June 4, 2020

Community Planning, Regulation and Mobility Committee

Re: June 9 Agenda Item Shadow and wind studies (PL-08-20)

Committee Members:

My primary interest is in the Shadow Study.

I attended the November 21, 2019 workshop held at Central Arena and submitted the attached comments dated December 2, 2019. I have the following thoughts for your consideration:

- I support the requirement to provide an assessment for the shadow impacts of a development for March 21, June 21, September 21 and December 21. (Not all reports that came before Committee and Council in past years included December 21 shadow data.)
- 2. The Sun Access Factor is presented as a measure of shadow impact on surrounding uses. This is a somewhat complex measure that is difficult to comprehend and is based on limited data 12 hours per day for four days per year.

I suggest that shadow studies should consider total hours of sunlight lost and periods of time for which all direct sunlight is lost by a given receptor. In 2018 we conducted such a study for our neighbourhood and found that properties adjacent to a seven story building would lose more than 800 hours of sunlight per year and there would be no direct sunlight for three consecutive months each year.

I believe this information would provide a clear and full picture of shadow impacts of a potential development. These are not onerous calculations. Available sun angle data, building height, location and distance from receptor can be used in a simple spreadsheet to produce this type of assessment.

Respectfully submitted,

Bob Osborne

December 2, 2019

Todd Evershed, MCIP, RPP Urban Designer Community Planning Department | Urban Design City of Burlington

Todd:

Thank you for arranging the shadow and wind study guidelines presentation and workshop on November 21. Both studies are off to a good start and reflect the high quality work being done by the city.

I have some comments, for the most part, on the shadow study:

- It is essential to include evaluations for December 21 shadow impacts in any study guidelines.
- Assessments should go beyond point in time evaluations for March 21, June 21, September 21 and December 21. Hours of sunlight lost through the year should be estimated.
- The presentation started with a focus on shadow impacts on public spaces. Only later did it
 reference impacts on established residential neighborhoods. Any shadow (or wind) study
 guidelines should be consistent with Principle 15 in "Taking Another Look at Downtown"
 which promotes smooth transitions to established neighborhoods.
- An attempt should be made to establish "acceptability" measures for shadowing like those included in the wind study guidelines
- Our group identified sidewalk safety impacts due to differential freezing as a public safety issue.

I would be glad to discuss these items with you

Bob Osborne