

ROOM USE	LVDN	KTFM	LAUN	PWD	FOY	WOB	BAS
EXP. WALL	60	61	0	8	14	47	106
CLG. HT.	10	10	9	10	11	9	9
FACTORS							
GRS.WALL AREA	600	610	0	80	154	423	636
LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN
GLAZING	0	0	0	0	0	52	7
NORTH	19.8	15.4	0	0	0	1028	138
EAST	19.8	39.1	0	0	0	0	108
SOUTH	33	652	781	8	158	0	0
WEST	19.8	39.1	0	0	0	0	0
SKYL.T.	0	0	0	0	0	0	0
DOORS	23.5	4.6	0	0	0	0	0
NET EXPOSED WALL	4.1	0.8	0	0	0	0	0
SUB TOTAL HT GAIN	518	2147	420	72	298	371	20
NET EXPOSED BSMT WALL ABOVE GR	3.3	0.7	0	0	0	1538	459
EXPOSED CLG	1.2	0.6	176	210	106	301	92
NO ATTIC EXPOSED CLG	2.6	1.3	0	0	0	0	0
EXPOSED FLOOR	2.4	0.5	88	208	41	0	0
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0	0
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	575	2047
SUBTOTAL HT LOSS	3842	4060	418	457	1121	3141	3717
SUB TOTAL HT GAIN	2427	4079	147	248	219	1100	407
LEVEL FACTOR / MULTIPLIER	0.30	0.46	0.20	0.30	0.30	0.50	1.07
AIR CHANGE HEAT LOSS	1781	1882	135	212	520	0	7324
AIR CHANGE HEAT GAIN	240	404	15	25	22	0	149
DUCT LOSS	0	0	55	0	0	0	0
DUCT GAIN	0	0	76	0	0	0	0
HEAT GAIN PEOPLE	240	0	0	0	0	0	0
HEAT GAIN APPLIANCES/LIGHTS	598	598	598	0	0	0	0
TOTAL HT LOSS BTU/H	5623	5942	609	668	1641	3717	11042
TOTAL HT GAIN x 1.3 BTU/H	4244	6604	1086	354	313	1430	723

TOTAL HEAT GAIN BTU/H:	30553	TONS: 2.55	LOSS DUE TO VENTILATION LOAD BTU/H: 2650	STRUCTURAL HEAT LOSS: 41192	TOTAL COMBINED HEAT LOSS BTU/H: 43842
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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.

[Signature]

MICHAEL O'ROURKE
INDIVIDUAL BCIN: 19669

SITE NAME: RUSSEL GARDENS
BUILDER: GREENPARK HOMESLOT 204-6
TYPE: HIGHGROVE SE WOB

GFA: 2284 LO# 77164

DATE: Dec-17

#GOODMAN

GMCE960603BNA 60

FAN SPEED LOW

MEDIUM HIGH

DESIGN CFM = 1131

CFM @ 6" E.S.P.

AFUE = 96 %

INPUT (BTU/H) = 60,000

OUTPUT (BTU/H) = 57,600

TEMPERATURE RISE 47 °F

HEATING CFM 1131
TOTAL HEAT GAIN 30,035
AIR FLOW RATE CFM 37.66

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	11	7	5
R/A	0	0	4	2	1

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

All S/A runs 5'x9" unless noted otherwise on layout.

RUN #	1	2	3	4	5	6	7	8	9	10	12	13	14	15	16	17	18	19	21	22	23	24
ROOM NAME	MBR	ENS	WIC	BED-2	BED-3	BED-4	BATH	BED-2	BED-3	MBR	LV/DN	LV/DN	KT/FM	KT/FM	KT/FM	LAUN	PWD	FOY	BAS	BAS	BAS	BAS
RM LOSS MBH	1.19	1.48	0.46	1.01	1.80	1.44	0.58	1.01	1.80	1.19	2.81	2.81	1.98	1.98	1.98	0.61	0.67	1.64	2.95	2.95	2.95	2.95
CFM PER RUN HEAT	33	41	13	28	49	39	16	28	49	33	77	77	54	54	54	17	18	45	81	81	81	81
RM GAIN MBH	1.81	1.03	1.13	1.69	2.35	2.07	0.37	1.69	2.35	1.81	2.12	2.12	2.20	2.20	2.20	1.09	0.35	0.31	0.43	0.43	0.43	0.43
CFM PER RUN COOLING	68	39	5	64	88	78	14	64	88	68	80	80	83	83	83	41	13	12	16	16	16	16
ADJUSTED PRESSURE	0.17	0.17	0.17	0.17	0.16	0.17	0.17	0.17	0.16	0.17	0.17	0.17	0.16	0.16	0.16	0.17	0.17	0.17	0.16	0.16	0.16	0.16
EQUIVALENT LENGTH	42	46	36	46	47	22	28	52	43	51	18	27	24	33	40	37	8	32	36	51	11	10
TOTAL EFFECTIVE LENGTH	140	170	160	120	140	150	140	130	170	160	140	90	120	130	140	130	120	140	180	120	90	130
ADJUSTED PRESSURE	0.09	0.08	0.09	0.1	0.09	0.1	0.1	0.09	0.08	0.08	0.11	0.15	0.11	0.11	0.11	0.09	0.1	0.13	0.08	0.09	0.16	0.12
ROUND DUCT SIZE	5	4	5	5	5	5	4	5	6	5	5	5	5	5	5	4	4	4	5	5	5	5
HEATING VELOCITY (ft/min)	242	470	149	206	360	286	184	206	250	242	565	565	396	396	396	195	207	516	595	595	595	595
COOLING VELOCITY (ft/min)	499	447	57	470	646	573	161	470	449	499	587	587	609	609	609	470	149	138	117	117	117	117
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10
TRUNK	A	A	B	D	C	B	D	D	C	A	C	C	A	A	A	D	D	C	A	B	B	D

RUN # 25

ROOM NAME BAS

RM LOSS MBH 2.95

CFM PER RUN HEAT 81

RM GAIN MBH 0.43

CFM PER RUN COOLING 16

ADJUSTED PRESSURE 0.16

EQUIVALENT LENGTH 21

TOTAL EFFECTIVE LENGTH 130

ADJUSTED PRESSURE 0.11

ROUND DUCT SIZE 5

HEATING VELOCITY (ft/min) 595

COOLING VELOCITY (ft/min) 117

OUTLET GRILL SIZE 3X10

TRUNK C

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	350	0.08	9.5	10	8	TRUNK G	0	0.00	0	0	8
TRUNK B	564	0.08	11.3	14	8	TRUNK H	0	0.00	0	0	8
TRUNK C	378	0.08	9.7	12	8	TRUNK I	0	0.00	0	0	8
TRUNK D	566	0.08	11.3	14	8	TRUNK J	0	0.00	0	0	8
TRUNK E	0	0.00	0	0	8	TRUNK K	0	0.00	0	0	8
TRUNK F	0	0.00	0	0	8	TRUNK L	0	0.00	0	0	8

RETURN AIR #

AIR VOLUME

AIR PRESSURE

ACTUAL DUCT LGH

EQUIVALENT LENGTH

TOTAL EFFECTIVE LH

ADJUSTED PRESSURE

ROUND DUCT SIZE

INLET GRILL SIZE

INLET GRILL SIZE

RETURN AIR TRUNK SIZE

VELOCITY (ft/min)

RECT DUCT

ROUND DUCT

STATIC PRESS.

TRUNK CFM

TRUNK O

TRUNK P

TRUNK Q

TRUNK R

TRUNK S

TRUNK T

TRUNK U

TRUNK V

TRUNK W

TRUNK X

TRUNK Y

TRUNK Z

DROP

VELOCITY (ft/min)

RECT DUCT

ROUND DUCT

STATIC PRESS.

TRUNK CFM

TRUNK O

TRUNK P

TRUNK Q

TRUNK R

TRUNK S

TRUNK T

TRUNK U

TRUNK V

TRUNK W

TRUNK X

TRUNK Y

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TRUNK V

TRUNK W

TRUNK X

TRUNK Y

TRUNK Z

TYPE: HIGHGROVE 5E WOB
SITE NAME: RUSSEL GARDENS

LO # 77164
LOT 204-6

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	4 @ 10.6 cfm	42.4 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		79.5 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	71 F	1.08	0.25

SUPPLEMENTAL FANS		NUTONE	
Location	Model	cfm	HVI
ENS	QTXEN050C	50	☒
BATH	QTXEN050C	50	☒
PWD	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: GREENPARK 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:	December-17

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL:	HIGHGROVE 5E WOB	LOT	204-6	BUILDER:	GREENPARK HOMES
SFQT:	2264	LO#	77164	SITE:	RUSSEL GARDENS

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	1	OUTDOOR DESIGN TEMP.	88
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	74

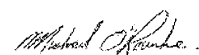
BUILDING DATA

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):	30676.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	5
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.27	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.0 ft
LENGTH: 52.0 ft WIDTH: 26.0 ft		EXPOSED PERIMETER:	106.0 ft
WOB INSULATION CONFIGURATION	SCB_9	WOB EXPOSED PERIMETER	46.0 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	29.80
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	-

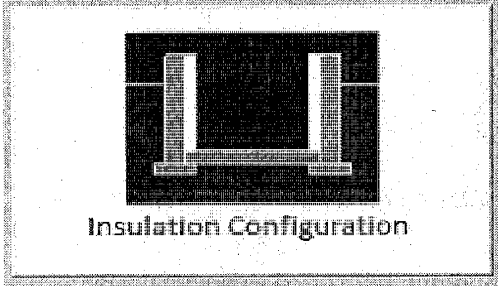
INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE



Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

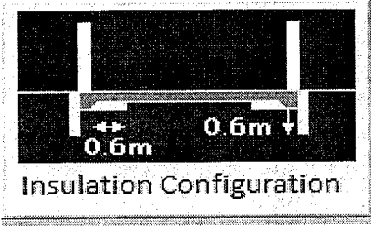
Weather Station Description		
Province:	Ontario	
Region:	Hamilton	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	6.1	 Insulation Configuration
Floor Width (m):	7.9	
Exposed Perimeter (m):	32.3	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.55	
Window Area (m ²):	0.7	
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):		600

TYPE: HIGHGROVE 5E WOB
LO# 77164

LOT 204-6

Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Hamilton	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Length (m):	3.0	
Width (m):	7.9	
Exposed Perimeter (m):	14.0	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Results		
Heating Load (Watts):		169

TYPE: HIGHGROVE 5E WOB
LO# 77164

LOT 204-6

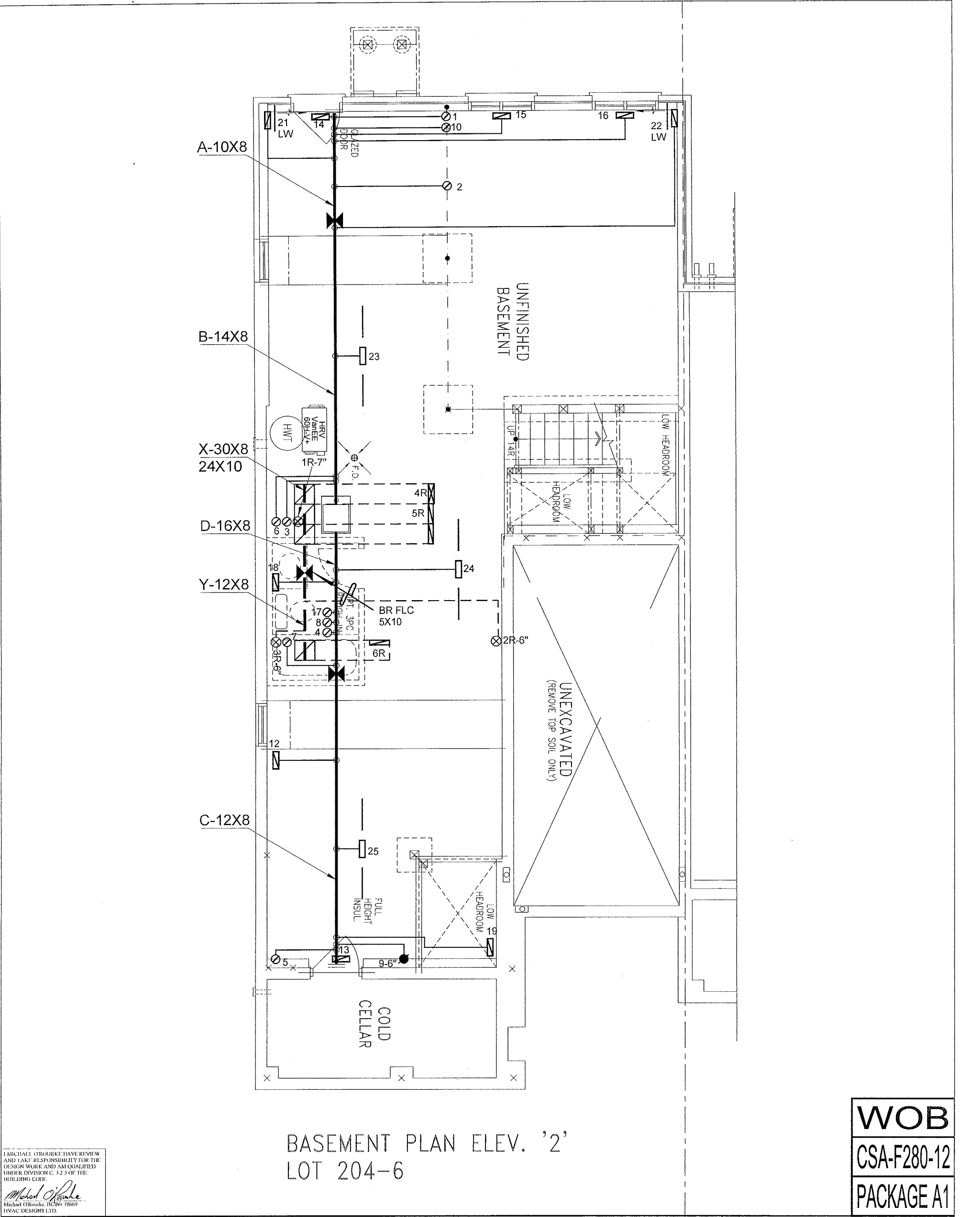
Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario			
Region:	Hamilton			
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):	8.53			
Building Configuration				
Type:	Semi			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	868.6			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1157.9 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):	0.378			
Cooling Air Leakage Rate (ACH/H):	0.135			

TYPE: HIGHGROVE 5E WOB
LO# 77164

LOT 204-6



I MICHAEL O'BRIEN HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C. 12.3 OF THE BUILDING CODE.

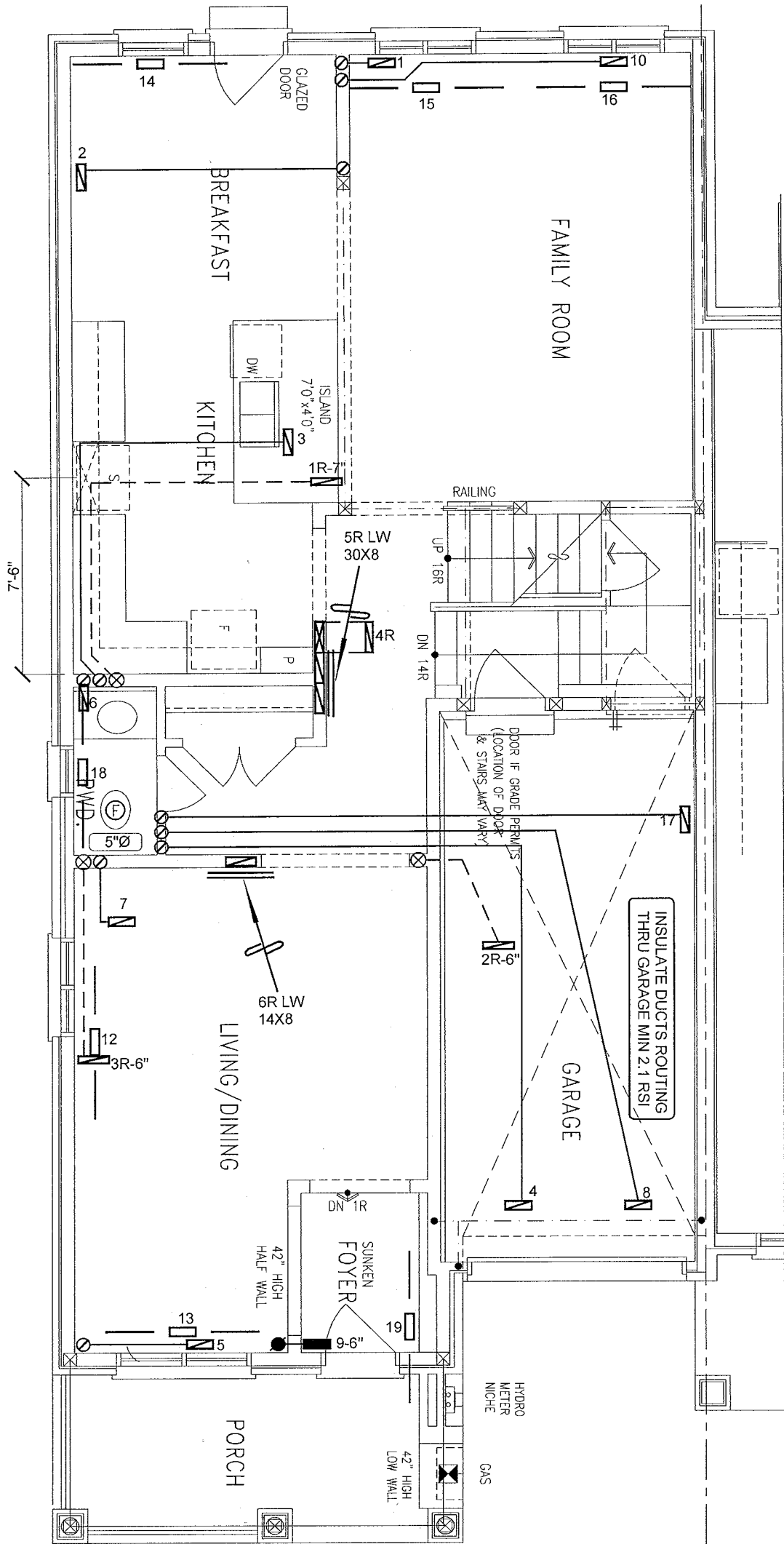
Michael O'Brien
Michael O'Brien, BCIN# 19669
HVAC DESIGNS LTD.

WOB
CSA-F280-12
PACKAGE A1

HVAC LEGEND								3.	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.	
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.	
	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	

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 GREENPARK HOMES	 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	HEAT LOSS 43842 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS				Sheet Title BASEMENT HEATING LAYOUT		
		MAKE GOODMAN		3RD FLOOR						
		MODEL GMEC960603BNA		2ND FLOOR	11	4	3			
		INPUT 60 MBTU/H		1ST FLOOR	7	2	2	Date DEC/2017		
		OUTPUT 57.6 MBTU/H		BASEMENT	5	1	0	Scale 3/16" = 1'-0"		
		COOLING 2.5 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					BCIN# 19669	
		FAN SPEED 1131 cfm @ 0.6" w.c.							LO# 77164	
Project Name RUSSEL GARDENS HAMILTON, ONTARIO WOB LOT 204-6 HIGHGROVE 5E 2264 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.									



GROUND FLOOR PLAN ELEV. '2'
LOT 204-6

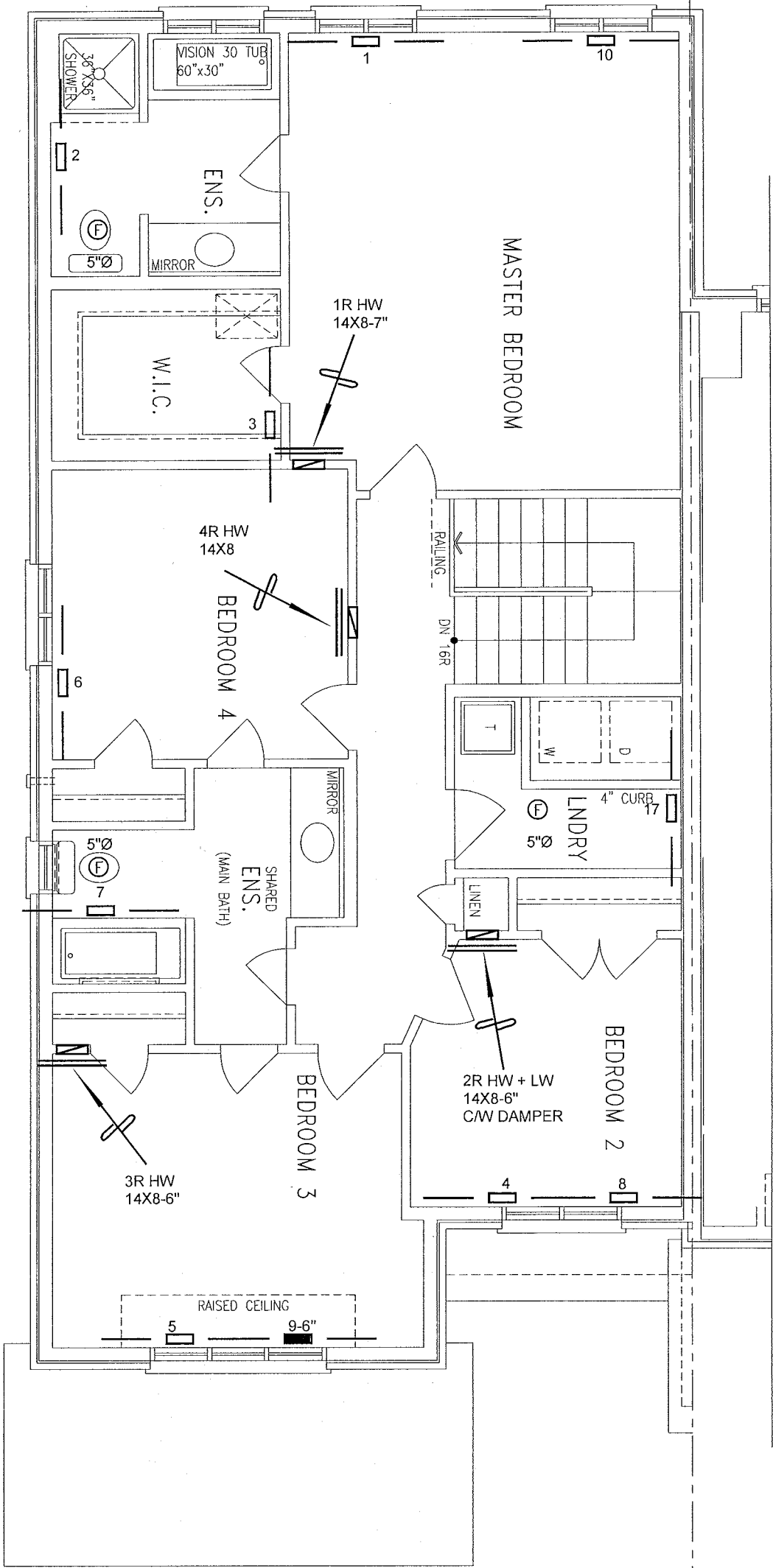
WOB
CSA-F280-12
PACKAGE A1

I, MICHAEL O'DROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.
Michael O'Drouke
Michael O'Drouke, BCIN# 19669
HVAC DESIGNS LTD.

HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	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 GREENPARK HOMES		 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 FIRST FLOOR HEATING LAYOUT	
Project Name RUSSEL GARDENS HAMILTON, ONTARIO			Date DEC/2017	
WOB			Scale 3/16" = 1'-0"	
LOT 204-6			BCIN# 19669	
HIGHGROVE 5E 2264 sqft			LO#	77164



SECOND FLOOR PLAN ELEV. '2'
LOT 204-6

WOB
CSA-F280-12
PACKAGE A1

I MICHAEL O'BROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C. 3.2.5 OF THE BUILDING CODE.
Michael O'Brourke
Michael O'Brourke, BCIN# 19669
HVAC DESIGNS LTD.

HVAC LEGEND								3.	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.	
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.	
	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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Project Name RUSSEL GARDENS HAMILTON, ONTARIO			Date DEC/2017	
WOB			Scale 3/16" = 1'-0"	
LOT 204-6			BCIN# 19669	
HIGHGROVE 5E	2264 sqft		LO#	77164