

GRADIENTWIND

ENGINEERS & SCIENTISTS

February 6, 2024

Hennepin's View Inc.
6361 Fallsview Blvd
Niagara Falls, ON L2G 3V9

Attn: Frank Dicosimo, Owner
frank@niagarahri.com

Dear Mr. Dicosimo:

Re: Mist Study Addendum
Oakes Hotel Redevelopment, Niagara Falls
Gradient Wind File 22-366

Gradient Wind Engineering Inc. (Gradient Wind) completed a mist study to satisfy a Zoning By-law Amendment application submission for the proposed hotel redevelopment, referred to as the "Oakes Hotel Redevelopment", located at 6546 Fallsview Boulevard and 6503-6519 Stanley Avenue in Niagara Falls, Ontario¹. The study was conducted based on architectural drawings of the proposed development provided by architects-Alliance in January 2023².

The current architectural drawings, which were distributed to the consultant team in February 2024³ in preparation for resubmission of the Zoning By-law Amendment application, include several changes to the building massing and architectural design. Along with internal programming changes within the upper ground floor, a residential main entrance has been added near the northeast corner and a hotel main entrance has been added at the southeast corner of the hotel building. The noted hotel entrance includes a drop-off area to its east and is served by a porte-cochère above. The central atrium between the podia serving each tower now only extends up to Level 4, and the podia are connected through a sky bridge at Level 5. Most notably, as the podium of the hotel building has been shortened by one storey, the terraces atop the podia have been relocated from Level 8 to Level 7.

¹ Gradient Wind Engineering Inc., 'Mist Study, Oakes Hotel, Niagara Falls', [June 6, 2023]

² architects-Alliance, 'Niagara Oakes Hotel Redevelopment', [Jan 31, 2023]

³ architects-Alliance, 'Oakes Hotel Redevelopment, Zoning By-Law Amendment Application – Final', [Feb 1, 2024]

The original study concluded that an incremental redirection of the existing mist plume towards the Canadian side of the Falls was predicted due to an increased extent of the wake and reversed flow generated by the proposed development, increasing misting conditions over Table Rock Centre, the Niagara Parkway, and the nearby pedestrian walkways, as compared to current conditions. However, it was concluded that this increase in misting conditions was not predicted to extend over the Niagara escarpment and over the proposed development or the nearby high-rise hotels, inclusive of the Fallsview Casino Resort and the Falls Incline Railway.

Importantly, the original study concluded that these increased misting conditions occur for relatively infrequent north-northwesterly winds. Under the prevailing southwesterly winds, the introduction of the proposed development was expected to have a lesser impact on misting conditions on the Canadian side of the Falls as compared to other tall building developments to the south of the proposed development.

The differences in the 2023 and the 2024 massing designs are not considered significant for the misting conditions, and as such, are not expected to alter the principal conclusions of the mist study.

Sincerely,

Gradient Wind Engineering Inc.



Justin Ferraro, P.Eng.
Principal

