

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 Rideau 2 S42-2 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-04607	
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: 2886	Model	Rideau 2	
Residential System Design per CAN/CSA-F280-12				S42-2 WOB	
Residential New Construction - Forced Air			SB-12	Package A1	
D. Declaration of Designer					
I, <u>David DaCosta</u> 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: <u>32964</u> Basis for exemption from registration: <u>Division C 3.2.4.1. (4)</u> ☐ 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.					
<u>March 23, 2018</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 Bayview Wellington				Layout No.	
and may not be used by any other persons without authorization. Documents for permit and/or construction are signed in red.				JB-04607	
Building Location					
Address (Model): S42-2 WOB			Site: Green Valley East		
Model: Rideau 2			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: 2886
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 dave@gtadesigns.ca		

Builder: **Bayview Wellington**

Date: **March 23, 2018**

Project: **Green Valley East**

Model: **Rideau 2
S42-2 WOB**

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* David DaCosta

Page 3
Project # **PJ-00204**
Layout # **JB-04607**

DESIGN LOAD SPECIFICATIONS		AIR DISTRIBUTION & PRESSURE		FURNACE/AIR HANDLER DATA:		BOILER/WATER HEATER DATA:		A/C UNIT DATA:	
Level 1 Net Load	20,081 btu/h	Equipment External Static Pressure	0.5 "w.c.	Make	Amana	Make	Type	Amana	3.0 Ton
Level 2 Net Load	19,024 btu/h	Additional Equipment Pressure Drop	0.225 "w.c.	Model	AMEC960803BNA	Model		Cond.-----	3.0
Level 3 Net Load	17,272 btu/h	Available Design Pressure	0.275 "w.c.	Input Btu/h	80000	Input Btu/h		Coil -----	3.0
Level 4 Net Load	0 btu/h	Return Branch Longest Effective Length	300 ft	Output Btu/h	76800	Output Btu/h			
Total Heat Loss	56,377 btu/h	R/A Plenum Pressure	0.138 "w.c.	E.s.p.	0.50 " W.C.	Min.Output Btu/h	AWH		
Total Heat Gain	30,987 btu/h	S/A Plenum Pressure	0.14 "w.c.	Water Temp	deg. F.	Blower DATA:			
Combo System HL + 10%	62,015 Btu/h	Heating Air Flow Proportioning Factor	0.0208 cfm/btuh	AFUE	96%	Blower Speed Selected:	W2	Blower Type	ECM
Building Volume Vb	33362 ft³	Cooling Air Flow Proportioning Factor	0.0378 cfm/btuh	Aux. Heat				(Brushless DC OBC 12.3.1.5.(2))	
Ventilation Load	1,118 Btu/h.	R/A Temp	70 deg. F.	SB-12 Package	Package A1	Heating Check	1172 cfm	Cooling Check	1172 cfm
Ventilation PVC	79.5 cfm	S/A Temp	131 deg. F.						
Supply Branch and Grill Sizing		Diffuser loss	0.01 "w.c.	Temp. Rise>>>	61 deg. F.	Selected cfm>	1172 cfm	Cooling Air Flow Rate	1172 cfm

	Level 1														Level 2									
	1	2	3	4	23										5	6	7	8	9	10	11	12	13	
S/A Outlet No.	BASE	BASE	BASE	BASE	BASE										KIT	KIT	GRT	GRT	LAUN	PWD	FOY	LIV/DIN	LIV/DIN	
Room Use	4016	4016	4016	4016	4016										2924	2924	1696	1696	2115	858	3160	1826	1826	
Btu/Outlet	83	83	83	83	83										61	61	35	35	44	18	66	38	38	
Heating Airflow Rate CFM	32	32	32	32	32										98	98	68	68	67	5	48	71	71	
Cooling Airflow Rate CFM	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
Duct Design Pressure	50	41	13	29	43										49	53	39	49	42	24	35	36	10	
Actual Duct Length	100	120	80	120	120	70	70	70	70	70	70	70	70	70	130	120	130	110	100	110	110	95	90	70
Equivalent Length	150	161	93	149	163	70	70	70	70	70	70	70	70	70	179	173	169	159	142	134	145	131	100	70
Total Effective Length	0.09	0.08	0.14	0.09	0.08	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.07	0.08	0.08	0.08	0.09	0.10	0.09	0.10	0.13	0.19
Adjusted Pressure	6	6	6	6	6										6	6	6	6	5	3	6	5	5	
Duct Size Round	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	3x10	4x10	3x10	3x10	4x10
Outlet Size	B	C	A	E	B										B	B	C	C	C	D	E	D	A	
Trunk																								

	Level 3										Level 4													
	14	15	16	17	18	19	20	21	22															
S/A Outlet No.	MAST	ENS 2	BED 2	BED 2	BED 3	WIC	BATH	BED 4	ENS															
Room Use	3537	1389	2092	2092	2947	863	625	1363	2364															
Btu/Outlet	74	29	43	43	61	18	13	28	49															
Heating Airflow Rate CFM	97	18	54	54	85	21	13	39	38															
Cooling Airflow Rate CFM	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
Duct Design Pressure	58	50	53	47	60	59	51	30	61															
Actual Duct Length	140	130	170	160	120	150	100	90	165	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Equivalent Length	198	180	223	207	180	209	151	120	226	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Total Effective Length	0.07	0.07	0.06	0.06	0.07	0.06	0.09	0.11	0.06	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
Adjusted Pressure	6	4	5	5	6	4	3	4	6															
Duct Size Round	4x10	3x10	3x10	3x10	4x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Outlet Size	B	D	E	E	E	E	D	A	B															
Trunk																								

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	209	424	150	150	139	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	11	25	41	42	46	51					
Equivalent Length	110	165	120	155	255	165	50	50	50	50	50
Total Effective Length	121	190	161	197	301	216	50	50	50	50	50
Adjusted Pressure	0.10	0.06	0.07	0.06	0.04	0.05	0.24	0.24	0.24	0.24	0.24
Duct Size Round	8.0	11.5	7.5	8.0	8.5	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	Z	Z	Y						

Return Trunk Duct Sizing							
Trunk	CFM	Press.	Round	Rect. Size			
Drop	1172	0.04	18.0	24x12			
Z	1022	0.04	17.5	28x10	22x12		
Y	309	0.05	10.5	12x8	10x10		
X							
W							
V							
U							
T							
S							
R							
Q							

Supply Trunk Duct Sizing							
Trunk	CFM	Press.	Round	Rect. Size			
A	759	0.06	14.0	22x8	18x10		
B	411	0.06	11.0	14x8	10x10		
C	198	0.08	8.0	8x8			
D	413	0.06	11.0	14x8	10x10		
E	315	0.06	10.0	12x8	10x10		
F							
G							
H							
I							
J							
K							

2012 OBC

Builder: Bayview Wellington

Date: March 23, 2018

Project: Green Valley East

Model: Rideau 2 S42-2 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: 2886

Project # PJ-00204
Layout # JB-04607

Level 1

BASE

Run ft. exposed wall A	125	A	A	A	A	A	A	A	A	A	A	A	A
Run ft. exposed wall B	47	B	B	B	B	B	B	B	B	B	B	B	B
Ceiling height	4.9	AG	4.9	AG	4.9	AG	4.9	AG	4.9	AG	4.9	AG	4.9
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	610												
Gross Exp Wall B	423												

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	10.91	3	69	33											
East/West	3.55	22.93	27.35														
South	3.55	22.93	20.89	6	138	125											
WOB Windows	3.55	22.93	27.35	79	1811	2161											
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	580		302											
Net exposed walls B	14.49	5.62	0.76	344	1932	261											
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 Above ()			7278													
Total Conductive	Heat Loss			11655													
	Heat Gain				2940												
Air Leakage	Heat Loss/Gain	0.6939	0.0331	8088		97											
Ventilation	Case 1		0.05			0.06											
	Case 2		14.07			11.88											
	Case 3	x	0.03			0.06											
Heat Gain People						239											
Appliances Loads	1 = .25 percent					4562											
Duct and Pipe loss						10%											
Level 1 HL Total	20,081		Total HL for per room	20081													
Level 1 HG Total	4,169		Total HG per room x 1.3			4169											

Level 2

KIT

GRT

LAUN

PWD

FOY

LIV/DIN

Run ft. exposed wall A	45	A	33	A	21	A	13	A	29	A	31	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	10.0		10.0		12.0		10.0		11.0		10.0		10.0		10.0		10.0
Floor area	341	Area	282	Area	103	Area	40	Area	94	Area	305	Area	Area	Area	Area	Area	Area
Exposed Ceilings A	10	A	5	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	450		330		252		130		319		310						
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	10.91	44	1009	480											
East/West	3.55	22.93	27.35	70	1605	1915											
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	336	1606	217	282	1348	182	231	1104	149	130	621	84	274	1310
Net exposed walls B	8.50	9.58	1.29														
Exposed Ceilings A	59.22	1.37	0.64	10	14	6	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 Above ()																
Total Conductive	Heat Loss			4234				2455						621			
	Heat Gain				2618			1498			207			84			
Air Leakage	Heat Loss/Gain	0.3523	0.0331	1492		87		865		50		7		219		3	
Ventilation	Case 1		0.02														
	Case 2		14.07														
	Case 3	x	0.03														
Heat Gain People																	
Appliances Loads	1 = .25 percent																
Duct and Pipe loss																	
Level 2 HL Total	19,024		Total HL for per room	5848				3392		3607				2115		1776	
Level 2 HG Total	15,712		Total HG per room x 1.3			5196								858		119	

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

Dave DaCosta

Dave DaCosta

SB-12 Package

Package A1

Site Copy

2012 OBC

Builder: Bayview Wellington

Date: March 23, 2018

Project: Green Valley East

Model: Rideau 2
S42-2 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: 2886

Project #
Layout #

Level 3

	MAST	ENS 2	BED 2	BED 3	WIC	BATH	BED 4	ENS					
Run ft. exposed wall A	37 A	11 A	27 A	24 A	11 A	6 A	14 A	35 A	A		A	A	A
Run ft. exposed wall B	B	B	B	B	B	B	B	B	B		B	B	B
Ceiling height	9.0	8.0	9.0	10.0	8.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Floor area	425 Area	99 Area	225 Area	198 Area	28 Area	84 Area	177 Area	164 Area	Area		Area	Area	Area
Exposed Ceilings A	425 A	99 A	225 A	198 A	28 A	84 A	177 A	164 A	A		A	A	A
Exposed Ceilings B	B	B	B	B	B	B	B	B	B		B	B	B
Exposed Floors	Flr	40 Flr	184 Flr	41 Flr	Flr	Flr	Flr	Flr	Flr		Flr	Flr	Flr
Gross Exp Wall A	333	88	243	240	88	48	112	280					
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	10.91																
East/West	3.55	22.93	27.35	33	757	903													
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	300	1434	194	70	335	45	187	894	121	197	942	127	76	363	49	40
Net exposed walls B	8.50	9.58	1.29																
Exposed Ceilings A	59.22	1.37	0.64	425	584	273	99	136	64	225	309	144	198	272	127	28	38	18	84
Exposed Ceilings B	22.86	3.56	1.66																
Exposed Floors	29.80	2.73	0.17				40	109	7	184	503	31	41	112	7				
Foundation Conductive Heatloss																			
Total Conductive																			
Heat Loss																			
Heat Gain																			
Air Leakage	Heat Loss/Gain	0.2458	0.0331																
Case 1		0.02	0.06																
Case 2		14.07	11.88																
Case 3	x	0.03	0.06																
Heat Gain People			239	2	80	79		29	18	1	87	94		67	78	20	23		
Appliances Loads	1 =.25 percent		4562																
Duct and Pipe loss			10%																
Level 3 HL Total	17,272																		
Level 3 HG Total	11,106																		

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	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	0.0331																
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		4562																
Duct and Pipe loss			10%																
Level 4 HL Total	0																		
Level 4 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

Site Copy

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: S42-2 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	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	

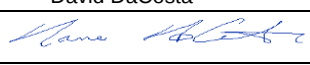
Principal Exhaust Fan Capacity				
Make	Model		Location	
LifeBreath	RNC155		Base	
132 cfm			Sones	or Equiv.

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 2	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 23, 2018		

Site Copy



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-00204
 Layout # JB-04607

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 Rideau 2 S42-2 WOB		Unit number	Lot/Con
Municipality Bradford	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		
☒ Zone 1 (< 5000 degree days) ☐ Zone 2 (≥ 5000 degree days)	☒ ≥ 92% AFUE ☐ ≥ 84% < 92% AFUE	☒ Gas ☐ Oil	☐ Propane ☐ Electric	☐ Solid Fuel ☐ Earth Energy
Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area		Other Building Characteristics		
Area of Walls = <u>395.38</u> m ² or <u>4255.9</u> ft ²	W, S & G % = <u>13%</u>	☐ Log/Post&Beam ☐ Slab-on-ground ☒ Air Conditioning ☐ Air Sourced Heat Pump (ASHP) ☐ Ground Source Heat Pump (GSHP)	☐ ICF Above Grade ☒ Walkout Basement ☐ Combo Unit	☐ ICF Basement
Area of W, S & G = <u>50.166</u> m ² or <u>540.0</u> ft ²	Utilize Window Averaging ☐ Yes ☒ No			

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) Airtightness test required (Refer to Design Guide Attached)	☐ Table 3.1.1.4.B Required:		Permitted Substitution:
	☐ Table 3.1.1.4.C Required:		Permitted Substitution:
Building Component	Minimum RSI/R-Values or Maximum U-Value ¹		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·ft²·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 David DaCosta	BCIN 32964	Signature
------------------------------	----------------------	---------------

Form authorized by OHBA, OBOA, LMCBO. Revised December 1, 2016.

Site Copy

Package: Package A1 System: System 1
Project: Bradford Model: S42-2 WOB

Air Leakage Calculations

Building Air Leakage Heat Loss				
B	LRairh	Vb	HL^T	HLleak
0.018	0.331	33362	81.4	16175

Building Air Leakage Heat Gain				
B	LRairh	Vb	HG^T	HG Leak
0.018	0.082	33362	11	542

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	16175	11655	0.6939
Level 2	0.3		13773	0.3523
Level 3	0.2		13159	0.2458
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		Air Leakage Heat Gain	
	542		0.0331
BUILDING CONDUCTIVE HEAT GAIN			16375

Levels this Dwelling	
3	

Ventilation Calculations

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	11655	0.05
Level 2	0.3		13773	0.02
Level 3	0.2		13159	0.02
Level 4	0		0	0.00

Case 1

Ventilation Heat Gain (Exhaust Only Systems)

Case 1 - Exhaust Only		Multiplier	
HGbvent	944	0.06	
Building	16375		

Case 2

Ventilation Heat Loss (Direct Ducted Systems)

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

Case 2

Ventilation Heat Gain (Direct Ducted Systems)

C	HG^T	Multiplier
1.08	11	11.88

Case 3

Ventilation Heat Loss (Forced Air Systems)

HLbvent		Multiplier
Total Ventilation Load	1118	0.03

Case 3

Ventilation Heat Gain (Forced Air Systems)

Vent Heat Gain		Multiplier
HGbvent	HG*1.3	0.06
944	1	

Foundation Conductive Heatloss Level 1

2133 Watts 7278 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

David DaCosta

Site Copy

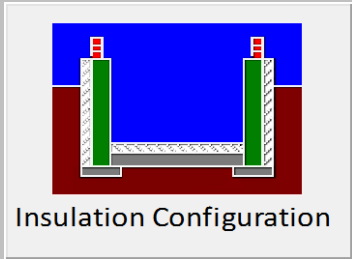
Envelope Air Leakage Calculator

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):	6.97			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	944.81			
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): 0.331				
Cooling Air Leakage Rate (ACH/H): 0.082				

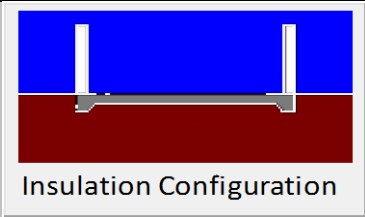
Residential Foundation Thermal Load Calculator

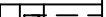
Supplemental tool for CAN/CSA-F280

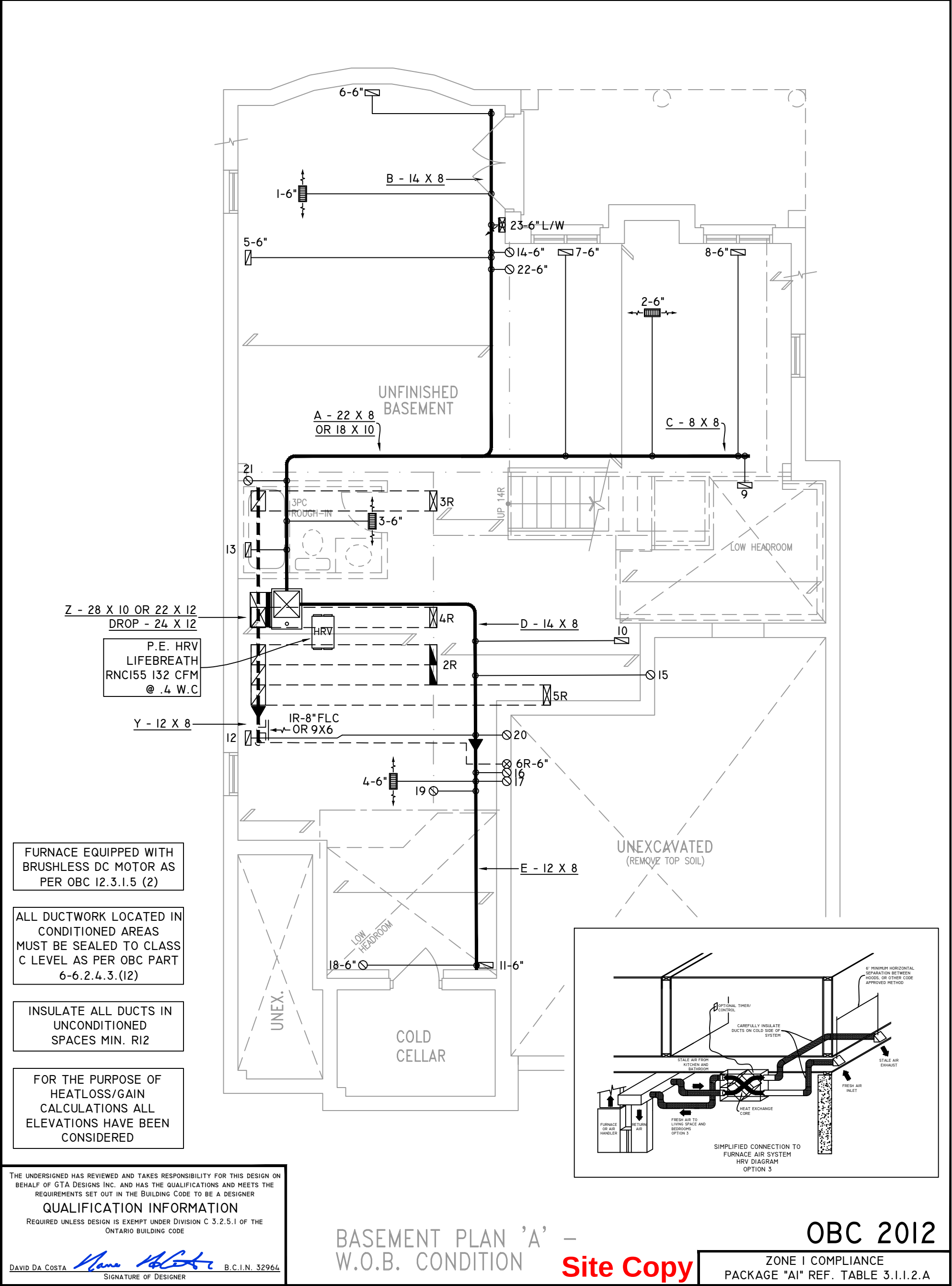
Weather Station Description		
Province:	Ontario ▼	
Region:	Bradford ▼	
Site Description		
Soil Conductivity:	High conductivity: moist soil ▼	
Water Table:	Normal (7-10 m, 23-33 Ft) ▼	
Foundation Dimensions		
Floor Length (m):	19.28	 Insulation Configuration
Floor Width (m):	4.95	
Exposed Perimeter (m):	38.10	
Wall Height (m):	2.74	
Depth Below Grade (m):	1.26	
Window Area (m ²):	0.84	
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):		1913

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):	11.17	 Insulation Configuration
Width (m):	1.17	
Exposed Perimeter (m):	14.33	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		220

	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



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.



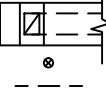
2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

HEAT-LOSS	56,377	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	60,000	BTU/HR.
UNIT HEATING OUTPUT	57,600	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1170	CFM

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

FLOOR PLAN:	BASEMENT
DRAWN BY:	AM
CHECKED:	DD
LAYOUT NO.	JB-04607
SQFT	2865
DRAWING NO.	MI

DATE:	MARCH 23, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-2 WOB RIDEAU 2
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

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. R12

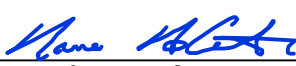
FOR THE PURPOSE OF
HEATLOSS/GAIN
CALCULATIONS ALL
ELEVATIONS HAVE BEEN
CONSIDERED

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

Site Copy

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.



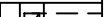
2985 DREW ROAD
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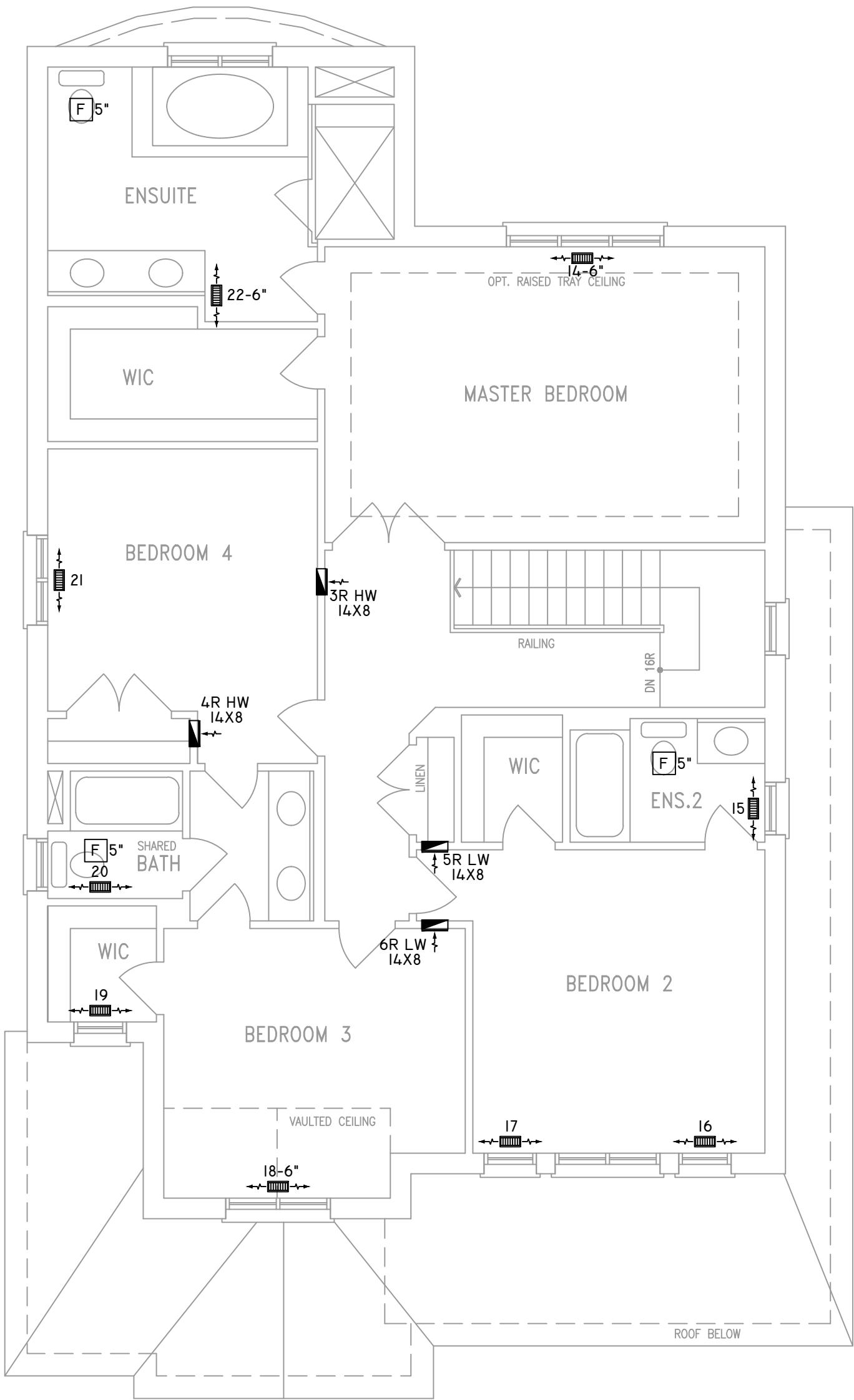
HEAT-LOSS	56,377	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	60,000	BTU/HR.
UNIT HEATING OUTPUT	57,600	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1170	CFM

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

FLOOR PLAN:		GROUND FLOOR
DRAWN BY:	CHECKED:	2865
AM	DD	
LAYOUT NO.	DRAWING NO.	
JB-04607	M2	

DATE:	MARCH 23, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-2 WOB RIDEAU 2
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 VOLUME DAMPER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		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.(12)

INSULATE ALL DUCTS IN
UNCONDITIONED
SPACES MIN. R12

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

Site Copy

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.

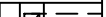

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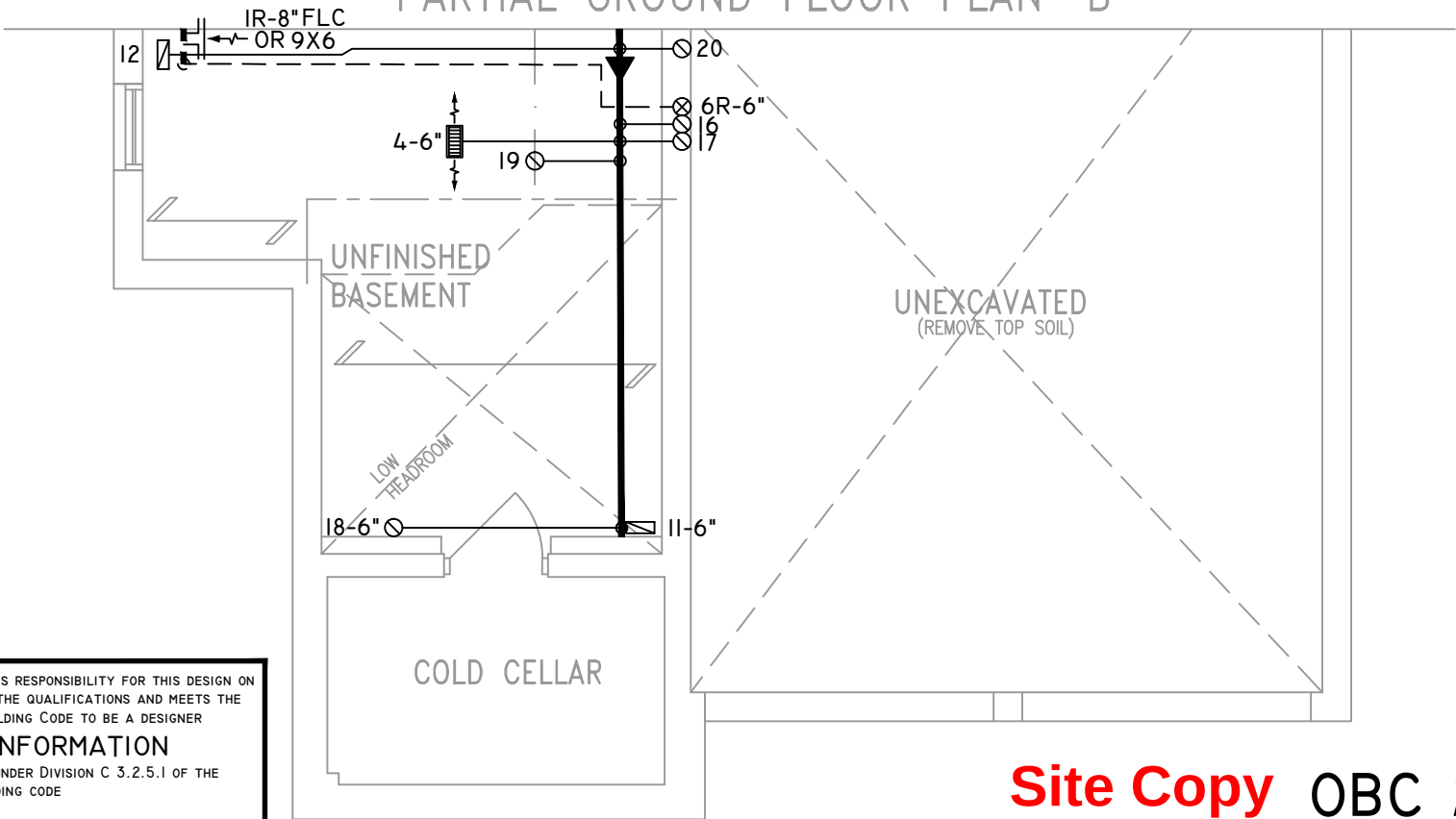
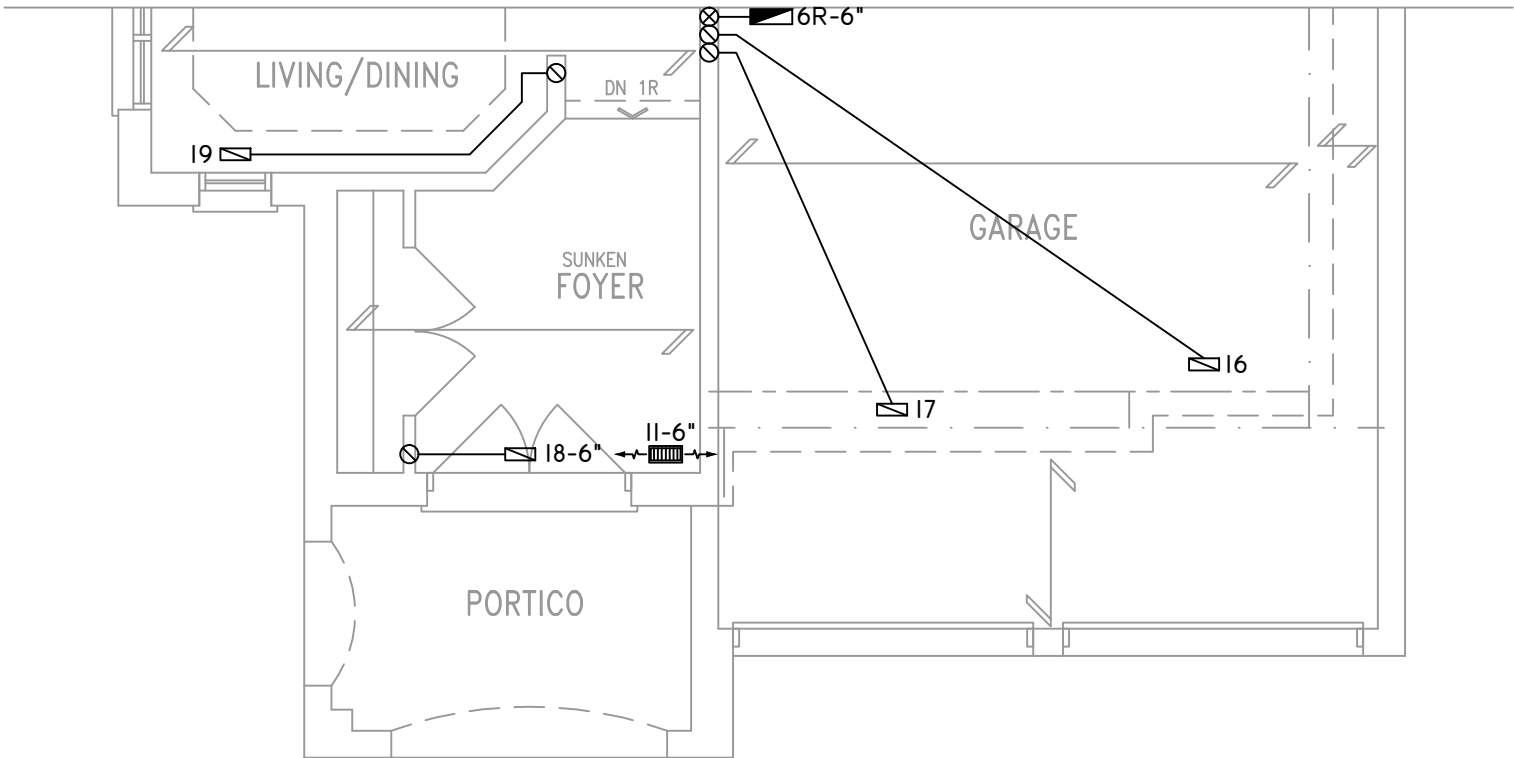
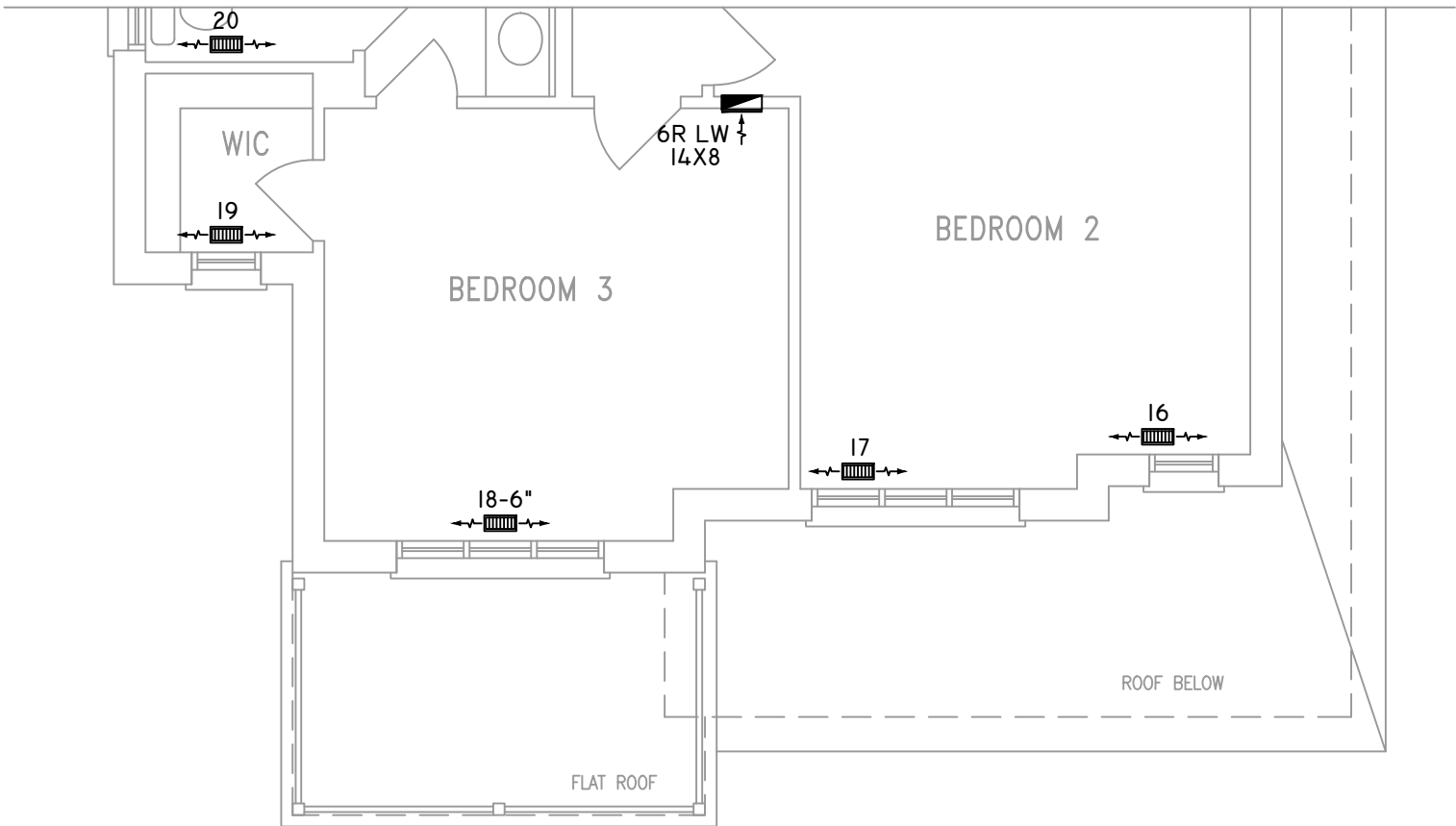
HEAT-LOSS	BTU/HR.
56,377	
UNIT MAKE	OR EQUAL.
AMANA	
UNIT MODEL	OR EQUAL.
AMEC960803BNA	
UNIT HEATING INPUT	BTU/HR.
60,000	
UNIT HEATING OUTPUT	BTU/HR.
57,600	
A/C COOLING CAPACITY	TONS.
3.0	
FAN SPEED	CFM
1170	

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

FLOOR PLAN: PARTIAL PLAN(S)	
DRAWN BY: AM	CHECKED: DD
LAYOUT NO. JB-04607	SQFT 2865
	DRAWING NO. M3

DATE:	MARCH 23, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-2 WOB RIDEAU 2
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

Site Copy 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.



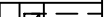
2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

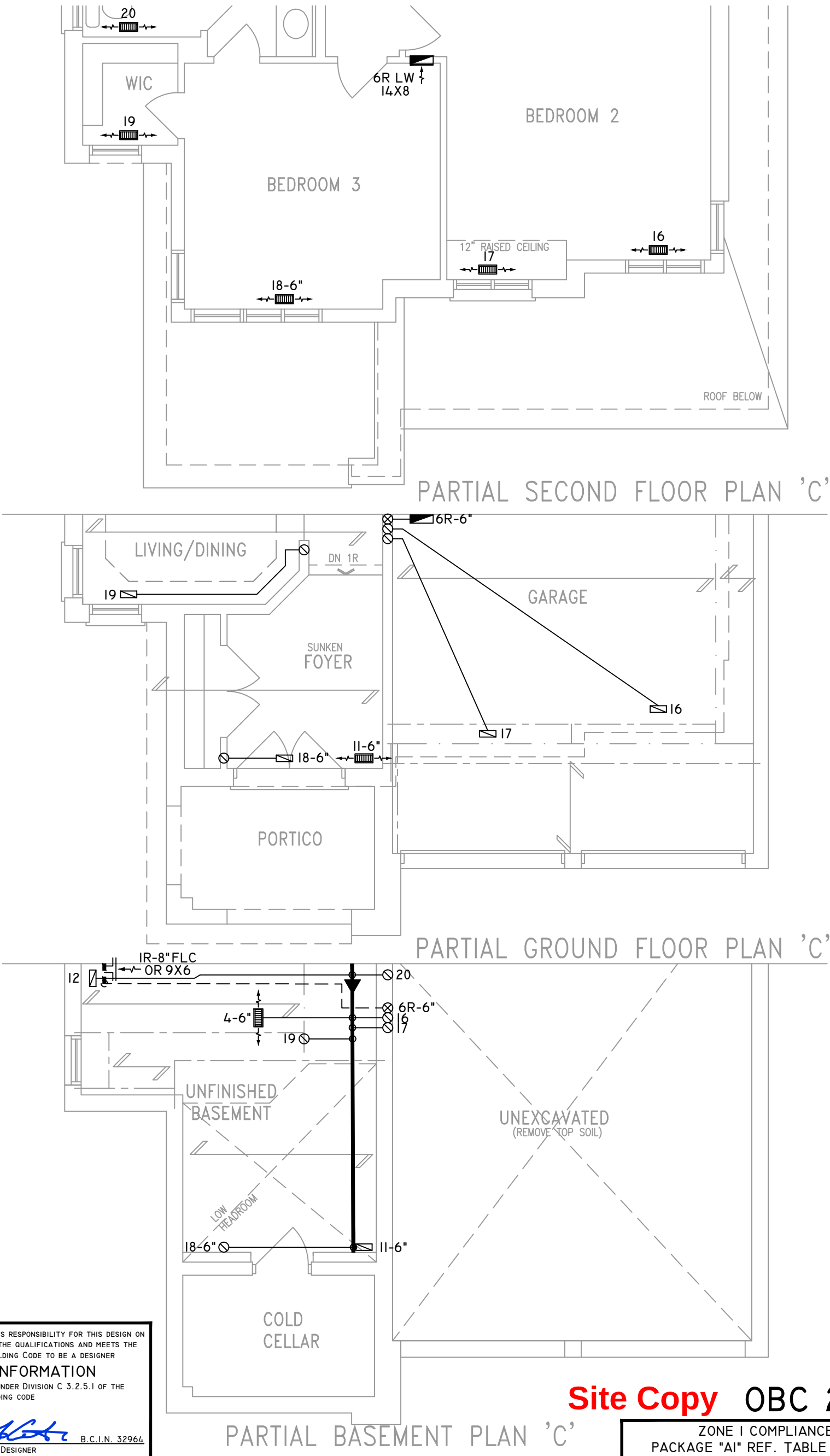
HEAT-LOSS	BTU/HR.
56,377	
UNIT MAKE	OR EQUAL.
AMANA	
UNIT MODEL	OR EQUAL.
AMEC960803BNA	
UNIT HEATING INPUT	BTU/HR.
60,000	
UNIT HEATING OUTPUT	BTU/HR.
57,600	
A/C COOLING CAPACITY	TONS.
3.0	
FAN SPEED	CFM
1170	

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

FLOOR PLAN: PARTIAL PLAN(S)		
DRAWN BY: AM	CHECKED: DD	SQFT 2865
LAYOUT NO. JB-04607	DRAWING NO. M4	

DATE:	MARCH 23, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-2 WOB RIDEAU 2
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

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DAVID DA COSTA



B.C.I.N. 32964

SIGNATURE OF DESIGNER

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HEAT-LOSS	BTU/HR.
56,377	
UNIT MAKE	OR EQUAL.
AMANA	
UNIT MODEL	OR EQUAL.
AMEC960803BNA	
UNIT HEATING INPUT	BTU/HR.
60,000	
UNIT HEATING OUTPUT	BTU/HR.
57,600	
A/C COOLING CAPACITY	TONS.
3.0	
FAN SPEED	CFM
1170	

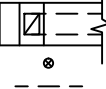
# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	9	4	3
1ST FLOOR	9	1	3
BASEMENT	5	1	

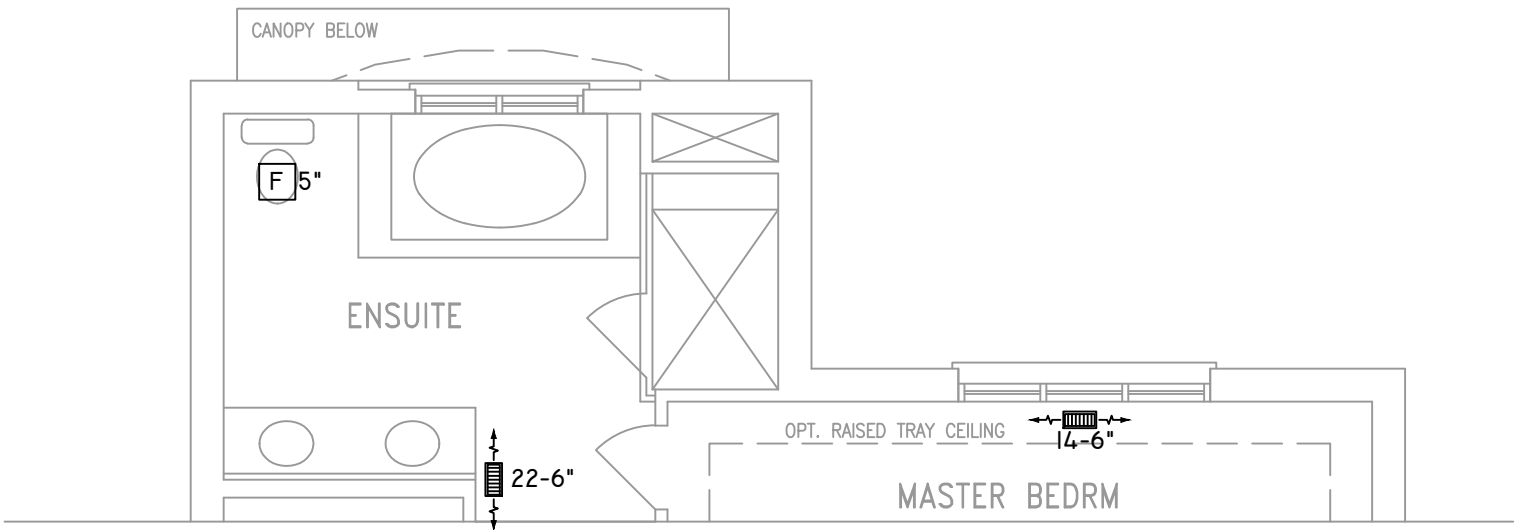
FLOOR PLAN: PARTIAL PLAN(S)	
DRAWN BY: AM	CHECKED: DD
LAYOUT NO. JB-04607	SQFT 2865
	DRAWING NO. M5

DATE:	MARCH 23, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-2 WOB RIDEAU 2
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

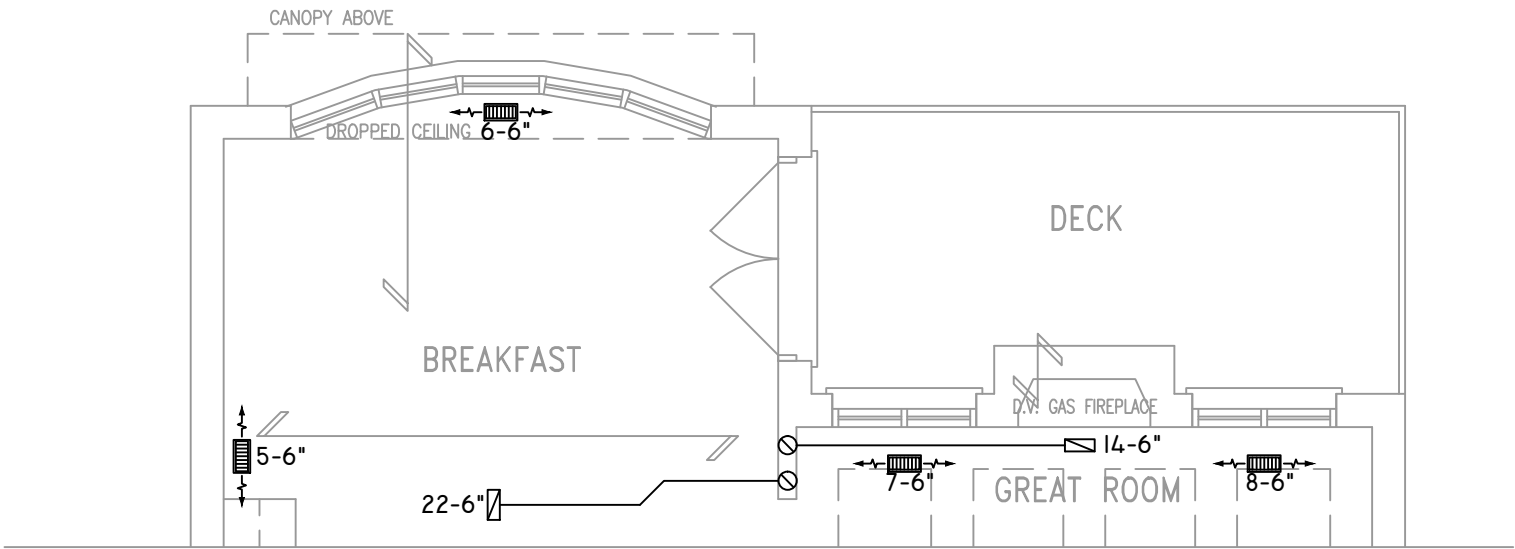
Site Copy OBC 2012

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

	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
ELEVATION 'C' REAR UPGRADE



PARTIAL GROUND FLOOR PLAN
ELEVATION 'C' REAR UPGRADE

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DAVID DA COSTA



B.C.I.N. 32964

SIGNATURE OF DESIGNER

Site Copy

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

OBC 2012

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HEAT-LOSS	56,377	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	60,000	BTU/HR.
UNIT HEATING OUTPUT	57,600	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1170	CFM

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

FLOOR PLAN: PARTIAL PLAN(S)		
DRAWN BY: AM	CHECKED: DD	SQFT 2865
LAYOUT NO. JB-04607	DRAWING NO. M6	

DATE:	MARCH 23, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-2 WOB RIDEAU 2
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"