

GRADIENTWIND

ENGINEERS & SCIENTISTS

February 8, 2024

All Saints Development LP
150 Elgin Street, Suite 1000
Ottawa, ON K2P 1L4

Attn: Ross Farris, Senior Development Manager
ross.farris@windmilldevelopments.com

Dear Mr. Farris:

Re: Pedestrian Level Wind Study Addendum
315 Chapel Street, Ottawa
Gradient Wind File 23-051

Gradient Wind Engineering Inc. (Gradient Wind) completed a computational pedestrian level wind (PLW) study to satisfy a Zoning By-law Amendment application submission for the proposed residential building located at 315 Chapel Street in Ottawa, Ontario¹. The study was conducted based on architectural drawings of the proposed development provided by Linebox Studio in May 2023². Subsequent minor revisions to the architectural design³ prior to the finalization of the PLW study are captured in an addendum in the Executive Summary of the PLW study.

The current architectural drawings, which were distributed to the consultant team in January 2024⁴ in final preparation for submission of the Zoning By-law Amendment and Heritage Permit applications, include several changes to the building massing and architectural design. At Level 2, a canopy, which includes a green roof area, now extends from the south building elevation, covering a portion of the pedestrian walkway to the south. Additionally, the building extends from the northeast corner to the west at this level. Beginning at Level 5, the configuration of the balconies along the south, southwest, and northwest elevations has been revised. At the rooftop level, a mechanical room has been added to the

¹ Gradient Wind Engineering Inc., '315 Chapel Street – Pedestrian Level Wind Study', [Aug 8, 2023]

² Linebox Studio, 'Windmill – All Saints', [May 23, 2023]

³ Linebox Studio, 'Windmill – All Saints, Issued for ZBLA & HIA' [Aug 11, 2023]

⁴ Linebox Studio, 'Windmill – All Saints, Revised for ZBLA & HIA', [Jan 25, 2024]

southwest, with an interior corridor linking the amenity room and washrooms to the north of the level to the private terraces, mechanical room, and stairwell to the south.

The original 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 the year, inclusive of the nearby public sidewalks, transit stops, the existing patio serving the All Saints Anglican Church, and in the vicinity of building access points. Regarding the common amenity terrace at the roof level, wind comfort conditions during the typical use period (that is, May to October, inclusive), were predicted to be calm and suitable for sitting, which is considered acceptable.

The differences between the 2023 and the 2024 architectural designs are considered minor from a wind engineering perspective. The wind conditions at grade level within and surrounding the subject site and within the common amenity terrace at the roof level are expected to be similar under the current massing and to remain suitable for the intended pedestrian uses. As such, the conclusions of the original study are expected to remain representative of the current site massing.

Sincerely,

Gradient Wind Engineering Inc.



Justin Ferraro, P.Eng.
Principal

