


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 INNISFIL	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]				
<input type="checkbox"/> House <input type="checkbox"/> Small Buildings <input type="checkbox"/> Large Buildings <input type="checkbox"/> Complex Buildings				
<input checked="" type="checkbox"/> HVAC – House <input type="checkbox"/> Building Services <input type="checkbox"/> Detection, Lighting and Power <input type="checkbox"/> Fire Protection				
<input type="checkbox"/> Building Structural <input type="checkbox"/> Plumbing – House <input type="checkbox"/> Plumbing – All Buildings <input type="checkbox"/> 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: 32-1-10	Project: ALCONA
D. Declaration of Designer				
I <u>MICHAEL O'ROURKE</u>		declare that (choose one as appropriate):		
(print name)				
<input type="checkbox"/> 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: _____				
<input checked="" type="checkbox"/> 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>				
<input type="checkbox"/> 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.				
June 21, 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.

Town of Innisfil Certified Model
04/01/2018 10:16:18 AM kgervais

SITE NAME: ALCONA		TYPE: 32-1-10		DATE: Jun-17		WINTER NATURAL AIR CHANGE RATE 0.332		HEAT LOSS AT °F: 83		CSA-F280-12	
BUILDER: BAYVIEW WELLINGTON		GFA: 2024		LO# 74573		SUMMER NATURAL AIR CHANGE RATE 0.087		HEAT GAIN AT °F: 12		SB-12 PACKAGE A1	
ROOM USE	MBR	ENS	WIC	BED-2	BED-3	BATH	FOY	MUD	WOD	BAS	
EXP. WALL	33	24	6	28	20	22	28	16	36	144	
CLG. HT.	9	9	9	10	9	9	10	10	9	9	
FACTORS											
GRS.WALL AREA	297	216	54	280	180	198	280	160	324	1080	
GLAZING	0	0	0	0	0	0	0	0	0	0	
NORTH	23.3	15.8	0	0	0	0	0	0	0	0	
EAST	23.3	41.4	0	0	0	0	0	0	23	70	47
SOUTH	23.3	24.7	0	0	0	0	6	0	0	0	0
WEST	23.3	41.4	0	0	0	0	140	0	0	0	0
SKYLT.	40.8	101.3	13	303	538	0	210	0	0	0	0
DOORS	27.6	4.1	0	0	0	0	0	0	0	0	0
NET EXPOSED WALL	4.9	0.7	289	1314	193	203	443	1776	0	0	0
NET EXPOSED BSMT WALL ABOVE GR	3.9	0.6	0	0	0	0	0	0	0	0	0
EXPOSED CLG	1.4	0.6	282	396	163	143	106	426	0	0	0
NO ATTIC EXPOSED CLG	3.0	1.2	0	0	0	0	0	0	0	0	0
EXPOSED FLOOR	2.8	0.4	0	0	0	0	0	0	0	0	0
BASEMENT/CRAWL HEAT LOSS	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
SUBTOTAL HT LOSS	2363	1496	443	2758	1779	1776	1776	1560	0	0	0
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
LEVEL FACTOR / MULTIPLIER	567	359	106	662	427	426	426	426	0	0	0
AIR CHANGE HEAT LOSS	0	0	0	0	0	0	0	0	0	0	0
AIR CHANGE HEAT GAIN	103	52	6	342	67	106	220	167	0	0	0
DUCT LOSS	0	0	0	0	0	0	0	0	0	0	0
DUCT GAIN	2	480	0	274	240	167	0	0	0	0	0
HEAT GAIN PEOPLE	550	550	0	560	560	0	0	0	0	0	0
HEAT GAIN APPLIANCES/LIGHTS	2930	1854	604	3762	2205	2423	3254	1885	1296	13188	560
TOTAL HT LOSS BTU/H	3442	1064	133	3914	2382	2383	803	967	618	47497	1109
TO TAL HT GAIN x 1.3 BTU/H											
ROOM USE	LVIDN		KIT	LAUN	WIR	FOY	MUD				
EXP. WALL	51		36	7	13	28	16				
CLG. HT.	10		10	9	10	10	10				
FACTORS											
GRS.WALL AREA	510		360	63	130	280	160				
GLAZING	0		0	0	0	0	0				
NORTH	23.3	15.8	0	0	0	0	0				
EAST	23.3	41.4	0	0	0	0	0				
SOUTH	23.3	24.7	0	0	0	0	0				
WEST	23.3	41.4	0	0	0	0	0				
SKYLT.	40.8	101.3	67	1561	2773	0	0				
DOORS	27.6	4.1	0	0	0	0	0				
NET EXPOSED WALL	4.9	0.7	293	1431	210	444	1106				
NET EXPOSED BSMT WALL ABOVE GR	3.9	0.6	0	0	0	0	0				
EXPOSED CLG	1.4	0.6	0	0	0	0	0				
NO ATTIC EXPOSED CLG	3.0	1.2	0	0	0	0	0				
EXPOSED FLOOR	2.8	0.4	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	3707	2650	3050	644	801	2389	1237				
SUB TOTAL HT GAIN	0.30	0.36	0.30	0.24	0.30	0.36	0.30				
LEVEL FACTOR / MULTIPLIER	1343	181	1105	154	290	865	448				
AIR CHANGE HEAT LOSS	0	0	0	0	0	0	0				
AIR CHANGE HEAT GAIN	181	0	205	9	21	39	12				
DUCT LOSS	0	0	0	0	0	0	0				
DUCT GAIN	0	0	0	0	0	0	0				
HEAT GAIN PEOPLE	240	0	0	69	0	0	0				
HEAT GAIN APPLIANCES/LIGHTS	550	550	560	560	0	0	560				
TOTAL HT LOSS BTU/H	5050	4395	4155	4890	1091	429	967				
TO TAL HT GAIN x 1.3 BTU/H											

SITE NAME: ALCONA BUILDER: BAYVIEW WELLINGTON TYPE: 32-1-10 DATE: Jun-17 GFA: 2024 LO#: 74573

HEATING CFM 995 COOLING CFM 995
 TOTAL HEAT LOSS 44,375 TOTAL HEAT GAIN 27,517
 AIR FLOW RATE CFM 22.42 AIR FLOW RATE CFM 36.16

^LENNOX EL296UH070XE36B 70
 FAN SPEED LOW 0 MEDIUM 995 HIGH 1100
 DESIGN CFM = 995
 CH-M @ 6" E.S.P.
 ARUE = 96 %
 INPUT (BTU/H) = 66,000
 OUTPUT (BTU/H) = 64,000

TEMPERATURE RISE 60 °F
 r/a pressure 0.17
 r/a grille press. Loss 0.02
 r/a adjusted pressure r/a 0.15

plenum pressure s/a 0.18
 max s/a dif press. loss 0.02
 min adjusted pressure s/a 0.16

furnace pressure 0.6
 furnace filter 0.05
 a/c coil pressure 0.2
 available pressure for s/a & r/a 0.35

4th 3rd 2nd 1st Bas
 S/A 0 0 10 7 4
 R/A 0 0 3 1 1

All S/A diffusers 4"x10", unless noted otherwise on layout.
 All S/A runs 5/8" unless noted otherwise on layout.

ROOM NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
ROOM NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
RM LOSS MBH	1.46	1.85	0.60	1.88	2.21	2.21	1.21	1.88	1.21	1.46	1.46	2.52	2.52	2.08	2.08	0.88	0.88	1.09	3.25	1.88	3.62	3.62	3.62	3.62
CFM PER RUN HEAT	33	42	14	42	49	49	27	42	27	33	33	57	57	47	47	20	20	24	73	38	81	81	81	81
RM GAIN MBH	1.72	1.06	0.13	1.96	2.38	2.38	1.19	1.96	1.19	1.72	1.72	2.20	2.20	2.45	2.45	0.99	0.99	0.43	0.80	0.97	0.43	0.43	0.43	0.43
CFM PER RUN COOLING	62	38	5	71	86	86	43	71	43	62	62	79	79	88	88	36	36	16	29	35	16	16	16	16
ADJUSTED PRESSURE	0.17	0.17	0.17	0.17	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16
ACTUAL DUCT LGH	38	44	32	41	44	44	48	43	43	52	52	34	22	33	40	33	33	37	31	22	32	28	19	30
EQUIVALENT LENGTH	140	120	190	160	150	150	140	170	110	130	130	140	150	110	130	180	180	110	110	160	120	110	130	120
TOTAL EFFECTIVE LENGTH	178	164	222	201	194	194	188	213	153	182	170	174	172	143	170	213	213	147	141	182	152	138	149	150
ADJUSTED PRESSURE	0.1	0.1	0.08	0.09	0.08	0.08	0.09	0.08	0.11	0.09	0.09	0.1	0.1	0.11	0.1	0.08	0.08	0.12	0.12	0.09	0.11	0.12	0.11	0.11
ROUND DUCT SIZE	5	4	4	5	6	6	4	5	4	5	5	5	5	5	5	4	4	4	5	4	5	5	5	5
HEATING VELOCITY (ft/min)	242	482	161	308	250	250	310	308	310	242	242	419	419	345	345	229	229	275	536	436	595	595	595	595
COOLING VELOCITY (ft/min)	455	436	57	521	438	438	493	521	493	455	455	580	580	646	646	413	413	184	213	402	117	117	117	117
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	4X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10
TRUNK #	A	B	D	D	B	B	C	D	C	B	B	A	B	A	A	D	D	C	C	B	A	B	B	C

RETURN AIR TRUNK SIZE

TRUNK #	TRUNK CFM	STATIC PRESS	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK O	0	0.07	0	0	0
TRUNK P	0	0.07	0	0	0
TRUNK Q	0	0.07	0	0	0
TRUNK R	0	0.07	0	0	0
TRUNK S	0	0.07	0	0	0
TRUNK T	0	0.07	0	0	0
TRUNK U	0	0.07	0	0	0
TRUNK V	0	0.07	0	0	0
TRUNK W	0	0.07	0	0	0
TRUNK X	995	0.07	14.5	26	689
TRUNK Y	715	0.07	12.8	20	644
TRUNK Z	0	0.07	0	0	0
DROP	995	0.07	14.5	24	597

SUPPLY AIR TRUNK SIZE

TRUNK #	TRUNK CFM	STATIC PRESS	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK A	265	0.10	8.1	8	596
TRUNK B	646	0.08	11.9	16	727
TRUNK C	232	0.09	7.9	8	525
TRUNK D	350	0.08	9.5	12	815
TRUNK E	996	0.08	14	22	815
TRUNK F	0	0.00	0	0	0

RETURN AIR #

ROOM NAME	TRUNK #	TRUNK CFM	STATIC PRESS	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK #	1	2	3	4	4	BR
AIR VOLUME	180	175	120	360	0	160
PLENUM PRESSURE	0.15	0.15	0.15	0.15	0.15	0.15
ACTUAL DUCT LGH	40	41	46	28	1	14
EQUIVALENT LENGTH	145	185	145	190	0	150
TOTAL EFFECTIVE LH	185	226	191	218	1	164
ADJUSTED PRESSURE	0.08	0.07	0.08	0.07	0.08	0.09
ROUND DUCT SIZE	7.4	7.5	6.3	9.9	0	6.9
INLET GRILL SIZE	8	8	8	8	0	8
INLET GRILL SIZE	X	X	X	X	X	X
INLET GRILL SIZE	14	14	14	30	0	14

TYPE: 32-1-10
SITE NAME: ALCONA

LO # 74573

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	5	@ 10.6 cfm	53.0	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	63.6	cfm

SUPPLEMENTAL VENTILATION CAPACITY 9.32.3.5.

Total Ventilation Capacity	159	cfm
Less Principal Ventil. Capacity	139	cfm
Required Supplemental Capacity	20.0	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	83 F	1.08	0.25

SUPPLEMENTAL FANS NUTONE

Location	Model	cfm	HVI	Sones
ENS	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3
BATH	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3
W/R	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3

HEAT RECOVERY VENTILATOR 9.32.3.11.

Model: VANEE 60H-V+

139 cfm high 50 cfm low

75 % Sensible Efficiency @ 32 deg F (0 deg C) HVI Approved

LOCATION OF INSTALLATION

Lot: Concession

Township: Plan:

Address:

Roll # Building Permit #

BUILDER: BAYVIEW WELLINGTON

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: June-17

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 32-1-10

BUILDER: BAYVIEW WELLINGTON

SFQT: 2024

LO# 74573

SITE: ALCONA

DESIGN ASSUMPTIONS

	°F		°F
HEATING		COOLING	
OUTDOOR DESIGN TEMP.	-11	OUTDOOR DESIGN TEMP.	84
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	72

BUILDING DATA

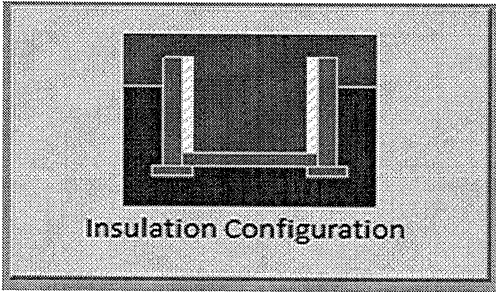
ATTACHMENT:	DETACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	EAST	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	3.57	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	AVERAGE	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft ³):	27326.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	4
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: 45.0 ft	WIDTH: 27.0 ft	EXPOSED PERIMETER:	144.0 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:	Barrie	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	13.7	 <p style="text-align: center;">Insulation Configuration</p>
Floor Width (m):	8.2	
Exposed Perimeter (m):	0.0	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.83	
Window Area (m ²):	2.4	
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):	1454	

TYPE: 32-1-10
 LO# 74573

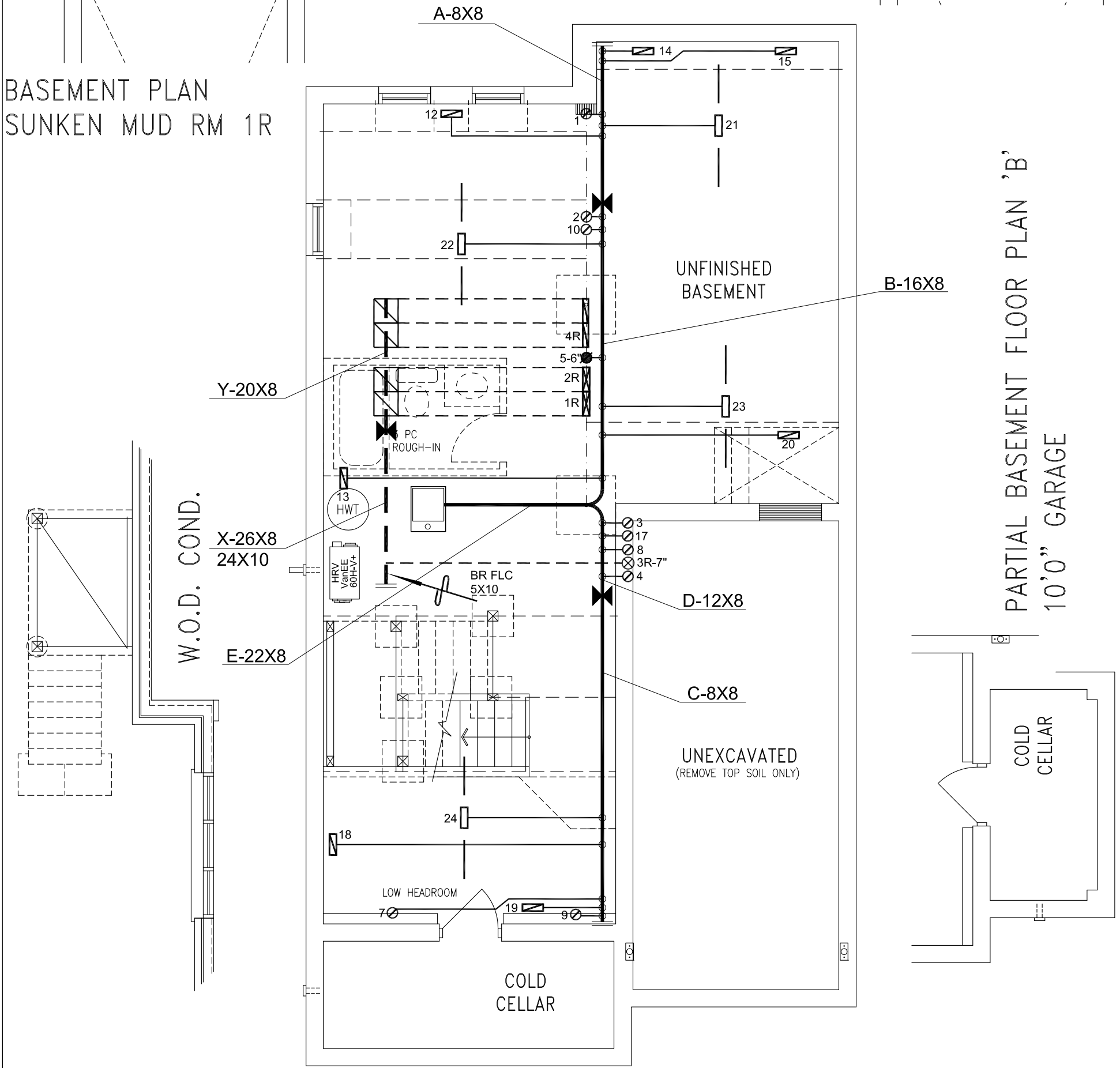
Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario			
Region:	Barrie			
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):	773.8			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1031.5 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):	0.332			
Cooling Air Leakage Rate (ACH/H):	0.087			

BASEMENT PLAN SUNKEN
MUD ROOM 2R OR MORE

BASEMENT PLAN
SUNKEN MUD RM 1R



BASEMENT PLAN 'A'
10'0" GARAGE

Town of Innisfil Certified Model
04/01/2018 10:16:34 AM kgervais

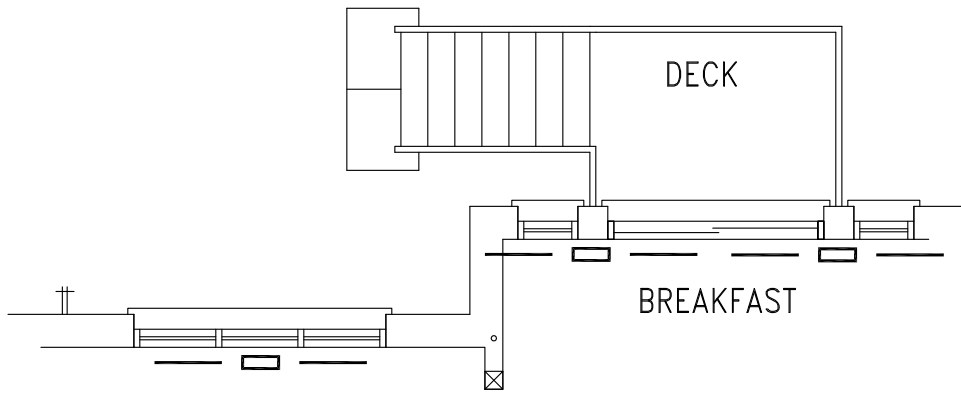
CSA-F280-12
PACKAGE A1

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.

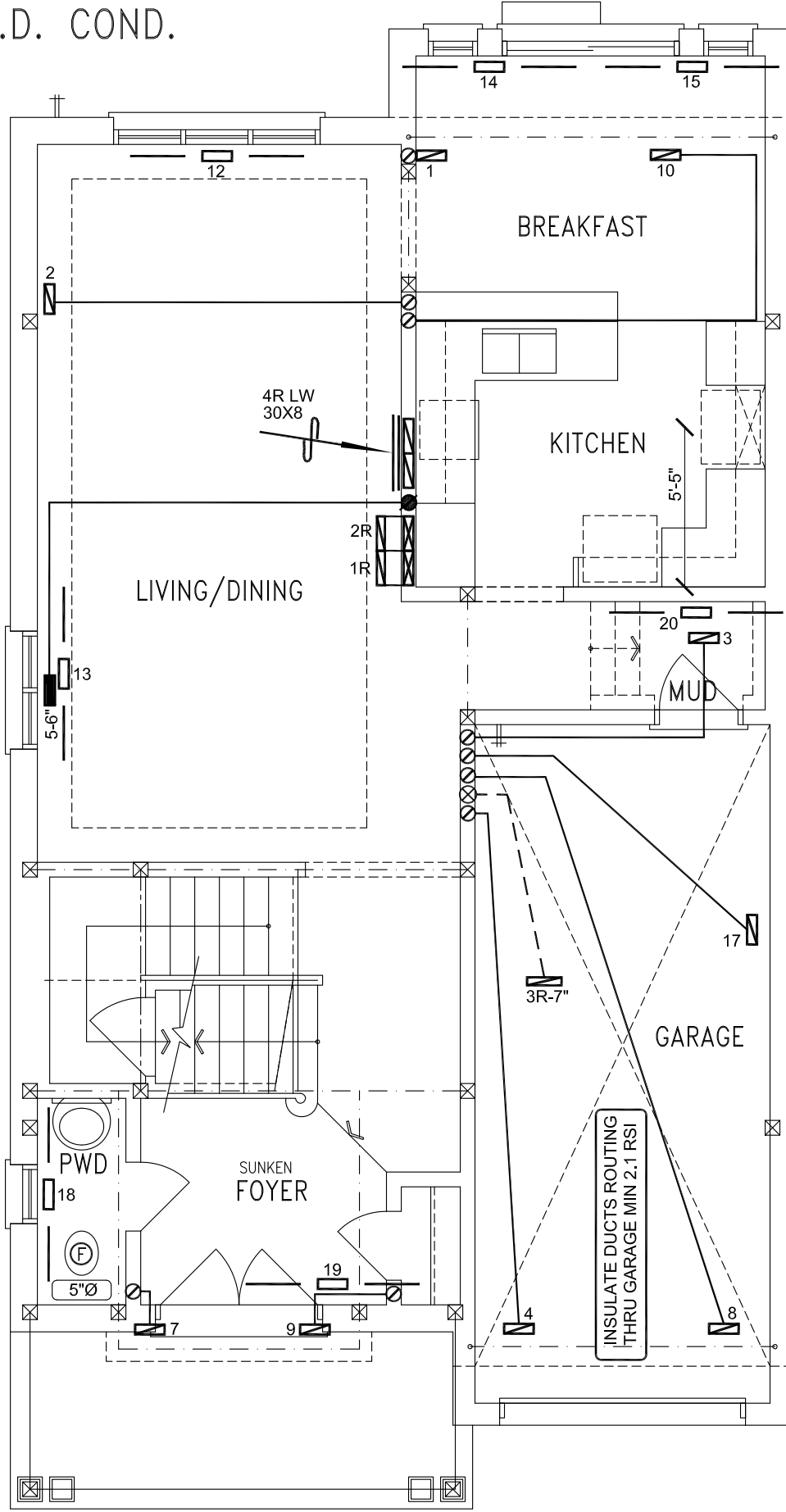
HVAC LEGEND							REVISIONS		
— ◻ —	FLOOR SUPPLY AIR GRILLE	— ◻ —	6" SUPPLY AIR BOOT ABOVE	— ◻ —	14"x8" RETURN AIR GRILLE	— ◻ —	RETURN AIR STACK ABOVE	3.	
— ◻ —	FLOOR SUPPLY AIR GRILLE 6" BOOT	— ◻ —	SUPPLY AIR STACK FROM 2nd FLOOR	— ◻ —	30"x8" RETURN AIR GRILLE	— ◻ —	RETURN AIR STACK 2nd FLOOR	2.	
—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

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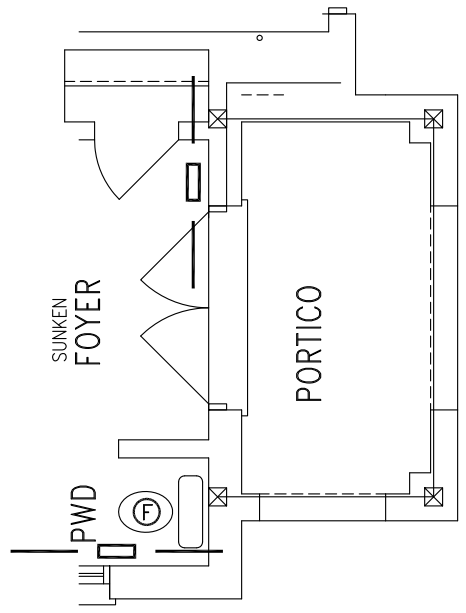
Client BAYVIEW WELLINGTON	Project Name ALCONA INNISFIL, ONTARIO	 375 Finley Ave - Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdsgns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services	HEAT LOSS 47497 BTU/H	# OF RUNS S/A R/A FANS	Sheet Title BASEMENT HEATING LAYOUT		
			UNIT DATA	3RD FLOOR			
			MAKE LENNOX	2ND FLOOR	10	3	3
			MODEL EL296UH070XE36B	1ST FLOOR	7	1	2
			INPUT 66 MBTU/H	BASEMENT	4	1	0
			OUTPUT 64 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			Date JUNE/2017
			COOLING 2.5 TONS				Scale 3/16" = 1'-0"
			FAN SPEED 995 cfm @ 0.5" w.c.				BCIN# 19669
32-1-10	2024 sqft	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.				LO# 74573	



W.O.D. COND.



PARTIAL GROUND FLOOR PLAN 'B'
10'0" GARAGE



GROUND FLOOR PLAN 'A'
10'0" GARAGE

Town of Innisfil Certified Model
04/01/2018 10:16:37 AM kgervais

CSA-F280-12
PACKAGE A1

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.

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

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Client
BAYVIEW WELLINGTON

Project Name
ALCONA
INNISFIL, ONTARIO

32-1-10 2024 sqft

HVAC DESIGNS LTD.

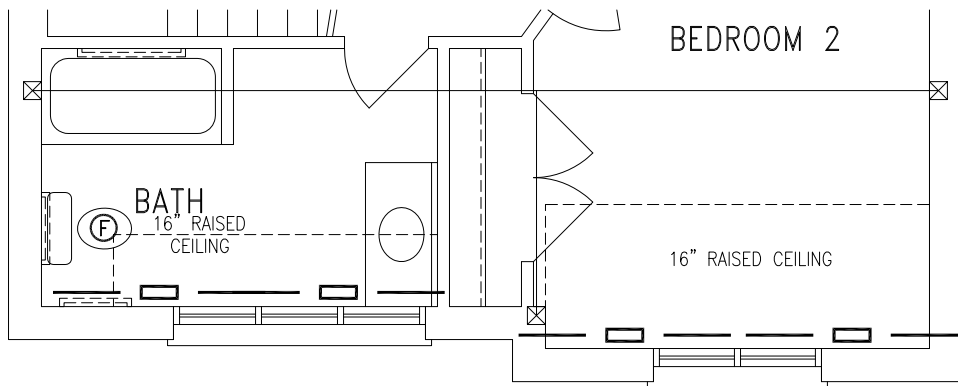
375 Finley Ave - Suite 202 - Ajax, Ontario
L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375
Email: info@hvacdsgns.ca
Web: www.hvacdsgns.ca
Specializing in Residential Mechanical Design Services

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.

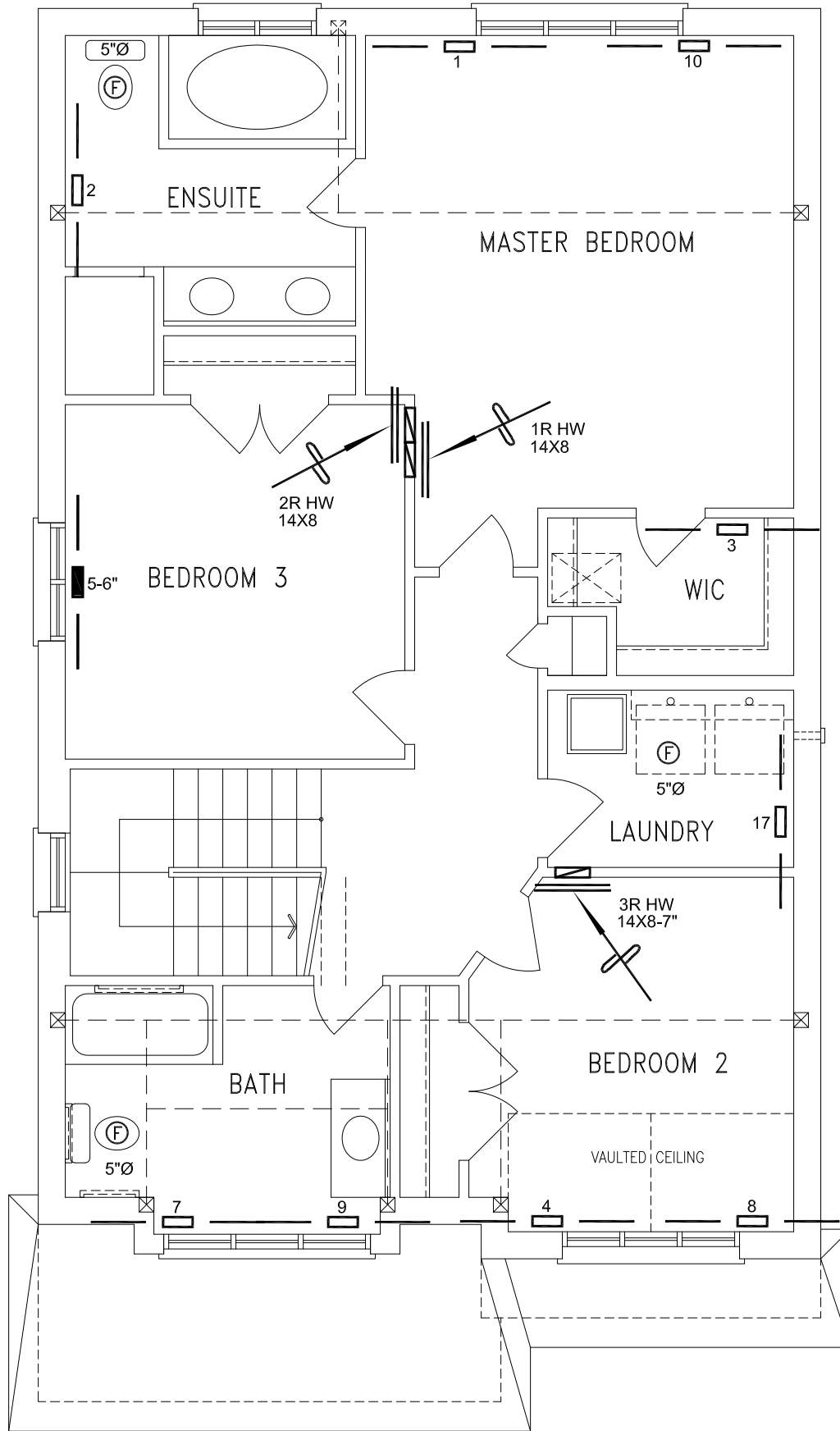
Sheet Title
FIRST FLOOR HEATING LAYOUT

Date: JUNE/2017
Scale: 3/16" = 1'-0"
BCIN# 19669

LO# 74573



PARTIAL SECOND FLOOR PLAN 'B'
10'0" GARAGE



SECOND FLOOR PLAN 'A'
10'0" GARAGE

Town of Innisfil Certified Model
04/01/2018 10:16:40 AM kgervais

CSA-F280-12
PACKAGE A1

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.

HVAC LEGEND							REVISIONS		
— ◻ —	FLOOR SUPPLY AIR GRILLE	— ◻ —	6" SUPPLY AIR BOOT ABOVE	— ◻ —	14"x8" RETURN AIR GRILLE	— ◻ —	RETURN AIR STACK ABOVE	3.	
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Client
BAYVIEW WELLINGTON

Project Name
**ALCONA
INNISFIL, ONTARIO**

32-1-10 2024 sqft

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Sheet Title
**SECOND FLOOR
HEATING
LAYOUT**

Date: JUNE/2017
Scale: 3/16" = 1'-0"
BCIN# 19669

LO# 74573