



December 14, 2018

Mattamy Homes
7880 Keele Street
Vaughan, ON
L4K 4G7

Re: Pedestrian Level Winds – James Street at Martha Street
Addendum to Pedestrian Level Wind Study
GWE File No.: 16-162-CFDPLW

Gradient Wind Engineering Inc. (GWE) was retained by Mattamy Homes to undertake a computer-based pedestrian level wind (PLW) study for a residential development to be located at the south corner of the intersection of James Street and Martha Street in Burlington, Ontario. This letter provides a summary of significant architectural changes to the site which have been made since the study was issued, as well as the anticipated impact of those changes on the predicted pedestrian wind conditions. For a complete summary of the methodology and results pertaining to the original pedestrian wind study, please refer to GWE report #16-162-PLW, dated October 26, 2017.

Following completion of the pedestrian level wind study, the design development process led to several changes to the site massing which would potentially influence pedestrian level wind conditions. Specifically, the building has been extended to the west and now contains office/commercial space at grade along James Street, replacing the open landscaped area, amenity patio, and two-storey townhouse units. A reconfigured residential lobby remains at the northeast corner of the building. The southeast corner of the building is similarly dedicated to building support functions, as well as covered loading areas and surface parking, although the layout has been revised from the tested configuration. Above the ground floor, the residential building retains the northwest building segment extension until

Level 4, where the planform steps back at this corner to provide space for an elevated amenity terrace. Above Level 4, the building retains a similar planform to that which was tested. An L-shaped rooftop outdoor amenity space is now provided at Level 18 to the west and south of the mechanical penthouse.

With regard to pedestrian level wind conditions, the modified building design will present a similar projected area facing oncoming winds as compared to the tested design and is expected result in similar grade-level wind conditions as was reported in the original study. As such, wind comfort at all pedestrian areas within and surrounding the study site will be acceptable for their intended uses throughout the year. As well, no areas were found to experience conditions too windy for walking, or that could be considered unsafe.

Regarding the amenity terraces at Levels 4 and 18, prominent west quadrant winds are likely to influence comfort over these spaces. For the Level 4 terrace, it is recommended to provide a 1.8-metre-tall balcony guard around the perimeter of the terrace to deflect direct oncoming winds. For higher-level winds washing down the tower façade, it is recommended to provide a 2.0-metre-deep canopy wrapping around the northwest corner of the tower, continuing to the eastern extent of the amenity terrace. The rooftop terrace will likely require a 2.4-metre-tall perimeter guard along the west and north perimeter of the space to ensure calm conditions suitable for sitting or more sedentary activities.

This completes our review of the design changes for the planned development at James Street at Martha Street in Burlington, Ontario. Please advise the undersigned of any questions or concerns.

Yours truly,

Gradient Wind Engineering Inc.

A handwritten signature in black ink, appearing to read 'A. Sliwas', is written over a light blue circular stamp.

Andrew Sliwas, M.A.Sc., P.Eng.
Principal

GWE16-162-CFDPLW Addendum Letter