

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@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: 4001 THE SUMMERDALE Project: PINE VALLEY & TESTON	
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: <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.			
January 23, 2018 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 & TESTON
BUILDER: GOLD PARK HOMES
TYPE: 4001 THE SUMMERDALE
DATE: Jan-18
LO# 77466
GFA: 2840
WINTER NATURAL AIR CHANGE RATE 0.341
HEAT LOSS AT °F. 76
CSA-F280-12
HEAT GAIN AT °F. 16
SB-12 PACKAGE A1

ROOM USE	MBR	ENS	WIC	BED-2	BED-3	BED-4	BATH	GM/LN	ENS-2	
EXP. WALL	32	27	7	11	37	11	6	40	6	
CLG. HT.	10	9	9	9	9	9	9	9	9	
FACTORS										
GRS.WALL AREA	320	248	64	100	337	100	65	364	55	
GLAZING									LOSS GAIN	
NORTH	0	0	0	18	383	0	0	0	8	170
EAST	0	0	0	0	0	73	0	0	0	135
SOUTH	0	0	0	0	0	0	0	44	0	0
WEST	0	0	0	0	0	0	0	936	0	0
SKYLT.	36	383	0	0	0	20	8	426	0	0
DOORS	37.2	103.0	0	0	0	0	0	20	0	0
NET EXPOSED WALL	4.5	0	0	0	0	0	0	0	0	0
NET EXPOSED BSMT WALL ABOVE GR	3.6	0	0	0	0	0	0	0	0	0
EXPOSED CLG	1.3	0	0	0	0	0	0	0	0	0
NO ATTIC EXPOSED CLG	2.7	0	0	0	0	0	0	0	0	0
EXPOSED FLOOR	2.6	0	0	0	0	0	0	0	0	0
BA SEMENT/CRAWL HEAT LOSS	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
SUBTOTAL HT LOSS	2357	1630	419	975	3918	1009	501	3167	580	
SUB TOTAL HT GAIN	1950	1089	126	491	3709	701	310	2874	255	
LEVEL FACTOR / MUL TIPLIER	0.20	0.20	0.26	0.20	0.26	0.20	0.20	0.20	0.20	
AIR CHANGE HEAT LOSS	602	416	107	249	1001	258	128	809	148	
AIR CHANGE HEAT GAIN	192	107	12	48	365	69	0	283	25	
DUCT LOSS	0	0	0	0	492	0	0	398	73	
DUCT GAIN	0	0	0	0	0	0	0	0	0	
HEAT GAIN PEOPLE	2	0	0	1	494	1	0	378	28	
HEAT GAIN APPLIANCES	621	0	0	240	621	240	0	0	0	
TOTAL HT LOSS BTU/H	2959	2047	526	1224	5410	1267	630	4374	802	
TOTAL HT GAIN x 1.3 BTU/H	4216	1556	180	1821	7057	2121	443	5402	401	

ROOM USE	DIN	STDY	KIT/FM	LN/MD	WIR	FOY			BAS
EXP. WALL	18	9	67	20	4	55			168
CLG. HT.	11	11	11	13	11	11			9
FACTORS									
GRS.WALL AREA	188	99	737	260	44	805			1025
GLAZING									LOSS GAIN
NORTH	0	0	0	9	0	0	0	0	9
EAST	0	0	0	0	0	0	0	0	192
SOUTH	0	0	0	0	0	0	0	0	151
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	4.5	0	0	20	0	40	1010	210	0
NET EXPOSED BSMT WALL ABOVE GR	3.6	0	0	231	0	565	2521	524	0
EXPOSED CLG	1.3	0	0	0	0	0	0	0	0
NO ATTIC EXPOSED CLG	2.7	0	0	0	0	0	0	0	0
EXPOSED FLOOR	2.6	0	0	0	0	0	0	0	0
BA SEMENT/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	1287	778	5559	1727	314	3531			5638
SUB TOTAL HT GAIN	779	410	5281	471	215	734			8148
LEVEL FACTOR / MUL TIPLIER	0.30	0.30	0.42	0.30	0.42	0.30			633
AIR CHANGE HEAT LOSS	544	329	2350	730	133	1493			0.50
AIR CHANGE HEAT GAIN	77	40	619	46	21	72			9298
DUCT LOSS	0	0	0	0	0	0			62
DUCT GAIN	0	0	0	0	0	0			0
HEAT GAIN PEOPLE	0	0	0	0	0	0			0
HEAT GAIN APPLIANCES	621	621	621	621	0	0			0
TOTAL HT LOSS BTU/H	1831	1107	7909	2458	447	5024			821
TOTAL HT GAIN x 1.3 BTU/H	1920	1392	9777	1479	306	1048			17446

TOTAL HEAT GAIN BTU/H: 41492 TONS: 3.46 LOSS DUE TO VENTILATION LOAD BTU/H: 3181 STRUCTURAL HEAT LOSS: 55461 TOTAL COMBINED HEAT LOSS BTU/H: 88641

SITE NAME: PINE VALLEY & TESTON
BUILDER: GOLD PARK HOMES

TYPE: 4001 THE SUMMERDALE DATE: Jan-18

GFA: 2840 LO# 77456

HEATING CFM 1255
TOTAL HEAT LOSS 55,461
AIR FLOW RATE CFM 22.63

COOLING CFM 1255
TOTAL HEAT GAIN 40,831
AIR FLOW RATE CFM 30.74

AFUE = 96 %
INPUT (BTU/H) = 88,000
OUTPUT (BTU/H) = 85,000

ALLENNOX
EL296UH090XE48C
FAN SPEED
LOW 0
MEDIUM 1105
HIGH 1255

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	13	9	4
R/A	0	0	4	2	1

All S/A diffusers 4" x 10" unless noted otherwise on layout.

All S/A turns 5° 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
RM LOSS MBH	1.48	2.05	0.53	1.22	1.80	1.27	0.63	1.80	1.80	1.48	0.80	1.83	1.11	1.98	1.98	1.98	2.19	2.19	5.02	2.19	2.46	1.98	4.36	4.36
CFM PER RUN HEAT	33	46	12	28	41	29	14	41	41	33	18	41	25	45	45	45	49	10	114	49	56	45	99	99
RM GAIN MBH	2.11	1.56	0.18	1.82	2.35	2.12	0.44	2.35	2.35	2.11	0.40	1.92	1.39	2.44	2.44	2.44	2.70	0.31	1.05	2.70	1.48	2.44	0.43	0.43
CFM PER RUN COOLING	65	48	6	56	72	65	14	72	72	65	12	59	43	75	75	75	83	9	32	83	45	75	13	13
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	0.17	0.17	0.17	0.16	0.17	0.15	0.16	0.17	0.17	0.16	0.16
EQUIVALENT LENGTH	150	140	190	120	150	110	120	160	170	160	180	140	120	130	130	150	130	160	100	140	110	120	130	150
TOTAL EFFECTIVE LENGTH	205	168	214	144	201	159	173	216	231	204	235	176	125	170	162	176	195	202	146	211	122	143	168	169
ADJUSTED PRESSURE	0.08	0.1	0.08	0.12	0.09	0.11	0.1	0.08	0.07	0.08	0.07	0.1	0.14	0.1	0.11	0.1	0.08	0.09	0.1	0.08	0.14	0.12	0.1	0.1
ROUND DUCT SIZE	5	4	4	5	5	5	4	5	5	5	4	5	4	5	5	5	6	4	6	6	4	5	6	6
HEATING VELOCITY (ft/min)	242	528	138	321	301	213	161	301	301	242	207	301	287	330	330	330	250	115	581	250	642	330	505	505
COOLING VELOCITY (ft/min)	477	551	69	642	529	477	161	529	529	477	138	433	493	551	551	551	423	103	163	423	516	551	66	66
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	4X10	3X10	4X10	4X10	4X10
TRUNK	A	D	C	D	B	A	A	B	B	C	B	A	D	A	C	D	B	A	B	B	D	D	A	D

ROOM NAME	25	26
RM LOSS MBH	BAS	BAS
CFM PER RUN HEAT	4.36	4.36
RM GAIN MBH	0.43	0.43
CFM PER RUN COOLING	13	13
ADJUSTED PRESSURE	0.16	0.16
EQUIVALENT LENGTH	27	50
TOTAL EFFECTIVE LENGTH	137	210
ADJUSTED PRESSURE	0.12	0.08
ROUND DUCT SIZE	5	6
HEATING VELOCITY (ft/min)	727	505
COOLING VELOCITY (ft/min)	95	66
OUTLET GRILL SIZE	3X10	4X10
TRUNK	C	B

SUPPLY AIR TRUNK SIZE										RETURN AIR TRUNK SIZE									
TRUNK	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)					
TRUNK A	0.08	8.6	8	8	0	0.00	0	0	8	0	0.06	0	0	8					
TRUNK B	0.07	10.8	14	8	0	0.00	0	0	8	0	0.06	0	0	8					
TRUNK C	0.07	14	22	8	0	0.00	0	0	8	0	0.06	0	0	8					
TRUNK D	0.10	8.9	10	8	0	0.00	0	0	8	0	0.06	0	0	8					
TRUNK E	0.00	0	0	8	0	0.00	0	0	8	0	0.06	0	0	8					
TRUNK F	0.00	0	0	8	0	0.00	0	0	8	0	0.06	0	0	8					
RETURN AIR #	1	2	3	4	5	6	BR												
AIR VOLUME	155	155	155	95	365	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					
ACTUAL DUCT LGH.	58	57	40	59	21	22	1	1	1	1	1	1	1	14					
EQUIVALENT LENGTH	190	185	225	145	145	185	0	0	0	0	0	0	0	150					
TOTAL EFFECTIVE LH	248	242	265	204	166	207	1	1	1	1	1	1	1	164					
ADJUSTED PRESSURE	0.06	0.06	0.06	0.07	0.09	0.07	14.80	14.80	14.80	14.80	14.80	14.80	14.80	0.09					
ROUND DUCT SIZE	7.5	7.5	7.5	6	9.3	6.8	0	0	0	0	0	0	0	7.4					
INLET GRILL SIZE	8	8	8	8	8	8	0	0	0	0	0	0	0	8					
	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
INLET GRILL SIZE	14	14	14	14	30	14	0	0	0	0	0	0	0	14					

TYPE: 4001 THE SUMMERDALE
SITE NAME: PINE VALLEY & TESTON

LO # 77456

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	<u>2</u> @ 21.2 cfm	<u>42.4</u> cfm
Other Bedrooms	<u>3</u> @ 10.6 cfm	<u>31.8</u> cfm
Kitchen & Bathrooms	<u>5</u> @ 10.6 cfm	<u>53</u> cfm
Other Rooms	<u>6</u> @ 10.6 cfm	<u>63.6</u> cfm
Table 9.32.3.A.	TOTAL	<u>190.8</u> 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	<u>190.8</u>	cfm
Less Principal Ventil. Capacity	<u>155</u>	cfm
Required Supplemental Capacity	<u>35.8</u>	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE 65H	Location: BSMT
<u>155.0</u> cfm	<u>3.0</u> sones
☒ HVI Approved	

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

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

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 65H		
<u>155</u> cfm high	<u>64</u> cfm low	
<u>75</u> % Sensible Efficiency @ 32 deg F (0 deg C)	☒ HVI Approved	

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-18

HEAT LOSS AND GAIN SUMMARY SHEET**MODEL:** 4001 THE SUMMERDALE**BUILDER:** GOLD PARK HOMES**SFQT:** 2840**LO#** 77456**SITE:** PINE VALLEY & TESTON**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 (ft³):	40095.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	5
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.50	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.1 ft
LENGTH: 52.0 ft	WIDTH: 32.0 ft	EXPOSED PERIMETER:	168.0 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	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:	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):	15.8	
Floor Width (m):	9.8	
Exposed Perimeter (m):	0.0	
Wall Height (m):	2.8	
Depth Below Grade (m):	1.86	
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):		1652

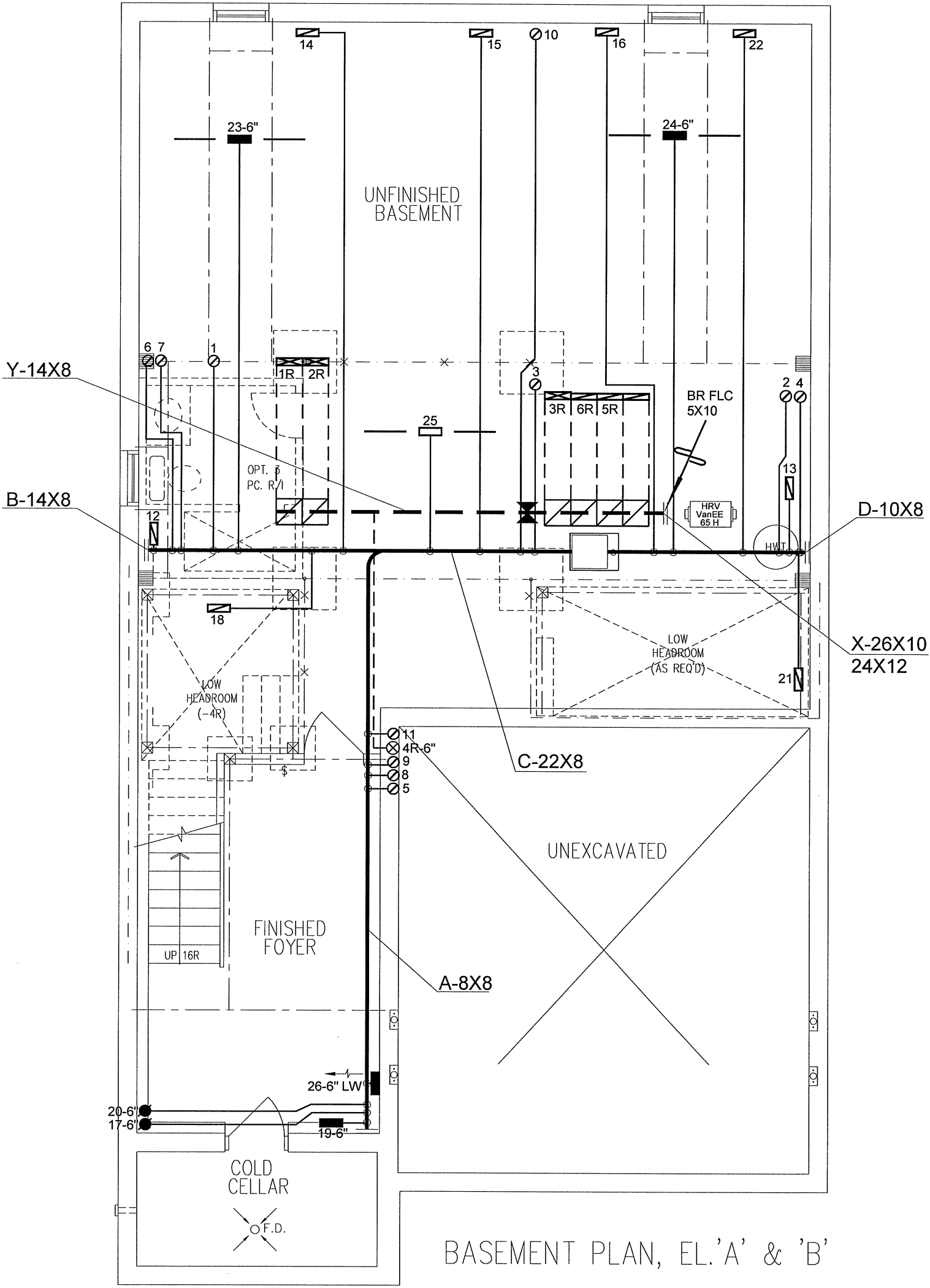
TYPE: 4001 THE SUMMERDALE
LO# 77456

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):	7.04			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	1135.4			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1513.5 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	73.2	73.2		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.341			
Cooling Air Leakage Rate (ACH/H):	0.124			

TYPE: 4001 THE SUMMERDALE
LO# 77456



BASEMENT PLAN, EL. 'A' & '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.

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

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Client
GOLD PARK HOMES

Project Name
**PINE VALLEY & TESTON
VAUGHAN, ONTARIO**

**THE SUMMERDALE
4001 2840 sqft**



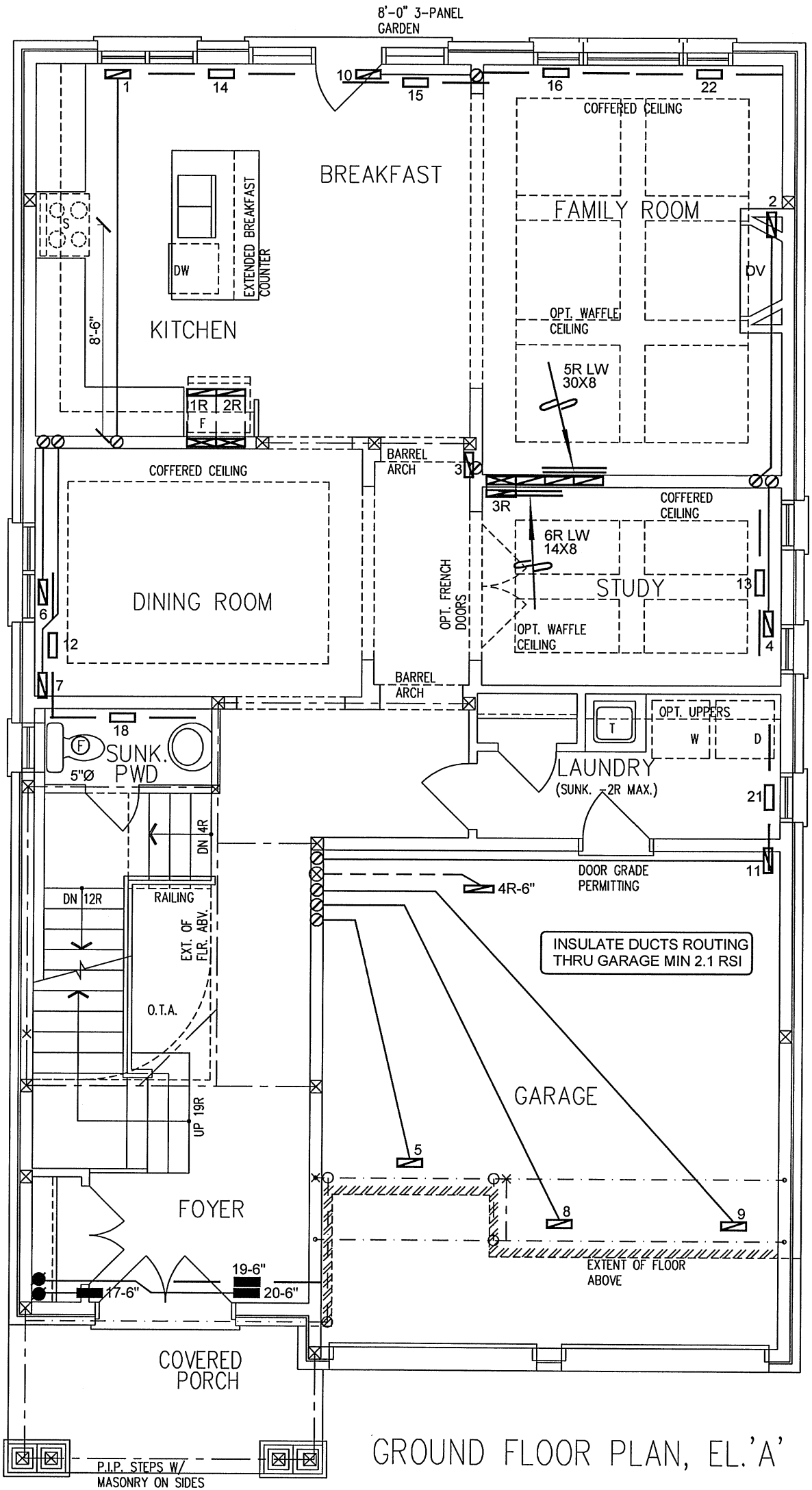
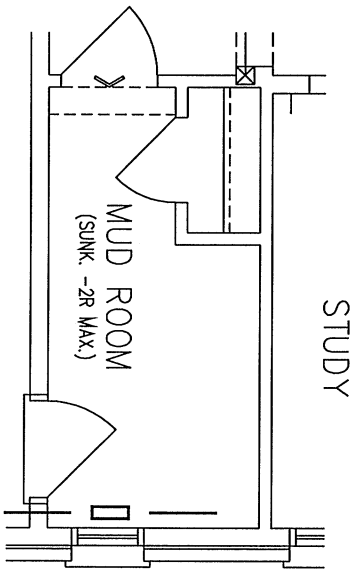
375 Finley Ave - Suite 202 - Ajax, Ontario
L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375
Email: info@hvacdesigns.ca
Web: www.hvacdesigns.ca
Specializing in Residential Mechanical Design Services

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 58641 BTU/H UNIT DATA		# OF RUNS	S/A	R/A	FANS
MAKE	LENNOX	3RD FLOOR			
MODEL	EL296UH090XE48C	2ND FLOOR	13	4	3
INPUT	88 MBTU/H	1ST FLOOR	9	2	2
OUTPUT	85 MBTU/H	BASEMENT	4	1	0
COOLING	3.5 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			
FAN SPEED	1255 cfm @ 0.6" w.c.				

Sheet Title	
BASEMENT HEATING LAYOUT	
Date	JAN/2018
Scale	3/16" = 1'-0"
BCIN# 19669	
LO#	77456

PART. GROUND FLOOR MUDROOM FOR OPT.
SECOND FLOOR LAUNDRY



GROUND FLOOR PLAN, EL.'B'

GROUND FLOOR PLAN, EL.'A'

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.

CSA-F280-12
PACKAGE A1

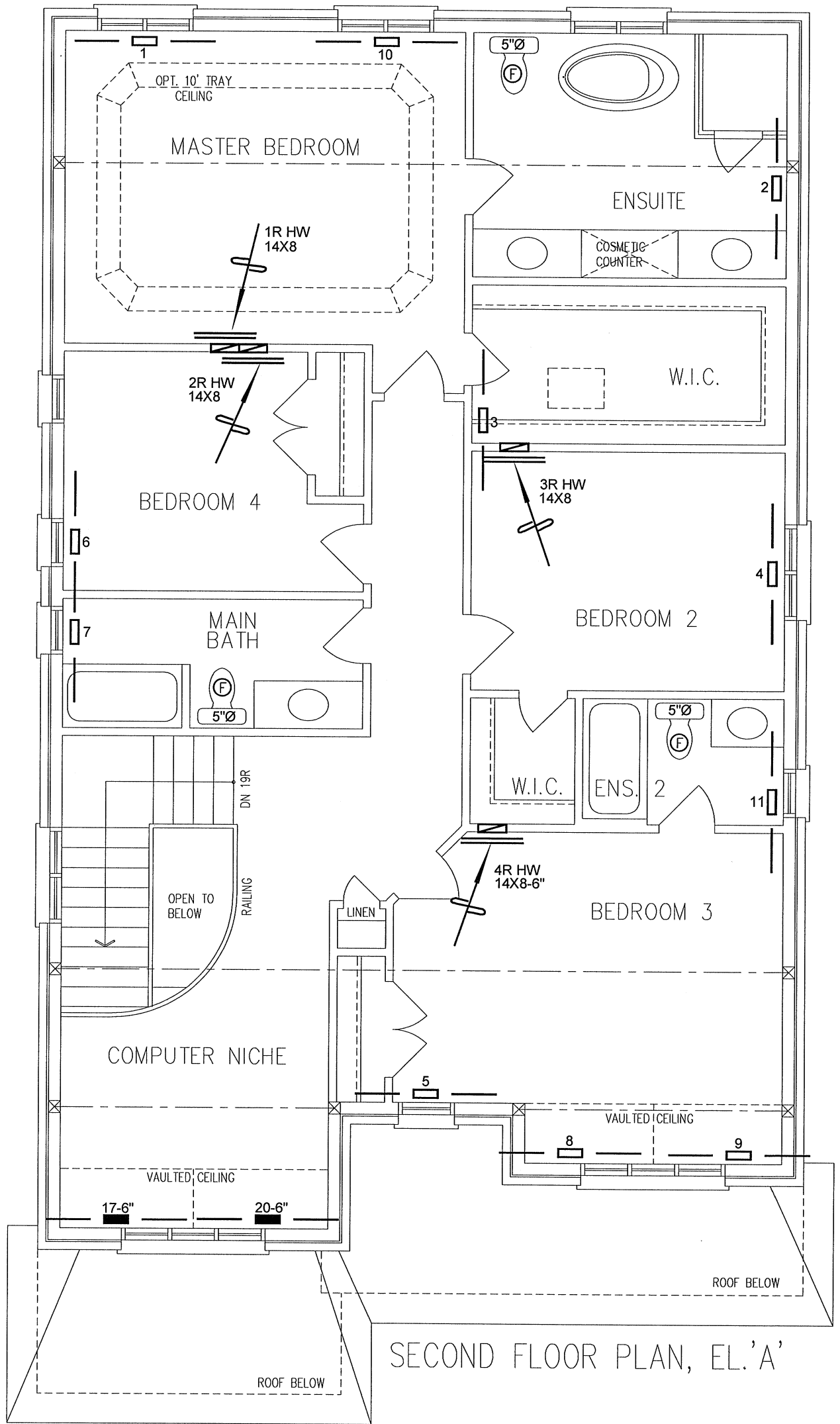
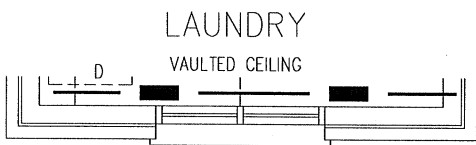
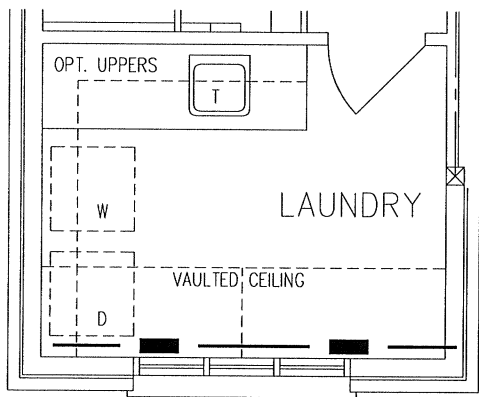
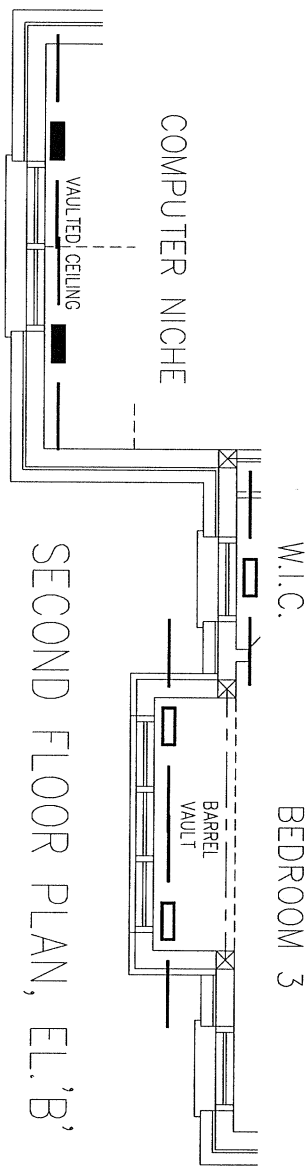
HVAC LEGEND						3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	
	FLOOR SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN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

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Client
GOLD PARK HOMES
Project Name
**PINE VALLEY & TESTON
VAUGHAN, ONTARIO**
**THE SUMMERDALE
4001** **2840 sqft**

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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 **JAN/2018**
Scale **3/16" = 1'-0"**
BCIN# 19669
LO# 77456



PART. SECOND FLOOR PLAN
W/ OPT. LAUNDRY, EL. 'A'

PART. SECOND FLOOR PLAN
W/ OPT. LAUNDRY, EL. 'B'

SECOND FLOOR PLAN, EL. '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			SECOND FLOOR HEATING LAYOUT	
Project Name			Date	JAN/2018
PINE VALLEY & TESTON VAUGHAN, ONTARIO			Scale	3/16" = 1'-0"
THE SUMMERDALE 40012840 sqft			BCIN# 19669	
		LO#	77456	