



STRIK
BALDINELLI
MONIZ

PLANNING • CIVIL • STRUCTURAL • MECHANICAL • ELECTRICAL

SHADOW IMPACT STUDY

PROPOSED 6 STOREY RESIDENTIAL APARTMENT BUILDING

415-421 BOLER RD, LONDON, ONTARIO

LONDON LOCATION

1599 Adelaide Street N Unit 301
London, ON, N5X 4E8
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KITCHENER LOCATION

132 Queen St. S. Unit 4
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City of London
300 Dufferin Ave.
London, ON, N6B 1Z2

Attn: Current Planner, Community & Strategic Planning, City of London

**Re: Shadow Impact Study in support of Zoning Amendments
415-465 Boler Road, London, ON**

Dear Current Planner,

Strik, Baldinelli, Moniz Ltd, on behalf of Patrick David Trotier Architect, has prepared the following Shadow Impact Study, in support of the Site Plan application documents requested by the City of London Planning Department.

1 Project Overview

Our understanding is the City of London does not have formal Shadow Impact Study guidelines in place. As a result, SBM has employed the City of Waterloo Shadow Study guideline in the basis of this report. The City of Waterloo guideline has been widely accepted in many other municipalities, including, St. Thomas, and Central Elgin.

- As a principle, at least 50% or more of any property should not be shaded for more than two interval times (a 4-hour equivalency); or
- As a principle, at least 50% of any property should be in full sun for at least two interval times (a 4-hour equivalency)

The Shadow Study was prepared to reflect the proposed building massing and the latest concept site plan. The following includes an assessment of the shadows cast by the proposed development in consideration of the guidelines and the existing permissions (existing zones).

2 SOLAR STUDY OVERVIEW

2.1 Spring/Fall Equinox (March/September)

During the Spring & Fall Equinox the proposed building mass will have shade impact on the residential properties to the East & West of the proposed building at sunrise/sunset. Each of the impacted areas will be shade covered for no more than one-time interval (2-hour equivalent), which is within the guidelines stated above. Other impacts include a portion of Boler Rd. for the 2-hour period prior to sunset, when the solar apex is at its lowest.



March 21 – 10am



March 21 – 12pm



March 21 – 2pm



March 21 – 4pm



March 21 – 6pm

2.2 Summer Solstice (June)

During the Summer Solstice the proposed building mass will have shade impact on the residential properties to the East & West of the proposed building at sunrise/sunset. Each of the impacted areas will be shade covered for no more than one-time interval (2-hour equivalent), which is within the guidelines stated above. Other impacts include a portion of Boler Rd. for the 2-hour period prior to sunset, when the solar apex is at its lowest.



June 21 – 10am



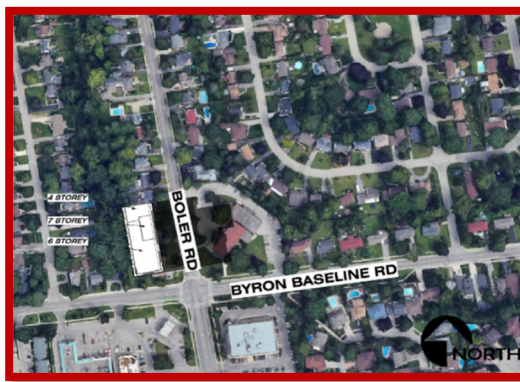
June 21 – 12pm



June 21 – 2pm



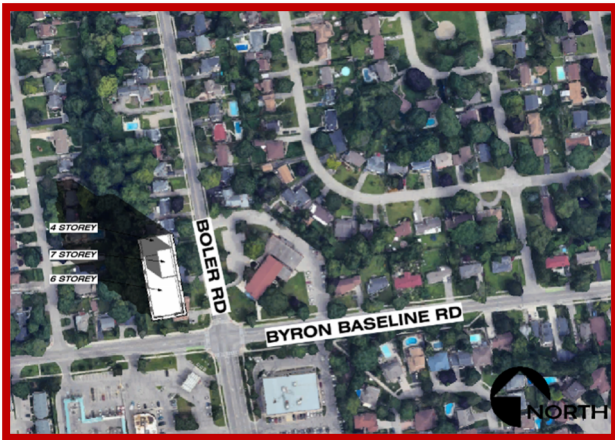
June 21 – 4pm



June 21 – 6pm

2.3 Winter Solstice (December)

During the Winter Solstice the proposed building mass will have a shade impact on the adjacent residential properties. Each of the impacted areas will be shade covered for no more than one-time interval (2-hour equivalent), which is within the guidelines stated above. Other impacts include a portion of Boler Rd. for no more than one-time interval (2-hour equivalent).



December 21 - 10am



December 21 - 12pm



December 21 - 2pm



December 21 - 4pm

3 CONCLUSION

The building will propose some shading impacts to the adjacent properties and the Boler Rd. Corridor. However, it is in our opinion that the impacts will generally result in less than 50% of the surrounding properties being shaded for no more than two-time intervals (4-hour equivalent), except during the Winter Solstice which provides a unique challenge due to the minimal available daylight and lower solar apex. However, all time periods are in accordance to the City of Waterloo Shadow Guideline.

Respectfully submitted,

Strik, Baldinelli, Moniz Ltd.

Planning • Civil • Structural • Mechanical • Electrical



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