

# GRADIENTWIND

ENGINEERS & SCIENTISTS

September 30, 2022

**The Ottawa Hospital**  
1053 Carling Avenue  
Ottawa, ON K1Y 4E9

Re: 930 Carling Avenue & 520 Preston Street, Ottawa  
The Ottawa Hospital New Campus Development  
Addendum to Environmental Noise & Vibration Assessment  
GW File No.: 20-049-Addendum Letter

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Gradient Wind Engineering Inc. (Gradient Wind) was retained by The Ottawa Hospital, through a sub-consultant agreement with Parsons Inc., to undertake an Environmental Noise & Vibration Assessment to satisfy Site Plan Control application and Federal Land Use and Design Approval requirements for the proposed New Campus Development for The Ottawa Hospital (TOH), located between 930 Carling Avenue and 520 Preston Street in Ottawa, Ontario (*ref. GW20-049-Noise & Vibration Final, dated May 7, 2021*).

Following completion of Gradient Wind's 2021 report, the development design process led to site plan changes, as detailed in the drawings prepared by HDR Architects, in September 2022. Regarding anticipated roadway traffic noise levels, we expect that the changes to the building design will result in similar traffic noise levels on each façade of the building, and therefore the recommendations of the original report can still be relied upon. Detailed stationary noise impacts are provided in Gradient Wind's stationary noise assessment report (*ref. GW20-049-Stationary Noise Final, dated Sep 30, 2022*). An updated site description is provided below:

The New Campus Development for TOH is located between 930 Carling Avenue and 520 Preston Street in Ottawa; situated on a parcel of land bounded by Carling Avenue to the north, Preston Street to the east, Prince of Wales Drive to the southeast, Birch Drive to the southwest, and Maple Drive to the west. The New Campus Development includes a main Hospital



**ARCHITECTURAL RENDERING, NORTH PERSPECTIVE  
(COURTESY OF HDR ARCHITECTURE ASSOCIATES INC.)**

building and a Central Utility Plant (CUP), referred to as Phases 4 and 3 respectively and both form the focus of the present study. A future research building will be located to the north of the previously approved Phase 2 parking garage to the southeast, and three future towers to be located at the northeast corner.

The main Hospital building comprises two nearly rectangular building components connected by a common podium. The building to the west is an eight-storey building, hereinafter referred to as the “Tower A”, and the building to the east is a 12-storey building, hereinafter referred to as the “Tower B”. The Tower A includes terraces along the east and west elevations at Levels 5 and 6 and the Tower B includes a helicopter pad on the roof. Entrances to the main hospital building are provided below-grade on the east elevation (public access to the emergency room) and west elevation (ambulance access), and grade-level access on the south (loading area) and north. Additionally, a pedestrian bridge at the northeast corner provides access between Level 1 of the main hospital building and the parking garage to the northeast. The covered emergency level includes short-term parking, and the main entrance level includes short-term parking and barrier-free parking surrounded by landscaping towards the northeast of the main entrance plaza. A wellness garden is located north on the main entrance plaza.

The CUP is a one-storey rectangular building located at the southwest corner of the subject site aligned with Maple Drive to the southwest. There is a fuelling and loading area located at the northeast corner, and a main entrance located at the northwest corner. The CUP is located below the level of Maple Drive and includes open areas and covered areas that will include surface parking. The CUP will include exhaust stacks that extend above the surface of the CUP roof and parking area.

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Should you have any questions, or wish to discuss our findings further, please call us (613) 836-0934 or contact us by e-mail at [joshua.foster@gradientwind.com](mailto:joshua.foster@gradientwind.com). In the interim, we thank you for the opportunity to be of service.

Sincerely,

**Gradient Wind Engineering Inc.**



Michael Lafortune, C.E.T.  
Environmental Scientist



Joshua Foster, P.Eng.  
Lead Engineer