

16.09.25

To: Toronto and East York Community Council

Re: Agenda Item 25.8, 15 Toronto Street Rezoning and Official Plan Amendment

St. James Cathedral: Shadows Approaching from the West

A policy in the St. Lawrence Neighbourhood Heritage Conservation District (HCD) Plan requires new developments to limit net new shadows on St. James Cathedral. However, 'limit' is not a defined term in the plan. Thus GBCA, a firm retained by the applicant to assess impacts on the Cathedral, states (in its professional opinion) that the proposed tower "adequately limits" shadow impacts on the Cathedral.

As we note below, the shadows cited by GBCA can at times cut by half the sunlight that currently reaches the main portion of the Cathedral (i.e. from the south end to the north wall of the apse), with even the tip of the Cathedral spire in shadow.

GBCA's assessment has been publicly available for more than two years. What's new is the City planners' response. Their decision report says "the shadow impact resulting from the proposal is acceptable", while noting that GBCA "describes how the proposal limits net new shadow impacts on the HCD and heritage resources (i.e. the Cathedral)".

An alternative response might have required shadows to be measurably limited – for example by confining them to the area below the Cathedral's main windows. Responses along these lines would require reducing the proposed tower's height, so an appeal to the Ontario Land Tribunal might ensue. The OLT has already watered down a number of policies in the HCD Plan, a point that perhaps motivated City planners to avoid another appeal.

GBCA's professional opinion was based on a shadow study undertaken by BDP Quadrangle, another firm retained by the applicant. Pages from this study are attached; they show predicted late-afternoon shadows on June 21, when the Cathedral is currently in full sunlight. The full-sunlight condition is present not just on June 21 but during a two-month period centred on that date. Shadows due to the proposed tower will likewise be present during the two-month period.

The BDP Quadrangle study colour-codes the 15 Toronto Street shadows in bronze. The west elevation of the Cathedral is shown at 15-minute intervals between 3:18 and 6:18 pm. The shadow impact is maximized at 5:18 pm, when sunlight on the main portion of

the Cathedral is cut by half, with even the tip of the spire in shadow. By 6:18 pm only a small area at the south end is still shadowed.

The full BDP Quadrangle study, which includes not only the June 21 predictions attached here but also predictions for March 21 and September 21, is available on the Application Information Centre. The March and September predictions show that existing shadows are extensive enough that net new shadows on the Cathedral will be precluded.

The blue shadows in the study are due to a proposed tower at 23 Toronto Street. However, that tower's configuration has been modified since the BDP Quadrangle study was executed. The originally proposed 80-storey height is now 88 storeys, and the floor plate has been reduced.

Shadow studies submitted by the 23 Toronto Street applicant reflect these changes, but the viewpoint is vertically from above the Cathedral. To know how predicted shadows will actually appear to observers it is essential to show the west elevation of the Cathedral – as in the BDP Quadrangle study attached here. As well, the shadow studies submitted by the 23 Toronto Street applicant end at 6:18 pm, which is well before the time that shadows will have moved off the Cathedral. Consequently, we ask the Community Council to adopt the following recommendation:

Recommendation:

That the forthcoming decision report on the proposed 23 Toronto Street project include shadow studies showing the west elevation of St. James Cathedral on May 21, June 21 and July 21, with predicted shadows shown at 15-minutes intervals from the time they initially impact the Cathedral to the time their impact ends.

Sincerely,

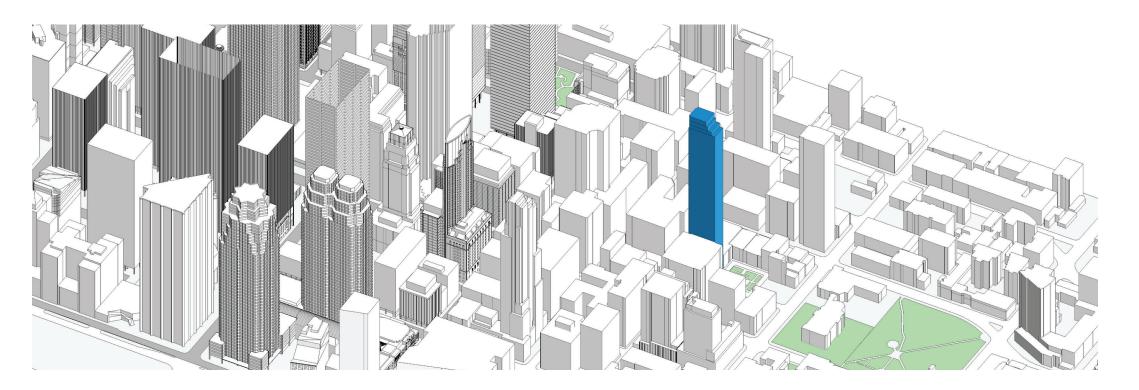
Ian Morrison, VP, TSCC-1864 (Spire)

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BDP. Quadrangle



15 Toronto St. Toronto

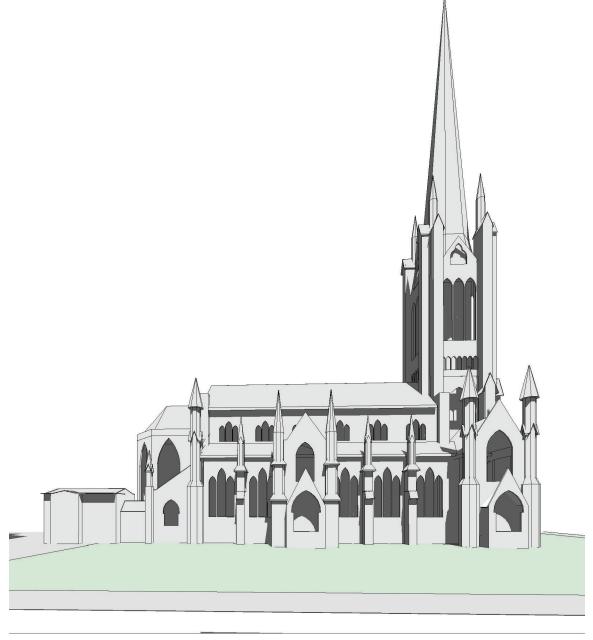
St. James Cathedral Church Shadow Impact Study

16 June 2023

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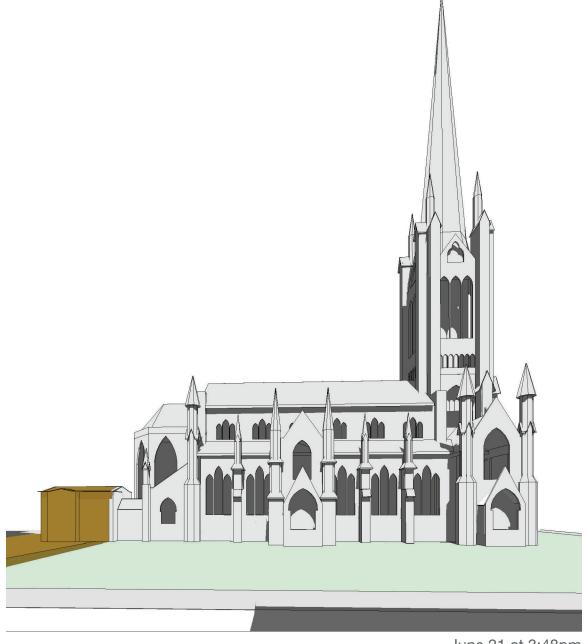




June 21 at 3:33pm

June 21 at 3:18pm





June 21 at 4:03pm

June 21 at 3:48pm

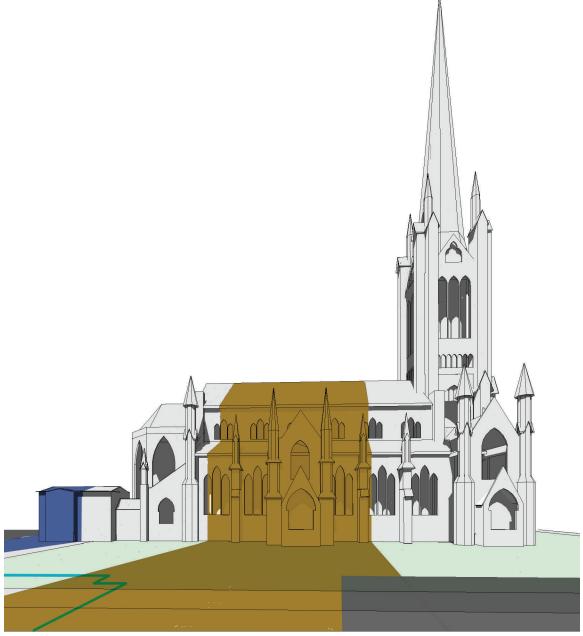




June 21 at 4:33pm

June 21 at 4:18pm





June 21 at 4:48pm



June 21 at 5:03pm

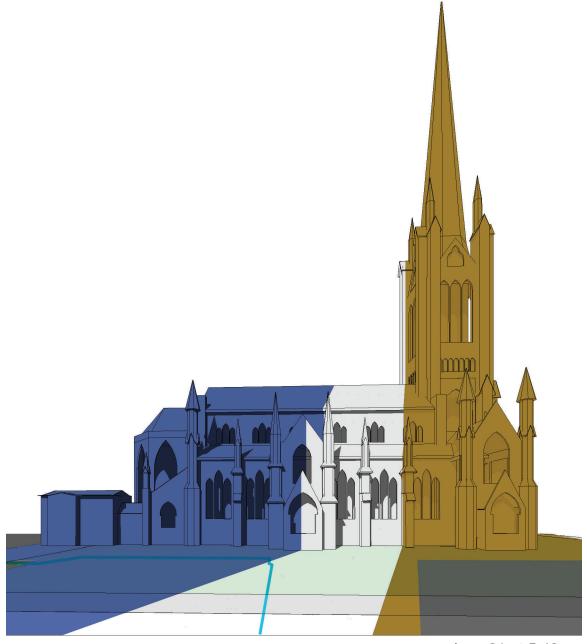




June 21 at 5:33pm

June 21 at 5:18pm





June 21 at 6:03pm

June 21 at 5:48pm



BDP. Quadrangle 15 Toronto St., Toronto

Shadow Impact Study

Project No. 22023 16 June 2023



June 21 at 6:18pm



BDP. Quadrangle 15 Toronto St., Toronto Shadow Impact Study

Project No. 22023 16 June 2023