


Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

<b>A. Project Information</b>					
Building number, street name <b>Barossa 3</b>				Lot: <b>S38-3</b>	
Municipality <b>Bradford</b>				Postal code	Plan number/ other description
<b>B. Individual who reviews and takes responsibility for design activities</b>					
Name <b>David DaCosta</b>			Firm <b>gtaDesigns Inc.</b>		
Street address <b>2985 Drew Road, Suite 202</b>				Unit no.	Lot/con.
Municipality <b>Mississauga</b>		Postal code <b>L4T 0A4</b>	Province <b>Ontario</b>	E-mail <a href="mailto:hvac@gtadesigns.ca">hvac@gtadesigns.ca</a>	
Telephone number <b>(905) 671-9800</b>		Fax number		Cell number	
<b>C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1 of Division C]</b>					
<input type="checkbox"/> House		<input checked="" type="checkbox"/> HVAC – House		<input type="checkbox"/> Building Structural	
<input type="checkbox"/> Small Buildings		<input type="checkbox"/> Building Services		<input type="checkbox"/> Plumbing – House	
<input type="checkbox"/> Large Buildings		<input type="checkbox"/> Detection, Lighting and Power		<input type="checkbox"/> Plumbing – All Buildings	
<input type="checkbox"/> Complex Buildings		<input type="checkbox"/> Fire Protection		<input type="checkbox"/> On-site Sewage Systems	
<b>Description of designer's work</b>			<b>Model Certification</b>		<b>Project #:</b> <b>PJ-00041</b>
					<b>Layout #:</b> <b>JB-07351</b>
Heating and Cooling Load Calculations		Main	X	Builder	Bayview Wellington
Air System Design		Alternate		Project	Green Valley East
Residential mechanical ventilation Design Summary		Area Sq ft:	2544	Model	Barossa 3
Residential System Design per CAN/CSA-F280-12					S38-3
Residential New Construction - Forced Air				SB-12	Package A1
<b>D. Declaration of Designer</b>					
<p>I, <u>David DaCosta</u> declare that (choose one as appropriate):</p> <p style="text-align: center;">(print name)</p> <p><input type="checkbox"/> I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4 Division C of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.</p> <p style="margin-left: 150px;">Individual BCIN: _____</p> <p style="margin-left: 150px;">Firm BCIN: _____</p> <p><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.</p> <p style="margin-left: 150px;">Individual BCIN: <u>32964</u></p> <p style="margin-left: 150px;">Basis for exemption from registration: <u>Division C 3.2.4.1. (4)</u></p> <p><input type="checkbox"/> The design work is exempt from the registration and qualification requirements of the Building Code.</p> <p style="margin-left: 150px;">Basis for exemption from registration and qualification:</p>					
<p>I certify that:</p> <ol style="list-style-type: none"> <li>The information contained in this schedule is true to the best of my knowledge.</li> <li>I have submitted this application with the knowledge and consent of the firm.</li> </ol>					
<u>July 21, 2021</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 qualifications under Subsections 3.2.4 . and 3.2.5.of Division C.
- Schedule 1 does not require to be completed 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 licence to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

Heat loss and gain calculation summary sheet				CSA-F280-M12 Standard Form No. 1	
These documents issued for the use of <b>Bayview Wellington</b>				Layout No.	
and may not be used by any other persons without authorization. Documents for permit and/or construction are signed in red.				<b>JB-07351</b>	
<b>Building Location</b>					
Address (Model): <b>S38-3</b>			Site: <b>Green Valley East</b>		
Model: <b>Barossa 3</b>			Lot:		
City and Province: <b>Bradford</b>			Postal code:		
<b>Calculations based on</b>					
Dimensional information based on:			<b>VA3 Design13/May/2021</b>		
Attachment: <b>Detached</b>			Front facing: <b>East/West</b>		Assumed? <b>Yes</b>
No. of Levels: <b>3</b> Ventilated? <b>Included</b>			Air tightness: <b>1961-Present (ACH=3.57)</b>		Assumed? <b>Yes</b>
Weather location: <b>Bradford</b>			Wind exposure: <b>Sheltered</b>		
HRV? <b>VanEE</b> <b>V150H75NS</b>			Internal shading: <b>Light-translucent</b>		Occupants: <b>5</b>
Sensible Eff. at -25C <b>60%</b>		Apparent Effect. at -0C <b>83%</b>		Units: <b>Imperial</b>	Area Sq ft: <b>2544</b>
Sensible Eff. at -0C <b>75%</b>					
<b>Heating design conditions</b>			<b>Cooling design conditions</b>		
Outdoor temp <b>-9.4</b> Indoor temp: <b>72</b> Mean soil temp: <b>48</b>			Outdoor temp <b>86</b> Indoor temp: <b>75</b> Latitude: <b>44</b>		
<b>Above grade walls</b>			<b>Below grade walls</b>		
Style A: <b>As per OBC SB12</b> <b>Package A1</b> <b>R</b> <b>22</b>			Style A: <b>As per OBC SB12</b> <b>Package A1</b> <b>R</b> <b>20ci</b>		
Style B:			Style B:		
Style C:			Style C:		
Style D:			Style D:		
<b>Floors on soil</b>			<b>Ceilings</b>		
Style A: <b>As per Selected OBC SB12</b> <b>Package A1</b>			Style A: <b>As per Selected OBC SB12</b> <b>Package A1</b> <b>R</b> <b>60</b>		
Style B:			Style B: <b>As per Selected OBC SB12</b> <b>Package A1</b> <b>R</b> <b>31</b>		
<b>Exposed floors</b>			Style C:		
Style A: <b>As per Selected OBC SB12</b> <b>Package A1</b> <b>R</b> <b>31</b>			<b>Doors</b>		
Style B:			Style A: <b>As per Selected OBC SB12</b> <b>Package A1</b> <b>R</b> <b>4.00</b>		
<b>Windows</b>			Style B:		
Style A: <b>As per Selected OBC SB12</b> <b>Package A1</b> <b>R</b> <b>3.55</b>			Style C:		
Style B:			<b>Skylights</b>		
Style C:			Style A: <b>As per Selected OBC SB12</b> <b>Package A1</b> <b>R</b> <b>2.03</b>		
Style D:			Style B:		
Attached documents: <b>As per Shedule 1</b>		<b>Heat Loss/Gain Caculations based on CSA-F280-12 Effective R-Values</b>			
Notes: <b>Residential New Construction - Forced Air</b>					
<b>Calculations performed by</b>					
Name: <b>David DaCosta</b>			Postal code: <b>L4T 0A4</b>		
Company: <b>gtaDesigns Inc.</b>			Telephone: <b>(905) 671-9800</b>		
Address: <b>2985 Drew Road, Suite 202</b>			Fax:		
City: <b>Mississauga</b>			E-mail <b>hvac@gtadesigns.ca</b>		

Builder: **Bayview Wellington**

Date: **July 21, 2021**

Project: **Green Valley East**

Model: **Barossa 3  
S38-3**

**System 1**

I review and take responsibility for the design work and am qualified in the appropriate category as an "other designer" under Division C subsection 3.2.5. of the Building Code.

Individual BCIN: 32964

David DaCosta

Project # **PJ-00041**  
Layout # **JB-07351**

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## DESIGN LOAD SPECIFICATIONS

Level 1 Net Load 18,405 btu/h  
Level 2 Net Load 18,930 btu/h  
Level 3 Net Load 17,668 btu/h  
Level 4 Net Load 0 btu/h  
Total Heat Loss 55,002 btu/h  
Total Heat Gain 28,387 btu/h

Building Volume Vb 33025 ft³  
Ventilation Load 1,188 Btu/h.  
Ventilation PVC 79.5 cfm  
Supply Branch and Grill Sizing

## AIR DISTRIBUTION & PRESSURE

Equipment External Static Pressure 0.5 "w.c.  
Additional Equipment Pressure Drop 0.225 "w.c.  
Available Design Pressure 0.275 "w.c.  
Return Branch Longest Effective Length 300 ft  
R/A Plenum Pressure 0.138 "w.c.  
S/A Plenum Pressure 0.14 "w.c.  
Heating Air Flow Proportioning Factor 0.0169 cfm/btuh  
Cooling Air Flow Proportioning Factor 0.0327 cfm/btuh  
R/A Temp 70 deg. F.  
S/A Temp 127 deg. F.  
Diffuser loss 0.01 "w.c.

## FURNACE/AIR HANDLER DATA:

Make Amana  
Model AMEC960603ANA  
Input Btu/h 60000  
Output Btu/h 57600  
E.s.p. 0.50 " W.C.  
Water Temp deg. F.  
AFUE 96%  
Aux. Heat  
SB-12 Package Package A1  
Temp. Rise>>> 57 deg. F.

## BOILER/WATER HEATER DATA:

Make Type  
Model  
Input Btu/h  
Output Btu/h  
Min.Output Btu/h AWH  
Blower Speed Selected: W2  
Heating Check 929 cfm  
Selected cfm> 929 cfm

## A/C UNIT DATA:

Amana 2.5 Ton  
Cond.----- 2.5  
Coil ----- 2.5  
Blower Type ECM  
(Brushless DC OBC 12.3.1.5.(2))  
Cooling Check 929 cfm  
Cooling Air Flow Rate 929 cfm

	Level 1												Level 2											
S/A Outlet No.	1	2	3	4									5	6	7	8	9	10						
Room Use	BASE	BASE	BASE	BASE									KIT	KIT	GRT	LAUND	FOY	DIN						
Btu/Outlet	4601	4601	4601	4601									2160	2160	3727	2435	4139	4308						
Heating Airflow Rate CFM	78	78	78	78									36	36	63	41	70	73						
Cooling Airflow Rate CFM	16	16	16	16									87	87	96	60	76	91						
Duct Design Pressure	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Actual Duct Length	24	42	25	41									33	39	46	25	27	5						
Equivalent Length	90	120	70	110	70	70	70	70	70	70	70	70	80	130	110	170	110	130	70	70	70	70	70	70
Total Effective Length	114	162	95	151	70	70	70	70	70	70	70	70	113	169	156	195	137	135	70	70	70	70	70	70
Adjusted Pressure	0.11	0.08	0.14	0.09	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.12	0.08	0.08	0.07	0.09	0.10	0.19	0.19	0.19	0.19	0.19	0.19
Duct Size Round	6	6	6	6									6	6	6	5	6	6						
Outlet Size	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	A	B	A	C									A	B	B	C	C	A						

	Level 3										Level 4													
S/A Outlet No.	11	12	13	14	15	16	17	18	19	20														
Room Use	MAST	MAST	BED 2	BATH	BED 3	BED 3	LOFT	BED 4	ENS 2	ENS														
Btu/Outlet	1705	1705	1748	1675	1907	1907	3247	1361	638	1777														
Heating Airflow Rate CFM	29	29	30	28	32	32	55	23	11	30														
Cooling Airflow Rate CFM	41	41	28	24	46	46	70	34	11	27														
Duct Design Pressure	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Actual Duct Length	49	61	54	42	43	39	36	34	24	29														
Equivalent Length	140	120	150	160	150	140	120	150	120	140	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Total Effective Length	189	181	204	202	193	179	156	184	144	169	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Adjusted Pressure	0.07	0.07	0.06	0.06	0.07	0.07	0.08	0.07	0.09	0.08	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Duct Size Round	5	5	4	4	5	5	6	4	3	4														
Outlet Size	3x10	3x10	3x10	3x10	3x10	3x10	4x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	B	B	B	C	C	C	C	A	A	A														

Return Branch And Grill Sizing	Grill Pressure Loss										
R/A Inlet No.	1R	2R	3R	4R	5R	6R	7R	8R	9R	10R	11R
Inlet Air Volume CFM	155	414	105	105	150						
Duct Design Pressure	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Actual Duct Length	9	17	36	41	40						
Equivalent Length	110	125	180	195	155	50	50	50	50	50	50
Total Effective Length	119	142	216	236	195	50	50	50	50	50	50
Adjusted Pressure	0.10	0.08	0.05	0.05	0.06	0.24	0.24	0.24	0.24	0.24	0.24
Duct Size Round	7.0	10.5	6.0	6.0	8.0						
Inlet Size	FLC	8	8	8	8						
" "	x	x	x	x	x	x	x	x	x	x	x
Inlet Size		30	14	14	14						
Trunk	Y	Z	Y	Y	Z						

Return Trunk Duct Sizing	CFM	Press.	Round	Rect. Size
Trunk				
Drop	929	0.05	15.5	24x10
Z	929	0.05	15.5	28x8 22x10
Y	365	0.05	11.5	14x8 12x10
X				
W				
V				
U				
T				
S				
R				
Q				

Supply Trunk Duct Sizing	CFM	Press.	Round	Rect. Size
Trunk				
A	592	0.06	13.0	18x8 14x10
B	264	0.06	9.5	10x8 127
C	336	0.06	10.5	12x8 10x10
D				
E				
F				
G				
H				
I				
J				
K				

2012 OBC

Builder: Bayview Wellington

Date: July 21, 2021

Project: Green Valley East

Model: Barossa 3 S38-3

System 1

Weather Data Bradford 44 -9.4 86 22 48.2

Heat Loss ^T 81.4 deg. F Ht gain ^T 11 deg. F GTA: 2544

Project # PJ-00041  
Layout # JB-07351

## Level 1

### BASE

Run ft. exposed wall A	153	A	A	A	A	A	A	A	A	A	A	A	A
Run ft. exposed wall B	B	B	B	B	B	B	B	B	B	B	B	B	B
Ceiling height	6.0	AG	6.0	AG	6.0	AG	6.0	AG	6.0	AG	6.0	AG	6.0
Floor area	1027	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area
Exposed Ceilings A	A	A	A	A	A	A	A	A	A	A	A	A	A
Exposed Ceilings B	B	B	B	B	B	B	B	B	B	B	B	B	B
Exposed Floors	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr
Gross Exp Wall A	918												
Gross Exp Wall B													

Components	R-Values	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	11.62														
East/West	3.55	22.93	29.56	23	527	680											
South	3.55	22.93	22.50	6	138	135											
WOB Windows	3.55	22.93	27.86														
Skylight	2.03	40.10	88.23														
Doors	4.00	20.35	2.75	21	427	58											
Net exposed walls A	21.12	3.85	0.52	868		452											
Net exposed walls B	17.03	4.78	0.65														
Exposed Ceilings A	59.22	1.37	0.64														
Exposed Ceilings B	27.65	2.94	1.37														
Exposed Floors	29.80	2.73	0.17														
Foundation Conductive Heatloss																	
Total Conductive																	
Air Leakage	Heat Loss/Gain	1.1036	0.0432														
Ventilation	Case 1	0.07	0.06														
	Case 2	14.95	11.88														
	Case 3	x	0.03	0.06	298	86											
Heat Gain People			239														
Appliances Loads	1 = 25 percent		4229														
Duct and Pipe loss			10%														
Level HL Total	18,405			18405													
Level HG Total	1,908				1908												

## Level 2

### KIT

### GRT

### LAUND

### FOY

### DIN

Run ft. exposed wall A	31	A	32	A	18	A	26	A	45	A	A	A	A	A	A	A	A
Run ft. exposed wall B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Ceiling height	11.0		11.0		13.0		12.0		11.0		11.0		11.0		11.0		11.0
Floor area	233	Area	216	Area	68	Area	76	Area	421	Area	Area	Area	Area	Area	Area	Area	Area
Exposed Ceilings A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Exposed Ceilings B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Exposed Floors	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr
Gross Exp Wall A	341		352		234		312		495								
Gross Exp Wall B																	

Components	R-Values	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	11.62														
East/West	3.55	22.93	29.56	71	1628	2099											
South	3.55	22.93	22.50														
Existing Windows	1.99	40.90	23.66														
Skylight	2.03	40.10	88.23														
Doors	4.00	20.35	2.75														
Net exposed walls A	17.03	4.78	0.65	270	1291	174											
Net exposed walls B	8.50	9.58	1.29														
Exposed Ceilings A	59.22	1.37	0.64														
Exposed Ceilings B	27.65	2.94	1.37														
Exposed Floors	29.80	2.73	0.17														
Foundation Conductive Heatloss			x														
Total Conductive																	
Air Leakage	Heat Loss/Gain	0.4457	0.0432														
Ventilation	Case 1	0.03	0.06														
	Case 2	14.95	11.88														
	Case 3	x	0.03	0.06	101	147											
Heat Gain People			239														
Appliances Loads	1 = 25 percent		4229														
Duct and Pipe loss			10%														
Level HL Total	18,930			1.5		1586	0.5		529	1.0		1057	1.0		1057		
Level HG Total	15,210				4320	5335			3727	2930		2435	1830		4139	2335	4308

I review and take responsibility for the design work and am qualified in the appropriate category as an "other designer" under

Division C subsection 3.2.5. of the Building Code. Individual BCIN:

32964

Name

David DaCosta

SB-12 Package

Package A1

Total Heat Loss	55,002	btu/h
Total Heat Gain	28,387	btu/h

2012 OBC

Builder: Bayview Wellington

Date: July 21, 2021

Project: Green Valley East

Model: Barossa 3 S38-3

System 1

Weather Data Bradford 44 -9.4 86 22 48.2

Heat Loss ^T 81.4 deg. F Ht gain ^T 11 deg. F GTA: 2544

Project # PJ-00041  
Layout # JB-07351

## Level 3

	MAST	BED 2	BATH	BED 3	LOFT	BED 4	ENS 2	ENS				
Run ft. exposed wall A	30 A	18 A	15 A	23 A	31 A	13 A	6 A	22 A	A	A	A	A
Run ft. exposed wall B	B	B	B	B	B	B	B	B	B	B	B	B
Ceiling height	11.0	9.0	9.0	10.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Floor area	297 Area	165 Area	74 Area	175 Area	269 Area	127 Area	69 Area	113 Area	Area	Area	Area	Area
Exposed Ceilings A	297 A	165 A	74 A	175 A	269 A	127 A	69 A	113 A	A	A	A	A
Exposed Ceilings B	B	B	B	B	B	B	B	B	B	B	B	B
Exposed Floors	Flr	9 Flr	74 Flr	175 Flr	12 Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr
Gross Exp Wall A	330	162	135	230	279	117	54	198				
Gross Exp Wall B												

Components	R-Values	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	11.62																
East/West	3.55	22.93	29.56	32	734	946													
South	3.55	22.93	22.50																
Existing Windows	1.99	40.90	23.66																
Skylight	2.03	40.10	88.23																
Doors	4.00	20.35	2.75																
Net exposed walls A	17.03	4.78	0.65	298	1424	192	146	698	94	124	593	80	186	889	120	240	1147	155	101
Net exposed walls B	8.50	9.58	1.29																
Exposed Ceilings A	59.22	1.37	0.64	297	408	191	165	227	106	74	102	47	175	241	112	269	370	173	127
Exposed Ceilings B	27.65	2.94	1.37																
Exposed Floors	29.80	2.73	0.17				9	25	2	74	202	12	175	478	29	12	33	2	
Foundation Conductive Heatloss																			
Total Conductive																			
Heat Loss																			
Heat Gain																			
Air Leakage	Heat Loss/Gain	0.2938	0.0432																
Case 1		0.02	0.06																
Case 2		14.95	11.88																
Case 3	x	0.03	0.06																
Heat Gain People			239	2	89	86	1	46	25		40	30		91	101		85	96	1
Appliances Loads	1 =.25 percent		4229																
Duct and Pipe loss			10%																
Level HL Total	17,668			3409				1748			1675			3814			3247		
Level HG Total	11,270				2535				869			730			2795			2135	

## Level 4

Run ft. exposed wall A	A	A	A	A	A	A	A	A	A	A	A	A	A
Run ft. exposed wall B	B	B	B	B	B	B	B	B	B	B	B	B	B
Ceiling height													
Floor area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area
Exposed Ceilings A	A	A	A	A	A	A	A	A	A	A	A	A	A
Exposed Ceilings B	B	B	B	B	B	B	B	B	B	B	B	B	B
Exposed Floors	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr
Gross Exp Wall A													
Gross Exp Wall B													

Components	R-Values	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	11.62																
East/West	3.55	22.93	29.56																
South	3.55	22.93	22.50																
Existing Windows	1.99	40.90	23.66																
Skylight	2.03	40.10	88.23																
Doors	4.00	20.35	2.75																
Net exposed walls A	17.03	4.78	0.65																
Net exposed walls B	8.50	9.58	1.29																
Exposed Ceilings A	59.22	1.37	0.64																
Exposed Ceilings B	27.65	2.94	1.37																
Exposed Floors	29.80	2.73	0.17																
Foundation Conductive Heatloss																			
Total Conductive																			
Heat Loss																			
Heat Gain																			
Air Leakage	Heat Loss/Gain	0.0000	0.0432																
Case 1		0.00	0.06																
Case 2		14.95	11.88																
Case 3	x	0.03	0.06																
Heat Gain People			239																
Appliances Loads	1 =.25 percent		4229																
Duct and Pipe loss			10%																
Level HL Total	0																		
Level HG Total	0																		

I review and take responsibility for the design work and am qualified in the appropriate category as an "other designer" under

Division C subsection 3.2.5. of the Building Code. Individual BCIN:

32964

David DaCosta

David DaCosta

SB-12 Package

Package A1

Total Heat Loss	55,002	btu/h
Total Heat Gain	28,387	btu/h

I review and take responsibility for the design work and am qualified in the appropriate category as an "other designer" under Division C subsection 3.2.5. of the Building Code.

Individual BCIN: 32964

David DaCosta

**Package:** Package A1

**Project:** Bradford

**Model:**
**S38-3**

## RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

*For systems serving one dwelling unit & conforming to the Ontario Building Code, O.reg 332/12*

Location of Installation	
Lot #	Plan #
Township	Bradford
Roll #	Permit #
Address	

Builder	
Name	Bayview Wellington
Address	
City	
Tel	Fax

Installing Contractor	
Name	
Address	
City	
Tel	Fax

Combustion Appliances 9.32.3.1(1)		
a)	x	Direct vent (sealed combustion) only
b)		Positive venting induced draft (except fireplaces)
c)		Natural draft, B-vent or induced draft fireplaces
d)		Solid fuel (including fireplaces)
e)		No combustion Appliances

Heating System		
x	Forced air	
	Non forced air	
	Electric space heat (if over 10% of heat load)	

House Type 9.32.3.1(2)		
I	x	Type a) or b) appliances only, no solid fuel
II		Type I except with solid fuel (including fireplace)
III		Any type c) appliance
IV		Type I or II either electric space heat
Other		Type I, II or IV no forced air

System Design Option		
1	x	Exhaust only / forced air system
2		HRV WITH DUCTING / forced air system
3	x	HRV simplified connection to forced air system
4		HRV full ducting/not coupled to forced air system
		Part 6 design

Total Ventilation Capacity 9.32.3.3(1)				
Bsmt & Master Bdrm	2	@	21.2 cfm	42.4 cfm
Other Bedrooms	3	@	10.6 cfm	31.8 cfm
Bathrooms & Kitchen	5	@	10.6 cfm	53 cfm
Other rooms	5	@	10.6 cfm	53 cfm
Total				180.2

Principal Ventilation Capacity 9.32.3.4(1)				
Master bedroom	1	@	31.8 cfm	31.8 cfm
Other bedrooms	3	@	15.9 cfm	47.7 cfm
Total				79.5

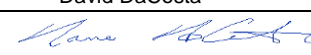
Principal Exhaust Fan Capacity				
Make	Model		Location	
VanEE	V150H75NS		Base	
140 cfm			Sones	or Equiv.

Heat Recovery Ventilator		
Make	VanEE	
Model	V150H75NS	
	140 cfm high	80 cfm low
Sensible efficiency @ -25 deg C	60%	
Sensible efficiency @ 0 deg C	75%	

Note: Installer to balance HRV/ERV to within 10 percent of PVC

Supplemental Ventilation Capacity				
Total ventilation capacity	180.2			
Less principal exhaust capacity	79.5			
REQUIRED supplemental vent. Capacity	100.7 cfm			

Supplemental Fans 9.32.3.5.			
Location	cfm	Model	Sones
Ens	50	XB50	0.3
Ens 2	50	XB50	0.3
Bath	50	XB50	0.3
<i>all fans HVI listed</i>	Make	Broan	or Equiv.

Designer Certification			
I hereby certify that this ventilation system has been designed in accordance with the Ontario Building Code.			
Name	David DaCosta		
Signature			
HRAI #	5190	BCIN #	32964
Date	July 21, 2021		



2985 Drew Road, Suite 202, Mississauga, Ontario  
 L4T 0A4 Tel: 905-671-9800 Fax: 647-494-9643  
 e-mail dave@gtadesigns.ca

## Energy Efficiency Design Summary: Prescriptive Method (Building Code Part 9, Residential)

Page 7  
 Project # PJ-00041  
 Layout # JB-07351

This form is used by a designer to demonstrate that the energy efficiency design of a house complies with the building code using the prescriptive method described in Subsection 3.1.1. of SB-12. This form is applicable where the ratio of gross area of windows/sidelights/skylights/glazing in doors and sliding glass doors to the gross area of peripheral walls is not more than 22%.

For use by Principal Authority

Application No:

Model/Certification Number

### A. Project Information

Building number, street name <b>Barossa 3 S38-3</b>		Unit number	Lot/Con
Municipality <b>Bradford</b>	Postal code	Reg. Plan number / other description	

### B. Prescriptive Compliance [indicate the building code compliance package being employed in the house design]

SB-12 Prescriptive (input design package): Package A1 Table: 3.1.1.2.A

### C. Project Design Conditions

Climatic Zone (SB-1):	Heat. Equip. Efficiency	Space Heating Fuel Source		
<input checked="" type="checkbox"/> Zone 1 (< 5000 degree days) <input type="checkbox"/> Zone 2 (≥ 5000 degree days)	<input checked="" type="checkbox"/> ≥ 92% AFUE <input type="checkbox"/> ≥ 84% < 92% AFUE	<input checked="" type="checkbox"/> Gas <input type="checkbox"/> Oil	<input type="checkbox"/> Propane <input type="checkbox"/> Electric	<input type="checkbox"/> Solid Fuel <input type="checkbox"/> Earth Energy
Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area		Other Building Characteristics		
Area of Walls = <u>386.19</u> m <sup>2</sup> or <u>4156.9</u> ft <sup>2</sup>	W,S & G % = <u>9.9%</u>	<input type="checkbox"/> Log/Post&Beam <input type="checkbox"/> Slab-on-ground <input checked="" type="checkbox"/> Air Conditioning <input type="checkbox"/> Air Sourced Heat Pump (ASHP) <input type="checkbox"/> Ground Source Heat Pump (GSHP)		
Area of W, S & G = <u>38.275</u> m <sup>2</sup> or <u>412.0</u> ft <sup>2</sup>	Utilize Window Averaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> ICF Above Grade <input type="checkbox"/> Walkout Basement <input type="checkbox"/> Combo Unit		

### D. Building Specifications [provide values and ratings of the energy efficiency components proposed]

Energy Efficiency Substitutions			
<input type="checkbox"/> ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5)) <input type="checkbox"/> Combined space heating and domestic water heating systems (3.1.1.2(7) / 3.1.1.3.(7))			
<input type="checkbox"/> Airtightness substitution(s) Airtightness test required (Refer to Design Guide Attached)	<input type="checkbox"/> Table 3.1.1.4.B Required:		Permitted Substitution:
	<input type="checkbox"/> Table 3.1.1.4.C Required:		Permitted Substitution:
Building Component	Minimum RSI/R-Values or Maximum U-Value <sup>1</sup>		Efficiency Ratings
<b>Thermal Insulation</b>	Nominal	Effective	<b>Windows &amp; Doors</b> Provide U-Value <sup>(1)</sup> or ER rating
Ceiling with Attic Space	60	59.22	Windows/Sliding Glass Doors
Ceiling without Attic Space	31	27.65	Skylights
Exposed Floor	31	29.80	<b>Mechanicals</b>
Walls Above Grade	22	17.03	Heating Equip.(AFUE)
Basement Walls	20.0ci	21.12	HRV Efficiency (SRE% at 0°C)
Slab (all >600mm below grade)	x	x	DHW Heater (EF)
Slab (edge only ≤600mm below grade)	10	11.13	DWHR (CSA B55.1 (min. 42% efficiency))
Slab (all ≤600mm below grade, or heated)	10	11.13	Combined Heating System

(1) U value to be provided in either W/(m<sup>2</sup>·K) or Btu/(h·ft<sup>2</sup>·F) but not both.

### E. Designer(s) [name(s) & BCIN(s), if applicable, of person(s) providing information herein to substantiate that design meets building code]

Name <b>David DaCosta</b>	BCIN <b>32964</b>	Signature 
------------------------------	----------------------	---------------

Package:  
Project:

Package A1  
Bradford

System:  
Model:

System 1  
S38-3

## Air Leakage Calculations

Building Air Leakage Heat Loss				
B	LRairh	Vb	HL^T	HLleak
0.018	0.393	33025	81.4	18999

Building Air Leakage Heat Gain				
B	LRairh	Vb	HG^T	HG Leak
0.018	0.097	33025	11	631

Air Leakage Heat Loss/Gain Multiplier Table (Section 11)				
Level	Level Factor (LF)	Building Air	Level Conductive Heat Loss	Air Leakage Heat Loss Multiplier
Level 1	0.5	18999	8607	1.1036
Level 2	0.3		12787	0.4457
Level 3	0.2		12934	0.2938
Level 4	0		0	0.0000

Levels			
1	2	3	4
(LF)	(LF)	(LF)	(LF)
1.0	0.6	0.5	0.4
	0.4	0.3	0.3
		0.2	0.2
			0.1

HG LEAK		631	Air Leakage Heat Gain	
BUILDING CONDUCTIVE HEAT GAIN		14610	0.0432	

Levels this Dwelling	
3	

## Ventilation Calculations

Vent	Ventilation Heat Loss					Ventilation Heat Gain				Vent
	Ventilation Heat Loss					Ventilation Heat Gain				
	C	PVC	HL^T	(1-E) HRV	HLbvent	C	PVC	HG^T	HGbvent	
	1.08	79.5	81.4	0.17	1188	1.1	79.5	11	944	
Case 1	Case 1					Case 1				Case 1
	Ventilation Heat Loss (Exhaust only Systems)					Ventilation Heat Gain (Exhaust Only Systems)				
	Case 1 - Exhaust Only					Case 1 - Exhaust Only		Multiplier		
	Level	LF	HLbvent	LVL Cond. HL	Multiplier	HGbvent	944	0.06		
	Level 1	0.5	1188	8607	0.07	Building	14610			
	Level 2	0.3		12787	0.03					
	Level 3	0.2		12934	0.02					
	Level 4	0		0	0.00					
Case 2	Case 2					Case 2				Case 2
	Ventilation Heat Loss (Direct Ducted Systems)					Ventilation Heat Gain (Direct Ducted Systems)				
				Multiplier				Multiplier		
	C	HL^T	(1-E) HRV	14.95		C	HG^T	11.88		
	1.08	81.4	0.17			1.08	11			
Case 3	Case 3					Case 3				Case 3
	Ventilation Heat Loss (Forced Air Systems)					Ventilation Heat Gain (Forced Air Systems)				
			HLbvent	Multiplier		Vent Heat Gain		Multiplier		
	Total Ventilation Load		1188	0.03		HGbvent	HG*1.3	944	0.06	
						944	1			

Foundation Conductive Heatloss Level 1	Level 1	2203	Watts	7515	Btu/h
Foundation Conductive Heatloss Level 2	Level 2		Watts		Btu/h
Slab on Grade Foundation Conductive Heatloss			Watts		Btu/h
Walk Out Basement Foundation Conductive Heatloss			Watts		Btu/h

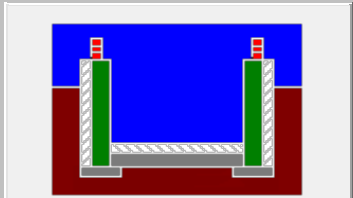
# Envelope Air Leakage Calculator



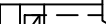













Supplemental tool for CAN/CSA-F280

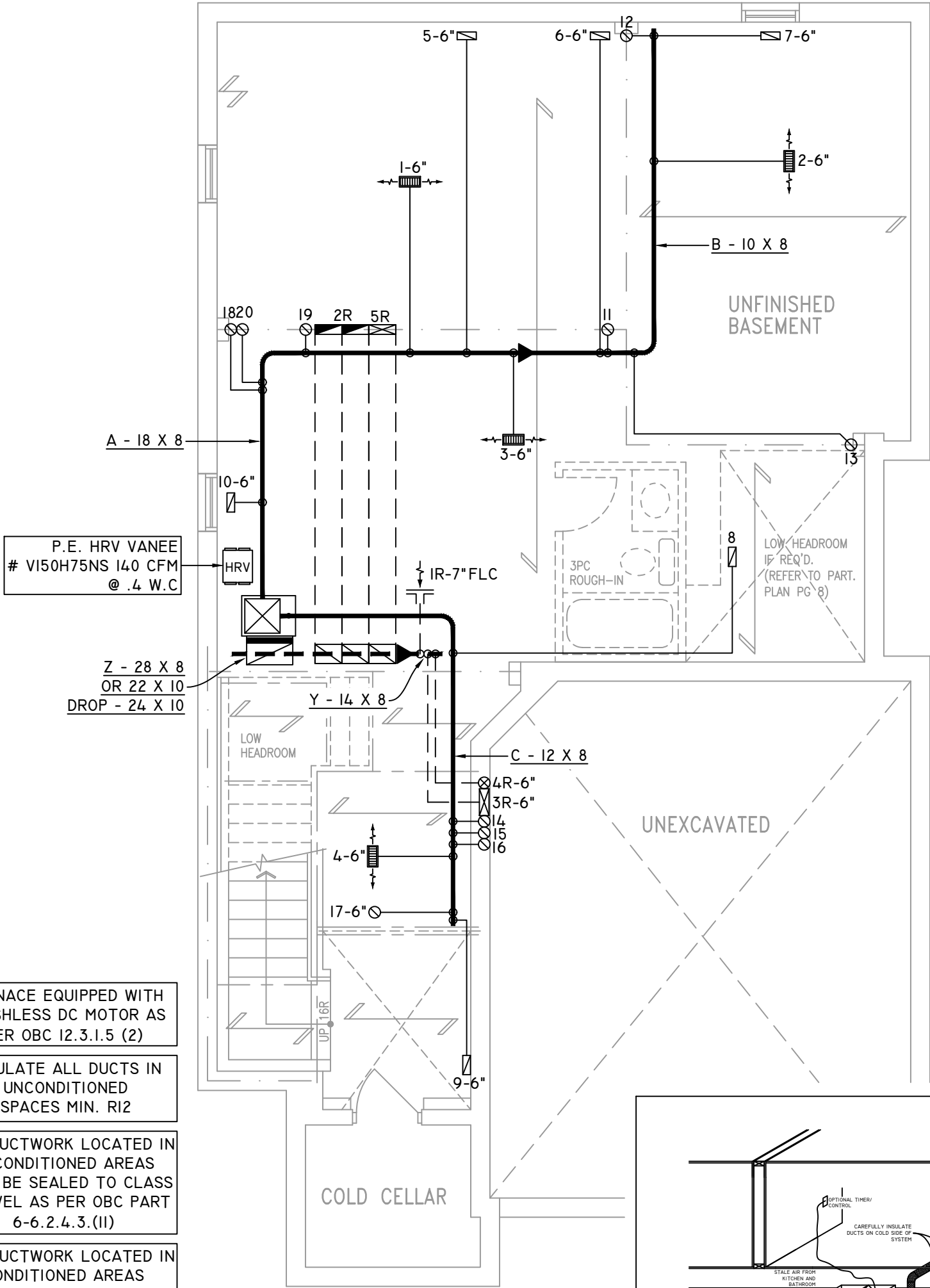
Weather Station Description				
Province:	Ontario ▼			
Region:	Bradford ▼			
Weather Station Location:	Open flat terrain, grass ▼			
Anemometer height (m):	10			
Local Shielding				
Building Site:	Suburban, forest ▼			
Walls:	Heavy ▼			
Flue:	Heavy ▼			
Highest Ceiling Height (m):	8.53			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Shallow			
House Volume (m <sup>3</sup> ):	935.27			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (ACH=3.57)			
Custom BDT Data:	ELA @ 10 Pa. ▼ 322.44 cm <sup>2</sup>			
	3.57 ACH @ 50 Pa			
Mechanical Ventilation (L/s):	Total Supply:		Total Exhaust:	
	39.75		39.75	
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Heating Air Leakage Rate (ACH/H):		0.393		
Cooling Air Leakage Rate (ACH/H):		0.097		

# Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	▼
Region:	Bradford	▼
Site Description		
Soil Conductivity:	High conductivity: moist soil	▼
Water Table:	Normal (7-10 m, 23-33 Ft)	▼
Foundation Dimensions		
Floor Length (m):	18.02	 <p>Insulation Configuration</p>
Floor Width (m):	5.29	
Exposed Perimeter (m):	46.63	
Wall Height (m):	3.05	
Depth Below Grade (m):	1.22	
Window Area (m <sup>2</sup> ):	2.69	
Door Area (m <sup>2</sup> ):	1.95	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		2203

	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH
									W/R & PRINCIPAL EXHAUST FAN



FURNACE EQUIPPED WITH  
BRUSHLESS DC MOTOR AS  
PER OBC 12.3.1.5 (2)

INSULATE ALL DUCTS IN  
UNCONDITIONED  
SPACES MIN. R12

ALL DUCTWORK LOCATED IN  
UNCONDITIONED AREAS  
MUST BE SEALED TO CLASS  
A LEVEL AS PER OBC PART  
6-6.2.4.3.(II)

ALL DUCTWORK LOCATED IN  
CONDITIONED AREAS  
MUST BE SEALED TO CLASS  
C LEVEL AS PER OBC PART  
6-6.2.4.3.(12)

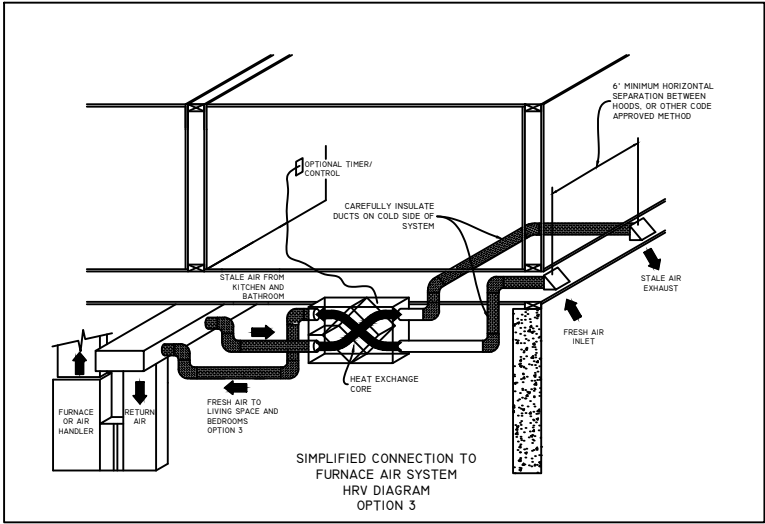
THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN ON BEHALF OF GTA DESIGNS INC. AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE BUILDING CODE TO BE A DESIGNER

**QUALIFICATION INFORMATION**

REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C 3.2.5.1 OF THE ONTARIO BUILDING CODE

DAVID DA COSTA  B.C.I.N. 32964  
SIGNATURE OF DESIGNER

BASEMENT PLAN 'A'  
(9'-0" BASEMENT)  
ELEV. 'B' & 'C' SIMILAR



OBC 2012

ZONE I COMPLIANCE  
PACKAGE "A1" REF. TABLE 3.1.1.2.A

**NOTES**

INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.

ALL SUPPLY OUTLETS TO BE 5" DIA. UNLESS OTHERWISE SPECIFIED.

PROVIDE BALANCING DAMPERS ON ALL BRANCHES.

ALL R/A PARTITIONS 6" (FIRST FLOOR ONLY)

INSULATE DUCTS IN UNCONDITIONED SPACES R12 UNDERCUT ALL DOORS 1" MIN.

CONTRACTOR MUST WORK FROM APPROVED PLANS.

ANY ALTERATIONS TO THIS ORIGINAL PLAN ARE NOT THE RESPONSIBILITY OF GTA DESIGNS.

GTA DESIGNS MUST BE CONSULTED IF KITCHEN EXHAUST FAN EXCEEDS 700 CFM DEPRESSURIZATION MAY OCCUR WITH IN THE DWELLING.





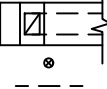













2985 DREW ROAD  
SUITE 202,  
MISSISSAUGA, ONT.  
L4T 0A4 TEL: 905-671-9800  
EMAIL: DAVE@GTADESIGNS.CA  
WEB: WWW.GTADESIGNS.CA

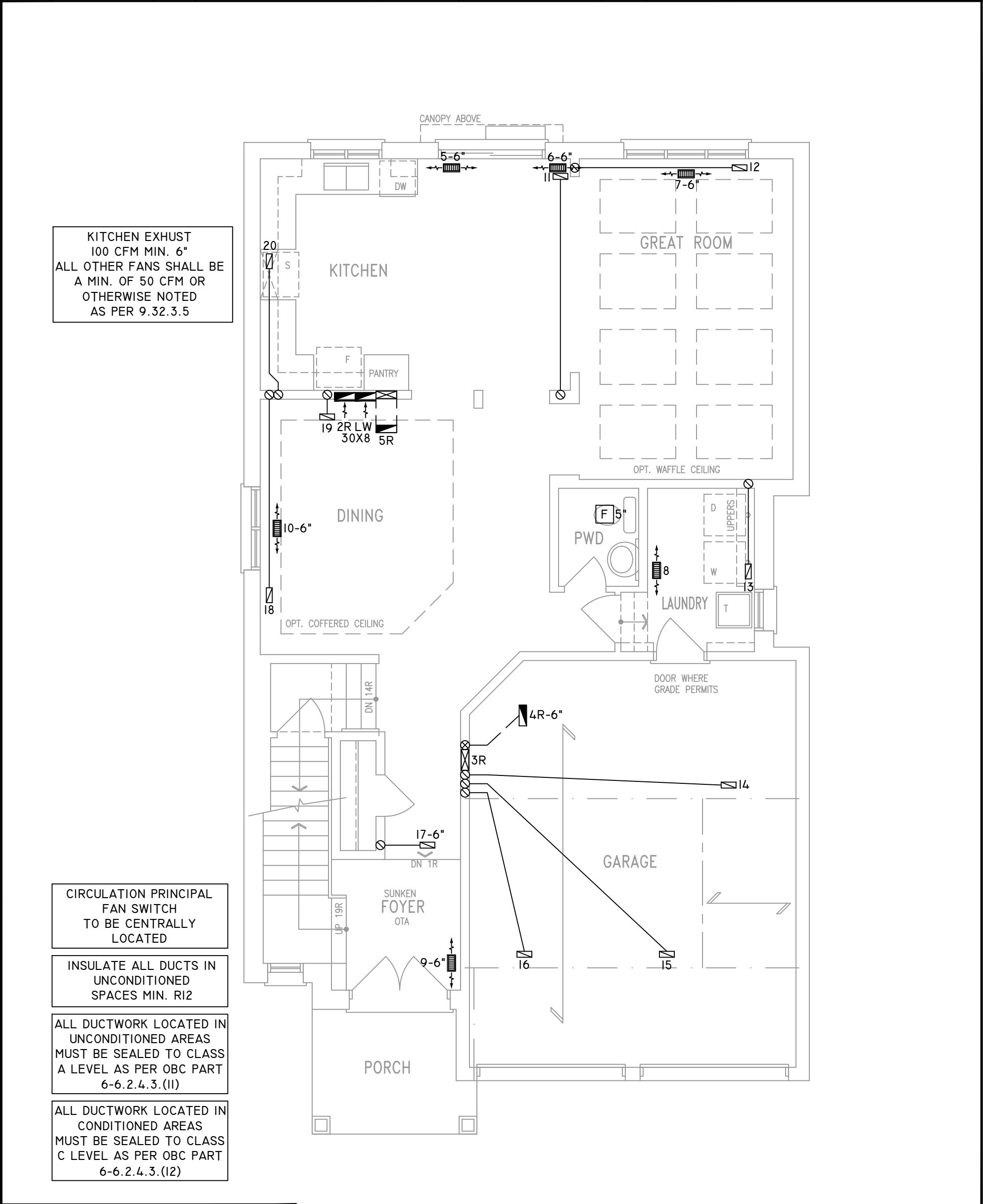
HEAT-LOSS	55,002	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960603ANA	OR EQUAL.
UNIT HEATING INPUT	60,000	BTU/HR.
UNIT HEATING OUTPUT	57,600	BTU/HR.
A/C COOLING CAPACITY	2.5	TONS.
FAN SPEED	929	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	3	3
1ST FLOOR	6	1	2
BASEMENT	4	1	

FLOOR PLAN:	BASEMENT
DRAWN BY:	JL
CHECKED:	DD
SQFT	2544
LAYOUT NO.	JB-07351
DRAWING NO.	MI

DATE:	JULY 21, 2021
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-3 BAROSSA 3
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER				PRINCIPAL EXHAUST FAN SWITCH		W/R & PRINCIPAL EXHAUST FAN



THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN ON BEHALF OF GTA DESIGNS INC. AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE BUILDING CODE TO BE A DESIGNER

**QUALIFICATION INFORMATION**

REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C 3.2.5.1 OF THE ONTARIO BUILDING CODE

DAVID DA COSTA



B.C.I.N. 32964

SIGNATURE OF DESIGNER

GROUND FLOOR PLAN 'A'  
(10'-0" GROUND)

OBC 2012

ZONE I COMPLIANCE  
PACKAGE "AI" REF. TABLE 3.1.1.2.A

**NOTES**  
INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.  
ALL SUPPLY OUTLETS TO BE 5" DIA. UNLESS OTHERWISE SPECIFIED.  
PROVIDE BALANCING DAMPERS ON ALL BRANCHES.  
ALL R/A PARTITIONS 6" (FIRST FLOOR ONLY)  
INSULATE DUCTS IN UNCONDITIONED SPACES R12 UNDERCUT ALL DOORS 1" MIN.  
CONTRACTOR MUST WORK FROM APPROVED PLANS.  
ANY ALTERATIONS TO THIS ORIGINAL PLAN ARE NOT THE RESPONSIBILITY OF GTA DESIGNS.  
GTA DESIGNS MUST BE CONSULTED IF KITCHEN EXHAUST FAN EXCEEDS 700 CFM DEPRESSURIZATION MAY OCCUR WITH IN THE DWELLING.





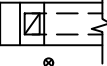







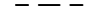





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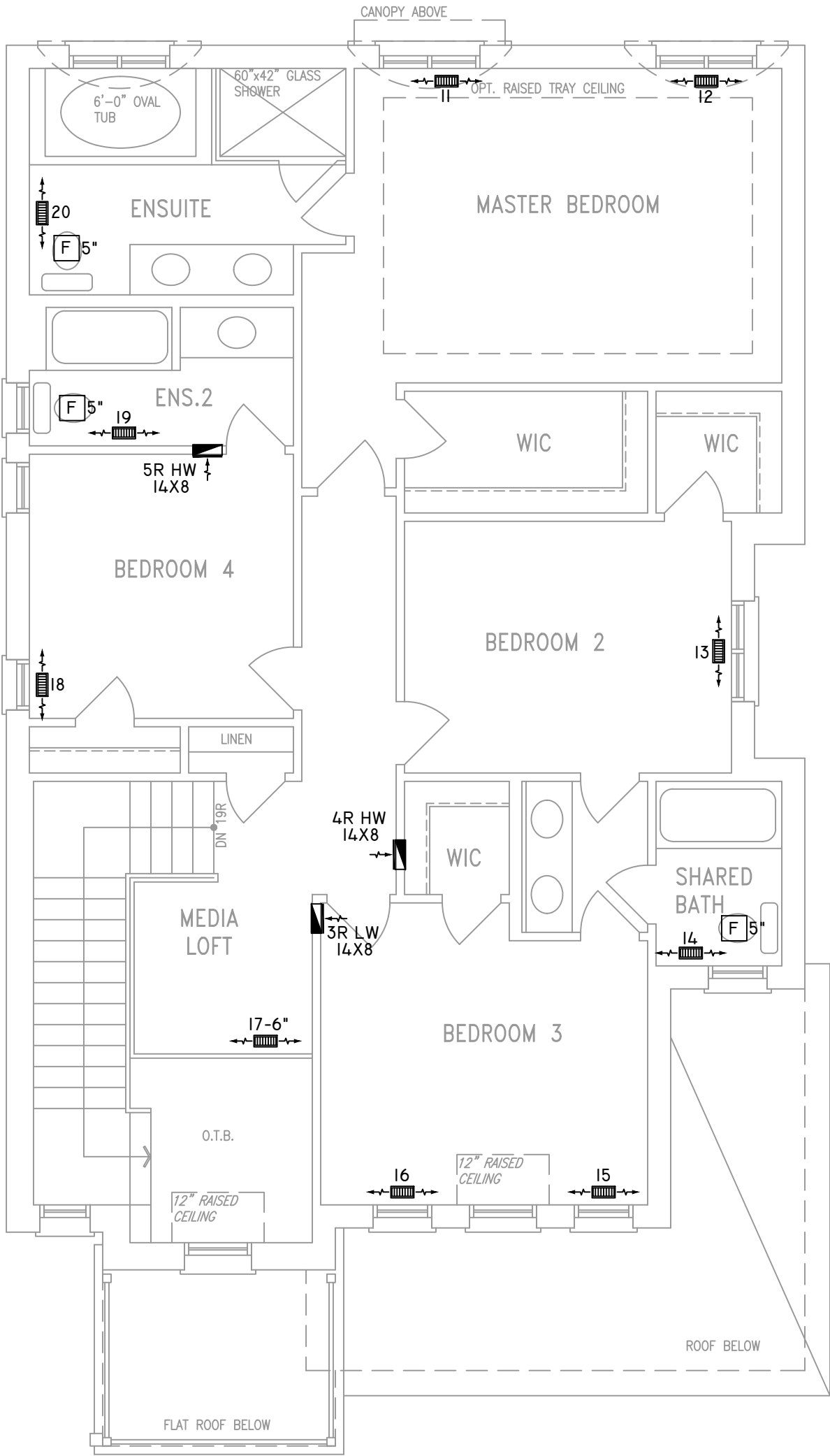
HEAT-LOSS	55,002	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960603ANA	OR EQUAL.
UNIT HEATING INPUT	60,000	BTU/HR.
UNIT HEATING OUTPUT	57,600	BTU/HR.
A/C COOLING CAPACITY	2.5	TONS.
FAN SPEED	929	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	3	3
1ST FLOOR	6	1	2
BASEMENT	4	1	

FLOOR PLAN: GROUND FLOOR		
DRAWN BY: JL	CHECKED: DD	SQFT 2544
LAYOUT NO. JB-07351	DRAWING NO. M2	

DATE:	JULY 21, 2021
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-3 BAROSSA 3
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER				PRINCIPAL EXHAUST FAN SWITCH		W/R & PRINCIPAL EXHAUST FAN




- INSULATE ALL DUCTS IN UNCONDITIONED SPACES MIN. R12
- ALL DUCTWORK LOCATED IN UNCONDITIONED AREAS MUST BE SEALED TO CLASS A LEVEL AS PER OBC PART 6-6.2.4.3.(II)
- ALL DUCTWORK LOCATED IN CONDITIONED AREAS MUST BE SEALED TO CLASS C LEVEL AS PER OBC PART 6-6.2.4.3.(I2)

THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN ON BEHALF OF GTA DESIGNS INC. AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE BUILDING CODE TO BE A DESIGNER

**QUALIFICATION INFORMATION**

REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C 3.2.5.1 OF THE ONTARIO BUILDING CODE

DAVID DA COSTA



B.C.I.N. 32964

SIGNATURE OF DESIGNER

SECOND FLOOR PLAN 'A'

OBC 2012

ZONE I COMPLIANCE  
PACKAGE "A1" REF. TABLE 3.1.1.2.A

**NOTES**

INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.

ALL SUPPLY OUTLETS TO BE 5" DIA. UNLESS OTHERWISE SPECIFIED.

PROVIDE BALANCING DAMPERS ON ALL BRANCHES.

ALL R/A PARTITIONS 6" (FIRST FLOOR ONLY)

INSULATE DUCTS IN UNCONDITIONED SPACES R12 UNDERCUT ALL DOORS 1" MIN.

CONTRACTOR MUST WORK FROM APPROVED PLANS.

ANY ALTERATIONS TO THIS ORIGINAL PLAN ARE NOT THE RESPONSIBILITY OF GTA DESIGNS.

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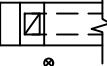














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WEB: WWW.GTADESIGNS.CA

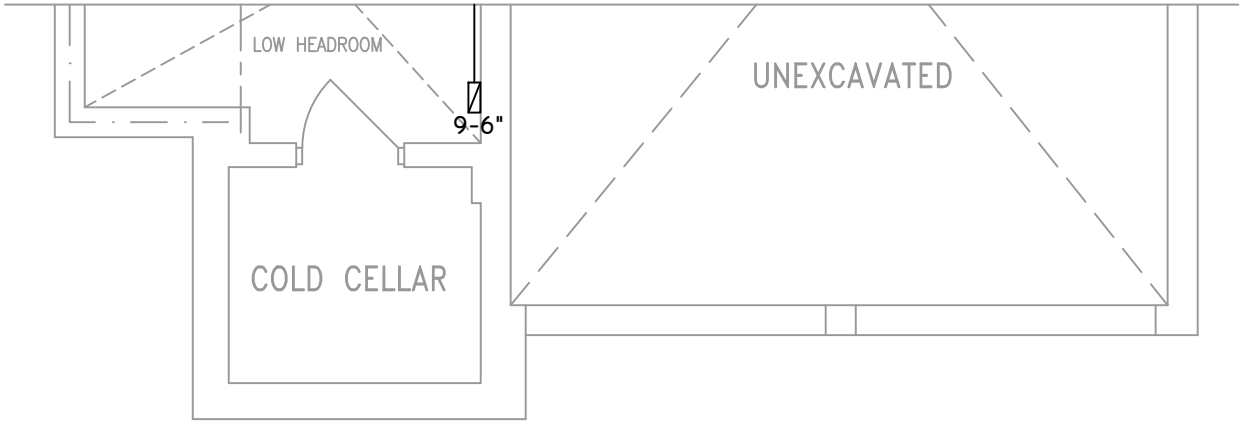
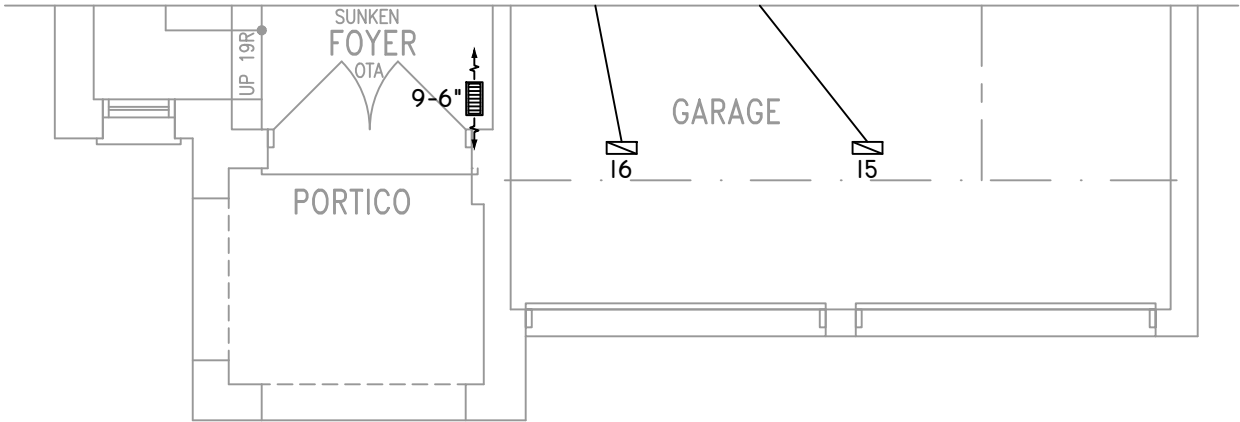
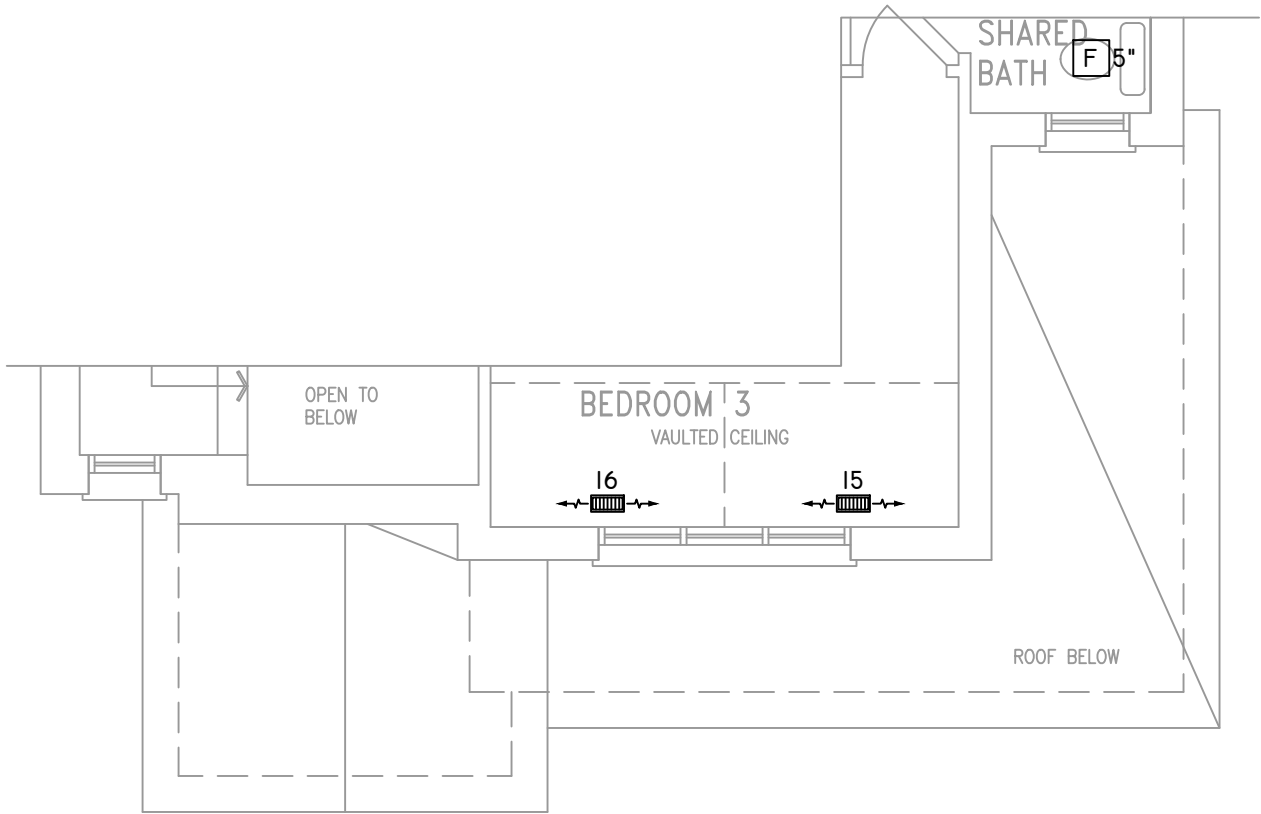
HEAT-LOSS	55,002	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960603ANA	OR EQUAL.
UNIT HEATING INPUT	60,000	BTU/HR.
UNIT HEATING OUTPUT	57,600	BTU/HR.
A/C COOLING CAPACITY	2.5	TONS.
FAN SPEED	929	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	3	3
1ST FLOOR	6	1	2
BASEMENT	4	1	

FLOOR PLAN: SECOND FLOOR		
DRAWN BY: JL	CHECKED: DD	SQFT 2544
LAYOUT NO. JB-07351	DRAWING NO. M3	

DATE:	JULY 21, 2021
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-3 BAROSSA 3
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH
									W/R & PRINCIPAL EXHAUST FAN

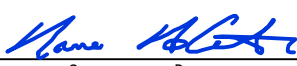


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**QUALIFICATION INFORMATION**

REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C 3.2.5.1 OF THE ONTARIO BUILDING CODE

DAVID DA COSTA



B.C.I.N. 32964

SIGNATURE OF DESIGNER

OBC 2012

ZONE I COMPLIANCE  
PACKAGE "A1" REF. TABLE 3.1.1.2.A

**NOTES**  
INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.  
ALL SUPPLY OUTLETS TO BE 5" DIA. UNLESS OTHERWISE SPECIFIED.  
PROVIDE BALANCING DAMPERS ON ALL BRANCHES.  
ALL R/A PARTITIONS 6" (FIRST FLOOR ONLY)  
INSULATE DUCTS IN UNCONDITIONED SPACES R12 UNDERCUT ALL DOORS 1" MIN.  
CONTRACTOR MUST WORK FROM APPROVED PLANS.  
ANY ALTERATIONS TO THIS ORIGINAL PLAN ARE NOT THE RESPONSIBILITY OF GTA DESIGNS.  
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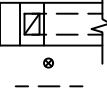













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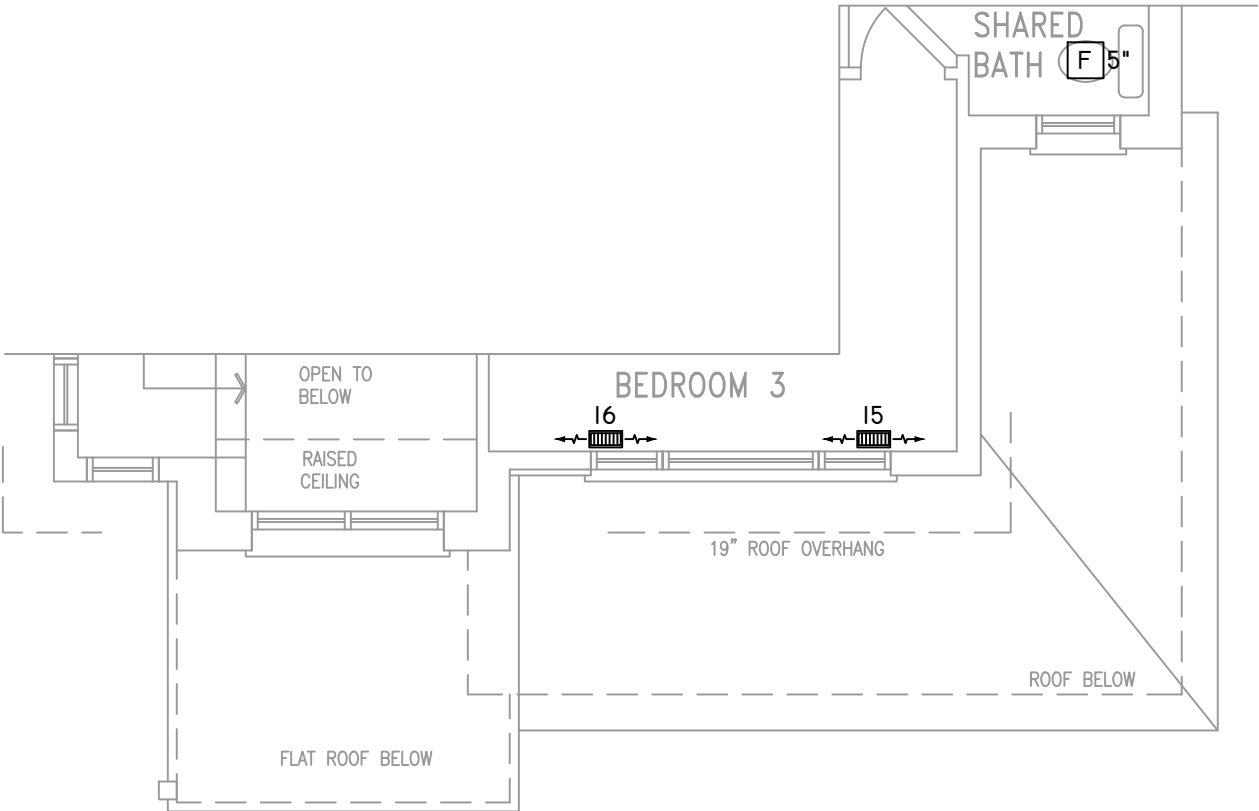
HEAT-LOSS	55,002	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960603ANA	OR EQUAL.
UNIT HEATING INPUT	60,000	BTU/HR.
UNIT HEATING OUTPUT	57,600	BTU/HR.
A/C COOLING CAPACITY	2.5	TONS.
FAN SPEED	929	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	3	3
1ST FLOOR	6	1	2
BASEMENT	4	1	

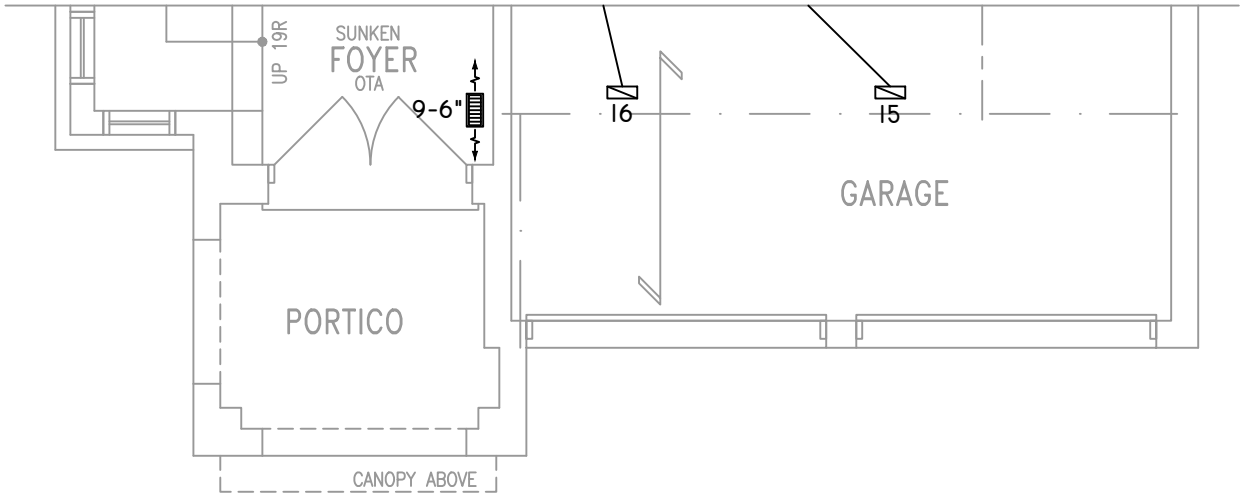
FLOOR PLAN: PARTIAL PLAN(S)	
DRAWN BY: JL	CHECKED: DD
LAYOUT NO. JB-07351	SQFT 2544
DRAWING NO. M4	

DATE:	JULY 21, 2021
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-3 BAROSSA 3
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

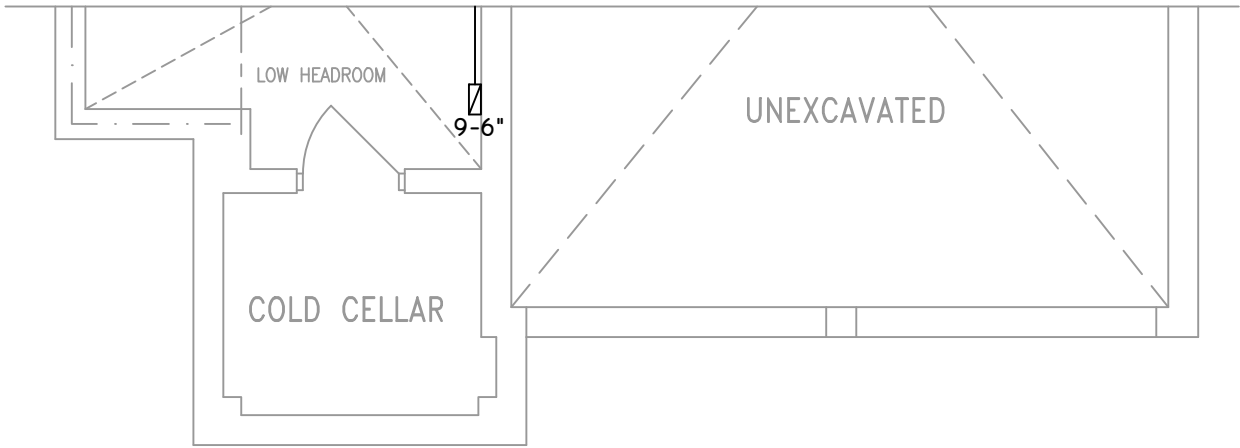
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH W/R & PRINCIPAL EXHAUST FAN



PARTIAL SECOND FLOOR PLAN 'C'



PARTIAL GROUND FLOOR PLAN 'C'  
(10'-0" GROUND)



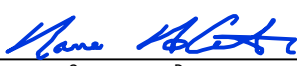
PARTIAL BASEMENT PLAN 'C'

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DAVID DA COSTA



B.C.I.N. 32964

SIGNATURE OF DESIGNER

OBC 2012

ZONE I COMPLIANCE  
PACKAGE "A1" REF. TABLE 3.1.1.2.A

**NOTES**  
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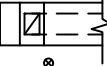







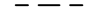





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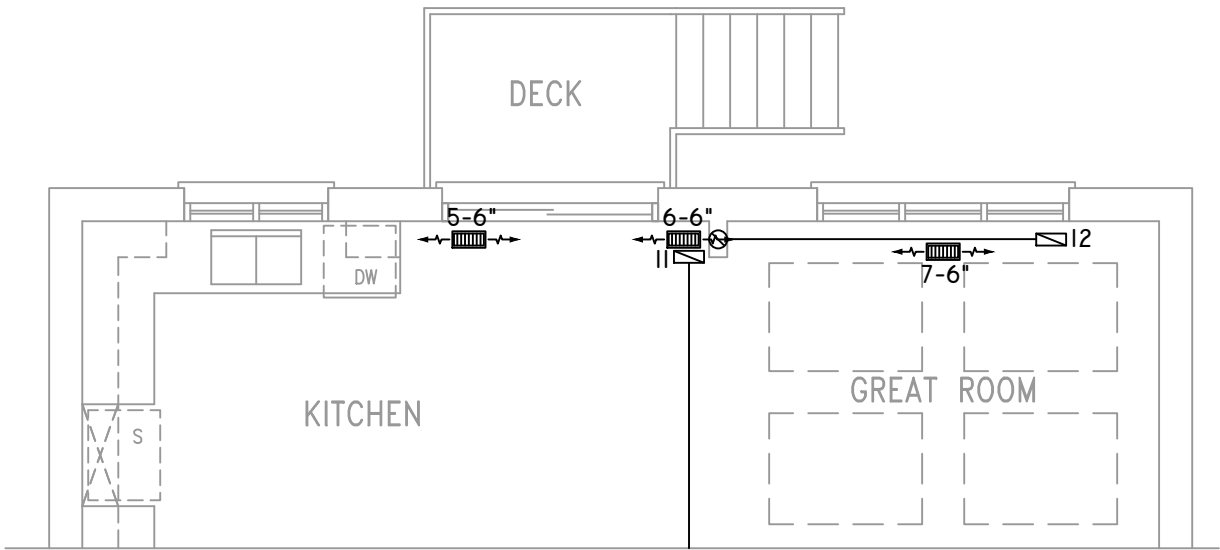
HEAT-LOSS	55,002	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960603ANA	OR EQUAL.
UNIT HEATING INPUT	60,000	BTU/HR.
UNIT HEATING OUTPUT	57,600	BTU/HR.
A/C COOLING CAPACITY	2.5	TONS.
FAN SPEED	929	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	3	3
1ST FLOOR	6	1	2
BASEMENT	4	1	

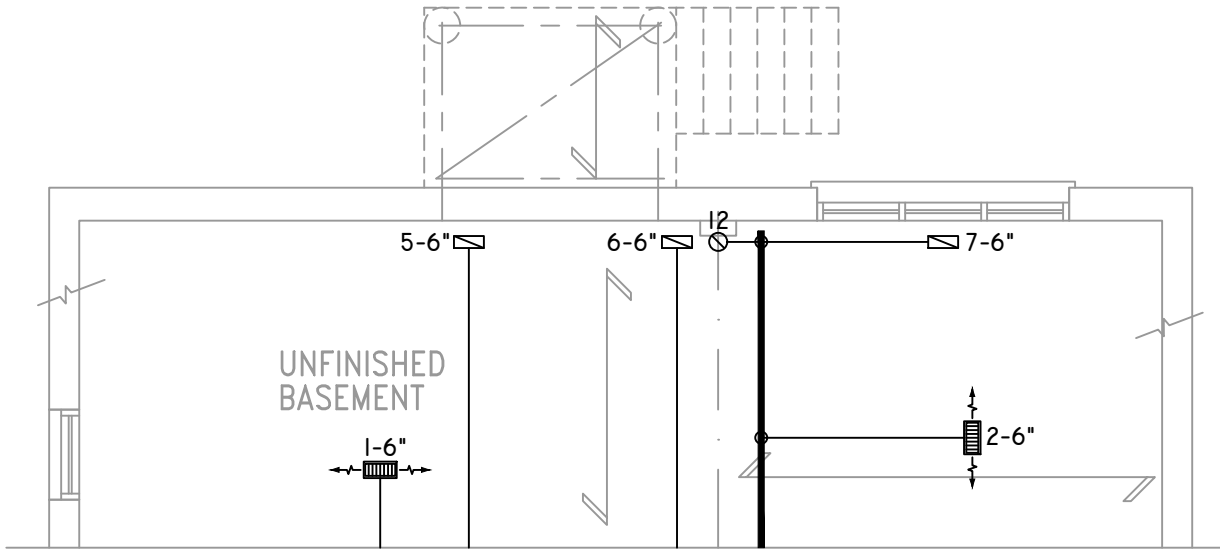
FLOOR PLAN: PARTIAL PLAN(S)		
DRAWN BY: JL	CHECKED: DD	SQFT 2544
LAYOUT NO. JB-07351	DRAWING NO. M5	

DATE:	JULY 21, 2021
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-3 BAROSSA 3
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH
									W/R & PRINCIPAL EXHAUST FAN



GROUND FLOOR PLAN 'A' – W.O.D. CONDITION  
ELEV. 'B' & 'C' SIMILAR




BASEMENT PLAN 'A' – W.O.D. CONDITION  
ELEV. 'B' & 'C' SIMILAR

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SIGNATURE OF DESIGNER

OBC 2012

ZONE I COMPLIANCE  
PACKAGE "A1" REF. TABLE 3.1.1.2.A

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FAN SPEED	929	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	3	3
1ST FLOOR	6	1	2
BASEMENT	4	1	

FLOOR PLAN: PARTIAL PLAN(S)	
DRAWN BY: JL	CHECKED: DD
LAYOUT NO. JB-07351	SQFT 2544
DRAWING NO. M6	

DATE:	JULY 21, 2021
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-3 BAROSSA 3
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"