



PHOENIX HOMES

LOT 272 SITE/GRADING PLAN
PATHWAYS PHASE 2

Bldg. Ht. _____ m
Lot coverage 0.0 %
Scale 1:250
Sod Area _____ m²
Asphalt Area _____ m²

THIS PLAN IS FOR REFERENCE ONLY AND IS PRELIMINARY IN NATURE, ALL DIMENSIONS SHOWN ARE APPROXIMATE. E.O&E.

CHECKED/APPROVED BY: T.L.MAK ENG.
MAY 22/22

Sleeved services required under retaining walls / No excess drainage to be directed
footings / garage, and are recommended under towards adjacent properties
porches, decks, and similar structures
USF to have min. 1.5m cover
Match existing elevations with Top of Foundation to be min. around foundation or
0.15m above final grade foundation shall be insulated

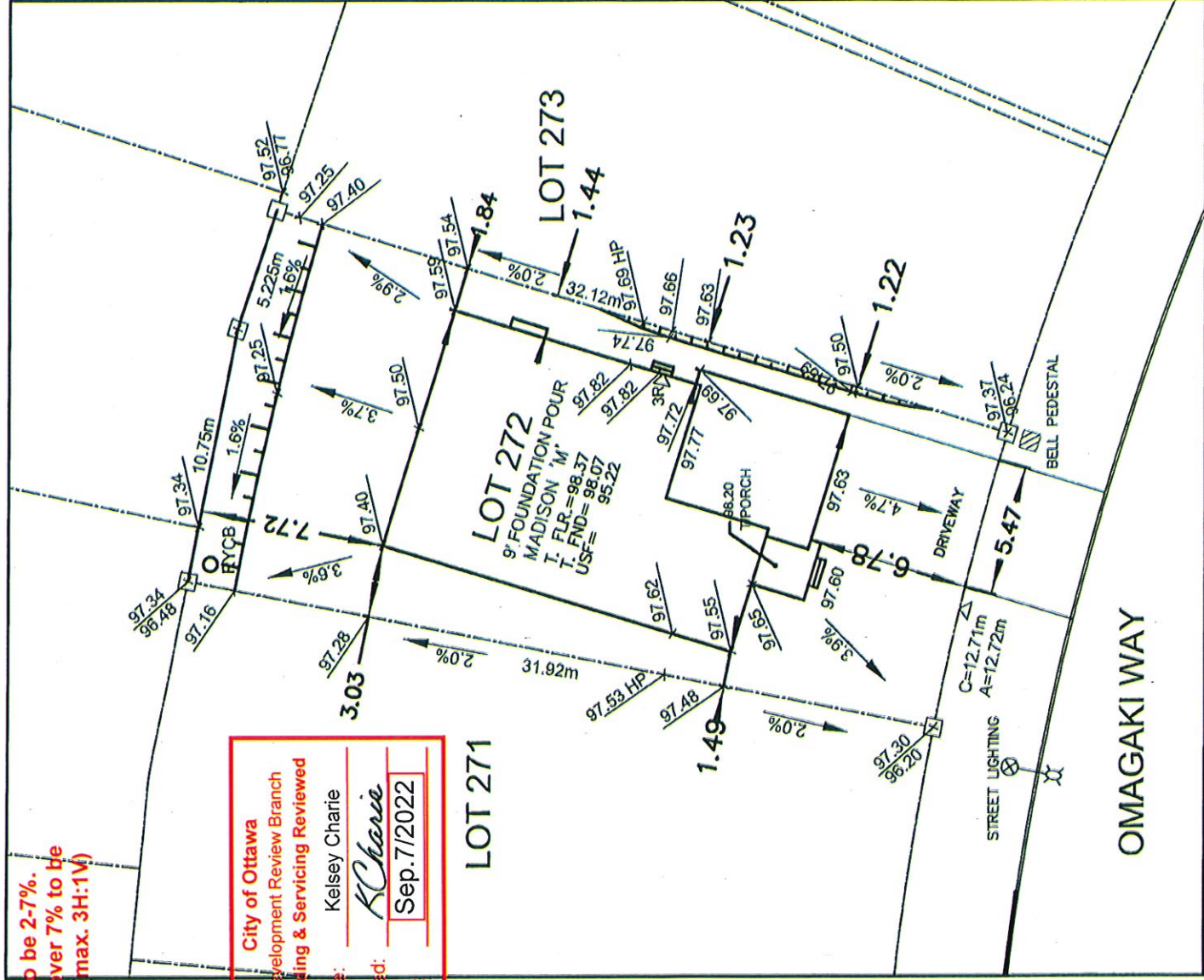
Grading to be 2-7%.
Grading over 7% to be
terraced (max. 3H:1V)

City of Ottawa
Development Review Branch
Grading & Servicing Reviewed

Name: Kelsey Charie

Signed: *K Charie*

Date: Sep.7/2022



Owner/Applicant
DCR/PHOENIX HOMES
Telephone # 723-9227
Plan # 4M-1618
Project name: PATHWAYS
Civic Address: 914 OMAGAKI WAY
House model: MADISON 'M'

LOT 272 **SITE/GRADING PLAN**
PATHWAYS PHASE 2

INDIVIDUAL LOT GRADING REVIEW SUMMARY FOR SITED
HOUSE AS COMPARED WITH OVERALL SUBDIVISION PLAN

Bldg. Ht. _____ m
Lot coverage 0.0 %
Scale 1:250
Sod Area _____ m²
Asphalt Area _____ m²

CHECKED/APPROVED BY: T.L.MAK ENG.
MAY 22/22

NOTE: THIS PLAN IS NOT A SURVEY PLAN OR SUBDIVISION
PLAN WITHIN THE MEANING OF PLANNING ACT.
THIS PLAN IS FOR REFERENCE ONLY AND IS PRELIMINARY IN NATURE, ALL
DIMENSIONS SHOWN ARE APPROXIMATE. E.O&E.

Mechanical Design Report

Low rise residential



Location of Installation	Address	House Builder PHOENIX
	Application Number	House Model (if applicable) MADISON 5BED
Installing Contractor	Name HARDING MECHANICAL	
	Address 2210 CAVANMORE RD	
	City OTTAWA	Postal Code KOA 1LO
	Telephone Number 613-831-2257	Fax Number 613-831-9011

SYSTEM DESIGN PARAMETERS

Combustion Appliances 9.32.3.1.(1)	Heating System
a) ☒ Direct vent (sealed combustion) only	☒ Forced Air
b) ☐ Positive venting induced draft (except fireplaces)	☐ Non-Forced Air (Other - _____)
c) ☐ Natural draft, B-vent or induced draft fireplace	☐ Electric Space Heat
d) ☐ Solid Fuel (including fireplaces)	☐ Radiant Floor Heat (attach pipe details)
e) ☐ No Combustion Appliances	☐ Geothermal (attach loop, pipe & well details)
	☐ High Velocity Residential (attach duct details)
House Type 9.32.3.1.(2)	Ventilation System
☒ I Type a) or b) appliances only, no solid fuel	☐ CAN/CSA-F326
☐ II Type I except with solid fuel (including fireplace)	☐ HRV - Exhaust Ducts / Forced Air System
☐ III Any Type c) appliance = Part 6 Design	☒ HRV - Simplified Connection to Forced Air System
☐ IV Electric space heat	☐ HRV - Full Ducting / Not Coupled to Forced Air System
☐ Other: No forced air = Option 4	☐ Part 6 Design (Other - _____)

EQUIPMENT DESIGN REQUIREMENTS

Total Ventilation Capacity 9.32.3.3.(1)				TOTAL
Master Bedroom	1	x	10 L/s	= 10 L/s
Unfinished Basement	1	x	10 L/s	= 10
Other Habitable Rooms	12	x	5 L/s	= 60
Principal Ventilation Capacity 9.32.3.4.(1)				80 T.V.C.
Master Bedroom	1	x	15 L/s	= 15
Other Bedrooms	4	x	7.5 L/s	= 30
				- 45 P.V.C.
Required Supplemental Ventilation Capacity (T.V.C. less P.V.C.) =				35

Furnace size: _____ GMEC960603BN 60,000 BTU'S _____ KJ

Air conditioner size: _____ GSX16030 2.5 TON _____ KJ (If provided / applicable)

Heating / Cooling Equipment sized according to heat loss/gain calculations of CAN/CSA F280: Yes

Geothermal Equipment designed according to CAN/CSA-C448.2:

Hydronic Equipment designed according to CAN/CSA-B214:

Duct (and pipe) schematic attached including sizes, runs and material used:

VENTILATION EQUIPMENT

Heat Recovery Ventilator

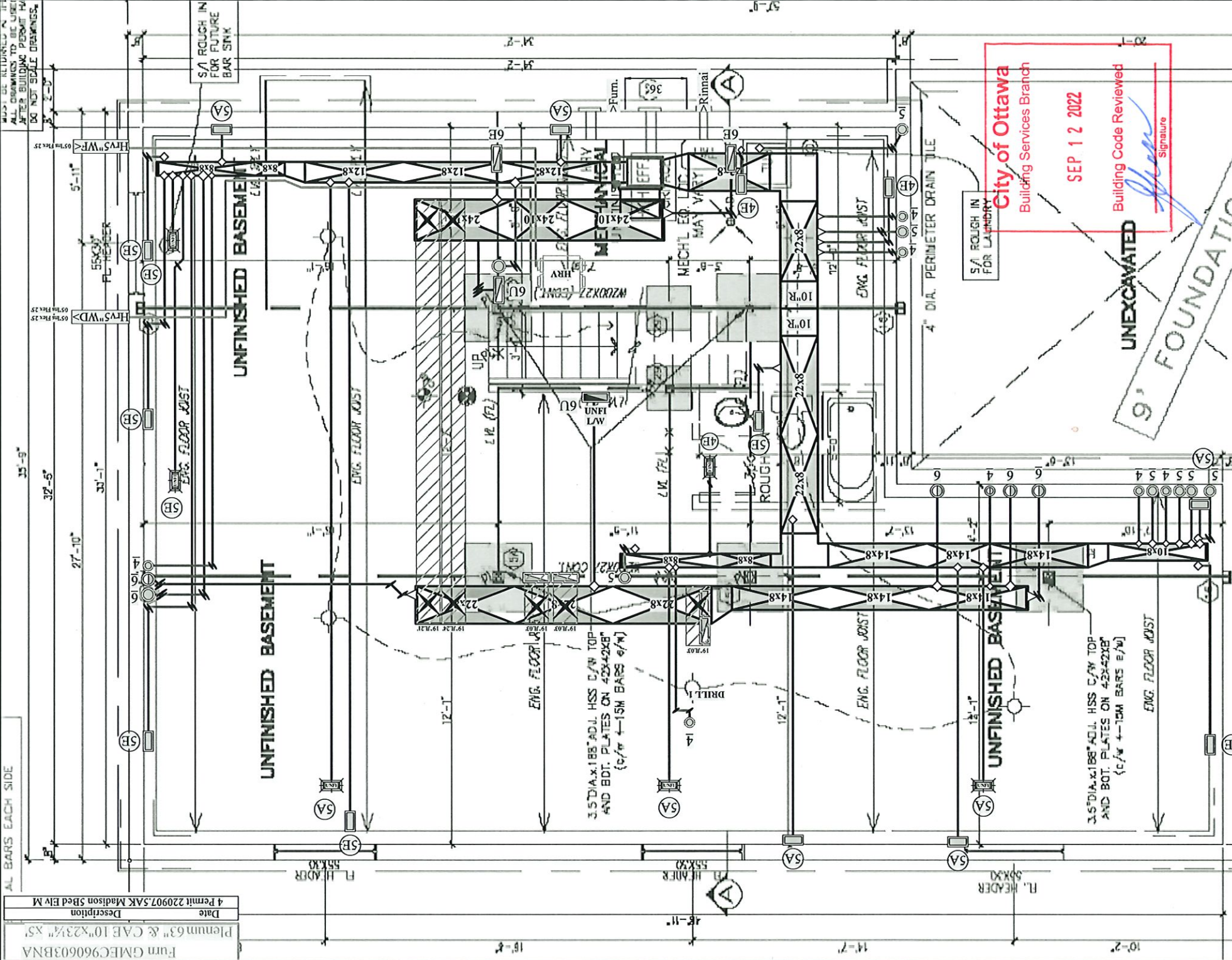
Model: CLEAN COMFORT VH30100RNC HRV

80 _____ L/s High 40 _____ L/s Low

No	City of Ottawa
No	Building Services Branch
Yes	SEP 12 2022
Building Code Reviewed	
Signature	

AL BARS EACH SIDE

Furn GMEC960603BNA	Plenum 63" & CAB 10"x23 1/4" x5'	Date	Description	4 Permit 220907.5AK Madison 5Bed Elv M
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[illegible]

EXCAVATED

UNEXCAVATED

City of Ottawa
Building Services Branch

SEP 12 2022

Building Code Reviewed

Signature

UNEXCAVATED

9' FOUNDATION POUR

[Signature]
Signature

SITE COPY

There are red notes on these plans, acceptance of the Building Permit includes acceptance of these red notes

24370

1" = 1' (Full Size)

FOR THE MAJOR
SECTION ONLY
ED. HAS PROVIDED.

4 Permit 220907.5AK Madison 5Bed Elv M
Description
Date
SEP 12 2022

City of Ottawa
Building Services Branch

SEP 12 2022

Building Code Reviewed

Signature

HOOD VENT
TO EXTERIOR

UP AIR SYSTEM

NO HEADERS

BUTLER'S
PANTRY

WALK-IN
PANTRY

KITCHEN
12'-0" X 20'-0"

LINE OF FLR ABV

LINE OF FLR ABV

OFFICE/DEN
8'-2" X 10'-2"

GREAT ROOM
20'-5" X 15'-0"

LIVING/DINING ROOM
12'-6" X 23'-0"

NUDROOM

FOYER

GARAGE
18'-0" X 20'-0"

PORCH

Room Name	Htg blt	Cfg cfm	Htg cfm
BASEMENT	283	63	10947
BATH	25	20	973
BEDROOM 2	76	43	2922
BEDROOM 3	56	47	2173
BEDROOM 4	56	49	2356
BEDROOM 5	42	34	1607
ENSUITE	32	19	1241
FOYER	52	31	2016
GREATROOM	119	142	4611
KITCHEN	86	337	3308
LAUNDRY	109	89	520
LIV/DINING ROOM	109	89	4215
MASTERBEDROOM	121	74	4684
MUD	23	4	896
OFFICE	27	15	1055
PDRM	25	15	956
STAIRS	5	4	212
W.C. 2	9	3	366
W.C. 1	1167	999	45180

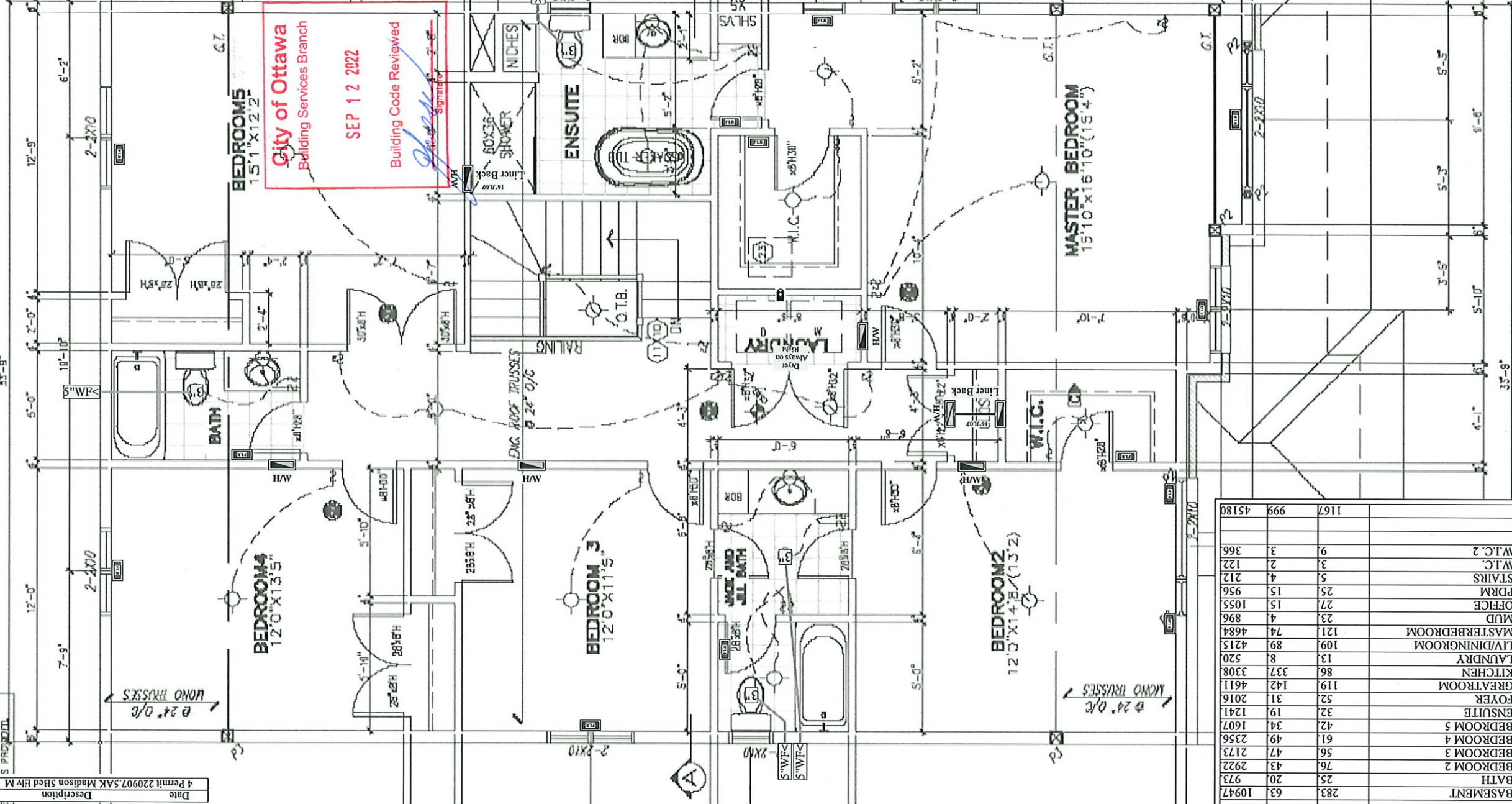
Linea Mobilis
24379

NOTE:

5' PROXIMITY
CITIZEN ONLY

5' PROXIMITY

Date	Description
4 Permit 220907.5AK Madison 5Bed Elv M	



City of Ottawa
Building Services Branch
SEP 12 2022
Building Code Reviewed
[Signature]

Room Name		Htg cfm	Clg cfm	Htg btu
BASEMENT		283	63	10947
BATH		25	20	973
BEDROOM 2		76	43	2922
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GREATROOM		119	142	4611
KITCHEN		86	337	3308
LAUNDRY		13	8	520
LIVING/DININGROOM		109	89	4215
MASTERBEDROOM		121	74	4684
MUD		23	4	896
OFFICE		27	15	1055
PDRM		25	15	956
STAIRS		5	4	212
W.C.		3	2	122
W.C. 2		9	3	366
W.C. 3		1167	999	45180

Linde Mechanical
24379

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

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%.

Application No:		For use by Principal Authority	
Model/Certification Number			

A. Project Information

Building number, street name	Unit number	Lot/Con
914 Omagaki Way		272
Municipality	Postal code	Reg. Plan number / other description
Findlay Creek		4M-1618

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

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

C. Project Design Conditions

Climatic Zone (SB-1):		Heating Equipment 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 = _____ m ² or 3513 ft ²		☐ Log/Post&Beam ☐ ICF Above Grade ☐ ICF Basement	
Area of W, S & G = _____ m ² or 482.78 ft ²		☐ Slab-on-ground ☐ Walkout Basement	
		☐ Air Conditioning ☐ Combo Unit	
		☐ Air Sourced Heat Pump (ASHP)	
		☐ Ground Sourced 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) & (6))					
☐ 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: _____		Building Code Reviewed SEP 12 2022
	☐ Table 3.1.1.4.C Required: _____		Permitted Substitution: _____		
	Required: _____		Permitted Substitution: _____		
Building Component	Minimum RSI / R values or Maximum U-Value ⁽¹⁾	Effective	Building Component	Efficiency Ratings	
Thermal Insulation	Nominal		Windows & Doors	Provide U-Value ⁽¹⁾ or ER rating	
Ceiling with Attic Space	R60		Windows/Sliding Glass Doors		25
Ceiling without Attic Space	R31		Skylights/Glazed Roofs		0.49
Exposed Floor	R31		Mechanicals		
Walls Above Grade	R22		Heating Equip.(AFUE)		96%
Basement Walls	R20 CI	R21.12	HRV Efficiency (SRE% at 0° C)		75%
Slab (all >600mm below grade)	--		DHW Heater (EF)		0.8
Slab (edge only ≤600mm below grade)	10		DWHR (CSA B55.1 (min. 42% efficiency))		1 # Showers ³
Slab (all ≤600mm below grade, or heated)	10		Combined Heating System		No

(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 the building code]

Qualified Designer Declaration of designer to have reviewed and take responsibility for the design work.		
Name	BCIN	Signature
Sandy Pollock	33536	
Sandy Pollock 2021.10.14 07:08:58 -04'00'		



Kollaard Associates
Engineers

210 Prescott Street
P.O. Box 189
Kemptville, Ontario K0G 1J0

Civil • Geotechnical •
Structural • Environmental •
Hydrogeology •

(613) 860-0923

FAX: (613) 258-0475

May 12, 2022

Kollaard File # 220022 – LOT272

Phoenix Homes
18A Bentley Avenue
Ottawa, Ontario
K2E 6T8

Attn: Sandy Pollock
Tel: 613-723-9227 x 165
Email: spollock@phoenixhomes.ca



Re: Proposed Single Family Dwelling, Lot # 272 Omagaki Way, Pathways, City of Ottawa, Kollaard Associates File # 220022

With regard to structural issues only, Kollaard Associates has reviewed the following drawings:

- Phoenix Homes, Lot # 271 Pathways, Pages # 1, 2, 3AC, 4AC, 5D, 6D, 7D, 8A, Dated May 12, 2022
- Grandor Lumber Inc., Upper Roof Truss Layout, Madison "M", Dated 16/12/2020
- Grandor, 2nd Floor Joist Layout, Pathways PWY2-271, Dated 05/11/2022
- Grandor, 1st Floor Joist Layout, Pathways PWY2-271, Dated 05/11/2022

Kollaard Associates offers the following comments:

Second Floor Plan – Pages # 4AC:

1. It is the opinion of Kollaard Associates that the proposed lintels and supporting posts shown on Phoenix Homes Pages # 4AC are adequate.
2. Posts supporting girders may consist of built up 2x6 posts as indicated on Phoenix Homes Pages # 4AC and are laterally supported by plywood or OSB sheathing (i.e. posts form part of sheathed exterior walls unless noted).
3. Truss design is by others.

Ground Floor Plan – Pages # 3AC:

4. It is the opinion of Kollaard Associates that the proposed lintels, beams and supporting posts shown on Phoenix Homes Pages # 3AC are adequate
5. Ramset a 2x6 to the top flange of all steel beams to attach the above framing, floor joists and flush LVL beams.
6. Truss design is by others.
7. Floor joist design and flush LVL beams within the floor structure are by the manufacturer.



Professional Engineers
Ontario

Authorized by the Association of Professional Engineers
of Ontario to offer professional engineering services.

Basement Plan – Pages # 2:

8. It is the opinion of Kollaard Associates that the proposed steel beams steel posts shown on Phoenix Homes Pages # 2 are adequate.
9. The front porch slab reinforcement described on Phoenix Homes Pages # 1 is adequate.
10. The foundation walls at the bottom of the window openings that exceed 47¼" in width (or the sum of the widths of the window openings exceed 25% of the length of the wall) are considered to be laterally unsupported as per 2012 OBC 9.15.4.3. The reinforcement around the window openings noted on Phoenix Homes Sheets # 2 are adequate.
11. The remaining proposed foundation walls conform to 2012 OBC Table 9.15.4.2.A. ensuring that the grade difference between the basement slab and the exterior grade (including the garage slab) does not exceed 7'-6½" for the full height 8'-10" foundation walls.
12. The proposed strip footings and interior pad footings shown on Phoenix Homes Page # 2 and noted on Phoenix Homes Page # 1 are adequate.
13. The details for the rear bracket supporting the landing are designed and approved by others (Estructura Inc. Dwg. # SK-1, Stamp Date: December 6, 2019).
14. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer. The posts supporting the flush LVL lintels shown on Phoenix Homes Pages # 2 are adequate.

General Notes:

15. All gravity loads to be carried to foundation through solid blocking.
16. Truss design is by others.
17. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer.
18. The self supporting stairs are to be designed by the stair manufacturer.
19. All dimension lumber, except non-load bearing 8 ft 2x6 studs to be No.2 grade SPF or better.
20. Non-load bearing 8 ft 2x6 studs to be No.3 or Stud grade SPF or better.
21. All guards to be as per OBC SB-7, unless otherwise mentioned and designed by others.
22. All brick lintels to be as per OBC Table 9.20.5.2.B.
23. Unless otherwise noted, LVL to be 1.8E 3000Fb LVL (Canadian Limit States bending strength of at least 39.5 MPa) with 1¾" nominal width or better.
24. Pemco Steel adjustable posts are designed and approved by the manufacturer. The adjustable steel posts are designed for a maximum allowable load of 106.8 kN at a maximum height of 9'-3".
25. All 3" x 3" x 3/16" HSS posts c/w 6" x 6" x 3/8" top and bottom bearing plates.
26. The assumed soil bearing resistance of 125 kPa is to be verified prior to construction.

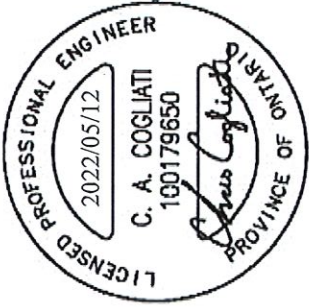




27. Note that the truss manufacturer/floor joist supplier has sized the flush LVL beams and girder trusses shown on the building drawings. The comments provided by Kollaard Associates in this report are based in part on the design indicated in the truss and floor layouts. If a different truss and/or floor layout is used in construction, comments made in this report may no longer be valid. Provide Kollaard Associates with the full truss package prior to construction.
28. Comments provided in this report are made in consideration of Part 9 and Part 4 (where applicable) of the 2012 OBC as amended.
29. This report constitutes a review of the structural information indicated on the building plans cited in this report for the client indicated above.

We trust this letter provides sufficient information for your present purposes. If you have any questions concerning this letter please do not hesitate to contact our office.

Sincerely,
Kollaard Associates Inc.



Christopher Cogliati, P.Eng.

