



A. Project Information										
Building number, street name							Lot:			
S38-20 - WOB							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 hvac@gtadesigns.ca		
Telephone number (905) 671-9800				Fax number			Cell number			
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-08592
Heating and Cooling Load Calculations			Main	X	Builder		Bayview Wellington			
Air System Design			Alternate		Project		Green Valley East			
Residential mechanical ventilation Design Summary			Area Sq ft:	3262	Model		S38-20 - WOB			
Residential System Design per CAN/CSA-F280-12					SB-12		Package A1			
Residential New Construction - Forced Air										
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>November 18, 2022</u> Date					<u></u> Signature of Designer					

Page 1

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, 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-08592	
Building Location					
Address (Model): S38-20 - WOB			Site: Green Valley East		
Model:			Lot:		
City and Province: Bradford			Postal code:		
Calculations based on					
Dimensional information based on:			VA3 Design Oct/2021		
Attachment: Detached		Front facing: East/West		Assumed? Yes	
No. of Levels: 3		Ventilated? Included		Air tightness: 1961-Present (ACH=3.57)	
Weather location: Bradford		Wind exposure: Sheltered			
HRV? VanEE		V150H75NS		Internal shading: Light-translucent	
Sensible Eff. at -25C 60%		Apparent Effect. at -0C 80%		Occupants: 5	
Sensible Eff. at -0C 75%				Units: Imperial	
				Area Sq ft: 3262	
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:			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:			Skylights		
Style C:			Style A: As per Selected OBC SB12 Package A1 R 2.03		
Style D:			Style B:		
Attached documents: As per Schedule 1		Heat Loss/Gain Calculations 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:		
City: Mississauga			E-mail hvac@gtadesigns.ca		



Air System Design

2985 Drew Road, Suite 202, Mississauga, Ontario L4T 0A4 Tel: 905-671-9800
e-mail hvac@gtadesigns.ca

Builder: Bayview Wellington

Date: November 18, 2022

Project: Green Valley East

Model: S38-20 - 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
Project # PJ-00041
Layout # JB-08592

DESIGN LOAD SPECIFICATIONS		AIR DISTRIBUTION & PRESSURE		FURNACE/AIR HANDLER DATA:			BOILER/WATER HEATER DATA:		A/C UNIT DATA:		
Level 1 Net Load	27,493 btu/h	Equipment External Static Pressure	0.5 "w.c.	Make	Amana		Make	Type	Amana	3.0 Ton	
Level 2 Net Load	23,313 btu/h	Additional Equipment Pressure Drop	0.225 "w.c.	Model	AMEC960803BNA		Model		Cond.-----	3.0	
Level 3 Net Load	22,170 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	72,976 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	33,901 btu/h	S/A Plenum Pressure	0.14 "w.c.	Water Temp		deg. F.	Blower DATA:				
Building Volume Vb	42163 ft³	Heating Air Flow Proportioning Factor	0.0161 cfm/btuh	AFUE	96%		Blower Speed Selected:	W2	Blower Type	ECM	
		Cooling Air Flow Proportioning Factor	0.0346 cfm/btuh	Aux. Heat			(Brushless DC OBC 12.3.1.5.(2))				
				SB-12 Package	Package A1		Heating Check	<u>1172</u> cfm	Cooling Check	<u>1172</u> cfm	
Ventilation Load	1,398 Btuh.	R/A Temp	70 deg. F.								
Ventilation PVC	79.5 cfm	S/A Temp	131 deg. F.								
Supply Branch and Grill Sizing		Diffuser loss	<u>0.01</u> "w.c.	Temp. Rise>>>	<u>61</u> deg. F.		Selected cfm>	<u>1172</u> cfm	Cooling Air Flow Rate	<u>1172</u> cfm	

	Level 1														Level 2									
S/A Outlet No.	1	2	3	4	5										6	7	8	9	10	11	12	13	14	15
Room Use	BASE	BASE	BASE	BASE	BASE										KIT	KIT	LIV/DIN	LIV/DIN	MUD	FOY	PWD	STUDY	GRT	GRT
Btu/Outlet	5499	5499	5499	5499	5499										2386	2386	3012	3012	1587	3863	781	1732	2277	2277
Heating Airflow Rate CFM	88	88	88	88	88										38	38	48	48	25	62	13	28	37	37
Cooling Airflow Rate CFM	33	33	33	33	33										83	83	53	53	7	47	13	91	72	72
Duct Design Pressure	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Actual Duct Length	42	36	14	21	28										41	46	36	25	7	36	27	22	30	44
Equivalent Length	130	120	110	110	120	70	70	70	70	70	70	70	70	170	140	100	120	90	110	110	80	90	110	70
Total Effective Length	172	156	124	131	148	70	70	70	70	70	70	70	70	211	186	136	145	97	146	137	102	120	154	70
Adjusted Pressure	0.08	0.08	0.10	0.10	0.09	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.06	0.07	0.10	0.09	0.13	0.09	0.09	0.13	0.11	0.08	0.19
Duct Size Round	6	6	6	6	6									6	6	5	5	4	5	3	6	6	6	6
Outlet Size	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	3x10	3x10	3x10	3x10	4x10	4x10	4x10
Trunk	E	D	B	F	C									E	E	C	B	A	G	G	B	C	D	

	Level 3														Level 4									
S/A Outlet No.	16	17	18	19	20	21	22	23	24	25	26	27	28											
Room Use	P.BED	P.BED	WC	ENS	ENS 2	BED 2	BED 3	BED 3	ENS 3	WIC 4	BED 4	LAUND	WIC											
Btu/Outlet	1837	1837	454	2245	705	1656	3352	3352	427	1082	3703	696	825											
Heating Airflow Rate CFM	30	30	7	36	11	27	54	54	7	17	59	11	13											
Cooling Airflow Rate CFM	45	45	12	39	8	31	64	64	3	23	81	11	6											
Duct Design Pressure	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Actual Duct Length	58	54	54	61	47	38	45	41	33	38	52	33	37											
Equivalent Length	120	180	170	140	130	110	120	110	140	100	140	120	130	70	70	70	70	70	70	70	70	70	70	70
Total Effective Length	178	234	224	201	177	148	165	151	173	138	192	153	167	70	70	70	70	70	70	70	70	70	70	70
Adjusted Pressure	0.07	0.06	0.06	0.06	0.07	0.09	0.08	0.09	0.08	0.09	0.07	0.08	0.08	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Duct Size Round	5	5	3	5	3	4	6	6	3	4	6	3	3											
Outlet Size	3x10	3x10	3x10	3x10	3x10	3x10	4x10	4x10	3x10	3x10	4x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	D	E	E	E	E	B	F	F	F	F	G	B	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	221	376	170	105	150	150											
Duct Design Pressure	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12						
Actual Duct Length	14	10	16	50	32	37											
Equivalent Length	155	170	175	150	180	140	50	50	50	50	50						
Total Effective Length	169	180	191	200	212	177	50	50	50	50	50						
Adjusted Pressure	0.07	0.07	0.06	0.06	0.06	0.07	0.24	0.24	0.24	0.24	0.24						
Duct Size Round	8.0	10.5	8.0	6.0	8.0	7.5											
Inlet Size	FLC	8	8	8	8	8											
" "	OR	x	x	x	x	x	x	x	x	x	x						
Inlet Size	9x6	30	14	14	14	14											

Return Trunk Duct Sizing					Supply Trunk Duct Sizing				
Trunk	CFM	Press.	Round	Rect. Size	Trunk	CFM	Press.	Round	Rect. Size
Drop	1172	0.06	16.5	24x10	A	1171	0.06	16.5	32x8 24x10
Z	1172	0.06	16.5	32x8 24x10	B	792	0.06	14.5	24x8 18x10
Y	541	0.06	12.5	18x8 14x10	C	590	0.06	13.0	18x8 14x10
X					D	154	0.07	7.5	8x8 87
W					E	249	0.06	9.5	10x8 127
V					F	354	0.07	10.5	12x8 10x10
U					G	134	0.07	7.5	8x8 87
T					H				
S					I				
R					J				
Q					K				



Heatloss/Gain Calculations CSA-F280-12

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

e-mail hvac@gtadesigns.ca

Builder: Bayview Wellington

Date: November 18, 2022

Weather Data Bradford 44 -9.4 86 22 48.2

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2012 OBC

Project: Green Valley East

Model: S38-20 - WOB

System 1

Heat Loss ^T 81.4 deg. F Ht gain ^T 11 deg. F GTA: 3262

Project # PJ-00041
Layout # JB-08592

Level 1				BASE																							
Run ft. exposed wall A				140 A		A		A		A		A		A		A		A		A		A		A			
Run ft. exposed wall B				41 B		B		B		B		B		B		B		B		B		B		B			
Ceiling height				7.5 AG		7.5 AG		7.5 AG		7.5 AG		7.5 AG		7.5 AG		7.5 AG		7.5 AG		7.5 AG		7.5 AG		7.5 AG			
Floor area				1187 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				1050																							
Gross Exp Wall B				410																							
Components				R-Values	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	11.62	3	69	35																		
East/West				3.55	22.93	29.56																					
South				3.55	22.93	22.50	3	69	68																		
WOB Windows				3.55	22.93	27.86	88	2018	2452																		
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	1023		533																		
Net exposed walls B				17.03	4.78	0.65	322	1539	208																		
Exposed Ceilings A				59.22	1.37	0.64																					
Exposed Ceilings B				27.65	2.94	1.37																					
Exposed Floors				29.80	2.73	0.17																					
Foundation Conductive Heatloss								9604																			
Total Conductive	Heat Loss							13726																			
	Heat Gain								3353																		
Air Leakage	Heat Loss/Gain				0.9714	0.0504		13333	169																		
Ventilation	Case 1				0.05	0.05																					
	Case 2				17.58	11.88																					
	Case 3	x		0.03	0.05		434	181																			
Heat Gain People						239																					
Appliances Loads				1 =.25 percent		5225																					
Duct and Pipe loss						10%																					
Level HL Total	27,493			Total HL for per room					27493																		
Level HG Total	4,813			Total HG per room x 1.3						4813																	



Heatloss/Gain Calculations CSA-F280-12

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

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Weather Data Bradford 44 -9.4 86 22 48.2

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2012 OBC

Project: Green Valley East

Model: S38-20 - WOB

System 1

Heat Loss ΔT 81.4 deg. F Ht gain ΔT 11 deg. F GTA: 3262

Project # PJ-00041
Layout # JB-08592

Level 3				P.BED		WC		ENS		ENS 2		BED 2		BED 3		ENS 3		WIC 4		BED 4		LAUND		WIC		
Run ft. exposed wall A	31 A					4 A		25 A		7 A		14 A		43 A		A		8 A		33 A		7 A		11 A		
Run ft. exposed wall B	B					B		B		B		B		B		B		B		B		B		B		
Ceiling height	11.0					9.0		9.0		9.0		9.0		11.0		9.0		9.0		11.0		9.0		9.0		
Floor area	338 Area					23 Area		156 Area		62 Area		228 Area		337 Area		69 Area		38 Area		216 Area		57 Area		93 Area		
Exposed Ceilings A	338 A					23 A		156 A		62 A		228 A		337 A		69 A		38 A		216 A		57 A		93 A		
Exposed Ceilings B	B					B		B		B		B		B		B		B		B		B		B		
Exposed Floors	Flr					Flr		Flr		Flr		Flr		232 Flr		69 Flr		38 Flr		4 Flr		Flr		Flr		
Gross Exp Wall A	341					36		225		63		126		473				72		363		63		99		
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	11.62							7	161	81		16	367	186										
East/West	3.55	22.93	29.56	32	734	946		7	161	207		19	436	562		40	917	1182								
South	3.55	22.93	22.50													20	459	450								
Existing Windows	1.99	40.90	23.66																			7	161	158		
Skylight	2.03	40.10	88.23																							
Doors	4.00	20.35	2.75																							
Net exposed walls A	17.03	4.78	0.65	309	1477	200		29	139	19		206	985	133		56	268	36		110	526	71		413	1974	267
Net exposed walls B	8.50	9.58	1.29																							
Exposed Ceilings A	59.22	1.37	0.64	338	465	217		23	32	15		156	214	100		62	85	40		228	313	146		337	463	216
Exposed Ceilings B	27.65	2.94	1.37																							
Exposed Floors	29.80	2.73	0.17																							
Foundation Conductive Heatloss																										
Total Conductive	Heat Loss																									
	Heat Gain																									
Air Leakage	Heat Loss/Gain																									
Ventilation	Case 1																									
	Case 2																									
	Case 3	x																								
Heat Gain People																										
Appliances Loads		1 =.25 percent																								
Duct and Pipe loss																										
Level HL Total	22,170	Total HL for per room																								
Level HG Total	12,494	Total HG per room x 1.3																								

Level 4				A		A		A		A		A		A		A		A		A		A		A	
Run ft. exposed wall A	A																								
Run ft. exposed wall B	B																								
Ceiling height																									
Floor area	Area																								
Exposed Ceilings A	A																								
Exposed Ceilings B	B																								
Exposed Floors	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	11.62																						
East/West	3.55	22.93	29.56																						
South	3.55	22.93	22.50																						
Existing Windows	1.99	40.90	23.66																						
Skylight	2.03	40.10	88.23																						
Doors	4.00	20.35	2.75																						
Net exposed walls A	17.03	4.78	0.65																						
Net exposed walls B	8.50	9.58	1.29																						
Exposed Ceilings A	59.22	1.37	0.64																						
Exposed Ceilings B	27.65	2.94	1.37																						
Exposed Floors	29.80	2.73	0.17																						
Foundation Conductive Heatloss																									
Total Conductive	Heat Loss																								
	Heat Gain																								
Air Leakage	Heat Loss/Gain																								
	Case 1																								
	Case 2																								
	Case 3	x																							
Heat Gain People																									
Appliances Loads	1 =.25 percent																								
Duct and Pipe loss																									
Level HL Total	0																								
Level HG Total	0																								

Total Heat Loss	72,976	btu/h
Total Heat Gain	33,901	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

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: S38-20 - 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)	☒	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		
	☒	Forced air
	☐	Non forced air
	☐	Electric space heat (if over 10% of heat load)

House Type 9.32.3.1(2)		
I	☒	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	
VanEE	V150H75NS	Base	
127 cfm		Sones	or Equiv.

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

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

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

Supplemental Fans 9.32.3.5.			
Location	cfm	Model	Sones
Ens	50	XB50	0.3
Ens 2	50	XB50	0.3
Ens 3	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	November 18, 2022		



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

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

Page 7
Project # PJ-00041
Layout # JB-08592

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 S38-20 - 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):	<u>Package A1</u>	Table: <u>3.1.1.2.A</u>
--	-------------------	-------------------------

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 ☐ Propane ☐ Solid Fuel ☐ Oil ☐ Electric ☐ Earth Energy
Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area		Other Building Characteristics
Area of Walls = <u>499.15</u> m ² or <u>5372.9</u> ft ²	W, S & G % = <u>9.8%</u>	☐ Log/Post&Beam ☐ ICF Above Grade ☐ ICF Basement ☐ Slab-on-ground ☒ Walkout Basement ☒ Air Conditioning ☐ Combo Unit ☐ Air Sourced Heat Pump (ASHP) ☐ Ground Source Heat Pump (GSHP)
Area of W, S & G = <u>48.773</u> m ² or <u>525.0</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:
			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	59.22	Windows/Sliding Glass Doors
Ceiling without Attic Space	31	27.65	Skylights
Exposed Floor	31	29.80	Mechanicals
Walls Above Grade	22	17.03	Heating Equip.(AFUE)
Basement Walls	20.0ci	21.12	HRV Efficiency (SRE% at 0°C)
Slab (all >600mm below grade)	x	x	DHW Heater (EF)
Slab (edge only ≤600mm below grade)	10	11.13	DWHR (CSA B55.1 (min. 42% efficiency))
Slab (all ≤600mm below grade, or heated)	10	11.13	Combined Heating System

(1) U value to be provided in either W/(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
------------------------------	----------------------	---------------

Package:
Project:

Package A1
Bradford

System:
Model:

System 1
S38-20 - WOB

Air Leakage Calculations

Building Air Leakage Heat Loss					Building Air Leakage Heat Gain				
B	LRairh	Vb	HL ^Δ T	HLleak	B	LRairh	Vb	HG ^Δ T	HG Leak
0.018	0.432	42163	81.4	26666	0.018	0.106	42163	11	884

Air Leakage Heat Loss/Gain Multiplier Table (Section 11)					Levels			
Level	Level Factor (LF)	Building Air	Level Conductive Heat Loss (HL _{clevel})	Air Leakage Heat Loss Multiplier	1	2	3	4
Level 1	0.5	26666	13726	0.9714	(LF)	(LF)	(LF)	(LF)
Level 2	0.3		14843	0.5390	1.0	0.6	0.5	0.4
Level 3	0.2		15612	0.3416		0.4	0.3	0.3
Level 4	0		0	0.0000			0.2	0.2

HG LEAK		884	Air Leakage Heat Gain	
BUILDING CONDUCTIVE HEAT GAIN		17542	0.0504	

Levels this Dwelling			
3			

Ventilation Calculations

Ventilation Heat Loss					Ventilation Heat Gain			
C	PVC	HL ^Δ T	(1-E) HRV	HL _{bvent}	C	PVC	HG ^Δ T	HG _{bvent}
1.08	79.5	81.4	0.20	1398	1.1	79.5	11	944

Case 1					Case 1			
Ventilation Heat Loss (Exhaust only Systems)					Ventilation Heat Gain (Exhaust Only Systems)			
Case 1 - Exhaust Only					Case 1 - Exhaust Only		Multiplier	
Level	LF	HL _{bvent}	LVL Cond. HL	Multiplier	HG _{bvent}	944	0.05	
Level 1	0.5	1398	13726	0.05	Building	17542		
Level 2	0.3		14843	0.03				
Level 3	0.2		15612	0.02				
Level 4	0		0	0.00				

Case 2					Case 2			
Ventilation Heat Loss (Direct Ducted Systems)					Ventilation Heat Gain (Direct Ducted Systems)			
C	HL ^Δ T	(1-E) HRV	Multiplier		C	HG ^Δ T	Multiplier	
1.08	81.4	0.20	17.58		1.08	11	11.88	

Case 3					Case 3			
Ventilation Heat Loss (Forced Air Systems)					Ventilation Heat Gain (Forced Air Systems)			
Total Ventilation Load		HL _{bvent}	Multiplier		HG _{bvent}	HG*1.3	Vent Heat Gain	Multiplier
		1398	0.03		944	1	944	0.05

Foundation Conductive Heatloss Level 1	Level 1	2624	Watts	8953	Btu/h
Foundation Conductive Heatloss Level 2	Level 2		Watts		Btu/h
Slab on Grade Foundation Conductive Heatloss			Watts		Btu/h
Walk Out Basement Foundation Conductive Heatloss		191	Watts	651	Btu/h

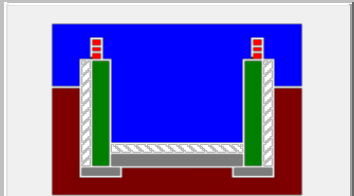
Envelope Air Leakage Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario ▼			
Region:	Bradford ▼			
Weather Station Location:	Open flat terrain, grass ▼			
Anemometer height (m):	10			
Local Shielding				
Building Site:	Suburban, forest ▼			
Walls:	Heavy ▼			
Flue:	Heavy ▼			
Highest Ceiling Height (m):	9.75			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Shallow			
House Volume (m ³):	1194.06			
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):		0.432		
Cooling Air Leakage Rate (ACH/H):		0.106		

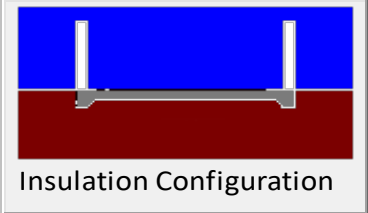
Residential Foundation Thermal Load Calculator

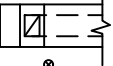
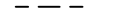
Supplemental tool for CAN/CSA-F280

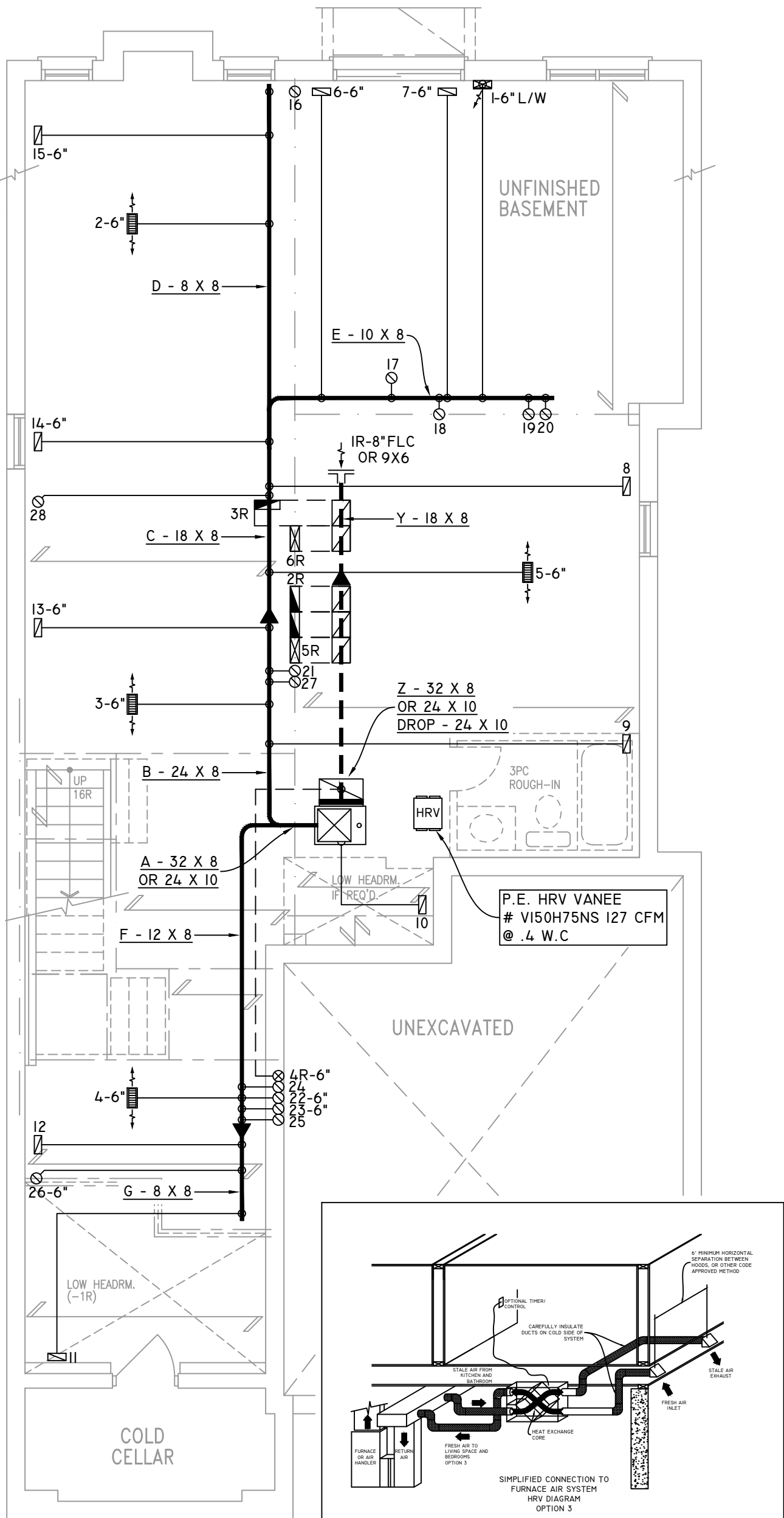
Weather Station Description		
Province:	Ontario	▼
Region:	Bradford	▼
Site Description		
Soil Conductivity:	High conductivity: moist soil	▼
Water Table:	Normal (7-10 m, 23-33 Ft)	▼
Foundation Dimensions		
Floor Length (m):	20.54	 Insulation Configuration
Floor Width (m):	5.37	
Exposed Perimeter (m):	42.67	
Wall Height (m):	3.05	
Depth Below Grade (m):	0.76	
Window Area (m ²):	0.56	
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):		2624

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):	9.70	 Insulation Configuration
Width (m):	1.27	
Exposed Perimeter (m):	12.50	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		191

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



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

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

INSULATE ALL DUCTS IN UNCONDITIONED SPACES MIN. R12

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

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

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

QUALIFICATION INFORMATION

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

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

SIGNATURE OF DESIGNER

PART. BASEMENT PLAN 'A','B'&'C'
-W.O.B. COND.

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.



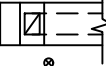
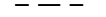
2985 DREW ROAD
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L4T 0A4 TEL: 905-671-9800
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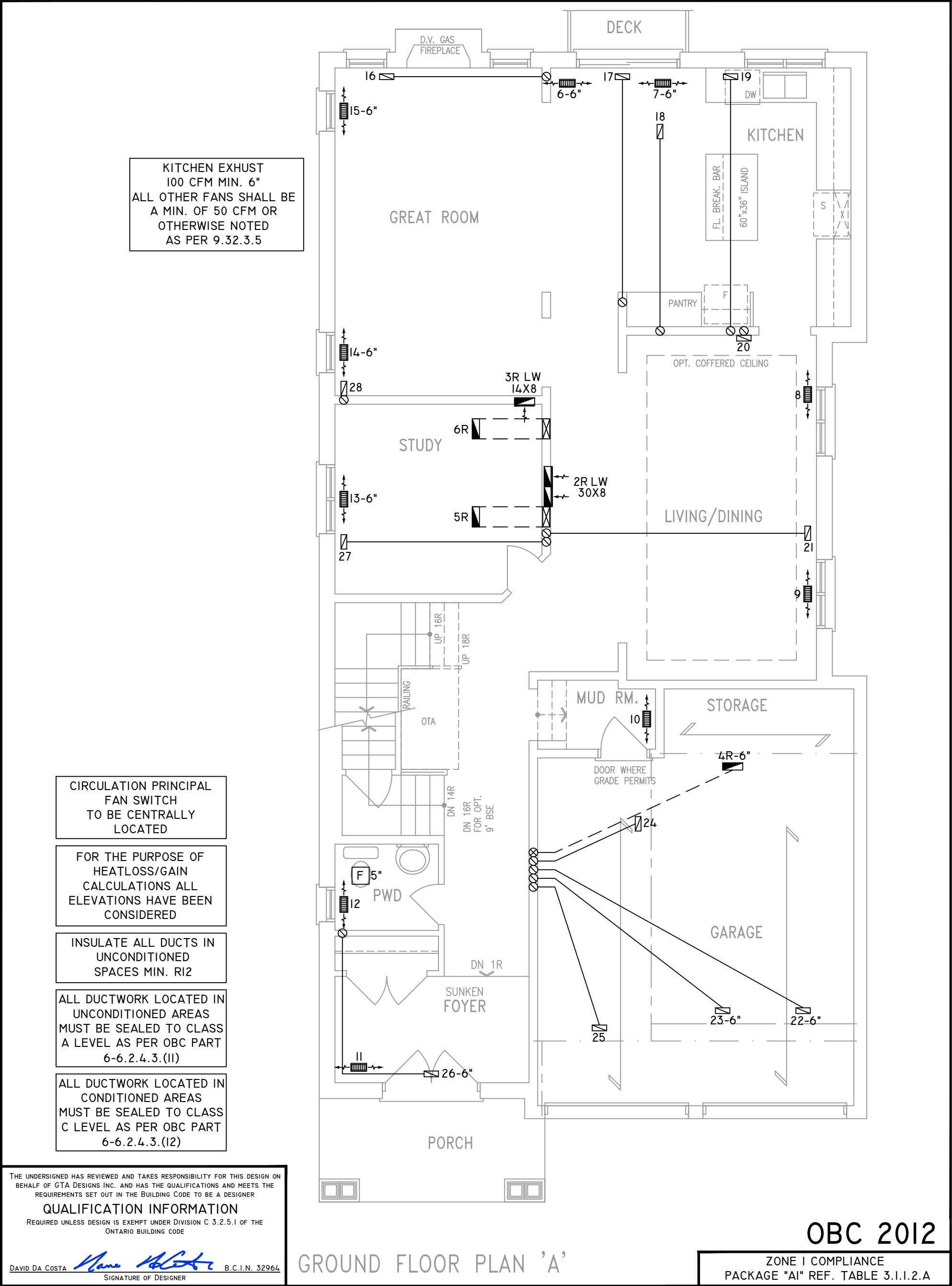
HEAT-LOSS	72,976	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	13	3	4
1ST FLOOR	10	2	2
BASEMENT	5	1	

FLOOR PLAN:	BASEMENT
DRAWN BY:	JL
CHECKED:	DD
LAYOUT NO:	JB-08592
SQFT	3262
DRAWING NO.	MI

DATE:	NOVEMBER 18, 2022
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-20 - WOB
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



NOTES
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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.
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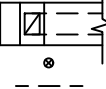
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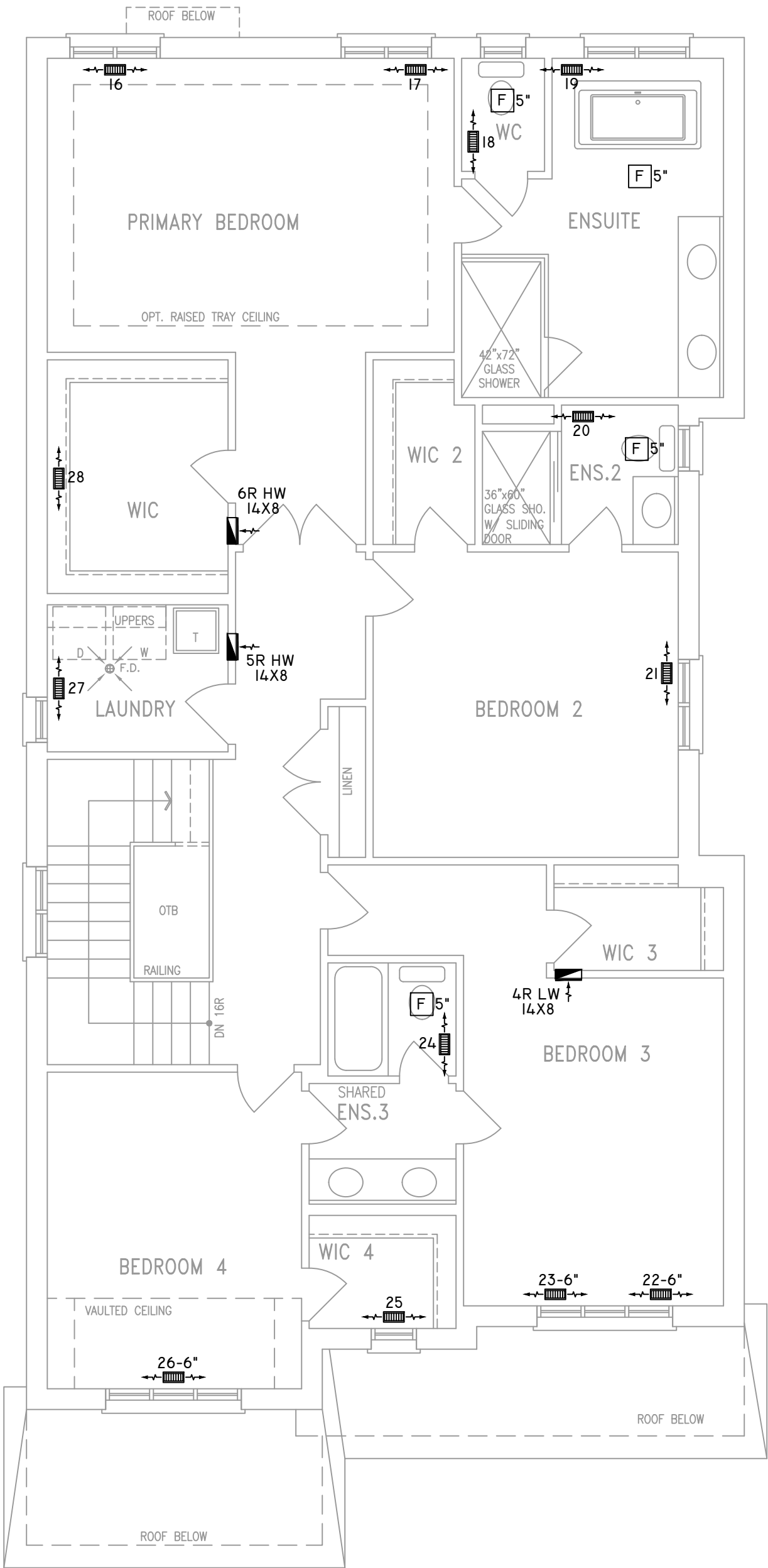
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FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	13	3	4
1ST FLOOR	10	2	2
BASEMENT	5	1	

FLOOR PLAN:		GROUND FLOOR
DRAWN BY:	CHECKED:	SQFT
JL	DD	3262
LAYOUT NO.	DRAWING NO.	
JB-08592	M2	

DATE:	NOVEMBER 18, 2022
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-20 - WOB
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



- FOR THE PURPOSE OF HEATLOSS/GAIN CALCULATIONS ALL ELEVATIONS HAVE BEEN CONSIDERED
- INSULATE ALL DUCTS IN UNCONDITIONED SPACES MIN. R12
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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

SECOND FLOOR PLAN 'A'

OBC 2012

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

NOTES

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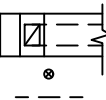
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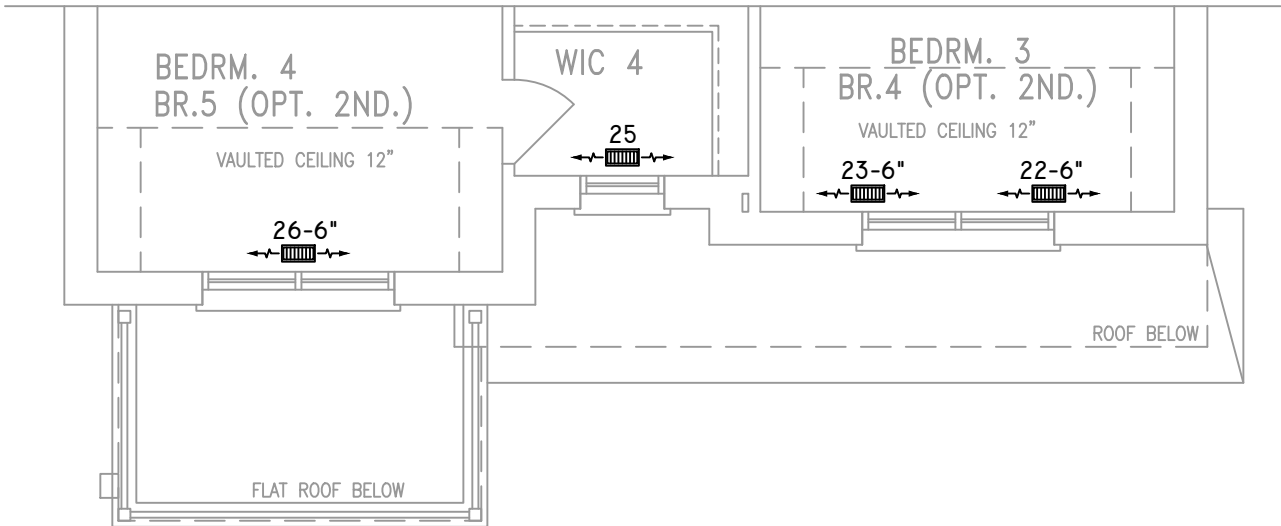
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UNIT MODEL	AMEC960803BNA	OR EQUAL.
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UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	13	3	4
1ST FLOOR	10	2	2
BASEMENT	5	1	

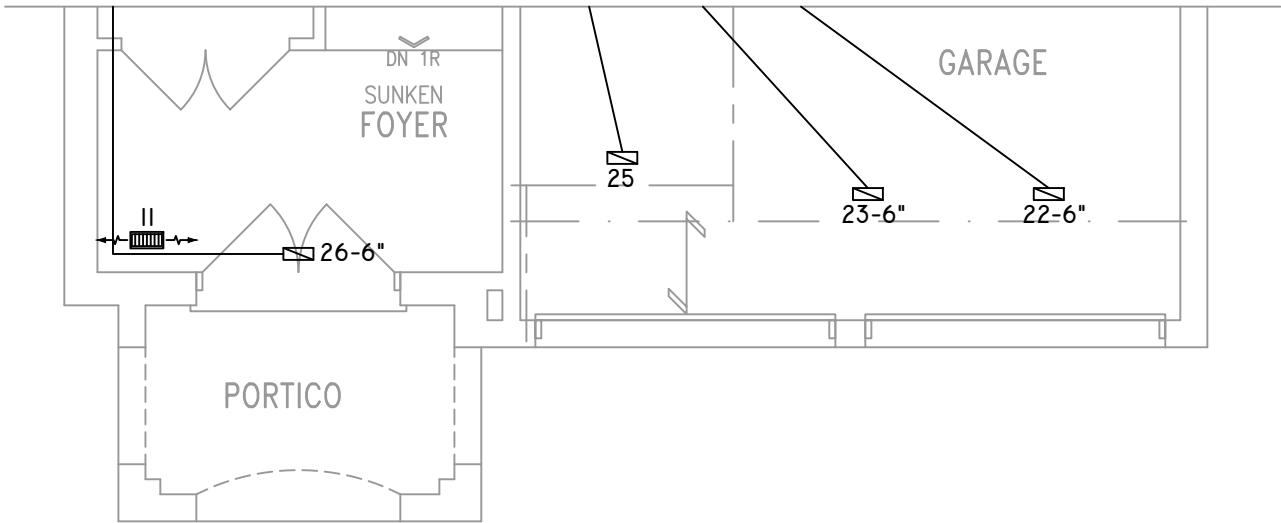
FLOOR PLAN: SECOND FLOOR		
DRAWN BY: JL	CHECKED: DD	SQFT 3262
LAYOUT NO. JB-08592	DRAWING NO. M3	

DATE:	NOVEMBER 18, 2022
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-20 - WOB
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

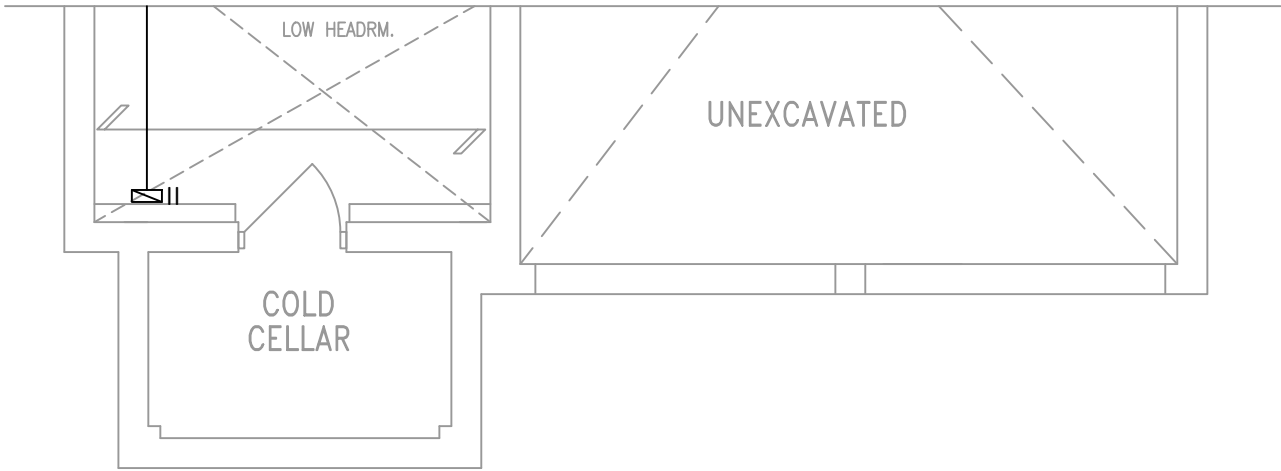
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN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



PARTIAL STD./OPT. SECOND FLOOR PLAN 'B'



PARTIAL GROUND FLOOR PLAN 'B'



PARTIAL BASEMENT PLAN 'B'

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

OBC 2012

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

NOTES

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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.

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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.



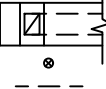
2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

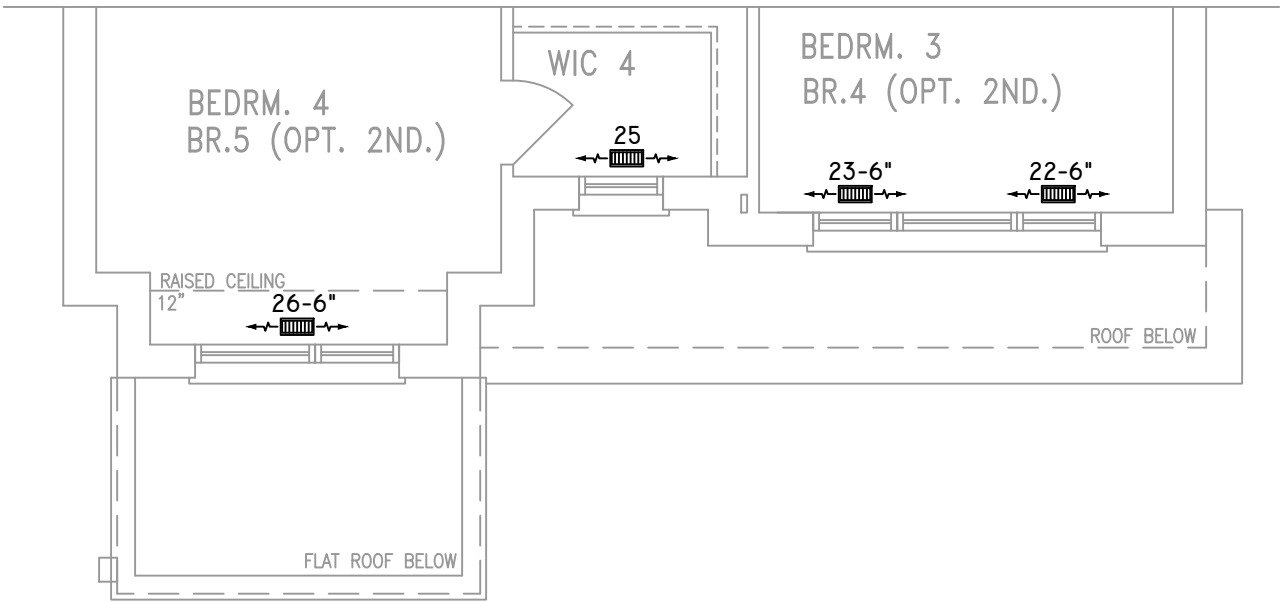
HEAT-LOSS	72,976	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	13	3	4
1ST FLOOR	10	2	2
BASEMENT	5	1	

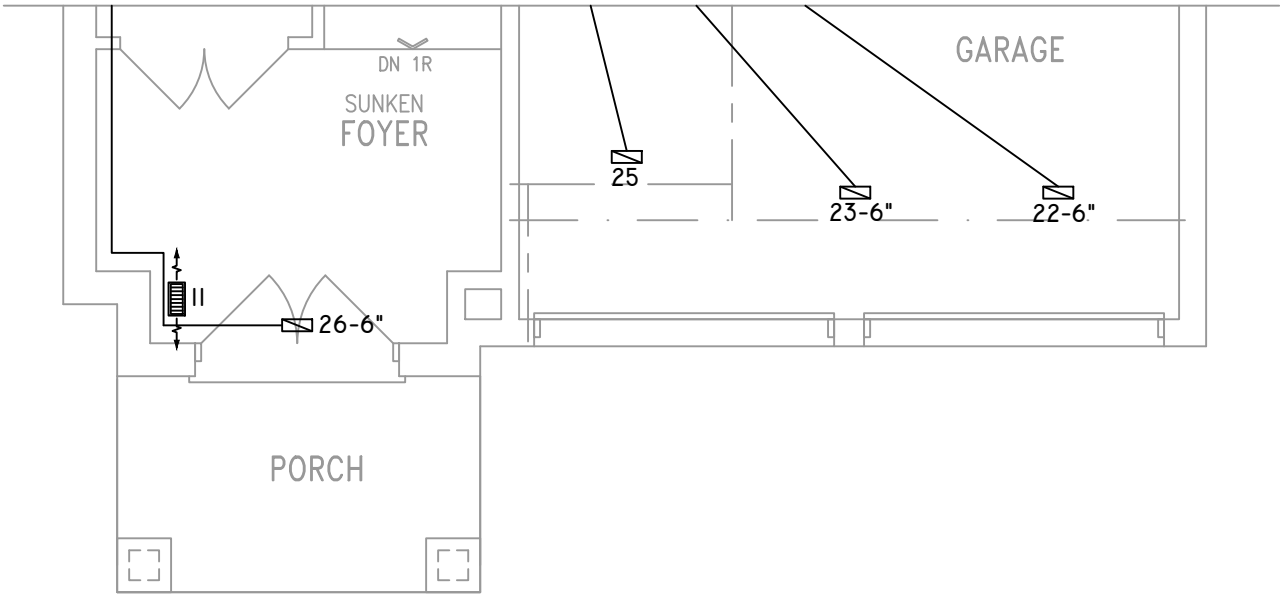
FLOOR PLAN: PARTIAL PLAN(S)		
DRAWN BY: JL	CHECKED: DD	SQFT 3262
LAYOUT NO. JB-08592	DRAWING NO. M4	

DATE:	NOVEMBER 18, 2022
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-20 - WOB
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

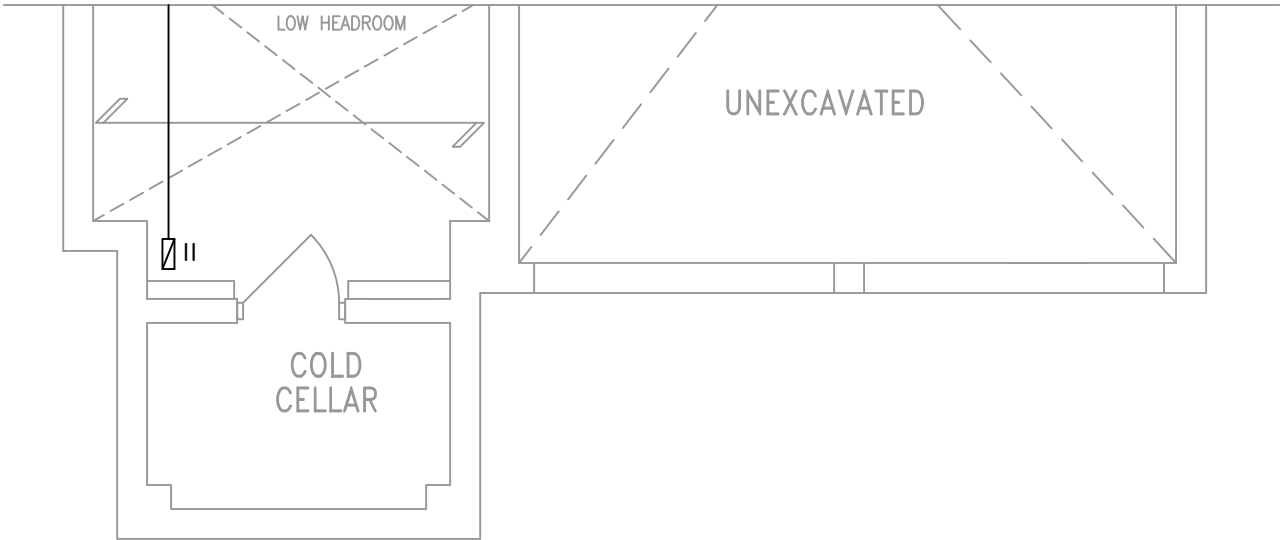
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN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



PARTIAL STD./OPT. SECOND FLOOR PLAN 'C'



PARTIAL GROUND FLOOR PLAN 'C'



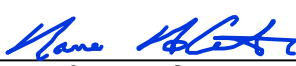
PARTIAL BASEMENT PLAN 'C'

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

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.



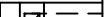
2985 DREW ROAD
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L4T 0A4 TEL: 905-671-9800
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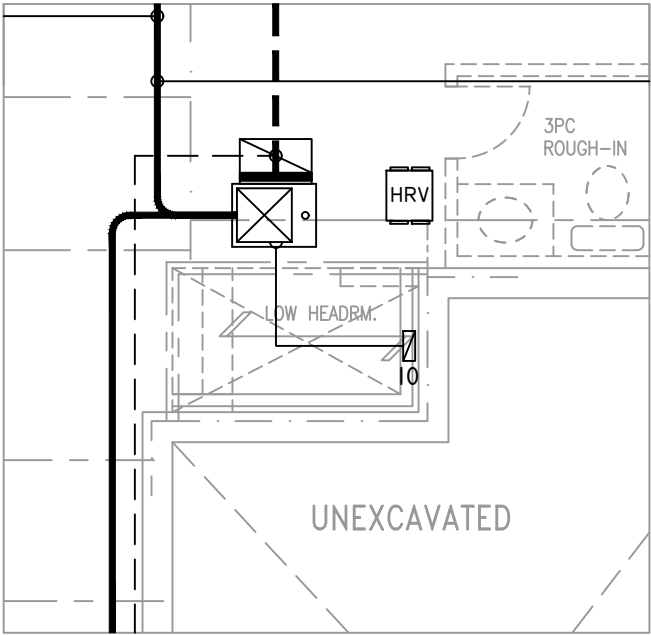
HEAT-LOSS	72,976	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	13	3	4
1ST FLOOR	10	2	2
BASEMENT	5	1	

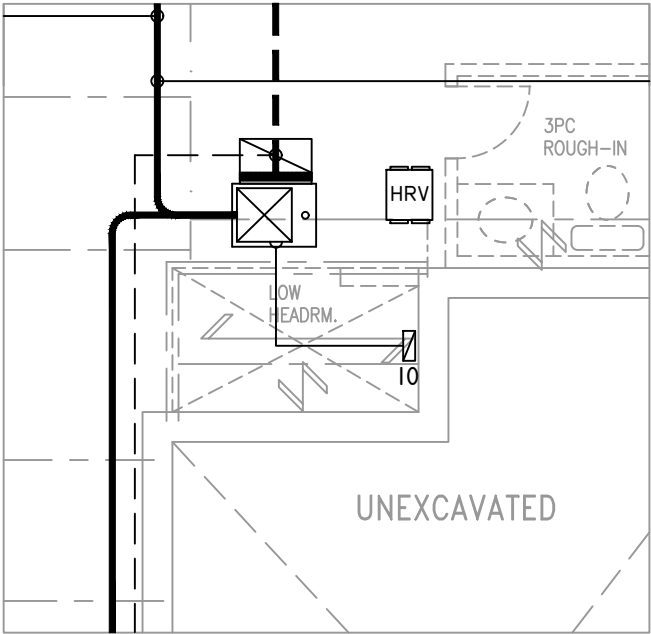
FLOOR PLAN: PARTIAL PLAN(S)	
DRAWN BY: JL	CHECKED: DD
LAYOUT NO. JB-08592	DRAWING NO. M5

DATE:	NOVEMBER 18, 2022
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-20 - WOB
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



PART. SUNKEN MUD ROOM
(2-3R)



PART. SUNKEN MUD ROOM (-1R)

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

OBC 2012

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

NOTES
INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.
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# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	13	3	4
1ST FLOOR	10	2	2
BASEMENT	5	1	

FLOOR PLAN: PARTIAL PLAN(S)		
DRAWN BY: JL	CHECKED: DD	SQFT 3262
LAYOUT NO. JB-08592	DRAWING NO. M6	

DATE:	NOVEMBER 18, 2022
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-20 - WOB
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"