



August 4, 2017

David Powers  
Realty Initiatives and Development Unit  
City of Ottawa  
110 Laurier Avenue West  
Ottawa, ON K1P 1J1

Dear Mr. Powers:

Re.: Pedestrian Level Wind Study  
Massing Change Commentary  
557 & 584 Wellington Street, Ottawa  
GWE File: 16-028-PLW

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Gradient Wind Engineering Inc. (GWE) was retained by the City of Ottawa to undertake a pedestrian level wind study for the noted site. Our work was completed and summarized in a report, GWE16-028-PLW, dated May 31, 2016. The purpose of this letter is to review the impact of the massing changes on the conclusions of that study.

The major changes to the site massing from the time of the study to the present are as follows:

- (i) Buildings east of Empress Avenue and north of Albert Street have reduced from five buildings at 25 floors each to two buildings - building 3 with six floors and building 4 with four floors;
- (ii) Two low buildings have been added on the parcel of land between Albert Street and Slater Street, both of six floors, where there were no buildings there previously.

The two buildings (single tower and dual towers) west of Empress Avenue have remained at 25 floors with similar massing.

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The results of the initial wind study indicated that wind conditions at grade were acceptable for the intended uses over most of the site. Nonetheless, the windiest areas between pods west of building 4 could be mitigated with building features or landscape elements. Furthermore, rooftop podia were found to be windier than grade level, as is typically the case, but conditions could also be mitigated with appropriate landscape and building design elements.

The impact of the massing changes to the site noted above will be positive, which is to say that wind conditions around the new low buildings (buildings 3, 4, 5, and 6) will generally improve, and conditions around the remaining tall buildings west of Empress Avenue will remain the same or improve.

Therefore, the main conclusions of our review are that:

- (i) Wind conditions presented in the original study of May 31, 2016 represent a worst-case scenario which will improve for the low buildings east of Empress Avenue (buildings 3, 4, 5, and 6); and
- (ii) Wind conditions around building 1 (single tower) and building 2 (dual tower) are expected to remain the same or improve.

This completes our review of current massing conditions for the study site. Please advise us of any further questions or comments.

Sincerely,

***Gradient Wind Engineering Inc.***

A handwritten signature in dark ink, appearing to read 'Vincent Ferraro', written in a cursive style.

Vincent Ferraro, M.Eng., P.Eng.  
Managing Principal