

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: SD-2 LOT 61L Project: ENCORE	
D. Declaration of Designer			
I <u>MICHAEL O'ROURKE</u> (print name)		declare that (choose one as appropriate):	
☐ 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: 19669 Basis for exemption from registration and qualification: O.B.C SENTENCE 3.2.4.1 (4)			
☐ 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.			
August 16, 2017 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.

Application for a Permit Construct or Demolish – Effective January 1, 2015

SITE NAME: ENCORE BUILDING: GOLD PARK HOMES										DATE: Aug-17		WINTER NATURAL AIR CHANGE RATE		HEAT LOSS AT °F		CSA-F280-12	
LOT 61L TYPE: SD-2										LO# 75556		SUMMER NATURAL AIR CHANGE RATE		HEAT GAIN AT °F		SB-12 PACKAGE A1	
ROOM USE	EXP. WALL CLG. HT.	MBR	ENS	WIC	BED-2	BED-3	BATH	FOY	WIR	WIR	WIR	FOY	WIR	WIR	WIR	WIR	WIR
GRS.WALL AREA	36	36	11	0	12	16	26	10	17	17	17	10	10	10	10	10	10
GLAZING	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	10	10
FACTORS	324	324	99	0	108	144	260	260	170	170	170	160	160	160	160	160	160
LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	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	0	0	0	0	0	0	0	0	0	0	0
EAST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH	21	436	536	0	30	923	1265	20	18	374	759	0	0	0	0	0	0
WEST	32	665	1349	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SKYLT.	36.4	102.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DOORS	24.7	6.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NET EXPOSED WALL	4.4	0.9	271	1181	239	85	370	75	0	0	0	78	340	69	103	449	91
NET EXPOSED SKYLT WALL ABOVE GR	3.5	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXPOSED CLG	1.3	0.6	294	388	184	110	138	69	60	76	37	164	193	96	164	193	96
NO ATTIC EXPOSED CLG	2.7	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXPOSED FLOOR	2.5	0.5	0	0	0	0	0	0	0	0	0	164	383	78	0	0	0
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL HT LOSS	2650	2308	799	734	1540	1494	1654	1151	1036	1036	1036	1732	1732	1732	1732	1732	1732
SUB TOTAL HT GAIN	0.20	0.24	0.20	0.24	0.20	0.24	0.20	0.24	0.20	0.24	0.20	0.24	0.20	0.24	0.20	0.24	0.20
LEVEL FACTOR / MUL TIPLIER	630	630	190	59	366	355	393	92	18	18	18	121	121	121	121	121	121
AIR CHANGE HEAT LOSS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AIR CHANGE HEAT GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DUCT LOSS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DUCT GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEAT GAIN PEOPLE	240	480	0	0	1	240	0	0	0	0	0	240	0	0	0	0	0
HEAT GAIN APPLIANCES/LIGHTS	604	604	0	0	604	604	0	0	0	0	0	604	0	0	0	0	0
TOTAL HT LOSS BTU/H	3280	3280	989	1031	2096	1849	2047	1616	1351	1351	1351	2258	2258	2258	2258	2258	2258
TOTAL HT GAIN x 1.3 BTU/H	4649	4649	1031	53	3534	3082	1616	492	1254	1254	1254	492	492	492	492	492	492

ROOM USE	EXP. WALL CLG. HT.	DIN	KTIFRM	LAUN	WIR	FOY	BAS
GRS.WALL AREA	300	300	590	0	170	160	933
GLAZING	0	0	0	0	0	0	0
NORTH	0	0	0	0	0	0	0
EAST	10	208	422	0	18	374	83
SOUTH	39	810	995	0	0	0	4
WEST	20.8	42.2	0	0	0	0	0
SKYLT.	36.4	102.6	0	0	0	0	8
DOORS	24.7	6.0	0	0	0	0	0
NET EXPOSED WALL	4.4	0.9	251	1094	221	20	493
NET EXPOSED SKYLT WALL ABOVE GR	3.5	0.7	0	0	0	51	1257
EXPOSED CLG	1.3	0.6	0	0	0	96	254
NO ATTIC EXPOSED CLG	2.7	1.3	0	0	0	109	476
EXPOSED FLOOR	2.5	0.5	0	0	0	0	0
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0	0
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0	0
SUBTOTAL HT LOSS	2112	1638	5029	5113	1036	1732	4723
SUB TOTAL HT GAIN	0.30	0.30	0.30	0.20	0.30	0.30	0.50
LEVEL FACTOR / MUL TIPLIER	641	641	1826	409	315	526	5013
AIR CHANGE HEAT LOSS	0	0	0	0	0	0	0
AIR CHANGE HEAT GAIN	0	0	0	0	0	0	0
DUCT LOSS	0	0	0	0	0	0	0
DUCT GAIN	0	0	0	0	0	0	0
HEAT GAIN PEOPLE	240	480	0	0	0	0	0
HEAT GAIN APPLIANCES/LIGHTS	604	604	604	604	0	0	0
TOTAL HT LOSS BTU/H	2763	2763	6555	7964	1351	2258	9736
TOTAL HT GAIN x 1.3 BTU/H	3084	3084	7964	982	1254	492	1123

SITE NAME: ENCORE
BUILDER: GOLD PARK HOMES

LOT 61L
TYPE: SD-2

DATE: Aug-17

GFA: 1672 LO# 75556

HEATING CFM 950 COOLING CFM 950
TOTAL HEAT LOSS 33,306 TOTAL HEAT GAIN 28,842
AIR FLOW RATE CFM 28.52 AIR FLOW RATE CFM 32.94

AFUE = 96 %
INPUT (BTU/H) = 44,000
OUTPUT (BTU/H) = 43,000

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	9	6	3
R/A	0	0	3	1	1

EL298UH045XE36B
FAN SPEED LOW 0
MEDIUM 650
HIGH 1060
DESIGN CFM = 950
CFM @ .8" E.S.P. = 1060
TEMPERATURE RISE 42 °F

All S/A diffusers 4"x10" unless noted otherwise on layout.
All S/A runs 5"Ø unless noted otherwise on layout.

RUN #	1	2	3	4	5	7	8	10	13	14	15	16	17	18	19	22	23	24
ROOM NAME	MBR	ENS	WIC	BED-2	BED-3	BATH	BED-2	MBR	DIN	KT/FM	KT/FM	KT/FM	LAUN	W/R	FOY	BAS	BAS	BAS
RM LOSS MBH	1.64	0.99	0.09	1.05	1.85	2.05	1.05	1.64	2.75	2.19	2.19	2.19	0.30	1.35	2.26	3.25	3.25	3.25
CFM PER RUN HEAT	47	28	3	30	53	58	30	47	79	62	62	62	9	39	64	93	93	93
RM GAIN MBH	2.32	1.03	0.05	1.77	3.06	1.62	1.77	2.32	3.08	2.65	2.65	2.65	0.98	1.25	0.49	0.37	0.37	0.37
CFM PER RUN COOLING	77	34	2	58	101	53	58	77	102	87	87	87	32	41	16	12	12	12
ADJUSTED PRESSURE	0.17	0.17	0.17	0.17	0.16	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.16	0.16	0.16
EQUIVALENT LENGTH	49	35	38	35	52	60	37	55	35	19	25	34	33	35	34	31	24	36
ACTUAL DUCT LGH	150	130	140	160	160	150	170	170	160	130	140	140	150	140	160	170	120	150
EQUIVALENT LENGTH	199	165	178	195	212	210	207	225	195	149	165	184	183	175	194	201	144	186
TOTAL EFFECTIVE LENGTH	199	165	178	195	212	210	207	225	195	149	165	184	183	175	194	201	144	186
ADJUSTED PRESSURE	0.09	0.1	0.1	0.09	0.08	0.08	0.08	0.08	0.08	0.11	0.1	0.1	0.09	0.1	0.09	0.08	0.11	0.09
ROUND DUCT SIZE	5	4	4	5	6	5	5	5	6	5	5	5	4	4	5	6	5	6
HEATING VELOCITY (ft/min)	345	321	34	220	270	426	220	345	403	455	455	455	103	447	470	474	683	474
COOLING VELOCITY (ft/min)	565	390	23	426	515	389	426	565	520	639	639	639	367	470	117	61	88	61
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	3X10	4X10
TRUNK	A	A	C	C	C	B	C	A	C	A	A	A	C	B	B	A	C	B

RUN #	ROOM NAME	RM LOSS MBH	CFM PER RUN HEAT	RM GAIN MBH	CFM PER RUN COOLING	ADJUSTED PRESSURE	EQUIVALENT LENGTH	TOTAL EFFECTIVE LENGTH	ADJUSTED PRESSURE	ROUND DUCT SIZE	HEATING VELOCITY (ft/min)	COOLING VELOCITY (ft/min)	OUTLET GRILL SIZE
TRUNK	TRUNK A	401	0.08	10	12	0.15	12	12	0.15	12	0.15	12	12
TRUNK B	TRUNK B	254	0.08	8.4	8	0.15	8.4	8.4	0.15	8.4	0.15	8.4	8.4
TRUNK C	TRUNK C	551	0.08	11.2	14	0.15	11.2	11.2	0.15	11.2	0.15	11.2	11.2
TRUNK D	TRUNK D	0	0.00	0	0	0.00	0	0	0.00	0	0.00	0	0
TRUNK E	TRUNK E	0	0.00	0	0	0.00	0	0	0.00	0	0.00	0	0
TRUNK F	TRUNK F	0	0.00	0	0	0.00	0	0	0.00	0	0.00	0	0

SUPPLY AIR TRUNK SIZE	TRUNK	CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK	CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK A	401	0.08	10	12	0.15	12	401	0.08	10	12	0.15	12
TRUNK B	254	0.08	8.4	8	0.15	8.4	254	0.08	8.4	8	0.15	8.4
TRUNK C	551	0.08	11.2	14	0.15	11.2	551	0.08	11.2	14	0.15	11.2
TRUNK D	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0
TRUNK E	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0
TRUNK F	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0
RETURN AIR #	1	2	3	4	4	4	1	2	3	4	4	4
AIR VOLUME	120	120	120	455	0.15	0.15	120	120	120	455	0.15	0.15
PLENUM PRESSURE	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
ACTUAL DUCT LGH	58	32	32	27	1	1	58	32	32	27	1	1
EQUIVALENT LENGTH	185	175	175	160	0	0	185	175	175	160	0	0
TOTAL EFFECTIVE LH	243	207	207	187	1	1	243	207	207	187	1	1
ADJUSTED PRESSURE	0.06	0.07	0.07	0.08	0.08	0.08	0.06	0.07	0.07	0.08	0.08	0.08
ROUND DUCT SIZE	6.8	6.6	6.6	10.4	0	0	6.8	6.6	6.6	10.4	0	0
INLET GRILL SIZE	8	8	8	8	8	8	8	8	8	8	8	8
INLET GRILL SIZE	14	14	14	30	0	0	14	14	14	30	0	0

TYPE: SD-2
SITE NAME: ENCORE

LO # 75556
LOT 61L

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	2 @ 10.6 cfm	21.2 cfm
Kitchen & Bathrooms	4 @ 10.6 cfm	42.4 cfm
Other Rooms	4 @ 10.6 cfm	42.4 cfm
Table 9.32.3.A.	TOTAL	148.4 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	63.6	cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	148.4	cfm
Less Principal Ventil. Capacity	139	cfm
Required Supplemental Capacity	9.4	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	74 F	1.08	0.25

SUPPLEMENTAL FANS		NUTONE	
Location	Model	cfm	HVI
ENS	QTXEN050C	50	☒
BATH	QTXEN050C	50	☒
W/R	QTXEN050C	50	☒

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:	
HRAI #	001820
Date:	August-17

I REVIEW AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED IN THE APPROPRIATE CATEGORY AS AN "OTHER DESIGNER" UNDER DIVISION C. 3.2.5 OF THE BUILDING CODE.
INDIVIDUAL BCIN: 19669  MICHAEL O'ROURKE

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: SD-2	LOT 61L	BUILDER: GOLD PARK HOMES
SFQT: 1672	LO# 75556	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)	71

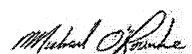
BUILDING DATA

ATTACHMENT:	ATTACHED	# 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):	22469.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	4
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.50	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.0 ft
LENGTH: 42.0 ft	WIDTH: 25.0 ft	EXPOSED PERIMETER:	91.0 ft

2012 OBC - COMPLIANCE PACKAGE		Compliance Package	
Component		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



Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

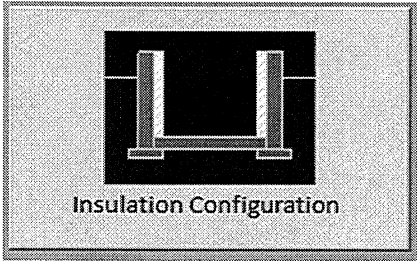
Weather Station Description				
Province:	Ontario			
Region:	Brampton			
Weather Station Location:	Open flat terrain, grass			
Anemometer height (m):	10			
Local Shielding				
Building Site:	Suburban, forest			
Walls:	Heavy			
Flue:	Heavy			
Highest Ceiling Height (m):	6.71			
Building Configuration				
Type:	Semi			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	636.3			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	848.1 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):	0.336			
Cooling Air Leakage Rate (ACH/H):	0.119			

TYPE: SD-2
LO# 75556

LOT 61L

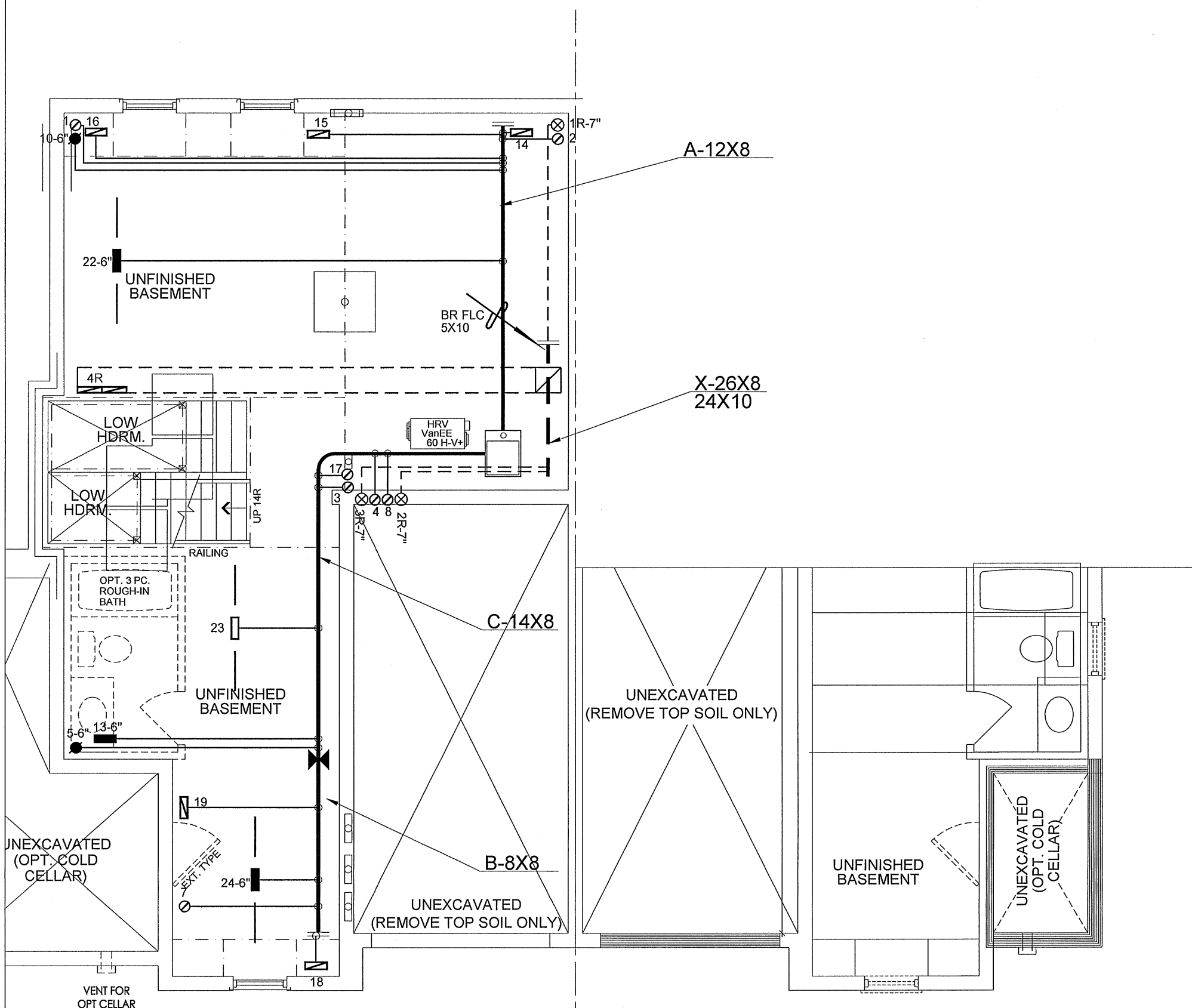
Residential Foundation Thermal Load Calculator

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):	12.8	 Insulation Configuration
Floor Width (m):	7.6	
Exposed Perimeter (m):	27.7	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.8	
Window Area (m ²):	1.1	
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):		885

TYPE: SD-2
LO# 75556

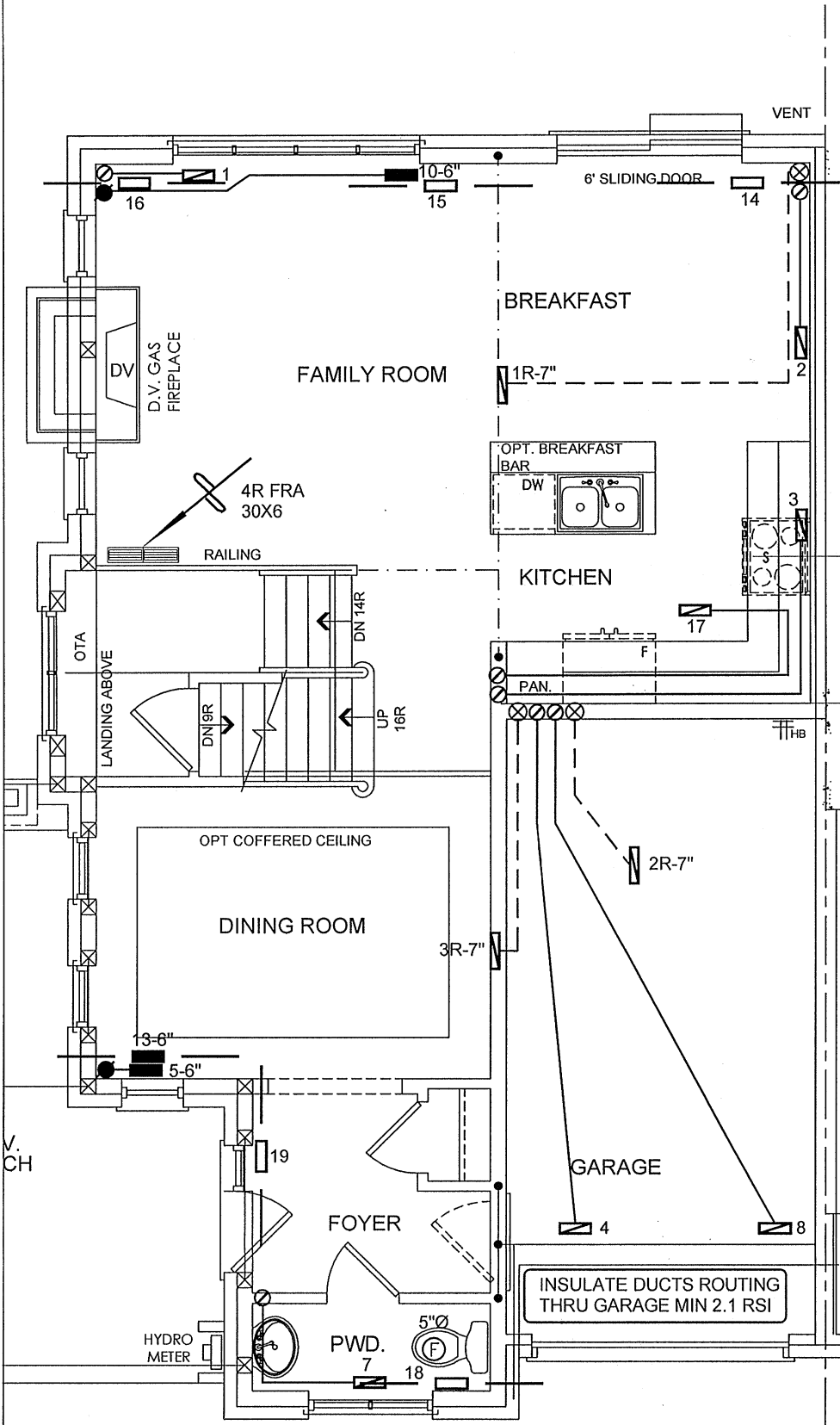
LOT 61L



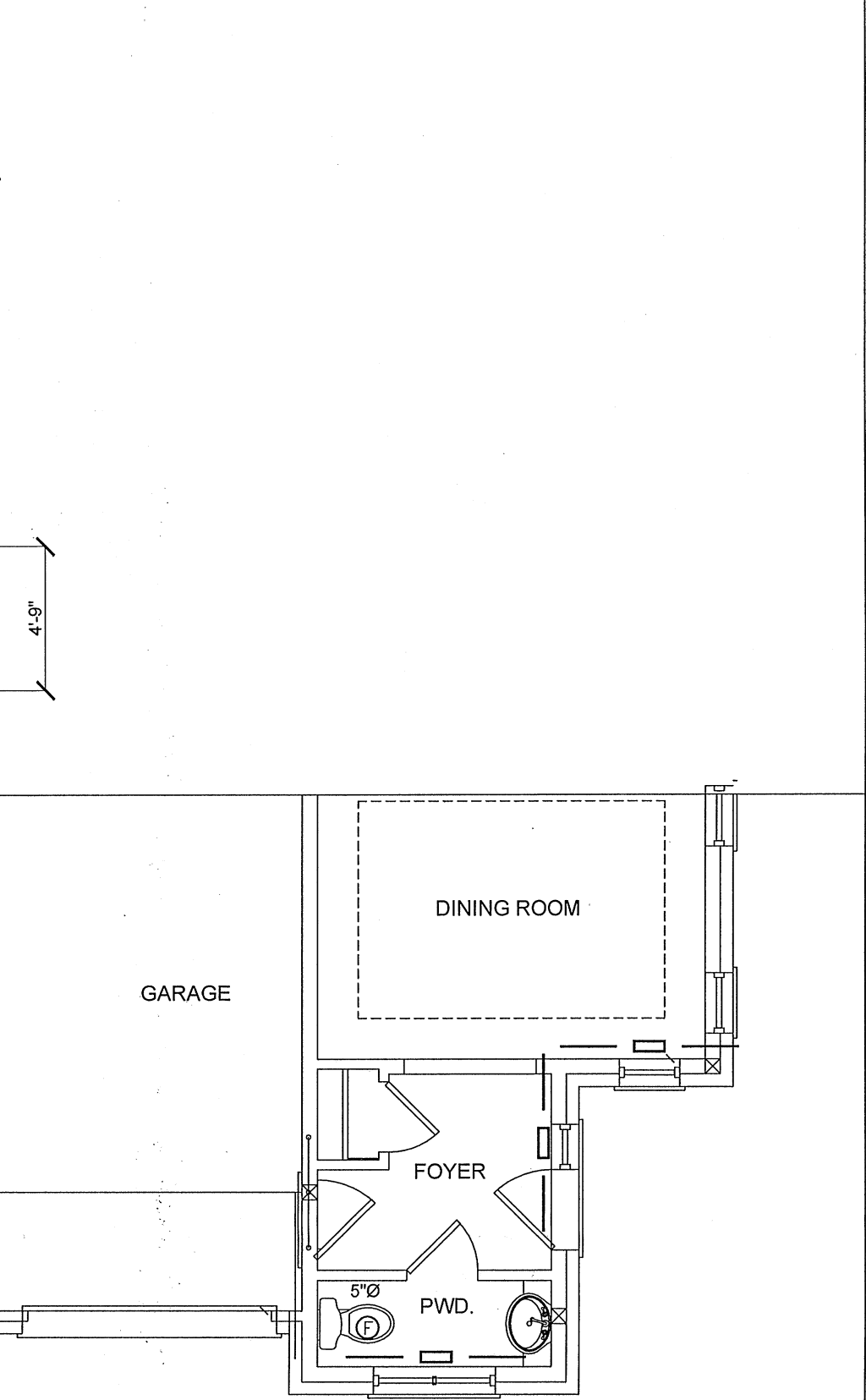
LOT 61L

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		

Client	 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 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 36091 BTU/H		# OF RUNS			S/A R/A FANS			Sheet Title				
GOLD PARK HOMES		UNIT DATA		3RD FLOOR						BASEMENT HEATING LAYOUT				
Project Name		MAKE LENNOX		2ND FLOOR			9	3	3					
ENCORE		MODEL EL296UH045XE36B		1ST FLOOR			6	1	2					
BRAMPTON, ONTARIO		INPUT 44 MBTU/H		BASEMENT			3	1	0	Date	AUG/2017			
	OUTPUT 43 MBTU/H		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						Scale	3/16" = 1'-0"				
	COOLING 2.5 TONS								BCIN# 19669					
	FAN SPEED 950 cfm @ 0.6" w.c.								LO# 75556					



PARTIAL GROUND FLOOR ELEVATION
'A' CORNER UPGRADE - LOT 61L



PART. GROUND FLOOR PLAN 'B'

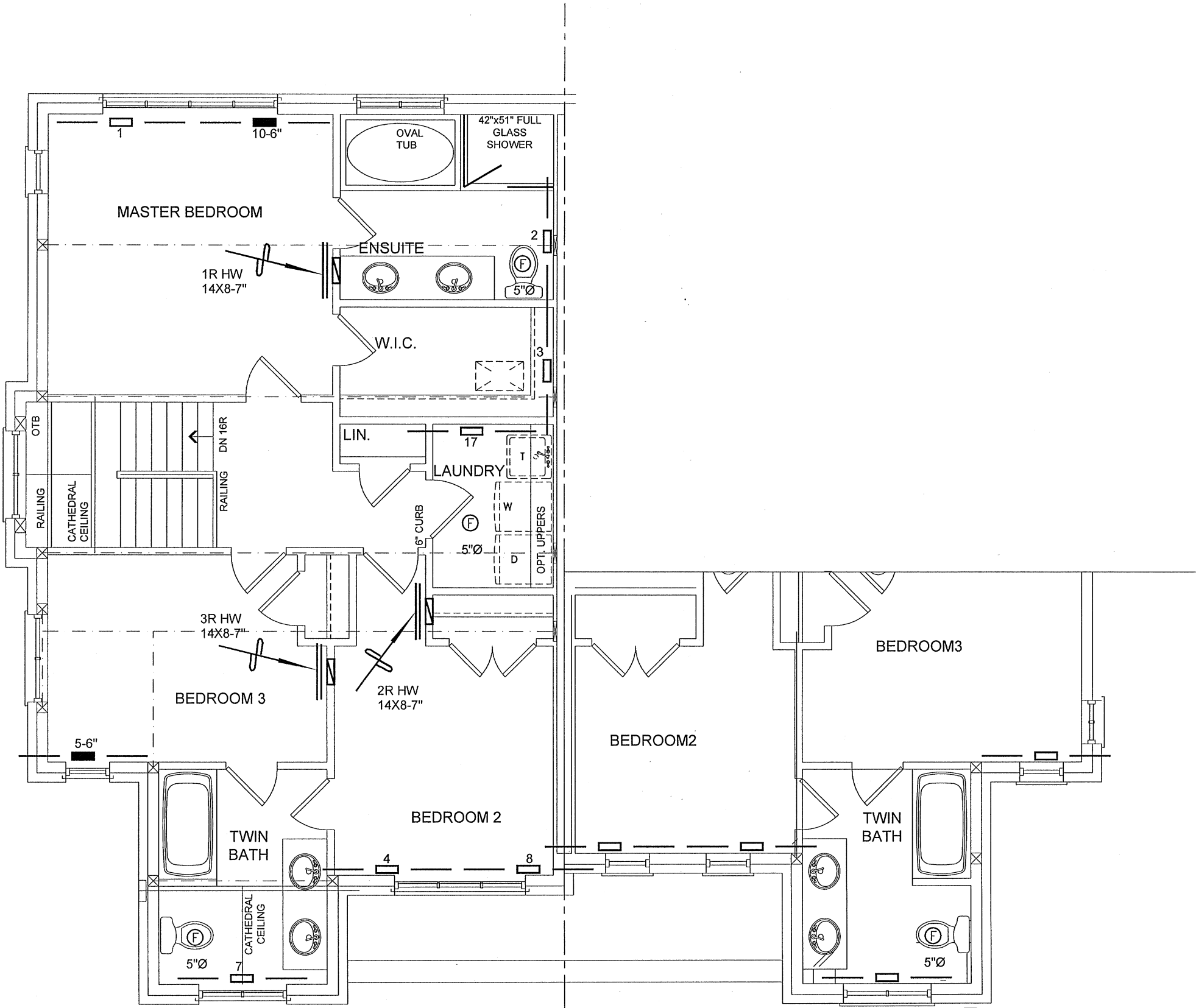
I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.3 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

LOT 61L
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			FIRST FLOOR HEATING LAYOUT	
Project Name ENCORE BRAMPTON, ONTARIO			Date	AUG/2017
SD-2 LOT 61L 1672 sqft			Scale	3/16" = 1'-0"
		BCIN# 19669		
		LO#	75556	
		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.		



PARTIAL SECOND FLOOR ELEVATION
'A' CORNER UPGRADE - LOT 61L

PART. SECOND FLOOR PLAN 'B'

I MICHAEL O'ROURKE HAVE REVIEW
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.

LOT 61L
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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Client		 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 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			SECOND FLOOR HEATING LAYOUT	
Project Name			Date	
ENCORE BRAMPTON, ONTARIO			AUG/2017	
SD-2 LOT 61L			Scale	
1672 sqft		3/16" = 1'-0"		
		BCIN# 19669		
		LO#	75556	