

GRADIENTWIND

ENGINEERS & SCIENTISTS

August 6, 2021

Colonnade BridgePort
16 Concourse Gate, Suite 200
Ottawa, ON K2E 7S8

Attn: Bonnie Martell, MCIP, RPP, Development Manager
bmartell@colonnadebridgeport.ca

Dear Ms. Martell:

Re: Pedestrian Level Wind Study, Addendum
100 Argyle Avenue, Ottawa
Gradient Wind File 18-108

Following the completion of a pedestrian level wind (PLW) study based on computer simulations using the computational fluid dynamics (CFD) technique for the proposed mixed-use residential development located at 100 Argyle Avenue in Ottawa, Ontario¹, Gradient Wind Engineering Inc. (Gradient Wind) was informed by the design team that the proposal has been amended to a 12-storey, 38-metre-tall building² (previously 21 storeys³). The footprint of the current design is similar to the design considered for the original PLW study. This addendum is provided at the request of Colonnade BridgePort to support a Site Plan Control application submission for the proposed development.

From a wind engineering perspective, the significant reduction in height is expected to result in generally calmer wind conditions around the subject site. Since wind conditions were determined to be acceptable across the subject site for the original taller massing, a formal update to the wind study is not recommended. Of particular importance, excluding anomalous localized storm events such as tornadoes and downbursts, no areas over the subject site are anticipated to be uncomfortable or dangerous for the current massing.

¹ Gradient Wind Engineering Inc., 'Pedestrian Level Wind Study – 100 Argyle Avenue, Ottawa', [Nov 15, 2018]

² RLA Architecture, '100 Argyle' [Jul 5, 2021]

³ RLA Architecture, '100 Argyle' [Oct 30, 2018]

The original 2018 design for 100 Argyle Avenue included a common amenity terrace along the west side of the proposed building at Level 4. The current architectural design includes a common amenity terrace at Level 4 along the east side of the proposed building, which is expected to receive calmer wind conditions as compared to a terrace with a western wind exposure. Additionally, the proposed building is expected to provide sheltering effects to the east terrace, which will increase comfort levels within most of the terrace area. As such, the terrace along the east side of the proposed building at Level 4 is anticipated to be suitable mostly for sitting during the typical use period of May to October, inclusive, becoming mostly suitable for standing during the remaining colder months of the year. These conditions would be considered acceptable according to the City of Ottawa wind criteria⁴.

Please contact the undersigned with any questions.

Sincerely,

Gradient Wind Engineering Inc.



Justin Ferraro, P.Eng.
Principal

⁴ City of Ottawa Terms of References: Wind Analysis
https://documents.ottawa.ca/sites/default/files/torwindanalysis_en.pdf