GRADIENTWIND

July 12, 2019

Trinity Developments c/o Glen Vaillancourt Roderick Lahey Architect Inc. 56 Beech Street Ottawa, ON K1S 3J6

Dear Mr. Vaillancourt:

Re: Traffic Noise Cover Letter Rideau & Chapel, Ottawa GWE File No.: 19-010 – Cover Letter

This letter describes how we have addressed comments prepared by the City of Ottawa in their memo dated June 4, 2019, pertaining to the traffic noise assessment performed for the proposed mixed-use development located at 151-153 Chapel Street in Ottawa, Ontario. Below is a summary of how each of the comments relating to the noise study have been addressed. The number sequence below is in reference to each of the numbered comments continued in the memo.

62: Table 4 in Section 5.3 speaks to Noise levels for barrier and no barrier. Please ensure these are correct figures that are provided.

GWE Response: This table should read as follows and is consistent with the barrier figure.

Location	Reference Receptor	Barrier Height (m)	Daytime Leq Noise Levels (dBA)	
			With Barrier	Without Barrier
Phase 1 – 2 nd Floor Terrace	14	1.1	55	60

TABLE 4: RESULTS OF NOISE BARRIER INVESTIGATION

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63. Why are floors 2-8 and 11-24th in Phase I as well as floors 7-22 not included in this study? Do the chosen receptor locations provide sufficient information to adequately determine the expected Noise levels expected for both towers?

GWE Response: This is correct. Noise levels are generally uniform along the entire façade, partly due to reflective ground surfaces, but primarily due to STAMSON model limitations.

64. Please speak to reflective noise from proposed landscaping as per grading and landscaping designs.

GWE Response: STAMSON is only capable of modeling full reflective or full absorptive intermediate ground characteristics. Because intermediate ground characteristics are primarily reflective, reflective ground is considered, as per ORNAMENT guidelines.

65. Please confirm and show that lower and upper floors are not affected by reflective noise. Refer to current proposal with landscape and grading plans.

GWE Response: STAMSON model cannot account for reflected noise on vertical surfaces. Reflective intermedia ground characteristics are accounted for as per Comment 64.

66. Please speak to the OLA on the 10th Storey and to whether mitigation is required or not. If applicable, please provide boundaries etc.

GWE Response: Noise levels at the 10th Floor Terrace (R16 – Table 3) are below 55 dBA during the daytime period, therefore mitigation is not required. Other areas of 10th Floor terrace have additional blockage from building massing; therefore, noise levels will be lower.

67. OLA at 2nd Storey requires mitigation. Please provide shop drawings and material specifications prior to SPC approval or a condition will be applied to the SPC Agreement for this item.

GWE Response: Executive Summary indicates that this information is to be provided once available.

68. A stationary noise study is required to determine the impact of all proposed roof top units for this building and any surrounding noise sources. Please provide this prior to SPC approval or a condition will be applied to the SPC Agreement for this item. Please ensure report includes Predictor-Lima output for our review and as supportive information for results and provided conclusions/recommendations.

GWE Response: Executive summary indicates that a separate stationary noise study will be performed once mechanical plans for the proposed building become available.

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This concludes our cover letter to address City of Ottawa comments on our traffic noise assessment report for the proposed mixed-use development located at 151-153 Chapel Street in Ottawa, Ontario. If you have any questions or wish to discuss our findings, please contact the undersigned.

Sincerely,

Gradient Wind Engineering Inc.

Michael Lafortune, C.E.T. Environmental Scientist *GWE19-010 – Cover Letter*



