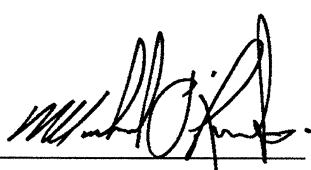


Schedule 1: Designer Information

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		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: 42-4 Project: KLEINBURG GLEN	
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>January 26, 2016</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: KLEINBURG GLEN BUILDING: GOLD PARK HOMES TYPE: 42-4 DATE: Jan-16 WINTER NATURAL AIR CHANGE RATE 0.322 HEAT LOSS AT °F. 76 CSA-F280-12
LO# 66894 SUMMER NATURAL AIR CHANGE RATE 0.088 HEAT GAIN AT °F. 16 SB-12 PACKAGE J

ROOM USE EXP. WALL CLG. HT.	MBR	ENS	WIC	BED-2	BED-3	BED-4	BATH	WIC-2	ENS-2	
GRS-WALL AREA GLAZING	370	261	81	144	234	144	63	99	135	
NORTH	0	0	0	0	0	0	0	0	0	
EAST	32	21	0	0	0	0	0	0	0	
SOUTH	0	8	0	0	0	0	0	0	0	
WEST	0	0	0	0	0	0	0	0	0	
SKYLT.	0	0	0	0	0	0	0	0	0	
DOORS	0	0	0	0	0	0	0	0	0	
NET EXPOSED WALL	338	232	81	128	210	124	56	89	128	
NET EXPOSED BSMT WALL ABOVE GR	3.5	0	0	0	0	0	0	0	0	
EXPOSED CLG	1.5	0	0	0	0	0	0	0	0	
NO ATTIC EXPOSED CLG	2.5	0	0	0	0	0	0	0	0	
EXPOSED FLOOR	2.5	0	0	0	0	0	0	0	0	
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0	0	0	0	
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0	0	0	0	
SUBTOTAL HT LOSS	2455	1819	458	1144	2310	1421	772	803	930	
SUB TOTAL HT GAIN	1882	1443	148	673	1515	695	314	577	437	
LEVEL FACTOR / MULTIPLIER	0.20	0.34	0.20	0.34	0.20	0.34	0.20	0.34	0.20	
AIR CHANGE HEAT LOSS	829	614	155	386	780	480	261	271	314	
AIR CHANGE HEAT GAIN	126	97	10	45	102	47	21	107	29	
DUCT LOSS	0	0	0	0	309	0	103	107	0	
DUCT GAIN	0	0	0	0	269	0	34	62	0	
HEAT GAIN PEOPLE	2	0	0	1	240	1	0	0	0	
HEAT GAIN APPLIANCES/LIGHTS	836	0	0	836	836	836	0	0	836	
TOTAL HT LOSS BTU/H	3284	2434	612	1530	3399	1901	1136	1181	1244	
TOTAL HT GAIN x 1.3 BTU/H	4321	2002	205	2333	3851	2363	479	880	1693	

ROOM USE EXP. WALL CLG. HT.	LVDN	DEN	KTIFM	LAUN	FOY					
GRS-WALL AREA GLAZING	220	240	760	319	820					
NORTH	0	0	10	7	0					
EAST	0	0	128	0	0					
SOUTH	38	19	3084	0	0					
WEST	0	0	0	0	0					
SKYLT.	0	0	0	0	0					
DOORS	0	0	0	0	0					
NET EXPOSED WALL	182	221	622	312	749					
NET EXPOSED BSMT WALL ABOVE GR	3.5	0	0	0	0					
EXPOSED CLG	1.5	0	0	0	0					
NO ATTIC EXPOSED CLG	2.5	0	0	0	0					
EXPOSED FLOOR	2.5	0	0	0	0					
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0					
SLAB ON GRADE HEAT LOSS	0	0	0	0	0					
SUBTOTAL HT LOSS	1544	1221	5527	1246	4638					
SUB TOTAL HT GAIN	1135	662	6163	349	2239					
LEVEL FACTOR / MULTIPLIER	0.30	0.43	0.30	0.30	0.30					
AIR CHANGE HEAT LOSS	668	528	2391	539	2007					
AIR CHANGE HEAT GAIN	76	44	414	23	150					
DUCT LOSS	0	0	0	0	0					
DUCT GAIN	0	0	0	0	0					
HEAT GAIN PEOPLE	1	0	1	0	0					
HEAT GAIN APPLIANCES/LIGHTS	836	836	836	836	6645					
TOTAL HT LOSS BTU/H	2212	1750	7919	1786	3106					
TOTAL HT GAIN x 1.3 BTU/H	2973	2005	9949	1571	3106					

SITE NAME: KLEINBURG GLEN
BUILDER: GOLD PARK HOMES

TYPE: 42-4 DATE: Jan-16
furnace pressure 0.6
furnace filter 0.05
a/c coil pressure 0.2
available pressure 0.35
plenum pressure s/a 0.18
max s/a diff press. loss 0.02
min adjusted pressure s/a 0.16

HEATING CFM 1255 COOLING CFM 1255
TOTAL HEAT LOSS 60,656 TOTAL HEAT GAIN 39,478
AIR FLOW RATE CFM 20.69 AIR FLOW RATE CFM 31.79

EL195UH090XE48C
FAN SPEED
LOW 0
MEDIUM 1105
HIGH 1255

LENNOX 90
AFUE = 95.0 %
INPUT (BTU/H) = 88,000
OUTPUT (BTU/H) = 84,000
DESIGN CFM = 1255
CFM @ 6" E.S.P.

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

All S/A diffusers 4"x10" unless noted otherwise on layout.
All S/A runs 5'0" unless noted otherwise on layout.

RUN #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	17	18	19	20	21	22	23	24
ROOM NAME	MBR	ENS	WIC	BED-2	BED-3	BED-4	BATH	WIC-2	BED-3	MBR	ENS-2	LVDN	LVDN	KT/FM	KT/FM	LAUN	ENS	FOY	DEN	BAS	BAS	BAS	BAS
RM LOSS MBH	1.64	1.22	0.61	1.53	1.70	1.90	1.14	1.18	1.70	1.64	1.24	1.11	1.11	2.64	2.64	1.79	1.22	3.32	1.75	4.72	4.72	4.72	4.72
CFM PER RUN HEAT	34	25	13	32	35	39	23	24	35	34	26	23	23	55	55	37	25	69	36	98	98	98	98
RM GAIN MBH	2.16	1.00	0.21	2.33	1.93	2.36	0.48	0.88	1.93	2.16	1.69	1.49	1.49	3.32	3.32	1.57	1.00	1.55	2.01	0.35	0.35	0.35	0.35
CFM PER RUN COOLING	69	32	7	74	61	75	15	28	61	69	54	47	47	105	105	50	32	49	64	11	11	11	11
ADJUSTED PRESSURE	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16
EQUIVALENT LENGTH	170	130	140	180	170	130	180	150	190	220	200	102	160	170	170	130	160	160	170	170	190	80	120
TOTAL EFFECTIVE LENGTH	220	182	175	216	214	166	224	192	228	248	239	124	201	211	202	146	190	196	200	208	228	100	142
ADJUSTED PRESSURE	0.08	0.09	0.1	0.08	0.08	0.1	0.08	0.09	0.08	0.07	0.07	0.14	0.09	0.08	0.08	0.12	0.09	0.09	0.09	0.08	0.07	0.16	0.11
ROUND DUCT SIZE	5	4	4	5	5	5	4	4	5	5	5	4	4	6	6	4	4	5	5	6	6	5	5
HEATING VELOCITY (ft/min)	250	287	149	235	257	286	264	275	257	250	191	264	264	280	280	424	287	507	264	500	500	720	720
COOLING VELOCITY (ft/min)	507	367	80	543	448	551	172	321	448	507	396	539	539	535	535	574	367	360	470	56	56	81	81
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	4X10	3X10	3X10	3X10	3X10	4X10	4X10	3X10	3X10
TRUNK	A	B	F	E	E	F	E	E	E	A	E	F	B	A	A	F	B	D	E	B	A	C	F

RUN #	25	29	30
ROOM NAME	BAS	FOY	KT/FM
RM LOSS MBH	4.72	3.32	2.64
CFM PER RUN HEAT	98	69	55
RM GAIN MBH	0.35	1.55	3.32
CFM PER RUN COOLING	11	49	105
ADJUSTED PRESSURE	0.16	0.17	0.16
EQUIVALENT LENGTH	170	170	120
TOTAL EFFECTIVE LENGTH	205	187	161
ADJUSTED PRESSURE	0.08	0.09	0.1
ROUND DUCT SIZE	6	5	6
HEATING VELOCITY (ft/min)	500	507	280
COOLING VELOCITY (ft/min)	56	360	535
OUTLET GRILL SIZE	4X10	3X10	4X10
TRUNK	D	D	B

SUPPLY AIR TRUNK SIZE	TRUNK	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK A	276	0.07	9	10	8	TRUNK G	0	0.00	0	0	TRUNK H	0	0.00	0	0	TRUNK I	0	0.00	0	0
TRUNK B	226	0.08	8	8	8	TRUNK J	0	0.00	0	0	TRUNK K	0	0.00	0	0	TRUNK L	0	0.00	0	0
TRUNK C	600	0.07	12	16	8	TRUNK M	0	0.00	0	0	TRUNK N	0	0.00	0	0	TRUNK O	0	0.05	0	0
TRUNK D	236	0.08	8.2	8	8	TRUNK P	0	0.05	0	0	TRUNK Q	0	0.05	0	0	TRUNK R	0	0.05	0	0
TRUNK E	447	0.07	10.7	14	8	TRUNK S	0	0.05	0	0	TRUNK T	0	0.05	0	0	TRUNK U	0	0.05	0	0
TRUNK F	657	0.07	12.4	18	8	TRUNK V	0	0.05	0	0	TRUNK W	0	0.05	0	0	TRUNK X	0	0.05	0	0

RETURN AIR #	1	2	3	4	5	6	7	BR																
AIR VOLUME	130	130	130	130	155	255	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	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.	45	52	55	36	32	42	40	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EQUIVALENT LENGTH	175	195	195	175	190	235	240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EFFECTIVE LH	220	247	250	211	222	277	280	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ADJUSTED PRESSURE	0.07	0.06	0.06	0.07	0.07	0.05	0.05	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80
ROUND DUCT SIZE	6.8	7	7	6.8	7.2	9.5	7.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INLET GRILL SIZE	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
INLET GRILL SIZE	14	14	14	14	14	30	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TYPE: 42-4
SITE NAME: KLEINBURG GLEN

LO # 66894

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	4 @ 10.6 cfm	42.4 cfm
Other Rooms	6 @ 10.6 cfm	63.6 cfm
Table 9.32.3.A.	TOTAL	180.2 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	79.5 cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	180.2	cfm
Less Principal Ventil. Capacity	95	cfm
Required Supplemental Capacity	85.2	cfm

PRINCIPAL EXHAUST FAN CAPACITY			
Model: VANEE 50H	Location: BSMT		
95.0 cfm	3.0 sones		
☒	HVI Approved		
PRINCIPAL EXHAUST HEAT LOSS CALCULATION			
CFM	ΔT °F	FACTOR	% LOSS
95.0 CFM	X 76 F	X 1.08	X 0.34

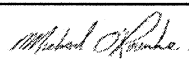
SUPPLEMENTAL FANS		NUTONE
Location	Model	cfm HVI Sones
ENS	QTXEN050C	50 ✓ 0.3
BATH	QTXEN050C	50 ✓ 0.3

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 50H		
95 cfm high	48 cfm low	
66 % 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:	January-16

HEAT LOSS AND GAIN SUMMARY SHEET**MODEL:** 42-4**BUILDER:** GOLD PARK HOMES**SFQT:** 3371**LO#** 66894**SITE:** KLEINBURG GLEN**DESIGN ASSUMPTIONS**

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

BUILDING DATA

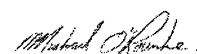
ATTACHMENT:	DETACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	EAST	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	3.57	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	AVERAGE	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft ³):	46694.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	5
INTERIOR LIGHTING LOAD (Btu/h/ft ²):	1.50	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.0 ft
LENGTH: 61.0 ft	WIDTH: 34.0 ft	EXPOSED PERIMETER:	190.0 ft

2012 OBC - COMPLIANCE PACKAGE

Component	Compliance Package
	J
Ceiling with Attic Space Minimum RSI (R)-Value	50
Ceiling Without Attic Space Minimum RSI (R)-Value	31
Exposed Floor Minimum RSI (R)-Value	31
Walls Above Grade Minimum RSI (R)-Value	22
Basement Walls Minimum RSI (R)-Value	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
Heated Slab or Slab ≤ 600 mm below grade Minimum RSI (R)-Value	10
Windows and Sliding Glass Doors Maximum U-Value	1.8
Skylights Maximum U-Value	2.8
Space Heating Equipment Minimum AFUE	0.94
HRV Minimum Efficiency	60%
Domestic Hot Water Heater Minimum EF	0.67

INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE



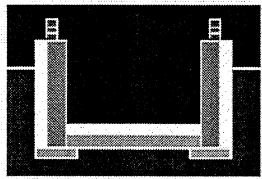
Air Infiltration Residential Load Calculator

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):	6.71			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	1322.2			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (ACH=3.57)			
Custom BDT Data:	ELA @ 10 Pa. 716.42 cm ² 3.57 ACH @ 50 Pa			
Mechanical Ventilation (L/s):	Total Supply:		Total Exhaust:	
	0		0	
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Change Rate (ACH/H):			0.322	
Cooling Air Change Rate (ACH/H):			0.098	

Residential Foundation Thermal Load Calculator

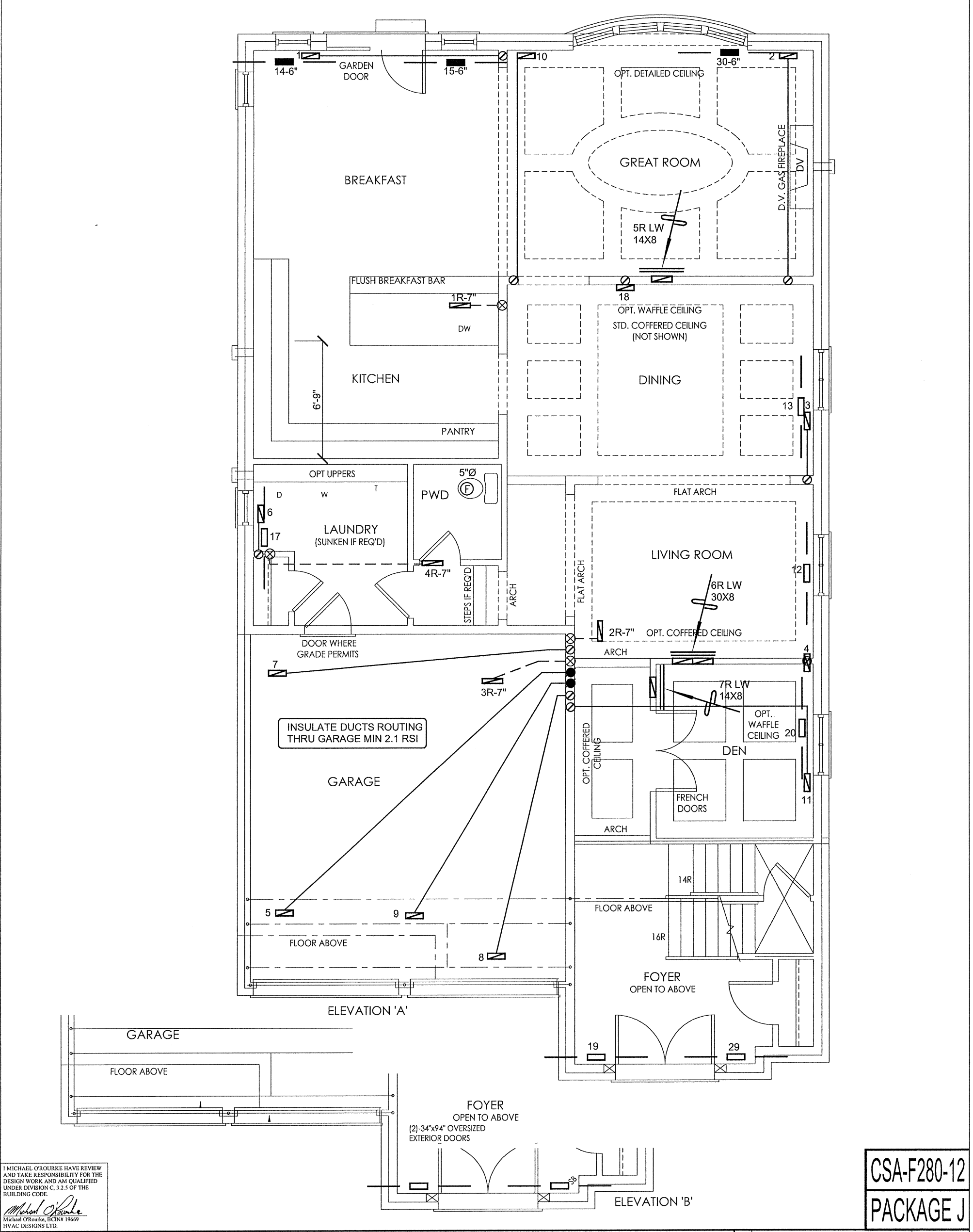
Supplemental tool for CAN/CSA-F280

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):	18.6	 Insulation Configuration
Floor Width (m):	12.8	
Exposed Perimeter (m):	0	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.8	
Window Area (m ²):	1.7	
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):	2615	

62.8

2.6 167.86

167.66



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.

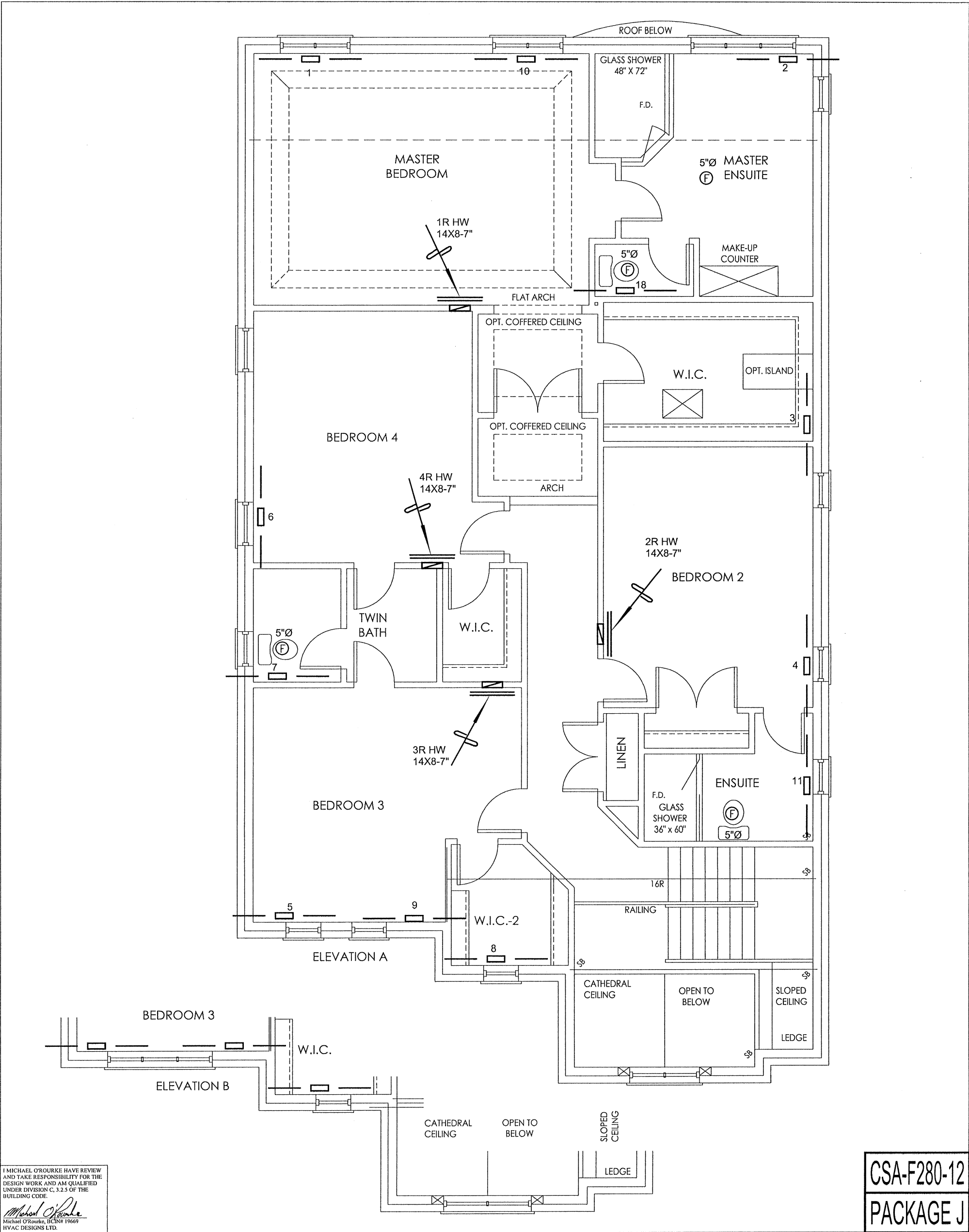
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE J

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			FIRST FLOOR HEATING LAYOUT	
Project Name			Date	JAN/2016
KLEINBURG GLEN VAUGHAN, ONTARIO			Scale	3/16" = 1'-0"
42-4			BCIN# 19669	
3371 sqft			LO#	66894



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 J

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								

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GOLD PARK HOMES			SECOND FLOOR HEATING LAYOUT	
Project Name			Date	JAN/2016
KLEINBURG GLEN VAUGHAN, ONTARIO			Scale	3/16" = 1'-0"
42-4			BCIN# 19669	
3371 sqft			LO#	66894