



December 4, 2019

Glen Schnarr & Associates Inc.
10 Kingsbridge Garden Circle, Suite 700
Mississauga, Ontario L5R 3K6

Attn: Karen Bennett, MCIP, RPP,
Senior Associate

Re: SHADOW STUDY - ORANGEVILLE HIGHLANDS (PHASE 2)
Revised Applications for Draft Plan of Subdivision, Official Plan and Zoning By-law Amendments
Orangeville Highlands Limited and Brucedale Investments Inc.
Part of Lot 3, Concession 2 W.H.S.
Town of Orangeville File No's.: OPZ 5/10 and S 1/10
Our Ref No.: W-2282

RATIONALE

A shadow study has been prepared for the Orangeville Highlands – Phase 2 development site in order to demonstrate that the proposed 5 to 6-storey apartment buildings in the southern portion of the site will be sited, massed and designed to fit harmoniously into the planned development and limit negative shadowing impacts on neighbouring streets, parks, open spaces and properties. For this Shadow Study, we employed typical practices undertaken throughout the GTA. This has been prepared in response to concerns raised by This includes:

- Showing all streets, lots, blocks, parks and open spaces as well as buildings to a distance adequate to show the shadow impacts during the requested times.
- Providing the shadow conditions from other abutting buildings.
- Providing shadow diagrams with a reference base plan, including a bar scale.
- Utilizing shadow test times for March 21, June 21, September 21 and December 21. The hours of the study generally capture the hours of daylight between 9:18am, 11:18am, 1:18pm, 3:18pm, 5:18pm and 7:18pm (if before sunset – June 21 only).
- A written summary of the study and the sun/shadow impacts of the development.
- Images of the shadow tests using models that clearly indicate the development site, its boundary, the footprints and mass of buildings within the test site and the shadow effect on abutting buildings, land parcels, streets, public parks and accessible open spaces.

CONCLUSION

Shadow impacts of the proposed development on the surrounding area are minimal and for the most part will be contained within the subject lands. The positioning and orientation of the 5 to 6-storey apartment buildings on the north side of Hansen Boulevard do not impact the sidewalk or street of Hansen Boulevard or the existing residential uses south and west of the site. The cluster of apartment buildings do, however, cast shadows onto the eastern portion of the proposed Dog Park (Block 24) at 9:18 am through during the dates of March 21, June 21, September 21 and December 21, with the most influential shadow being cast on December 21 at 9:18am



which also covers the southeast corner of the larger park (Block 25). We note that during the winter months when the most influential shadows are cast, it is probable that the park will have decreased usage. Therefore, the impact of shadowing on the enjoyment of this public space will be minimal.

The 5 to 6-Storey apartment buildings will cast shadows onto the stormwater management pond (Block 26) in the late afternoon from 3:18pm to sunset. The most significant shadowing will occur on September 21 at 5:18pm where the two apartment buildings on the east side of Street 'A' will cast a shadow reaching the parking lot / loading area behind the Orangeville Mall.

During December 21 between 9:18am and 3:18pm, shadowing from the proposed 5 to 6-storey apartment buildings will be cast onto some of the proposed 3 to 3.5-storey street townhouses and stacked townhouses on the north side of Street 'B'. However, during these times the movement of the shadows still permit adequate sunlight to these affected units.

It is our firm's professional opinion that the proposed building heights contemplated for the proposed development are appropriate given the findings of this study.

Yours truly,

JOHN G. WILLIAMS LIMITED, ARCHITECT

David Stewart, MCIP, RPP

c.c. Carmen Jandu