

SHADOW IMPACT STUDY

PROPOSED 8 STOREY RESIDENTIAL APARTMENT BUILDING. 80-82 BASELINE RD. W., LONDON, ONTARIO

LONDON LOCATION

1599 Adelaide Street N. Unit 301 London, Ont, N5X 4E8 P: 519.471.6667 KITCHENER LOCATION

1415 Huron Rd., Unit 225 Kitchener, Ont, N2R 0L3 P: 519.725.8093

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LONDON LOCATION

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City of London 300 Dufferin Ave. London, Ontario N6B 1Z2 March 28, 2024 SBM-17-1164

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

Re: Shadow Impact Study in support of Zoning Amendments

80-82 Baseline Rd. W., London, ON

Dear Current Planner,

Strik, Baldinelli, Moniz Ltd, on behalf of Patrick David Trottier, Architect, has prepared the following Shadow Impact Study, in support of the Site Plan application documents requested by 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 zoning).

2 SOLAR STUDY OVERVIEW

2.1 Spring/Fall Equinox (March/September)

During the Spring & Fall Equinox the proposed building mass will have a shade impact on the residential townhomes to the East as well as the driveways of the property to the North/West of the proposed building. 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.



March 21 - 10am



March 21 - 12pm



March 21 - 4pm



March 21 - 6pm

2.2 Summer Solstice (June)

During the Summer Solstice the proposed building mass will only have a shade impact on the driveways/parking lots of adjacent properties to the North, East & West of the proposed building. 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 Baseline Rd. W. for no more than one-time interval (2-hour equivalent) which is within the guidelines stated above.



June 21 - 10am



June 21 - 12pm



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 properties to the North, West & East of the proposed building. Each of the impacted areas will be shade covered for no more than two-time interval (4-hour equivalent), which is within the guidelines stated above.



December 21 - 10am



December 21 - 12pm



December 21 – 2pm



December 21 - 4pm



December 21 - 6pm

3 **CONCLUSION**

The building will propose some shading impacts to the adjacent properties and the Baseline Rd. W. Corridor. However, it is in our opinion that the impacts will generally result in less than 50% of 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.

Civil • Structural • Mechanical • Electrical

Tomislav Tomljenovic, C.Tech., AATO Intern Associate Associate II, Structural/Building Design Division Manager