



**Kollaard Associates**

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October 31, 2022 (Revised)

Kollaard File # 220020 – LOT50

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, 300 Antler Court, Lot # 50 White Tail Ridge, Arnprior, Kollaard Associates File # 220020**

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

- Phoenix Homes, Lot # 50, White Tail Ridge, Pages # 1 to 8, Dated 31/10/2022
- Grandor, High Roof Truss Layout, Newington 'D', WTR-3 Lot 50, Dated 05/06/2022
- Grandor, Low Roof Truss Layout, Newington 'D', WTR-3 Lot 50, Dated 05/06/2022
- Grandor, 2<sup>nd</sup> Floor Joist Layout, WTR3-50, Dated 06/14/2021
- Grandor, 1<sup>st</sup> Floor Joist Layout, WTR3-50, Dated 06/14/2021

Kollaard Associates offers the following comments:

Second Floor Plan – Pages # 4:

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

Ground Floor Plan – Pages # 3:

5. It is the opinion of Kollaard Associates that the proposed lintels, beams and supporting posts shown on Phoenix Homes Pages # 3 are adequate



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of Ontario to offer professional engineering services.

6. Ramset a 2x6 to the top flange of all steel beams to attach the above framing, floor joists and flush LVL beams.
7. The proposed web packing of the steel beam detailed on Phoenix Homes Sheet # 8 is adequate.
8. Truss design is by others.
9. Posts supporting girders may consist of built up 2x6 posts as indicated on Phoenix Homes Pages # 3 and are laterally supported by plywood or OSB sheathing (i.e. posts form part of sheathed exterior walls unless noted).
10. Floor joist design and flush LVL beams within the floor structure are by the manufacturer.

Basement Plan – Pages # 2:

11. It is the opinion of Kollaard Associates that the proposed steel beams steel posts shown on Phoenix Homes Sheet # 2 are adequate.
12. It is the opinion of Kollaard Associates that the proposed deck beams, posts, joists, sonotubes and ledger connection shown on Phoenix Homes Sheet # 2 are adequate.
13. The front porch slab reinforcement described on Phoenix Homes Sheet # 1M is adequate.
14. As noted on Phoenix Homes Sheet # 2, the framed walls supporting the intermediate landing may be supported by the basement slab.
15. 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 is adequate to withstand the lateral earth pressures.
16. 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 7'-10" foundation walls.
17. The proposed strip footings, interior pad footings and exterior pad footings shown on Phoenix Homes Page # 2 and noted on Phoenix Homes Sheet # 1 are adequate.
18. 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 Sheet # 2 are adequate.

General Notes:

19. All gravity loads to be carried to foundation through solid blocking.
20. Truss design is by others.
21. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer.
22. The self supporting stairs are to be designed by the stair manufacturer.
23. All dimension lumber, except non-load bearing 8 ft 2x6 studs to be No.2 grade SPF or better.
24. Non-load bearing 8 ft 2x6 studs to be No.3 or Stud grade SPF or better.

25. All guards to be as per OBC SB-7, unless otherwise mentioned and designed by others.
26. All brick lintels to be as per OBC Table 9.20.5.2.B.
27. Unless otherwise noted, LVL to be 1.8E 3000Fb LVL (Canadian Limit States bending strength of at least 39.5 MPa) with 1 $\frac{3}{4}$ " nominal width or better.
28. 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".
29. All 3" x 3" x 3/16" HSS posts c/w 6" x 6" x 3/8" top and bottom bearing plates.
30. The assumed soil bearing resistance of 100 kPa is to be verified prior to construction.
31. 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.
32. Comments provided in this report are made in consideration of Part 9 and Part 4 (where applicable) of the 2012 OBC as amended.
33. 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.