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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	**Barossa 3-1** **S38-3-1 Lot 183**	Lot:	183
		Lot/con.	
Municipality: **Bradford**	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: **David DaCosta**		Firm: **gtaDesigns Inc.**	
Street address: **2985 Drew Road, Suite 202**		Unit no.	Lot/con.
Municipality: **Mississauga**	Postal code: **L4T 0A4**	Province: **Ontario**	E-mail: ddacosta@gtadesigns.ca
Telephone number: **(905) 671-9800**	Fax number: **(647) 494-9643**		Cell number: **(416) 268-6820**

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1 of Division C]

☐ House	☒ HVAC – House	☐ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work	**Model Certification**			**Project #:**	**PJ-00041**
				Layout #:	**JB-05397**
Heating and Cooling Load Calculations	**Main**	**X**	Builder	**Bayview Wellington**	
Air System Design	**Alternate**		Project	**Green Valley Estates**	
Residential mechanical ventilation Design Summary	**Area Sq ft:**	**2567**	Model	**Barossa 3-1** **S38-3-1 Lot 183**	
Residential System Design per CAN/CSA-F280-12					
Residential New Construction - Forced Air			SB-12	**Package A1**	

D. Declaration of Designer

I David DaCosta declare that (choose one as appropriate):
(print name)

☐ 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.

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: **32964**

Basis for exemption from registration: **Division C 3.2.4.1. (4)**

☐ 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.

December 13, 2018
Date

Signature of Designer

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Planning & Development Services
DEC 14 2018

NOTE:

1. 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.
2. Schedule 1 does not require to be completed a holder of a license, temporay license, or a certificate of authorization, issed by the Ontario Associstion 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.

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

Heat loss and gain calculation summary sheet

CSA-F280-M12 Standard Form No. 1

These documents issued for the use of **Bayview Wellington**
and may not be used by any other persons without authorization. Documents for permit and/or construction are signed in red.

Layout No. **JB-05397**

Building Location

Address (Model):	S38-3-1 Lot 183	Site:	Green Valley Estates
Model:	Barossa 3-1	Lot:	183
City and Province:	Bradford	Postal code:	

Calculations based on

Dimensional information based on:	VA 3 Design4/Dec/2018				
Attachment:	Detached	Front facing:	East/West	Assumed?	Yes
No. of Levels:	3 Ventilated? Included	Air tightness:	1961-Present (ACH=3.57)	Assumed?	Yes
Weather location:	Bradford	Wind exposure:	Sheltered		
HRV?	LifeBreath RNC155	Internal shading:	Light-translucent	Occupants:	5
Sensible Eff. at -25C	71% Apparent Effect. at -0C 84%	Units:	Imperial	Area Sq ft:	2567
Sensible Eff. at -0C	75%				

Heating design conditions	Cooling design conditions
Outdoor temp -9.4 Indoor temp: 72 Mean soil temp 48	Outdoor temp 86 Indoor temp: 75 Latitude: 44

Above grade walls	Below grade walls
Style A: As per OBC SB12 Package A1 R 22	Style A: As per OBC SB12 Package A1 R 20ci
Style B: Existing Walls (When Applicable) R 12	Style B:
Style C:	Style C:
Style D:	Style D:

Floors on soil	Ceilings
Style A: As per Selected OBC SB12 Package A1	Style A: As per Selected OBC SB12 Package A1 R 60
Style B:	Style B: As per Selected OBC SB12 Package A1 R 31
Exposed floors	Style C:
Style A: As per Selected OBC SB12 Package A1 R 31	**Doors**
Style B:	Style A: As per Selected OBC SB12 Package A1 R 4.00
Windows	Style B:
Style A: As per Selected OBC SB12 Package A1 R 3.55	Style C:
Style B: Existing Windows (When Applicable) R 1.99	**Skylights**
Style C:	Style A: As per Selected OBC SB12 Package A1 R 2.03
Style D:	Style B:

Attached documents:	As per Shedule 1	Heat Loss/Gain Caculations based on CSA-F280-12 Effective R-Values	
Notes:	Residential New Construction - Forced Air		

Calculations performed by

Name:	David DaCosta	Postal code:	L4T 0A4
Company:	gtaDesigns Inc.	Telephone:	(905) 671-9800
Address:	2985 Drew Road, Suite 202	Fax:	(416) 268-6820
City:	Mississauga	E-mail	ddacosta@gtadesigns.ca

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Air System Design

SB-12 Package A1

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

Builder: Bayview Wellington
Date: December 13, 2018
Project: Green Valley Estates
Model: Barossa 3-1 S38-3-1 Lot 183

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-05397

DESIGN LOAD SPECIFICATIONS

Level 1 Net Load	13,707	btu/h
Level 2 Net Load	17,050	btu/h
Level 3 Net Load	15,400	btu/h
Level 4 Net Load	0	btu/h
Total Heat Loss	46,157	btu/h
Total Heat Gain	25,819	btu/h
Combo System HL + 10%	50,772	Btuh.
Building Volume Vb	29247	ft³
Ventilation Load	1,118	Btuh.
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	0.0253	cfm/btuh
Cooling Air Flow Proportioning Factor	0.0453	cfm/btuh
R/A Temp	70	deg. F.
S/A Temp	116	deg. F.
Diffuser loss	0.01	"w.c.

FURNACE/AIR HANDLER DATA:

Make	Amana	
Model	GMEC96-0603BNA	
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>>>	46	deg. F.

BOILER/WATER HEATER DATA:

Make	Type
Model	
Input Btu/h	
Output Btu/h	
Min.Output Btu/h	AWH

A/C UNIT DATA:

Amana	2.5 Ton
Cond.———	2.5
Coil ———	2.5

Blower DATA:

Blower Speed Selected:	W2	Blower Type	ECM (Brushless DC OBC 12.3.1.5.(2))
Heating Check	1170 cfm	Cooling Check	1170 cfm
Selected cfm>	1170 cfm	Cooling Air Flow Rate	1170 cfm

Level 1

S/A Outlet No.	1	2	3	4
Room Use	BASE	BASE	BASE	BASE
Btu/Outlet	3427	3427	3427	3427
Heating Airflow Rate CFM	87	87	87	87
Cooling Airflow Rate CFM	9	9	9	9
Duct Design Pressure	0.13	0.13	0.13	0.13
Actual Duct Length	41	32	22	23
Equivalent Length	110	90	100	120
Total Effective Length	151	122	122	143
Adjusted Pressure	0.09	0.11	0.11	0.09
Duct Size Round	6	6	6	6
Outlet Size	4x10	4x10	4x10	4x10
Trunk	C	B	B	D

Level 2

S/A Outlet No.	5	6	7	8	9	10	11	12						
Room Use	KIT	KIT	DIN	DIN	FOY	FOY	LAUN	FAM						
Btu/Outlet	1829	1829	2026	2026	1899	1899	2109	3434						
Heating Airflow Rate CFM	46	46	51	51	48	48	53	87						
Cooling Airflow Rate CFM	109	109	100	100	58	58	50	95						
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
Actual Duct Length	43	36	16	10	34	29	37	50						
Equivalent Length	70	70	90	80	100	110	160	90	70	70	70	70	70	70
Total Effective Length	113	106	106	90	134	139	197	140	70	70	70	70	70	70
Adjusted Pressure	0.12	0.12	0.12	0.14	0.10	0.09	0.07	0.09	0.19	0.19	0.19	0.19	0.19	0.19
Duct Size Round	6	6	6	6	5	5	5	6						
Outlet Size	4x10	4x10	4x10	4x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	B	A	E	E	D	D	C	C						

Level 3

S/A Outlet No.	13	14	15	16	17	18	19	20	21	22				
Room Use	MAST	MAST	ENS	ENS 2	BED 4	LOFT	BED 3	BED 3	BATH	BED 2				
Btu/Outlet	1573	1573	1729	609	1741	1008	1988	1988	1629	1561				
Heating Airflow Rate CFM	40	40	44	15	44	26	50	50	41	40				
Cooling Airflow Rate CFM	57	57	44	15	69	22	61	61	31	38				
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
Actual Duct Length	66	43	34	29	37	31	42	45	49	52				
Equivalent Length	120	100	140	120	170	150	110	120	130	170	70	70	70	70
Total Effective Length	186	143	174	149	207	181	152	165	179	222	70	70	70	70
Adjusted Pressure	0.07	0.09	0.07	0.09	0.06	0.07	0.09	0.08	0.07	0.06	0.19	0.19	0.19	0.19
Duct Size Round	6	6	5	3	6	4	6	6	5	6				
Outlet Size	4x10	4x10	3x10	3x10	4x10	3x10	4x10	4x10	3x10	4x10	4x10	4x10	4x10	4x10
Trunk	C	B	E	E	E	D	D	D	D	C				

Level 4

Heating Airflow Rate CFM														
Cooling Airflow Rate CFM														
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
Actual Duct Length														
Equivalent Length	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Total Effective Length	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Adjusted Pressure	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
Outlet Size	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10

Return Branch And Grill Sizing

Grill Pressure Loss 0.02 "w.c

R/A Inlet No.	1R	2R	3R	4R	5R	6R	7R	8R	9R	10R	11R
Inlet Air Volume CFM	174	496	140	150	105	105					
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	5	17	41	40	51	42					
Equivalent Length	155	125	170	180	195	130	50	50	50	50	50
Total Effective Length	160	142	211	220	246	172	50	50	50	50	50
Adjusted Pressure	0.07	0.08	0.06	0.05	0.05	0.07	0.24	0.24	0.24	0.24	0.24
Duct Size Round	7.0	11.5	7.0	8.0	6.0	6.0					
Inlet Size	FLC	8	8	8	8	8					
" "	x	x	x	x	x	x	x	x	x	x	x
Inlet Size		30	14	14	14	14					
Trunk	Z	Z	Y	Z	Y	Y					

Return Trunk Duct Sizing

Trunk	CFM	Press.	Round	Rect. Size	
Drop	1170	0.05	17.0	24x12	
Z	1170	0.05	17.0	26x10	22x12
Y	350	0.05	11.0	14x8	10x10
X					
W					
V					
U					
T					
S					
R					
Q					

Supply Trunk Duct Sizing

Trunk	CFM	Press.	Round	Rect. Size	
A	964	0.06	15.5	28x8	22x10
B	567	0.06	12.5	18x8	14x10
C	307	0.06	10.0	12x8	10x10
D	351	0.07	10.5	12x8	10x10
E	206	0.06	8.5	8x8	107
F					
G					
H					
I					
J					
K					

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Heatloss/Gain Calculations CSA-F280-12

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

2012 OBC

Builder: Bayview Wellington | Date: December 13, 2018
Project: Green Valley Estates | Model: Barossa 3-1 S38-3-1 Lot 183

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: 2567

Project # PJ-00041
Layout # JB-05397

Level 1

	BASE										
Run ft. exposed wall A	155 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
Ceiling height	3.0 AG	3.0 AG	3.0 AG	3.0 AG	3.0 AG	3.0 AG	3.0 AG	3.0 AG	3.0 AG	3.0 AG	3.0 AG
Floor area	1050 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
Exposed Ceilings 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
Gross Exp Wall A	465										
Gross Exp Wall B											

Components	R-Values	Loss	Gain	BASE Loss	BASE Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	10.91																				
East/West	3.55	22.93	27.35	5	115	137																	
South	3.55	22.93	20.89	6	138	125																	
WOB Windows	3.15	25.84	28.32																				
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	433		226																	
Net exposed walls B	14.49	5.62	0.76																				
Exposed Ceilings A	59.22	1.37	0.64																				
Exposed Ceilings B	22.86	3.56	1.66																				
Exposed Floors	29.80	2.73	0.17																				
Foundation Conductive Heatloss	On Grade ( ) or Abo			5894																			
Total Conductive: Heat Loss				6574																			
Total Conductive: Heat Gain						545																	
Air Leakage: Heat Loss/Gain		1.0488	0.0361	6894		20																	
Ventilation: Case 1		0.09	0.07																				
Ventilation: Case 2		14.07	11.88																				
Ventilation: Case 3	x	0.04	0.07	239		40																	
Heat Gain People			239																				
Appliances Loads	1 =.25 percent		4235																				
Duct and Pipe loss			10%																				
Level 1 HL Total	13,797	Total HL for per room		13707																			
Level 1 HG Total	787	Total HG per room	x 1.3			787																	

Level 2

	KIT		DIN		FOY		LAUN		FAM															
Run ft. exposed wall A	32 A		46 A		26 A		18 A		32 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	
Ceiling height	10.0		10.0		10.0		12.0		10.0		10.0		10.0		10.0		10.0		10.0		10.0		10.0	
Floor area	242 Area		425 Area		71 Area		67 Area		216 Area		Area		Area		Area		Area		Area		Area		Area	
Exposed Ceilings 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	
Exposed Floors	Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr	
Gross Exp Wall A	320		460		260		216		320															
Gross Exp Wall B																								

Components	R-Values	Loss	Gain	KIT Loss	KIT Gain	DIN Loss	DIN Gain	FOY Loss	FOY Gain	LAUN Loss	LAUN Gain	FAM Loss	FAM Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	10.91							10	229	109	12	275	131										
East/West	3.55	22.93	27.35	63	1445	1723				45	1032	1231	42	963	1149										
South	3.55	22.93	20.89				42	963	877	18	413	376													
Existing Windows	1.99	40.90	22.15																						
Skylight	2.03	40.10	88.23																						
Doors	4.00	20.35	2.75							25	509	69	21	427	58										
Net exposed walls A	17.03	4.75	0.65	257	1228	166	418	1998	270	172	822	111	165	884	119	266	1271	172							
Net exposed walls B	8.50	9.58	1.29																						
Exposed Ceilings A	59.22	1.37	0.64																						
Exposed Ceilings B	22.86	3.56	1.66																						
Exposed Floors	29.80	2.73	0.17																						
Foundation Conductive Heatloss	On Grade ( ) or Abo		x																						
Total Conductive: Heat Loss				2673		2961		2775			1541			2510											
Total Conductive: Heat Gain					1889		1147		1787			286			1452										
Air Leakage: Heat Loss/Gain		0.3320	0.0361	887	68	983	41	921	64		512	10		833	52										
Ventilation: Case 1		0.03	0.07																						
Ventilation: Case 2		14.07	11.88																						
Ventilation: Case 3	x	0.04	0.07	97	139	108	85	101	132		56	21		91	107										
Heat Gain People			239																						
Appliances Loads	1 =.25 percent		4235	1.5	1588	2.0	2118			0.5		529													
Duct and Pipe loss			10%																						
Level 2 HL Total	17,050	Total HL for per room		3658		4052		3798			2109			3434											
Level 2 HG Total	14,972	Total HG per room	x 1.3		4791		4408		2578			1101			2094										

Total Heat Loss	46,157	btu/h
Total Heat Gain	25,819	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

SB-12 Package
Package A1

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Heatloss/Gain Calculations CSA-F280-12

2985 Drew Road, Suite 202, Mississauga, Ontario L4T 0A4 Tel: 905-671-9800 Fax: 647-494-9643

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2012 OBC

Builder: Bayview Wellington | Date: December 13, 2018

Project: Green Valley Estates | Model: Barossa 3-1 S38-3-1 Lot 183

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: 2567

Project # PJ-00041 | Layout # JB-05397

Level 3

	MAST	ENS	ENS 2	BED 4	LOFT	BED 3	BATH	BED 2			
Run ft. exposed wall A	30 A	22 A	6 A	15 A	10 A	26 A	15 A	18 A	A	A	A
Run ft. exposed wall B	B	B	B	B	B	B	B	B	B	B	B
Ceiling height	9.0	8.0	8.0	8.0	8.0	10.0	8.0	8.0	8.0	8.0	8.0
Floor area	333 Area	113 Area	89 Area	143 Area	152 Area	197 Area	74 Area	163 Area	Area	Area	Area
Exposed Ceilings A	333 A	113 A	89 A	143 A	152 A	197 A	74 A	163 A	A	A	A
Exposed Ceilings B	B	B	B	B	B	B	B	B	B	B	B
Exposed Floors	Flr	Flr	Flr	Flr	14 Flr	197 Flr	74 Flr	9 Flr	Flr	Flr	Flr
Gross Exp Wall A	270	176	48	120	80	260	120	144			
Gross Exp Wall B											

Components	R-Values	Loss	Gain	MAST Loss	MAST Gain	ENS Loss	ENS Gain	ENS 2 Loss	ENS 2 Gain	BED 4 Loss	BED 4 Gain	LOFT Loss	LOFT Gain	BED 3 Loss	BED 3 Gain	BATH Loss	BATH Gain	BED 2 Loss	BED 2 Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	10.91	8 183	87											8 183	87	16 367	175						
East/West	3.55	22.93	27.35	32 734	875	13 298	356							44 1009	1204	8 183	219								
South	3.55	22.93	20.89			7 161	146	7 161	146	33 757	689	9 206	188												
Existing Windows	1.99	40.90	22.15																						
Skylight	2.03	40.10	88.23																						
Doors	4.00	20.35	2.75																						
Net exposed walls A	17.03	4.78	0.65	230 1099	149	156 746	101	41 196	26	87 416	56	71 339	46	216 1032	140	104 497	67	120 612	83						
Net exposed walls B	8.50	9.58	1.29																						
Exposed Ceilings A	59.22	1.37	0.64	333 458	214	113 155	73	89 122	57	143 197	92	152 209	98	197 271	126	74 102	47	163 224	105						
Exposed Ceilings B	22.86	3.56	1.66																						
Exposed Floors	29.80	2.73	0.17									14 38	2	197 538	33	74 202	12	9 25	2						
Foundation Conductive Heatloss																									
Total Conductive: Heat Loss				2474		1360		479		1369		793		2850		1168		1227							
Total Conductive: Heat Gain					1325		675		230		837		334		1503		433		363						
Air Leakage: Heat Loss/Gain		0.2353	0.0361	582	48	320	24	113	8	322	30	187	12	671	54	275	16	289	13						
Ventilation: Case 1		0.02	0.07																						
Ventilation: Case 2		14.07	11.88																						
Ventilation: Case 3	x	0.04	0.07	90	98	49	50	17	17	50	62	29	25	104	111	42	32	45	27						
Heat Gain People			239	2	478					1	239			1	239			1	239						
Appliances Loads	1 =.25 percent		4235																						
Duct and Pipe loss			10%											1 352	174	1 144	43								
Level 3 HL Total	15,400	Total HL for per room		3146		1729		609		1741		1008		3977		1629		1561							
Level 3 HG Total	10,060	Total HG per room x 1.3			2533		974		332		1519		481		2705		681		835						

Level 4

Run ft. exposed wall 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	
Ceiling height																									
Floor 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	
Exposed Ceilings 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	
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	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	10.91																						
East/West	3.55	22.93	27.35																						
South	3.55	22.93	20.89																						
Existing Windows	1.99	40.90	22.15																						
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	22.86	3.56	1.66																						
Exposed Floors	29.80	2.73	0.17																						
Foundation Conductive Heatloss																									
Total Conductive: Heat Loss																									
Total Conductive: Heat Gain																									
Air Leakage: Heat Loss/Gain		0.0000	0.0361																						
Ventilation: Case 1		0.00	0.07																						
Ventilation: Case 2		14.07	11.88																						
Ventilation: Case 3	x	0.04	0.07																						
Heat Gain People			239																						
Appliances Loads	1 =.25 percent		4235																						
Duct and Pipe loss			10%																						
Level 4 HL Total	0	Total HL for per room																							
Level 4 HG Total	0	Total HG per room x 1.3																							

Total Heat Loss	46,157	btu/h
Total Heat Gain	25,819	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

SB-12 Package

Package A1

SITE COPY

GTADESIGNS

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

Project # PJ-00041
Layout # JB-05397

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:** S38-3-1 Lot 183

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

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

FILE COPY

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		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
LifeBreath	RNC155	Base
132 cfm		Sones or Equiv.

Heat Recovery Ventilator

Make	LifeBreath	
Model	RNC155	
	132 cfm high	80 cfm low
Sensible efficiency @ -25 deg C		71%
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

all fans HVI listed 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	December 13, 2018		

GTADESIGNS
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)

Project # PJ-00041
Layout # JB-05397

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	Unit number	Lot/Con
Barossa 3-1 S38-3-1 Lot 183		

Municipality	Postal code	Reg. Plan number / other description
Bradford		

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
☑ Zone 1 (< 5000 degree days)	☑ ≥ 92% AFUE	☑ Gas ☐ Propane ☐ Solid Fuel
☐ Zone 2 (≥ 5000 degree days)	☐ ≥ 84% < 92% AFUE	☐ Oil ☐ Electric ☐ Earth Energy

Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area		Other Building Characteristics
Area of Walls = 302.76 m² or 3258.9 ft²	W,S &G % = 13%	☐ Log/Post&Beam ☐ ICF Above Grade ☐ ICF Basement ☐ Slab-on-ground ☐ Walkout Basement ☑ Air Conditioning ☐ Combo Unit
Area of W, S & G = 39.761 m² or 428.0 ft²	Utilize Window Averaging ☐ Yes ☑ No	☐ Air Sourced Heat Pump (ASHP) ☐ Ground Source Heat Pump (GSHP)

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

Energy Efficiency Substitutions

☐ ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5))

☐ Combined space heating and domestic water heating systems (3.1.1.2(7) / 3.1.1.3.(7))

☐ Airtightness substitution(s)	☐ Table 3.1.1.4.B	Required:	Permitted Substitution:
Airtightness test required	☐ Table 3.1.1.4.C	Required:	Permitted Substitution:
(Refer to Design Guide Attached)		Required:	Permitted Substitution:

Building Component	Minimum RSI/R-Values or Maximum U-Value¹		Building Component	Efficiency Ratings
Thermal Insulation	Nominal	Effective	**Windows & Doors** Provide U-Value(1) or ER rating	
Ceiling with Attic Space	60		Windows/Sliding Glass Doors	1.6
Ceiling without Attic Space	31		Skylights	2.8
Exposed Floor	31		**Mechanicals**	
Walls Above Grade	22		Heating Equip.(AFUE)	96%
Basement Walls	20.0ci		HRV Efficiency (SRE% at 0°C)	75%
Slab (all >600mm below grade)	x		DHW Heater (EF)	0.80
Slab (edge only ≤600mm below grade)	10		DWHR (CSA B55.1 (min. 42% efficiency))	#Showers 2
Slab (all ≤600mm below grade, or heated)	10		Combined Heating System	

(1) U value to be provided in either W/(m²·K) or Btu/(h·ft·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	BCIN	Signature
David DaCosta	32964	

GTADESIGNS

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

Project # PJ-00041
Layout # JB-05397

Package: Package A1 **System:** System 1
Project: Bradford **Model:** S38-3-1 Lot 183

Air Leakage Calculations

Building Air Leakage Heat Loss				
B	LRairh	Vb	HL^T	HLleak
0.018	0.322	29247	81.4	13789

Building Air Leakage Heat Gain				
B	LRairh	Vb	HG^T	HG Leak
0.018	0.080	29247	11	462

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	13789	6574	1.0488
Level 2	0.3		12460	0.3320
Level 3	0.2		11720	0.2353
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

		Air Leakage Heat Gain
HG LEAK	462	0.0361
BUILDING CONDUCTIVE HEAT GAIN	12806	

Levels this Dwelling
3

Ventilation Calculations

Vent

Ventilation Heat Loss

Ventilation Heat Loss				
C	PVC	HL^T	(1-E) HRV	HLbvent
1.08	79.5	81.4	0.16	1118

Ventilation Heat Gain

Ventilation Heat Gain			
C	PVC	HG^T	HGbvent
1.1	79.5	11	944

Vent

Case 1

Case 1

Ventilation Heat Loss (Exhaust only Systems)

Case 1 - Exhaust Only				
Level	LF	HLbvent	LVL Cond. HL	Multiplier
Level 1	0.5	1118	6574	0.09
Level 2	0.3		12460	0.03
Level 3	0.2		11720	0.02
Level 4	0		0	0.00

Ventilation Heat Gain (Exhaust Only Systems)

Case 1 - Exhaust Only		Multiplier
HGbvent	944	0.07
Building	12806	

Case 1

Case 2

Case 2

Ventilation Heat Loss (Direct Ducted Systems)

			Multiplier
C	HL^T	(1-E) HRV	14.07
1.08	81.4	0.16	

Ventilation Heat Gain (Direct Ducted Systems)

		Multiplier
C	HG^T	11.88
1.08	11	

Case 2

Case 3

Case 3

Ventilation Heat Loss (Forced Air Systems)

	HLbvent	Multiplier
Total Ventilation Load	1118	0.04

Ventilation Heat Gain (Forced Air Systems)

		Vent Heat Gain	Multiplier
HGbvent	HG*1.3	944	0.07
944	1		

Case 3

Foundation Conductive Heatloss Level 1	1727	Watts	5894	Btu/h
Foundation Conductive Heatloss Level 2		Watts		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

SITE COPY

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):	6.71			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m^3):	828.28			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (ACH=3.57)			
Custom BDT Data:	ELA @ 10 Pa.	322.44 cm^2		
	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):	**0.322**			
Cooling Air Leakage Rate (ACH/H):	**0.080**			

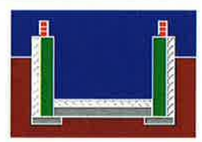
SITE COPY

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):	18.29	 Insulation Configuration
Floor Width (m):	5.33	
Exposed Perimeter (m):	47.24	
Wall Height (m):	2.59	
Depth Below Grade (m):	1.68	
Window Area (m^2):	1.02	
Door Area (m^2):	1.95	

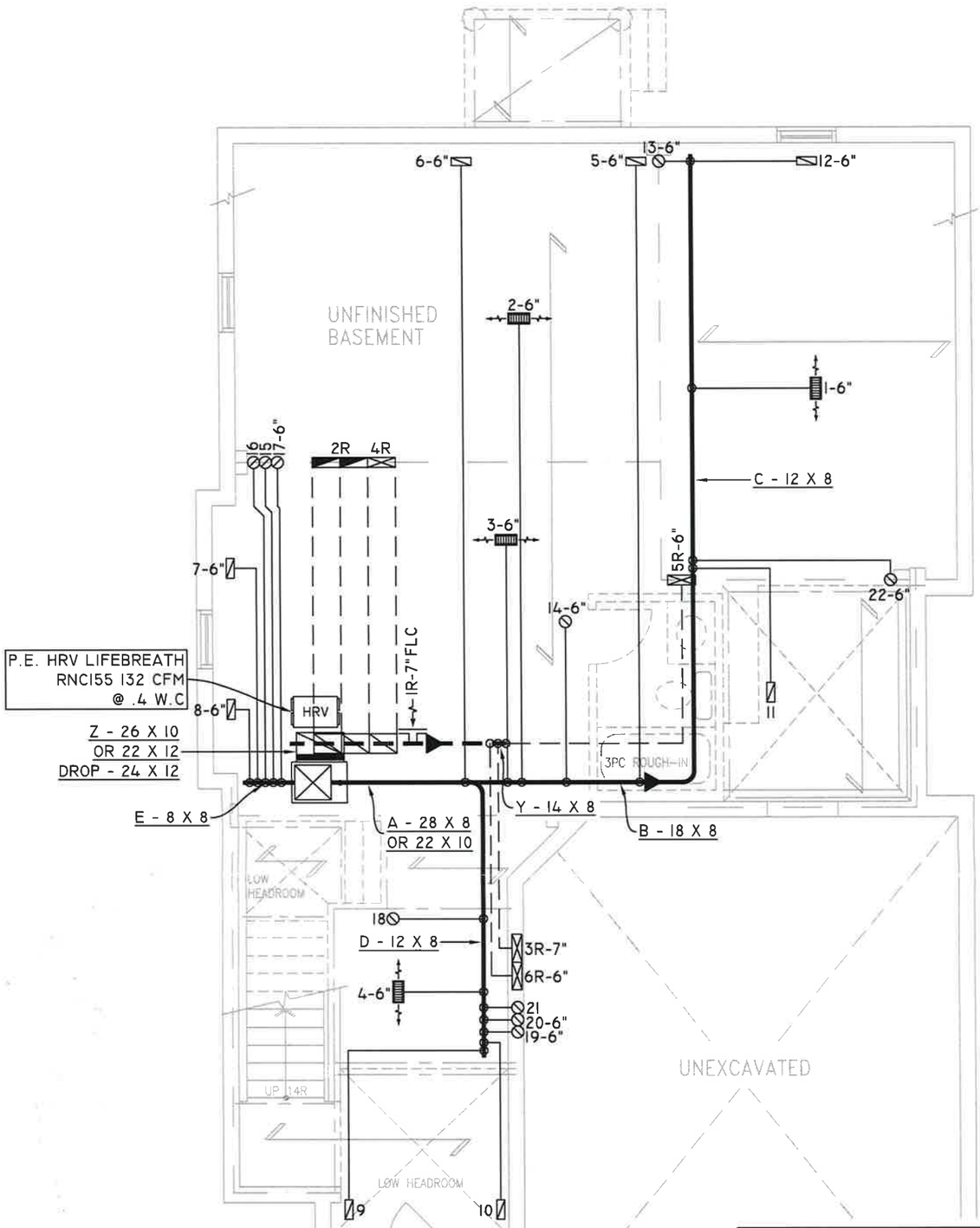
Radiant Slab	
Heated Fraction of the Slab:	0
Fluid Temperature (°C):	33

Design Months	
Heating Month	1

Foundation Loads	
Heating Load (Watts):	**1727**

SITE COPY

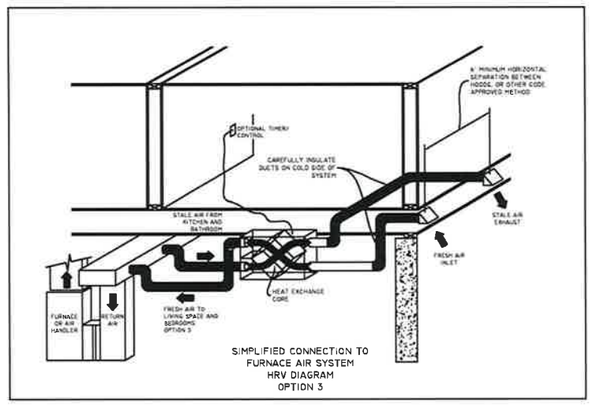
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR	T	THERMOSTAT
			VOLUME DAMPER					F FE	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. RI2

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



SIMPLIFIED CONNECTION TO FURNACE AIR SYSTEM HRV DIAGRAM OPTION 3

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

SITE COPY

OBC 2012

ZONE 1 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 RI2 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.

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

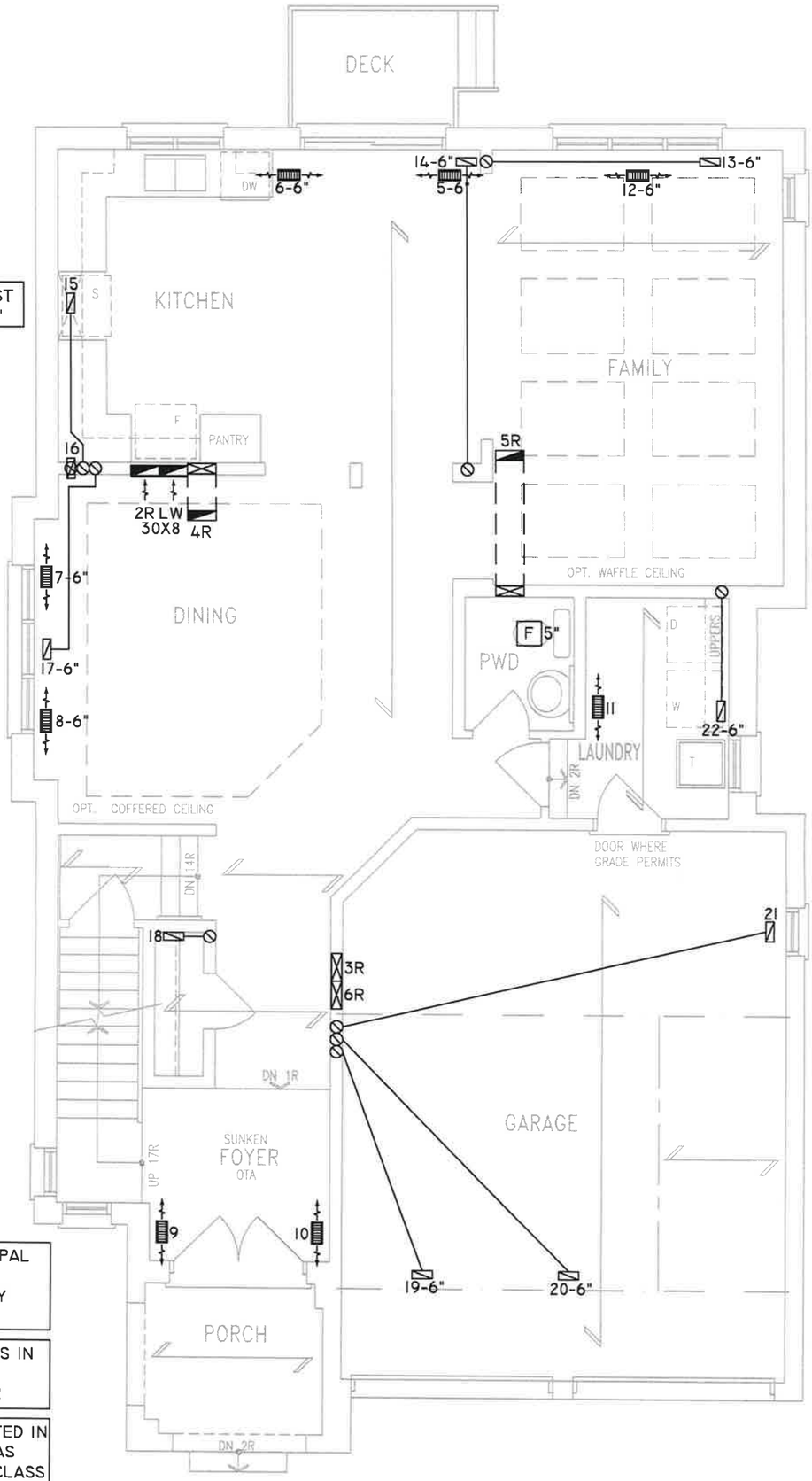
HEAT-LOSS	46,157 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	GMEC96-0603BNA OR EQUAL.
UNIT HEATING INPUT	66,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
1ST FLOOR	8	1	2
BASEMENT	4	1	

FLOOR PLAN: BASEMENT		
DRAWN BY: JL	CHECKED: DD	SQFT 2567
LAYOUT NO. JB-05397		DRAWING NO. M1

DATE: DECEMBER 13, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-3-1 LOT 183 BAROSSA 3-1
PROJECT: GREEN VALLEY ESTATES 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	T	THERMOSTAT
			VOLUME DAMPER					F FE	PRINCIPAL EXHAUST FAN SWITCH W/R & PRINCIPAL EXHAUST FAN



KITCHEN EXHAUST
100 CFM MIN. 6"

CIRCULATION PRINCIPAL FAN SWITCH TO BE CENTRALLY LOCATED

INSULATE ALL DUCTS IN UNCONDITIONED SPACES MIN. RI2

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

SITE COPY

OBC 2012

ZONE 1 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 RI2 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.

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

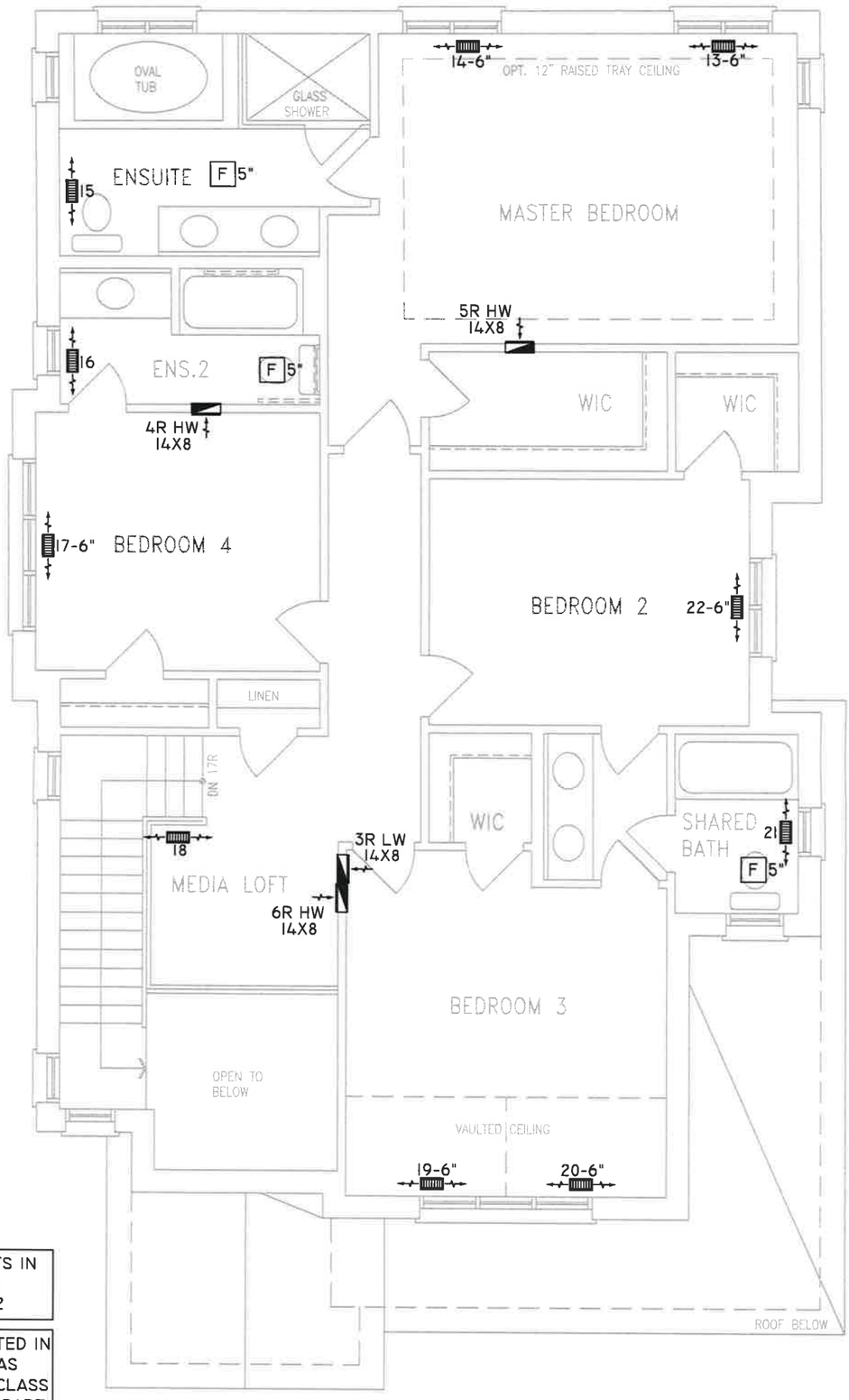
HEAT-LOSS	46,157 BTU/HR.
UNIT MAKE	AMANA OR EQUAL
UNIT MODEL	GMEC96-0603BNA OR EQUAL
UNIT HEATING INPUT	66,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
1ST FLOOR	8	1	2
BASEMENT	4	1	

FLOOR PLAN: GROUND FLOOR		
DRAWN BY: JL	CHECKED: DD	SQFT 2567
LAYOUT NO. JB-05397		DRAWING NO. M2

DATE: DECEMBER 13, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-3-1 LOT 183 BAROSSA 3-1
PROJECT: GREEN VALLEY ESTATES BRADFORD, ONT.
SCALE: 3/16" = 1'-0"

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



INSULATE ALL DUCTS IN UNCONDITIONED SPACES MIN. RI2

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

SITE COPY

OBC 2012

ZONE 1 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 RI2 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.

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

HEAT-LOSS	46,157 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	GMEC96-0603BNA OR EQUAL.
UNIT HEATING INPUT	66,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
1ST FLOOR	8	1	2
BASEMENT	4	1	

FLOOR PLAN: SECOND FLOOR		
DRAWN BY: JL	CHECKED: DD	SQ.FT. 2567
LAYOUT NO. JB-05397		DRAWING NO. M3

DATE: DECEMBER 13, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-3-1 LOT 183 BAROSSA 3-1
PROJECT: GREEN VALLEY ESTATES BRADFORD, ONT.
SCALE: 3/16" = 1'-0"