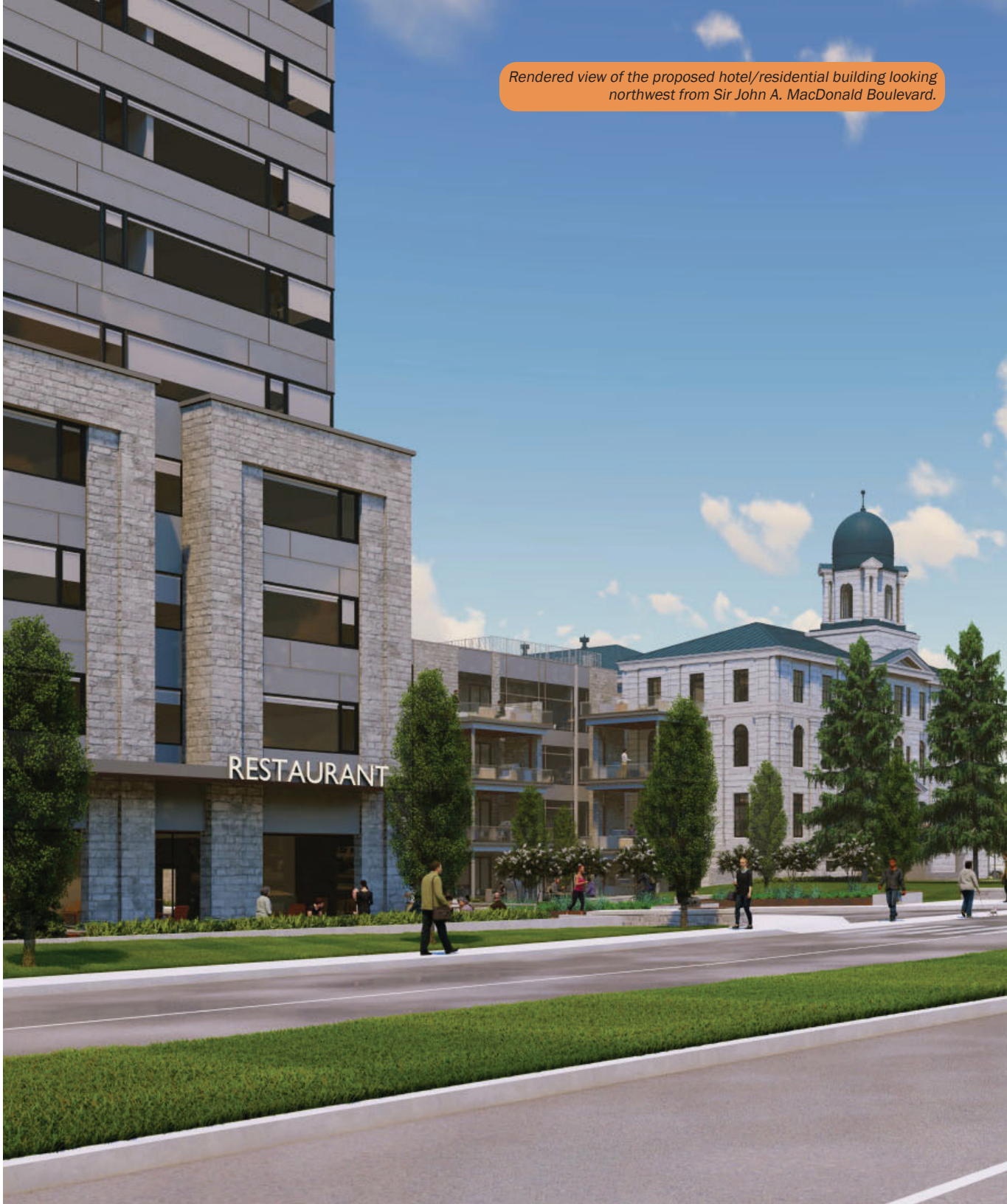
## 3.5 SHADOW IMPACTS & ANALYSIS

This section demonstrates the shadow impacts of the proposed development during the Spring/Fall Equinox, and the Winter and Summer Solstice, illustrating that the strategic location and careful massing of the buildings successfully offset the shadow impacts of a development of this scale, containing shadows almost entirely internal to the site (particularly in Spring, Fall and Summer) while ensuring ample access to sunlight on all adjacent properties.

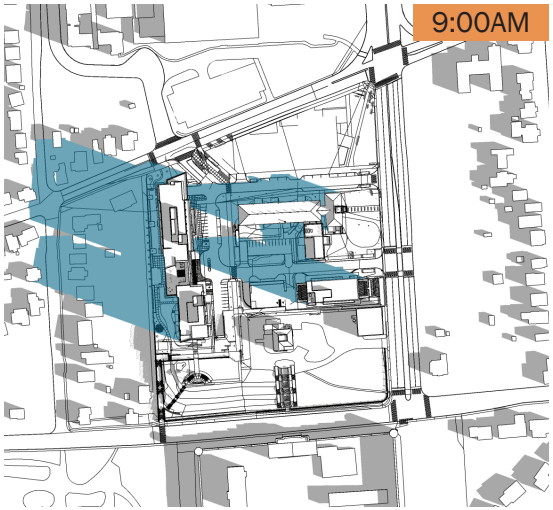
As Block A consists of a residential/ commercial building that will be implemented as part of a future phase, its impacts have not been discussed in this analysis.

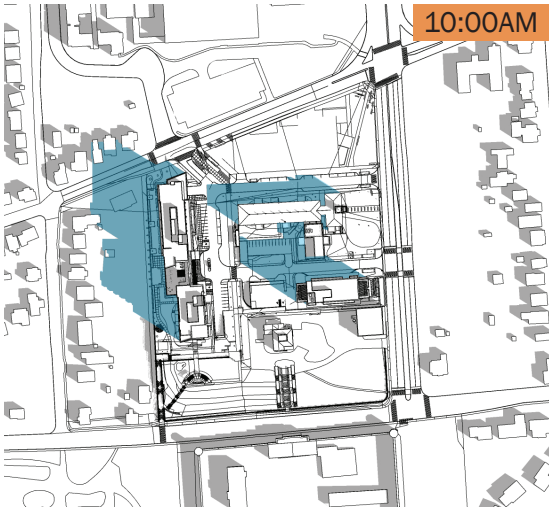


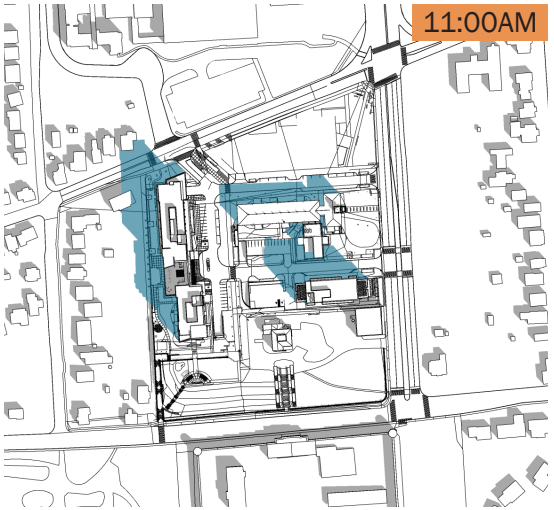

*Rendered view of the proposed hotel/residential building looking northwest from Sir John A. MacDonald Boulevard.*

## MARCH/SEPTEMBER 21 (SPRING/FALL EQUINOX)

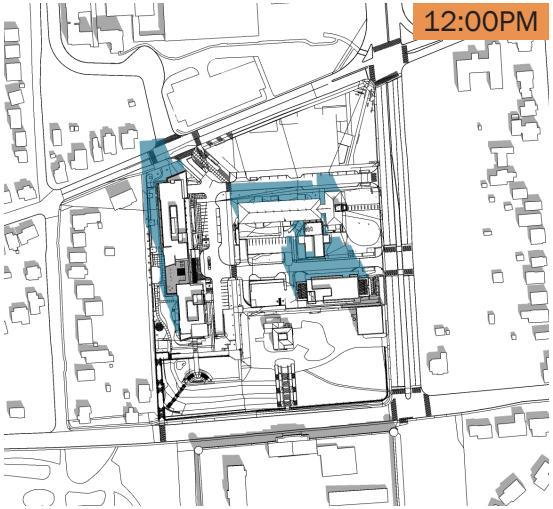
- On March/September 21, the proposed buildings on Blocks B and D have no impact on any buildings or adjacent properties.
- At 9:00am, there are shadow impacts from Block C onto the residential properties to the west of the development.
- These shadows quickly shift and by 10:00am, only a few properties are directly effected by shadows from Block C.
- By 11:00am, shadows have generally shifted entirely from the western neighbourhood, with the exception of a small sliver on two buildings.
- For the remainder of the day, Blocks B, C, and D have no shadow impacts on the adjacent properties.
- The site receives full and continuous sunlight access for 7 hours.
- Block B's shadows are contained within the site and have no impact on neighbouring properties.




*Proposed Buildings Shadow*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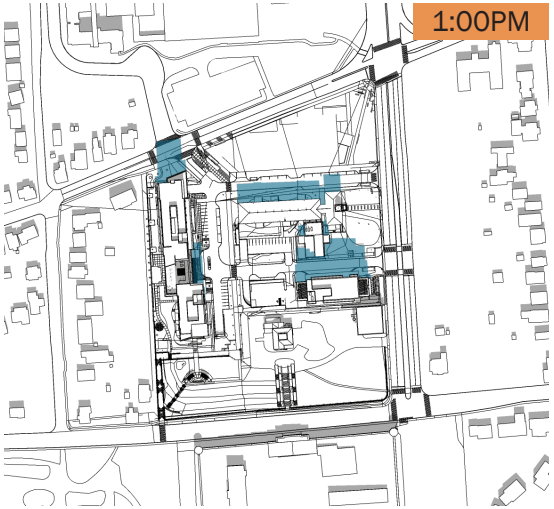
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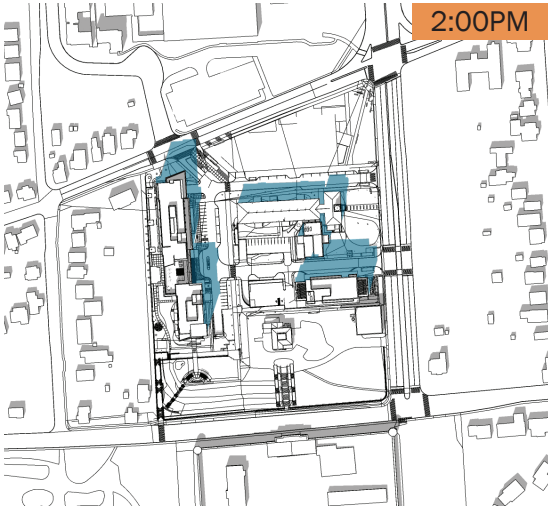
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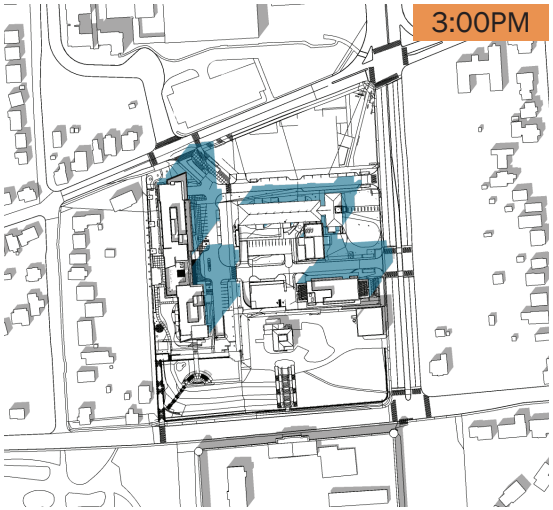
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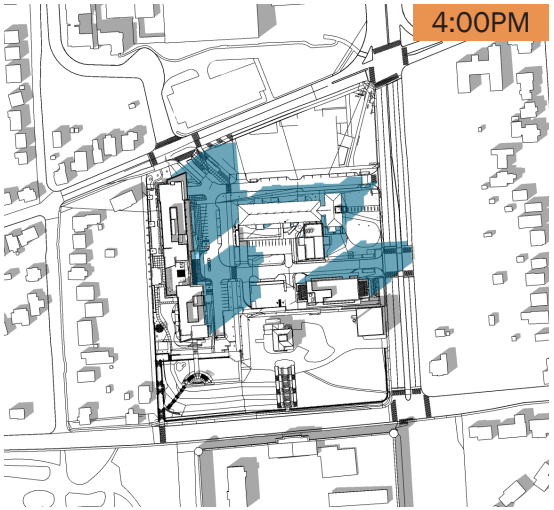
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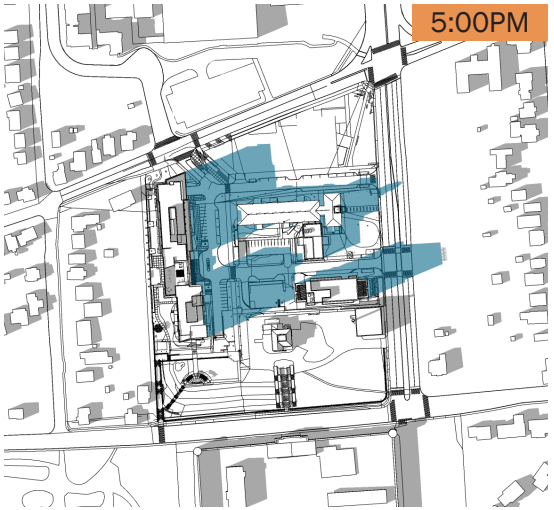
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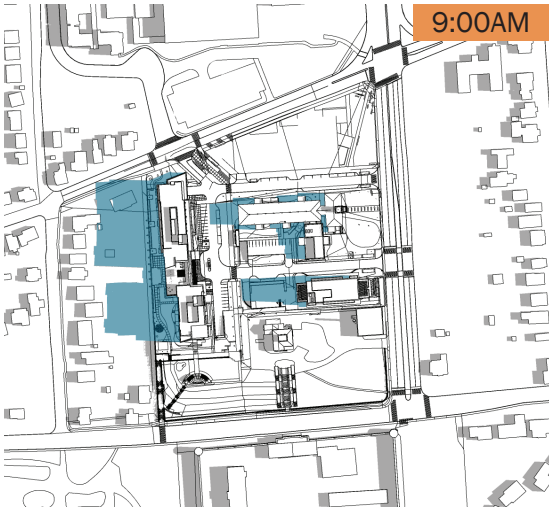
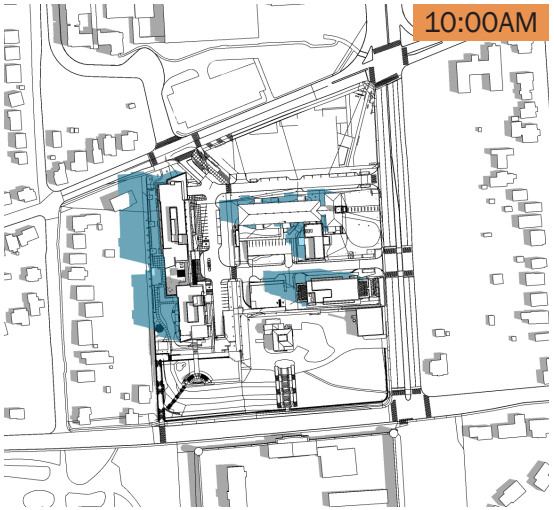
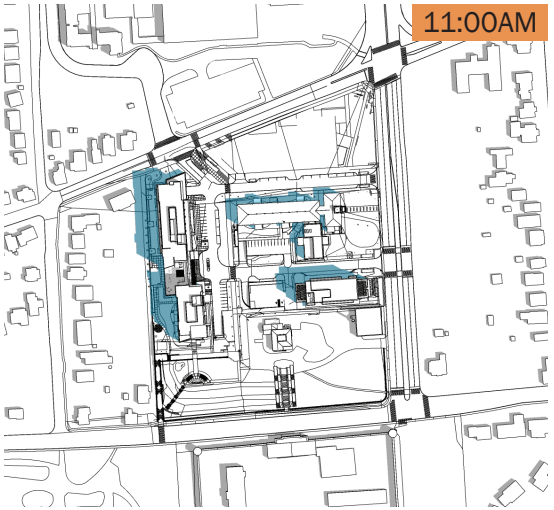
## JUNE 21 (SUMMER SOLSTICE)

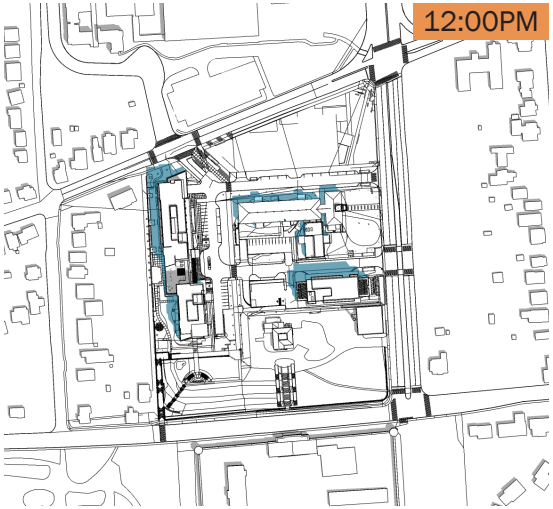
- On June 21, the proposed development has minimal impact on the surrounding properties, allowing for a lengthy period of sunlight throughout the day.
- At 9:00am, shadows from Block C impact one building directly to the west of the development as well as some of the rear yards.
- The shadows quickly shift and by 10:00am, the shadows are generally limited to a small area on the same adjacent building.
- By 11:00am, there is minimal to no shadow impact on the adjacent western properties.
- By 12:00pm, the shadow moves out of the western neighbourhood entirely, allowing for full sunlight access for the remainder of the day.
- Between the hours of 1:00pm to 5:00pm, the proposed development has no shadow impact on any of the surrounding properties.
- From 4:00pm to 5:00pm, the shadows from Block D start to impact Sir John A. MacDonald Boulevard. However, prior to this, the street has full sunlight throughout the day.
- Block B and Block D have no shadow impact on any neighbouring property throughout the day.




*Proposed Buildings Shadow*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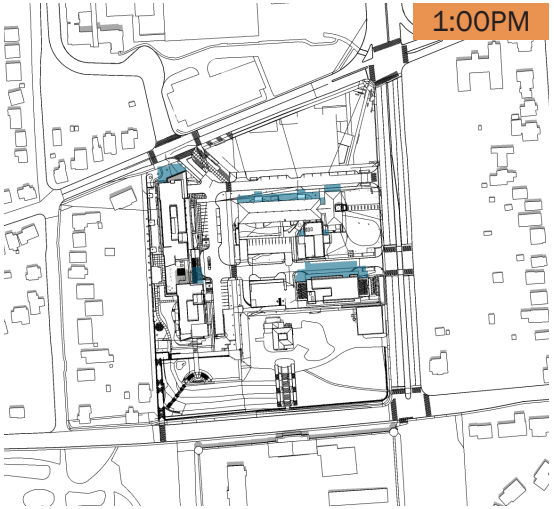
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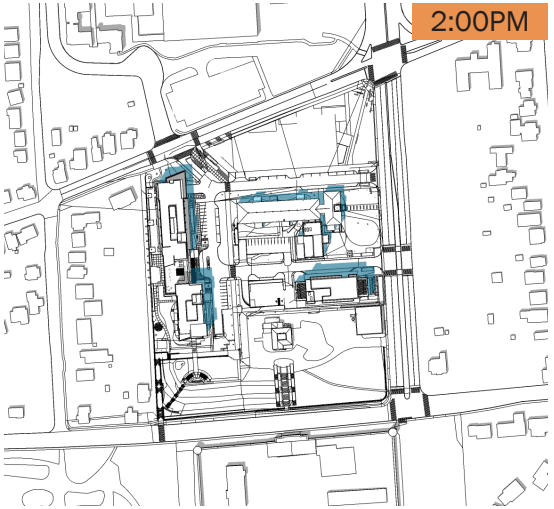
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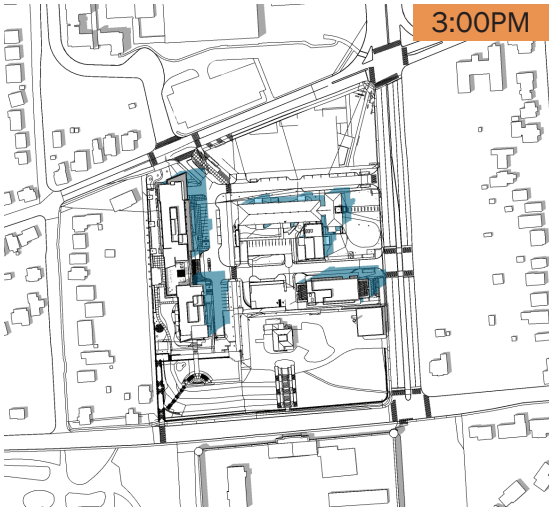
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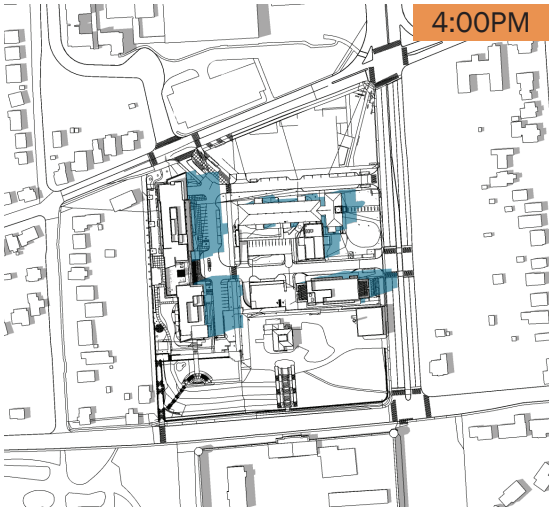
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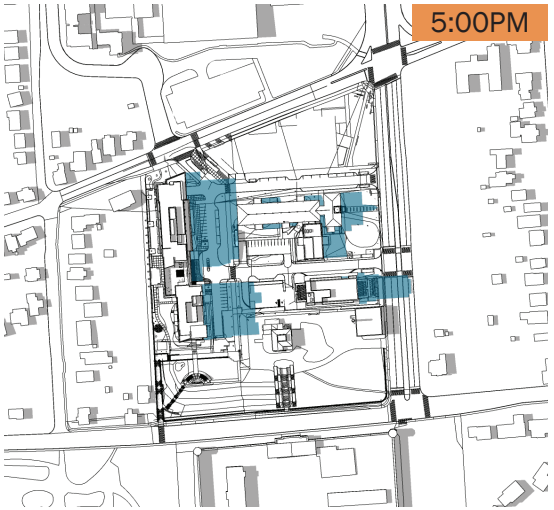
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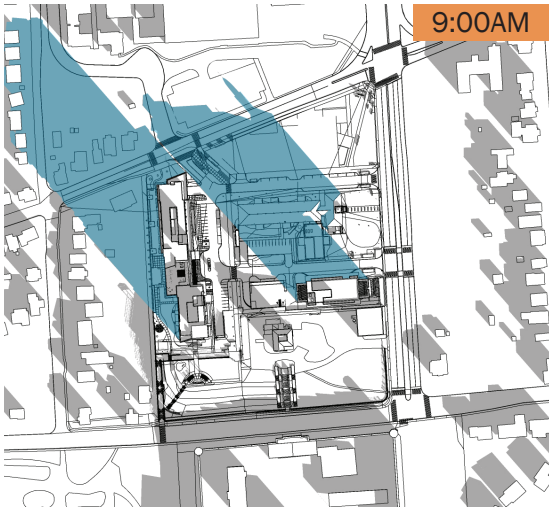
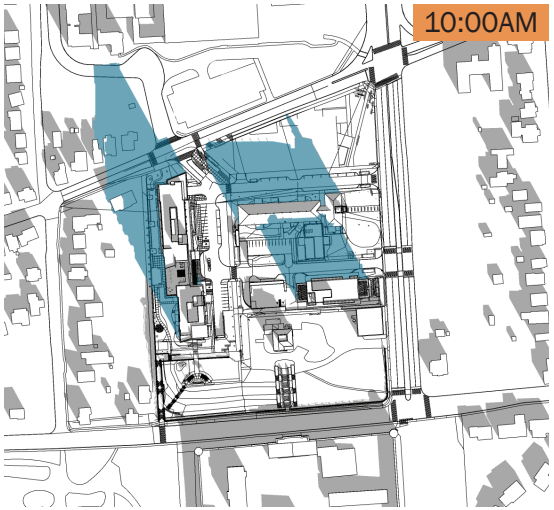
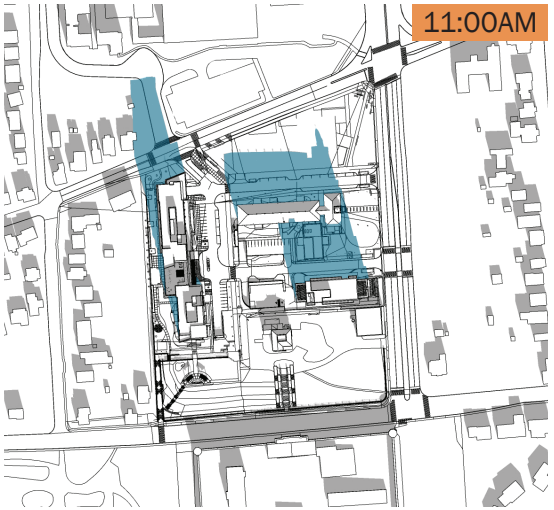
## DECEMBER 21 (WINTER SOLSTICE)

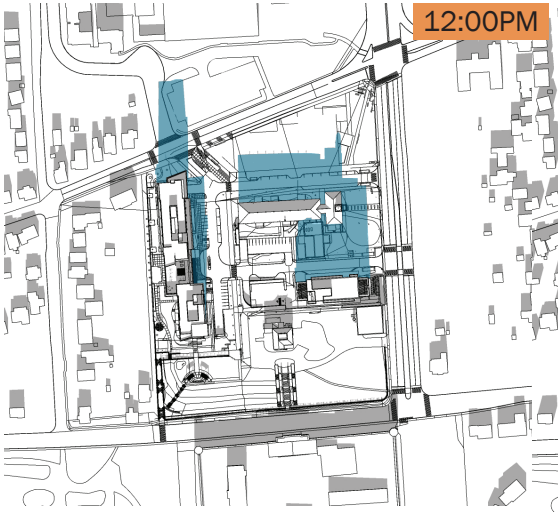
- On December 21, the proposed development has shadow impacts on the buildings immediately northwest of the site.
- At 9:00am, shadows from Block C impact the residential properties to the north-west. However, there are many shadows projected from the residential buildings themselves.
- At 10:00am, four of the adjacent north-west buildings are impacted by the shadows from Block C.
- At 11:00am, the shadows quickly subside and most of the north-west neighbouring buildings are no longer impacted by Block C.
- By 12:00pm, the western properties have no shadow coverage from Block C. These properties will have adequate sunlight throughout the day.
- At 12:00pm, the shadows from the proposed development have no impact on the surrounding buildings.
- At 1:00pm, shadows from Block D begin to project onto Sir John. A. MacDonald Boulevard and will continue to shift to the eastern parking lot by 3:00pm.
- Block B and Block D have no shadow impacts on any neighbouring buildings throughout the day until 4:00pm. By this time, the sun has almost completely set and shadow impacts are minimal.




*Proposed Buildings Shadow*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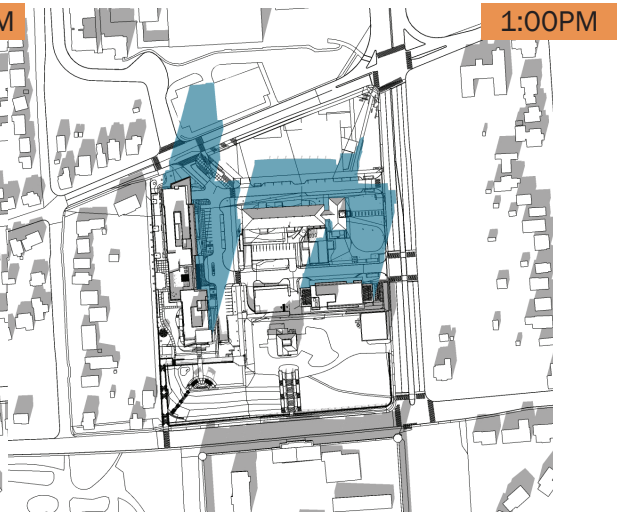
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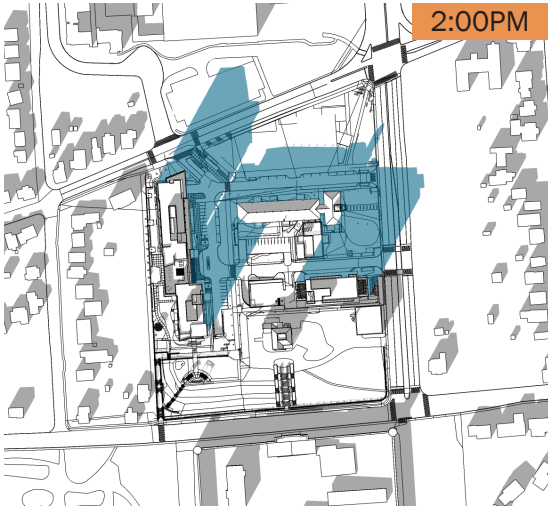
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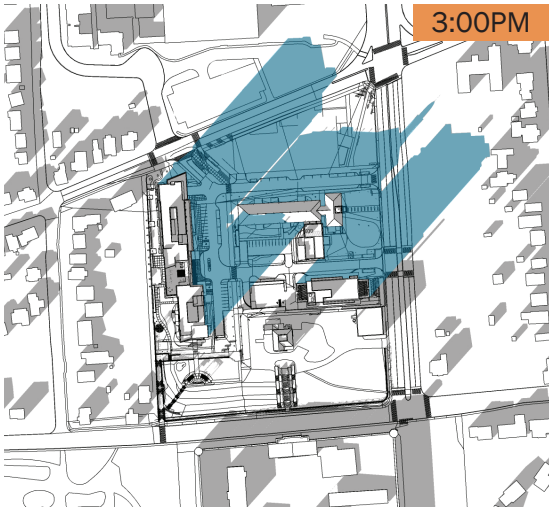
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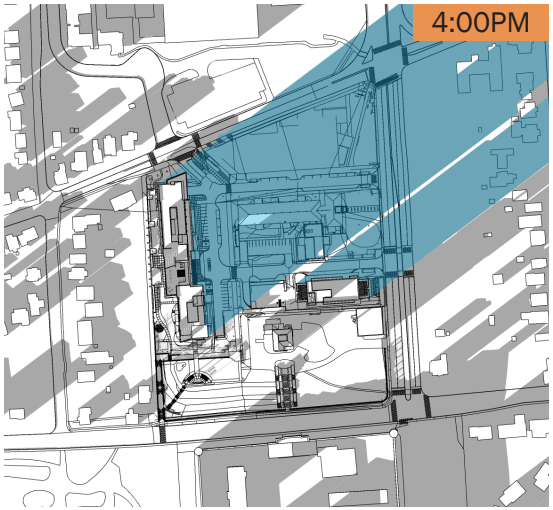
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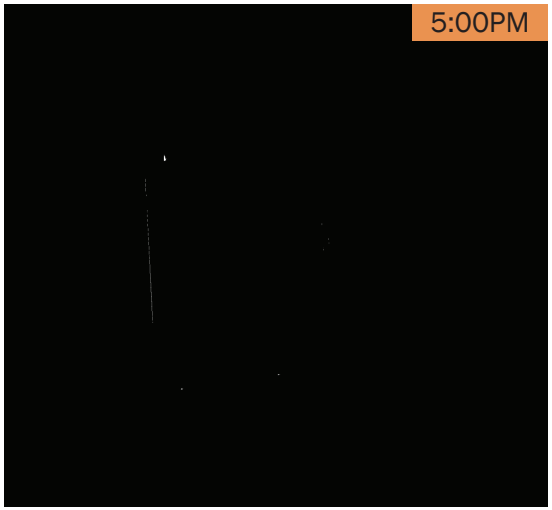
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