

GRADIENTWIND

ENGINEERS & SCIENTISTS

November 17, 2025

Claridge Homes
210 Gladstone Avenue
Ottawa, ON K2P 0Y6

Attn: Evan Saunders, MCIP RPP, Planner
saunders@fotenn.com

Dear Mr. Saunders:

Re: Pedestrian Level Wind Study Addendum
829 Carling Avenue, Ottawa
Gradient Wind File 21-086

Gradient Wind Engineering Inc. (Gradient Wind) completed a computational pedestrian level wind (PLW) study in January 2024¹ based on architectural drawings of the proposed development prepared by Hariri Pontarini Architects in December 2023 to satisfy concurrent Official Plan Amendment (OPA), Zoning By-Law Amendment (ZBLA), and Site Plan Control application resubmission requirements for the proposed development located at 829 Carling Avenue in Ottawa, Ontario (hereinafter referred to as “proposed development” or “subject site”)². The current architectural drawings, which were distributed to the consultant team in November 2025³ in preparation for a resubmission of the OPA, ZBLA, and Site Plan Control applications, include minor changes to the proposed development as compared to the December 2023 massing. Most notably, the common amenity terraces at Levels 9 and 10 have been relocated to Levels 4 and 5, respectively. Furthermore, the amenity balcony along the west elevation at Level 9 is now located at Level 4, while the amenity balconies at the northeast and southeast corners at Level 9 have been relocated to the north of Level 5.

The January 2024 study concluded that all grade-level areas within and surrounding the subject site were predicted to experience conditions considered acceptable for the intended pedestrian uses throughout

¹ Gradient Wind Engineering Inc., ‘829 Carling Avenue – Pedestrian Level Wind Study’, [Jan 15, 2024]

² Hariri Pontarini Architects, ‘829 Carling Avenue’, [Dec 15, 2023]

³ Hariri Pontarini Architects, ‘829 Carling Avenue, Ottawa, ON, ZBA/OPA/SPA Submission’, [Nov 13, 2025]

the year, inclusive of the nearby public sidewalks, nearby transit stops, existing parking lots to the west and northwest, and in the vicinity of building access points. Wind comfort conditions within the amenity balconies serving the proposed development at Level 9 were predicted to be suitable for sitting throughout the year and conditions over the common amenity terrace serving the proposed development at Level 9 were predicted to be suitable for sitting during the typical use period, (that is, May to October, inclusive), which was considered acceptable. Notably, the Level 9 terrace was modelled with 1.8-metre (m) tall wind screens along its full perimeter. The common amenity terrace serving the proposed development at Level 10 was similarly modelled with 1.8-m-tall perimeter wind screens, along with a canopy located 4.2 m above the local walking surface of the terrace along the west elevation, with a return of approximately 2 m along the south elevation, extending 2.5 m and 2 m from the west and south elevations, respectively. With the noted wind mitigation features, conditions during the typical use period within the Level 10 terrace were predicted to be suitable for sitting to the north and along the west and south tower elevations with standing conditions predicted throughout the remainder of the terrace. To improve comfort conditions, it was recommended to implement mitigation inboard of the terrace perimeter responding to programming, taking the form of 1.8-m-tall wind screens and/or other landscape elements such as planters and dense clusters of coniferous plantings strategically located around sensitive and designated seating areas.

The December 2023 and November 2025 massing designs are mostly similar, and similar wind conditions that are suitable for the intended pedestrian uses are expected within and surrounding the subject site. The conclusions and recommendations as detailed in the January 2024 PLW study and as summarized above are expected to remain representative of the current site massing. Wind conditions within the Level 4 amenity terrace, Level 4 amenity balcony, and the Level 5 amenity balconies are expected to be suitable for sitting during the typical use period, which is considered acceptable. With a canopy above the Level 5 terrace and the 1.8-m-tall wind perimeter wind screens as noted above, conditions over the Level 5 amenity terrace are expected to be suitable for mostly sitting during the typical use period.

Sincerely,

Gradient Wind Engineering Inc.

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

