
May 7, 2026



Margaret Potter, Senior Planner
Community Services Department
City of Owen Sound
808 2nd Avenue East
Owen Sound, ON, N4K 2H4

Dear Ms. Potter,

**Re: East Court Retirement Residences – Shadow Study Addendum
1301 15th Avenue East, Owen Sound
TBG Project # 26410**

Further to the City's comments dated April 23, 2026 regarding the Shadow Study submitted in support of the Zoning By-law Amendment application for the above-noted lands, this letter provides an addendum confirming how the updated analysis prepared by BIMstudio Inc. addresses the City's Shadow Study Terms of Reference.

As requested, the revised study includes a quantitative assessment of shadow impacts based on the City's performance criteria, namely:

- i. that at least 50% of a property is not shaded for more than two (2) interval times (equivalent to four hours), or
- ii. that at least 50% of a property is in full sun for at least two (2) interval times.

The updated shadow study applies a cumulative (continuous) shadow overlay approach across the prescribed study dates and time intervals (March 21, June 21, September 21, and December 21 at two-hour increments).

The updated shadow study demonstrates that the proposed East Court Retirement Residences development satisfies the City of Owen Sound's quantitative shadow performance criteria.

Specifically, the analysis confirms that the proposal does not result in more than 50% of the Subject Site or any surrounding property being shaded for more than two interval times (equivalent to four hours) and correspondingly maintains at least 50% sunlight access across the evaluated properties for the required interval periods.

As outlined in the study, the highest impact conditions were tested during low-angle afternoon and evening periods across the spring, summer, fall, and winter test dates, with the greatest net new shadow impact identified at approximately 22.4% of the property area at 1100 16th Avenue East during the September 21st 4:00 PM–6:00 PM interval. All other tested properties and intervals similarly remained well below the City's 50% threshold.

The updated shadow study also confirms that the Subject Site itself is not unduly shadowed, thereby satisfying the City of Owen Sound's shadow performance criteria, both incrementally and cumulatively. The maximum net new shadow impact on the Subject Site ranges from approximately 6.5% to 8.2% of the Site area during the tested intervals, remaining well below the City's 50% threshold. The study also demonstrates that portions of the site are already subject to existing shadow conditions arising from the elevated topography of 10th Street East and surrounding mid-rise development context, meaning the proposal's contribution to cumulative shadowing is limited and modest. Accordingly, the Subject Site continues to maintain well in excess of 50% sunlight access throughout the analyzed periods.

The study therefore concludes that the proposal complies with the City's shadow impact criteria and that the incremental shadow effects associated with the development remain limited and acceptable within the existing built and topographic context.

As well, the revised drawings distinguish between shadowing resulting from the proposed development and existing shadow conditions, allowing for a focused assessment of incremental impacts. Consistent with standard practice, the analysis isolates the contribution of the proposed building form to ensure that compliance is evaluated on the basis of project-related effects.

A key consideration in interpreting the revised shadow study is that a substantial portion of the shadowing illustrated represents incremental effects layered onto an already shadowed context. The subject lands sit at the base of a pronounced grade change associated with 10th Street East, which functions as an elevated corridor approximately 3–4 storeys above the site and generates significant baseline shadowing, particularly during lower sun angles. This condition is further compounded by the presence of existing mid-rise built form to the north and northeast, which already contributes to some shadow coverage across the site and adjacent properties. Some additional shadowing is also generated by existing low-rise residential built form to the west and southwest, particularly during winter months when lower sun angles result in longer shadow lengths, as illustrated in the December study.

As such, the additional shadowing attributable to the proposed mid-rise development occurs within an environment that is already subject to some shadow influence, meaning the net new impact is limited in both scale and duration. In this context, the quantified (cumulative) results not only demonstrate clear compliance with the City's performance thresholds, but also confirm that the proposal introduces only modest, incremental shadow effects within an established pattern of existing shadows.

Based on the above, it is our professional opinion that the proposed development meets the intent and quantitative requirements of the City's Shadow Study Terms of Reference. The updated shadow study appropriately demonstrates that the incremental shadow impacts are limited and do not result in undue adverse effects.

We trust this addendum addresses the City's comments. Please do not hesitate to contact the undersigned should you require any further clarification.

Yours truly,

The Biglieri Group Ltd.

A handwritten signature in black ink, appearing to read "Evan Sugden". The signature is fluid and cursive, with a long horizontal stroke at the end.

Evan Sugden, HBASc, MA. CAHP, RPP, MCIP

Senior Associate

Attach: Revised Quantitative Shadow Impact Assessment – East Court Retirement Residences, Owen Sound, Ontario (May 4, 2026)

WINTER SOLSTICE - DEC 21



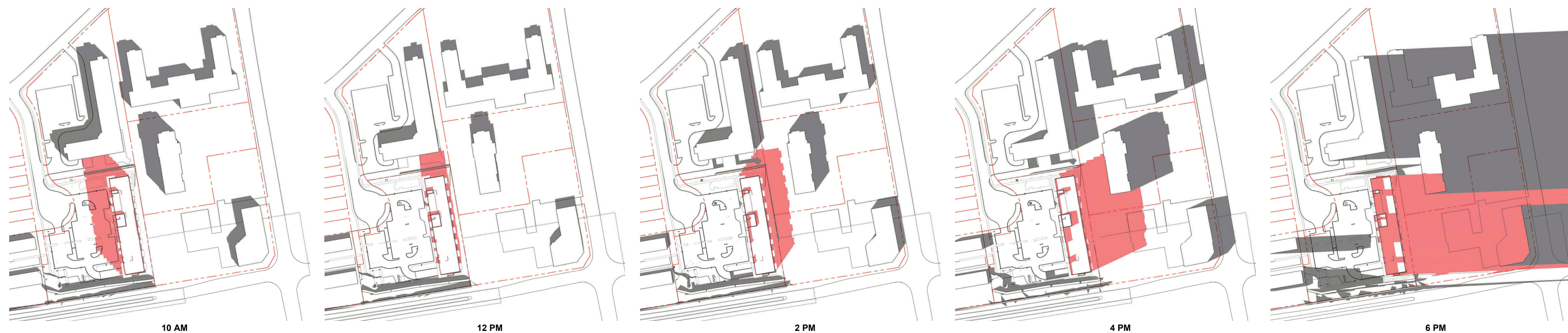
SPRING EQUINOX - MARCH 21



SUMMER SOLSTICE - JUNE 21



FALL EQUINOX - SEPTEMBER 21



LEGEND

- EXISTING SHADING
- NEW SHADING FROM PROPOSED BUILDING

SHADOW STUDY INFORMATION

METHODOLOGY

THIS SHADOW STUDY WAS PREPARED ACCORDING TO THE GUIDANCE AND STANDARDS GIVEN BY THE CITY OF OWEN SOUND'S SHADOW STUDY CRITERIA, RETRIEVED 2026. A 3D MODEL OF THE PROPOSED DEVELOPMENT WAS PREPARED BY BIMSTUDIO AND PATRICK DAVID TROTTER ARCHITECT.

THE MODEL WAS PLACED INTO AN APPROXIMATE MASSING CONTEXT ALSO PREPARED BY BIMSTUDIO USING CIVIL PLANS FROM GEI CONSULTANTS, SATELLITE IMAGERY OF THE SURROUNDING BUILDINGS, AND SITE PHOTOS. THE MASSING CONTEXT INCLUDES SURROUNDING BUILDINGS, THEIR HEIGHT IN STOREYS, AND THEIR FOOTPRINTS.

THE COMBINED MODEL WAS GEOLOCATED TO 44°34'16.4"N 80°55'03.8"W ACCORDING TO THE WGS 84 GPS STANDARD, AND ASTRONOMIC NORTH WAS DETERMINED IN CONJUNCTION WITH THE SITE'S PROPERTY LINE BEARINGS GIVEN ON THE CIVIL PLANS.

DUE TO THE DOMINANT EFFECT OF THE ELEVATION FROM 10TH STREET EAST TO THE SOUTH, A BASIC TRIANGULATED TOPOGRAPHIC MAP WAS PREPARED FOR THE STREET AND SURROUNDING AREA ACCORDING TO THE ELEVATION CONTOURS PREPARED BY GEI AND IS EVIDENT IN THE EXISTING SHADING MAP.

THE IMAGES AND SHADOWS SHOWN ARE IN RELATION TO TRUE/SOLAR NORTH.

STUDY IMAGES WERE PREPARED TO CAPTURE THE REQUIRED STILL-FRAME DATES AND TIMES GIVEN BY THE CITY OF OWEN SOUND:

- SPRING, MARCH 21,
 1. 10AM,
 2. 12PM,
 3. 2PM,
 4. 4PM,
 5. 6PM.
- SUMMER, JUNE 21,
 1. 10AM,
 2. 12PM,
 3. 2PM,
 4. 4PM,
 5. 6PM.
- AUTUMN, SEPTEMBER 21,
 1. 10AM,
 2. 12PM,
 3. 2PM,
 4. 4PM,
 5. 6PM.
- WINTER, DECEMBER 21,
 1. 10AM,
 2. 12PM,
 3. 2PM

SHADING IS COLOUR-HIGHLIGHTED TO SHOW SHADOWS CAST BY PROPOSED DEVELOPMENT. EXISTING SHADOWS ARE SHOWN FROM EXISTING BUILDINGS IN GREY.

TREES WERE NOT CONSIDERED AS PART OF THE STUDY.

IMPACT SUMMARY

THE CITY'S STANDARDS REQUIRE THE PROPOSED DEVELOPMENT DEMONSTRATE COMPLIANCE WITH THE FOLLOWING CRITERIA:

1. AS A PRINCIPLE, AT LEAST 60% OR MORE OF ANY PROPERTY SHOULD NOT BE SHADED FOR MORE THAN TWO INTERVAL TIMES (A FOUR HOUR EQUIVALENCY); OR,
2. AS A PRINCIPLE, AT LEAST 50% OF ANY PROPERTY SHOULD BE IN FULL SUN FOR AT LEAST TWO INTERVAL TIMES (A FOUR HOUR EQUIVALENCY).

EACH SET OF 2 SOLAR SHADING IMAGES WERE OVERLAID IN 4 HOUR INTERVALS TO OBTAIN THE SHADING AREA FOR TWO INTERVAL TIMES.

FOR BREVITY, THE FOLLOWING DATE AND TIME INTERVALS ARE PROVIDED AS AN ANALYSIS OF THE HIGHEST-IMPACT CASES, NAMELY LOW-ANGLE EVENINGS.





PROPERTY	TIME INTERVAL	NET NEW SHADING	
1100 16TH	MAR 4-6PM	1262.5m2	12.45%
1100 16TH	JUNE 4-6PM	1974.5m2	19.47%
1100 16TH	SEPT 4-6PM	2269.6m2	22.38%
1200 16th	MAR 4-6PM	746.5m2	8.90%
1200 16TH	JUNE 4-6PM	1683.2m2	28.87%
1200 16TH	SEPT 4-6PM	1310.9m2	15.63%
SUBJECT SITE	DEC 12-2PM	653.4m2	6.45%
SUBJECT SITE	MAR 2-4PM	830.4m2	8.20%
SUBJECT SITE	SEPT 2-4PM	819.6m2	8.09%

AS SHOWN, NET NEW SHADING ADDED BY THE PROJECT DOES NOT CONTRIBUTE MORE THAN 50% OF THE AREA OF ANY PROPERTY IN THE SURROUNDING CONTEXT.

*1100 16TH AVE E IS CURRENTLY RETAIL USE AND ITS PROPERTY AREA WAS ESTIMATED TO BE ~10 141m2.

**1200 16TH AVE E IS CURRENTLY IN DEVELOPMENT AS A MIXED USE HOTEL AND COMMERCIAL USE, ITS PROPERTY AREA WAS ESTIMATED TO BE ~8386m2.

*** THE SUBJECT SITE'S (PENDING FINAL ADDRESS ON 15TH AVE) AREA IS 10 127m2.

 <p>288 DUFFERIN AVE. BRANTFORD, ON N6T 4S2 226.205.1943 patrick@pdarch.ca www.pdarch.ca</p>	 <p>PATRICK DAVID TROTTER ARCHITECTS LICENCE 5270</p>	<p>CLIENT</p> 	<p>ASSOCIATION WITH</p>  <p>FastTrack by Stubbs's T: 519 424 2183 44 Muir Line, Harley, ON NOE 1E0</p>	<p>GENERAL DISCLAIMER</p> <p>1. ALL CONSTRUCTION TO MEET THE CURRENT REQUIREMENTS OF THE ONTARIO BUILDING CODE AND ZONING BY-LAWS.</p> <p>2. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS, ASSEMBLIES, AND TAGS PRIOR TO CONSTRUCTION. DO NOT SCALE THE DRAWINGS. REPORT ANY DISCREPANCIES TO THE ARCHITECT.</p> <p>3. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT SPECIFICATIONS, ARCHITECTURAL, STRUCTURAL, CIVIL, MECHANICAL, ELECTRICAL DRAWINGS, GEOTECHNICAL REPORT(S) & ENVIRONMENTAL REPORT(S).</p> <p>4. ARCHITECTURAL DRAWINGS SHALL NOT BE REPRODUCED WITHOUT CONSENT FROM THE ARCHITECT.</p>	<p>PROJECT</p> <p>EAST COURT RESIDENCE APARTMENTS</p> <p>ADDRESS</p> <p>1301 15th AVENUE EAST, OWEN SOUND, ON</p> <p>CLIENT</p> <p>FAST TRACK MODULAR PRECAST</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>1</td> <td>Issued for ZBA</td> <td>2026/03/26</td> <td>BIM</td> </tr> <tr> <td>2</td> <td>Reissued for ZBA</td> <td>2026/05/06</td> <td>BIM</td> </tr> </table>	1	Issued for ZBA	2026/03/26	BIM	2	Reissued for ZBA	2026/05/06	BIM	<p>SHEET NAME</p> <p>SHADOW STUDY</p>	<p>SHEET SIZE</p> <p>24"x36"</p> <p>ISSUE DATE</p> <p>2026-05-06</p> <p>PROJECT #</p> <p>PDTA#26-06</p> <p>DRAWN BY</p> <p>AM</p> <p>CHECKED BY</p> <p>PDTA</p> <p style="font-size: 2em; font-weight: bold; text-align: center;">.A.806</p>
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