600 Southgate Drive
Guelph, ON N1G 4P6
Canada

Tel: +1.519.823.1311
Fax: +1.519.823.1316

July 23, 2025

Aiden Sweeny

Clearbrook Developments Ltd.
506-80 Front Street East
Toronto, Ontario, Canada M5E 1T4

Re: Pedestrian Wind Assessment
3115 Hurontario Street
RWDI Reference No. 2406897

Dear Aiden,

Rowan Williams Davies & Irwin Inc. (RWDI) has previously conducted a pedestrian wind study for the proposed development at 3115 Hurontario Street in Mississauga, Ontario. The assessment was based on the wind-tunnel testing conducted for the proposed development site with existing and future surroundings. The wind tunnel model was constructed based on the drawings received in January 2025 (Image 1). The wind tunnel test included proposed landscaping on-site, but trees were modelled leafless in order to provide more conservative wind conditions. Our findings and recommendations were summarized in the following final report:

> *Pedestrian Wind Study – 3115 Hurontario Street* – Mississauga*, Ontario, RWDI Project # 2406897, March 4, 2025, by Maryam Al Labbad, Hanqing Wu and Artur Nascimento.*

The results of the wind study showed appropriate wind conditions at most areas on and around the project site. However, higher-than-desired wind speeds were predicted in the outdoor charity space on the north side of the proposed building at grade, as well as on the west terrace of Level 7. Additionally, uncomfortable wind conditions were predicted at isolated locations around the northwest corner of the proposed building in the summer and winter, and around the southwest corner of the building and along the sidewalk of Hurontario Street during the winter. The annual safety criterion was also predicted to be exceeded marginally at localized areas on the southwest corner of the proposed building, on the sidewalks of Hurontario Street and Hillcrest Avenue, and on Level 7 west terrace.

Wind control strategies were discussed in the report to address both uncomfortable and unsafe wind conditions for the design team's consideration. These measures can be reviewed at a later design stage of the project.

The purpose of this letter is to comment on the impact of the design changes to the proposed project on the wind conditions predicted in the wind study report.

Recent Project Design Changes

Following the wind study, RWDI received an updated 3D model on July 23, 2025 (Image 2). Major design changes that may potentially affect the predicted wind conditions include:

- The reduction of the podium height on the north side of the building by 1 storey; hence, the outdoor amenity areas were moved from Level 3 to Level 2.
- The introduction of approximately 6 m setbacks on the east side of the building at grade, and on the north side of the podium at Level 2.
- The addition of an outdoor amenity space on the east side of the tower on Level 40, which is enclosed by a 2 m parapet.

Since the overall design, height, and orientation of the proposed development have not changed significantly relative to the design studied previously, similar wind conditions to those presented in the March 4, 2025, report are expected with the new design. The downwashing off the towers' façades and the subsequent corner acceleration flows associated with the latest design of the project are expected to occur in a similar manner to that of the initial design. The 6 m setbacks on the north and east sides are considered significant design changes. While the setback on the east side of the building is not expected to change wind conditions significantly, the setback on the north side is expected to improve the wind conditions north of the proposed building. However, its impact on the areas south of the proposed building is expected to be minimal. Generally, the areas with uncomfortable and/ or unsafe wind conditions along Hurontario Street, as indicated in the March 4, 2025 report, are expected to remain unchanged with the new design.

The wind conditions on the Level 2 outdoor amenity area are expected to be similar to those at Level 3 in the prior study. The rooftop terrace will be located on the east side and sheltered by the roof structure from the prevailing westerly and northwesterly winds. The terrace is also enclosed by a 2 m tall parapet. Therefore, wind conditions at this level are expected to be generally appropriate for the intended use in the summer, when the outdoor spaces will be used most often. Slightly higher wind speeds might be experienced at the north and south ends, so we recommend increasing the parapet height to a minimum of 2.5 m to achieve calm wind speeds throughout the amenity space.

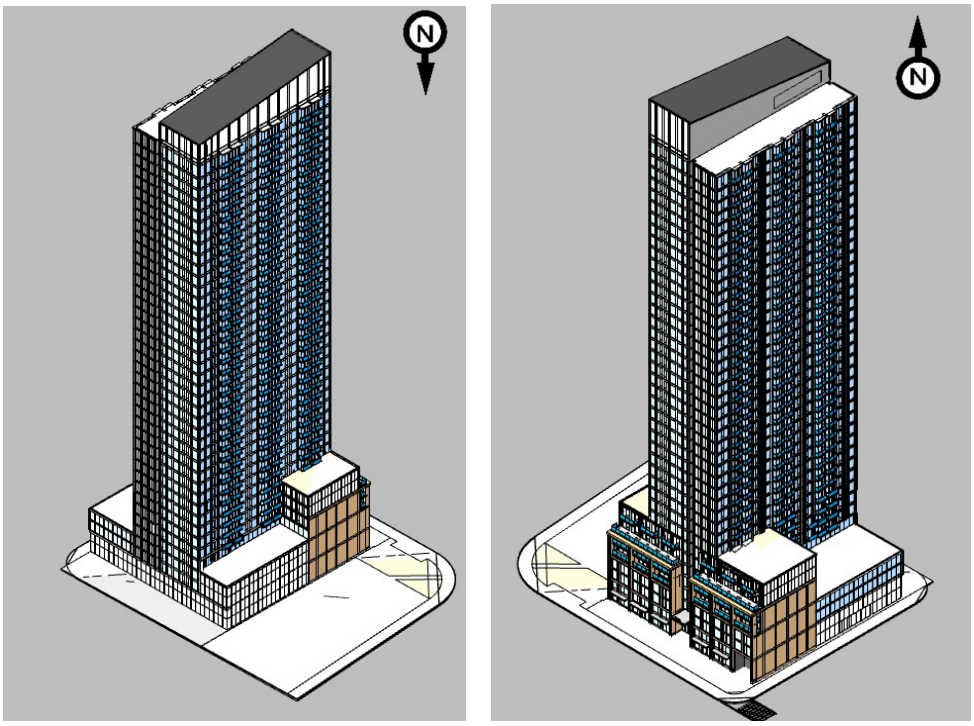

Image 1: 3D Model of the Original Design of the Proposed Development

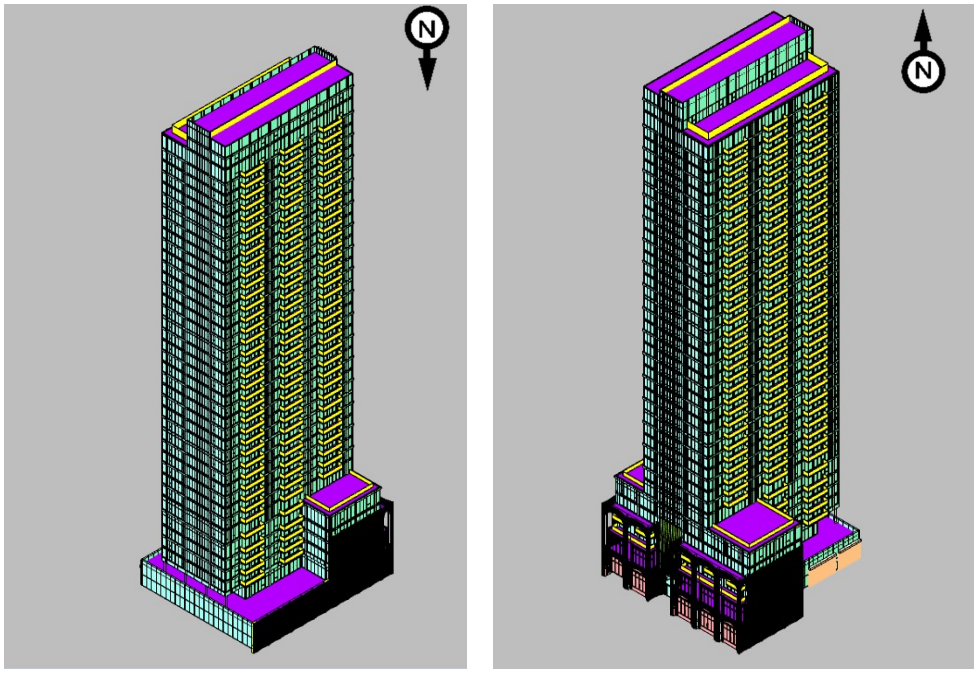

Image 2: 3D Model of the Updated Design of the Proposed Development

Closing

We trust this satisfies your current requirements. Should you have any questions or require additional information, please do not hesitate to contact us.

Yours truly,

RWDI

Maryam Al Labbad, M.A.Sc., EIT
Technical Coordinator
Maryam.AlLabbad@rwdi.com

Artur Nascimento, PMP
Project Manager
Artur.Nascimento@rwdi.com