

GRADIENTWIND

ENGINEERS & SCIENTISTS

February 26, 2021

Claridge Homes
2001-210 Gladstone Avenue
Ottawa, ON K2P 0Y6

Attn: Vincent Dénommé
vincent.denomme@claridgehomes.com

Dear Mr. Dénommé:

Re: Pedestrian Level Wind Study Addendum
East Flats – 301 Lett Street, Ottawa
Gradient Wind Project File 17-074

Gradient Wind Engineering Inc. (Gradient Wind) completed a computer-based pedestrian level wind (PLW) study using the computational fluid dynamics (CFD) technique¹ to satisfy Site Plan Control requirements for the proposed tall building development located at 301 Lett Street, Ottawa. The PLW study included a recommendation to introduce wind mitigation measures on the common amenity terraces serving Tower 1 (north) and Tower 2 (south) at Level 6 to provide comfortable wind conditions during the typical use period, defined as late spring to early autumn.

Following the completion of the PLW study, a wind mitigation strategy was developed with the design architect². Since wind conditions over the terraces were predicted to be moderately windy during the typical use period, wind barriers are expected to provide the necessary calming measures. Specifically, the wind mitigation strategy involves solid vertical glazed wind screens rising 1.825 metres (m) above the roof decks to protect seating areas from statistically prominent winds.

- For Tower 1 (north), the tall wind screens follow the profile of the amenity space along its north side, beginning at horizontal architectural gridline 'E', connecting to the northwest and northeast corners of the stairwell, and continuing along the east side of the amenity space, terminating east

¹ Gradient Wind Engineering Inc., 'Pedestrian Level Wind Study', Report: 17-074-PLW [May 8, 2020]

² EVOQ Architecture, 'Issued for Coordination - Wind Mitigation' [Feb 25, 2021]

of horizontal architectural gridline 'B' and immediately south of vertical architectural gridline '4'. The wind screens are expected to protect the amenity space from prominent winds from the west clockwise to north during the typical use period, while also increasing wind comfort within the remaining colder months of the year.

- For Tower 2 (south), the tall wind screens follow the profile of the amenity space along its north side, beginning immediately west of horizontal architectural gridline 'F.7', wrapping counterclockwise the west side of the amenity space, and terminating immediately east of horizontal architectural gridline 'H.2' to connect to the southwest corner of the stairwell. Standard height wind screens (i.e., 1.070 m) occupy the remaining perimeters of the space on the north and south sides, adjacent to the west elevation of the building.

Following the implementation of the noted mitigation strategies, wind conditions within the common amenity terraces serving Towers 1 and 2 at Level 6 are expected to be comfortable for the anticipated uses of the spaces during the typical use period, while also increasing comfort levels within the remaining colder months of the year, as compared to the wind conditions developed in the detailed PLW study.

Please contact the undersigned with any comments or questions.

Sincerely,

Gradient Wind Engineering Inc.



Justin Ferraro, P.Eng.
Principal