE CFM	AIR FLOW RATE CFM	22.73	32.15

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	9	12	5	4
R/A	0	4	2	1	1

All S/A diffusers 4"x10" unless noted otherwise on layout.

[illegible]

25	26	27	28	29	30	31	32
WIC-2	KT/IFM	DIN	NANNY	REC	REC	FOY-2	ENS-3
RM LOSS MBH.	1.18	1.91	1.33	2.97	2.28	5.29	1.60
CFM PER RUN HEAT	27	43	30	68	52	120	36
RM GAIN MBH.	0.97	2.27	2.02	2.43	1.87	0.68	0.20
CFM PER RUN COOLING	31	73	65	78	60	22	7
ADJUSTED PRESSURE	0.17	0.17	0.17	0.17	0.17	0.15	0.17
ACTUAL DUCT LGH	52	38	33	18	33	22	11
EQUIVALENT LENGTH	100	100	100	100	130	120	150
TOTAL EFFECTIVE LENGTH	152	138	133	128	133	152	131
ADJUSTED PRESSURE	0.11	0.12	0.13	0.13	0.13	0.11	0.12
ROUND DUCT SIZE	4	5	4	5	4	6	4
HEATING VELOCITY (ft/min)	310	344	499	597	382	612	413
COOLING VELOCITY (ft/min)	356	536	746	573	441	112	80
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	3X10	4X10	3X10
TRUNK	C	B	C	F	F	G	F

SUPPLY AIR TRUNK SIZE										RETURN AIR TRUNK SIZE														
TRUNK					STATIC PRESS.					ROUND DUCT					RECT DUCT					VELOCITY (ft/min)				
TRUNK CFM					TRUNK PRESS.					ROUND DUCT					RECT DUCT					VELOCITY (ft/min)				
TRUNK A					TRUNK G					TRUNK O					TRUNK P					TRUNK Q				
TRUNK B					TRUNK H					TRUNK R					TRUNK S					TRUNK T				
TRUNK C					TRUNK I					TRUNK U					TRUNK V					TRUNK W				
TRUNK D					TRUNK J					TRUNK X					TRUNK Y					TRUNK Z				
TRUNK E					TRUNK K					TRUNK AA					TRUNK AB					TRUNK AC				
TRUNK F					TRUNK L					TRUNK AD					TRUNK AE					TRUNK AF				
TRUNK G					TRUNK M					TRUNK AG					TRUNK AH					TRUNK AI				
TRUNK H					TRUNK N					TRUNK BA					TRUNK BB					TRUNK BC				
TRUNK I					TRUNK O					TRUNK CB					TRUNK CC					TRUNK CD				
TRUNK J					TRUNK P					TRUNK DB					TRUNK DC					TRUNK DD				
TRUNK K					TRUNK Q					TRUNK EB					TRUNK EC					TRUNK ED				
TRUNK L					TRUNK R					TRUNK FB					TRUNK FC					TRUNK FD				
TRUNK M					TRUNK S					TRUNK GB					TRUNK GC					TRUNK GD				
TRUNK N					TRUNK T					TRUNK HB					TRUNK HC					TRUNK HD				
TRUNK O					TRUNK U					TRUNK IB					TRUNK IC					TRUNK ID				
TRUNK P					TRUNK V					TRUNK JB					TRUNK JC					TRUNK JD				
TRUNK Q					TRUNK W					TRUNK KB					TRUNK KC					TRUNK KD				
TRUNK R					TRUNK X					TRUNK LB					TRUNK LC					TRUNK LD				
TRUNK S					TRUNK Y					TRUNK MB					TRUNK MC					TRUNK MD				
TRUNK T					TRUNK Z					TRUNK NB					TRUNK NC					TRUNK ND				
TRUNK U					TRUNK AA					TRUNK OB					TRUNK OC					TRUNK OD				
TRUNK V					TRUNK AB					TRUNK PB					TRUNK PC					TRUNK PD				
TRUNK W					TRUNK AC					TRUNK QB					TRUNK QC					TRUNK QD				
TRUNK X					TRUNK AD					TRUNK RB					TRUNK RC					TRUNK RD				
TRUNK Y					TRUNK AE					TRUNK SB					TRUNK SC					TRUNK SD				
TRUNK Z					TRUNK AF					TRUNK TB					TRUNK TC					TRUNK TD				
TRUNK AA					TRUNK AG					TRUNK UB					TRUNK UC					TRUNK UD				
TRUNK AB					TRUNK AH					TRUNK VB					TRUNK VC					TRUNK VD				
TRUNK AC					TRUNK AI					TRUNK WB					TRUNK WC					TRUNK WD				
TRUNK AD					TRUNK AJ					TRUNK XB					TRUNK XC					TRUNK XD				
TRUNK AE					TRUNK AK					TRUNK YB					TRUNK YC					TRUNK YD				
TRUNK AF					TRUNK AL					TRUNK ZB					TRUNK ZC					TRUNK ZD				
TRUNK AG					TRUNK AM					TRUNK AB					TRUNK AC					TRUNK AD				
TRUNK AH					TRUNK AN					TRUNK BB					TRUNK BC					TRUNK BD				
TRUNK AI					TRUNK AO					TRUNK CB					TRUNK CC					TRUNK CD				
TRUNK AJ					TRUNK AP					TRUNK DB					TRUNK DC					TRUNK DD				
TRUNK AK					TRUNK AQ					TRUNK EB					TRUNK EC					TRUNK ED				
TRUNK AL					TRUNK AR					TRUNK FB					TRUNK FC					TRUNK FD				
TRUNK AM					TRUNK AS					TRUNK GB					TRUNK GC					TRUNK GD				
TRUNK AN					TRUNK AT					TRUNK HB					TRUNK HC					TRUNK HD				
TRUNK AO					TRUNK AU					TRUNK														

[illegible]

TYPE: 41-6
SITE NAME: ENCORE

LO # 72726
OPT 1ST

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	4 @ 10.6 cfm	42.4 cfm
Kitchen & Bathrooms	6 @ 10.6 cfm	63.6 cfm
Other Rooms	6 @ 10.6 cfm	63.6 cfm
Table 9.32.3.A.	TOTAL	212.0 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	
More than 5 - Part 6	TOTAL	95.4 cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	212	cfm
Less Principal Ventil. Capacity	139	cfm
Required Supplemental Capacity	73.0	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE 60H-V+	Location: BSMT
139.0 cfm	3.0 sones
☒ HVI Approved	

PRINCIPAL EXHAUST HEAT LOSS CALCULATION				
CFM	ΔT °F	FACTOR	% LOSS	
139.0 CFM	X 74 F	X 1.08	X	0.25

SUPPLEMENTAL FANS		NUTONE		
Location	Model	cfm	HVI	Sones
ENS	QTXEN050C	50	☒	0.3
BATH	QTXEN050C	50	☒	0.3
ENS-2	QTXEN050C	50	☒	0.3
W/R	QTXEN050C	50	☒	0.3

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 60H-V+		
139 cfm high	50 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:	March-17

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 41-6	OPT 1ST	BUILDER: GOLD PARK HOMES
SFQT: 4104	LO# 72726	SITE: ENCORE

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-2	OUTDOOR DESIGN TEMP.	86
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	72

BUILDING DATA

ATTACHMENT:	DETACHED	# OF STORIES (+BASEMENT):	4
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 (ft ³):	45685.4	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	6
INTERIOR LIGHTING LOAD (Btu/h/ft ²):	1.27	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.1 ft
LENGTH: 47.0 ft	WIDTH: 35.0 ft	EXPOSED PERIMETER:	164.0 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	29.8
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	0.96	-
HRV Minimum Efficiency	75%	-
Domestic Hot Water Heater Minimum EF	0.8	-

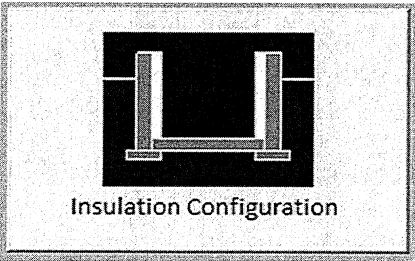
INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE



Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Brampton	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	14.3	 Insulation Configuration
Floor Width (m):	10.7	
Exposed Perimeter (m):	0.0	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.9	
Window Area (m ²):	0.8	
Door Area (m ²):	1.9	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		1589

TYPE: 41-6
LO# 72726

OPT 1ST

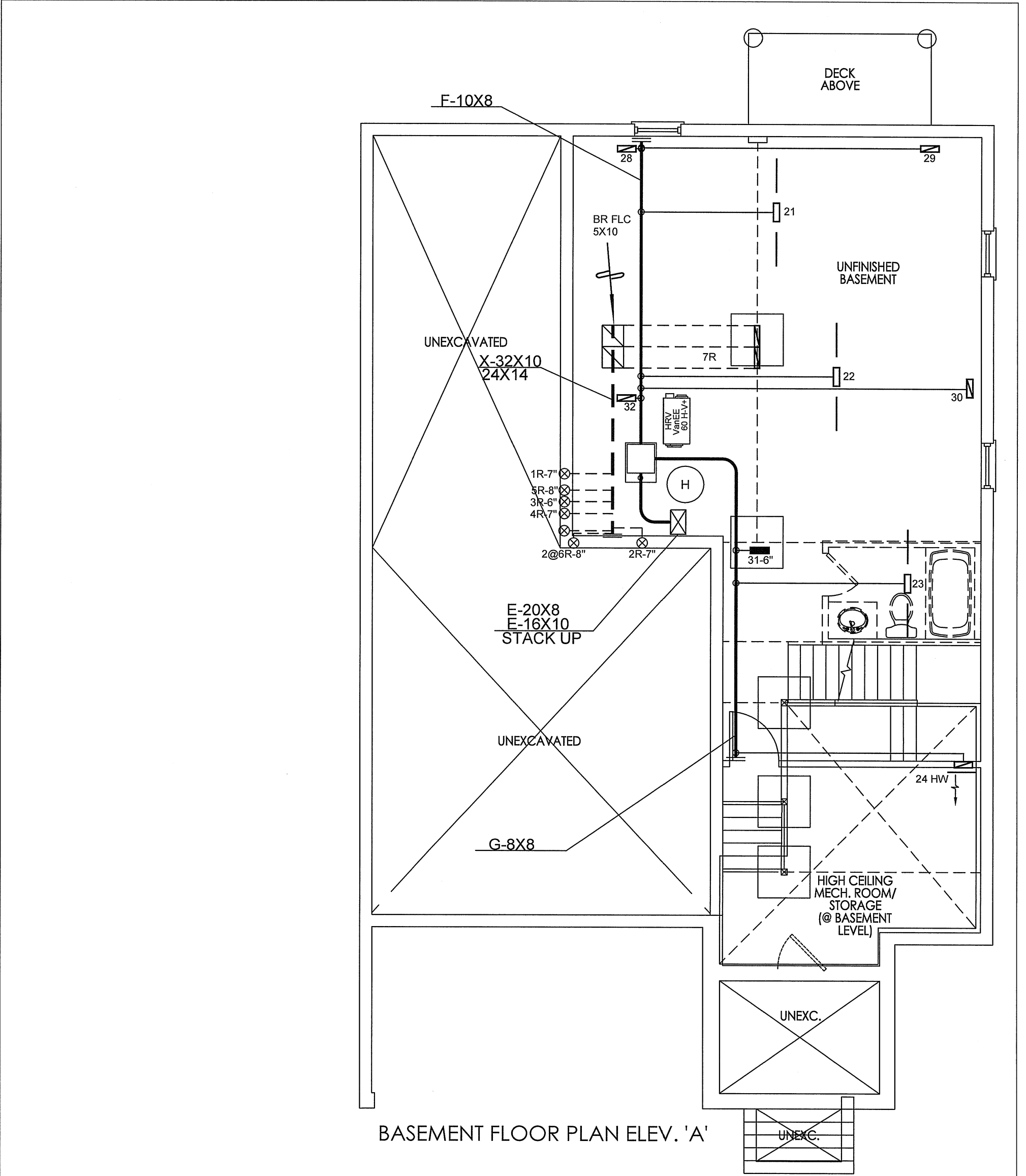
Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario			
Region:	Brampton			
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):	9.33			
Building Configuration				
Type:	Detached			
Number of Stories:	Three			
Foundation:	Full			
House Volume (m ³):	1293.7			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1724.5 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	65.6	65.6		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.405			
Cooling Air Leakage Rate (ACH/H):	0.144			

TYPE: 41-6
LO# 72726

OPT 1ST

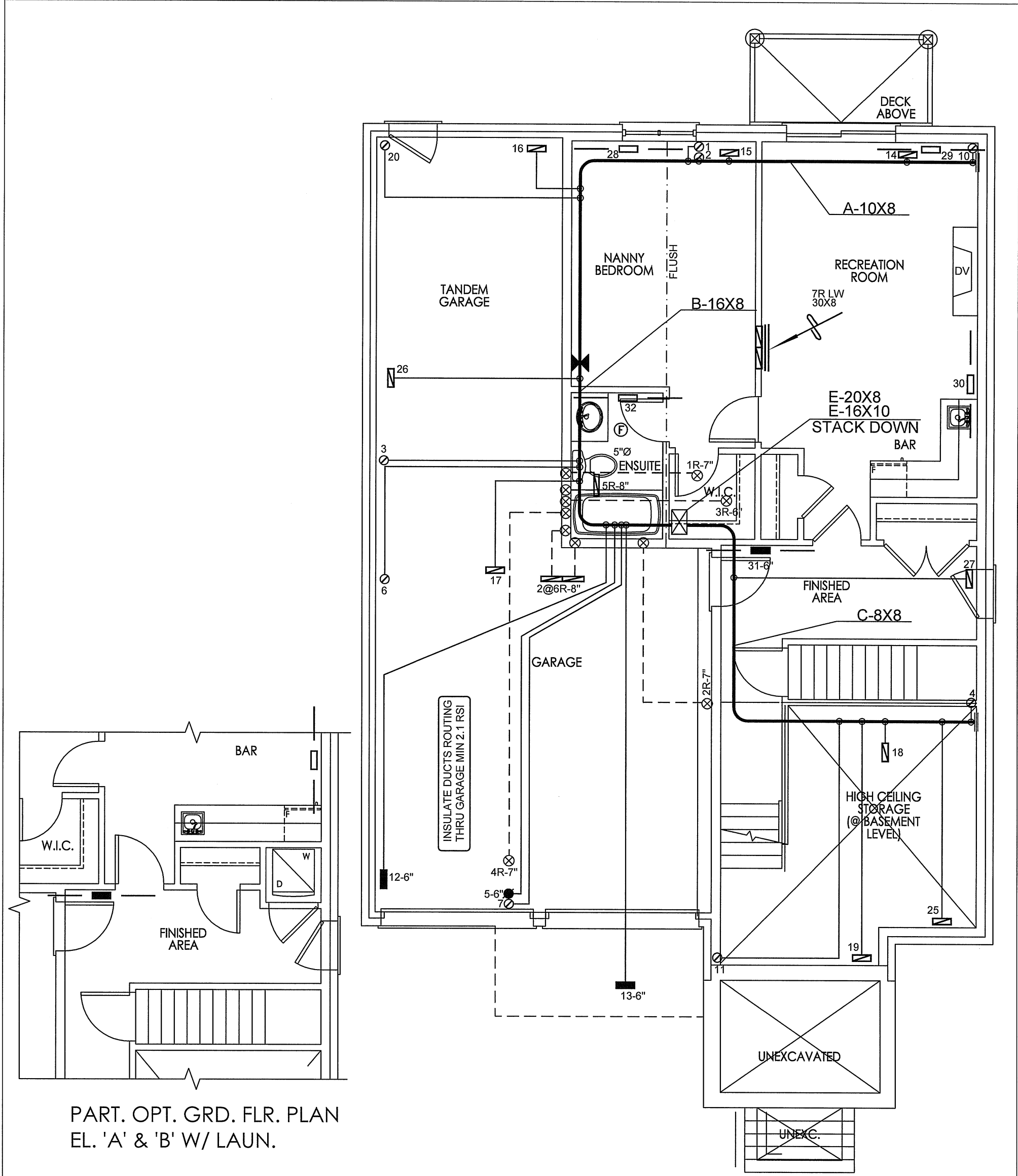


BASEMENT FLOOR PLAN ELEV. 'A'

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

CSA-F280-12
PACKAGE A1

HVAC LEGEND						3.					
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION				
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	2.			
	FLOOR SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	1.			
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	No. Description Date			
								REVISIONS			
ALL DRAWINGS, CALCULATIONS AND SPECIFICATIONS ARE THE PROPERTY OF HVAC DESIGNS LTD.© AND MAY NOT BE REPRODUCED, MODIFIED OR ALTERED WITHOUT EXPRESSED WRITTEN CONSENT. THE DRAWINGS ARE DATED AND USE OF THESE DRAWINGS AFTER ONE YEAR FROM THE DATED NOTED IS NOT AUTHORIZED. CONTRACTOR SHALL CHECK ALL CONDITIONS BEFORE PROCEEDING WITH WORK. LATEST MUNICIPAL APPROVED DRAWINGS ONLY TO BE USED DURING INSTALLATION OF HEATING SYSTEM. HVAC DESIGNS LTD. IS NOT LIABLE FOR ANY CLAIMS ARISING FROM UNAUTHORIZED USE OF THE DRAWINGS OR FROM ANY CHANGES TO ACCEPTED STANDARDS AND/OR THE ONTARIO BUILDING CODE.											
Client GOLD PARK HOMES		 375 Finley Ave - Unit 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 Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper. Ductwork which passes through the garage or unheated spaces shall be adequately insulated and be gas-proofed.			HEAT LOSS 69862 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS			Sheet Title BASEMENT HEATING LAYOUT	
Project Name ENCORE BRAMPTON, ONTARIO					MAKE LENNOX		3RD FLOOR 9 2 4				
41-6 OPT 1ST 4104 sqft					MODEL EL296UH090XE48C-90		2ND FLOOR 12 2 3			Date MAR/2017	
					INPUT 88 MBTU/H		1ST FLOOR 5 1 1				
					OUTPUT 84 MBTU/H		BASEMENT 4 1 0			Scale 3/16" = 1'-0"	
					COOLING 4.0 TONS		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			BCIN# 19669	
					FAN SPEED 1525 cfm @ 0.5" w.c.		LO# 72726				



PART. OPT. GRD. FLR. PLAN
EL. 'A' & 'B' W/ LAUN.

OPT. GROUND FLOOR PLAN ELEV. '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
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

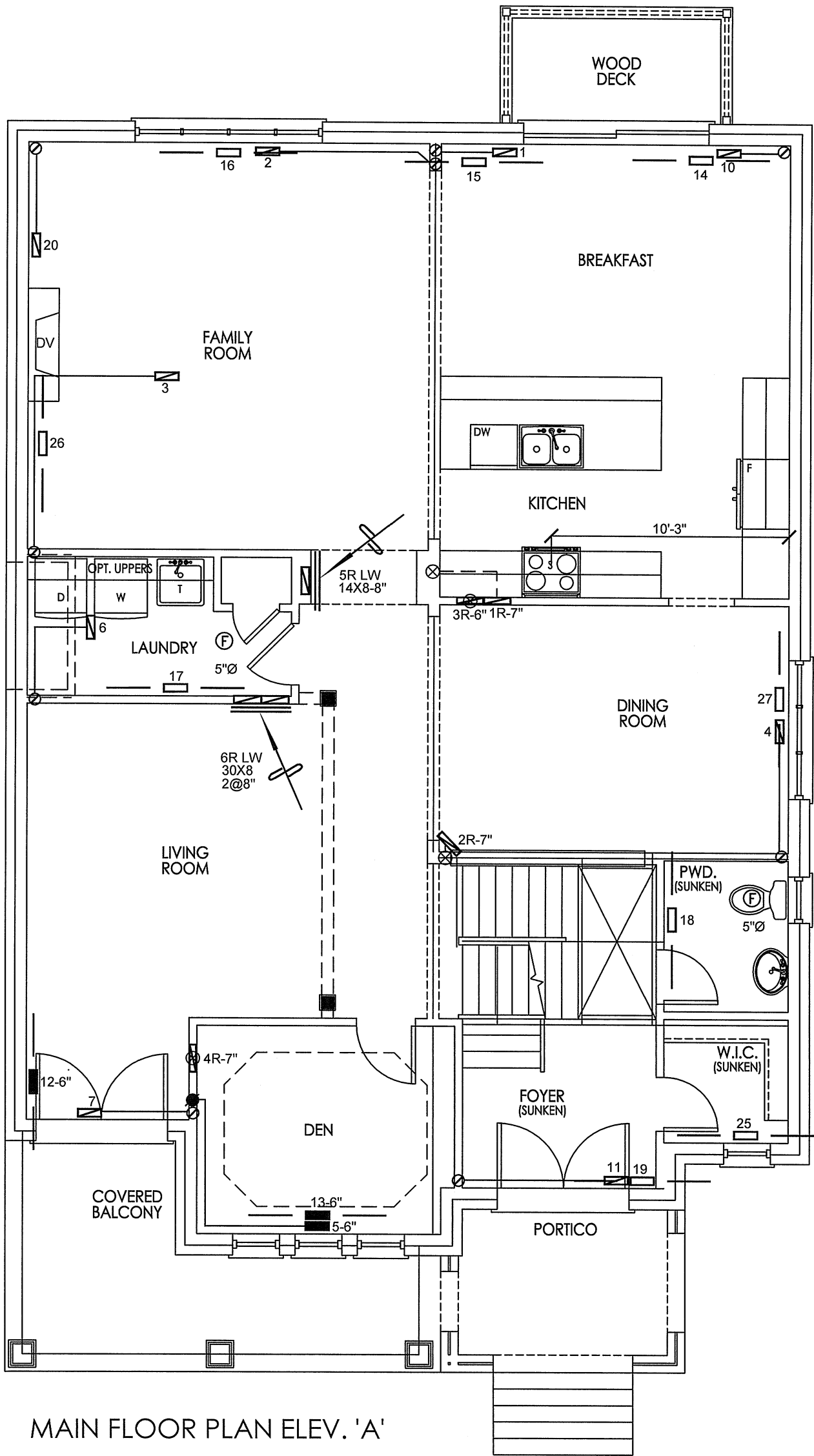
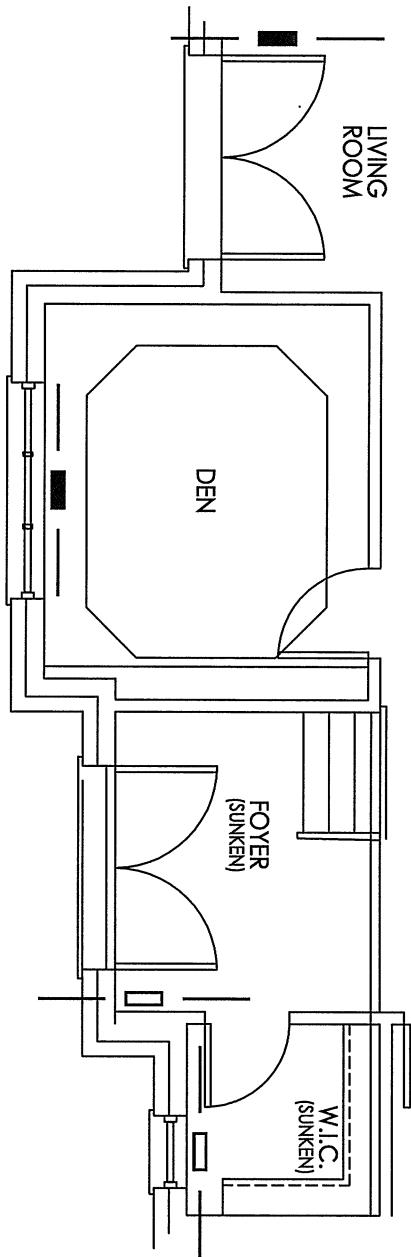
CSA-F280-12
PACKAGE A1

HVAC LEGEND							3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.	
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.	
	FLOOR SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	No.	Description
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	Date	
							REVISIONS		

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Client		 375 Finley Ave - Unit 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 Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper. Ductwork which passes through the garage or unheated spaces shall be adequately insulated and be gas-proofed.	Sheet Title	
GOLD PARK HOMES			FIRST FLOOR HEATING LAYOUT	
Project Name ENCORE BRAMPTON, ONTARIO			Date	MAR/2017
41-6 OPT 1ST 4104 sqft		Scale	3/16" = 1'-0"	
		BCIN# 19669		
		LO#	72726	

PART. MAIN FLOOR PLAN ELEV. 'B'



MAIN FLOOR PLAN ELEV. '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.

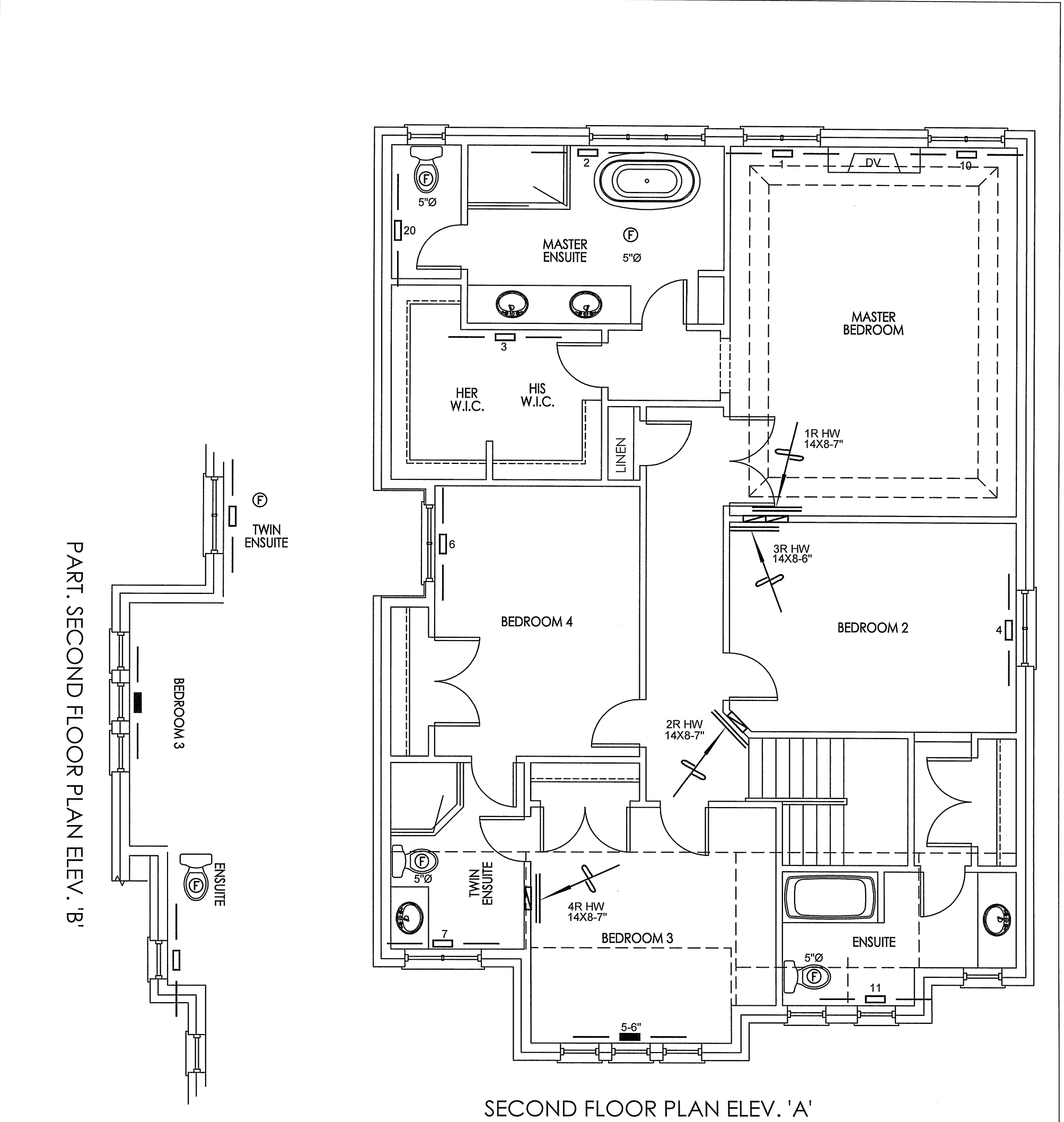
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	FLOOR SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	No.	Description	Date
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	REVISIONS		

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GOLD PARK HOMES			SECOND FLOOR HEATING LAYOUT	
Project Name			Date	MAR/2017
ENCORE BRAMPTON, ONTARIO			Scale	3/16" = 1'-0"
			BCIN# 19669	
41-6 OPT 1ST 4104 sqft		LO#	72726	



PART. SECOND FLOOR PLAN ELEV. 'B'

SECOND FLOOR PLAN ELEV. '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
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	FLOOR SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	No.	Description	Date
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	REVISIONS		

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GOLD PARK HOMES			THIRD FLOOR HEATING LAYOUT	
Project Name			Date	MAR/2017
ENCORE BRAMPTON, ONTARIO			Scale	3/16" = 1'-0"
			BCIN# 19669	
41-6 OPT 1ST 4104 sqft		LO#	72726	