

Via email: jordand@fieldgateproperties.com

March 26, 2026

Jordan Dyer

Townline Gateway Holdings Ltd.

5400 Yonge Street, Suite 300

Toronto, Ontario M2N 5R5

**RE: Peer Review Response – Preliminary Noise Study
2809 Townline Road, Twp of Puslinch ON (25021383)**

A Preliminary Noise Study (PNS), dated February 3, 2026, was completed by Thornton Tomasetti (TT), as part of the development application for the proposed commercial/retail development located 2809 Townline Road in the Township of Puslinch Ontario. At the request of the Township of Puslinch, the study was completed as a “preliminary” assessment of impacts. Upon review, comments were provided by Valcoustics on behalf of the Township of Puslinch in the following letter:

- Valcoustics Letter regarding “Peer Review of Preliminary Noise Study, 2809 Townline Road, Puslinch Ontario, VCL File: 123-0460”, dated March 10, 2026 (Valcoustics Letter).

The Peer Review comment from the Valcoustics Letter is shown in italics, followed by the TT response.

Comment b) a.

Ambient sound levels, which have been used as the guideline limit, are provided in Table 2 and in Appendix E. It is not clear if the existing sound barriers have been taken into account in calculating the ambient sound levels. Since the existing sound barriers will reduce the ambient and applicable guideline limits, the sound barrier must be accounted for in the assessment.

The acoustic barriers were not considered by TT to provide any significant screening due the low height. On review, the height was confirmed to be 1.5 m above grade (i.e. 3 panels high at 0.5 m height per panel).

Given the height of 2-storey houses (typically 4.5 m), a 1.5 m acoustic barrier would not provide any screening for the worst-case façade locations. This was confirmed by TT personnel observations during various site visits within the area. In addition, the line-of-sight to the worst-case façade locations are apparent in the available on-line imagery from Thorold Townline Road where the 2nd floor windows are readily visible.

Regarding at-grade receptors, any screening from the barrier for ambient noise would also screen facility impacts (at-grade truck noise). As truck noise is considered the most significant noise source at the worst-case receptors near Site Access 1, screening from ambient noise would also screen noise from the facility. Therefore, given the low barrier height, the barrier was excluded from our analysis as a conservative assessment of impacts.

As noise levels (ambient or facility) at the worst-case locations are not expected to change with the low 1.5 m acoustic barrier, an update to the analysis is not considered necessary as this time. Future site plan application submissions will take into account the 1.5 m acoustic barrier.

Comment b) b.

The ambient calculations appear to have been done on the rear (east facing) facades of the dwellings. This likely is not the worst-case location. It is likely that the north-facing facades receive similar worst-case noise levels but a lower ambient sound level/guideline limit. Additional assessment is requested.

As the night-time period was predicted to have the worst-case impacts (i.e. meeting the guideline limits with the smallest margin), this period was the focus for the comment response.

Based on a revised analysis with Building Evaluations, ambient sound levels along the north/south facades drop by 1 to 4 dBA in comparison to the east façade (facing the Project) for the various houses in proximity to Site Access 1 (worst-case impacts related to ambient noise). With an associated drop in facility noise impacts (0 to 5 dBA), a 1 dBA excess is predicted at the worst-case home near Site Access 1 (see attached figures).

As the on-site truck noise on its own is predicted to just meet the 45 dBA sound level limit for the houses in proximity to Site Access 1, this 1 dBA excess can be addressed through additional noise controls/equipment placement/selections of rooftop mechanical equipment. With the additional noise controls on the mechanical equipment, overall facility continuous noise levels can be reduced by 1 dBA, meeting the applicable guideline limits. In addition, in response to **Comment b) d.** below, the on-site truck noise levels will decrease with the revised truck volumes further reducing facility noise impacts on these receptors.

As part of future site plan application submissions (i.e. inclusion of mechanical systems, revised truck volumes, etc.), all facades of the surrounding buildings can be considered to confirm the guideline limits would be met.

Comment b) c.

Some of the reference sound levels in Table 3 are very low and much lower than we have seen TT use in the past. Of particular concern are the truck pass-by, truck coupling and trailer loading reference sound levels.

Acknowledged, with justifications provided under the "Notes & Assumptions" column in Table 3. To clarify, the reference sound level data is based on the experience of TT personnel (Marcus Li), which includes nearly 25 yrs of collecting reference sound level data.

It should be noted that under Section 5.4.1, leveling plate mitigation is assumed, and "bumping" during loading is noise generated by personnel within the trailer. Based on TT's experience, the "bumping" noise is significantly quieter than leveling plate impulsive noise and higher relative to general loading noise. Therefore the "bumping" reference sound level for trailer loading is considered a conservative assessment of loading noise impulsive noise.

Comment b) d.

We are concerned about the assumed average speed of 40 km/hr when trucks are operating on site. Using too high of a speed results in less time on site and reduced off-site sound levels.

Following a discussion with the GHD Ltd, the Transportation consultants for the project, a 40 km/h speed is reasonable for longer truck segments of Building 3 and 6. Buildings 1, 2, 4 and 5 are expected to have speeds closer to 25 km/hr. With this adjustment in speed the on-site truck noise from Buildings 1, 2, 4 and 5 are expected to increase by approximately 2 dBA.

However, the Traffic Impact Study peak hour traffic volumes were initially assumed to be all truck traffic in the absence of detailed traffic break-downs. Upon clarification of vehicle breakdowns with GHD Ltd, the truck volumes were revised for the peak hour. The following table compares the PNS truck volumes and revised truck volumes.

Table 1: Comparison of On-Site Truck Volumes – Plan A

Building	Applicable Concept Plan	Period	Preliminary Noise Study (Trucks/hr)	Revised (Trucks/hr)
Buildings 1, 2 and 3 (each)	A & B	Day/Eve	39	10
		Ngt	13	3.3
Buildings 4, 5 and 6 (each)	A & B	Day/Eve	2	7
		Ngt	1	2.3
Total (Buildings 1 to 8)		Day/Eve	123	51
		Ngt	42	17

Table 2: Comparison of On-Site Truck Volumes – Plan B

Building	Applicable Concept Plan	Period	Preliminary Noise Study (Trucks/hr)	Revised (Trucks/hr)
Buildings 1, 2 and 3 (each)	A & B	Day/Eve	39	10
		Ngt	13	3.3
Buildings 4, 5 and 6 (each)	A & B	Day/Eve	2	7
		Ngt	1	2.3
Buildings 7 and 8 (each)	B only	Day/Eve	43	4
		Ngt	14	1.3
Total (Buildings 1 to 8)		Day/Eve	209	59
		Ngt	70.7	19.7

Based on the above reduction in traffic volume only, predicted on-site truck traffic noise levels are expected to decrease by approximately 4 dBA for Plan A and approximately 5.5 dBA for Plan B.

Therefore, with the decrease in truck speed (Building 1, 2, 4, 6) and the decrease in overall volumes for all buildings, a net decrease in on-site truck traffic sound level is anticipated to be approximately -2 dBA for Plan A and -3.5 dBA for Plan B.

As the net result is a decrease in on-site truck traffic noise, a revision to the PNS is not considered necessary. Future site plan application submissions will take into account the refined speeds and reduced on-site truck traffic volumes.

Comment b) e.

NPC-300 requires a predictable worst-case noise assessment. Assuming impulses are distributed across the entire site does not reflect a predictable worst- case scenario

Based on the MECP definition of “predictable worst-case” scenario for impulsive sources and communication from the MECP on NPC-300 definitions during the Feb 11, 2015 Air & Noise Practitioners Presentation, the higher impact of the following is required to be considered:

1. individual impulse source; and
2. logarithmic average of all impulsive sources.

Should the assessment consider a single loading dock truck coupling, at most 2 impulses would be expected per hour based on 30 min/loading of a trailer. The applicable 75 dBAI day/eve limit and 70 dBAI night limit (2/hr) would be readily met for truck coupling without noise controls.

With averaging of all impulsive sources, the stricter 45 dBAI night-time limit for a frequent impulse (>9 /hr) is applicable. This results in a requirement to consider additional noise controls.

Therefore, the averaging of impulsive noise across the entire facility is considered to be reflective of the predictable worst-case scenario requirement based on MECF definitions.

Comment b) f.

The truck source heights (1.2 m for truck coupling and 1.75 m for truck movements) are lower than what is typically used. What source height has been used for the reefers?

Acknowledged, where source heights were determined based on site visit observations and measurements by TT personnel (Marcus Li) at various facilities. In particular:

- The 1.2 m height for the 5th wheel shoe/king pin was measured and understood to be a common height.
- 1.75 m height for truck movements is based on site observations and measured engine heights, where the engine casing-radiated noise was observed to be dominant during all pass-bys. This is consistent with general observations of trucks such as school buses, where the exhaust noise (incl muffler) is quieter at the rear, in comparison to the unenclosed engine casing radiated noise located at the front of the bus. As the engine noise is considered dominant, a source height of 1.75 m was applied in the noise modelling. Regardless, future site plan application submissions can include a 2.4 m source height, identified in the ORNAMENT manual for heavy trucks.

A source height of 3.6 m was applied for the reefers, and conservatively assessed without any screening from the trailer(s).

Comment b) g.

Assessment results that include the reefers are not included in Appendix E.

The initial assessment was completed to confirm reefer mitigation would not be feasible for Buildings 1, 2 and 3. As a conceptual assessment for a “preliminary” noise study, a detailed analysis was not completed for the building supplied cooling option. Should cold storage and reefers be considered for Buildings 1, 2 and 3, additional analysis would be needed to confirm the mechanical systems can meet the NPC-300 guideline limits on the surrounding homes.

At this time, it is anticipated that the NPC-300 guideline limits for continuous noise can be met for the building supplied cooling option, with the appropriate selection of equipment, inclusion of noise controls, placement of equipment to minimize noise at worst-case receptors, etc. This assessment of the mechanical systems can be completed as part of future site plan application submissions, if cold storage is included with Buildings 1, 2 and 3.

Comment b) h.

Why have idling trucks been modelled as a line source?

Idling trucks were modelled as line sources to represent the grouping of noise sources. This is a simplification of the modelling for ease and efficiency.

We trust the above responses are sufficient in addressing the comments provided for a Preliminary level assessment and are sufficient to support the development as being Feasible regarding noise.

Should you have any questions or concerns, please do not hesitate to contact us to further discuss.

Yours Truly,

Thornton Tomasetti

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Reviewed by:
Ayman Shaaban, Ph.D., P.Eng.
Senior Project Engineer

DISCLAIMERS

This report is provided in accordance with the contractual agreement between TT and the Client. In addition to our contractual obligations TT notes the following general disclaimers and qualifications regarding the content of this report.

In preparing this report, TT has relied upon the accuracy and completeness of information provided by the Client and other third parties (manufacturers, other consultants, etc.) and accepts no responsibility for errors or omissions by other parties in the information provided to TT.

This report has been prepared solely for the benefit of the Client and the content of this report is intended for informational purposes only. This report shall not be relied upon by any other parties, including but not limited to other consultants retained by the Client, or utilized for any other purposes.

Ultimate responsibility for the design and construction remains solely with the architect/engineer of record and/or the contractor(s). Achieving the required mitigation requirements relies on correct incorporation of mitigation recommendations into Architectural and Mechanical drawings and specifications, as well as correct installation during construction. It is recommended that the implementation of mitigation measures be reviewed by a qualified consultant.

On request, TT will provide a proposal for additional work such as to peer review mitigation measures or observe on-site conditions as appropriate; however, notwithstanding the foregoing, it is expressly understood and agreed that TT shall not have control or charge of, and shall not be responsible for the acts or omissions, including but not limited to means, methods, techniques, sequences and procedures, of the Design Professionals and/or Contractors performing design and/or construction on the Project. Accordingly, TT shall not be held responsible for the failure of any party to properly incorporate the mitigation measures stated in this report.

Client Name

Townline Gateway Holdings LTD

Project Name

2809 Townline Road

Notes:

Legend

- + Point Source
- Line Source

Sound Level Difference

- 0 dBA
- 1 dBA
- 2 dBA
- 3 dBA
- 4 dBA
- 5 dBA
- 6 dBA
- 7 dBA
- 8 dBA
- 9 dBA
- 10+ dBA

Figure Title

Excess Levels – Night-time
Plan A

Produced By

MTL

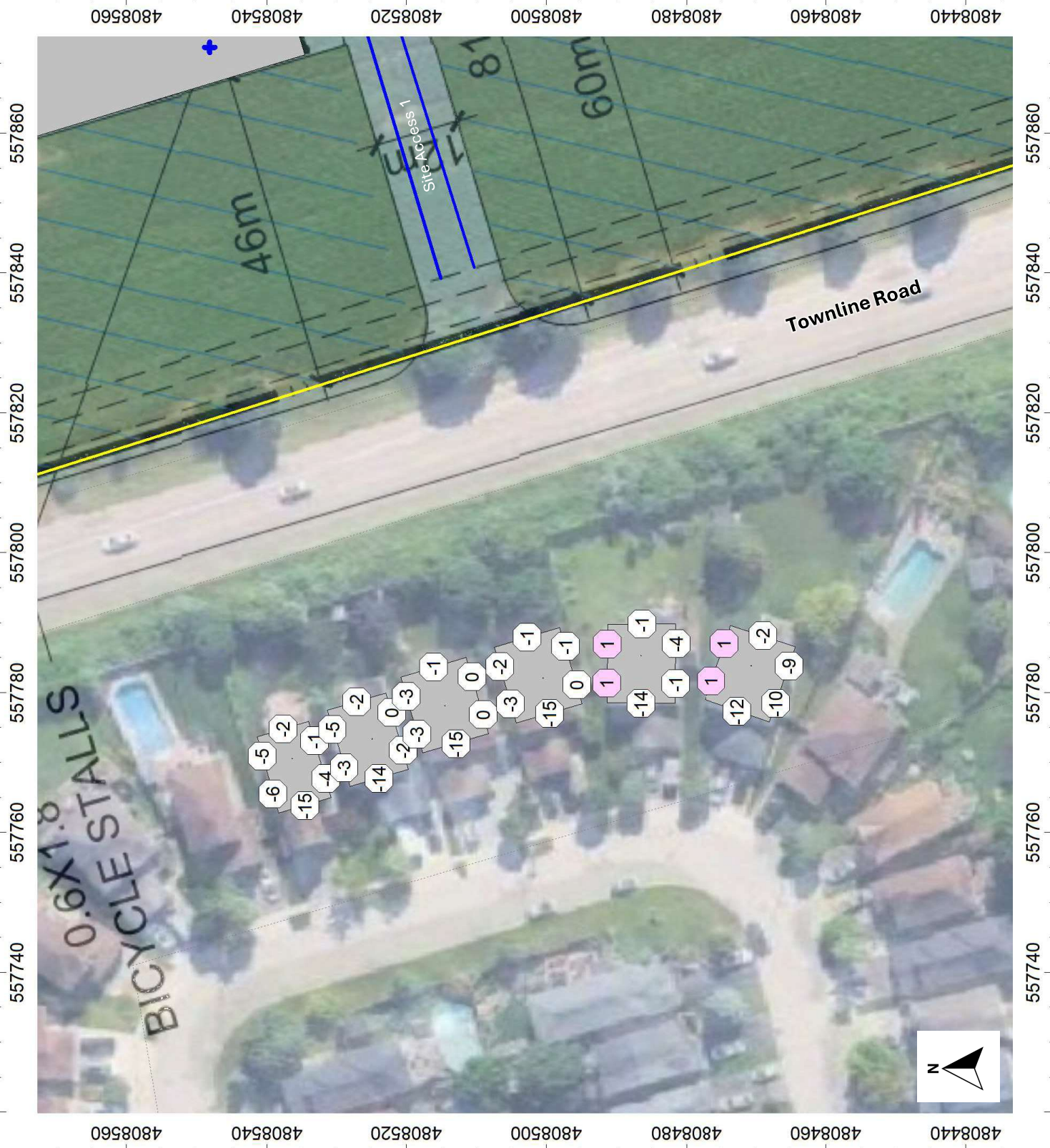
TT Project #

25021383

Date

March 24, 2026

A.1



Client Name

Townline Gateway Holdings LTD

Project Name

2809 Townline Road

Notes:

Legend

- + Line Source
- Line Source

Sound Level Difference

- 0 dBA
- 1 dBA
- 2 dBA
- 3 dBA
- 4 dBA
- 5 dBA
- 6 dBA
- 7 dBA
- 8 dBA
- 9 dBA
- 10+ dBA

Figure Title

Excess Levels – Night-time
Plan B

Produced By

MTL

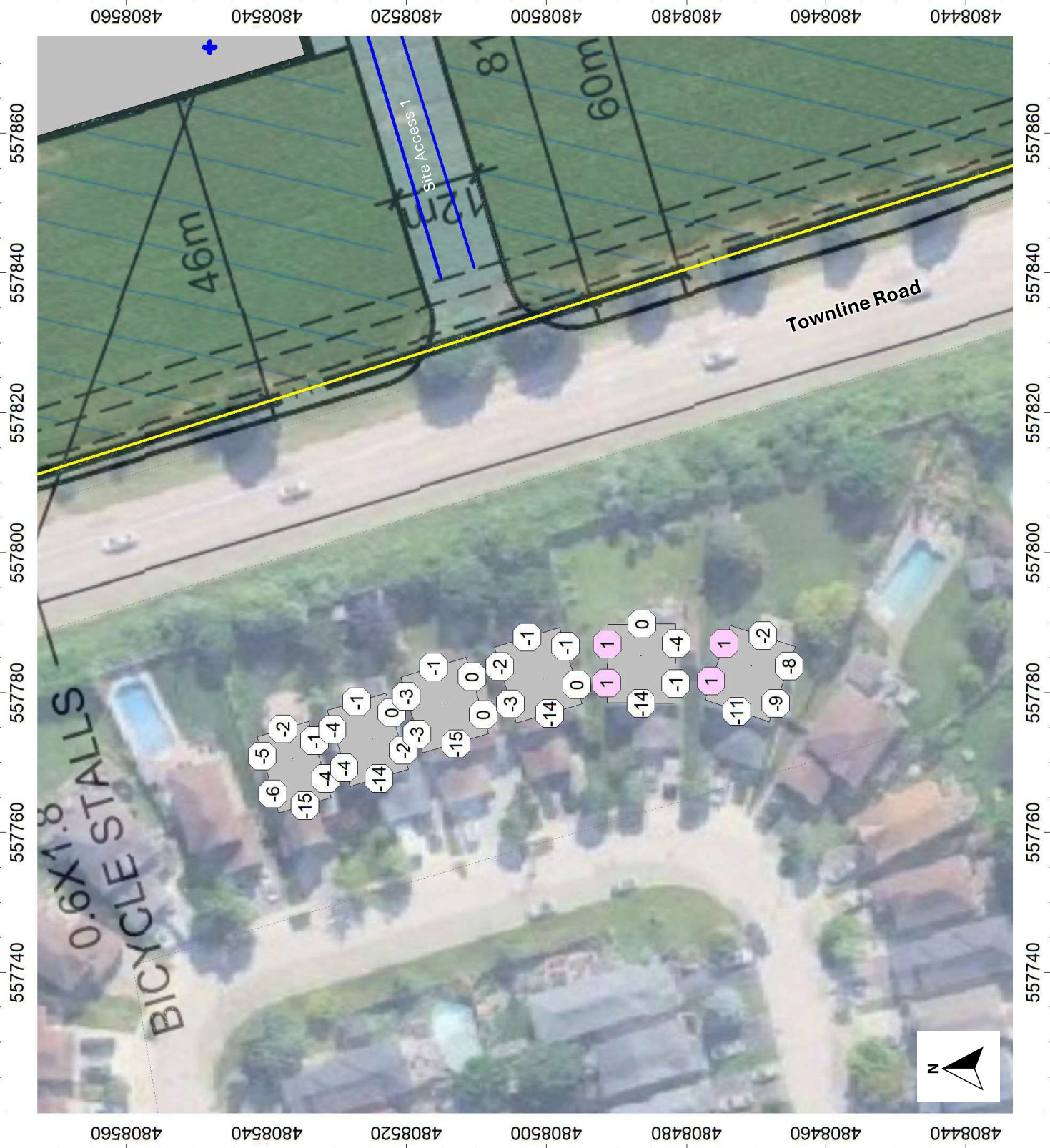
TT Project #

25021383

Date

March 24, 2026

A.2



April 14, 2026

Township of Puslinch
7404 Wellington Road 34
Puslinch, Ontario
N0B 2J0

Attention: Monika Farncombe
mfarncombe@puslinch.ca

VIA E-MAIL

**Re: Review of Peer Review Response Letter
 Preliminary Noise Study
 2809 Townline Road
 Puslinch, Ontario
 VCL File: 123-0460**

Dear Ms. Farncombe:

We have completed our review of “Peer Review Response – Preliminary Noise Study, 2809 Townline Road, Twp of Puslinch ON”, dated March 26, 2026, prepared by Thornton Tomasetti (TT).

Our comments are outlined herein.

- a) The response to comment b) a. indicates that the existing sound barrier was not taken into account. The response goes on to say that the existing sound barrier would not provide any screening for the worst-case façade locations. We have these questions/comments regarding the response:
- a. TT states that the height of the existing sound barrier was confirmed to be 1.5 m (3 panels that are each 0.5 m in height). How was this confirmation made? Review of the images on Google Earth seem to show 3 panels on top of a precast panel along Jamieson Parkway. The precast panel appears to be replaced by a 4th sound barrier panel along Townline Road.
 - b. How is TT defining the worst-case façade location? It appears that TT considers the second storey as being the worst-case facade location since this is where the highest sound levels from the facility are predicted to occur. The worst-case location is where the greatest noise impact (i.e., highest excess over the guideline limit) could occur. It is not clear how the worst-case façade location was determined without updating the analysis.
 - c. We agree that the existing sound barrier could provide acoustic screening for both the stationary source and road traffic on Townline Road. However, the amount of acoustic screening could vary depending on geometry (source to receiver distance, source height, source elevation, etc.). Thus, justification that the

attenuation will be the same for the transportation and stationary source is needed.

- d. It is not clear how excluding the existing sound barrier from the assessment is conservative.
- b) The response to comment b) c. states that “bumping” noise is significantly quieter than levelling plate impulsive noise. TT does indicate that mitigation will be provided for the levelling plate. What mitigation has been assumed and what amount of noise reduction will result?
- c) The response to comment b) d. states that the Preliminary Noise Study (PNS) assumed the peak hour traffic volumes in the Traffic Impact Study were all heavy trucks. Review of the Site Trip Generation tables in the November 18, 2025 Traffic Impact Study presents peak hour traffic volumes significantly higher than those in the PNS. We were also unable to find any information about truck volumes in the February 18, 2026 Traffic Impact Study. Additional detail regarding how the reduced truck volumes were determined is needed.
- d) Regarding the response to comment b) e., the definition of predictable worst case noise impact in NPC-300 states “the noise impact associated with a planned and predictable mode of operation for stationary source(s), during the hour when the noise emissions from the stationary source(s) have the greatest impact at a point of reception, relative to the applicable limit”. While the two scenarios presented by TT should be considered, they are unlikely to actually occur in reality and may not be planned and predictable modes of operation. Thus, other scenarios should also be considered. It would be reasonable to assume that loading activities are only occurring at one of the warehouse buildings on the site. This would concentrate impulses closer to a receptor and likely result in somewhat higher noise impacts.
- e) The response to comment b) g. is not clear. The first paragraph appears to state that the supplied cooling option is not feasible for Buildings 1, 2 and 3. However, the second paragraph states that (presumably feasible) mitigation options exist. Clarification is needed.

Based on our review of the peer review response, there are a few items, as outlined above, that require further clarification before we can agree with the findings and conclusions of the noise study.

If there are any questions, please do not hesitate to call.

Yours truly,

VALCOUSTICS CANADA LTD.

Per: 
John Emeljanow, P.Eng.