October 2, 2024

11034936 Canada Inc.
98 rue Lois
Gatineau, QC J8Y 3R7

Attn: Jean-Luc Rivard, Vice-President – Land Acquisition & Development
jlrivard@brigil.com

Dear Mr. Rivard:

Re: Pedestrian Level Wind Study Addendum
2829 Dumaurier Avenue, Ottawa, ON
Gradient Wind File 20-150

Gradient Wind Engineering Inc. (Gradient Wind) completed a computational pedestrian level wind (PLW)[1]. to satisfy Site Plan Control application submission requirements for the proposed development located at 2829 Dumaurier Avenue in Ottawa, Ontario. The study was conducted based on architectural drawings of the proposed development provided by Roderick Lahey Architect Inc. in March 2024[2]. The City of Ottawa provided the applicant, 11034936 Canada Inc., with the following comments:

City of Ottawa, Planning, Comment 1.i:

> *"Staff have concerns with the wind impacts of the proposed development on surrounding areas. Consider introducing building design measures to help reduce the wind conditions being down washed from the proposed building. Refer to the wind analysis terms of reference."*

City of Ottawa, Urban Design, Comment 12:

> *"The wind study shows that wind is worsened in the park and in between the buildings as compared with existing conditions and the 2021 proposal. I note that wind conditions of the*

[1] Gradient Wind Engineering Inc., '*2829 Dumaurier Avenue – Pedestrian Level Wind Study*', [April 2, 2024]
[2] Roderick Lahey Architect Inc., '*2829 Dumaurier Avenue, Site Plan*', [March 20, 2024]

planned tower neighbourhood context have not been modelled. Further mitigation, including sculpting the building massing, should be explored to improve wind comfort."

The mostly currently suburban environs of the subject site and the limited existing built-up massing in the vicinity of the proposed development exposes the subject site to prevailing winds from multiple directions. Salient winds, including those from the east and southwest clockwise to the northwest are predicted to downwash over the façades of the podium and tower towards grade and to accelerate around the principal corners of the building, particularly the southwest and northwest corners, and between the proposed development and the neighbouring low-rise buildings to the north and south. An appropriate mitigation strategy will be developed in collaboration with the building and landscape architects as the design of the proposed development progresses. This work is expected to support the future Site Plan Control application resubmission.

Notably, the introduction of future proposed developments within the Pinecrest and Queensview Stations Secondary Plan areas would be expected to provide significant sheltering effects from prevailing winds and to improve pedestrian wind comfort within and surrounding the subject site, inclusive of Dumaurier Park. Of particular note, the Foster Farm redevelopment, which includes a proposed ten high-rise buildings and nine mid-rise buildings and is located to the immediate southwest of the proposed development would be expected to provide significant relief from the prevailing winds from the southwest compass quadrant and to improve pedestrian wind comfort and safety within the area.

Sincerely,

Gradient Wind Engineering Inc.



David Huitema, M.Eng., P.Eng.
CFD Lead Engineer