March 27, 2024

9441-6302 Quebec Inc.
5139 Av. de Courtrai, suite 300
Montréal, QC H3W 0A9

Attn: Félix Allaire
fallaire@devmont.net

Dear Mr. Allaire:

Re: Pedestrian Level Wind Study Addendum
6310 Hazeldean Road, Ottawa, ON
Gradient Wind File 20-303

Gradient Wind Engineering Inc. (Gradient Wind) completed a computational pedestrian level wind (PLW) study to satisfy Zoning By-law Amendment (ZBLA) application submission requirements for the proposed development located at 6310 Hazeldean Road in Ottawa, Ontario[1]. The study was conducted based on architectural drawings of the proposed development provided by Figurr Architects Collective in September 2023[2]. An updated set of architectural drawings was provided to the consultant team in December 2023[3] which included some differences to the massing design that were described in the noted PLW study.

The current architectural drawings, which were distributed to the consultant team in March 2024[4] in preparation for a resubmission of the ZBLA application, include several changes to the building massing. Specifically, the maximum height of Building A has increased from 9 to 12 storeys, while the west section has increased from 6 to 7 storeys. Additionally, the extension along the east elevation from Level 3 to the MPH Level has been removed, and the distance between the taller buildings serving Buildings A and B has increased by approximately 7 metres (m). Moreover, the maximum height of Building B has decreased

[1] Gradient Wind Engineering Inc., '*6310 Hazeldean Road – Pedestrian Level Wind Study*', [Dec 21, 2023]
[2] Figurr Architects Collective, '*6310 Hazeldean Road*', [Sep 8, 2023]
[3] Figurr Architects Collective, '*6310 Hazeldean Road – SPC Rezone*', [Nov 29, 2023]
[4] Figurr Architects Collective, '*6310 Hazeldean Road – 3D Sketchup Model*', [Mar 20, 2024]

from 25 to 21 storeys, and the distance between the 2-storey podium serving Building A and the west elevation of Building B has increased by approximately 2.5 m.

The original PLW study concluded that most grade-level areas within and surrounding the subject site were predicted to experience conditions that were considered acceptable for the intended pedestrian uses throughout the year, inclusive of the nearby public sidewalks, laneways, surface parking, walkways, green spaces, and in the vicinity of building access points. Wind conditions within the common amenity terrace serving Building A at Level 3 were predicted to be suitable for sitting during the typical use period (that is, from May to October, inclusive), which was considered acceptable.

Regarding the building access point near the northwest corner of Building B, wind comfort conditions in the immediate vicinity were predicted to exceed the walking threshold by a maximum of approximately 3% of the time during the winter season. For this reason, a canopy at the northwest corner of Building B, as well as the relocation of the noted access point farther to the east, were recommended. The noted mitigation recommendations have been adopted by the design team.

From a wind engineering perspective, the differences in the 2023 and the 2024 massing designs are considered modest. Conditions at grade within and surrounding the subject site are expected to be similar for the current massing and may be slightly improved due to the reduction in height of Building B and the increase in separation between Buildings A and B. As such, the conclusions and mitigation recommendations for the windiest areas at grade as detailed in the original PLW study are also expected to remain mostly representative of the current site massing. Regarding the wind comfort conditions within the Level 3 amenity terrace serving Building A, conditions are expected to remain calm and suitable for sitting during the typical use period.

Sincerely,

Gradient Wind Engineering Inc.

Justin Ferraro, P.Eng.
Principal