

October 5, 2023

Urban Solutions Planning & Land Development

3 Studebaker Place, Unit 1
Hamilton, Ontario
L8L 0C8

Re: Addendum to Pedestrian Level Wind Study
175 John Street North, Hamilton, ON
GW File No.: 22-275-WTPLW – Addendum

Gradient Wind Engineering Inc. previously completed a detailed pedestrian level wind study for the proposed residential development located at 175 John Street North in Hamilton, Ontario. This letter provides a summary of relevant architectural changes to the buildings design which have been made since the study was performed, as well as the anticipated impact of those changes on the predicted pedestrian wind conditions. For a complete summary of the methodology and results of the original pedestrian wind study, please refer to Gradient Wind report #22-275-WTPLW, dated December 1st, 2022.

Upon review of the updated drawings by SRM Architects Inc. dated September 15th, 2023, the following significant changes to the design were noted:

1. The building footprint has significantly reduced, stepping back from the north elevation, from a square to rectangular planform. The overall building height has reduced from 19-storeys to 12-storeys.
2. Proposed plantings now circumnavigate the full study site.
3. At grade, outdoor loading and parking spaces are now available along the north elevation, and an exterior amenity space, with building access, has been included at the southeast corner.
4. The larger Level 3 north elevation amenity terrace has been substituted for a narrow Level 2 amenity terrace in the northeast corner.

Other minor variations in architectural drawings are not expected to significantly influence the results and recommendations of the wind study. The effects of the noted significant changes above are as follows:

1. A reduction in building height and overall footprint is strongly correlated to a decrease in local windspeeds. Therefore, the significant decrease in size of the 175 John Street development is expected to result in grade level wind comfort that is similar to or calmer than those observed in the original report.
2. The proposed row of plantings circumnavigating the perimeter of the study site, if installed as shown on the landscaping plan, are expected to have a marginal calming effect on the overall recorded grade-level wind speeds, as prominent winds approaching the study site are buffered.
3. Considering items (1.) and (2.) above, the loading and parking areas along the north elevation are expected to be suitable for walking or better throughout the year, which is acceptable. The proposed outdoor amenity and various primary building access points at the southeast corner are expected to experience winds suitable for sitting during the summer and standing or better throughout the rest of the year, which is appropriate.
4. The Level 2 amenity terrace is expected to experience an improvement in wind comfort compared to the original Level 3 terrace by being lower on the building, thus less exposed to higher level winds, and being narrow, which increases the protection afforded by the study building façade and a standard height perimeter guard. Overall, wind conditions over the Level 2 amenity terrace are expected to be comfortable for sitting or more sedentary activities throughout the summer months, without the need for mitigation.

Please advise the undersigned of any questions or concerns.

Sincerely,

Gradient Wind Engineering Inc.



Nick Petersen, P.Eng.,
Wind Engineer