

SITE NAME: LAMBERT'S LANE PH.2
BUILDER: GREENPARK HOMES

TYPE: PRESTON 11

DATE: Feb-19

GFA: 2759 LO# 81355

HEATING CFM 1131 COOLING CFM 1131
TOTAL HEAT LOSS 42,419 TOTAL HEAT GAIN 34,974
AIR FLOW RATE CFM 26.66 AIR FLOW RATE CFM 32.34furnace pressure 0.6
furnace filter 0.05
a/c coil pressure 0.2
available pressure
for s/a & r/a 0.35plenum pressure s/a 0.18
max s/a dif press. loss 0.02
min adjusted pressure s/a 0.18r/a pressure 0.17
r/a grille press. Loss 0.02
adjusted pressure r/a 0.15#GOODMAN
GMCC060603BNA 60
FAN SPEED
LOW
MEDLOW
MEDIUM
MEDIUM HIGH
HIGH 1131AFUE = 96 %
INPUT (BTU/H) = 60,000
OUTPUT (BTU/H) = 57,600DESIGN CFM = 1131
CFM @ 6" E.S.P.

TEMPERATURE RISE 47 °F

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	14	10	4
R/A	0	0	4	2	1

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

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

RUN #	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	MBR	ENS	WIC	BED-2	BED-3	BED-4	ENS-2	WIC-2	S-ENS	MBR	S-ENS	DIN	FAM	KT/BR	KT/BR	LIB	LAUN	W/R	FOY	MUD	BAS	BAS	BAS	BAS
RM LOSS MBH	1.11	1.85	0.30	1.66	1.20	1.32	0.65	0.54	0.50	1.11	0.50	1.34	1.30	1.30	1.30	1.67	0.73	0.82	1.67	1.57	3.51	3.51	3.51	3.51
CFM PER RUN HEAT	30	49	8	44	32	35	17	14	13	30	13	36	35	35	35	44	20	25	44	42	94	94	94	94
RM GAIN MBH	1.91	1.99	0.09	2.06	2.05	1.90	0.82	0.39	0.34	1.91	0.34	2.02	1.74	1.68	1.68	2.19	1.10	0.54	0.25	0.24	0.43	0.43	0.43	0.43
CFM PER RUN COOLING	62	64	3	67	66	61	26	13	11	62	11	65	56	54	54	71	36	18	8	8	14	14	14	14
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	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16
ACTUAL DUCT LGH	38	45	30	56	53	44	36	42	44	44	50	24	43	25	36	43	21	31	28	15	35	21	23	37
EQUIVALENT LENGTH	120	160	120	150	180	180	140	170	120	140	130	110	170	110	110	110	120	180	170	110	180	120	150	120
TOTAL EFFECTIVE LENGTH	158	205	150	206	233	224	176	212	164	184	180	134	213	135	148	153	141	211	198	125	195	141	173	157
ADJUSTED PRESSURE	0.11	0.08	0.11	0.08	0.07	0.08	0.1	0.08	0.1	0.09	0.1	0.13	0.08	0.13	0.12	0.11	0.12	0.08	0.09	0.14	0.08	0.11	0.09	0.1
ROUND DUCT SIZE	5	5	4	5	6	5	4	4	4	5	4	5	5	4	4	5	4	4	4	4	6	6	6	6
HEATING VELOCITY (ft/min)	220	360	92	323	163	257	195	161	149	220	149	264	257	402	402	323	228	287	505	482	479	479	479	479
COOLING VELOCITY (ft/min)	455	470	34	492	337	448	298	149	126	455	126	477	411	620	620	521	413	207	92	92	71	71	71	71
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	4X10	4X10	4X10
TRUNK	E	B	A	D	C	B	B	D	D	E	D	B	B	E	A	C	A	D	D	A	B	A	B	C

RUN #	25	26	27	28
ROOM NAME	BED-2	BED-3	LIB	FAM
RM LOSS MBH	1.66	1.20	1.87	1.30
CFM PER RUN HEAT	44	32	44	35
RM GAIN MBH	2.06	2.05	2.19	1.74
CFM PER RUN COOLING	67	66	71	56
ADJUSTED PRESSURE	0.17	0.17	0.17	0.17
ACTUAL DUCT LGH	55	51	41	35
EQUIVALENT LENGTH	140	170	110	140
TOTAL EFFECTIVE LENGTH	195	221	151	175
ADJUSTED PRESSURE	0.09	0.08	0.11	0.1
ROUND DUCT SIZE	5	6	5	5
HEATING VELOCITY (ft/min)	323	163	323	257
COOLING VELOCITY (ft/min)	492	337	521	411
OUTLET GRILL SIZE	3X10	4X10	3X10	3X10
TRUNK	D	C	C	B

THIS STRUCTURE MUST BE
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THE ONTARIO BUILDING CODE

SUPPLY AIR TRUNK SIZE

	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK A	199	0.11	7.1	8	448
TRUNK B	395	0.08	9.9	12	593
TRUNK C	246	0.07	8.6	8	554
TRUNK D	443	0.07	10.7	14	570
TRUNK E	933	0.07	14.1	24	700
TRUNK F	0	0.00	0	0	0

	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK G	0	0.00	0	0	0
TRUNK H	0	0.00	0	0	0
TRUNK I	0	0.00	0	0	0
TRUNK J	0	0.00	0	0	0
TRUNK K	0	0.00	0	0	0
TRUNK L	0	0.00	0	0	0

RETURN AIR TRUNK SIZE

	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK O	0	0.05	0	0	0
TRUNK P	0	0.05	0	0	0
TRUNK Q	0	0.05	0	0	0
TRUNK R	0	0.05	0	0	0
TRUNK S	0	0.05	0	0	0
TRUNK T	0	0.05	0	0	0
TRUNK U	0	0.05	0	0	0
TRUNK V	0	0.05	0	0	0
TRUNK W	0	0.05	0	0	0
TRUNK X	1131	0.05	16.5	32	636
TRUNK Y	375	0.05	10.9	14	482
TRUNK Z	445	0.05	11.6	16	501
DROP	1131	0.05	16.5	24	679

RETURN AIR #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
AIR VOLUME	135	135	120	85	360	120	0	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	39	33	58	59	29	42	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EQUIVALENT LENGTH	135	185	225	175	180	230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EFFECTIVE LH	174	218	283	234	209	272	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ADJUSTED PRESSURE	0.09	0.07	0.05	0.06	0.07	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	14.80
ROUND DUCT SIZE	6.4	6.8	7.1	6	9.9	7.1	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INLET GRILL SIZE	X	X	X	X	X	X	X	X	X	X	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	0	0	0	0	0	0	0	0	0	0	0

TYPE: PRESTON 11
 SITE NAME: LAMBERT'S LANE PH.2

LO # 81355

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	5 @ 10.6 cfm	53 cfm
Other Rooms	5 @ 10.6 cfm	53.0 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	53.6	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	180.2	cfm
Less Principal Ventil. Capacity	79.5	cfm
Required Supplemental Capacity	100.7	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model:	VANEE 65H
Location:	BSMT
79.5 cfm	3.0 sones
☒ HVI Approved	

PRINCIPAL EXHAUST HEAT LOSS CALCULATION				
CFM	ΔT °F	FACTOR	% LOSS	
79.5 CFM	X 74 F	X 1.08	X	0.25

SUPPLEMENTAL FANS		PANASONIC		
Location	Model	cfm	HVI	Sones
ENS	FV-05-11VK1	50	☒	0.3
ENS-2	FV-05-11VK1	50	☒	0.3
S-ENS	FV-05-11VK1	50	☒	0.3
W/R	FV-05-11VK1	50	☒	0.3

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model:	VANEE 65H	
155 cfm high	54 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:	February-19

 CONSTRUCTED TO MEET O.
 EXCEED THE PROVISIONS OF
 THE ONTARIO BUILDING CODE

 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* MICHAEL O'ROURKE

CSA F280-12 Residential Heat Loss and Heat Gain Calculations
Formula Sheet (For Air Leakage / Ventilation Calculation)

LO#: 81355

Model: PRESTON 11

Builder: GREENPARK HOMES

Date: 2/5/2019

Volume Calculation
Air Change & Delta T Data
House Volume

Level	Floor Area (ft²)	Floor Height (ft)	Volume (ft³)
Bsmt	1224	9	11016
First	1224	10	12240
Second	1535	9	13815
Third	0	9	0
Fourth	0	9	0
Total:			37,071.0 ft³
Total:			1049.7 m³

WINTER NATURAL AIR CHANGE RATE	0.227
SUMMER NATURAL AIR CHANGE RATE	0.074

Design Temperature Difference				
	Tin °C	Tout °C	ΔT °C	ΔT °F
Winter DTDh	22	-19	41	74
Summer DTDc	24	30	6	11

5.2.3.1 Heat Loss due to Air Leakage
6.2.6 Sensible Gain due to Air Leakage

$$HL_{airb} = LR_{airh} \times \frac{V_b}{3.6} \times DTD_h \times 1.2$$

$$0.227 \times 291.59 \times 41 \text{ °C} \times 1.2 = 3279 \text{ W}$$

$$= 11189 \text{ Btu/h}$$

$$HG_{sairb} = LR_{airc} \times \frac{V_b}{3.6} \times DTD_c \times 1.2$$

$$= 0.074 \times 291.59 \times 6 \text{ °C} \times 1.2 = 158 \text{ W}$$

$$= 539 \text{ Btu/h}$$

5.2.3.2 Heat Loss due to Mechanical Ventilation
6.2.7 Sensible heat Gain due to Ventilation

$$HL_{vairb} = PVC \times DTD_h \times 1.08 \times (1 - E)$$

$$80 \text{ CFM} \times 74 \text{ °F} \times 1.08 \times 0.25 = 1593 \text{ Btu/h}$$

$$HL_{vairb} = PVC \times DTD_h \times 1.08 \times (1 - E)$$

$$80 \text{ CFM} \times 11 \text{ °F} \times 1.08 \times 0.25 = 236 \text{ Btu/h}$$

5.2.3.3 Calculation of Air Change Heat Loss for Each Room (Floor Multiplier Section)

$$HL_{airr} = \text{Level Factor} \times HL_{airbv} \times \{(HL_{lger} + HL_{bger}) \div (HL_{lgelevel} + HL_{bgelevel})\}$$

Level	Level Factor (LF)	HLairbv Air Leakage + Ventilation Heat Loss (Btu/h)	Level Conductive Heat Loss: (HLlevel)	Air Leakage Heat Loss Multiplier (LF x HLairbv / HLlevel)
1	0.5	11,189	8,446	0.662
2	0.3		10,684	0.314
3	0.2		11,708	0.191
4	0		0	0.000
5	0		0	0.000

*HLairbv = Air leakage heat loss + ventilation heat loss

*For a balanced or supply only ventilation system HLairv = 0

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: PRESTON 11	BUILDER: GREENPARK HOMES
SFQT: 2759	SITE: LAMBERT'S LANE PH.2
LO# 81355	

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-2	OUTDOOR DESIGN TEMP.	86
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	75

BUILDING DATA

ATTACHMENT:	DETACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	EAST	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	2.50	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	TIGHT	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft³):	37071.0	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: 54.0 ft	WIDTH: 31.0 ft	EXPOSED PERIMETER:	170.0 ft

2012 OBC - COMPLIANCE PACKAGE

Component

Ceiling with Attic Space Minimum RSI (R)-Value
Ceiling Without Attic Space Minimum RSI (R)-Value
Exposed Floor Minimum RSI (R)-Value
Walls Above Grade Minimum RSI (R)-Value
Basement Walls Minimum RSI (R)-Value
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
Heated Slab or Slab ≤ 600 mm below grade Minimum RSI (R)-Value
Windows and Sliding Glass Doors Maximum U-Value
Skylights Maximum U-Value
Space Heating Equipment Minimum AFUE
HRV Minimum Efficiency
Domestic Hot Water Heater Minimum EF

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Compliance Package ENERGYSTAR

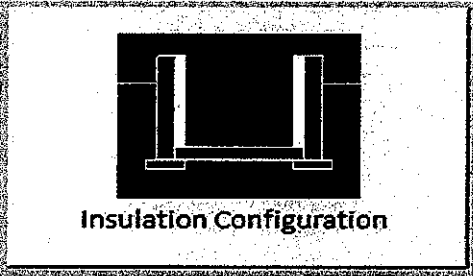
Nominal	Min. Eff.
60	59.20
31	27.70
31	29.80
R22+R5	21.10
20	21.12
-	-
10	10
10	11.13
ZONE 2	-
ZONE 2	-
0.96	-
75%	-
0.9	-

INDIVIDUAL BCIN: 19669
MICHAEL O'ROURKE

Michael O'Rourke

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):	16.5	 Insulation Configuration
Floor Width (m):	9.4	
Exposed Perimeter (m):	0.0	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.83	
Window Area (m ²):	1.4	
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):	1724	

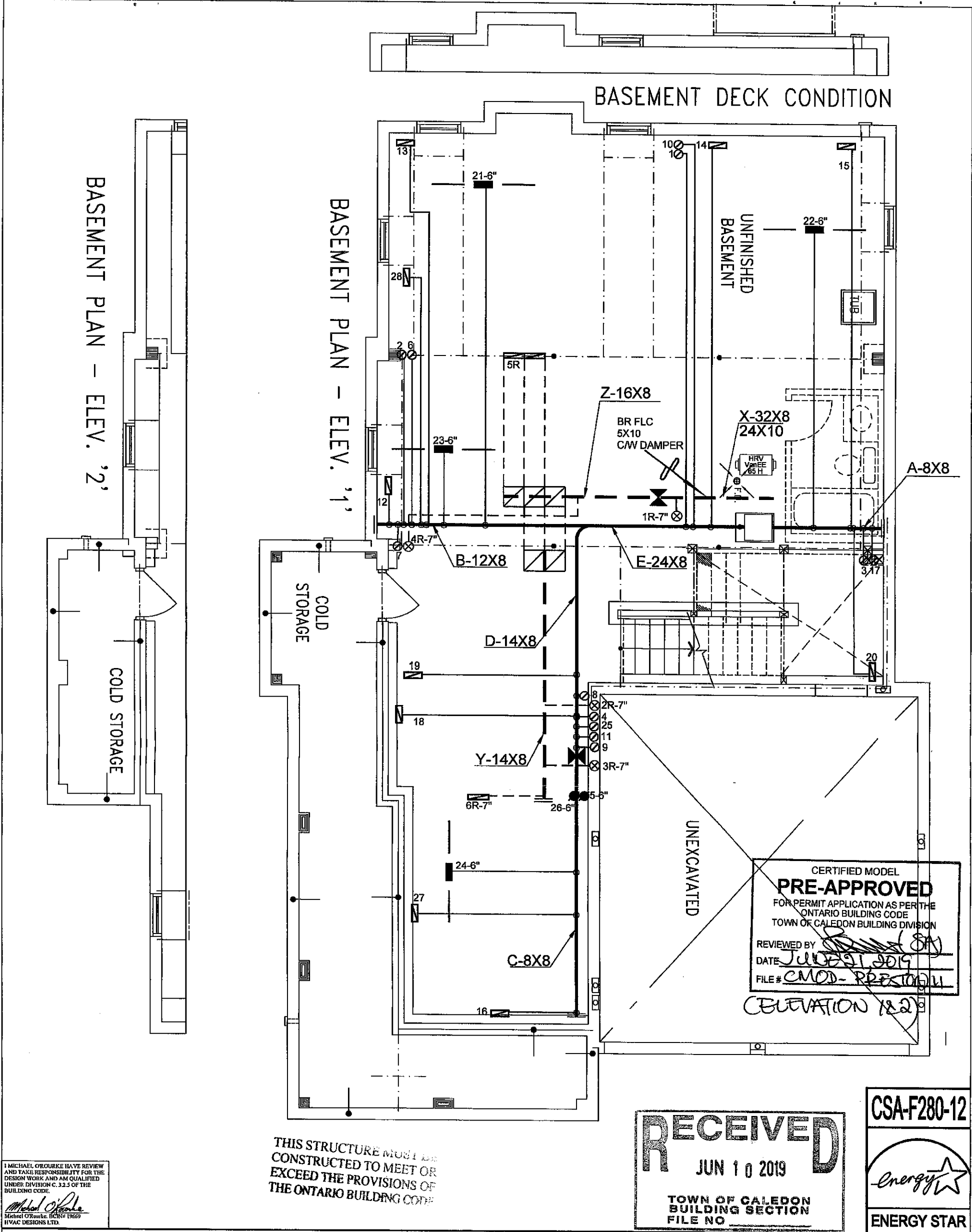
TYPE: PRESTON 11
LO# 81355THIS STRUCTURE MUST BE
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Air Infiltration Residential Load Calculator

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:	Detached		
Number of Stories:	Two		
Foundation:	Full		
House Volume (m ³):	1049.7		
Air Leakage/Ventilation			
Air Tightness Type:	Energy Star Detached (2.5 ACH)		
Custom BDT Data:	ELA @ 10 Pa.	979.9 cm ²	
	2.50	ACH @ 50 Pa	
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust	
	37.5	37.5	
Flue Size			
Flue #:	#1	#2	#3
Diameter (mm):	0	0	0
	#4	0	
Natural Infiltration Rates			
Heating Air Leakage Rate (ACH/H):	0.227		
Cooling Air Leakage Rate (ACH/H):	0.074		

TYPE: PRESTON 11
LO# 81355THIS STRUCTURE MUST BE
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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.

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RECEIVED
JUN 10 2019
TOWN OF CALEDON
BUILDING SECTION
FILE NO

CSA-F280-12
ENERGY STAR

HVAC LEGEND							3.	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.
	SUPPLY AIR GRILLE		8" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.
	SUPPLY AIR GRILLE 8" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	No.
	SUPPLY AIR BOOT ABOVE		8" SUPPLY AIR STACK 2nd FLOOR		FRA - FLOOR RETURN AIR GRILLE		REDUCER	Date

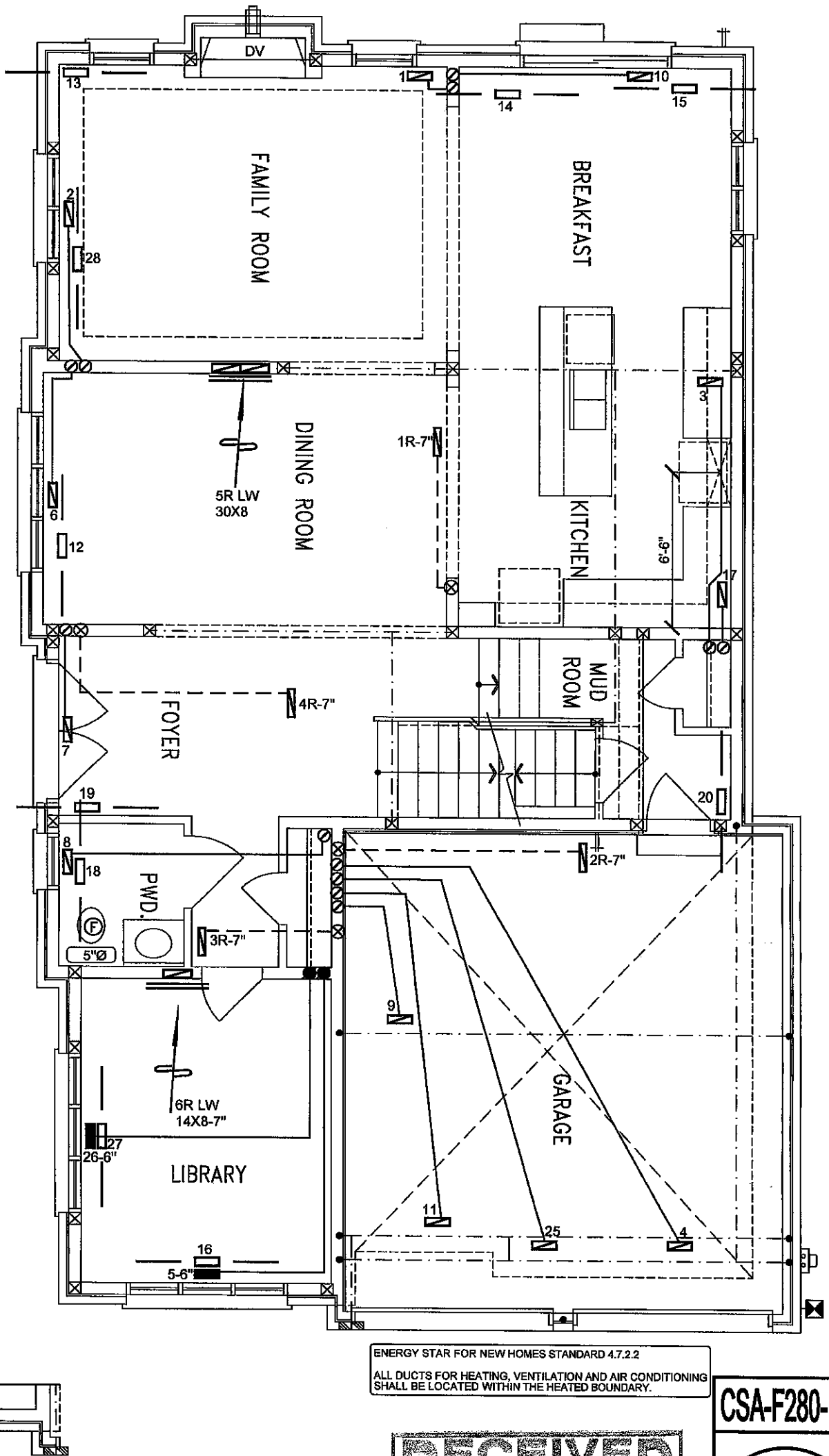
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Client GREENPARK HOMES	Project Name LAMBERTS LANE HOME CORP PH 2 CALEDON, ONTARIO	PRESTON 11 2759 sqft	HVACDESIGNS LTD. 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdsgns.ca Web: 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.	HEAT LOSS 44012 BTU/H UNIT DATA MAKE GOODMAN MODEL GMEC960603BNA INPUT 60 MBTU/H OUTPUT 57.6 MBTU/H COOLING 3.0 TONS FAN SPEED 1131 cfm @ 0.6" w.c.	# OF RUNS S/A R/A FANS 3RD FLOOR 2ND FLOOR 14 4 3 1ST FLOOR 10 2 2 BASEMENT 4 1 0	Sheet Title BASEMENT HEATING LAYOUT Date FEB/2019 Scale 3/16" = 1'-0" BCIN# 19669 LO# 81355

APPLICANT COPY

GROUND FLOOR PLAN - ELEV. '2'

GROUND FLOOR PLAN - ELEV. '1'



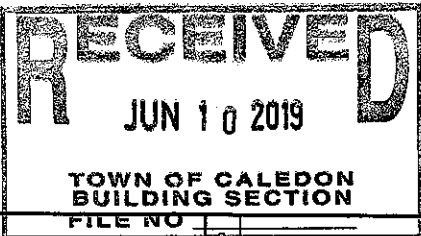
DUCTS LOCATED IN UNCONDITIONED SPACES SHALL BE SEALED TO A CLASS A SEAL LEVEL IN ACCORDANCE WITH THE SMACNA MANUAL

ENERGY STAR FOR NEW HOMES STANDARD 4.7.2.2
ALL DUCTS FOR HEATING, VENTILATION AND AIR CONDITIONING SHALL BE LOCATED WITHIN THE HEATED BOUNDARY.

CSA-F280-12



ENERGY STAR



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.

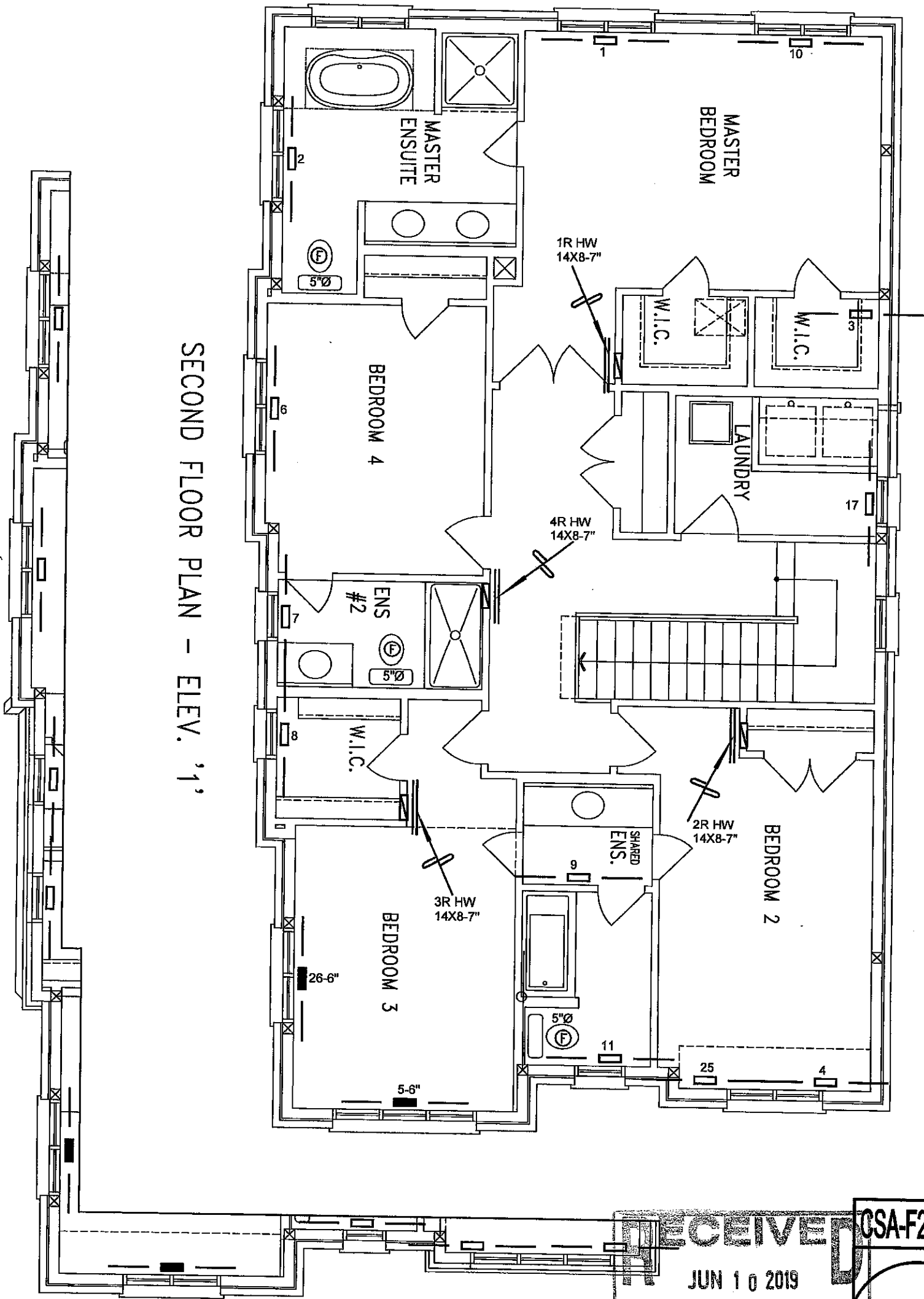
HVAC LEGEND							
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE
	SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER

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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.	THIS STRUCTURE MUST BE CONSTRUCTED TO MEET OR EXCEED THE PROVISIONS OF THE ONTARIO BUILDING CODE	Sheet Title FIRST FLOOR HEATING LAYOUT	
Project Name LAMBERTS LANE HOME CORP PH 2 CALEDON, ONTARIO				Date FEB/2019	
				Scale 3/16" = 1'-0"	
				BCIN# 19669	
PRESTON 11 2759 sqft				LO# 81355	

SECOND FLOOR PLAN - ELEV. '2'

SECOND FLOOR PLAN - ELEV. '1'



I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 32.5 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

RECEIVED

JUN 10 2019

TOWN OF CALEDON
BUILDING SECTION
FILE NO

CSA-F280-12

Energy Star

ENERGY STAR

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
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA - FLOOR RETURN AIR GRILLE		REDUCER	Date	

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Client

GREENPARK HOMES

Project Name

LAMBERTS LANE HOME CORP PH 2
CALEDON, ONTARIO

PRESTON 11

2759 sqft

HVAC DESIGNS LTD.

375 Finley Ave. Suite 202 - Ajax, Ontario
L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375
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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.

THIS STRUCTURE MUST BE
CONSTRUCTED TO MEET OR
EXCEED THE PROVISIONS OF
THE ONTARIO BUILDING CODE

Sheet Title

SECOND FLOOR
HEATING
LAYOUT

Date

FEB/2019

Scale

3/16" = 1'-0"

BCIN# 19669

LO#

81355