

GRADIENTWIND

ENGINEERS & SCIENTISTS

February 7, 2023

Richcraft Group of Companies
2280 St. Laurent Boulevard, Suite 201
Ottawa, ON K1G 4K1

Attn: Kevin Yemm, Vice President – Land Development
kyemm@richcraft.com

Dear Mr. Yemm:

Re: Roadway Traffic Noise Assessment, Addendum
19 CentrepoinTE Drive, Ottawa
Gradient Wind File 11-081

Following the completion of a roadway traffic noise assessment for the proposed mixed-use development located at 19 CentrepoinTE Drive in Ottawa (ref. report 11-081-Traffic Noise R1 Final, dated May 12, 2021), Gradient Wind Engineering Inc. (Gradient Wind) was informed by the planners that the site plan has been updated.

We have been informed by the planners that the City of Ottawa approved a Site Plan Control application (file no. D07-12-21-0071) submitted by Fotenn on May 25, 2021, on behalf of Richcraft Homes for the lands municipally known as 19 CentrepoinTE Drive (“the subject property”) on June 20, 2022. Since then, the proposed development has undergone minor revisions, including reductions in height, density, and footprint. The proposed design revisions will result in a shorter podium with slimmer and shorter towers.

The building’s footprint and massing have not changed enough to affect our previous traffic noise findings and recommendations other than for the podium roof amenity area. The podium in the previous design had 4 storeys with a 5-storey tower link (6th-floor amenity area), in the current design podium height is reduced to 3 storey, over the entire podium. In light of these changes, Gradient Wind reassessed the Podium Rooftop Outdoor Living Outdoor (OLA) The podium rooftop area was found to have a noise level of 59 dBA which can be mitigated to 55 dBA using a 1.1 m guardrail/noise barrier above the walking

surface as recommended in our previous report (dated May 12, 2021). The STAMSON input and output data for this receptor can be seen in Appendix A. Also, the outdoor living area, previously defined as a basketball court, at the south corner of the study site is now an outdoor pool area. As the location is still used as an outdoor living area (OLA), our noise level predictions are unchanged. Since the result of our assessment for the podium rooftop showed that the results are similar to the original design, our previous recommendations and conclusions for both the at-grade pool area and podium rooftop are still valid.

As the noise levels from local roadway sources; namely Baseline Road, CentrepoinTE Drive, and Gemini Way; are expected to be similar to the original predictions achieved for the previous design, our previous recommendations are still applicable to the buildings.

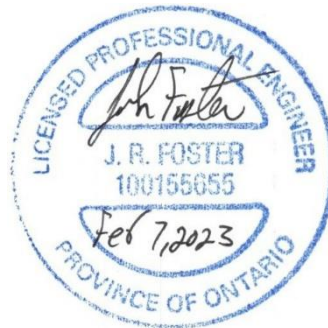
Please contact the undersigned with any questions.

Sincerely,

Gradient Wind Engineering Inc.



Efser Kara, MSc, LEED GA
Acoustic Scientist



Joshua Foster, P.Eng.
Lead Engineer

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APPENDIX A

STAMSON INPUT-OUTPUT DATA

STAMSON 5.0 NORMAL REPORT Date: 02-02-2023 14:25:31
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r03.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: Centrepoint (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Centrepoint (day/night)

Angle1 Angle2 : -90.00 deg 66.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 35.00 / 35.00 m
Receiver height : 8.60 / 8.60 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -90.00 deg Angle2 : 66.00 deg
Barrier height : 7.10 m
Barrier receiver distance : 9.00 / 9.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Centrepoint (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source	Receiver	Barrier	Elevation of
Height (m)	Height (m)	Height (m)	Barrier Top (m)

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1.50 ! 8.60 ! 6.77 ! 6.77

ROAD (0.00 + 59.15 + 0.00) = 59.15 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
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-90 66 0.00 68.73 0.00 -3.68 -0.62 0.00 0.00 -5.27 59.15

Segment Leq : 59.15 dBA

Total Leq All Segments: 59.15 dBA



Results segment # 1: Centrepoint (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
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1.50	8.60	6.77	6.77
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ROAD (0.00 + 51.55 + 0.00) = 51.55 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
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-90	66	0.00	61.13	0.00	-3.68	-0.62	0.00	0.00	-5.27	51.55
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Segment Leq : 51.55 dBA

Total Leq All Segments: 51.55 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 59.15
(NIGHT): 51.55

STAMSON 5.0 NORMAL REPORT Date: 02-02-2023 14:29:13
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r03b.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: Centrepoint (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Centrepoint (day/night)

Angle1 Angle2 : -90.00 deg 66.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 35.00 / 35.00 m
Receiver height : 8.60 / 8.60 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -90.00 deg Angle2 : 66.00 deg
Barrier height : 8.20 m
Barrier receiver distance : 11.00 / 11.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Centrepoint (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	8.60	6.37	6.37

ROAD (0.00 + 54.91 + 0.00) = 54.91 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	66	0.00	68.73	0.00	-3.68	-0.62	0.00	0.00	-9.51	54.91

Segment Leq : 54.91 dBA

Total Leq All Segments: 54.91 dBA



Results segment # 1: Centrepont (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
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1.50	8.60	6.37	6.37
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ROAD (0.00 + 47.32 + 0.00) = 47.32 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
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-90	66	0.00	61.13	0.00	-3.68	-0.62	0.00	0.00	-9.51	47.32
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Segment Leq : 47.32 dBA

Total Leq All Segments: 47.32 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 54.91
(NIGHT): 47.32