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 6** **S38-6 WOB**	Lot:	
		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: dave@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-00204

Layout #: JB-04545

Heating and Cooling Load Calculations	**Main**		Builder	**Bayview Wellington**
Air System Design	**Alternate**	**x**	Project	**Green Valley East**
Residential mechanical ventilation Design Summary	**Area Sq ft:**	**2891**	Model	**Barossa 6**
Residential System Design per CAN/CSA-F280-12				**S38-6 WOB**
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.

March 12, 2018

Date

Signature of Designer

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.

2985 Drew Road, Suite 202, Mississauga, Ontario L4T 0A4 Tel: 905-671-9800 Fax: 647-494-9643
e-mail dave@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-04545**

Building Location

Address (Model):	**S38-6 WOB**	Site:	**Green Valley East**
Model:	**Barossa 6**	Lot:	
City and Province:	**Bradford**	Postal code:	

Calculations based on

Dimensional information based on: **VA3 Design Jan/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: **2891**
Sensible Eff. at -0C	**75%**				

Heating design conditions

Outdoor temp **-9.4** Indoor temp: **72** Mean soil temp **48**

Cooling design conditions

Outdoor temp **86** Indoor temp: **75** Latitude: **44**

Above grade walls

Style A:	**As per OBC SB12 Package A1 R 22**
Style B:	**Existing Walls (When Applicable) R 12**
Style C:	
Style D:	

Below grade walls

Style A:	**As per OBC SB12 Package A1 R 20ci**
Style B:	
Style C:	
Style D:	

Floors on soil

Style A:	**As per Selected OBC SB12 Package A1**
Style B:	

Ceilings

Style A:	**As per Selected OBC SB12 Package A1 R 60**
Style B:	**As per Selected OBC SB12 Package A1 R 31**
Style C:	

Exposed floors

Style A:	**As per Selected OBC SB12 Package A1 R 31**
Style B:	

Doors

Style A:	**As per Selected OBC SB12 Package A1 R 4.00**
Style B:	
Style C:	

Windows

Style A:	**As per Selected OBC SB12 Package A1 R 3.55**
Style B:	**Existing Windows (When Applicable) R 1.99**
Style C:	
Style D:	

Skylights

Style A:	**As per Selected OBC SB12 Package A1 R 2.03**
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	**dave@gtadesigns.ca**

Air System Design

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

SB-12 Package A1

Builder: Bayview Wellington | Date: March 12, 2018 | Barossa 6 | **System 1**

Project: Green Valley East | Model: S38-6 WOB

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-00204
Layout # JB-04545

DESIGN LOAD SPECIFICATIONS		
Level 1 Net Load	19,015	btu/h
Level 2 Net Load	17,254	btu/h
Level 3 Net Load	17,538	btu/h
Level 4 Net Load	0	btu/h
Total Heat Loss	53,807	btu/h
Total Heat Gain	29,127	btu/h
Combo System HL + 10%	59,188	Btuh.
Building Volume Vb	33887	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	0.0217	cfm/btuh
Cooling Air Flow Proportioning Facter	0.0331	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	AMEC960603BNA	
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	

Blower DATA:		
Blower Speed Selected:	W2	
Heating Check	1170	cfm
Selected cfm>	1170	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 963 cfm
Cooling Air Flow Rate 963 cfm

	Level 1														Level 2														
S/A Outlet No.	1	2	3	4	24										5	6	7	8	9	10	11	12	13						
Room Use	BASE	BASE	BASE	BASE	BASE										GRT	GRT	KIT	KIT	STUDY	MUD	FOY	PWD	DIN						
Btu/Outlet	3803	3803	3803	3803	3803										1755	1755	1839	1839	2057	1205	3648	1131	2024						
Heating Airflow Rate CFM	83	83	83	83	83										38	38	40	40	45	26	79	25	44						
Cooling Airflow Rate CFM	27	27	27	27	27										60	60	60	60	43	5	47	15	82						
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	0.13	0.13	0.13	0.13	0.13
Actual Duct Length	51	49	28	38	62										58	48	49	47	8	15	37	29	34						
Equivalent Length	80	90	90	110	135	70	70	70	70	70	70	70	70	70	150	130	100	100	80	90	90	130	110	70	70	70	70	70	
Total Effective Length	131	139	118	148	197	70	70	70	70	70	70	70	70	70	208	178	149	147	88	105	127	159	144	70	70	70	70	70	
Adjusted Pressure	0.10	0.09	0.11	0.09	0.07	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.06	0.07	0.09	0.09	0.15	0.12	0.10	0.08	0.09	0.19	0.19	0.19	0.19	0.19	
Duct Size Round	6	6	6	6	6										6	6	5	5	4	4	6	4	6						
Outlet Size	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	3x10	3x10	3x10	4x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	
Trunk	D	D	C	B	E										E	E	E	D	A	A	B	C	C						

	Level 3										Level 4																		
S/A Outlet No.	14	15	16	17	18	19	20	21	22	23																			
Room Use	MAST	ENS	BED 2	BATH	BED 3	BED 4	BED 4	ENS 4	LAUN	WIC																			
Btu/Outlet	2840	2073	1359	595	1716	2631	2631	2038	974	682																			
Heating Airflow Rate CFM	62	45	30	13	37	57	57	44	21	15																			
Cooling Airflow Rate CFM	72	37	28	7	31	60	60	55	37	5																			
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	0.13	0.13	0.13	0.13	0.13
Actual Duct Length	70	63	59	51	37	56	52	63	38	60																			
Equivalent Length	130	140	100	130	110	160	150	125	140	120	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	
Total Effective Length	200	203	159	181	147	216	202	188	178	180	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	
Adjusted Pressure	0.07	0.06	0.08	0.07	0.09	0.06	0.06	0.07	0.07	0.07	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	0.19	0.19	0.19	0.19	0.19
Duct Size Round	6	5	4	3	6	6	6	6	5	3																			
Outlet Size	4x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	E	D	C	C	A	B	B	B	C	C																			

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	207	410	151	151	151	100					
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	17	28	51	46	39	53					
Equivalent Length	110	175	160	245	165	135	50	50	50	50	50
Total Effective Length	127	203	211	291	204	188	50	50	50	50	50
Adjusted Pressure	0.09	0.06	0.06	0.04	0.06	0.06	0.24	0.24	0.24	0.24	0.24
Duct Size Round	8.0	11.0	8.0	8.5	8.0	6.0					
Inlet Size	FLC	8	8	8	8	8					
" "	x	x	x	x	x	x	x	x	x	x	x
Inlet Size	9x6	30	14	14	14	14					
Trunk	Y	Z	Y	Z	Z	Z					

Return Trunk Duct Sizing					
Trunk	CFM	Press.	Round	Rect. Size	
Drop	1170	0.04	18.0	24x12	
Z	1170	0.04	18.0	30x10	24x12
Y	358	0.06	10.5	12x8	10x10
X					
W					
V					
U					
T					
S					
R					
Q					

Supply Trunk Duct Sizing					
Trunk	CFM	Press.	Round	Rect. Size	
A	1170	0.06	16.5	32x8	24x10
B	321	0.06	10.0	12x8	10x10
C	741	0.06	14.0	22x8	18x10
D	511	0.06	12.0	16x8	12x10
E	261	0.06	9.5	10x8	
F					
G					
H					
I					
J					
K					

GTADESIGNS

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e-mail dave@gtadesigns.ca

Heatloss/Gain Calculations CSA-F280-12

2012 OBC

Builder: Bayview Wellington | Date: March 12, 2018 | Project: Green Valley East | Model: Barossa 6 S38-6 WOB | **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: 2891

Project # PJ-00204 | Layout # JB-04545

Level 1

Components	R-Values	Loss	Gain	BASE Loss	BASE Gain	A Loss	A Gain	A Loss	A Gain	A Loss	A Gain	A Loss	A Gain	A Loss	A Gain	A Loss	A Gain	A Loss	A Gain	A Loss	A Gain	A Loss	A Gain
Run ft. exposed wall A				120 A		A		A		A		A		A		A		A		A		A	
Run ft. exposed wall B				44 B		B		B		B		B		B		B		B		B		B	
Ceiling height				4.1 AG		4.1 AG		4.1 AG		4.1 AG		4.1 AG		4.1 AG		4.1 AG		4.1 AG		4.1 AG		4.1 AG	
Floor area				1013 Area		Area		Area		Area		Area		Area		Area		Area		Area		Area	
Exposed Ceilings A				A		A		A		A		A		A		A		A		A		A	
Exposed Ceilings B				B		B		B		B		B		B		B		B		B		B	
Exposed Floors				Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr	
Gross Exp Wall A				492																			
Gross Exp Wall B				396																			
North Shaded	3.55	22.93	10.91																				
East/West	3.55	22.93	27.35																				
South	3.55	22.93	20.89	3	69	63																	
WOB Windows	3.55	22.93	27.35	84	1926	2298																	
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	468		244																	
Net exposed walls B	14.49	5.62	0.76	312	1753	237																	
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				6495																		
Total Conductive Heat Loss					10670																		
Total Conductive Heat Gain						2899																	
Air Leakage Heat Loss/Gain		0.7511	0.0362		8014	105																	
Ventilation Case 1		0.05	0.06																				
Ventilation Case 2		14.07	11.88																				
Ventilation Case 3	x	0.03	0.06		331	185																	
Heat Gain People			239																				
Appliances Loads	1 =.25 percent		4611																				
Duct and Pipe loss			10%																				
Level 1 HL Total	19,015	Total HL for per room			19015																		
Level 1 HG Total	4,145	Total HG per room x 1.3				4145																	

Level 2

Components	R-Values	Loss	Gain	GRT Loss	GRT Gain	KIT Loss	KIT Gain	STUDY Loss	STUDY Gain	MUD Loss	MUD Gain	FOY Loss	FOY Gain	PWD Loss	PWD Gain	DIN Loss	DIN Gain	Loss	Gain	Loss	Gain	Loss	Gain
Run ft. exposed wall A				33 A		36 A		21 A		9 A		33 A		12 A		19 A		A		A		A	
Run ft. exposed wall B				B		B		B		B		B		B		B		B		B		B	
Ceiling height				10.0		10.0		10.0		12.0		11.0		10.0		10.0		10.0		10.0		10.0	
Floor area				215 Area		297 Area		167 Area		27 Area		124 Area		70 Area		275 Area		Area		Area		Area	
Exposed Ceilings A				5 A		A		A		A		A		A		A		A		A		A	
Exposed Ceilings B				B		B		B		B		B		B		B		B		B		B	
Exposed Floors				Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr	
Gross Exp Wall A				330		360		210		108		363		120		190							
Gross Exp Wall B																							
North Shaded	3.55	22.93	10.91					24	550	262													
East/West	3.55	22.93	27.35	48	1101	1313	47	1078	1286					27	619	739							
South	3.55	22.93	20.89														12	275	251	28	642	585	
Existing Windows	1.99	40.90	22.15																				
Skylight	2.03	40.10	88.23																				
Doors	4.00	20.35	2.75							21	427	58	21	427	58								
Net exposed walls A	17.03	4.78	0.65	282	1348	182	313	1496	202	186	889	120	87	416	56	315	1506	203	108	516	70	162	774	105
Net exposed walls B	8.50	9.58	1.29																				
Exposed Ceilings A	59.22	1.37	0.64	5	7	3																	
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					2455			2574		1439		843		2552		791		1416					
Total Conductive Heat Gain						1498			1488		382		114		1000		320		689				
Air Leakage Heat Loss/Gain		0.3983	0.0362		978	54		1025	54		573	14		336	4		1017	36		315	12		564	25
Ventilation Case 1		0.03	0.06																				
Ventilation Case 2		14.07	11.88																				
Ventilation Case 3	x	0.03	0.06		76	95		80	95		45	24		26	7		79	64		25	20		44	44
Heat Gain People			239																				
Appliances Loads	1 =.25 percent		4611	1.0		1153	1.0		1153	0.5		576							1.0		1153		
Duct and Pipe loss			10%																				
Level 2 HL Total	17,254	Total HL for per room			3510			3679		2057		1205		3648		1131		2024					
Level 2 HG Total	13,098	Total HG per room x 1.3				3641			3626		1296		163		1430		458		2485				

Total Heat Loss	53,807	btu/h
Total Heat Gain	29,127	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

GTADESIGNS

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 dave@gtadesigns.ca

Builder: Bayview Wellington | Date: March 12, 2018 | Weather Data: Bradford 44 -9.4 86 22 48.2

2012 OBC | Project: Green Valley East | Model: Barossa 6 S38-6 WOB | **System 1** | Heat Loss ^T 81.4 deg. F | Ht gain ^T 11 deg. F | GTA: 2891 | Project # PJ-00204 | Layout # JB-04545

Level 3

	MAST	ENS	BED 2	BATH	BED 3	BED 4	ENS 4	LAUN	WIC		
Run ft. exposed wall A	32 A	23 A	12 A	6 A	12 A	34 A	21 A	12 A	11 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	9.0	8.0	8.0	8.0
Floor area	253 Area	123 Area	232 Area	68 Area	218 Area	289 Area	87 Area	89 Area	84 Area	Area	Area
Exposed Ceilings A	253 A	123 A	232 A	68 A	218 A	289 A	87 A	89 A	84 A	A	A
Exposed Ceilings B	B	B	B	B	B	B	B	B	B	B	B
Exposed Floors	Flr	Flr	Flr	Flr	66 Flr	194 Flr	3 Flr	Flr	Flr	Flr	Flr
Gross Exp Wall A	288	184	96	48	96	340	168	108	88		
Gross Exp Wall B											

Components		R-Values	Loss	Gain	MAST Loss	MAST Gain	ENS Loss	ENS Gain	BED 2 Loss	BED 2 Gain	BATH Loss	BATH Gain	BED 3 Loss	BED 3 Gain	BED 4 Loss	BED 4 Gain	ENS 4 Loss	ENS 4 Gain	LAUN Loss	LAUN Gain	WIC Loss	WIC Gain				
North Shaded		3.55	22.93	10.91			16	367	175	16	367	175	8	183	87	16	367	175										
East/West		3.55	22.93	27.35	28	642	766	16	367	438							48	1101	1313	37	848	1012						
South		3.55	22.93	20.89													19	436	397				7	161	146			
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	260	1243	168	152	727	98	80	382	52	40	191	26	80	382	52	273	1305	176	131	626	85	101	483	65	88	421	57				
Net exposed walls B		8.50	9.58	1.29																														
Exposed Ceilings A		59.22	1.37	0.64	253	348	162	123	169	79	232	319	149	68	93	44	218	300	140	289	397	185	87	120	56	89	122	57	84	115	54				
Exposed Ceilings B		22.86	3.56	1.66																														
Exposed Floors		29.80	2.73	0.17													66	180	11	194	530	33	3	8	1									
Foundation Conductive Heatloss																																		
Total Conductive	Heat Loss					2233			1629			1068			468			1229			3768			1602			766			536				
	Heat Gain						1096			789			375			157			377			2104			1153			269			111			
Air Leakage	Heat Loss/Gain		0.2410	0.0362		538	40		393	29		257	14		113	6		296	14		908	76		386	42		185	10		129	4				
Ventilation	Case 1		0.02	0.06																														
	Case 2		14.07	11.88																														
	Case 3	x	0.03	0.06		69	70		51	50		33	24		15	10		38	24		117	134		50	73		24	17		17	7				
Heat Gain People				239	2		478				1		239				1		239	1		239												
Appliances Loads		1 =.25 percent		4611																						0.5		576						
Duct and Pipe loss				10%																														
Level 3 HL Total	17,538	Total HL for per room				2840			2073			1359			595			1716			5261			2038			974			682				
Level 3 HG Total	11,884	Total HG per room x 1.3					2189			1129			847			224			930			3624			1649			1133			158			

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	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																											
	Heat Gain																											
Air Leakage	Heat Loss/Gain		0.0000	0.0362																								
Ventilation	Case 1		0.00	0.06																								
	Case 2		14.07	11.88																								
	Case 3	x	0.03	0.06																								
Heat Gain People				239																								
Appliances Loads		1 =.25 percent		4611																								
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	53,807	btu/h
Total Heat Gain	29,127	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

GTADESIGNS

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

Project # PJ-00204
Layout # JB-04545

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:** S38-6 WOB

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		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
Bath	50	XB50	0.3
Ens 4	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	March 12, 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-00204
Layout # JB-04545

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 6 **S38-6 WOB**		

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 = 370.21 m² or 3984.9 ft²	W,S &G % = 12%	☐ Log/Post&Beam ☐ ICF Above Grade ☐ ICF Basement ☐ Slab-on-ground ☑ Walkout Basement ☑ Air Conditioning ☐ Combo Unit
Area of W, S & G = 44.964 m² or 484.0 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 (Refer to Design Guide Attached)	☐ Table 3.1.1.4.C	Required:	Permitted Substitution:
		Required:	Permitted Substitution:

Building Component	Minimum RSI/R-Values or Maximum U-Value[1]		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	

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

Project # PJ-00204
Layout # JB-04545

Package: Package A1 **System:** System 1
Project: Bradford **Model:** S38-6 WOB

Air Leakage Calculations

Building Air Leakage Heat Loss				
B	LRairh	Vb	HL^T	HLleak
0.018	0.323	33887	81.4	16028

Building Air Leakage Heat Gain				
B	LRairh	Vb	HG^T	HG Leak
0.018	0.080	33887	11	537

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	16028	10670	0.7511
Level 2	0.3		12072	0.3983
Level 3	0.2		13300	0.2410
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	537	0.0362
BUILDING CONDUCTIVE HEAT GAIN	14822	

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

Case 1

Ventilation Heat Loss (Exhaust only Systems)

Case 1 - Exhaust Only				
Level	LF	HLbvent	LVL Cond. HL	Multiplier
Level 1	0.5	1118	10670	0.05
Level 2	0.3		12072	0.03
Level 3	0.2		13300	0.02
Level 4	0		0	0.00

Ventilation Heat Gain (Exhaust Only Systems)

Case 1 - Exhaust Only		Multiplier
HGbvent	944	0.06
Building	14822	

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 3

Ventilation Heat Loss (Forced Air Systems)

	HLbvent	Multiplier
Total Ventilation Load	1118	0.03

Ventilation Heat Gain (Forced Air Systems)

		Vent Heat Gain	Multiplier
HGbvent	HG*1.3	944	0.06
944	1		

Foundation Conductive Heatloss Level 1	1904	Watts	6495	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

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):	6.74

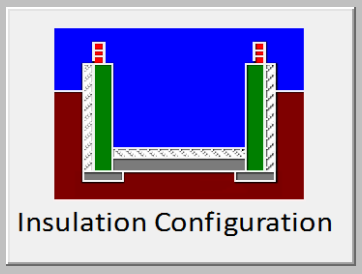
Building Configuration	
Type:	Detached
Number of Stories:	Two
Foundation:	Full
House Volume (m^3):	959.68

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):	**0.323**
Cooling Air Leakage Rate (ACH/H):	**0.080**

Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

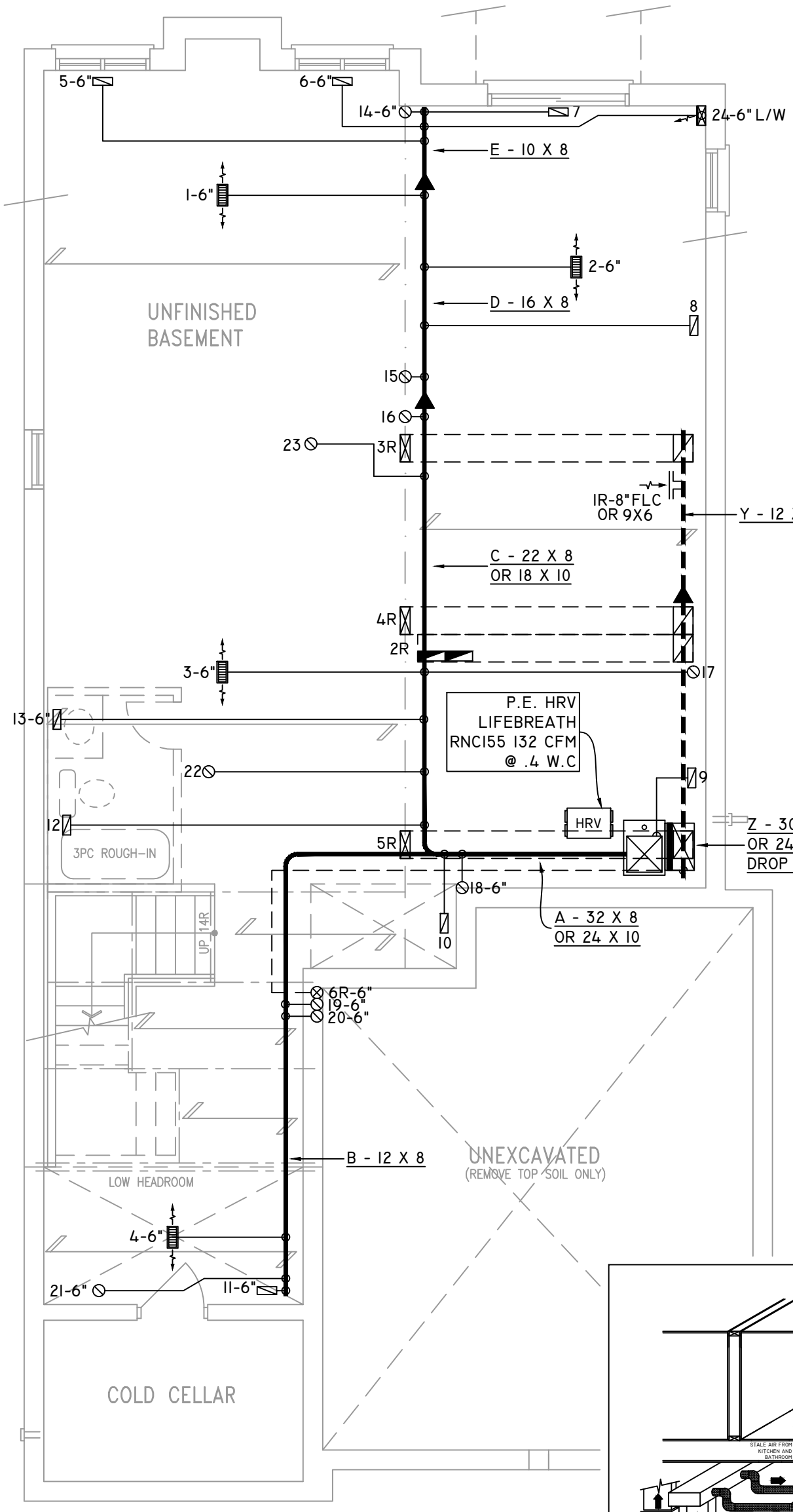
Weather Station Description		
Province:	Ontario	
Region:	Bradford	
Site Description		
Soil Conductivity:	High conductivity: moist soil	
Water Table:	Normal (7-10 m, 23-33 Ft)	
Foundation Dimensions		
Floor Length (m):	**17.03**	 Insulation Configuration
Floor Width (m):	**5.53**	
Exposed Perimeter (m):	**36.58**	
Wall Height (m):	**2.74**	
Depth Below Grade (m):	**1.49**	
Window Area (m^2):	**0.28**	
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):	**1699**	

Residential Slab on Grade 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)	
Floor Dimensions		
Length (m):	**9.34**	 Insulation Configuration
Width (m):	**1.63**	
Exposed Perimeter (m):	**13.41**	
Radiant Slab		
Heated Fraction of the Slab:	**0**	
Fluid Temperature (°C):	**33**	
Design Months		
Heating Month	**1**	
Foundation Loads		
Heating Load (Watts):	**205**	

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 PE	SUPPLY AIR RETURN AIR THERMOSTAT PRINCIPAL EXHAUST FAN SWITCH W/R & PRINCIPAL EXHAUST FAN

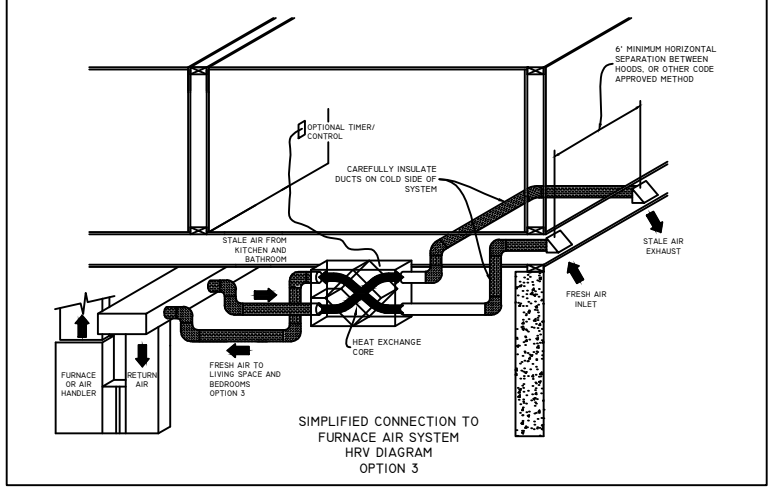


FURNACE EQUIPPED WITH BRUSHLESS DC MOTOR AS PER OBC 12.3.1.5 (2)

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

INSULATE ALL DUCTS IN UNCONDITIONED SPACES MIN. RI2

FOR THE PURPOSE OF HEATLOSS/GAIN CALCULATIONS ALL ELEVATIONS HAVE BEEN CONSIDERED



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

BASEMENT PLAN 'A' – W.O.B. CONDITION

ELEV. 'B' & 'C' SIMILAR

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

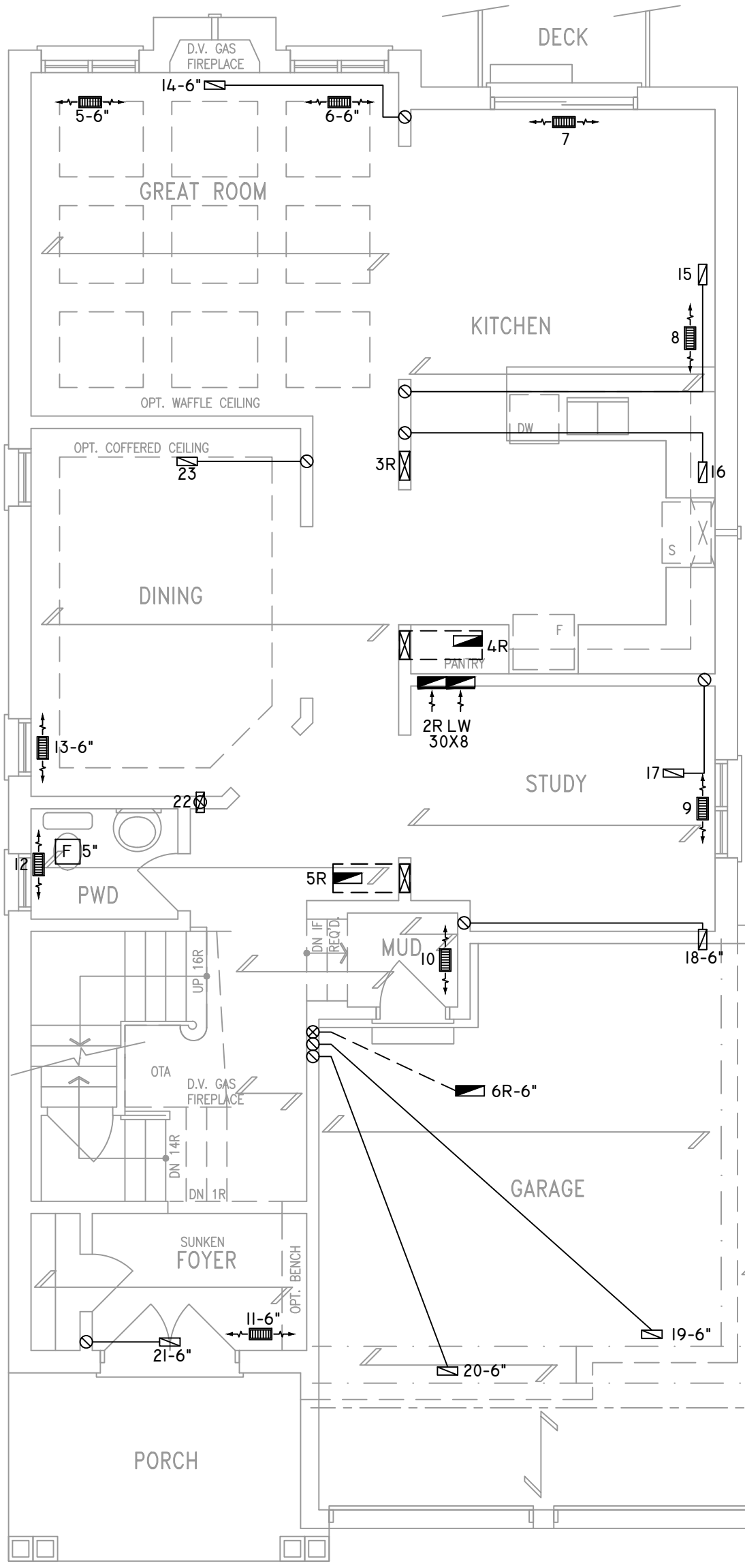
HEAT-LOSS	53,807 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC960603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
IST FLOOR	9	1	2
BASEMENT	5	1	

FLOOR PLAN: BASEMENT		
DRAWN BY: AP	CHECKED: DD	SQFT 2891
LAYOUT NO. JB-04545		DRAWING NO. M1

DATE:	MARCH 9, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-6 WOB BAROSSA 6
PROJECT:	GREEN VALLEY EAST 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 PE	SUPPLY AIR RETURN AIR THERMOSTAT PRINCIPAL EXHAUST FAN SWITCH W/R & PRINCIPAL EXHAUST FAN		



KITCHEN EXHAUST
100 CFM MIN. 6"

CIRCULATION PRINCIPAL FAN SWITCH TO BE CENTRALLY LOCATED

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

INSULATE ALL DUCTS IN UNCONDITIONED SPACES MIN. RI2

FOR THE PURPOSE OF HEATLOSS/GAIN CALCULATIONS ALL ELEVATIONS HAVE BEEN CONSIDERED

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' – W.O.B. CONDITION

ELEV. 'B' & 'C' SIMILAR

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

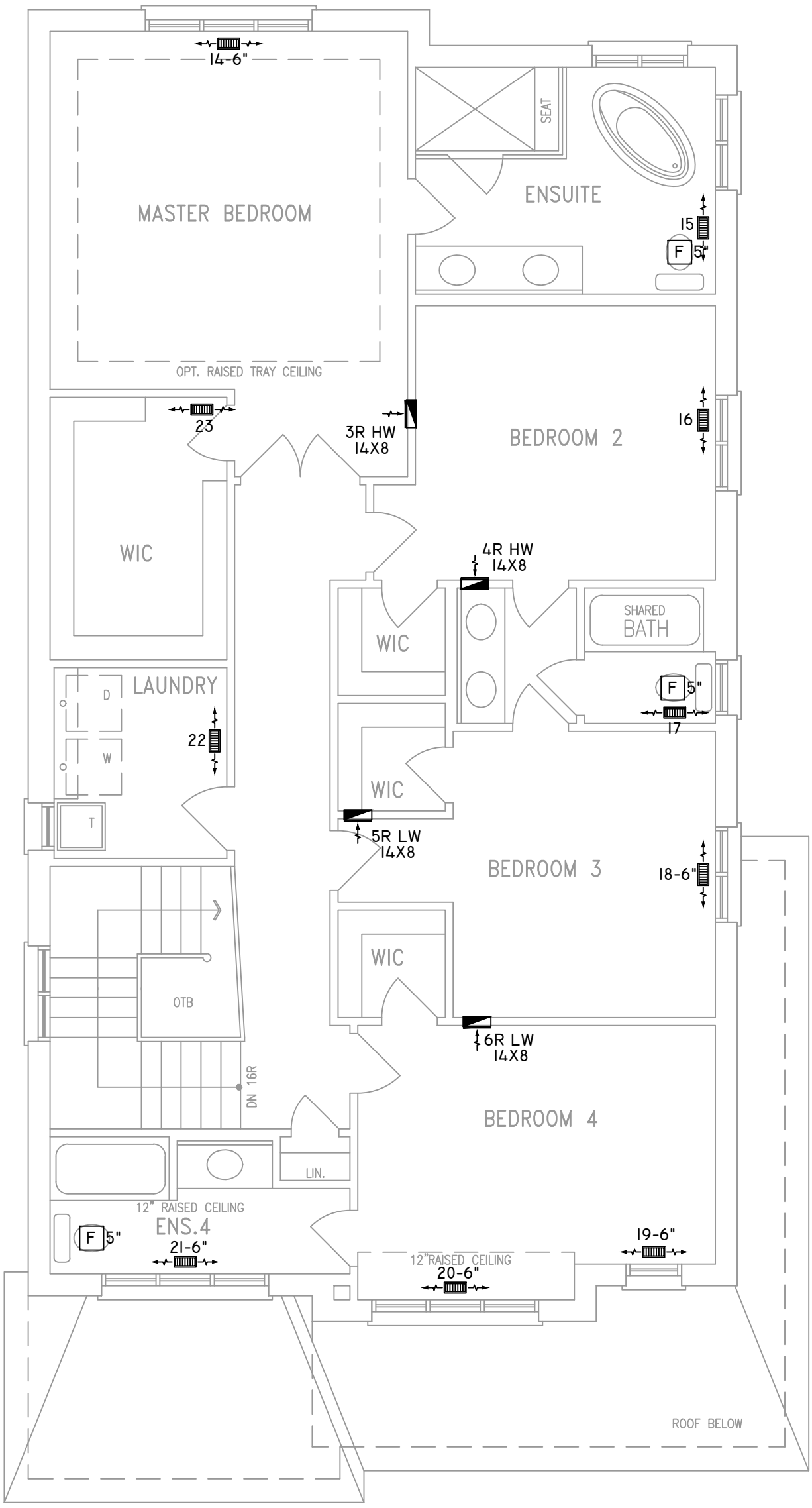
HEAT-LOSS	53,807 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC960603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
IST FLOOR	9	1	2
BASEMENT	5	1	

FLOOR PLAN: GROUND FLOOR		
DRAWN BY: AP	CHECKED: DD	SQFT 2891
LAYOUT NO. JB-04545		DRAWING NO. M2

DATE: MARCH 9, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-6 WOB BAROSSA 6
PROJECT: GREEN VALLEY EAST 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 PE	SUPPLY AIR RETURN AIR THERMOSTAT PRINCIPAL EXHAUST FAN SWITCH W/R & PRINCIPAL EXHAUST FAN		



ALL DUCTWORK LOCATED IN CONDITIONED AREAS MUST BE SEALED TO CLASS C LEVEL AS PER OBC PART 6-6.2.4.3.(I2)

INSULATE ALL DUCTS IN UNCONDITIONED SPACES MIN. RI2

FOR THE PURPOSE OF HEATLOSS/GAIN CALCULATIONS ALL ELEVATIONS HAVE BEEN CONSIDERED

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 "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 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.

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L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

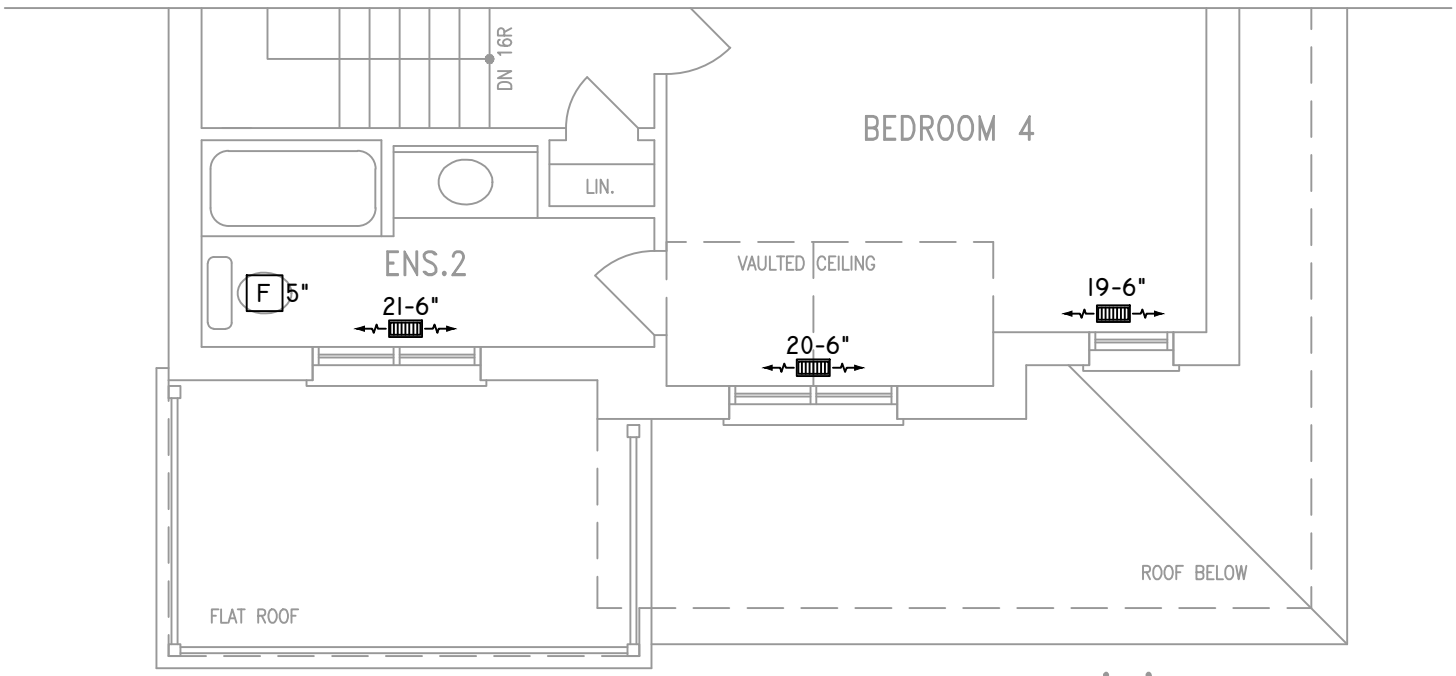
HEAT-LOSS	53,807 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC960603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
IST FLOOR	9	1	2
BASEMENT	5	1	

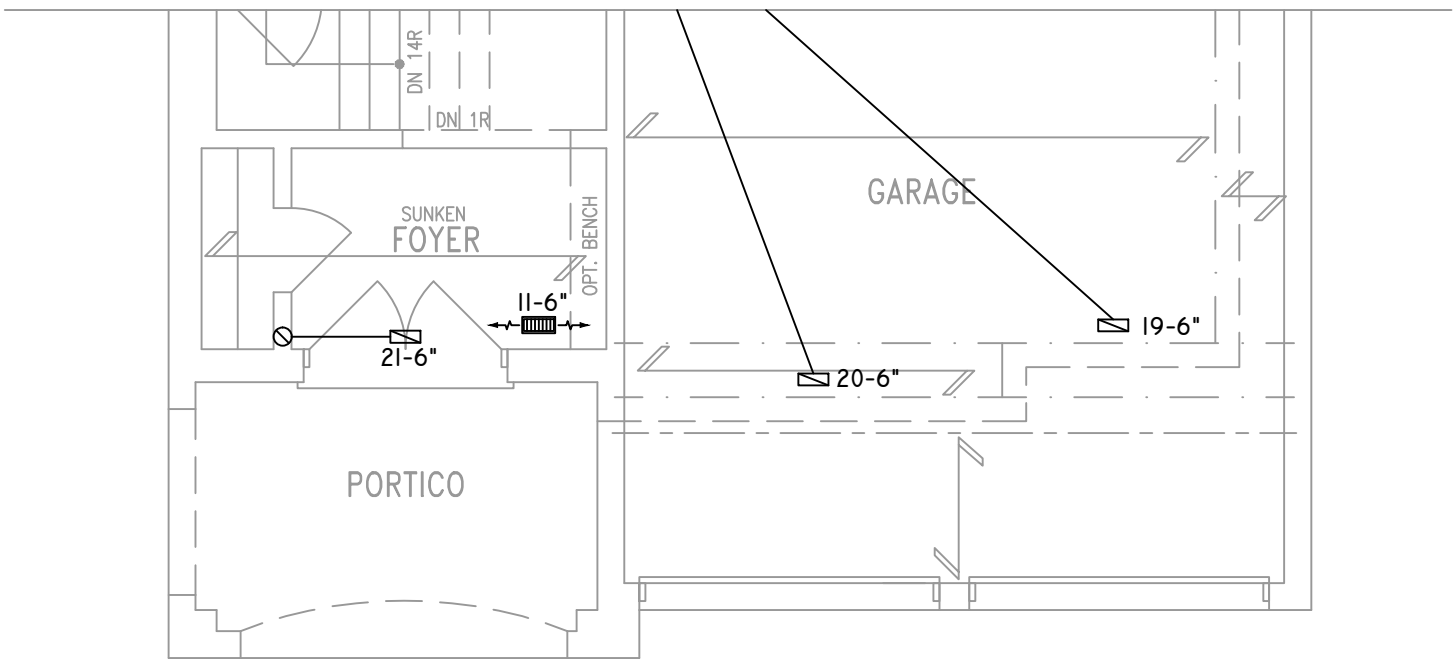
FLOOR PLAN: SECOND FLOOR			
DRAWN BY: AP	CHECKED: DD	SQFT 2891	
LAYOUT NO. JB-04545		DRAWING NO. M3	

DATE: MARCH 9, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-6 WOB BAROSSA 6
PROJECT: GREEN VALLEY EAST BRADFORD,ONT.
SCALE: 3/16" = 1'-0"

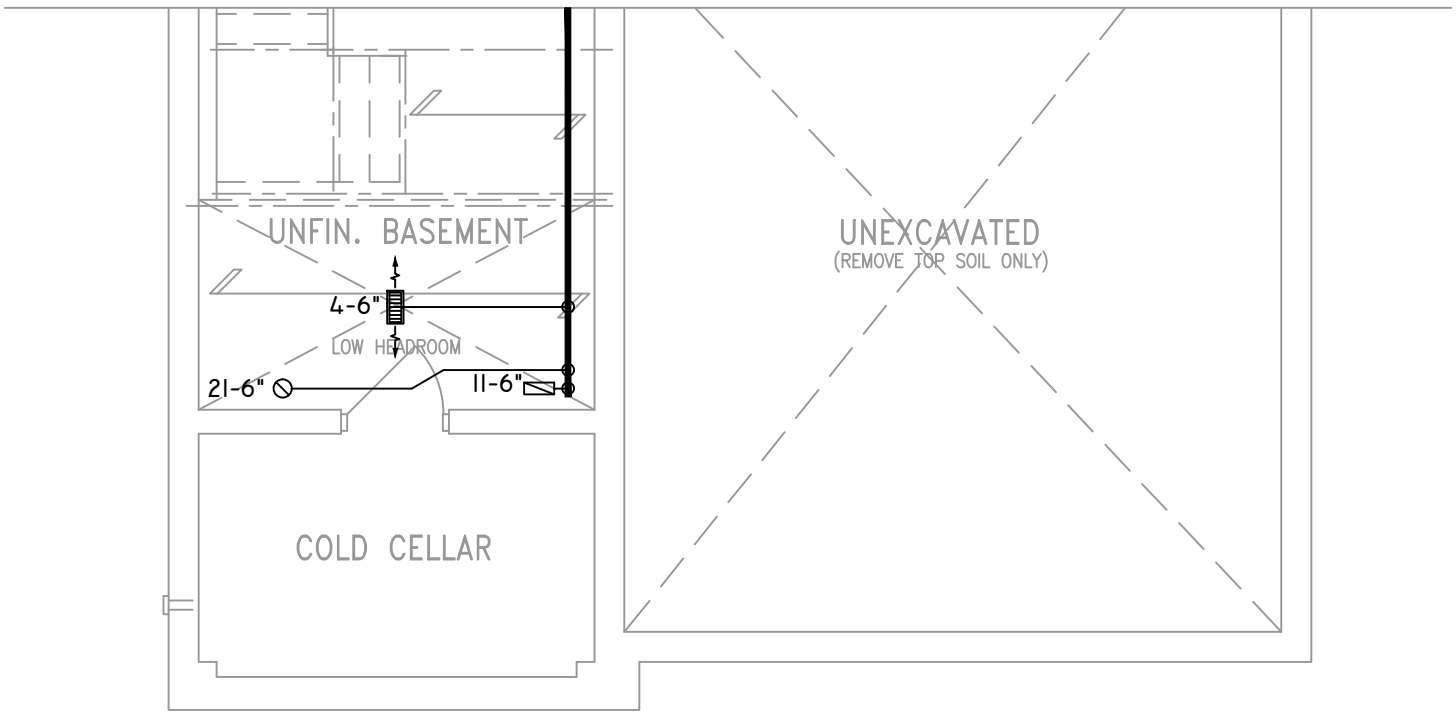
FLEX DUCT RIGID ROUND DUCT SUPPLY DIFFUSER	LOW/HIGH WALL/KICK SUPPLY DIFFUSER HRV EXHAUST GRILLE SUPPLY AIR PIPE RISER VOLUME DAMPER		DUCT CONNECTION TO JOIST LINING RETURN AIR PIPE RISER RETURN ROUND DUCT		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING) RETURN AIR RISER UP TO FLOOR ABOVE RETURN AIR FROM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



PARTIAL SECOND FLOOR PLAN 'B'



PARTIAL GROUND FLOOR PLAN 'B'



PARTIAL BASEMENT PLAN 'B'

OBC 2012

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

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

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 I" MIN.
CONTRACTOR MUST WORK FROM APPROVED PLANS.
ANY ALTERATIONS TO THIS ORIGINAL PLAN ARE NOT THE RESPONSIBILITY OF GTA DESIGNS.
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WEB: WWW.GTADESIGNS.CA

HEAT-LOSS	53,807 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC960603BNA 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	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
IST FLOOR	9	1	2
BASEMENT	5	1	

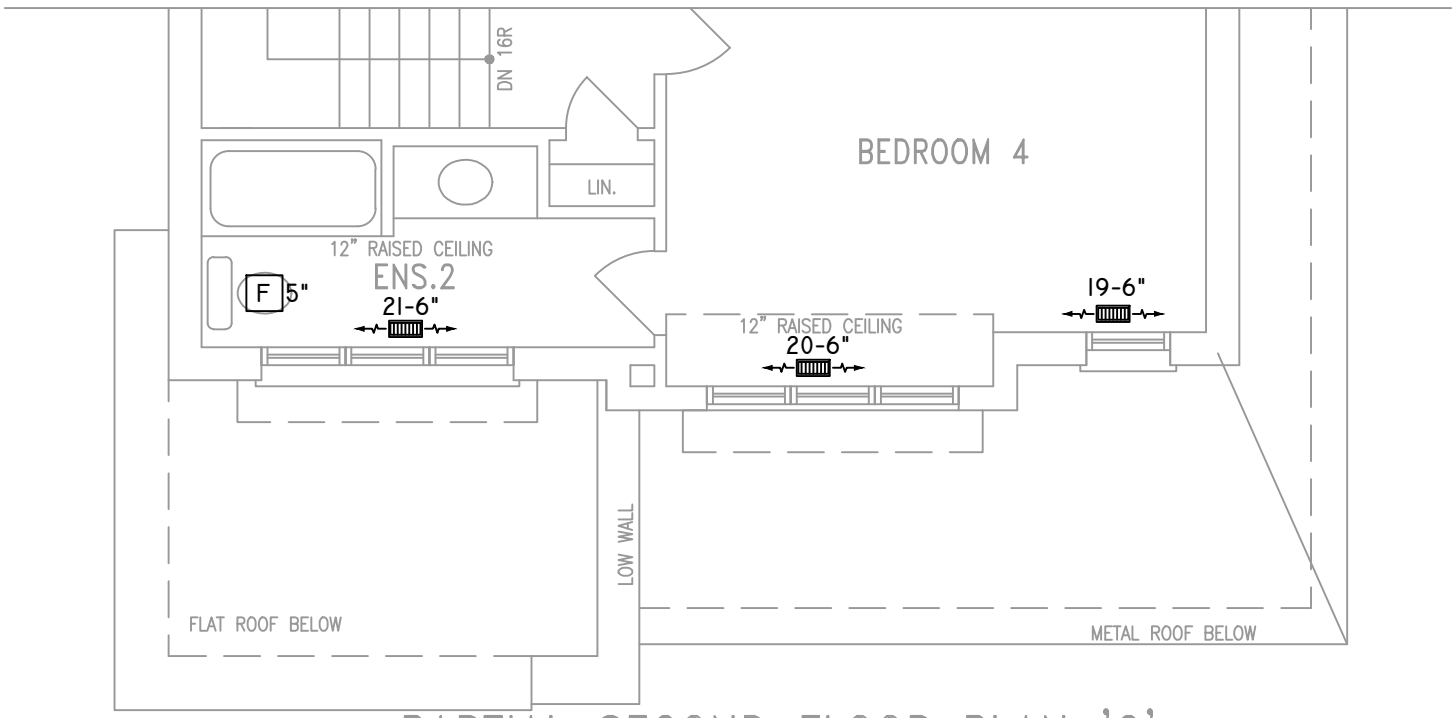
FLOOR PLAN: PARTIAL PLAN(S)

DRAWN BY:	CHECKED:	SQFT
AP	DD	2891

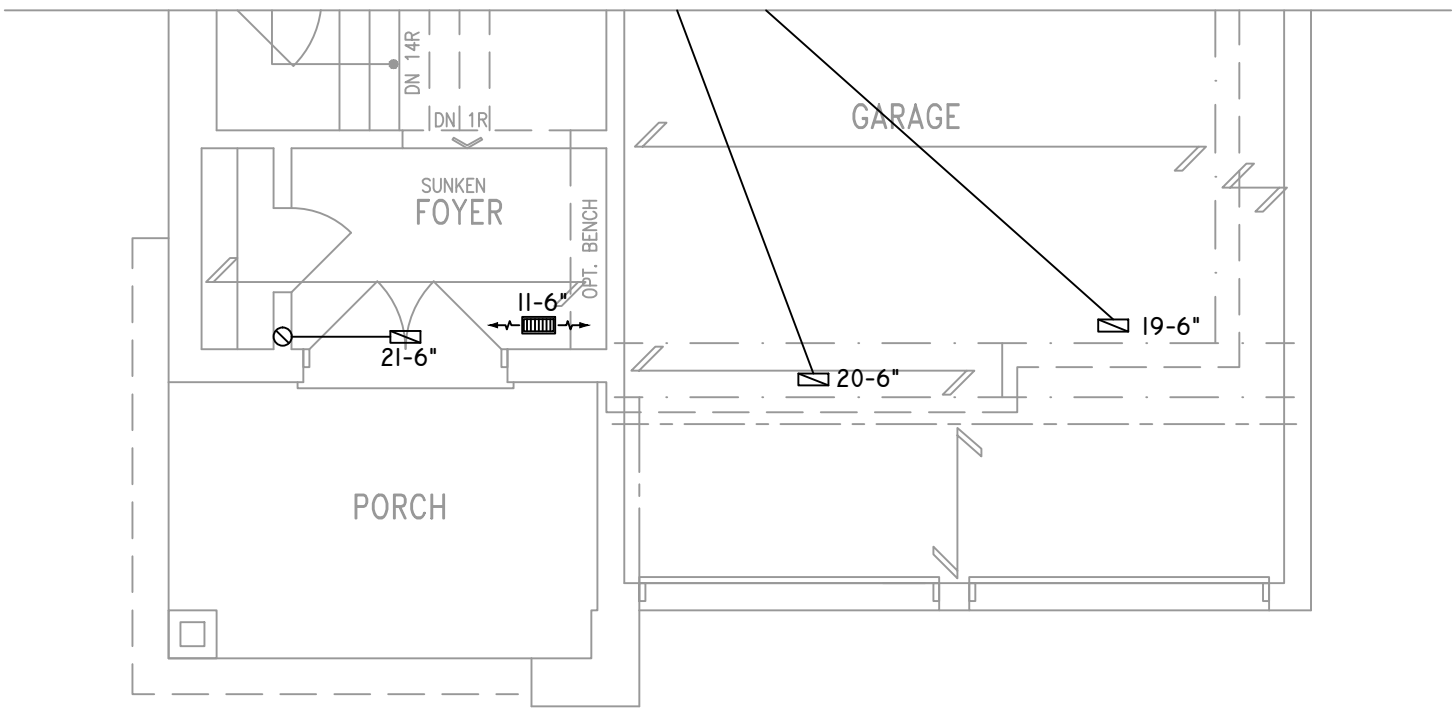
LAYOUT NO.: JB-04545 DRAWING NO.: M4

DATE: MARCH 9, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-6 WOB BAROSSA 6
PROJECT: GREEN VALLEY EAST BRADFORD,ONT.
SCALE: 3/16" = 1'-0"

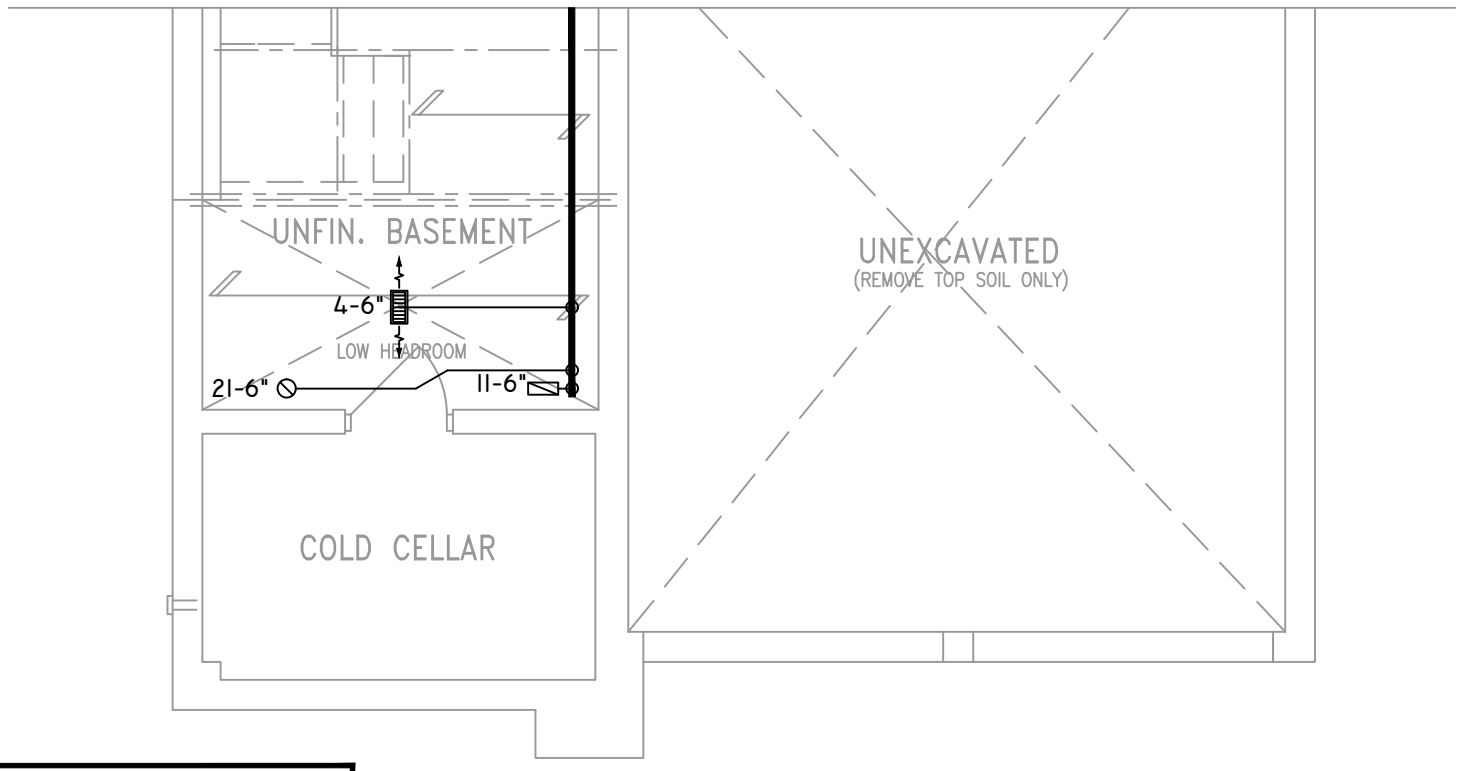
~~	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
——	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER	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



PARTIAL SECOND FLOOR PLAN 'C'



PARTIAL GROUND FLOOR PLAN 'C'



PARTIAL BASEMENT FLOOR PLAN 'C'

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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 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.
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INSULATE DUCTS IN UNCONDITIONED SPACES RI2 UNDERCUT ALL DOORS 1" MIN.
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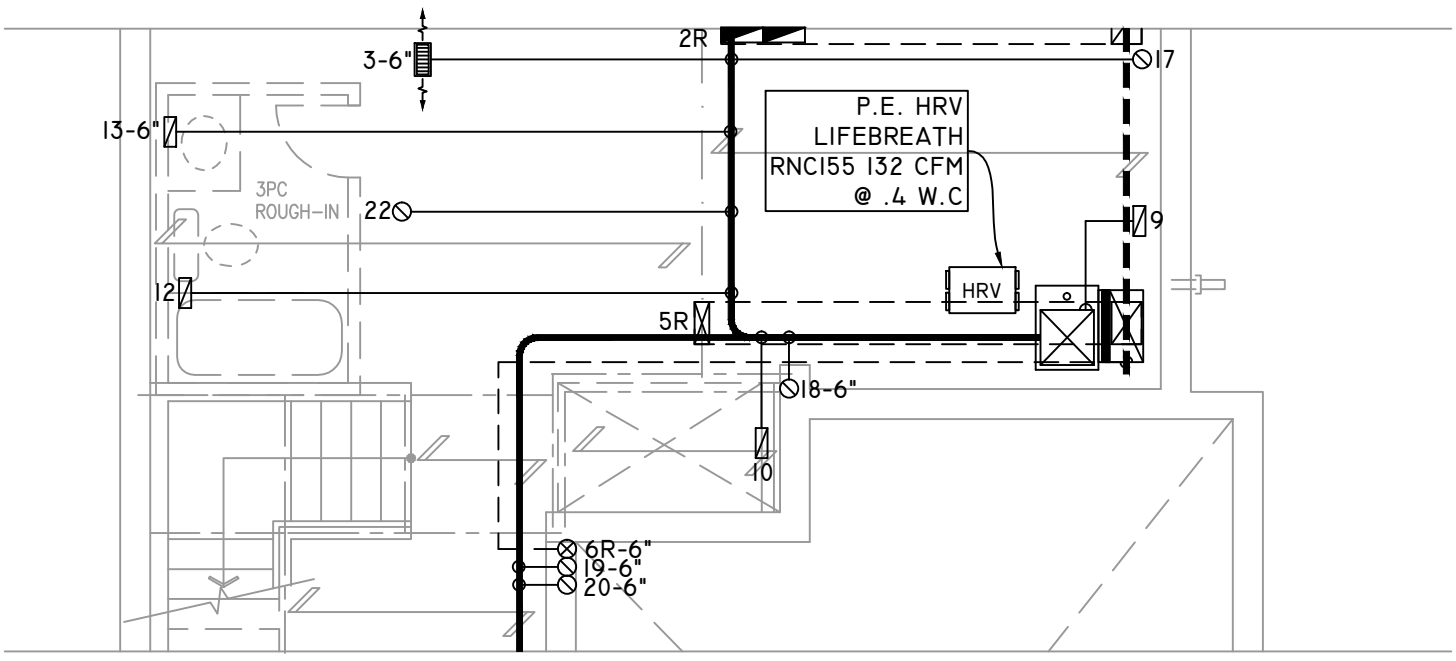
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
IST FLOOR	9	1	2
BASEMENT	5	1	

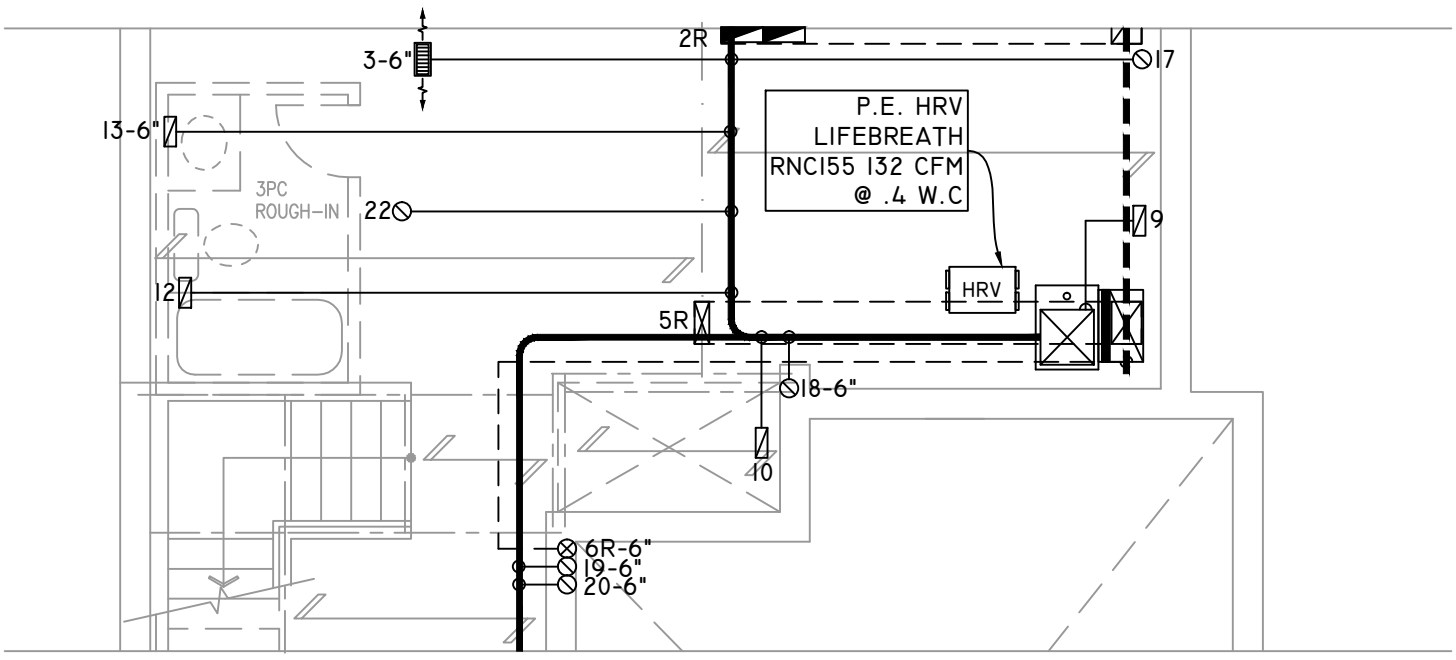
FLOOR PLAN:	PARTIAL PLAN(S)		
DRAWN BY: AP	CHECKED: DD	SQFT 2891	
LAYOUT NO. JB-04545		DRAWING NO. M5	

DATE: MARCH 9, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-6 WOB BAROSSA 6
PROJECT: GREEN VALLEY EAST 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 PE	SUPPLY AIR RETURN AIR THERMOSTAT PRINCIPAL EXHAUST FAN SWITCH W/R & PRINCIPAL EXHAUST FAN



PARTIAL PLAN FOR 2R OR MORE SUNKEN MUD ROOM COND.



PARTIAL PLAN FOR 1R SUNKEN MUD ROOM COND.

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DAVID DA COSTA B.C.I.N. 32964

SIGNATURE OF DESIGNER

OBC 2012

ZONE 1 COMPLIANCE
PACKAGE "A1" REF. TABLE 3.1.1.2.A

NOTES

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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.
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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	9	1	2
BASEMENT	5	1	

FLOOR PLAN: PARTIAL PLAN(S)			
DRAWN BY: AP	CHECKED: DD	SQFT 2891	
LAYOUT NO. JB-04545		DRAWING NO. M6	

DATE: MARCH 9, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-6 WOB BAROSSA 6
PROJECT: GREEN VALLEY EAST BRADFORD,ONT.
SCALE: 3/16" = 1'-0"