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September 11, 2024 Aercoustics Project #: 22291.00

2381798 Ontario Limited
141 Plains Road West
Burlington, ON L7T 1G1

ATTN: Adam Layton, Goldberg Group

CC: Domenica Arias, AAA Architects Inc.

Subject: 141-153 Plains Road West Noise Impact Study
Responses to City of Burlington Comments

1 Introduction

Aercoustics Engineering Limited (Aercoustics) was retained by 2381798 Ontario Limited to prepare a Noise Impact Study (the "Study") for a proposed development to be located at 141-153 Plains Road West in the City of Burlington, ON.

Aercoustics prepared the original Study, dated February 5, 2024. This letter serves to address comments made by the City of Burlington regarding the Study. An updated Noise Impact Study for SPA submission, dated September 11, 2024, has also been prepared which addresses comments below as required, as well as site plan updates.

2 City of Burlington Comments and Responses

The City of Burlington's summarized review comments are presented in *italics* and Aercoustics' responses are presented in regular text font.

Engineering Services – Noise and Vibration Feasibility Study – Comment 1)

> *During the subsequent SPA application stage, once the proposed on-site stationary sources become available, please update the Noise Impact Study for review and comment.*
>
> Acknowledged.

Halton Region – Noise Impact Study – Comment 5)

> *On-site rooftop mechanical equipment is anticipated to be located inside the mechanical penthouse and preliminary and assessment was conducted at this*

stage. As noted in the report, a detailed assessment including any potential mitigation measures requirements should be conducted during the design phase of the project.

Acknowledged and addressed in updated Noise Impact Study.

Halton Region – Noise Impact Study – Comment 6)

The proposed Site was characterized as a Class 1 area; however, due to a few exceedances, a temporary Class 4 designation was proposed as discussed below. The resulting sound levels were compared to both Class 1 and 4 limits.

Acknowledged.

Halton Region – Noise Impact Study – Comment 8)

Mission Produce Inc. has been identified as a facility with a potential noise impact on the proposed development in the Compatibility Study; however, it was not included in the Noise Study. Justification should be provided why this facility was not included in the assessment.

It was determined that the facility was acoustically insignificant due to the setback distance between the Mission Produce stationary and the proposed development (approximately 135 m), the small number of loading bays at Mission Produce, and the fact that there is shielding of the Mission Produce stationary sources from their own building.

Halton Region - Noise Impact Study - Comment 9)

Stationary noise sources at Agro Food Warehouse were identified as multiple small 5-ton rooftop units, four idling refrigerated trucks and two moving trucks. Impulsive noise from loading operations at the bay doors was modelled assuming four impulses during the worst-case hour. In our opinion, this operation scenario considered at the facility does not represent the worst-case conditions. Based on the historical Google Earth aerial images, up to eight trucks could be seen at the loading docks at the same time and the occupied loading docks appear to be closer to the Site than the ones assumed in the Noise Study. Also, based on the aerial images, there seem to be two large 66 and 12-fan air cooled chillers on the south end of the Agro Wood Warehouse roof and Google Street View potentially shows three air cooled chillers on the roof. These units are much noisier than small 5-ton HVAC units that were assumed in the assessment. In addition, there might be an emergency generator located next to the chillers (a green object in the south corner of the roof, to be confirmed). The windows on the northwest façade of the proposed development will have direct exposure to these major noise sources, the truck

maneuvering in the parking lot to park the trailers do not appear to be considered in the model. Also, Impulsive noise associated with trailer coupling/decoupling does not appear to be included in the assessment. An attempt to confirm information on the track numbers (idling at the loading docks, moving around the site, arriving/leaving, impulsive noised, etc.) and rooftop mechanical equipment should be made with Agro Food Warehouse. The sound power of the moving trucks was not included in the summary table in Appendix D and should be confirmed. Considering all the comments above, the noise impact assessment for this operation is not adequate and should be revised.

While there may be eight loading bays which can accommodate unloading activities at Argo, it is Aercoustics' understanding that it is not practical for all bays to operate at the same time. In Aercoustics' experience with similar facilities, trailers at loading bays are not typically unloaded at the same time in the same hour. It is Aercoustics' opinion that the modelling of four loading bays is appropriate and conservative. Aercoustics also notes that these trailers typically remain in place after they are unloaded and typically serve as storage facilities or for gradual loading and unloading. Aercoustics did contact Ippolito Group, the Argo Foods Warehouse parent company, but did not receive any information regarding noise emissions or operations despite multiple phone call conversations.

Halton Region – Noise Impact Study – Comment 10)

It is our understanding that information on the noise sources at St. Marys Cement were obtained from the original acoustic report for this facility. However, according to Figure 3A, no truck activities were included in the model. Considering the on-site trucks were not considered in the model for this facility.

Truck activities are included in the Noise Impact Study, noted as "Moving Trucks" in Figure 3A.

Halton Region – Noise Impact Study – Comment 11)

The sound levels from all surrounding operations were modelled and compared to the applicable limits. Background levels based on the lowest traffic volume hour were calculated and used as the applicable limits for some sensitive receptors. This is a typical approach in an environment with elevated background noise It was shown that sound levels from surrounding stationary noise sources slightly exceed the applicable limits at the proposed development. As a result, a temporary Class 4 designation was recommended for the proposed development. While we agree that the proposed development is a reasonable candidate for Class 4 designation, the provided assessment does not provide sufficient information to justify this designation. The request to grant Class 4 designation is based on a cumulative assessment. While considering cumulative sound levels from the surrounding

industry can seem a conservative and beneficial approach from the proposed development perspective, we note that designating the Site as Class 4 would allow each of the surrounding industries to emit sound levels up to 60 dBA at the proposed development. Following NPC-300 guidance, impact on the proposed development should be assessed from stationary noise source on individual facility basis. Cumulative impact assessment would be acceptable if the predicted impact is below the application limits to avoid further unnecessary work. However, this method should not be used to justify Class 4 designation request.

Aercoustics continues to recommend a temporary Class 4 designation.

Upon review of Aercoustics' noise model, Class 1 limits were exceeded when only sources associated with King Paving were modelled. There is no strict requirement in NPC-300 that Class 1 limits from an individual source must be exceeded to justify a Class 4 designation; the Ministry leaves this decision to the planning authority.

A Class 4 designation would increase the sound level limits for the surrounding facilities upon the proposed development for the brief period before the area would be redesignated as Class 1. However, the limits for those facilities at existing residential land uses would not increase. These include the apartments at 127 Plains Road and the terraced homes off Daryl Drive which are almost immediately to the east and west of the proposed development, respectively.

It is incredibly unlikely that the facilities could emit noise in such a directed manner that they exceed the Class 1 sound levels significantly at the proposed development but are in compliance with residences that are located so close by. Such an occurrence would require planning and effort on part of the surrounding facilities to a level that makes this scenario incredibly unlikely.

Halton Region – Noise Impact Study – Comment 13)

We agree that the proposed development is a candidate for a Class 4 area designation however, as discussed above, additional information should be provided, and sources considered to confirm that Class 4 is required and feasible for this Site.

Acknowledged and addressed above.

Halton Region – Opinion Letter Regarding Class 4 Acoustic Area Description – Comment 2)

It is our understanding that King paving was not included in the original assessment due to the anticipated decommissioning of the facility. We agree with the City of Burlington that if there is any overlap between the time and the proposed development is completed and occupied and the King Paving is still in operation, the noise impact assessment should be conducted and included in the report, The revised Noise Study does include this information.

Acknowledged.

Halton Region – Opinion Letter Regarding Class 4 Acoustic Area Description – Comment 3)

As noted above, we agree that the Site is a reasonable candidate for Class 4 designation; however, it may not be necessary based on the King Paving operations. Noise model assumptions should be confirmed for all surrounding operations as recommended above and the Class 4 feasibility revised.

Acknowledged.

Halton Region – Noise Study – Comment 9)

Justification should be provided why Missions Produce Inc. was not included in the noise assessment; otherwise, the impact of this operation should be assessed.

Acknowledged above.

Halton Region – Noise Study – Comment 10)

Worst-case operating scenario should be revisited for Agro Food Warehouse facility, and noise model, including impulsive noise scenario, should be revised accordingly.

Acknowledged above.

Halton Region – Noise Study – Comment 11)

Sound power assumed for the on-site moving trucks should be provided.

Sound power data used in Aercoustics' analysis is provided in the updated Noise Impact Study.

Halton Region – Noise Study – Comment 12)

On-site truck activities at King Paving should be considered in the noise assessment.

Acknowledged above.

Halton Region – Noise Study - Comment 13)

The compliance of King Paving Facility with the applicable noise limits at the Site should be confirmed based on individual facility assessment.

Acknowledged above.

Legislative & Planning Services – Community Planning – Noise Study – Comment 9)

Justification should be provided why Missions Produce Inc. Was not included in the noise assessment; otherwise, the impact of this operation should be assessed.

Acknowledged above.

Legislative & Planning Services – Community Planning – Noise Study – Comment 10)

Worst-case operating scenario should be revisited for Agro Food Warehouse facility, and noise model, including impulsive noise scenario, should be revised accordingly.

Acknowledged above.

Legislative & Planning Services – Community Planning – Noise Study – Comment 11)

Sound power assumed for the on-side moving trucks should be provided.

Acknowledged above.

Legislative & Planning Services – Community Planning – Noise Study – Comment 12)

On-site truck activities at King Paving should be considered in the noise assessment.

Acknowledged above.

Legislative & Planning Services – Community Planning – Noise Study – Comment 13)

The compliance of King Paving facility with the appliable noise limits at the Site should be confirmed based on individual facility assessment.

Acknowledged above.

Legislative & Planning Services – Community Planning – Regional Staff Comments – Comment 6)

Please revise/update the Land Use Compatibility Assessment and Noise Impact Study to address Peer Review comments. It is further recommended that a re-submission be made along with a comment response matrix to assist in expediting review.

Aercoustics' Noise Impact Study has been updated to address site plan changes as well as to provide sound power data used in the study.

3 Conclusions

The comments made by the City of Burlington have been reviewed and addressed in this letter. Please let us know if there are any questions or concerns.

Sincerely,

AERCOUSTICS ENGINEERING LIMITED



Nicholas Zomparelli, M.Eng., EIT



Derek Flake, M.Sc., P.Eng.