## GRADIENTWIND

November 11, 2021

Ironwood Fund Limited Partnership 18 Louisa Street, Suite 370 Ottawa, ON K1R 6Y6

c/o Fotenn Planning + Design 396 Cooper Street, Suite 300 Ottawa, ON K2P 2H7

Attn: Ghada Zaki, RPP, MCIP, Planner zaki@fotenn.com

Dear Ms. Zaki:

Re: Pedestrian Level Wind Study, Addendum 18 Louisa Street, Ottawa Gradient Wind File 20-258

Following the completion of a pedestrian level wind (PLW) study based on computer simulations using the computational fluid dynamics (CFD) technique to satisfy the requirements for concurrent Zoning Bylaw Amendment and Site Plan Control application submissions for the proposed development located at 18 Louisa Street in Ottawa<sup>1</sup>, Gradient Wind Engineering Inc. (Gradient Wind) was informed of the following comment from the City of Ottawa:

"Planning Rationale speak to a 10-storey addition to the existing 3-storey building. Does the addendum section in the Executive Summary [PLW study] include the height change? Otherwise, please ensure that the report speaks to the current proposal."

The PLW study was performed based on drawings prepared by Hobin Architecture Inc. in February 2021<sup>2</sup>. While the study included an addendum in the executive summary that addressed, at a high level, the influence of the architectural changes<sup>3</sup> on the wind study, it is the objective of the present addendum

<sup>&</sup>lt;sup>1</sup> Gradient Wind Engineering Inc., 'Pedestrian Level Wind Study – 18 Louisa Street, Ottawa', [May 28, 2021]

<sup>&</sup>lt;sup>2</sup> Hobin Architecture Inc., 'Issued for Coordination – 18 Louisa Street', [Feb 26, 2021]

<sup>&</sup>lt;sup>3</sup> Hobin Architecture Inc., 'Issued for Rezoning and SPA – 18 Louisa Street', [May 28, 2021]

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letter to respond directly to the above noted City of Ottawa comment. Specifically, the wind simulations were performed for a 9-storey building plus mechanical penthouse rising nominally 37 metres (m) above the ground floor to the top of the upper mechanical room. The Planning Rationale speaks to a proposed 10-storey building, inclusive of the mechanical penthouse, which also rises nominally 37 m above the ground floor. Therefore, for the purposes of the PLW study, there are no significant changes between the two drawing packages and the conclusions are the same.

Sincerely,

## Gradient Wind Engineering Inc.



Justin Ferraro, P.Eng. Principal