## **Shadow Study**

#### 689 Oxford Street West, London Ontario

The purpose of this report is to address the issue of height and the affect of shadows upon the neighbouring properties by the proposed development. This is done by using computer software that generate Shadow Diagrams.

This Shadow Study provides shadow diagrams for three periods of the day which is representative of the different shadow patterns cast over the course of the day. We analyse the typical shadow patterns which are reflective of the equinox and solstice periods over the course of the year.

### Date(s)

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Spring Shadows, March 21 (equinox) 9:00 am, 12:00 pm, 4:00 pm
Summer Shadows, June 21 (solstice) 9:00 am, 12:00 pm, 4:00 pm
Autumn Shadows, September 21 (equinox) 9:00 am, 12:00 pm, 4:00 pm
Winter Shadows, December 21 (solstice) 9:00 am, 12:00 pm, 4:00 pm
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The level of impact is measured by the time of shadow or duration. To be considered compatible, a Shadow Study must demonstrate:

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

These criteria are typical of other municipal shadow study requirements in the Province.

# **Description of the proposed Development**

The development consists of three, point towers and a parking deck adjacent to the railway line:

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Building A 17 Storey 49.03 m (westerly tower)
Building B 18 Storey 51.84 m (north/easterly tower)
Building C 21 Storey 59.97 m (south/easterly tower)
Parking Deck 5.6 m - 6.55 m
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The tower portion of all buildings (that portion beyond the four storey podiums) falls within the 'Compact Point Tower' category as the tower floor areas are less than 850 m<sup>2</sup>.

Note: While Building A maintains similar base masonry and colour treatment to buildings B and C, a podium is not viable due to site constraints.

### **Shadow Study Impact Summary:**

The proposed development meets the general Shadow Study criteria outlined above on the single family and medium density developments to the west and north of the proposed site.

As is generally the case, shadows cast from the proposed development are the largest in the Winter solstice study period.

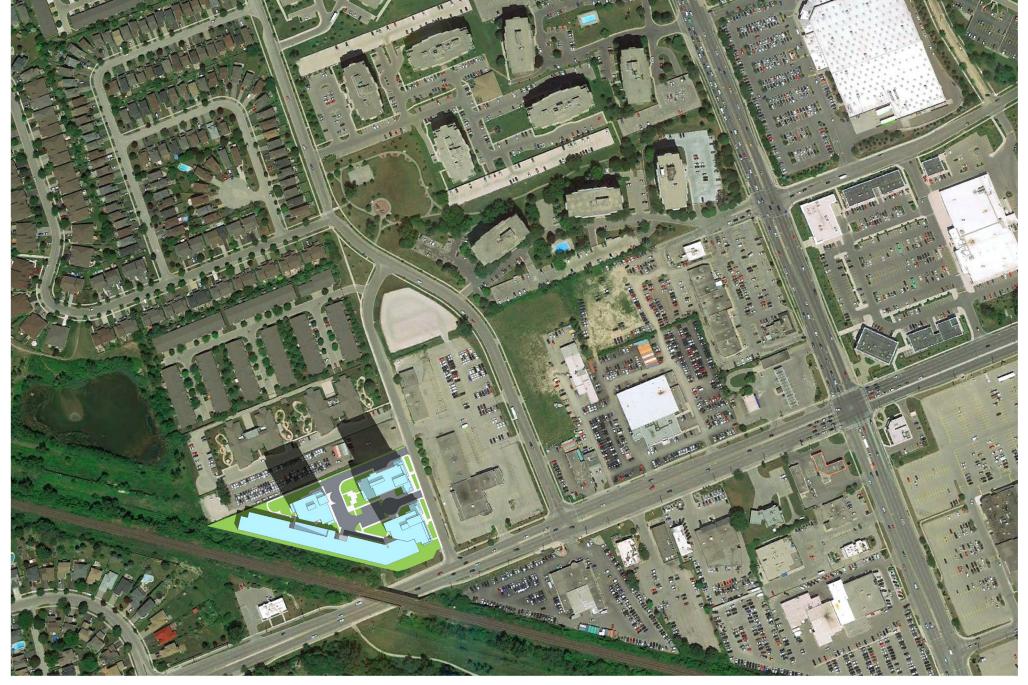
Shadow affect in the spring and autumn equinox extend no further than the Highview Residence. Shadow is cast over the westerly portion of Highview until approximately 12:00 pm. No shadow is cast on the Highview Residence beyond 12:15 pm.

There is no shadow affect on adjacent residential developments within the Summer solstice in this study period. During this period, shadows fall within the adjacent car storage lots directly north and east of the proposed development.

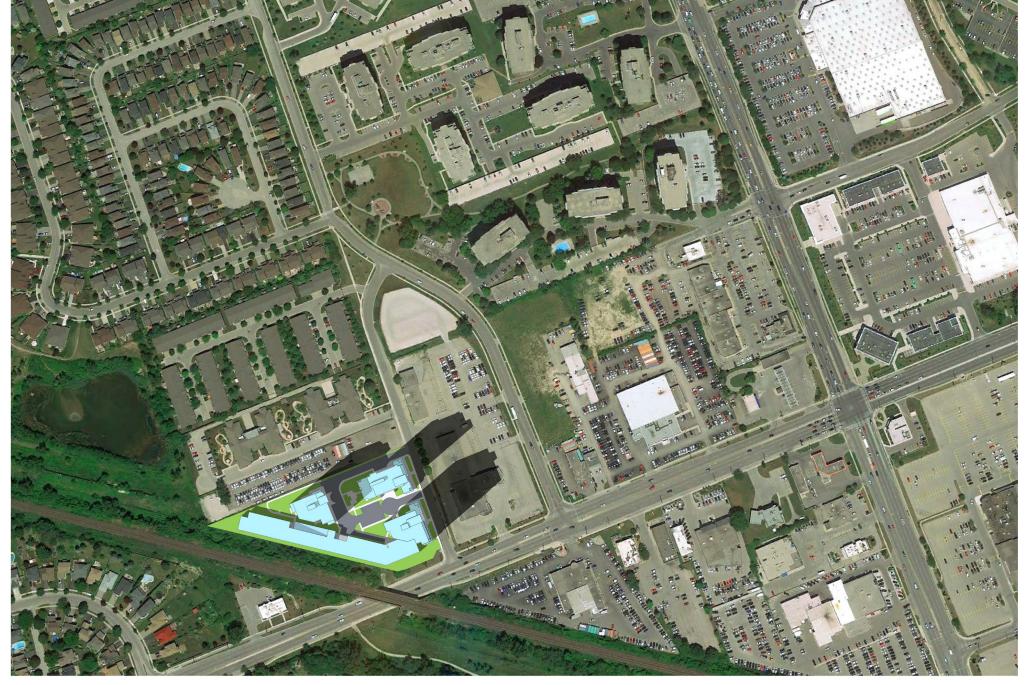
In closing, this study demonstrates the work that has been completed to shape this development and minimize the impact of shadowing on neighbouring properties.



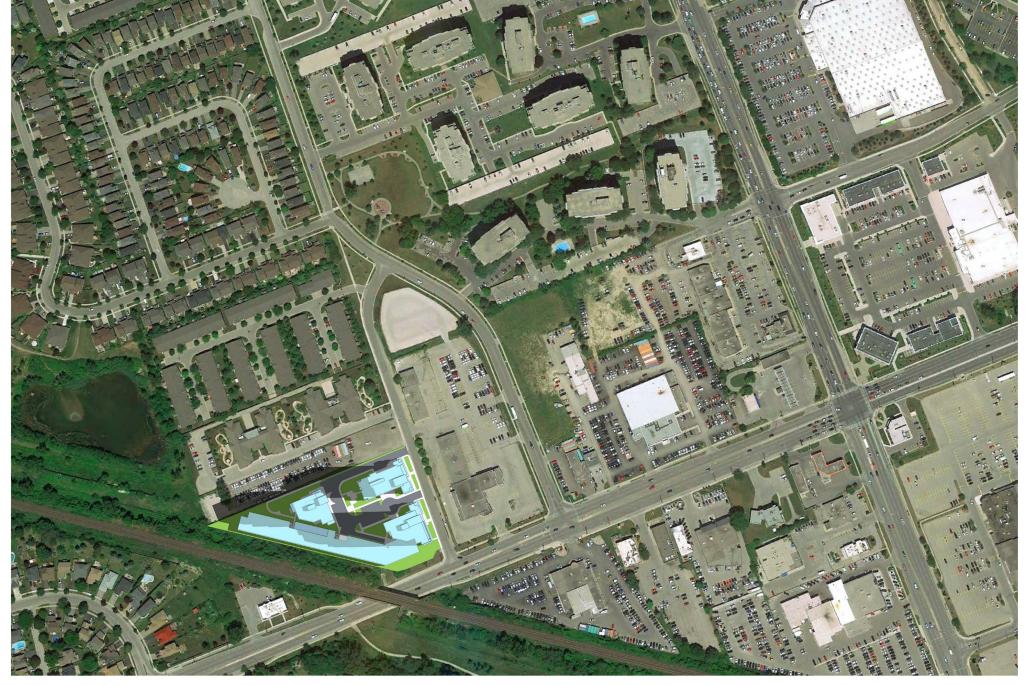
SHADOW STUDY - March 21st, 9:00 am



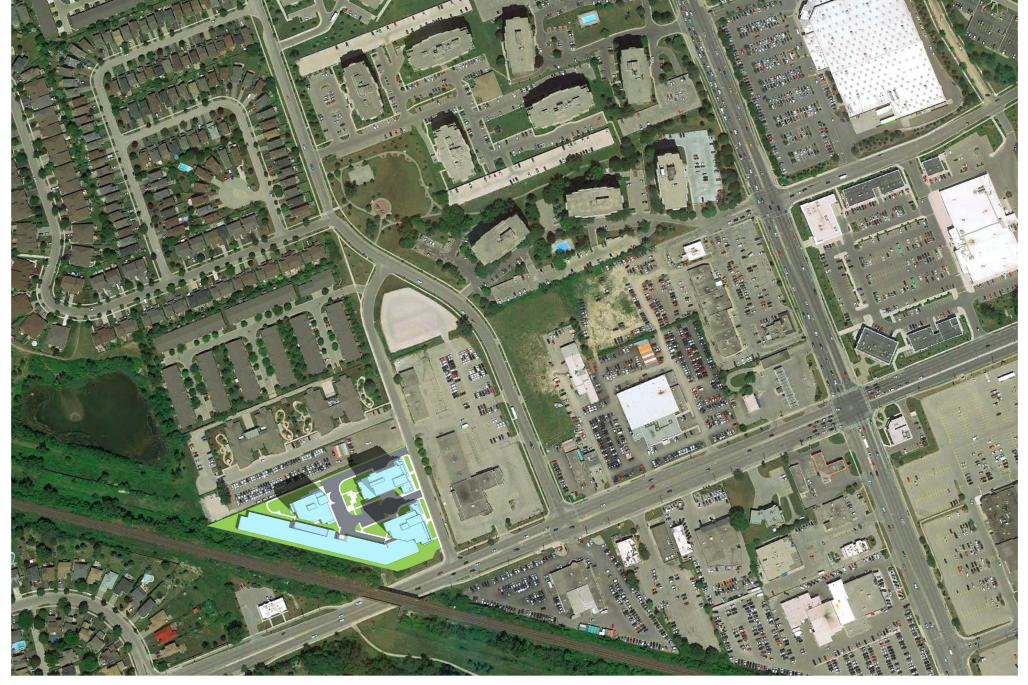
SHADOW STUDY - March 21st, 12:pm



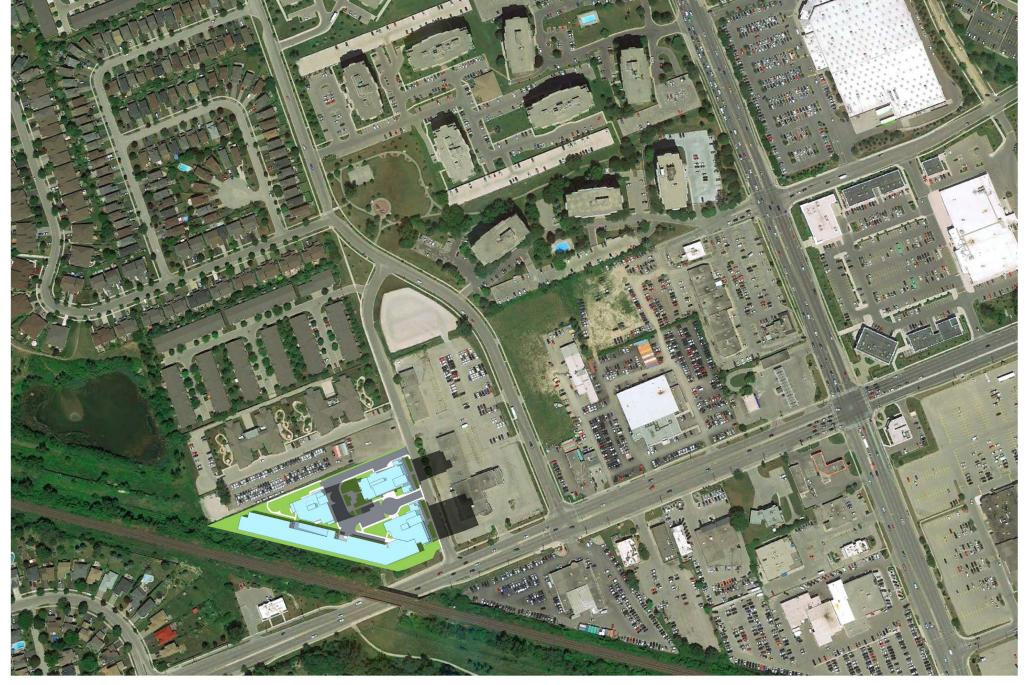
SHADOW STUDY - March 21st, 4:00 pm



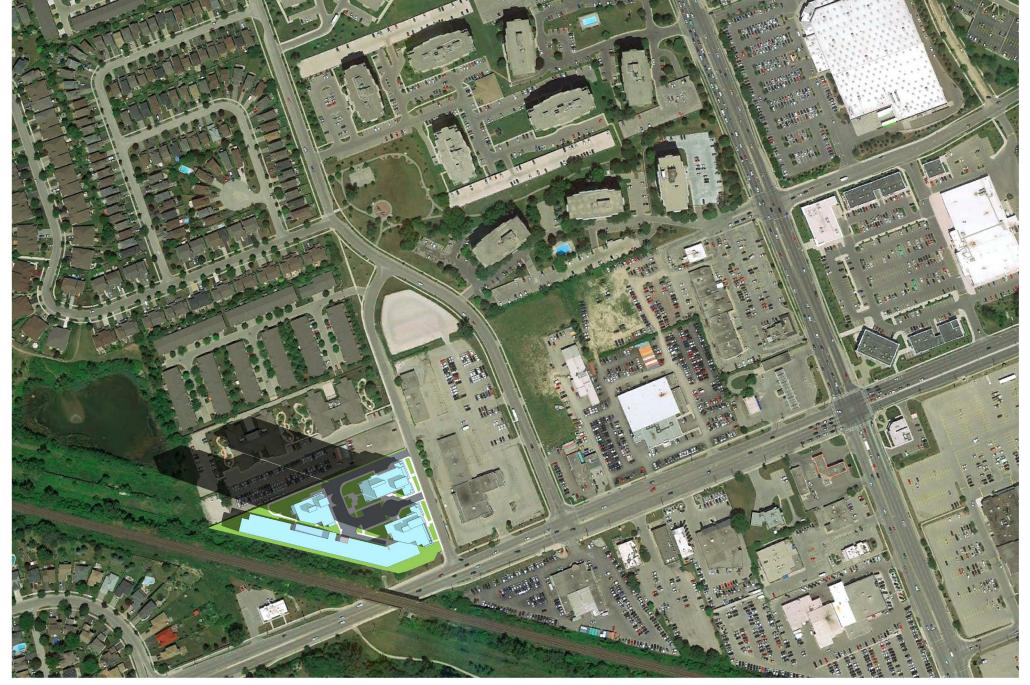
SHADOW STUDY - June 21st, 9:00 am



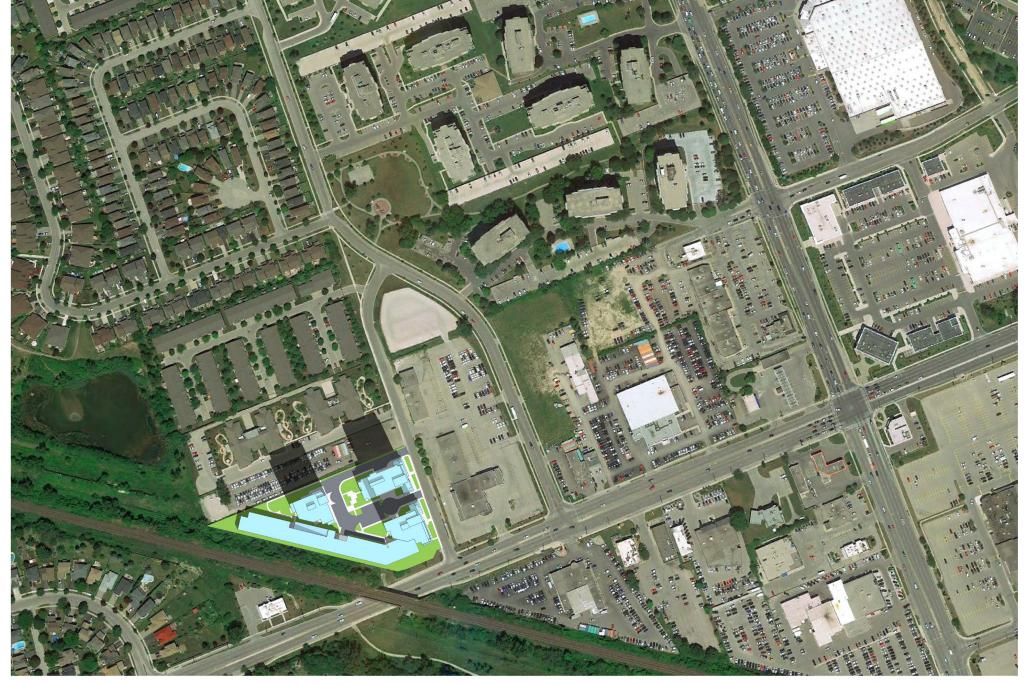
SHADOW STUDY - June 21st, 12:00 pm



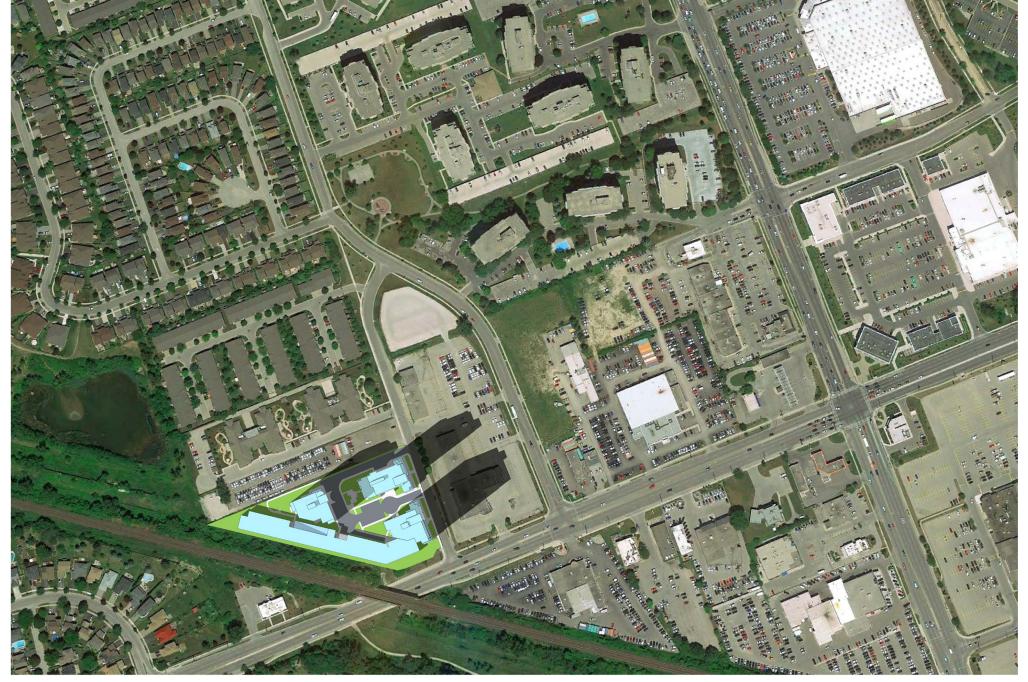
SHADOW STUDY - June 21st, 4:00 pm



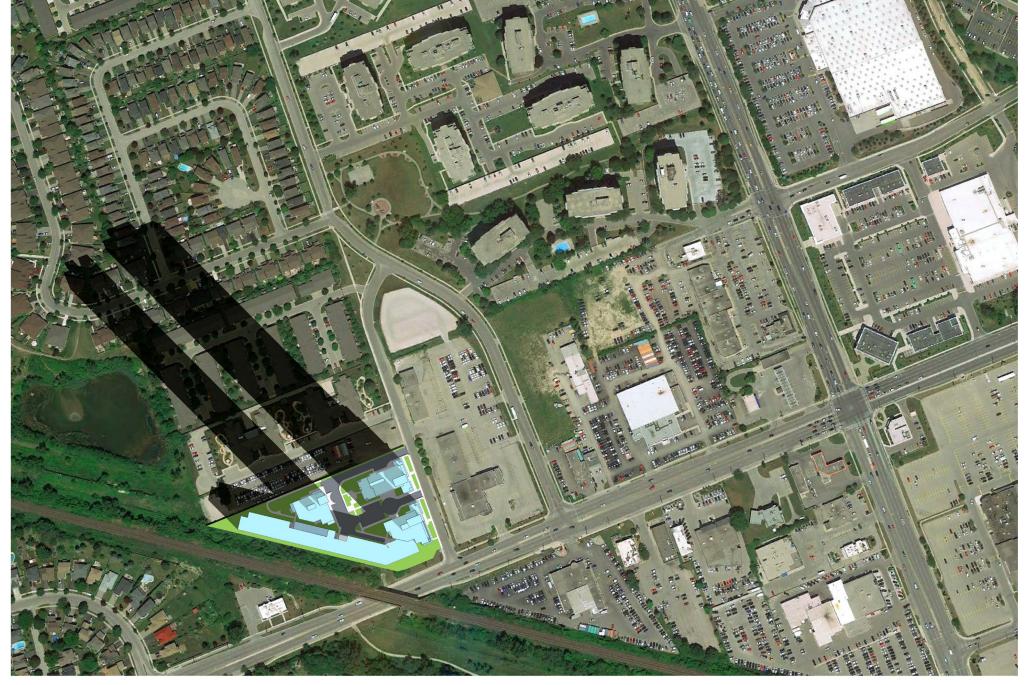
SHADOW STUDY - September 21st, 9:00 am



SHADOW STUDY - September 21st, 12:00 pm



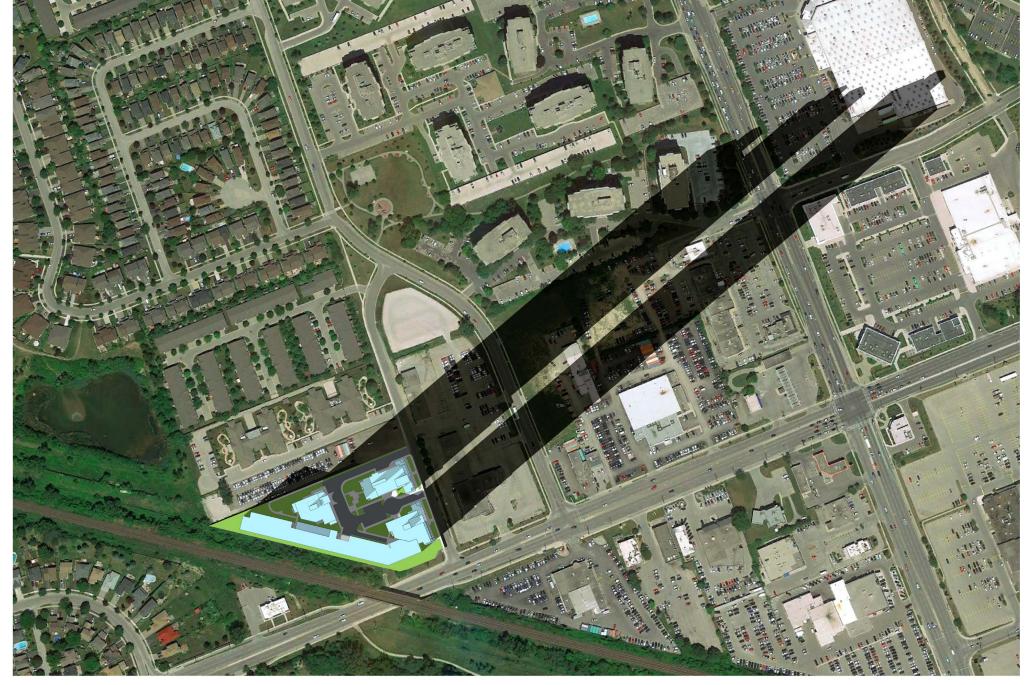
SHADOW STUDY - September 21st, 4:00 pm



SHADOW STUDY - December 21st, 9:00 am



SHADOW STUDY - December 21st, 12:00 pm



SHADOW STUDY - December 21st, 4:00 pm