



COMMITTEE OF ADJUSTMENT

APPLICANT : ALHAJ DEVELOPMENT LTD

ADDRESS : 1888 LONGFELLOW AVENUE

N.T.S.

 SUBJECT LANDS

 SEVERED LANDS

Notice of Public Hearing – Committee of Adjustment Application

File # A-090/26 & B-053/26 - 1888 LONGFELLOW AVE

Date Mailed: October 28, 2026

Electronic hearing:

By videoconference on November 12, 2026 at 3:30 PM

Why am I receiving this notice?

As an adjacent property owner you are receiving this courtesy notice of hearing because an application has been submitted for consent and/or minor variance to a property located close to you. Formal notice of the hearing was given by publication of the Committee of Adjustment’s Agenda Record in the Windsor Star on October 28, 2026. as required by the Planning Act.

Sections 45(1) & 54(5) of the Planning Act authorize the Committee of Adjustment to consider these requests.

Application details are posted on the City of Windsor website along with the Administrative recommendation(s). For the latest Administrative comments check the City’s website page for **Committee of Adjustment-Meeting Agenda** after 12:00 noon on the Friday prior to the hearing date.

APPLICANT AND PROPERTY INFORMATION

LEGAL DESCRIPTION: PLAN 557 LOTS 75 TO 77 PT ALLEY AND RP 12R28374 PARTS 50 AND 51

OFFICIAL PLAN DESIGNATION	ZONING OF SUBJECT LAND(S)
Residential	Residential District 1.1 (RD1.1)

Applicant/Owner(s)	Authorized Agent(s)	Subject Property
Owner Name: ALHAJ DEVELOPMENT LIMITED Applicant Name: Alhaj development Ltd		1888 LONGFELLOW AVE

PURPOSE OF APPLICATION

Consent (Severance) - Consent to create a new lot. Proposed single unit dwellings on both the retained and severed lots requesting relief for reduced minimum lot width and reduced minimum lot area on both the retained and severed lots.

By-Law	Provision	Provision Description	Requirement	Proposed
Zoning Bylaw 8600	10.1.5.1	Minimum Lot Width-Retained Lot	15.0m	11.42m
Zoning Bylaw 8600	10.1.5.2	Minimum Lot Area-Retained Lot	450.0m ²	409.1m ²
Zoning Bylaw 8600	10.1.5.1	Minimum Lot Width-Severed Lot	15.0m	11.42m
Zoning Bylaw 8600	10.1.5.2	Minimum Lot Area-Severed Lot	450.0m ²	409.1m ²

Type of Consent Application Transaction: New Lot**How do I participate if I have comments or concerns?****Submit written comments**

Although neighbours cannot appeal a decision, you are entitled to notice and may make written submissions before the application is considered by the Committee of Adjustment. You can send your written comments regarding the application by email (preferred) or regular mail to the Secretary-Treasurer noted below. Include your name, address and application number or address of the property in which you are providing comments. To allow all Committee members the opportunity to review and consider your comments, please provide your written submissions to be received no later than noon the day before the hearing.

Participate in the hearing by videoconference (Microsoft Teams)

Two ways to register: 1) visit the City of Windsor website to self-register OR 2) call or email the Secretary-Treasurer noted below no later than noon the day before the hearing date. You are encouraged to pre-register as a delegation as soon as possible in order to facilitate an orderly registration process. Once registered you will receive confirmation by email including a link to join the virtual hearing.

Applicant(s) – Attendance is required. If you do not attend or send a representative, the Committee may proceed in your absence without any further notice to you or reschedule the meeting at a cost to you.

Notice of Decision

If you wish to be notified of the decision for this application, you must make a written request by email or regular mail to the Secretary-Treasurer (jwatson@citywindsor.ca). The written request must be received before noon the day before the hearing date. This will entitle you to be notified of any future Ontario Land Tribunal proceedings in the event of an appeal.

**Contact Information:**

Jessica Watson
Secretary-Treasurer
Committee of Adjustment
Suite 320, 350 City Hall Square West
Windsor, ON N9A6S1
Phone: 519-255-6543 ext. 6450 or 6436
COAdjustment@citywindsor.ca

September 10, 2026

Attention: Mr. Sam Alhaj
T: 519-999-2200
E: samalhaj@live.ca

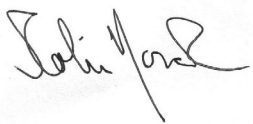
Re: Acoustic Assessment for the Proposed Residential Development – 1888 Longfellow Avenue, City of Windsor, Ontario.

Dear Mr. Alhaj,

Please find enclosed an acoustic assessment report submitted to you for the proposed residential development located at 1888 Longfellow Avenue, in the City of Windsor. This assessment pertains to the transportation noise impacts from the nearby roads and railways and railyard which are located near to the proposed site.

I trust that the enclosed information meets your requirements. Please do not hesitate to contact me if you have any questions.

Sincerely,



Colin Novak PhD, PEng

**Noise Assessment for the Proposed Residential
Development at 1888 Longfellow Avenue,
City of Windsor**



Attention: Mr. Sam Alhaj
T: 519-999-2200
E: samalhaj@live.ca

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Statement of Liability

Akoustik Engineering Limited prepared this report for Mr. Sam Alhaj. The material in it reflects Dr. Helen Ule's and Dr. Colin Novak's judgement considering the information available to them and Akoustik Engineering Limited at the time of the measurements and report preparation, under the stated test conditions. Any use that a Third Party makes of this report, or any reliance on decisions made based on it, is the responsibility of such Third Parties. Akoustik Engineering Limited accepts no responsibility for damages, if any, suffered by any Third Party resulting from decisions made or actions based on this report.

Introduction

This report is an acoustic assessment for the proposed residential development located at 1888 Longfellow Avenue, in the City of Windsor. The proposed development is a single lot with two proposed one-storey ranch buildings, each having one residential unit. This assessment pertains to the environmental noise impact from the nearby roads and railway and railyard. An illustration of the geographical area with the proposed development location identified, as well as the proposed development plan is given in Appendix A: Site Location. A zoning map of the area is provided in Appendix B.

The expected noise impacts from the roads and rail have been predicted using the Ministry of the Environment, Conservation and Parks (MECP) prediction software STAMSON and are based on available traffic volumes, which have been projected 10 years forward. The railyard noise was evaluated using site noise measurements. Given that the road and rail noise occur during all periods of a 24-hour day, as defined by the applicable Noise Pollution Control document NPC-300, the assessment has been carried out for the entire 24-hour period. All assumptions used for the calculations given in this report are detailed in Appendix C. Any recommended abatement measures, if required, to control noise are included in this report.

Identification of Noise Sources

The proposed development lot is bordered by industrial district and holding manufacturing district lands to the north, and residential lands to the east, south and west of the property. The MECP typical specifications for the identification of existing or future major sources of noise impact (road and stationary) on a development is whether they are within 500 metres of the site; rail lines are considered if they are within 300 meters and railyards if they are within 1000 metres.

Two roadway sources of noise have been identified to possibly produce an impact on the proposed development. These are Dominion Boulevard and South Cameron Boulevard.

The proposed development is located within Area “E” of the South Cameron Planning Area with Area “E” being composed of all residentially designated land within 1000 m of the Van de Water Rail Yard. For this development, the nearest section of the Canadian National Railway’s Van de Water Rail Yard where shunt activity may occur is more than 500 m from the nearest property line of the residential lot but within the 1000 m radius. Observations conducted at the site concluded that there are some audible noise impacts from the rail yard activities, as well as the noise impacts from the nearby roadway noise and other sources of community noise given the very close proximity to other residential homes. There is also a CN rail line which runs parallel to South Cameron Boulevard leading to the rail tunnel that goes under the Detroit River to the USA. This rail line is approximately 175 meters from the proposed residential site and is also evaluated for noise impacts in this study.

Given that the land of the proposed development falls outside the Windsor International Airport’s NEF/NEP 25 contours, no consideration for aircraft noise is warranted. There are no other significant sources of noise or vibration, including sources of stationary noise, which are expected to have an impact on the proposed development.

Ministry of the Environment and Climate Change Noise Criteria

Transportation Sources

In accordance with the MECP Guideline NPC-300, the following sound level limits for residential developments have been set and are shown for roadway and rail noise in Table 1 and 2 below respectively. Select pages from the NPC-300 guideline have been included in Appendix D: NPC-300 Reference Pages for reference. It is worth noting that when the sound level limits presented in Table 1 and 2 are exceeded, noise control abatement is required.

Table 1: Ministry of the Environment, Conservation and Parks Noise Criteria for Roadway Noise

Location	Daytime L_{eq} [dBA]	Nighttime L_{eq} [dBA]
Outdoor Living Area (OLA)	55	--
Plane of Window (Indoor)	55 (45)	50 (40)

Table 2: Ministry of the Environment, Conservation and Parks Noise Criteria for Rail Noise

Location	Daytime L_{eq} [dBA]	Nighttime L_{eq} [dBA]
Outdoor Living Area (OLA)	55	--
Plane of Window (Indoor)	55 (40)	50 (35)

From Table 1 and 2, daytime refers to the period from 07:00 to 23:00 and nighttime refers to the period from 23:00 to 07:00 hours. An outdoor living area (OLA) refers to a location such as a patio, yard, or barbeque area. In this case the OLA is taken at the rear of the proposed development.

The limits presented in Table 1 and 2 are the limits before noise control measures are required. The noise level limit in an OLA may be exceeded by up to 5 dBA if proper warning clauses are inserted in the titles, deeds, and any tenancy agreements relating to the property and only after barriers or other noise control measures have been found to be impractical or unfeasible. A noise attenuation barrier is required to protect the OLA and bring the sound level down to 55 dBA in the OLA if the noise level exceeds 60 dBA. Only in cases where the required noise control measures are not feasible for technical, economic or administrative reasons would an excess above the limit (55 dBA) be acceptable with the appropriate warning clause; in this situation, any excess above the noise limit will not be deemed acceptable if it exceeds 5 dB.

The guideline also recommends the provision for the installation of central air conditioning when the noise level outside the plane of a window exceeds 55 dBA for the daytime or 50 dBA for the nighttime. If the noise level exceeds 65 dBA for the daytime or 60 dBA for the nighttime, the installation of central air conditioning should be implemented. Further, building components including exterior walls, windows and doors should be designed to have sufficient Sound Transmission Class (STC) ratings to meet the indoor noise guidelines.

Noise Source Data

Road traffic volume data was obtained from the City of Windsor in the form of annual average daily traffic (AADT) volumes. The projected road traffic volumes along with the breakdown of vehicle types are given in Appendix E: Road Traffic Volume Data. Also, given in Appendix E are the distances between the representative receptor locations and the roadway sources of noise that are used as input data to the noise prediction software.

A conservative approach was taken using the most up to date traffic volumes, which are given in Appendix E. A 2.0% growth rate was used for all considered roadways to represent the future traffic volume for 2036. The split between the day and night traffic volumes is assumed to be 90%-day and 10%-night, which is consistent with the modelling protocol for municipal roadways.

CN Freight traffic was provided by the Canadian National Railway. The rail traffic data was projected 10 years into the future using a 2.5% increase per annum. As such, the predicted noise levels given in this report are for future traffic volumes. The CN freight traffic information is included in Appendix F. The impact from whistle noise was not included in the building component calculation model since there are no surface rail crossings within 300 m of the site.

Identification of the Representative Receptor Locations

Upon examination of the layout for the proposed residential development, two locations within the receptor were evaluated for noise impacts as well as one outdoor living area. A main floor family room and first floor bedroom were evaluated as these represent the worst-case residential unit façades for the building due to their proximity and orientation to the roads and railway. These are identified as POR1A (west/front facing façade; family room; nearest to Dominion Boulevard), POR1B (north facing façade; bedroom; nearest to the railway and South Cameron Boulevard roadway), and an OLA (east facing in rear of yard).

Assessment Approach for Transportation Noise (Road and Rail)

The predicted sound levels from the nearby road traffic have been determined through the application of the MECP noise prediction software STAMSON 5.0. All input data pertaining to the lot layout parameters was based on the layout plan provided at the time of the study, as shown in Appendix A: Site Location. The input data used to calculate the predicted sound level exposures for the selected units impacted by the road traffic noise, and the resulting outputs, are given in Appendix G: Noise Model Printout.

The acoustic propagation model used to predict the noise levels at the representative residential units was developed to determine the noise impacts and extent of the noise control measures required (if any). The MECP requires the calculation of the noise impacts at the outdoor living area (OLA) and plane of window of the dwellings, in this case the residential sleeping quarters.

Evaluation of Road and Rail line Sources (Calculated)

Given that the road traffic (Dominion Boulevard and South Cameron Boulevard) and rail traffic (nearby CN rail line) occurs during all periods of a 24-hour day, as defined by the applicable MECP's Noise Pollution Control documents (NPC-300), the assessment has been carried out for the entire 24-hour period. The input data used to calculate the predicted sound level exposures for the selected receptors impacted by the road and rail traffic noise, and the resulting outputs, are given in Appendix G: Noise Model Printout.

The predicted noise level impacts for the daytime and nighttime periods at the representative receptors with no control measures are given in Table 3. From this table, it is seen that the MECP noise limits for transportation noise identified in Table 1 and 2 are not exceeded at the receptor during either the daytime or nighttime periods, and therefore no abatement for roadway and railway noise impacts at the proposed development is required.

Table 3: Predicted Road and Rail Noise Levels – with No Abatement

POR ID	Daytime Period LAeq (dBA)	Nighttime Period LAeq (dBA)
POR1A (1.5 m)	44	38
POR1B (1.5 m)	45	36
OLA (1.5 m)	45	N/A

*red text denotes exceedance

Transportation Noise Source (Calculated) Summary

The modeled road and railway noise is shown to comply with the MECP NPC-300 guidelines. The noted rail noise as from the nearby CN line to the rail tunnel. The impacts from this rail line are included in the modelled assessment discussed in the previous section. The model does not include any impacts from the rail yard, these are considered in the subsequent sections.

Assessment Approach for Residential Use in Proximity to Freight Rail Shunting Yards

The main area of activity at the Van de Water rail yard is approximately 500 m to the east from the proposed residential lot. During the noise monitoring period, observations conducted at the site concluded that while there are occasional audible noise impacts from the distant rail yard activities, the ambient noise from the much closer roadways and other sources of residential community noise dominate. These include bird noise, siren noise, local vehicles (and honking), construction noise and very occasional and faint noise from distant trains during the evaluation period as well as some shunt noise. These observations and conclusions were reinforced from a review of noise recordings collected at the proposed site over a period of 124 hours on September 1 to 6, 2026. The purpose of the site noise monitoring was to assess any impacts from the Van de Water rail yard.

Evaluation of Rail Yard Sources (Measured)

The potential noise impacts from the adjacent rail activities were evaluated using 124 hours of continuous noise monitoring data which was carried out at the proposed development property. Two summary tables showing the maximum, minimum and average one-hour Equivalent Sound Level (Leq) and Logarithmic Mean Impulse Sound Level (L_{LM}) are shown in Tables 4 and 5 respectively. It should be noted that the measured noise levels also include noise contributions from the nearby feeder roadways, and therefore are conservative. The resulting measured noise data is given in Appendix H. Any hourly periods with unacceptable weather including winds exceeding 20 km/h, periods of precipitation and humidity above 90% are identified and excluded from the analysis. For all periods having a measured exceedance of the MECF exclusion limits, the recorded sound files were listened to. From these, it was found that the overages were caused by other natural (birds/insects) and environmental sounds including traffic, sirens, home construction (hammering and sawing), lawnmowers, etc. There was very little rail noise detected other than a few faint and very distant train sounds and the rare shunt noise. Photos of the noise monitor equipment setup are given in Appendix I: Photographs of Noise Measurement Location. Details pertaining to the measurement instrumentation is given in Appendix J.

Table 4: Measured One-Hour Equivalent Sound Level (Leq[dBA])

Period	Max (dBA)	Min (dBA)	Average (dBA)
Daytime	60	45	51
Evening	61	49	54
Nighttime	56	52	54

*red text denotes exceedance

Table 5: Measured One-Hour Equivalent Sound Level (L_{LM}[dBA])

Period	Max (dBA)	Min (dBA)	Average (dBA)
Daytime	67	45	52
Evening	64	49	55
Nighttime	57	53	54

*red text denotes exceedance

According to the Guidelines for New Development in Proximity to Railway Operations document which was prepared for the Federation of Canadian Municipalities and the Railway Association of Canada, the sound level limit at a point of reception expressed in terms of the one-hour equivalent sound level (Leq) or logarithmic mean impulse sound level (L_{LM}) is shown in Table 6 below.

Table 6: Noise Criteria for Residential Uses in Proximity to Freight Rail Shunting Yards

Time of Day	ONE HOUR Leq (dBA) or L_{LM} (dBA) – Class 2 Area
07:00-19:00	50
19:00-23:00	45
23:00-07:00	45

Rail Yard Noise Results (Measured) Summary

From inspection of the data given in Tables 4 and 5, it is found that the measured sound levels exceed the limits given in Table 6. The measured noise levels (Leq) which were collected to evaluate any impacts from the rail yard have maximum hourly levels between 56 and 67 dBA for all periods of the day which exceed the guidelines. However, the source of noise were found to be from natural sources of noise, including birds and construction noise and not noise from rail activity at the Van de Water rail yard.

Impulsive Noise (Shunt Noise) – Rail Yard

As some of the measured sound level data presented in Tables 4 and 5 exceed the applicable criteria specified in Section AC.1.6 of the Federation of Canadian Municipalities (FCM) and Railway Association of Canada (RAC) Guidelines due to shunt noise, additional assessment of the building façade requirements is warranted. The maximum measured sound levels associated with these exceedances were attributed to confirmed railway shunting noise. Accordingly, Sound Transmission Class (STC) calculations will be undertaken to determine the minimum building façade construction requirements necessary to reduce interior sound levels resulting from the maximum measured shunting noise events to within the applicable guideline limits. This assessment will be completed in accordance with Item 13 of Section AC.1.5 of the FCM/RAC Guidelines which states that mitigation will confirm to applicable stationary source guidelines.

In accordance with the MECP Guideline NPC-300, the following sound level limits for stationary source guidelines in Table 7.

Table 7: Ministry of the Environment and Climate Change Noise Criteria for a Class 2 Area

Point of Reception Location	Daytime LA_{eq} [dBA]	Evening LA_{eq} [dBA]	Nighttime LA_{eq} [dBA]
Outdoor (OLA)	50	45	--
Plane of Window	50	50	45

From Table 7, daytime refers to the period from 07:00 to 19:00, evening refers to the period from 19:00 to 23:00 and nighttime refers to the period from 23:00 to 07:00 hours.

As previously stated, for all periods having a measured exceedance of the MECP exclusion limits, the recorded sound files were listened to. From these, it was found that the overages were caused by other natural (birds/insects) and environmental sounds including traffic, sirens, home construction (hammering and sawing), lawnmowers, etc. For the instances where shunt noise was heard, the maximum level occurred during the nighttime period and was recorded to be 57 dBA.

STC Requirements

Given the occasional elevated measured rail shunt noise levels, an assessment of the minimum sound transmission class (STC) ratings for the exterior building envelope components, including windows, exterior doors, and wall assemblies, was undertaken to ensure compliance with the applicable indoor sound level criteria as shown in Table 8 as per NPC-300.

Table 8: Indoor Sound Level Limits [Rail]

Daytime LA_{eq} [dBA]	Evening LA_{eq} [dBA]	Nighttime LA_{eq} [dBA]
40	40	35

The minimum façade STC requirements were determined for a representative bedroom exposed to the adjacent railway corridor. The incident sound level at the plane of the exterior window was conservatively taken to be 57 dBA during the nighttime period based on measured data, representing the worst-case façade exposure. As the dominant source of transportation noise is rail traffic, the required façade STC ratings were calculated to achieve maximum indoor sound levels of 40 dBA during the daytime period and 35 dBA during the nighttime period within the sleeping quarters, in accordance with the procedures outlined in the National Research Council of Canada Building Practice Note BPN-56.

The glazing system was assumed to consist of operable thick double-pane windows and patio doors. Detailed architectural drawings and building construction information were not available at the time this assessment was completed. Accordingly, the representative bedroom used in the façade sound insulation analysis was assumed to have the following characteristics:

- a floor area of 9.185 m²; low absorption (hard surfaces)
- with a window (openable, thick double or triple) area of 2.79 m²
- with a single exterior door area of 1.858 m²
- and a wall area of 5.42 m².

The program inputs and results for the STC calculations and window schedule are given in Appendix K: STC Output Results. The building component STC requirements are given in Table 9.

Table 9: Building Components STC Requirements.

Noise Source	Exterior Wall	Window, openable thick double or triple	Single exterior door
Rail shunt noise	29	26	23

Results and Noise Control Requirements

The following section is a summary and assessment of the modeled results for the representative units.

Road Noise

As specified by the MECP Environmental Noise Guideline NPC-300, the outdoor and indoor sound level limits (based on one-hour LA_{eq} values) at a residence for road traffic noise are categorized into three (3) limits, based on the type of space assessed. The document also specifies the recommended noise control measures, if required, that should be followed for the OLA, plane of a window (ventilation requirements) and the indoor living area (building components) noise assessments. Select pages from the NPC-300

guideline are given in Appendix D: NPC-300 Reference Pages, which includes the warning clauses and other requirements based on the predicted noise levels.

Notes taken from NPC-300 (where applicable):

Note A: Noise control measures may be applied to reduce the sound level to 55 dBA. If measures are not provided, prospective purchasers or tenants should be informed of potential noise problems by a warning clause Type A.

Note B: Noise control measures should be implemented to reduce the level to 55 dBA. Only in cases where the required noise control measures are not feasible for technical, economic or administrative reasons would an excess above the limit (55 dBA) be acceptable with a warning clause Type B.

Note C: The dwelling should be designed with a provision for the installation of central air conditioning in the future, at the occupant's discretion. Warning clause Type C is also recommended.

Note D: Installation of central air conditioning should be implemented with a warning clause Type D. In addition, building components including windows, walls and doors, where applicable, should be designed so that the indoor sound levels comply with the sound level limits in Table C-2.

Note E: Building components including windows, walls and doors, where applicable, need to be designed so that the indoor sound levels comply with the sound level limits in Table C-2. The acoustical performance of the building components (windows, doors and walls) needs to be specified.

For all buildings and units that are applicable to Note E, it is recommended that the building plans be inspected and approved by a qualified acoustical engineer prior to the issuance of a building permit to ensure that the proposed building materials and design comply with the noise control requirements.

If required, the following warning clauses are to be implemented in all development agreements, offers to Purchase, and agreements of Purchase or Sale or Lease of each dwelling unit:

Warning Clause(s) (where applicable):

Type A: "Purchasers/tenants are advised that sound levels due to increasing road traffic and rail traffic may occasionally interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks."

Type B: "Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road traffic and rail traffic may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks."

Type C: "This dwelling unit has been designed with the provision for adding central air conditioning at the occupant's discretion. Installation of central air conditioning by the occupant

in low and medium density developments will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks.”

Type D: “This dwelling unit has been equipped with central air conditioning in order to allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks. Air conditioning units are to be installed in a noise insensitive area.”

Rail Noise

Due to the proximity of the proposed development to the Canadian National Railway’s Van de Water Rail Yard near South Cameron Blvd., the following warning clause must be included in all development agreements, offers to purchase, and agreements of purchase or sale or lease of each dwelling within 1000 metres of the site.

Warning Clause:

All persons intending to acquire an interest in the real property by purchase or lease are advised of the proximity of the Canadian National Railway’s Yards, which operate on a 24-hour basis. It is possible that the rail yard operations may cause disturbance and may be altered or expanded which could affect the living environment of the residents despite the inclusion of any noise and vibration attenuating measures in the design of the outdoor amenity area(s) and individual dwelling(s). Residents are advised that further investigation cannot be expected, and Canadian National Railways will not be responsible for any complaints or claims arising from use of such facilities and/or operations. (amended by OMB order 1485-11/01/2002)

Combined Results Summary

Table 10 summarizes the required warning clauses and building requirements for all residential units within the proposed development. It is required that any necessary warning clauses be implemented in all development agreements, offers to Purchase, and agreements of Purchase or Sale or Lease as identified in Table 10.

It should be noted again that the exterior walls of the first row of dwellings next to railway tracks are to be built to a minimum of brick veneer or masonry equivalent construction, from the foundation to the rafters when the rail traffic Leq (24-hour), estimated at a location of a nighttime receptor, is greater than 60 dBA, and when the first row of dwellings is within 100 metres of the tracks. In general, it is acknowledged that pre-cast concrete or poured concrete sections of exterior walls are expected to be acoustically acceptable. For spandrel panel wall sections or similar, upgraded wall construction beyond a standard spandrel wall will be required. The upgraded spandrel wall sections should achieve a minimum STC rating of 54 as it is not always possible to build a multi-storey building with brick veneer.

Table 10: Summary of Warning Clauses and Building Component Requirements

Unit(s)	Noise Barrier Requirement (Y/N)	Warning Clause(s)	Building Component Requirement(s)	Ventilation Requirement(s)
All	N/A	Canadian National Railway's Van de Water Rail Yard	Minimum STC Rating for the following Building Component: Window – 26 Wall – 29 Door - 23 Brick veneer or masonry equivalent construction (see above paragraph)	Installation of Central Air Conditioning

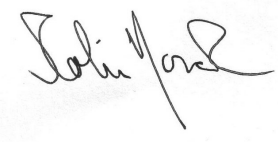
Conclusion

A noise impact assessment was conducted for the proposed two single-storey residential developments located at 1888 Longfellow Avenue, in the City of Windsor. For this, Dominion Boulevard and South Cameron Boulevard were considered as potential contributing roadway sources of noise. The Canadian National Railway's Van de Water Rail Yard and the rail line connecting to the Windsor-Detroit rail tunnel were also considered. It is shown in this report that the predicted noise levels do not exceed the limits set by the Ontario Ministry of the Environment, Conservation and Parks.

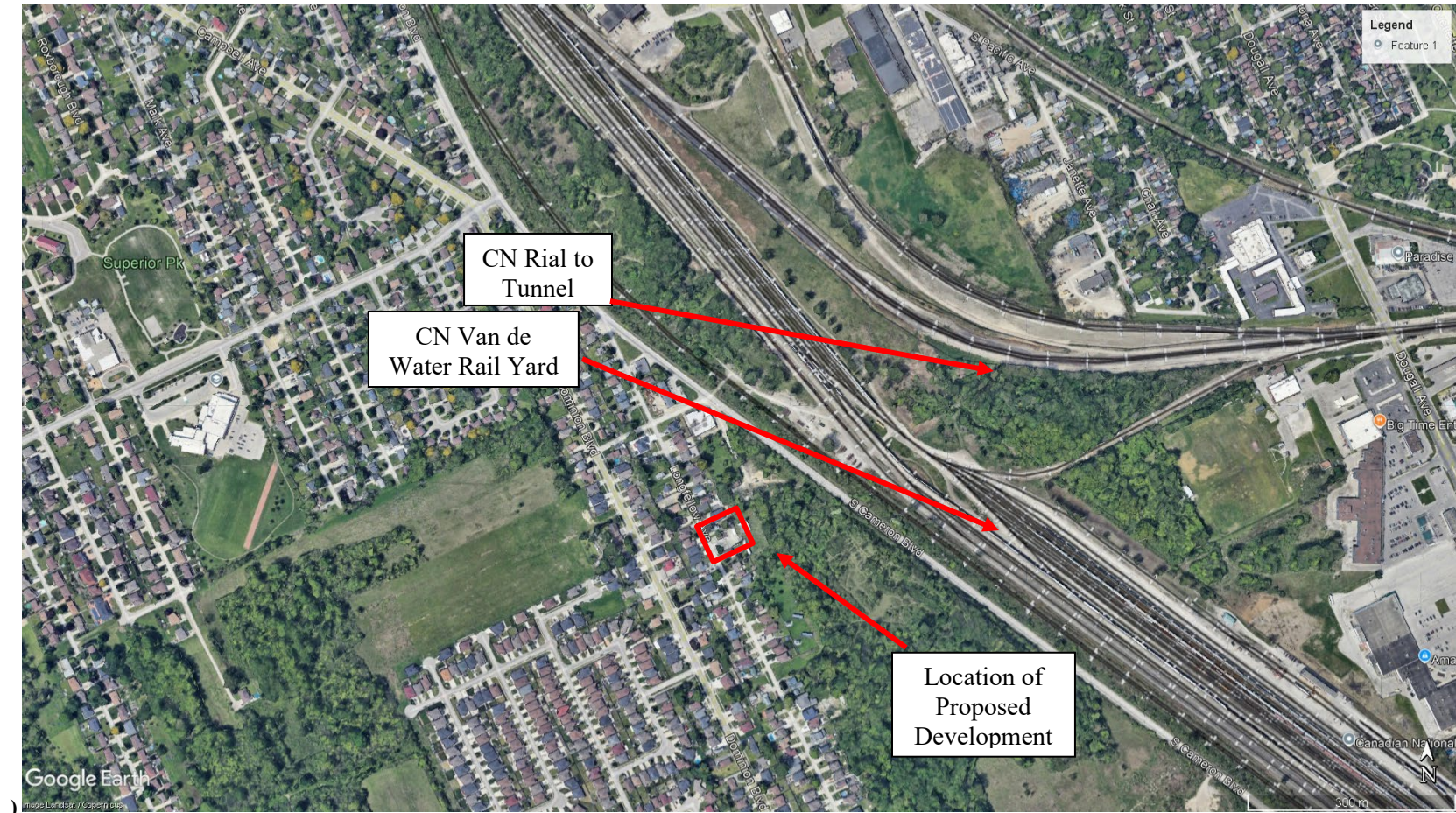
The assessment also demonstrates that the impulsive noise from rail shunting exceeded the Guidelines for New Development in Proximity to Railway Operations document which was prepared for the Federation of Canadian Municipalities and the Railway Association of Canada.

Compliance with the applicable indoor sound level criteria can be achieved through appropriate façade sound insulation design, including the specified Sound Transmission Class (STC) ratings for the building envelope components, the installation of central air conditioning to permit occupants to maintain windows in the closed position, and the registration of the recommended warning clauses on title, as detailed in this report.

Based on the findings of this assessment, it is concluded that the proposed development is suitable to proceed to the next stage of the municipal approval process, provided that the recommended noise mitigation measures identified in this report are incorporated into the final design and implemented as a condition of development approval.

For  akoustik engineering limited		
	Prepared by: Helen Ule, Ph.D., PEng	Reviewed by: Colin Novak, Ph.D., PEng

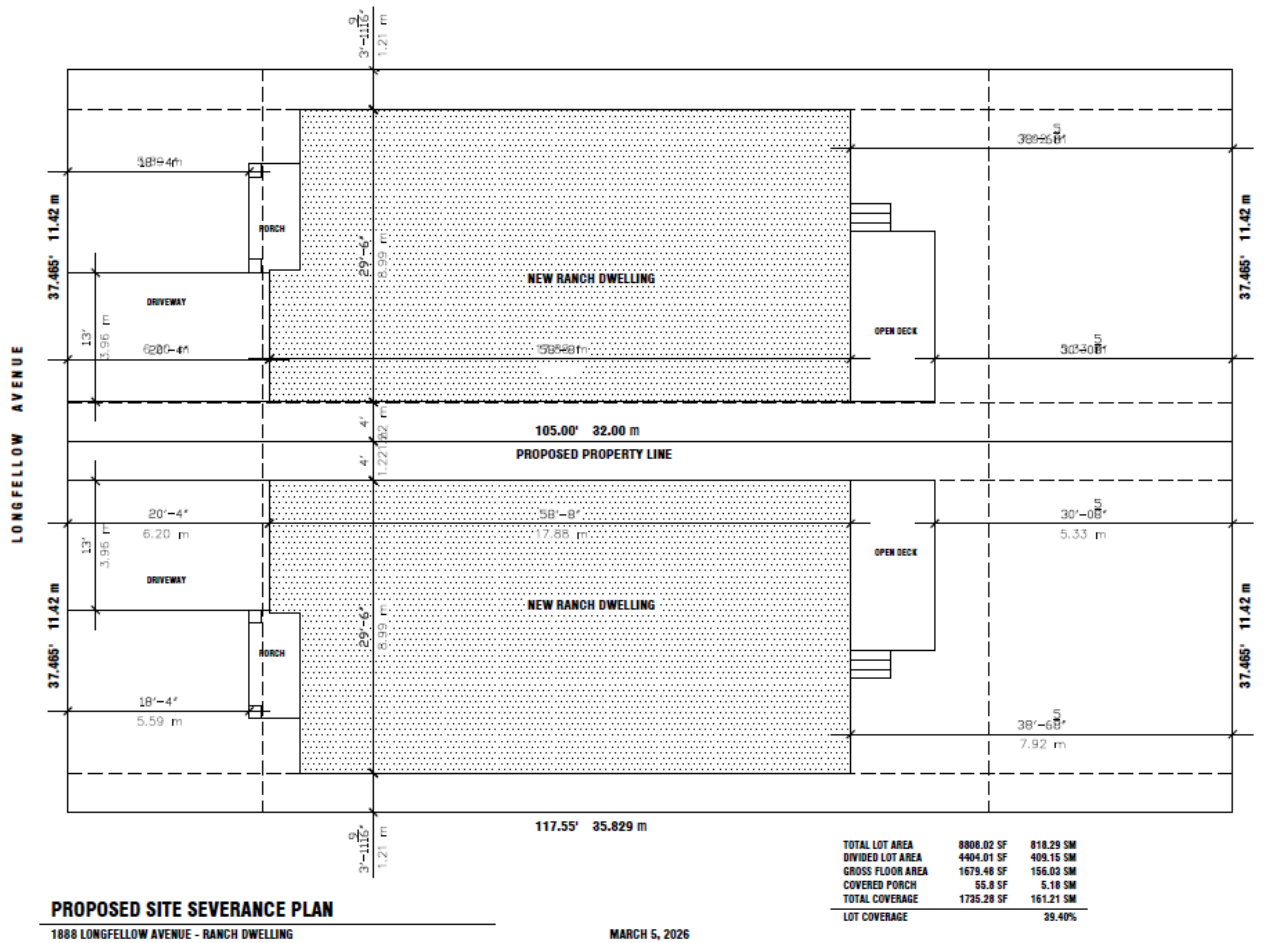
Appendix A: Site Location



A 1: General Location of Proposed Development and Nearby Surrounding Area including Road and Rail Sources of Noise

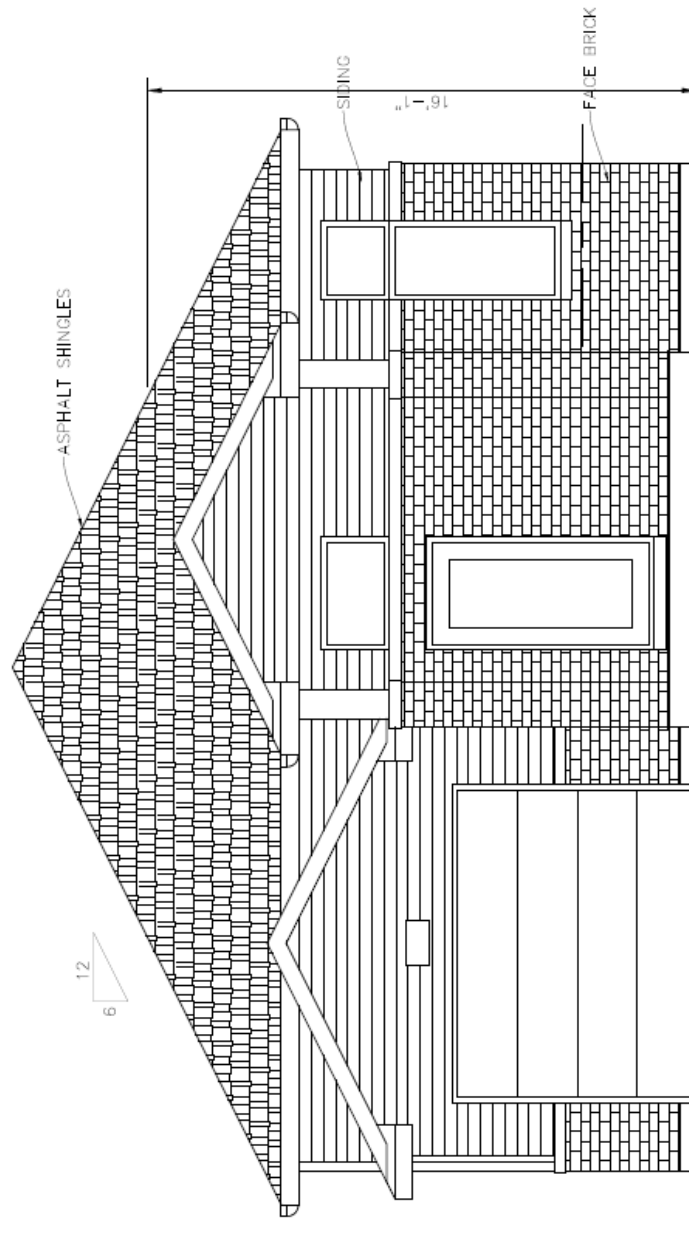


A 2: Proposed Development Site showing detailed Surrounding Area Features including Roadway Sources of Noise



A 3: Proposed Development Site Plan, dated March 5, 2026





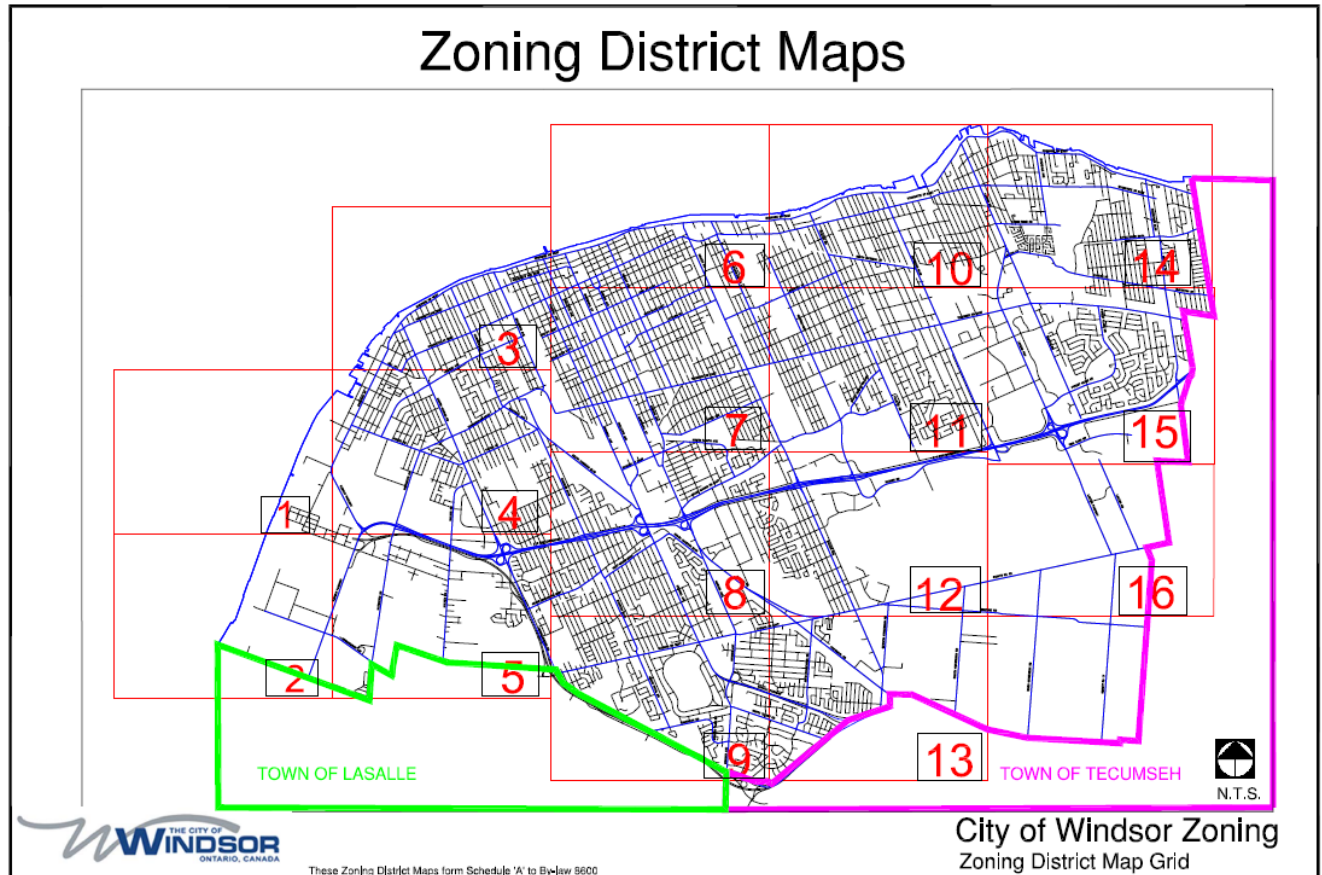
A 5: Proposed Elevation Drawing

FRONT ELEVATION

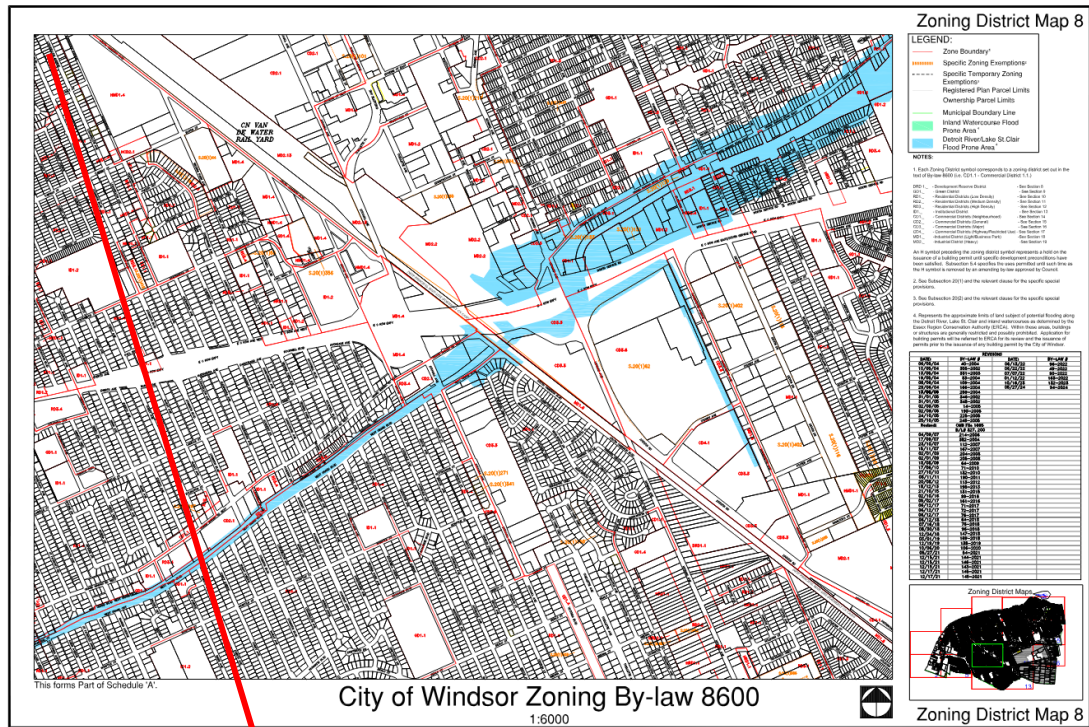
1888 LONGFELLOW AVENUE

MARCH 5, 2026

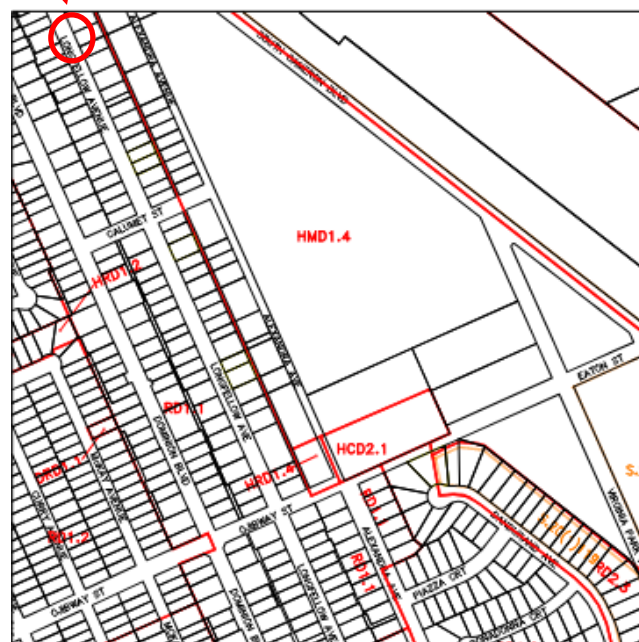
Appendix B: Land-use Zoning Map of Area



B 1: City of Windsor Zoning – Zoning District Map Grid

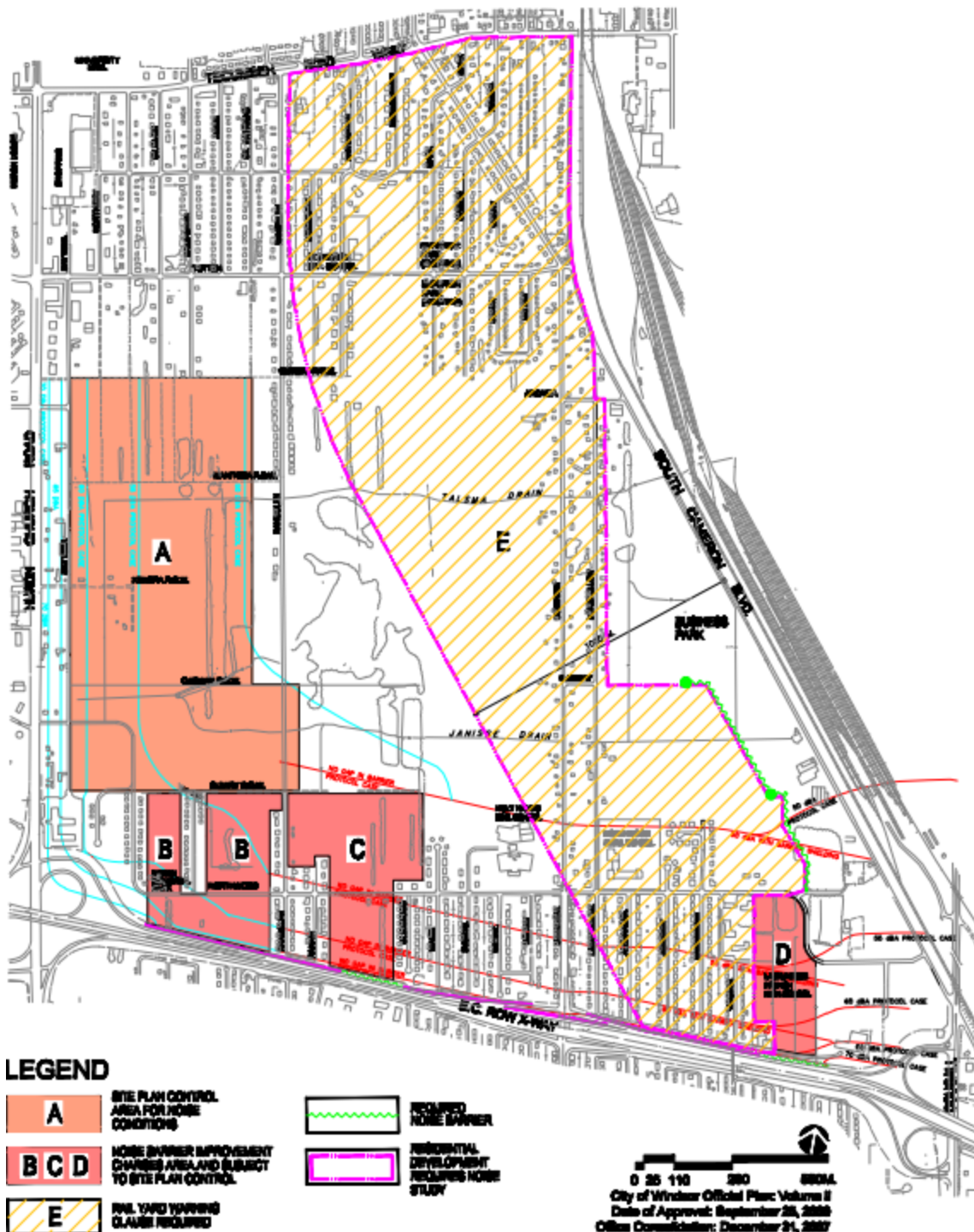


B 2: City of Windsor Zoning Map #8



Schedule SC-3 : Noise Control Areas

South Cameron Planning District



B 4: South Cameron Planning District, RE: Canadian National Railway's Van de Water Rail Yard

Appendix C: Report and Model Assumptions

ROAD:

- Traffic counts (AADT) provided by Mike Spagnuolo, City of Windsor
- Traffic volumes projected to 2036
- Historical roadway data:
 - South Cameron (South of Tecumseh):
 - 2015 3,500
 - 2036 5,099 (projected)
 - Dominion (South of Totten):
 - 2013 14,700
 - 2036 22,280 (projected)
- 90% of traffic during day period and 10% during night period
- Distribution:
 - South Cameron: 95% cars, 2.5% medium trucks, 2.5% heavy trucks
 - Dominion: 95% cars, 2.5% medium trucks, 2.5% heavy trucks
- Growth rate of 2.0% assumed
- 2036 Road Volume
 - South Cameron (South of Tecumseh):
 - Cars – 4,536 day, 504 night
 - Commercial –
 - Medium – 119 day, 13 night
 - Heavy – 119 day, 13 night
 - Dominion (South of Totten):
 - Cars – 19,819 day, 2,202 night
 - Commercial –
 - Medium – 522 day, 58 night
 - Heavy – 522 day, 58 night
- Speeds:
 - South Cameron Boulevard – 50 km/h
 - Dominion – 50 km/h

General:

- Model is 16 hour day, 8 hour night

Heights, Angles and Distances:

POR	Floor	Height (m)	South Cameron	
			Angle	Distance (m)
1-A	1	1.5	N/A	N/A
1-B	1	1.5	-90-50	144
OLA	1	1.5	-90-50	141

POR	Floor	Height (m)	Dominion	
			Angle	Distance (m)
1A	1	1.5	-90-90	103
1B	1	1.5	N/A	N/A
OLA	1	1.5	N/A	N/A

POR	Floor	Height (m)	Rail	
			Angle	Distance (m)
1A	1	1.5	N/A	N/A
1B	1	1.5	-90-50	176
OLA	1	1.5	-90-50	173

Appendix D: NPC-300 Reference Pages

L_{eq} (8). For complete description on assessing road traffic impacts, refer to ORNAMENT. Other traffic noise prediction models have been and are being developed by various authorities and may be adopted from time to time for use in Ontario by the MOE.

In order to be consistent with MOE guidelines, the sound level should be assessed in an OLA, such as a rear yard or a patio, and in indoor living areas, such as bedrooms and living rooms. Where the noise impact exceeds the applicable sound level limits, mitigation measures such as site planning, architectural design, noise barriers, building envelope elements (windows, exterior walls, doors) with upgraded sound isolation performance and/or central air conditioning may be required. Noise control measures are not required if the sound level estimated in the OLA is 55 dBA or less during the daytime and 50 dBA or less in the plane of bedroom windows during either daytime or nighttime.

C3.2.2 Daytime Outdoor Sound Level Limit

Table C-1 gives the equivalent sound level (L_{eq}) limit for designated OLAs. The limit applies to the entire daytime period from 07:00 to 23:00.

Table C-1
Sound Level Limit for Outdoor Living Areas
Road and Rail

Time Period	L_{eq} (16) (dBA)
16-hour, 07:00 – 23:00	55

C3.2.3 Indoor Sound Level Limits

Table C-2 gives the equivalent sound level (L_{eq}) limits and the applicable time periods for the indicated types of indoor spaces. The specified indoor sound level limits are maxima and apply to the indicated indoor spaces with windows and doors closed.

Table C-2
Indoor Sound Level Limits
Road and Rail

Type of Space	Time Period	L_{eq} (dBA)	
		Road	Rail
Living/dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, etc.	07:00 – 23:00	45	40
Living/dining, den areas of residences, hospitals, nursing homes, etc. (except schools or daycare centres)	23:00 – 07:00	45	40
Sleeping quarters	07:00 – 23:00	45	40

D 1: Daytime Outdoor and Daytime/Nighttime Indoor Sound Level Limits

the emissions are not required to be included with the overall noise assessment of a stationary source facility.

In addition, sound level limits do not apply to emergency equipment operating in emergency situations.

C4.5.4 Sound Level Limits for Layover Sites

The sound level limit for noise from a layover site in any hour, expressed in terms of the One-Hour Equivalent Sound Level (L_{eq}) is the higher of either 55 dBA or the background sound level.

C5 Noise Impact Assessment – Multiple Sources

Impulse sources, non-impulse sources and emergency equipment are to be analyzed separately. Where there are multiple, non-impulse sources at a stationary source, the noise assessment should be based on the combined effect of all sources comprising the stationary source, added together on an energy basis.

C6 Noise Impact Assessment – Supplementary Noise Limits

Indoor limits for transportation sources applicable to noise sensitive land uses are specified in Table C-2 and Table C-4. Table C-9 and Table C-10 are expanded versions of Table C-2 and Table C-4, and present guidelines for acceptable indoor sound levels that are extended to land uses and developments which are not normally considered noise sensitive. The specified values are maximum sound levels and apply to the indicated indoor spaces with the windows and doors closed. The sound level limits in Table C-9 and Table C-10 are presented as information, for good-practice design objectives.

Table C-9
Supplementary Indoor Sound Level Limits
Road and Rail

Type of Space	Time Period	L_{eq} (Time Period) (dBA)	
		Road	Rail
General offices, reception areas, retail stores, etc.	16 hours between 07:00 – 23:00	50	45
Living/dining areas of residences, hospitals, schools, nursing/retirement homes, daycare centres, theatres, places of worship, libraries, individual or semi-private offices, conference rooms, reading rooms, etc.	16 hours between 07:00 – 23:00	45	40
Sleeping quarters of hotels/motels	8 hours between 23:00 – 07:00	45	40
Sleeping quarters of residences, hospitals, nursing/retirement homes, etc.	8 hours between 23:00 – 07:00	40	35

Table C-10
Supplementary Indoor Aircraft Noise Limits
(Applicable over 24-hour period)

Type of Space	Indoor NEF/NEP*
General offices, reception areas, retail stores, etc.	15
Individual or semi-private offices, conference rooms, etc.	10
Living/dining areas of residences, sleeping quarters of hotels/motels, theatres, libraries, schools, daycare centres, places of worship, etc.	5
Sleeping quarters of residences, hospitals, nursing/retirement homes, etc.	0

* The indoor NEF/NEP values listed in Table C-10 are not obtained from NEF/NEP contour maps. The values are representative of the indoor sound levels and are used as assessment criteria for the evaluation of acoustical insulation requirements.

C7 Noise Control Measures

The following sections provide MOE guidance for appropriate noise control measures. These sections constitute requirements that are applied to MOE approvals for stationary sources. This information is also provided as guidance which land use planning authorities may consider adopting.

The definition in Part A describes the various types and application of noise control measures. All the noise control measures described in the definition are appropriate to address the impact of noise of transportation sources (road, rail and aircraft) on planned sensitive land uses. Only some of the noise control measures described in the definition are appropriate to address the noise impact of stationary sources on planned sensitive land uses.

C7.1 Road Noise Control Measures

C7.1.1 Outdoor Living Areas

If the 16-Hour Equivalent Sound Level, $L_{eq}(16)$ in the OLA is greater than 55 dBA and less than or equal to 60 dBA, noise control measures may be applied to reduce the sound level to 55 dBA. If measures are not provided, prospective purchasers or tenants should be informed of potential noise problems by a warning clause Type A.

If the 16-Hour Equivalent Sound Level, $L_{eq}(16)$ in the OLA is greater than 60 dBA, noise control measures should be implemented to reduce the level to 55 dBA. Only in cases where the required noise control measures are not feasible for technical, economic or administrative reasons would an excess above the limit (55 dBA) be acceptable with a warning clause Type B. In the above situations, any excess above the limit will not be acceptable if it exceeds 5 dBA.

C7.1.2 Plane of a Window – Ventilation Requirements

C7.1.2.1 Daytime Period, 07:00 – 23:00 Hours

Noise control measures may not be required if the L_{eq} (16) daytime sound level in the plane of a bedroom or living/dining room window is less than or equal to 55 dBA. If the sound level in the plane of a bedroom or living/dining room window is greater than 55 dBA and less than or equal to 65 dBA, the dwelling should be designed with a provision for the installation of central air conditioning in the future, at the occupant's discretion. Warning clause Type C is also recommended.

If the daytime sound level in the plane of a bedroom or living/dining room window is greater than 65 dBA, installation of central air conditioning should be implemented with a warning clause Type D. In addition, building components including windows, walls and doors, where applicable, should be designed so that the indoor sound levels comply with the sound level limits in Table C-2. The location and installation of the outdoor air conditioning device should comply with sound level limits of Publication NPC-216, Reference [32], and guidelines contained in Environmental Noise Guidelines for Installation of Residential Air Conditioning Devices, Reference [6], or should comply with other criteria specified by the municipality.

C7.1.2.2 Nighttime Period, 23:00 – 07:00 Hours

Noise control measures may not be required if the L_{eq} (8) nighttime sound level in the plane of a bedroom or living/dining room window is less than or equal to 50 dBA. If the sound level in the plane of a bedroom or living/dining room window is greater than 50 dBA and less than or equal to 60 dBA, the dwelling should be designed with a provision for the installation of central air conditioning in the future, at the occupant's discretion. Warning clause Type C is also recommended.

If the nighttime sound level in the plane of a bedroom or living/dining room window is greater than 60 dBA, installation of central air conditioning should be implemented, with a warning clause Type D. In addition, building components including windows, walls and doors, where applicable, should be designed so that the indoor sound levels comply with the sound level limits in Table C-2. The location and installation of the outdoor air conditioning device should comply with sound level limits of Publication NPC-216, Reference [32], and guidelines contained in Environmental Noise Guidelines for Installation of Residential Air Conditioning Devices, Reference [6], or should comply with other criteria specified by the municipality.

C7.1.3 Indoor Living Areas – Building Components

If the nighttime sound level outside the bedroom or living/dining room windows exceeds 60 dBA or the daytime sound level outside the bedroom or living/dining area windows exceeds 65 dBA, building components including windows, walls and doors, where applicable, should be designed so that the indoor sound levels comply with the

In Class 4 areas, where windows for noise sensitive spaces are assumed to be closed, the use of central air conditioning may be acceptable if it forms an essential part of the overall building designs.

C7.9 Verification of Noise Control Measures

It is recommended that the implementation of noise control measures be verified by qualified individuals with experience in environmental acoustics.

C8 Warning Clauses

The use of warning clauses or easements in respect of noise are recommended when circumstances warrant. Noise warning clauses may be used to warn of potential annoyance due to an existing source of noise and/or to warn of excesses above the sound level limits. Direction on the use of warning clauses should be included in agreements that are registered on title to the lands in question. The warning clauses would be included in agreements of Offers of Purchase and Sale, lease/rental agreements and condominium declarations. Alternatively, the use of easements in respect of noise may be appropriate in some circumstances. Additional guidance on the use of noise warning clauses is provided in Section C7.1.1, Section C7.1.2.1, Section C7.1.2.2, Section C7.3 and Section C7.4.

C8.1 Transportation Sources

The following warning clauses may be used individually or in combination:

TYPE A: (see Section C7.1.1)

“Purchasers/tenants are advised that sound levels due to increasing road traffic (rail traffic) (air traffic) may occasionally interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment.”

TYPE B: (see Section C7.1.1 and Section C7.4)

“Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road traffic (rail traffic) (air traffic) may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment.”

TYPE C: (see Section C7.1.2.1, Section C7.1.2.2 and Section C7.4)

“This dwelling unit has been designed with the provision for adding central air conditioning at the occupant’s discretion. Installation of

central air conditioning by the occupant in low and medium density developments will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment.”

TYPE D: (see Section C7.1.2.1, Section C7.1.2.2 and Section C7.4)

“This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment.”

C8.2 Stationary Sources

It is not acceptable to use warning clauses in place of physical noise control measures to identify an excess over the MOE sound level limits. Warning clause (Type E) for stationary sources may identify a potential concern due to the proximity of the facility but it is not acceptable to justify exceeding the sound level limits.

TYPE E: (see Section C7.6)

“Purchasers/tenants are advised that due to the proximity of the adjacent industry (facility) (utility), noise from the industry (facility) (utility) may at times be audible.”

C8.3 Class 4 Area Notification

TYPE F: (see Section B9.2 and Section C4.4.2)

“Purchasers/tenants are advised that sound levels due to the adjacent industry (facility) (utility) are required to comply with sound level limits that are protective of indoor areas and are based on the assumption that windows and exterior doors are closed. This dwelling unit has been supplied with a ventilation/air conditioning system which will allow windows and exterior doors to remain closed.”

Appendix E: Road Traffic Volume Data

E 1: Predicted Road Traffic

Year	Road	Location	AADT
2015	South Cameron	South of Tecumseh	3,500
2013	Dominion	South of Totten	14,700
2036	South Cameron	South of Tecumseh	5,304
2036	Dominion	South of Totten	23,180

E 2: Predicted Hourly Traffic Volumes per Period and Breakdown of Cars, Medium Trucks and Heavy Trucks – South Cameron

Period	Hourly Traffic Volume (Vehicles/hr)	Auto Traffic Volume (Vehicles/hr)	Medium Truck Traffic Volume (Vehicles/hr)	Heavy Truck Traffic Volume (Vehicles/hr)
Day	298	284	7	7
Night	66	63	2	2

E 3: Predicted Hourly Traffic Volumes per Period and Breakdown of Cars, Medium Trucks and Heavy Trucks – Dominion

Period	Hourly Traffic Volume (Vehicles/hr)	Auto Traffic Volume (Vehicles/hr)	Medium Truck Traffic Volume (Vehicles/hr)	Heavy Truck Traffic Volume (Vehicles/hr)
Day	1,304	1,239	33	33
Night	290	275	7	7

Appendix F: Rail Traffic Volume Data

F 1: CN Rail Train Volume Data Modelled for 2036

	Number of Trains (way freight)	Max Speed (km/h)	Number of Locomotive per Train	Number of Cars per Train	Engine Type
Day	2.69	16	4	25	Diesel
Night	0	16	0	0	Diesel

Date: 2024/05/13 **Project Number:** CAS-224.60 - Tecumseh Road West, Windsor ON

Dear Helen:

Re: Train Traffic Data – CN Caso Subdivision near Tecumseh Road West in Windsor, ON

The following is provided in response to Helen's 2024/04/12 request for information regarding rail traffic in the vicinity of Cabana Road East in Windsor ON at approximately Mile 224.60 on CN's Caso Subdivision.

Typical daily traffic volumes are recorded below. However, traffic volumes may fluctuate due to overall economic conditions, varying traffic demands, weather conditions, track maintenance programs, statutory holidays and traffic detours that when required may be heavy although temporary. For the purpose of noise and vibration reports, train volumes must be escalated by 2.5% per annum for a 10-year period.

Typical daily traffic volumes at this site location are as follows:

***Maximum train speed is given in Miles per Hour**

	0700-2300			
Type of Train	Volumes	Max.Consist	Max. Speed	Max. Power
Freight	0	140	10	4
Way Freight	2	25	10	4
Passenger	0	10	10	2

	2300-0700			
Type of Train	Volumes	Max.Consist	Max. Speed	Max. Power
Freight	0	140	10	4
Way Freight	0	25	10	4
Passenger	0	10	10	2

The volumes recorded reflect westbound and eastbound freight and passenger operations on CN's Caso Subdivision.

Except where anti-whistling bylaws are in effect, engine-warning whistles and bells are normally sounded at all at-grade crossings. There are three (3) crossings in the immediate vicinity of the study area at Mile 221.80 Howard Avenue, Mile 225 College Ave 225.27 Essex Terminal. Anti-whistling bylaws are not in effect at this crossing. Please note that engine-warning whistles may be sounded in cases of emergency, as a safety and or warning precaution at station locations and pedestrian crossings and occasionally for operating requirements.

With respect to equipment restrictions, the gross weight of the heaviest permissible car is 286,000 lbs.

The double mainline track is considered to be continuously welded rail throughout the study area. The presence of four switches located at Mile 224.48, 224.56, 224.60 and 224.66 and may exacerbate the noise and vibration caused by train movements.

The Canadian National Railway continues to be strongly opposed to locating developments near railway facilities and rights-of-way due to potential safety and environmental conflicts. Development adjacent to the Railway Right-of-Way is not appropriate without sound impact mitigation measures to reduce the incompatibility. For confirmation of the applicable rail noise, vibration and safety standards, Adjacent Development, Canadian National Railway Properties at Proximity@cn.ca should be contacted directly.

I trust the above information will satisfy your current request.

Sincerely,

Sarangan Srikanth

Sarangan Srikanth
Officer Public Works
sarangan.srikanth@cn.ca

Appendix G: Noise Model Printouts

STAMSON 5.0 NORMAL REPORT Date: 10-09-2026 15:16:26
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: por1b.te Time Period: Day/Night 16/8 hours
Description: POR 1-B

Rail data, segment # 1: CN (day/night)

Train Type	! Trains !	! Speed !(km/h)	!# loc !/Train!	!# Cars !/Train!	! Eng ! type	!Cont !weld						
1.	!	2.7/0.0	!	16.0	!	4.0	!	25.0	!	Diesel	!	No

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

Angle1	Angle2	:	-90.00 deg	50.00 deg
Wood depth	:	0	(No woods.)	
No of house rows	:	0 / 0		
Surface	:	1	(Absorptive ground surface)	
Receiver source distance	:	176.00 / 176.00 m		
Receiver height	:	1.50 / 1.50 m		
Topography	:	1	(Flat/gentle slope; no barrier)	
No Whistle				
Reference angle	:	0.00		

Results segment # 1: CN (day)

LOCOMOTIVE (0.00 + 40.90 + 0.00) = 40.90 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	50	0.58	59.89	-16.95	-2.04	0.00	0.00	0.00	40.90

WHEEL (0.00 + 25.82 + 0.00) = 25.82 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	50	0.66	45.70	-17.75	-2.13	0.00	0.00	0.00	25.82

Segment Leq : 41.03 dBA

Total Leq All Segments: 41.03 dBA

Page 2

Results segment # 1: CN (night)

LOCOMOTIVE (0.00 + -18.99 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	50	0.58	0.00	-16.95	-2.04	0.00	0.00	0.00	-18.99

WHEEL (0.00 + -19.89 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	50	0.66	0.00	-17.75	-2.13	0.00	0.00	0.00	-19.89

Segment Leq : 0.00 dBA

Total Leq All Segments: 0.00 dBA

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

Car traffic volume : 4536/504 veh/TimePeriod
Medium truck volume : 119/13 veh/TimePeriod
Heavy truck volume : 119/13 veh/TimePeriod
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: South Cam (day/night)

Angle1 Angle2 : -90.00 deg 50.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 144.00 / 144.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: South Cam (day)

Source height = 1.26 m

ROAD (0.00 + 43.00 + 0.00) = 43.00 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	-------	--------

-90	50	0.66	61.44	0.00	-16.31	-2.13	0.00	0.00	0.00	43.00
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Segment Leq : 43.00 dBA

Total Leq All Segments: 43.00 dBA

Page 3

Results segment # 1: South Cam (night)

Source height = 1.25 m

ROAD (0.00 + 36.42 + 0.00) = 36.42 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj
SubLeq									

-90	50	0.66	54.86	0.00	-16.31	-2.13	0.00	0.00	0.00
36.42									

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Segment Leq : 36.42 dBA

Total Leq All Segments: 36.42 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 45.14
(NIGHT): 36.42

Appendix H: Measured Noise Data

Start Time	LAeq	LAeq	Temp (°C)	Rel Hum (%)	Wind Spd (km/h)	Weather	Period	Noise Limit (dB)	Day of Week
2026-09-01 14:21	48.7	47.8	31.5	66	22	NA	Daytime	50	Tuesday
2026-09-01 14:41	48.49	47.4					Daytime	50	Tuesday
2026-09-01 15:01	51.11	50.4	31.7	65	21	NA	Daytime	50	Tuesday
2026-09-01 15:21	53.97	53.3					Daytime	50	Tuesday
2026-09-01 15:41	49.4	48.4					Daytime	50	Tuesday
2026-09-01 16:01	49.09	48.4	30.9	67	26	NA	Daytime	50	Tuesday
2026-09-01 16:21	49.91	49.1					Daytime	50	Tuesday
2026-09-01 16:41	54.81	53.4					Daytime	50	Tuesday
2026-09-01 17:01	55.22	54.4	30.7	70	21	NA	Daytime	50	Tuesday
2026-09-01 17:21	53.03	52.2					Daytime	50	Tuesday
2026-09-01 17:41	54.13	53.2					Daytime	50	Tuesday
2026-09-01 18:01	54.37	53.6	29	72	24	NA	Daytime	50	Tuesday
2026-09-01 18:21	55.07	54.3					Daytime	50	Tuesday
2026-09-01 18:41	55.5	54.6					Daytime	50	Tuesday
2026-09-01 19:01	52.49	51.6	27.6	75	17	NA	Evening	45	Tuesday
2026-09-01 19:21	49.56	49.0					Evening	45	Tuesday
2026-09-01 19:41	49.38	48.9					Evening	45	Tuesday
2026-09-01 20:01	64.38	61.1	26.6	79	13	NA	Evening	45	Tuesday
2026-09-01 20:21	61.69	58.8					Evening	45	Tuesday
2026-09-01 20:41	55.25	53.2					Evening	45	Tuesday
2026-09-01 21:01	52.23	51.7	25.3	84	13	NA	Evening	45	Tuesday
2026-09-01 21:21	53.66	53.0					Evening	45	Tuesday
2026-09-01 21:41	54.69	54.0					Evening	45	Tuesday
2026-09-01 22:01	55.17	54.5	23.2	93	5	NA	Evening	45	Tuesday
2026-09-01 22:21	55.98	55.3					Evening	45	Tuesday
2026-09-01 22:41	56.49	55.8					Evening	45	Tuesday
2026-09-01 23:01	56.74	56.0	23.5	91	5	NA	Nighttime	45	Tuesday
2026-09-01 23:21	56.79	56.1					Nighttime	45	Tuesday
2026-09-01 23:41	57.02	56.3					Nighttime	45	Tuesday
2026-09-02 0:01	56.99	56.3	23.5	90	8	NA	Nighttime	45	Wednesday
2026-09-02 0:21	57.05	56.4					Nighttime	45	Wednesday
2026-09-02 0:41	56.78	56.2					Nighttime	45	Wednesday
2026-09-02 1:01	57.26	56.6	22.5	95	8	NA	Nighttime	45	Wednesday
2026-09-02 1:21	57.97	57.2					Nighttime	45	Wednesday
2026-09-02 1:41	57.29	56.6					Nighttime	45	Wednesday
2026-09-02 2:01	56.88	56.2	22.5	94	8	NA	Nighttime	45	Wednesday
2026-09-02 2:21	57.03	56.4					Nighttime	45	Wednesday
2026-09-02 2:41	56.92	56.3					Nighttime	45	Wednesday
2026-09-02 3:01	57.32	56.7	23.3	92	9	NA	Nighttime	45	Wednesday
2026-09-02 3:21	57.41	56.8					Nighttime	45	Wednesday
2026-09-02 3:41	57.31	56.6					Nighttime	45	Wednesday
2026-09-02 4:01	57.32	56.6	23.4	94	11	NA	Nighttime	45	Wednesday
2026-09-02 4:21	57.22	56.5					Nighttime	45	Wednesday
2026-09-02 4:41	56.98	56.3					Nighttime	45	Wednesday
2026-09-02 5:01	56.24	55.7	23.8	95	11	NA	Nighttime	45	Wednesday
2026-09-02 5:21	55.06	54.5					Nighttime	45	Wednesday
2026-09-02 5:41	54.71	54.3					Nighttime	45	Wednesday
2026-09-02 6:01	54.62	54.2	24	96	17	Fog	Nighttime	45	Wednesday
2026-09-02 6:21	54.75	54.3					Nighttime	45	Wednesday
2026-09-02 6:41	55.37	55.0					Nighttime	45	Wednesday
2026-09-02 7:01	55.24	54.8	24.2	96	5	Fog	Daytime	50	Wednesday
2026-09-02 7:21	54.59	54.1					Daytime	50	Wednesday
2026-09-02 7:41	54.23	53.7					Daytime	50	Wednesday
2026-09-02 8:01	54.2	53.7	26.4	86	13	NA	Daytime	50	Wednesday
2026-09-02 8:21	54.27	53.5					Daytime	50	Wednesday
2026-09-02 8:41	54.13	53.3					Daytime	50	Wednesday
2026-09-02 9:01	53.41	52.9	28.5	76	15	NA	Daytime	50	Wednesday
2026-09-02 9:21	53.29	52.7					Daytime	50	Wednesday
2026-09-02 9:41	52.16	51.6					Daytime	50	Wednesday
2026-09-02 10:01	53.08	50.0	30.6	66	11	NA	Daytime	50	Wednesday
2026-09-02 10:21	49.12	48.6					Daytime	50	Wednesday

2026-09-02 10:41	48.39	47.7					Daytime	50	Wednesday
2026-09-02 11:01	47.12	46.4	31.3	63	15	NA	Daytime	50	Wednesday
2026-09-02 11:21	46.95	46.2					Daytime	50	Wednesday
2026-09-02 11:41	46.54	45.8					Daytime	50	Wednesday
2026-09-02 12:01	46.63	45.9	33.5	55	18	NA	Daytime	50	Wednesday
2026-09-02 12:21	45.74	44.8					Daytime	50	Wednesday
2026-09-02 12:41	47.03	46.2					Daytime	50	Wednesday
2026-09-02 13:01	47.08	46.3	34.4	52	24	NA	Daytime	50	Wednesday
2026-09-02 13:21	48.55	47.6					Daytime	50	Wednesday
2026-09-02 13:41	47.71	46.8					Daytime	50	Wednesday
2026-09-02 14:01	50.22	49.4	35.2	48	34	NA	Daytime	50	Wednesday
2026-09-02 14:21	50.53	49.6					Daytime	50	Wednesday
2026-09-02 14:41	49.82	48.9					Daytime	50	Wednesday
2026-09-02 15:01	50.48	49.7	35.2	46	32	NA	Daytime	50	Wednesday
2026-09-02 15:21	50.69	49.9					Daytime	50	Wednesday
2026-09-02 15:41	51.12	50.2					Daytime	50	Wednesday
2026-09-02 16:01	51	49.9	34.5	47	32	NA	Daytime	50	Wednesday
2026-09-02 16:21	50.23	49.1					Daytime	50	Wednesday
2026-09-02 16:41	51.66	50.2					Daytime	50	Wednesday
2026-09-02 17:01	51.28	50.3	33.9	47	24	NA	Daytime	50	Wednesday
2026-09-02 17:21	53.01	51.4					Daytime	50	Wednesday
2026-09-02 17:41	51.78	50.8					Daytime	50	Wednesday
2026-09-02 18:01	50.55	49.5	32.6	53	22	NA	Daytime	50	Wednesday
2026-09-02 18:21	48.45	47.7					Daytime	50	Wednesday
2026-09-02 18:41	48.4	47.7					Daytime	50	Wednesday
2026-09-02 19:01	48.63	47.8	30.7	59	15	NA	Daytime	50	Wednesday
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2026-09-02 19:41	51.72	48.9					Daytime	50	Wednesday
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2026-09-02 21:21	51.17	50.6					Daytime	50	Wednesday
2026-09-02 21:41	51.16	50.7					Daytime	50	Wednesday
2026-09-02 22:01	51.15	50.7	28.1	76	17	Thunderstorms	Daytime	50	Wednesday
2026-09-02 22:21	51.67	51.3					Daytime	50	Wednesday
2026-09-02 22:41	51.86	51.3					Daytime	50	Wednesday
2026-09-02 23:01	53.18	52.1	22.2	86	21	Thunderstorms,Rain	Daytime	50	Wednesday
2026-09-02 23:21	58.26	56.7					Daytime	50	Wednesday
2026-09-02 23:41	57.49	54.1					Daytime	50	Wednesday
2026-09-03 0:01	66.49	63.8	23.4	73	28	Thunderstorms,Heavy Rain	Daytime	50	Thursday
2026-09-03 0:21	54.95	51.6					Daytime	50	Thursday
2026-09-03 0:41	68	63.1					Daytime	50	Thursday
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2026-09-03 1:41	53.92	52.6					Daytime	50	Thursday
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2026-09-03 2:41	53.68	53.0					Daytime	50	Thursday
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2026-09-03 3:21	54.81	54.0					Daytime	50	Thursday
2026-09-03 3:41	55.93	54.8					Daytime	50	Thursday
2026-09-03 4:01	61.47	59.0	21.2	94	4	NA	Daytime	50	Thursday
2026-09-03 4:21	54.38	53.5					Daytime	50	Thursday
2026-09-03 4:41	54.63	54.0					Daytime	50	Thursday
2026-09-03 5:01	54.03	53.4	20.8	97	0	NA	Daytime	50	Thursday
2026-09-03 5:21	53.91	53.2					Daytime	50	Thursday
2026-09-03 5:41	52.95	52.3					Daytime	50	Thursday
2026-09-03 6:01	52.81	52.2	20.8	97	8	NA	Daytime	50	Thursday
2026-09-03 6:21	53.51	53.0					Daytime	50	Thursday
2026-09-03 6:41	53.67	53.1					Daytime	50	Thursday

2026-09-03 7:01	53.44	52.7	22.5	94	5	NA	Daytime	50	Thursday
2026-09-03 7:21	53	52.2					Daytime	50	Thursday
2026-09-03 7:41	53.46	52.6					Daytime	50	Thursday
2026-09-03 8:01	53.03	52.4	24.9	89	9	NA	Daytime	50	Thursday
2026-09-03 8:21	53.19	52.7					Daytime	50	Thursday
2026-09-03 8:41	54.75	54.2					Daytime	50	Thursday
2026-09-03 9:01	55.55	54.9	27.4	83	11	NA	Daytime	50	Thursday
2026-09-03 9:21	52.87	52.4					Daytime	50	Thursday
2026-09-03 9:41	51.96	51.4					Daytime	50	Thursday
2026-09-03 10:01	51.34	50.8	26.4	88	9	NA	Daytime	50	Thursday
2026-09-03 10:21	51.58	50.9					Daytime	50	Thursday
2026-09-03 10:41	50.9	50.4					Daytime	50	Thursday
2026-09-03 11:01	51.29	50.6	25.9	91	9	Rain	Daytime	50	Thursday
2026-09-03 11:21	51.95	51.2					Daytime	50	Thursday
2026-09-03 11:41	59.09	53.9					Daytime	50	Thursday
2026-09-03 12:01	51.43	50.8	26.2	70	5	NA	Daytime	50	Thursday
2026-09-03 12:21	50.27	49.7					Daytime	50	Thursday
2026-09-03 12:41	52.13	50.9					Daytime	50	Thursday
2026-09-03 13:01	52.01	50.3	27.1	70	11	NA	Daytime	50	Thursday
2026-09-03 13:21	52.24	50.8					Daytime	50	Thursday
2026-09-03 13:41	50.19	49.6					Daytime	50	Thursday
2026-09-03 14:01	47.92	47.4	28.8	66	17	NA	Daytime	50	Thursday
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2026-09-03 14:41	49.08	48.4					Daytime	50	Thursday
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2026-09-03 15:41	52.52	49.6					Daytime	50	Thursday
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2026-09-03 16:21	73.68	69.6					Daytime	50	Thursday
2026-09-03 16:41	64.7	61.6					Daytime	50	Thursday
2026-09-03 17:01	66.74	61.1	20.9	98	11	NA	Daytime	50	Thursday
2026-09-03 17:21	52.59	49.5					Daytime	50	Thursday
2026-09-03 17:41	51.04	48.2					Daytime	50	Thursday
2026-09-03 18:01	48.56	47.1	21.4	97	9	NA	Daytime	50	Thursday
2026-09-03 18:21	57.36	55.6					Daytime	50	Thursday
2026-09-03 18:41	51.18	47.7					Daytime	50	Thursday
2026-09-03 19:01	49.21	48.2	21.5	96	8	NA	Evening	45	Thursday
2026-09-03 19:21	48.88	47.9					Evening	45	Thursday
2026-09-03 19:41	49.18	48.1					Evening	45	Thursday
2026-09-03 20:01	47.26	46.3	20.9	97	11	NA	Evening	45	Thursday
2026-09-03 20:21	49.04	48.3					Evening	45	Thursday
2026-09-03 20:41	58.57	52.7					Evening	45	Thursday
2026-09-03 21:01	53.26	52.7	20.6	94	8	NA	Evening	45	Thursday
2026-09-03 21:21	53.8	53.2					Evening	45	Thursday
2026-09-03 21:41	53.75	53.0					Evening	45	Thursday
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2026-09-03 22:21	55.16	54.4					Evening	45	Thursday
2026-09-03 22:41	55.13	54.4					Evening	45	Thursday
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2026-09-03 23:41	54.89	54.1					Nighttime	45	Thursday
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2026-09-04 0:41	54.82	54.0					Nighttime	45	Friday
2026-09-04 1:01	54.75	53.9	20	98	5	Fog	Nighttime	45	Friday
2026-09-04 1:21	55.41	54.7					Nighttime	45	Friday
2026-09-04 1:41	55.05	54.3					Nighttime	45	Friday
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2026-09-04 2:41	55.76	55.0					Nighttime	45	Friday
2026-09-04 3:01	55.83	55.0	20.5	98	8	Fog	Nighttime	45	Friday

2026-09-04 3:21	56.17	55.4					Nighttime	45	Friday
2026-09-04 3:41	56.41	55.7					Nighttime	45	Friday
2026-09-04 4:01	56.76	56.1	20.8	98	13	Fog	Nighttime	45	Friday
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2026-09-04 4:41	55.89	55.3					Nighttime	45	Friday
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2026-09-04 5:41	54.5	53.9					Nighttime	45	Friday
2026-09-04 6:01	54.57	54.0	20.6	98	9	Fog	Nighttime	45	Friday
2026-09-04 6:21	53.46	52.8					Nighttime	45	Friday
2026-09-04 6:41	53.85	52.9					Nighttime	45	Friday
2026-09-04 7:01	53.61	52.4	20.7	99	0	Rain,Fog	Daytime	50	Friday
2026-09-04 7:21	66.38	62.7					Daytime	50	Friday
2026-09-04 7:41	55.82	51.5					Daytime	50	Friday
2026-09-04 8:01	57.46	52.2	20.8	99	0	Rain,Fog	Daytime	50	Friday
2026-09-04 8:21	59.86	53.8					Daytime	50	Friday
2026-09-04 8:41	57.82	51.8					Daytime	50	Friday
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2026-09-04 9:21	59.32	55.2					Daytime	50	Friday
2026-09-04 9:41	57.88	53.2					Daytime	50	Friday
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2026-09-04 10:21	60.66	56.4					Daytime	50	Friday
2026-09-04 10:41	61.83	57.1					Daytime	50	Friday
2026-09-04 11:01	63.08	57.9	21.3	97	15	Rain	Daytime	50	Friday
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2026-09-04 12:01	59.25	53.8	21.6	97	15	Rain	Daytime	50	Friday
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2026-09-04 17:21	49.83	48.7					Daytime	50	Friday
2026-09-04 17:41	48.31	47.5					Daytime	50	Friday
2026-09-04 18:01	48.96	47.9	24.9	80	4	NA	Daytime	50	Friday
2026-09-04 18:21	53.21	50.3					Daytime	50	Friday
2026-09-04 18:41	48.54	47.4					Daytime	50	Friday
2026-09-04 19:01	48.67	47.5	23.5	89	5	NA	Daytime	50	Friday
2026-09-04 19:21	47.65	46.7					Daytime	50	Friday
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2026-09-04 20:01	49.79	48.3	22.3	92	5	NA	Daytime	50	Friday
2026-09-04 20:21	50.58	49.7					Daytime	50	Friday
2026-09-04 20:41	52.69	51.9					Daytime	50	Friday
2026-09-04 21:01	53.78	53.3	21.8	94	4	NA	Daytime	50	Friday
2026-09-04 21:21	54.67	54.1					Daytime	50	Friday
2026-09-04 21:41	55.05	54.5					Daytime	50	Friday
2026-09-04 22:01	54.91	54.3	21.8	96	5	NA	Daytime	50	Friday
2026-09-04 22:21	55.75	55.0					Daytime	50	Friday
2026-09-04 22:41	55.59	54.9					Daytime	50	Friday
2026-09-04 23:01	55.54	54.7	22.3	94	15	NA	Daytime	50	Friday
2026-09-04 23:21	56.13	55.3					Daytime	50	Friday

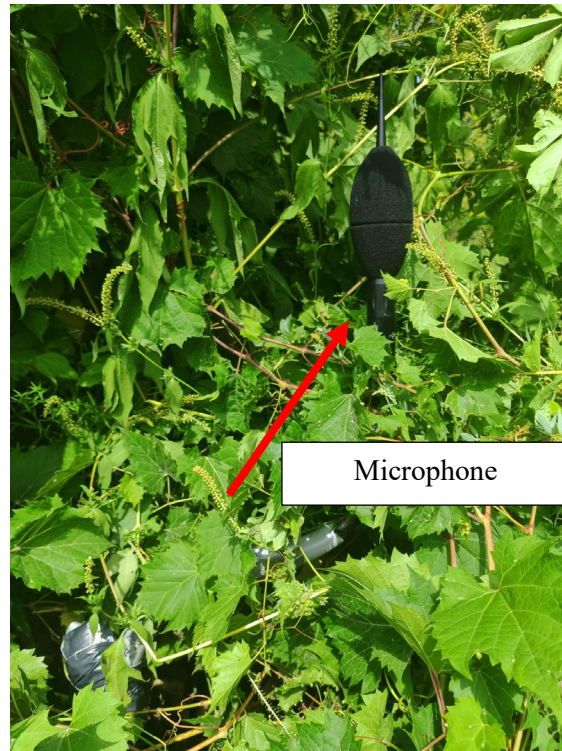
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2026-09-05 0:21	56.48	55.4					Daytime	50	Saturday
2026-09-05 0:41	56.34	55.2					Daytime	50	Saturday
2026-09-05 1:01	56.88	55.8	21.3	96	11	NA	Daytime	50	Saturday
2026-09-05 1:21	57.71	56.8					Daytime	50	Saturday
2026-09-05 1:41	57.32	56.4					Daytime	50	Saturday
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2026-09-05 8:21	52.23	51.5					Daytime	50	Saturday
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2026-09-05 10:41	54.85	52.2					Daytime	50	Saturday
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2026-09-05 11:21	53.89	50.8					Daytime	50	Saturday
2026-09-05 11:41	53.74	49.5					Daytime	50	Saturday
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2026-09-05 12:21	53.88	49.8					Daytime	50	Saturday
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2026-09-05 13:41	48.89	48.5					Daytime	50	Saturday
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2026-09-05 14:41	49.75	48.4					Daytime	50	Saturday
2026-09-05 15:01	48.93	48.3	24.7	63	13	NA	Daytime	50	Saturday
2026-09-05 15:21	53.37	59.9					Daytime	50	Saturday
2026-09-05 15:41	49.91	49.3					Daytime	50	Saturday
2026-09-05 16:01	57.11	54.7	25.5	58	18	NA	Daytime	50	Saturday
2026-09-05 16:21	50.2	49.4					Daytime	50	Saturday
2026-09-05 16:41	51.17	49.7					Daytime	50	Saturday
2026-09-05 17:01	49.82	49.2	24.7	53	26	NA	Daytime	50	Saturday
2026-09-05 17:21	48.78	48.0					Daytime	50	Saturday
2026-09-05 17:41	48.74	48.2					Daytime	50	Saturday
2026-09-05 18:01	50.97	49.5	23.5	56	22	NA	Daytime	50	Saturday
2026-09-05 18:21	49.36	48.9					Daytime	50	Saturday
2026-09-05 18:41	48.73	48.2					Daytime	50	Saturday
2026-09-05 19:01	49.33	48.6	21.6	63	22	NA	Evening	45	Saturday
2026-09-05 19:21	50.12	47.6					Evening	45	Saturday
2026-09-05 19:41	52.76	48.3					Evening	45	Saturday
2026-09-05 20:01	50.39	49.4	20.7	62	18	NA	Evening	45	Saturday

2026-09-05 20:21	52.4	51.5					Evening	45	Saturday
2026-09-05 20:41	54.24	53.5					Evening	45	Saturday
2026-09-05 21:01	54.7	54.0	19.8	66	21	NA	Evening	45	Saturday
2026-09-05 21:21	54.36	53.6					Evening	45	Saturday
2026-09-05 21:41	54.3	53.6					Evening	45	Saturday
2026-09-05 22:01	55.53	54.9	19	68	17	NA	Evening	45	Saturday
2026-09-05 22:21	56.02	55.4					Evening	45	Saturday
2026-09-05 22:41	57.42	56.8					Evening	45	Saturday
2026-09-05 23:01	55.08	54.4	17.6	80	9	NA	Nighttime	45	Saturday
2026-09-05 23:21	53.93	53.2					Nighttime	45	Saturday
2026-09-05 23:41	53.18	52.4					Nighttime	45	Saturday
2026-09-06 0:01	53.13	52.1	16.6	85	11	NA	Nighttime	45	Sunday
2026-09-06 0:21	53.01	52.4					Nighttime	45	Sunday
2026-09-06 0:41	52.76	52.1					Nighttime	45	Sunday
2026-09-06 1:01	53.47	52.8	16.4	87	9	NA	Nighttime	45	Sunday
2026-09-06 1:21	52.89	52.2					Nighttime	45	Sunday
2026-09-06 1:41	53.22	52.5					Nighttime	45	Sunday
2026-09-06 2:01	52.62	52.0	16.1	91	9	NA	Nighttime	45	Sunday
2026-09-06 2:21	53.47	52.6					Nighttime	45	Sunday
2026-09-06 2:41	52.47	51.9					Nighttime	45	Sunday
2026-09-06 3:01	52.13	51.4	16.4	92	9	NA	Nighttime	45	Sunday
2026-09-06 3:21	51	50.4					Nighttime	45	Sunday
2026-09-06 3:41	50.68	50.1					Nighttime	45	Sunday
2026-09-06 4:01	50.85	50.3	15.6	94	9	NA	Nighttime	45	Sunday
2026-09-06 4:21	51.25	50.7					Nighttime	45	Sunday
2026-09-06 4:41	51.44	50.9					Nighttime	45	Sunday
2026-09-06 5:01	51.21	50.6	15.8	95	11	NA	Nighttime	45	Sunday
2026-09-06 5:21	50.91	50.3					Nighttime	45	Sunday
2026-09-06 5:41	50.8	50.2					Nighttime	45	Sunday
2026-09-06 6:01	50.69	50.1	15.5	96	11	NA	Nighttime	45	Sunday
2026-09-06 6:21	50.21	49.6					Nighttime	45	Sunday
2026-09-06 6:41	48.16	47.5					Nighttime	45	Sunday
2026-09-06 7:01	47.67	46.0	16.7	94	9	NA	Daytime	50	Sunday
2026-09-06 7:21	48.97	47.5					Daytime	50	Sunday
2026-09-06 7:41	46.37	44.6					Daytime	50	Sunday
2026-09-06 8:01	45.45	44.5	19.3	87	15	NA	Daytime	50	Sunday
2026-09-06 8:21	46.32	45.6					Daytime	50	Sunday
2026-09-06 8:41	49.08	47.6					Daytime	50	Sunday
2026-09-06 9:01	50.6	49.4	21.1	78	24	NA	Daytime	50	Sunday
2026-09-06 9:21	51.12	50.4					Daytime	50	Sunday
2026-09-06 9:41	54.3	51.7					Daytime	50	Sunday
2026-09-06 10:01	53.43	50.8	22.1	72	21	NA	Daytime	50	Sunday
2026-09-06 10:21	57.09	54.8					Daytime	50	Sunday
2026-09-06 10:41	55.86	51.6					Daytime	50	Sunday
2026-09-06 11:01	54.49	52.7	23	69	24	NA	Daytime	50	Sunday
2026-09-06 11:21	54.79	51.8					Daytime	50	Sunday
2026-09-06 11:41	52.84	50.6					Daytime	50	Sunday
2026-09-06 12:01	54.52	50.5	23.4	62	22	NA	Daytime	50	Sunday
2026-09-06 12:21	54.54	53.0					Daytime	50	Sunday
2026-09-06 12:41	51.76	50.5					Daytime	50	Sunday
2026-09-06 13:01	50.29	49.7	24.5	58	21	NA	Daytime	50	Sunday
2026-09-06 13:21	49.76	49.0					Daytime	50	Sunday
2026-09-06 13:41	51.43	50.7					Daytime	50	Sunday
2026-09-06 14:01	51.25	50.7	24.2	54	24	NA	Daytime	50	Sunday
2026-09-06 14:21	52.05	51.3					Daytime	50	Sunday
2026-09-06 14:41	55.43	52.9					Daytime	50	Sunday
2026-09-06 15:01	54.87	51.9	24.5	52	21	NA	Daytime	50	Sunday
2026-09-06 15:21	52.42	50.5					Daytime	50	Sunday
2026-09-06 15:41	48.21	47.7					Daytime	50	Sunday
2026-09-06 16:01	53.25	51.6	24.6	50	21	NA	Daytime	50	Sunday
2026-09-06 16:21	55.8	55.0					Daytime	50	Sunday
2026-09-06 16:41	50	49.2					Daytime	50	Sunday

2026-09-06 17:01	52.99	51.2	24.3	51	17	NA	Daytime	50	Sunday
2026-09-06 17:23	58.65	54.1					Daytime	50	Sunday
2026-09-06 17:41	49.62	48.6					Daytime	50	Sunday
2026-09-06 18:01	49.77	48.9	23	53	13	NA	Daytime	50	Sunday

	High Wind (>20 km/h)
	Rain
	Exceedance

Appendix I: Photographs of Noise Measurement Location



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I 3: Microphone Location



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I 2: Site Measurement Location

Appendix J: Measurement Equipment List

The following is the list of equipment used to perform the noise measurements:

Type 4231 Brüel & Kjær Acoustic Calibrator	Serial No. 2588643
Type 4952 Brüel & Kjær Outdoor Microphone	Serial No. 2986887
Type 2250 Brüel & Kjær Sound Level Meter	Serial No. 2763480

All measurement systems were checked for calibration before and after the measurement period and were found to be within the acceptable calibration limits. The battery levels also remained within the acceptable levels during the measuring period.

It is also worth noting that the meteorological conditions were measured before and after the measurement period and were found to be within the limits set by the MECP.

Appendix K: STC Output Results

Indoor sound level in dB(A) is 35					
Room absorption category is: low absorption					
Outdoor sound level is 57 dB(A) (plus 0 dB from Table 2)					
Components:	After Step 2	From Table 3 (% energy)	From Table 4 (% floor area)	From Table 5 (spectrum)	STC
1. Single exterior door	22	+5 dB (33 %)	-4 dB (20 %)	+0 dB	23
2. Exterior wall	22	+5 dB (33 %)	+1 dB (59 %)	+2 dB	29
3. Window, openable thick d	22	+5 dB (33 %)	-2 dB (30 %)	+1 dB	26
Calculation is for: Longfellow					

K 1: STC Results for Railway Shunt Noise Source