

#### LONDON LOCATION

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**BLR Drafting & Design** Attn: Bree McGucken

SBM-19-1483 June 17, 2025

# 5161 Jones Baseline Guelph, Ontario

Bree;

As requested, we have completed our review of the structural items listed in this report. An allowable soil bearing pressure of 2000psf was assumed. All structural steel to have a  $F_V$ =345MPa or greater. All lumber to be S-P-F No.1/No.2 or better. All structural composite lumber (SCL) to be 2.0E with  $F_b$ =2950 (USA ASD) or  $F_b$ =5450 (Canadian LSD) or greater. Inspections of the items in this report are by others. Please contact us if additional engineering or inspections are required. See structural specification sheet SS1 attached for structural requirements, material specifications, loading, and assumptions. This report is for the above referenced project only and cannot be used for similar applications on other projects without written consent from Strik Baldinelli Moniz.

#### <u>Items</u>

## 1. Ridge Beam at Addition (front to back)

3-1.75"x16" 2.0E LVL

Factored reaction @ ends: 8.2 kips

Approx. span (centre-to-centre) = 22'-3"

Provide a 4-2x6 full height post at front support down to Item 3, and a short 4-2x4 or 4-2x6 post down to Item 2 at rear support.

### 2. Existing Living Room Door Header (left to right)

3-1.75"x9.25" 2.0E LVL

or 2-1.75"x9.25" 2.0E LVL

Factored reaction @ ends: 8.0 kips

Approx. span (centre-to-centre) = 9'-1"

Provide 2 jacks, 2 kings at each end with solid blocking in joist space down to existing foundation wall.

# 3. New Addition Front Deck Beam (left to right)

3-2x12

Factored reaction @ ends: 3.6 kips

Factored reaction @ interior: 16.4 kips

Approx. span (centre-to-centre) = 11'-5" + 11'-5" (2 separate spans)

Provide a 6x6 post at each support on a 12" diameter pier. Piers to bear on a 24"x24"x10" pad footing or belled to 24" diameter at the base at exterior supports and on a 32"x32"x12" concrete pad footing or belled to 36" diameter at interior support. Piers to be founded minimum 4' below finished grade on native undisturbed soil.

### 4. New Addition Front Side Deck Beams (2) (front to back)

3-2x12

Factored reaction @ ends: 3.4 kips

or 2-1.75"x9.25" 2.0E LVL

Approx. span (centre-to-centre) = 10'-0"

Provide a 6x6 post at each support on a 12" diameter pier, shared with Item 3 at front support and Item 5 at the rear support. Rear support pier to bear on a 28"x28"x12" concrete pad footing or belled to 32" diameter at the base. Piers to be founded minimum 4' below finished grade on native undisturbed soil.

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# 5. New Addition Rear Left Side Deck Beam (front to back)

3-2x12 or

Factored reaction @ ends: 5.5 kips

2-1.75"x9.25" 2.0E LVL

Approx. span (centre-to-centre) = 10'-3" + 2'-0" (cantilevered at end)

Provide a 6x6 post at each support on a 12" diameter pier, shared with Item 4 at front support. Rear support pier (closest to house) to bear on a a 24"x24"x10" pad footing or belled to 24" diameter at the base. Piers to be founded minimum 4' below finished grade on native undisturbed soil or at the same elevation as the existing building footings.

### 6. New Addition Rear Right Side Deck Beam (front to back)

3-2x12 or

2-1.75"x9.25" 2.0E LVL

Factored reaction @ ends: 6.9 kips

Approx. span (centre-to-centre) = 10'-3" + 2'-0" (cantilevered at end)

Provide a 6x6 post at each support on a 12" diameter pier, shared with Item 4 at front support. Rear support pier (closest to house) to bear on a 24"x24"x10" pad footing or belled to 24" diameter at the base. Piers to be founded minimum 4' below finished grade on native undisturbed soil or at the same elevation as the existing building footings.

We trust this report meets your satisfaction; if you need further clarification please do not hesitate to contact us.



Regards,

Strik, Baldinelli, Moniz Ltd.

lanning • Civil • Structural • Mechanical • Electrical

Kevin Flanagan, P.Eng Structural ENG III, Associate I