

March 30, 2021

Raj Patel
c/o Stantec
400-1331 Clyde Avenue
Ottawa, ON K2C 3G4

Attn: Kris Kilborn
kris.kilborn@stantec.com

Dear Mr. Kilborn:

Re: Proposal for Detailed Traffic Noise Impact Study
135 Lusk Street, Ottawa
Gradient Wind Proposal #21-147P

1. INTRODUCTION

At the request of Stantec on behalf of Raj Patel, we are pleased to offer a detailed traffic noise impact study, in support of a Site Plan Control (SPA) application, for the proposed commercial (hotel) development located at 135 Lusk Street in Ottawa, Ontario. The assessment would analyze roadway traffic noise impacts on the development to ensure that future occupants are afforded comfortable use of the outdoor and indoor living spaces, as directed by the City of Ottawa's Environmental Noise Control Guidelines (ENCG). In accordance with the Meeting Summary Notes, this study will also include initial commentary on existing sources of stationary noise (the hotel to the east) as well as commentary on the impact of the proposed development's stationary noise sources on its surroundings.

The subject site (Block 10) comprises an approximate triangular parcel of land within a larger block of land that is bounded by O'Keefe Court to the north, Fallowfield Road to the east, and Strandherd Drive to the south. The proposed development comprises a six-storey, commercial (hotel) building with a rectangular planform, and is situated to the west of the existing Hampton Inn & Suites Ottawa West hotel. This proposal is based on a topographical plan of survey prepared by Annis, O'Sullivan, Vollebek Ltd., dated October 16, 2020, as well as Meeting Summary Notes, dated August 26, 2020.

2. DETAILED TRAFFIC NOISE IMPACT STUDY

The major sources of traffic noise on the development are Fallowfield Road (arterial) to the east and Strandherd Drive to the south.

In accordance with the ENCG, Ministry of the Environment, Conservation and Parks (MECP) guidelines described in Publication NPC-300, and good engineering practice, study highlights include:

- Create a CAD model of site and surroundings.
- Obtain roadway traffic volumes based on road classifications outlined in the City of Ottawa's Official Plan (OP) and Transportation Master Plan and from discussions with the city, as necessary.
- Place approximately five (5) discrete noise receptors around the study site to represent specific locations of concern, including building facades, outdoor amenity areas, and window elevations.
- Perform roadway traffic noise calculations using the MECP computerized noise assessment program, STAMSON 5.04, for daytime and nighttime periods for a typical traffic mix of passenger vehicles, buses, and trucks.
- Compare results with ENCG criteria to ensure that interior and exterior noise levels do not exceed the allowable limits.
- Provide general commentary on stationary noise (impact of the development on surroundings and itself) to satisfy a SPA application.
- Provide ventilation requirements and warning clauses, if required.
- If exterior noise levels exceed the MECP recommended level of 55 dBA, perform additional calculations to determine the required mitigation to protect the Outdoor Living Areas (OLA's).
- If necessary, perform interior noise calculations for a typical unit, assuming building wall details satisfy the minimum Ontario Building Code (OBC) requirements.
- If interior noise criteria are not met, specify construction details including Sound Transmission Class (STC) rating for windows.

*This study will also include commentary on existing sources of stationary noise (the hotel to the east).



3. FEE PROPOSAL

Based on the foregoing scope of work, we offer the following lump sum fees for our services as identified in the table below. Fees include all engineering time, incidental expenses and overhead.

SERVICES		COST (CAD)
1. Detailed Traffic Noise Impact Study	<ul style="list-style-type: none"> - Acquire traffic volume information and CAD data - CAD modelling of site and surroundings - Calculate expected traffic noise impacts on development - Provide recommendations for window STC, if required - Provide ventilation requirements and warning clauses - Provide recommendations to mitigate noise levels, if needed - Provide general commentary on sources of stationary noise, including existing sources (hotel) - Prepare draft and final reports 	\$ 4,500
2. Site Plan Control (SPA) Resubmission/Addenda to City Comments	<ul style="list-style-type: none"> - Inclusion of one SPA application resubmission/response to comments from the municipality provided the massing changes are not significant 	Included

Any work beyond the stated scope would be charged at our hourly rates. Hourly fees will be determined based on the following unit cost in CAD dollars. The HST will be added to all invoiced amounts.

(i) Managing Principal	\$ 300 / Hour
(ii) Principal, Senior Associate	\$ 250 / Hour
(iii) Senior Engineer, Senior Project Manager	\$ 200 / Hour
(iv) Intermediate Engineer, Project Manager	\$ 175 / Hour
(v) Junior Engineer, Senior Technologist	\$ 125 / Hour
(vi) Technologist	\$ 100 / Hour

4. SCHEDULE & REQUIRED INFORMATION

The work would be completed within 3 to 4 weeks following receipt of required information and authorization to proceed. A final report would be provided as required by the project schedule. To execute the work, we would require a full architectural drawing package in AutoCAD format.



5. TERMS OF PROPOSAL & PAYMENT

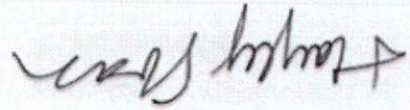
This proposal is valid for a period of 30 days following the date of the proposal. Gradient Wind reserves the right to modify the cost of services after the validity period. The project will be initiated upon receiving the required design drawings and authorization to proceed. The fees would be invoiced upon completion of our draft report and are due within 30 days of receipt.

If the scope and terms of this proposal are satisfactory, please indicate your acceptance by completing and returning the following *Client Approval* page.

Thank you for considering our services.

Sincerely,

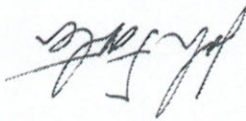
Gradient Wind Engineering Inc.



Hayley Sloan, BA (Hons)
Proposal Coordinator

Gradient Wind Proposal #21-147P

Joshua Foster, P.Eng.
Principal



6. CLIENT APPROVAL

Raj Patel accepts the terms of Gradient Wind proposal #21-147P, and hereby authorizes Gradient Wind to proceed with the work below as described herein. The undersigned is authorized to sign on behalf of the client. Please forward a signed and completed Client Approval form by email to joshua.foster@gradientwind.com.

SERVICES		COST (CAD)
1. Detailed Traffic Noise Impact Study		\$ 4,500

Signature Patel

Name & Title Raj Patel Partner

Date 30/6/2021

