City of Greater Geelong, Statutory Planning - Date Received 27/10/2026

ENFIELD ACOUSTICS NOISE VIBRATION

17-21 SEAFORTH STREET, NORTH SHORE

Acoustic Report for S72 Amendment Application

For

JET COURIERS PTY LTD

DOC. REF: V2885-01-P ACOUSTIC REPORT (R1)
23 OCTOBER 2026

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ENFIELD ACOUSTICS NOISE VIBRATION

Project	17-21 Seaforth Street, North Shore
Subject	Acoustic Report for S72 Amendment Application
Client	Jet Couriers Pty Ltd
Document Reference	V2885-01-P Acoustic Report (r1)
Date of Issue	23 October 2026

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1 Introduction and Scope

Enfield Acoustics has been engaged by Jet Couriers Pty Ltd (Applicant) to assess potential noise impacts relating to the permitted warehouse and office use (Planning Permit No. PP-94-2025) at 17-21 Seaforth Street, North Shore (Subject Land).

This assessment has been prepared in support of a proposed Section 72 (S72) amendment application to alleviate overly restrictive requirements imposed under Conditions 13 and 14 of the permit, which refer to the acoustic report prepared by Acoustic Logic dated 2 October 2025 for the initial planning permit application (refer to Appendix A), hereby referred to as the **AL Report**.

In particular, the following amendments are proposed under the S72 application:

Item	Permitted	Proposed Amendment
Loading/Unloading *Condition 13*	• Warehouse roller doors must be closed prior to loading/unloading • Forklifts must operate indoors at all times	• Warehouse roller doors can remain open during loading/unloading • Forklift may operate outdoors beneath the canopy between 7am to 6pm.
Deliveries *Condition 14(d)(e)(f)*	• Up to 1 heavy rigid vehicle delivery per hour between 8am to 6pm • No heavy rigid vehicle delivery before 8am • Up to 3 van deliveries per hour	• Remove heavy rigid vehicle delivery frequency restrictions between 8am to 6pm • Allow heavy rigid vehicle delivery between 6.30am to 8am • Remove van delivery frequency restrictions

No changes are proposed to the operating hours and prohibitions on idling and roadside queuing and parking under Conditions 14(a)(b)(c).

Given that the Applicant's courier operations are dynamic in nature, with delivery vehicle movements varying in response to customer demand, freight volumes and operational requirements, fixed movement caps can create operational inefficiencies. Movement caps are generally impractical for a freight and courier operator to actively monitor and control.

Accordingly, the Applicant seeks to alleviate the existing restrictions on vehicle movements to provide greater flexibility and unburden its operations.

In addition to the above, the Applicant also wishes to allow for the use of the office outside the permitted operating hours of 6.30am to 6pm, to accommodate staff who may, on occasion, need to arrive earlier or leave later than these hours. Office use outside of the permitted operating hours is not considered to present any material noise risk, as typical office activities do not generate material noise emissions such that it would be audible outdoors. Any noise associated with the office use would be effectively mitigated by standard forms of building construction.

To this end, Enfield Acoustics has:

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1. Confirmed proximities to existing and potential residential dwellings and interfaces surrounding the Subject Land;
2. Assessed potential noise emissions from the proposed use against relevant noise policies and identified noise mitigation and/or controls that may be required.

Our assessment will, in part, refer to the findings presented in the AL Report.

Our assessment has been conducted in reference to Plans prepared by JDZ Building Design Pty Ltd dated 18 December 2025.

Response to Further Information Required for Planning Permit No. PP-94-2025/A

Following submission of the previous acoustic report dated 16 September 2026, Council has requested further information, as follows:

1. Provide further information in the acoustic report on the benchmark measurement used for the heavy rigid vehicle noise level. This should include details on the type and size of the vehicle recorded and the conditions it was recorded in. It should also address if the recorded noise level includes accelerating, decelerating, reversing beeps, stopping and starting the engine and other loud noises generated by the vehicles.

2. Provide further clarification in the acoustic report regarding the assumption that all activities on the site would occur 'continuously and cumulatively'. Specifically, confirm whether the noise modelling assumes up to 5 HRV's and 14 vans are operating on the site simultaneously, or whether these vehicle movements occur progressively over the course of an hour.

This version of the acoustic report has been updated to address the above items. Further discussion is provided in Sections 4.1 and 4.2 of this report.

2 Site Context

Nearby sensitive uses surrounding the Subject Land were identified as follows:

Tag	Location of Sensitive Use	Direction
R1	24, 26, 28, 32-34, & 36 Seaforth Street	East

Refer to the site map below for locations of nearby sensitive uses.

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The Subject Land is located within an established Industrial 2 Zone (IN2Z), with various commercial and industrial uses to the north, west and south. The nearest sensitive uses are otherwise located to the east on Seaforth Street.

Given that the above dwellings identified are the closest to the Subject Land, it is intrinsic that compliance at these locations would also result in compliance at all other sensitive uses proximate to the Subject Land.

3 Policy Requirements

3.1 Noise Protocol

Noise from any commercial and/or industrial use must comply with the *Environment Protection Regulations 2021* (Regulations) and *Publication 1826: Noise Limit and Assessment Protocol for the Control of Noise from Commercial, Industrial and Trade Premises and Entertainment Venues* (Noise Protocol).

Zoning levels and noise limits were established in the AL Report as follows:

AL Report – Zoning Level and Noise Limits

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Period	Background dB(A) $L_{90,Period}$	Zoning limit	Classification	Project Noise Limits[1] dB(A) L_{eq}
Day Monday – Friday (7am – 6pm)	42	63	Low	**57**
Night Monday – Friday (6pm – 6:30pm)	42	56	Low	**52**
Night Monday – Friday (6:30am – 7am)	42	51	Low	**50**

Note 1: Warehouse operational hours between 6:30am – 6:00pm Monday to Friday.

Given that the Subject Land will operate only between 6:30am and 6:00pm, the periods of relevance to this assessment are the 'Day' period (between 7am to 6pm) and the 'Night' morning shoulder period (between 6.30am to 7am).

The Noise Protocol considers 30-minute average energy noise emissions, meaning that the relevant assessment metric being considered is $L_{Aeq\text{-}30min}$, dB(A).

4 Assessment

4.1 Benchmark Noise Monitoring

The Applicant currently operates another courier warehouse at 22B Dowsett St, South Geelong, which is to be relocated to the Subject Land. Our assessment will benchmark noise emissions from the existing site for use in our sensitivity analysis of the proposed Subject Land use.

This allows for an accurate assessment of potential noise impacts, as source noise levels from the Applicant's existing operations have been used and are expected to be representative of the proposed use. It is noted that the AL Report did not conduct comparative benchmark noise measurements of the Applicant's operations and instead utilised noise levels from their own database.

The following noise levels were measured at the benchmark site:

Item	Measured Noise Level
Forklift use *Internal reverberant noise level within the warehouse*	70 dB(A) $L_{eq\text{-}15min}$ SPL
Outdoor forklift use	92 dB(A) $L_{eq\text{-}5min}$ SWL
Van movements	93 dB(A) $L_{max\text{-}passby}$ SWL

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Measurement of indoor forklift use



Measurement of van movements



Measurement of outdoor forklift use

Given the existing site in South Geelong is smaller and operationally constrained, heavy rigid vehicle deliveries occur infrequently. Our office was therefore unable to measure heavy rigid vehicle deliveries at the existing site. As such, we have relied on previous benchmark measurements of heavy rigid vehicles undertaken at similar warehouse facilities for the purposes of this assessment, as follows:

The following noise levels were previously measured:

Item	Measured Noise Level
Heavy rigid vehicle movements	103 dB(A) $L_{max\text{-}passby}$ SWL

Response to Further Information Required for Planning Permit No. PP-94-2025/A

Regarding Item 1 of Council's RFI, the sound power level (SWL) adopted for heavy rigid vehicle movements was derived from measurements of a B-double truck operating at a road transport terminal facility (refer to the photo of the measurement below).

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Measurement of B-double passby

The measurements captured the truck accelerating in free-field conditions. Based on our observations and measurements of other truck-related noise sources, acceleration generated the highest noise emissions, exceeding those from idling, reversing (including the reversing alarm) and engine ignition.

The assessment conservatively applies this SWL for the entire duration the truck is on site. Sustained acceleration over this full period is not expected in practice, as actual operations would include periods of quieter activity such as idling and low-speed manoeuvring.

In effect, the modelling methodology is conservative in predicting noise levels.

4.2 Noise Modelling

Based on empirical data obtained from the benchmark monitoring, a 3D computational noise model has been generated using the software package CadnaA. The model considers acoustic propagation factors including attenuation from screening and buildings. The propagation distances here are too short that meteorological effects do not require consideration.

The following were assumed in our noise model:

- All garage roller doors assumed to be fully open
- Minimum forms of building envelope constructed (corrugated steel, R_w>21) assumed for the warehouse building
- All activities occurring continuously and cumulatively
- Forklift use during the 'Night' period assumed to occur internally within the warehouse building. Forklift use during the 'Day' period occurs outdoors beneath the canopy.

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Based on the assumptions outlined above, a sensitivity analysis has been undertaken to determine the number of heavy rigid vehicle (HRV) and van deliveries that could occur within a 1-hour period while maintaining compliance with the Noise Protocol.

The sensitivity analysis indicates that the following delivery movements can be accommodated while maintaining compliance with the Noise Protocol:

- 5 HRVs per hour; and
- 14 vans per hour

Response to Further Information Required for Planning Permit No. PP-94-2025/A

Regarding Item 2 of Council's RFI, the assessment assumes that the movements associated with up to 5 heavy rigid vehicles and 14 vans are distributed over the course of an hour. It does not assume that all 19 vehicles operate on site simultaneously. The reference to activities occurring "continuously and cumulatively" refers to the combined noise contributions from all sources, including forklift and vehicle movements.

The assessment considers noise from all activities and vehicle movements over the applicable 30-minute assessment period, in accordance with the Noise Protocol. Whether vehicle movements occur simultaneously or are distributed throughout the assessment period does not affect the predicted noise level, as the assessment considers the average sound energy over the 30-minute period.

The following 'worst-case' noise levels are predicted based on the above delivery movements:

Effective Noise Levels – All activities occurring at the same time

Location	Effective Noise Level $L_{Aeq\text{-}30\ min}$	Noise Protocol Limit $L_{Aeq\text{-}30\ min}$	Exceedance/compliance?
R1	55 dB(A)^ - Day 50 dB(A)^ - Night	57 dB(A) – Day 50 dB(A) – Night	✓

Notes:
- ^Noise level includes a +2dB(A) tonal adjustment in accordance with Noise Protocol methodology

A map of the noise model showing noise levels at all surrounding sensitive receptors can be referred to in Appendix B.

Our assessment is considered conservative, as all activities have been assumed to occur continuously and cumulatively.

The results of the sensitivity analysis indicate that a relatively high number of delivery vehicle movements (i.e., up to 5 HRVs and 14 vans within a 1-hour period) can be supported while maintaining compliance with the 'Night' period Noise Protocol limit.

The Applicant has advised us that these hourly volumes of delivery vehicles are unlikely to be supported by the site infrastructure at any time of day. In practice, the activity of loading and unloading of delivery vehicles would require time that would make this level of vehicle turnover highly unlikely.

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Further, during the 'Night' period, the warehouse will only operate between the shoulder morning period (i.e., 6.30am to 7am), which is inherently a less sensitive time as road traffic volumes during peak morning traffic are usually elevated. During the 'Day' period, compliance margins of 2dB(A) are predicted, indicating that a greater number of delivery vehicle movements could potentially be supported while maintaining compliance with the Noise Protocol. Our assessment also indicates that the forklift may operate outdoors, beneath the canopy during the 'Day'.

While the AL Report assumes a lower number of HRVs and vans, it is noted that ≤5dB(A) compliance margins were predicted (refer to the table below), meaning that a greater number of delivery vehicle movements could technically be supported than what was assessed in that report.

AL Report – Predicted Warehouse Operation Noise Levels

Table 6 – Predicted Furniture Warehouse Operation Noise Levels

Location	Period	Predicted Noise Level dB(A) L_{Aeq}	Noise Level Criteria dB(A) L_{Aeq}	Complies
Residential dwellings on Seaforth Street identified in Figure 1	Day Operation	<54	≤57	Yes
	Evening Operation (6pm-6:30pm)	<45	≤52	Yes
	Night Operation (6:30am-7am)	<45	≤50	Yes

The assumed delivery vehicle movements in the AL Report were primarily representative of typical warehouse operations, rather than representing the absolute maximum number of delivery vehicles that could be supported within a 1-hour period.

On this basis, we are satisfied that noise from the proposed Section 72 amendments is unlikely to result in adverse noise impacts and does not require specific acoustic mitigation and/or controls beyond the requirement for forklift use to remain indoors during the 'Night' period (6.30am to 7am).

5 Conclusion

Enfield Acoustics has assessed potential noise impacts resulting from the proposed S72 amendment at 17-21 Seaforth Street, North Shore and is satisfied that the application can be approved.

The results of our modelling indicate that a large number of delivery vehicle movements can be supported during the 'Day' and 'Night' periods of the Noise Protocol, meaning that restrictions to vehicle movements are not considered necessary.

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The modelling also indicates that external forklift use beneath the canopy can comply with the Noise Protocol during the 'Day' period.

The proposed office use outside the currently permitted operating hours is also not expected to result in any material noise impact.

Based on the frequency of deliveries that would need to occur before non-compliance is achieved, we are satisfied that vehicle frequency restrictions can be removed without resulting in unreasonable noise impacts. We are also satisfied that HRV deliveries can occur between 6.30am to 8am.

The number of vehicle movements that can occur on the Subject Land is inherently constrained by the site's infrastructure and operational capacity. In practical terms, the current restrictions would impose an unnecessary administrative and operational burden on a freight or courier operator, without materially affecting the level of vehicle activity capable of occurring on the site.

To that end, Enfield Acoustics is satisfied that the proposed S72 amendments will not result in unreasonable noise impacts for the hours permitted and no specific acoustic mitigation and/or controls are required beyond the requirement for forklift use to remain indoors at 'Night'.

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Appendix A: AL Report

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2	27/08/2025	20250570.1/2208A/R2/SS	SS	BAW	BAW
3	2/10/2025	20250570.1/1809A/R3/SS	SS	BAW	BAW

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1 INTRODUCTION

Acoustic Logic (AL) has been engaged to conduct an acoustic assessment to address noise associated with the proposed warehouse development located at 17-21 Seaforth Street, North Shore, with planning permit application PP-94-2025 dated 2 May 2025.

This report will primarily address noise emissions from typical operations within the proposed warehouse development to address the noise queries listed within planning permit application.

The assessment has been based on the documents referenced in Table 1 below.

Table 1 – Referenced Documents

Company	Document	Reference	Date
City of Greater Geelong	Planning Permit Application	PP-94-2025	2 May 2025
EPA Victoria	Noise Limit and Assessment Protocol (Noise Protocol)	Publication 1826.4	2021
-	Environmental Protection Act 2017	-	6 August 2025

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2 SITE DESCRIPTION

The proposed development is located at 17-21 Seaforth Street, North Shore. The proposed development is a warehouse building with two storey office. The hour of operation of the proposed development is Monday to Friday, 6:30am – 6:30pm.

The proposed is located within existing industrial area in which existing industrial tenancies to the north west and south of the development are currently operational.

It has been identified that the nearest noise sensitive residential receivers around the development are located as the following:

- 24 Seaforth Street
- 26 Seaforth Street
- 28 Seaforth Street
- 32-34 Seaforth Street
- 36 Seaforth Street

Figure 1 below indicates the subject site, measurement locations and general surrounding.



Figure 1: Site Map and surrounding environment (source: Google Maps™)

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3 PLANNING PERMIT APPLICATION

Planning Permit Application Ref: PP-94-2025 dated 2 May 2025 by City of Greater Geelong contains the following:

Request for information

- *An acoustic report prepared by a suitably qualified person to demonstrate how the proposal will comply with relevant noise legislation and mitigate amenity impacts on nearby residences/to residences of this development from heavy vehicles and or truck movements. Provide a noise development plan that demonstrates how the proposal will address any potential noise issues and mitigation measures control noise impacts.*

The assessment of heavy vehicle / truck movements associated with delivery are detailed in Section 7 of the report. Acoustic treatment recommendations are detailed in Section 8 to ensure compliance with EPA criteria detailed in Section 6 is achieved.

4 ENVIRONMENTAL NOISE DESCRIPTORS

Environmental noise constantly varies in level, due to fluctuations in local noise sources including road traffic. Accordingly, a 15-minute measurement interval is normally utilised. Over this period, noise levels are monitored on a continuous basis and statistical and integrating techniques are used to determine noise description parameters.

In the case of environmental noise three principal measurement parameters are used, namely L_{10}, L_{90} and L_{eq}. The L_{10} and L_{90} measurement parameters are statistical levels that represent the average maximum and average minimum noise levels respectively, over the measurement intervals.

The L_{10} parameter is commonly used to measure noise produced by a particular intrusive noise source since it represents the average of the loudest noise levels produced by the source.

Conversely, the L_{90} level (which is commonly referred to as the background noise level) represents the noise level heard in the quieter periods during a measurement interval. The L_{90} parameter is used to set the allowable noise level for new, potentially intrusive noise sources since the disturbance caused by the new source depends on how audible it is above the pre-existing noise environment, particularly during quiet periods, as represented by the L_{90} level.

The L_{eq} parameter represents the average noise energy during a measurement period. This parameter is derived by integrating the noise levels measured over the measurement period. L_{ea} is important in the assessment of traffic noise impact as it closely corresponds with human perception of a changing noise environment; such is the character of industrial noise.

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5 NOISE LEVEL MEASUREMENTS

5.1 MEASUREMENT LOCATIONS

An unattended background noise level measurements were conducted at subject site at the Measurement Location 1 shown in Figure 1. The microphone located 1.5m above the ground level and was affected by façade reflections. Measurements were undertaken between 11 and 18 June 2025. The photo of noise monitor is shown in Appendix 2.

5.2 MEASUREMENT EQUIPMENT

Unattended measurements were conducted using NGARA noise monitor. The equipment was calibrated at the beginning and the end of the measurement using a Rion NC-75 calibrator; no significant drift was detected. All measurements were taken on fast response mode.

5.3 MEASURED BACKGROUND NOISE LEVELS

The proposed warehouse will only be operational between 6:30am to 6:30pm Monday to Friday. Therefore, the relevant background noise level during the warehouse operational is presented below.

Table 2 – Unattended Background Noise Level Measurements

Period	Date and Time of Measurements	Measured Noise Levels dB(A) $L_{90,\ 1period}$ [1,2]
Day	7am – 6pm (Mon – Fri)	42
Evening	6pm – 6:30pm (Mon – Fri)	42
Night	6:30am – 7am (Mon – Fri)	42

Note 1: Noise levels presented are the lowest measured levels during the monitoring period and has been corrected by -2.5dB(A) for façade reflections.
Note 2: Warehouse operational hours between 6:30am – 6:00pm Monday to Friday. Therefore, other time period is not applicable.

Graphical results are presented in Appendix 2.

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6 ENVIRONMENTAL NOISE EMISSIONS CRITERIA

6.1 GENERAL ENVIRONMENTAL DUTY (GED)

The main document for Victorian noise regulation related to the General Environmental Duty (GED) is the Environment Protection Act 2017

Section 25 of the Environmental Protection Act 2017 states the following:

> ***General environmental duty***
>
> *A person who is engaging in an activity that may give rise to risks of harm to human health or the environment from pollution or waste must minimise those risks, so far as reasonably practicable.*

Environmental noise emissions from industrial activities, if not adequately managed, have the potential to cause harm. The GED requires that all reasonably practicable measures be put in place to minimise the risks of that harm occurring.

EPA Publication 1856 provides guidance of what is considered "Reasonably practicable" and provides recommendations of what should be considered to mitigate or minimise the risk of harm. This includes the following hierarchy of controls:

1. Eliminate risk (Can the risk be eliminated?)
2. Likelihood of risk (What is the chance that harm will occur?)
3. Degree of the harm (How severe could the harm be on human health or the environment?)
4. State of knowledge (What do you know, or what can you find out, about the risks your activities pose?)
5. Available suitable controls (What technology, processes or equipment are available to control the risk? What controls are suitable for use in your circumstances?)
6. Cost of suitable controls (How much does the control cost to put in place compared to how effective it would be in reducing the risk?)

These factors are required to be considered together to determine what is reasonably practicable to control the risk.

The above control measures have been considered at the subject site as follows.

1. Eliminate the risk

Noise from the operation of the warehouse will create noise during operation. Noise will be mitigated as part of the design.

2. Likelihood of risk

Mitigation measures have been designed to minimise risk of harm by limiting the number of truck movement, operational hours of the warehouse, and management control to ensure trucks do not idle on the street and make aware of the existing residential dwellings surrounding the warehouse.

3. Degree of the harm

Harm associated with noise from the warehouse operation can include sleep disturbance and annoyance.

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4. State of knowledge

Detailed reviews of the site and potential environmental noise emissions have been undertaken as detailed later in this report.

5. Available suitable controls

Limiting the number of truck movement and conducting all the unloading and loading activities within the warehouse with roller door closed are a suitable and effective measure to control noise from this proposed warehouse development.

6. Cost of suitable controls

Installing solid imperforated roller door is a suitable and cost-effective measure to control noise from this proposed warehouse development.

Note the Environmental Protection Act 2017 referenced above does not provide an assessable noise level. Therefore, the EPA Noise Protocol Publication 1826.4 (Noise Protocol), which provides an average permissible noise level over a 30-minute period, is proposed to assess the noise level emitted from the proposed gym facility. The Noise Protocol criteria has been established in Section 6.2.

6.2 EPA NOISE PROTOCOL 1826.4 PART I

To ensure that noise emissions from the site do not impact adversely on the amenity of the surrounding noise sensitive areas, the proposed development should be designed to comply with the EPA Noise Protocol – Part I.

6.2.1 Zoning Level

The 'Zoning' level is determined by the Influencing Factor (IF) and is calculated by the formula and the 'Zoning Level versus Influencing Factor' graph nominated in Section 1.1 of the EPA Noise Protocol and VicPlan Mapping. The IF is calculated from the proportion of industrial and commercial land around noise sensitive areas. Review of the surrounding area indicates an IF of approximately **0.72** which results in the zoning limits detailed in Table 3 below.

Table 3 - Zoning Levels

Period	Zoning Level dB(A)
Day	63
Evening	56
Night	51

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6.2.2 EPA Noise Protocol – Part I Criteria

Table 4 below details the assessment criteria based on both the zoning levels and the measured background noise levels.

Table 4 – Noise Limits

Period	Background dB(A) $L_{90,Period}$	Zoning limit	Classification	Project Noise Limits[1] dB(A) L_{eq}
Day Monday – Friday (7am – 6pm)	42	63	Low	**57**
Night Monday – Friday (6pm – 6:30pm)	42	56	Low	**52**
Night Monday – Friday (6:30am – 7am)	42	51	Low	**50**

Note 1: Warehouse operational hours between 6:30am – 6:00pm Monday to Friday.

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7 NOISE EMISSION ASSESSMENT

Noise emissions to identified nearby noise sensitive residential receivers have been assessed. Noise sources assessed includes operation noise from the truck and van movement. The nearest affected receivers have been identified in Section 2 of this report which are the existing residents addressed at 24-36 Seaforth Street. Operational noise impacts have been predicted at the facades of these identified affected receivers.

Predicted noise levels at nearest noise sensitive façade have been determined using the SoundPlan™ noise modelling software and the assumptions detailed below. Noise emissions resulting from the operation of the proposed development will be assessed against the criteria nominated by EPA Noise Protocol Part I.

7.1 NOISE MODELLING PARAMETERS

Noise emissions associated with proposed development activities have been predicted based on the information provided, detailed below:

- The warehouse's operating hours is Monday to Friday 6:30am-6:30pm.
- Up to 1 heavy rigid vehicle delivery per hour between 8am and 6pm. No heavy rigid vehicle delivery before 8am and after 6pm.
- Up to 3 van deliveries per hour between 6:30am-6:30pm.
- Delivery vehicles will enter the carpark and reverse into the internal loading area of the warehouse. Once located internally, the roller door will close prior to loading / unloading activities be undertaken.
- Vehicle access door will be solid imperforated and be closed except during delivery vehicle access (entering / leaving).
- All forklifts are to be electric forklift and will only operate inside the warehouse with solid imperforate door closed.
- All delivery vehicles shall be prohibited from idling i.e. engine turned off prior to loading / unloading activities.

7.2 NOISE SOURCE SOUND POWER LEVELS

Sound Power Levels associated with equipment on site are detailed in table below.

Table 5 – Operational Sound Power Levels

Noise Source	Sound Power Level
Large Truck Engine at 5km/h	105dB(A)
Large Truck Exhaust at 5km/h	97dB(A)
Vans at 5km/h	91dB(A)
Warehouse operation	75dB(A) SPL

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7.3 PREDICTED NOISE IMPACTS

Noise impacts to the nearby noise sensitive receivers have been predicted below. The noise impacts have been predicted at the worst affected façade and assessed against the requirements of EPA Noise Protocol Part I

Table 6 – Predicted Furniture Warehouse Operation Noise Levels

Location	Period	Predicted Noise Level dB(A) L_{Aeq}	Noise Level Criteria dB(A) L_{Aeq}	Complies
Residential dwellings on Seaforth Street identified in Figure 1	Day Operation	<54	≤57	Yes
	Evening Operation (6pm-6:30pm)	<45	≤52	Yes
	Night Operation (6:30am-7am)	<45	≤50	Yes

Assessment detailed in Table 6 indicate that the predicted noise levels from warehouse delivery complies with EPA Publication 1826.4 Noise Protocol Part I criteria.

7.4 MECHANICAL PLANT AND EQUIPMENT SERVING PROPOSED DEVELOPMENT

It is noted that plant and equipment selections/design have not yet been finalised. Therefore to ensure amenity for nearby noise sensitive receivers is preserved, mechanical plant and equipment shall be designed to ensure compliance with the EPA Noise Protocol – Part I detailed in Table 4. This will be achieved by the use of standard acoustic treatment such as internally lined ductwork, acoustic louvres, acoustic attenuators, variable speed drives, and vibration isolation mounts.

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8 ACOUSTIC TREATMENT RECOMMENDATIONS

The following acoustic treatments shall be implemented to ensure compliance with EPA Noise Protocol – Part I is achieved.

1. The warehouse's operating hours and delivery shall be Monday to Friday 6:30am-6:30pm.
2. Deliveries limited to the following:
    a. Up to 1 heavy rigid vehicle delivery per hour between 8am and 6pm. No heavy rigid vehicle delivery before 8am and after 6pm.
    b. Up to 3 van deliveries per hour.
3. For vehicle access door:
    a. Door shall be solid imperforated and be closed except during delivery vehicle access (entering / leaving).
    b. Doors shall be quiet in operation.
    c. Teflon guides shall be installed in all rails.
    d. Ensure that door panels do not rattle, and the operation of any door guides, rollers, etc is smooth.
    e. Door motors shall be fitted with a soft start/stop controller to minimise noise.
    f. The door shall be stopped approximately 5 mm from the slab/ground to ensure the base of the door does not contact the concrete surface.
4. Loading / unloading shall occur within the internal space only with solid imperforated door in closed position.
5. All forklifts shall be electric forklift and limited to the internal space of the warehouse.
6. All delivery vehicles shall be prohibited from idling i.e. engine turned off prior to loading / unloading activities.
7. Reverse beepers are prohibited, and squawker be used instead (if required).
8. All delivery vehicles shall be prohibited from idling outside of the site.
9. All delivery vehicles shall be prohibited from unnecessary acceleration or deceleration when entering or leaving the warehouse.

Alternative treatments shall be reviewed by a suitably qualified acoustic consultant to ensure compliance with EPA Noise Protocol – Part I in Table 4 is achieved.

9 CONCLUSION

This report provides our acoustic assessment of the proposed warehouse development at 17-21 Seaforth Street, North Shore. Provided the acoustic treatment recommendations detailed in Section 8 is implemented, compliance with the EPA Noise Protocol Part I in Section 6 will be achieved and therefore will satisfy Planning Permit No. PP-94-2025 dated 2 May 2025 by City of Greater Geelong.

We trust this information is satisfactory. Please contact us should you have any further queries.

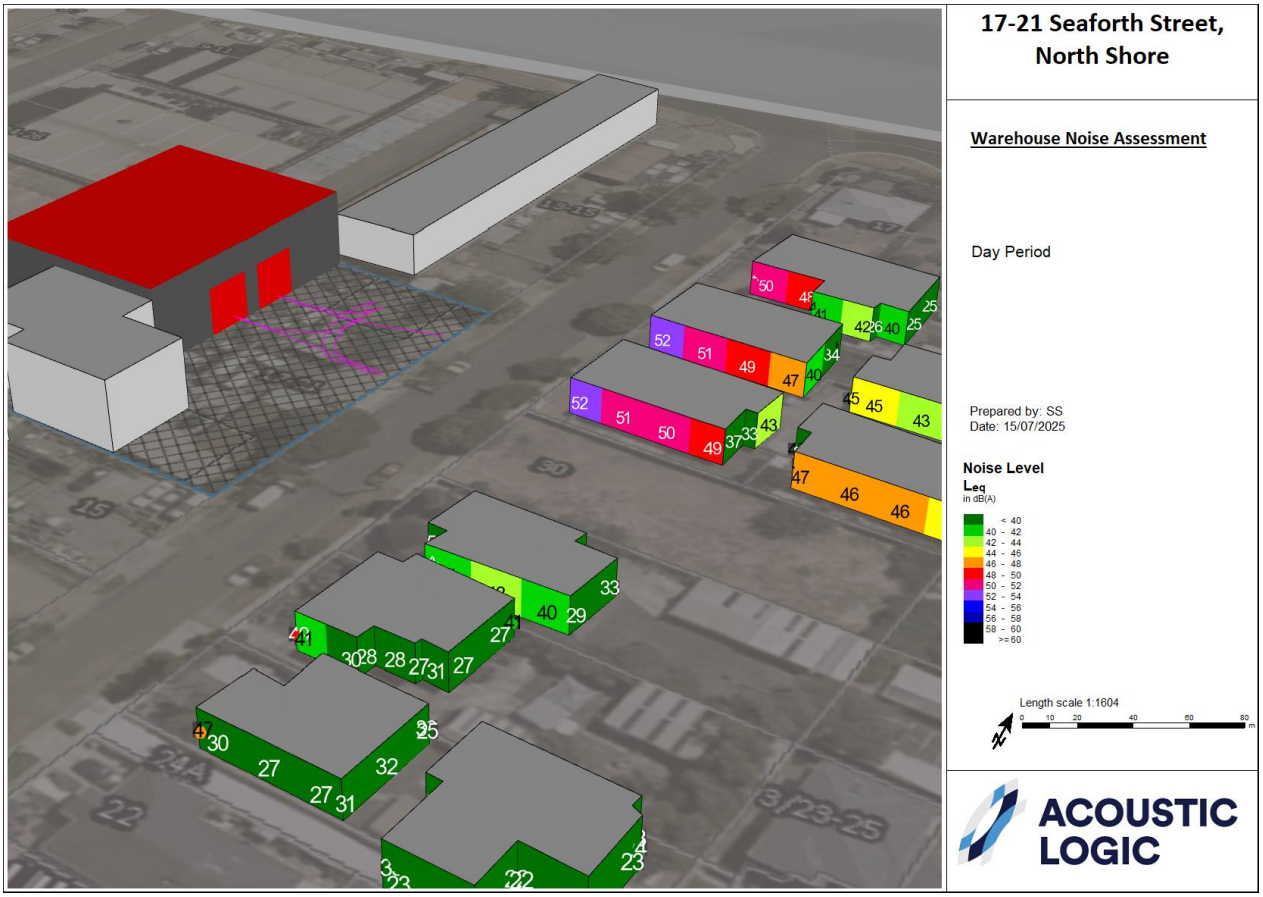
Yours faithfully,

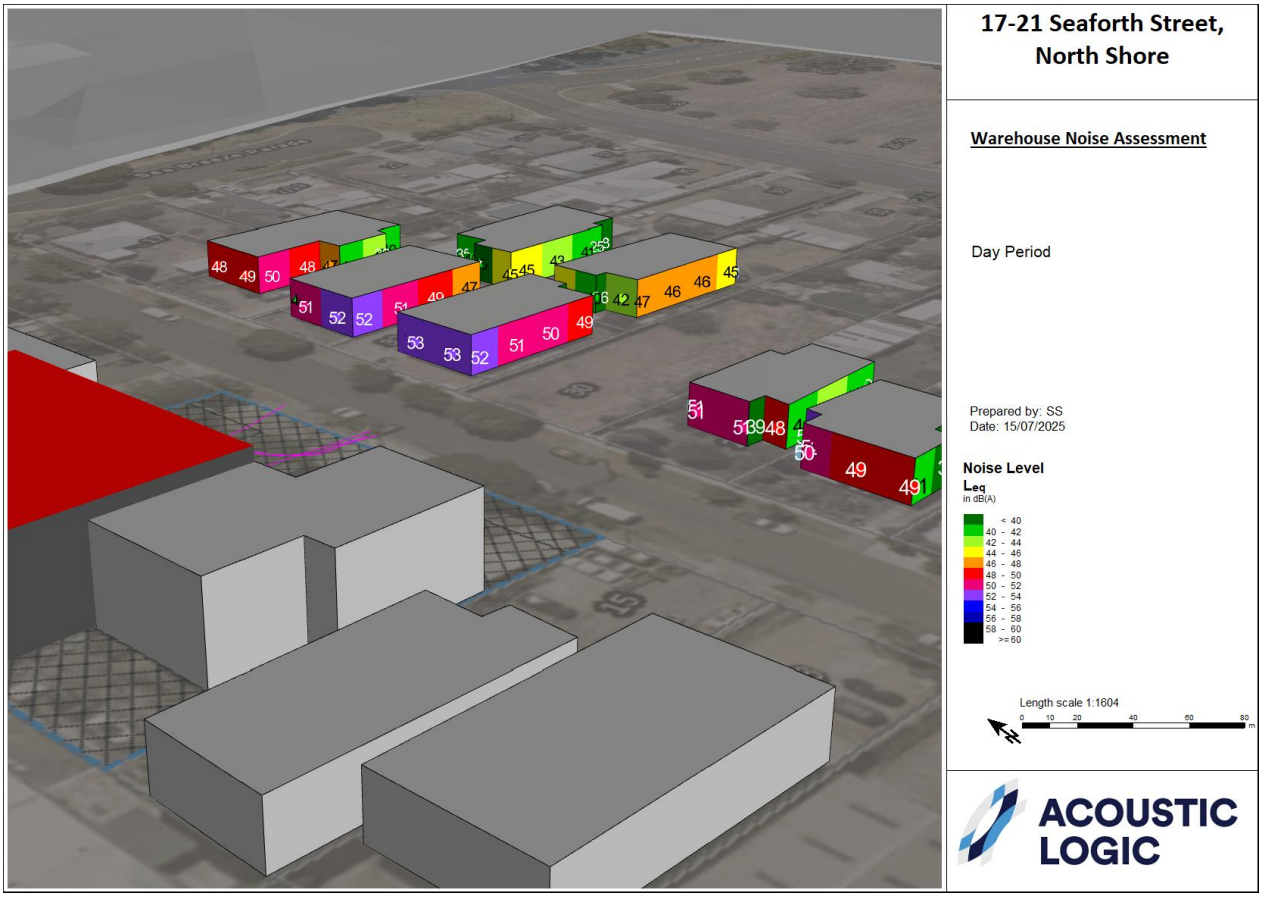


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APPENDIX 1 – SOUNDPLAN NOISE MODELLING

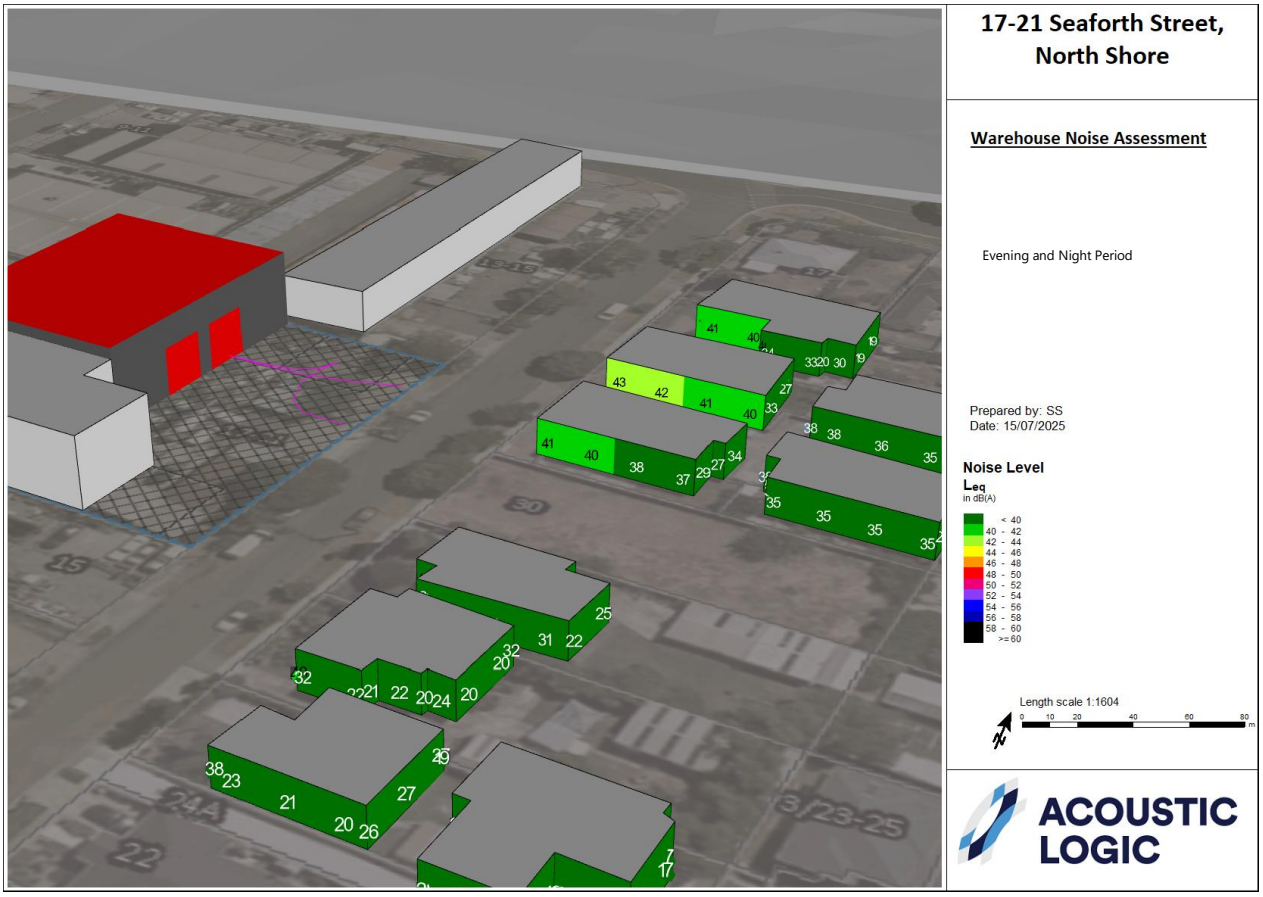
DAY PERIOD OPERATION

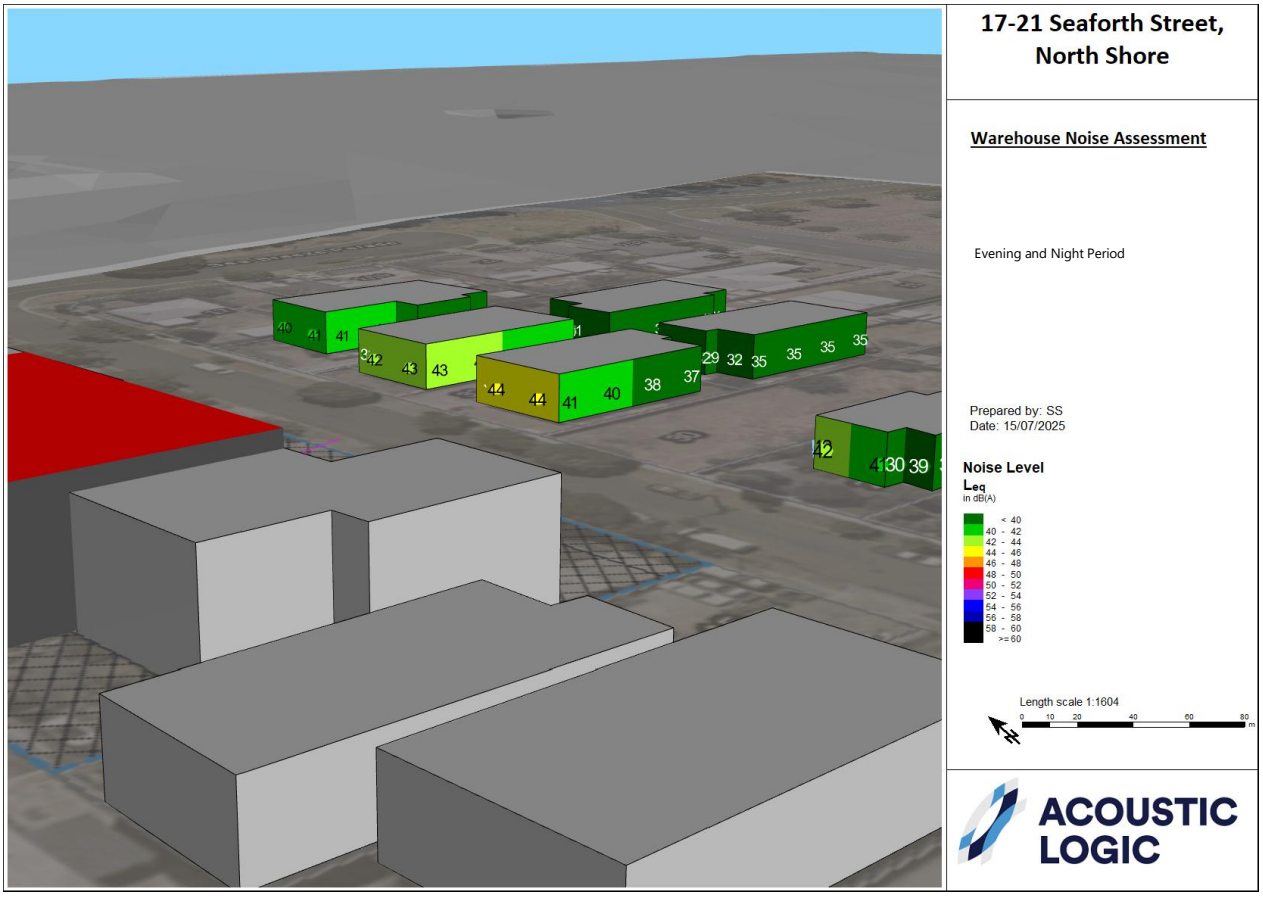




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EVENING AND NIGHT PERIOD OPERATION (6:30AM - 7AM AND 6PM – 6:30PM)

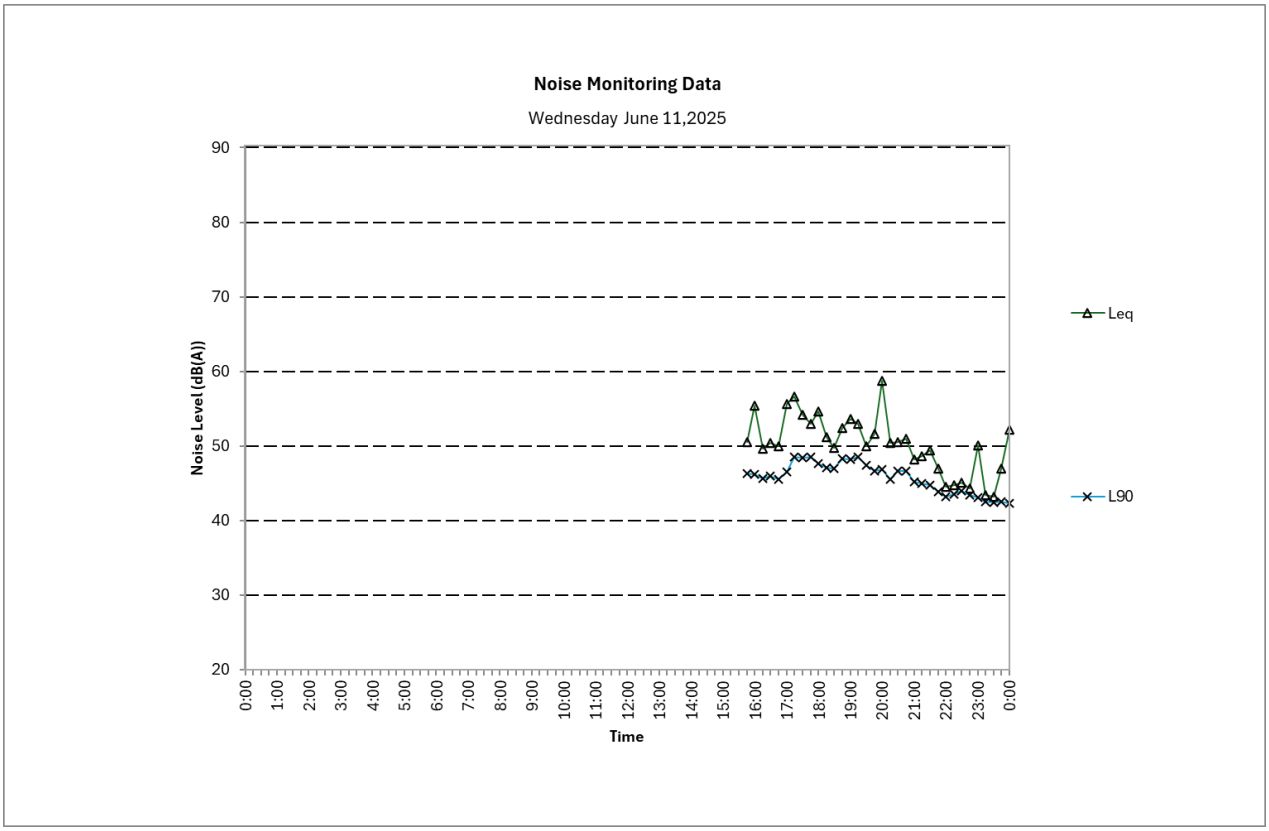




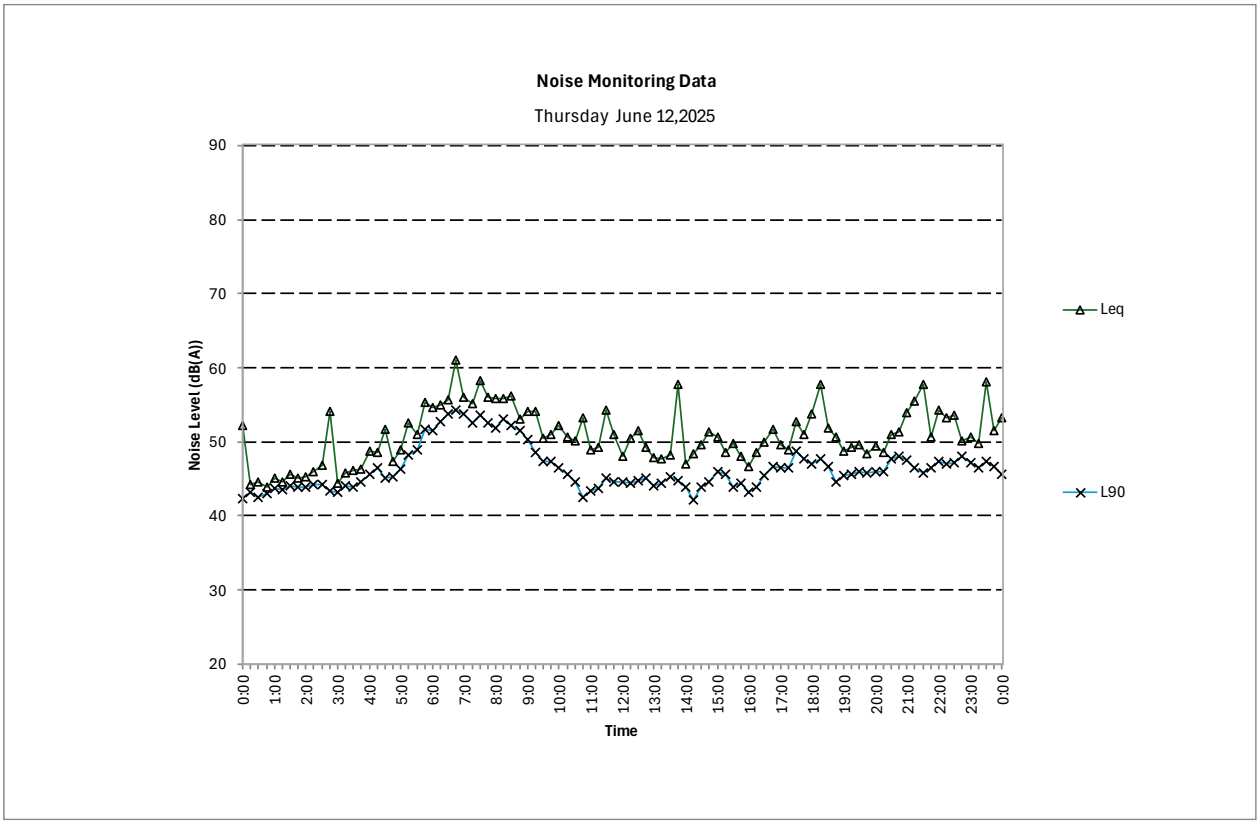
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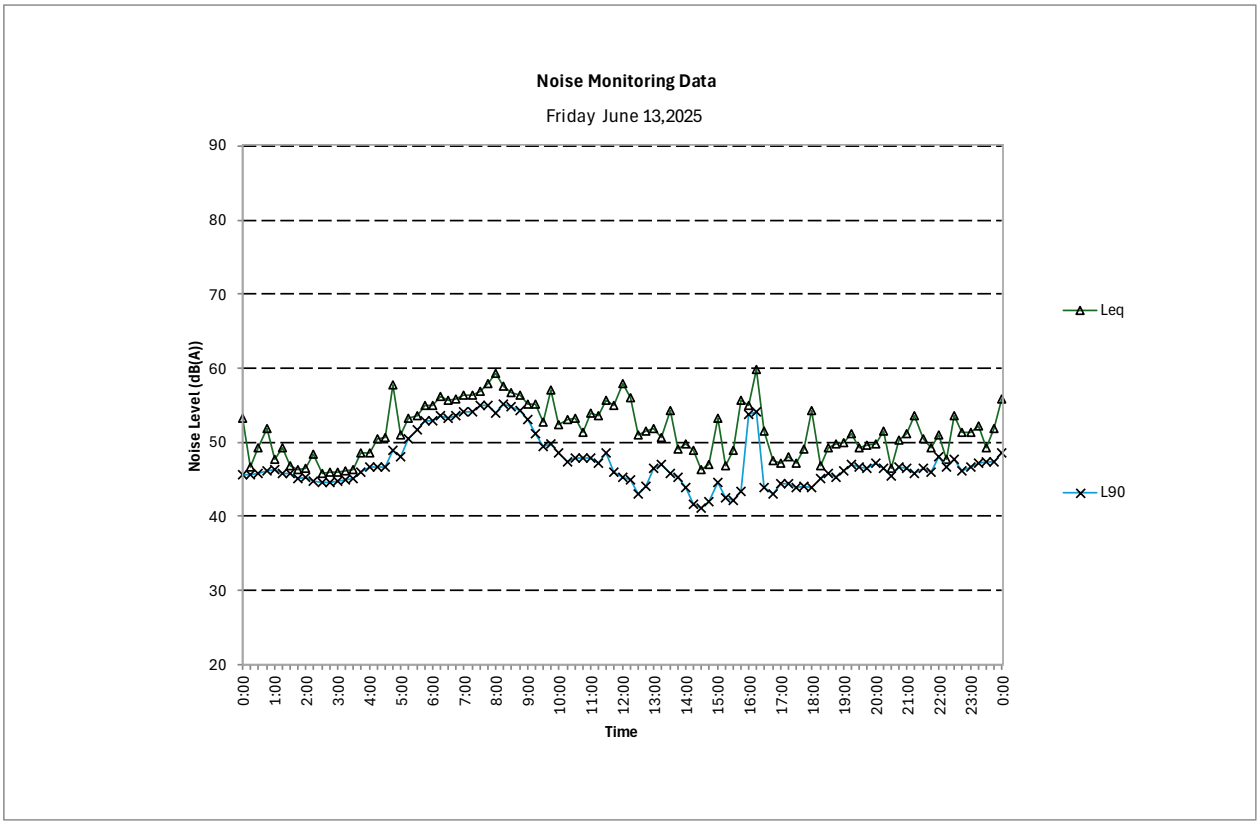
APPENDIX 2 – NOISE MONITOR PHOTO AND GRAPHICAL RESULTS



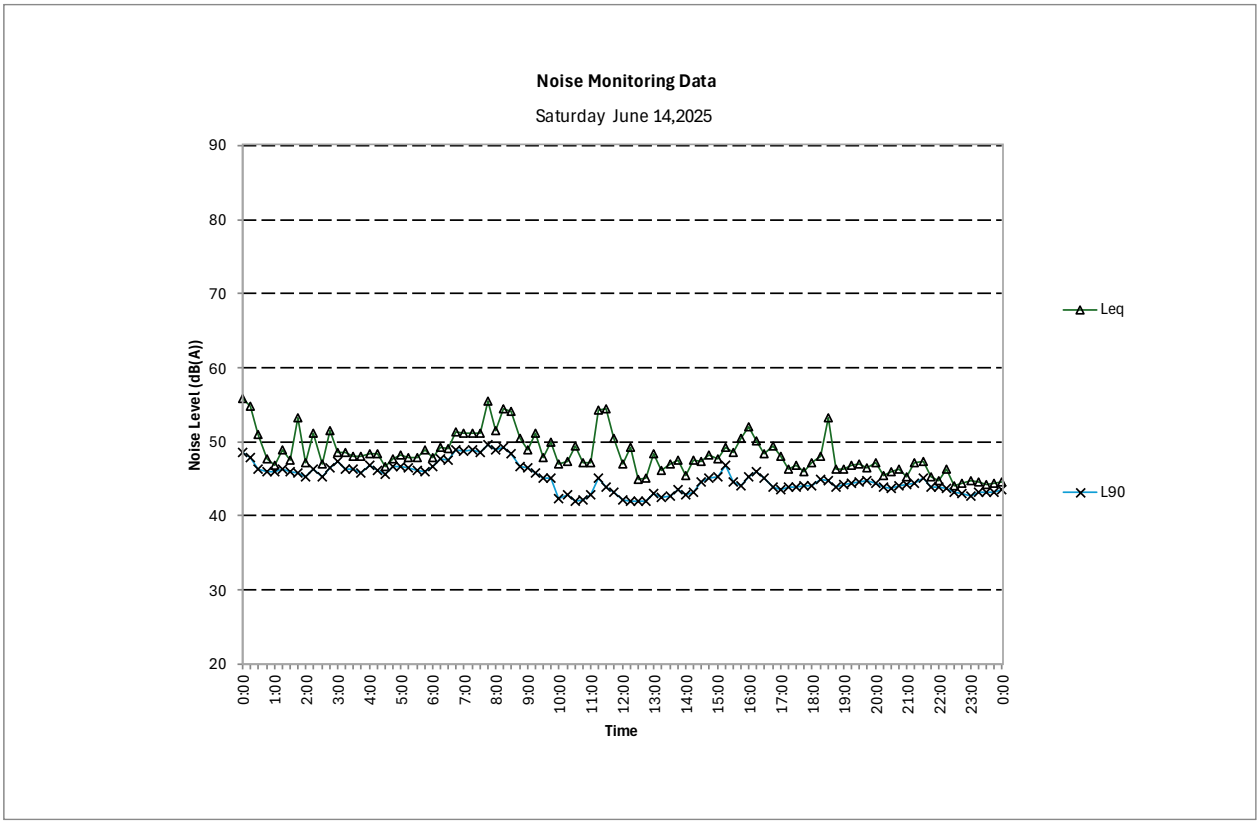


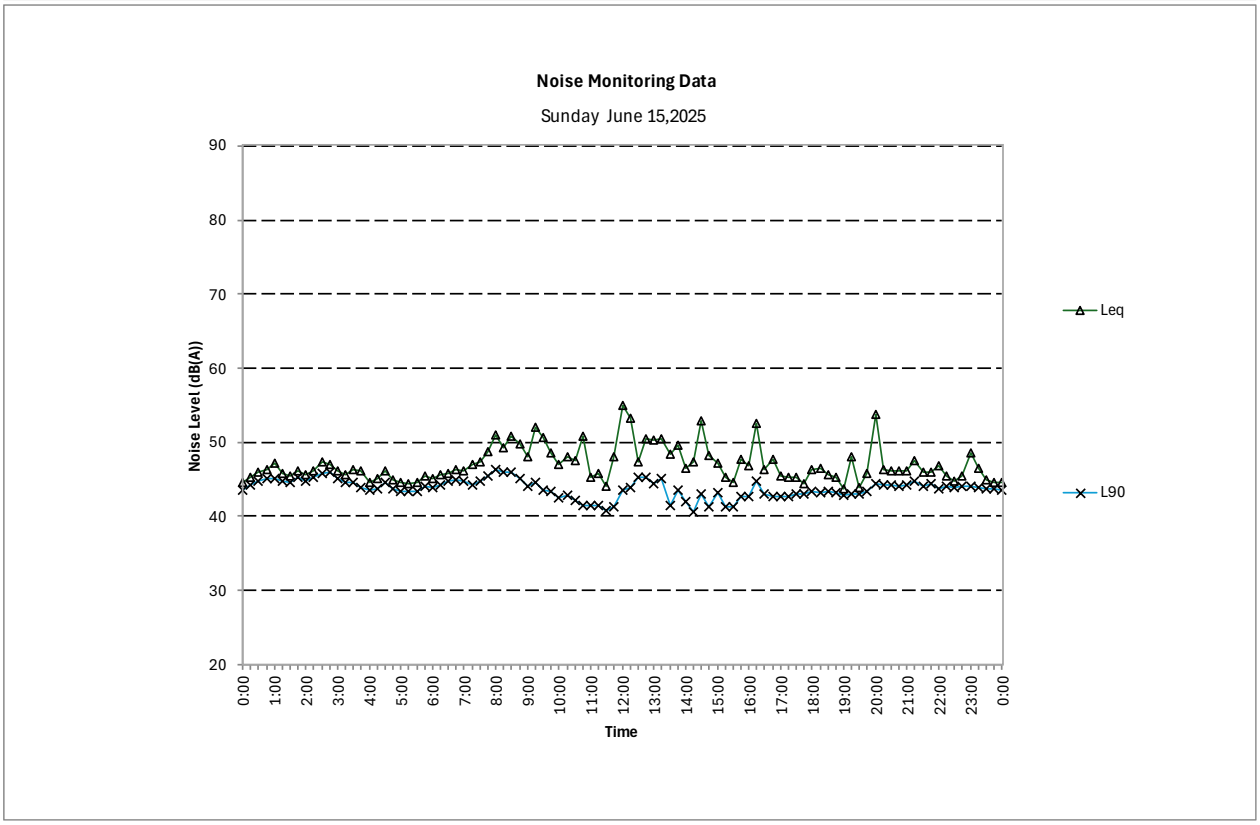
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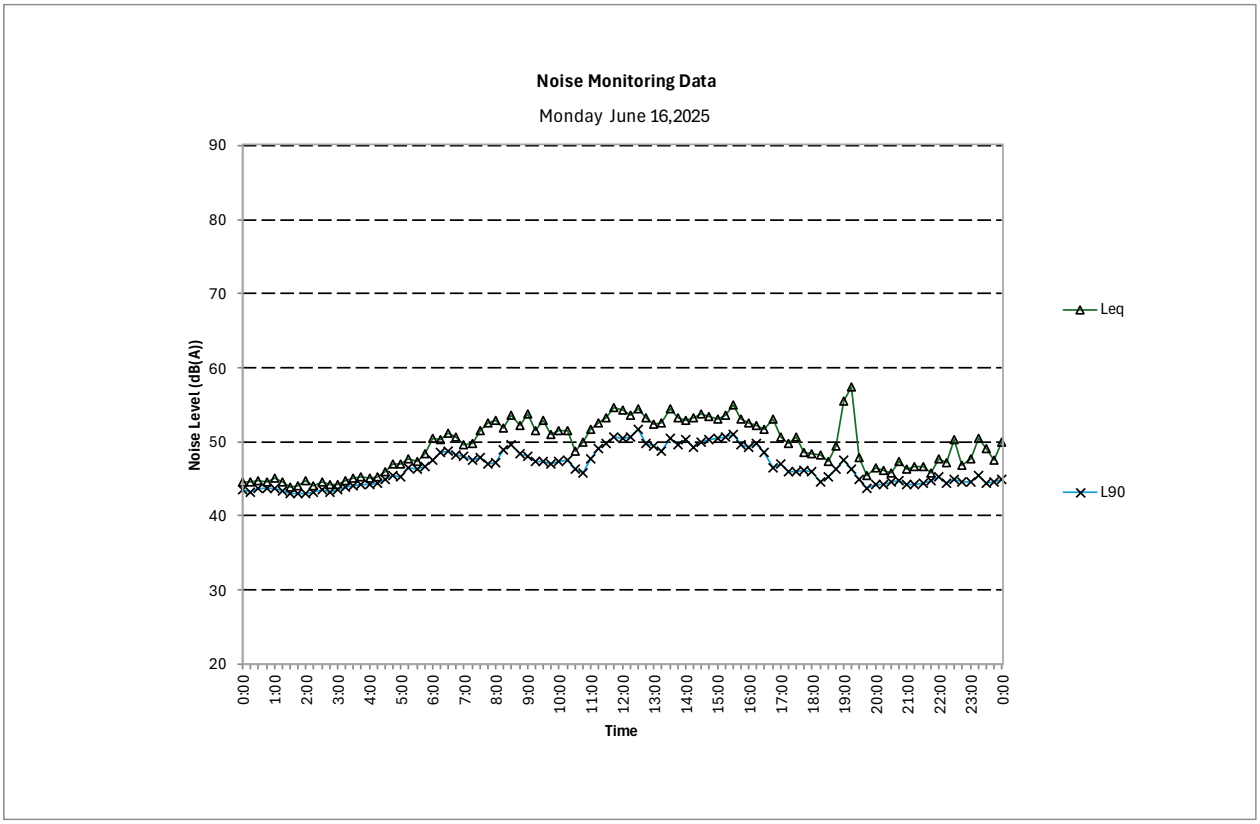


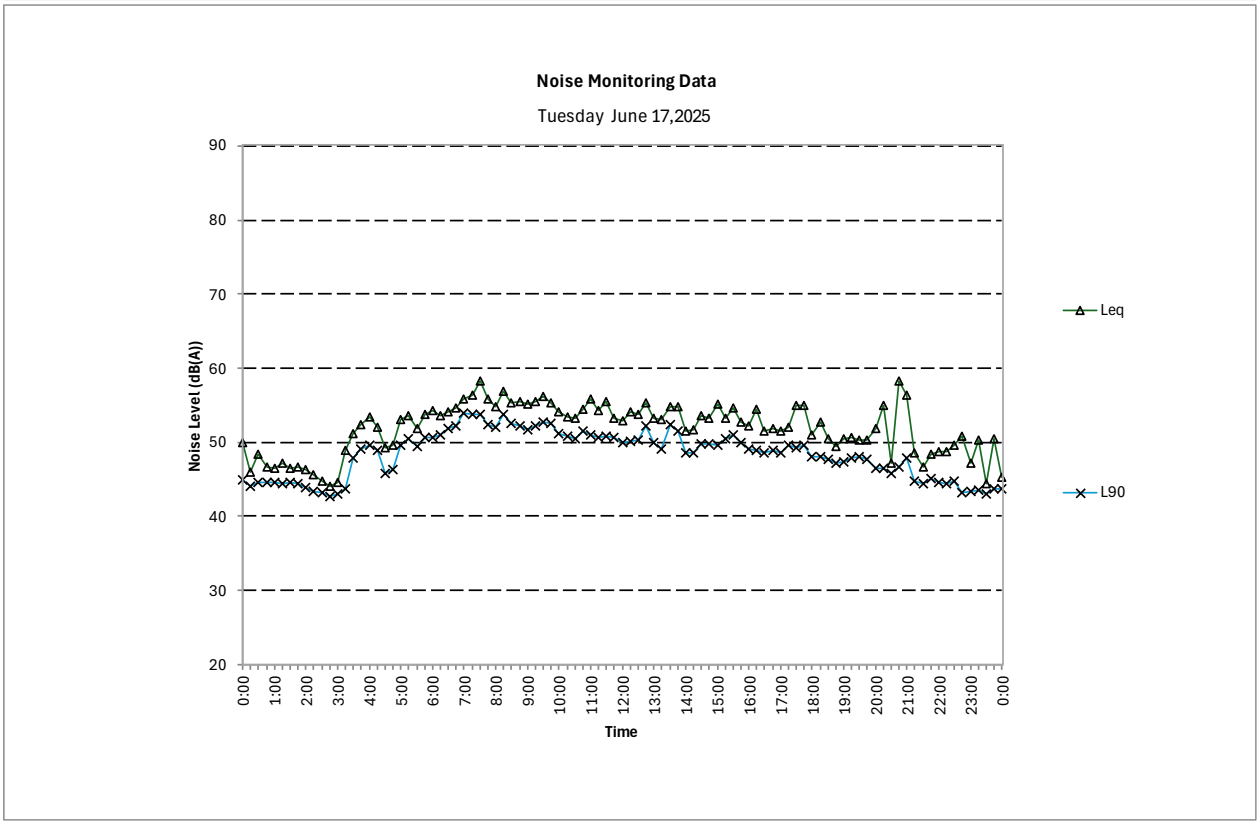
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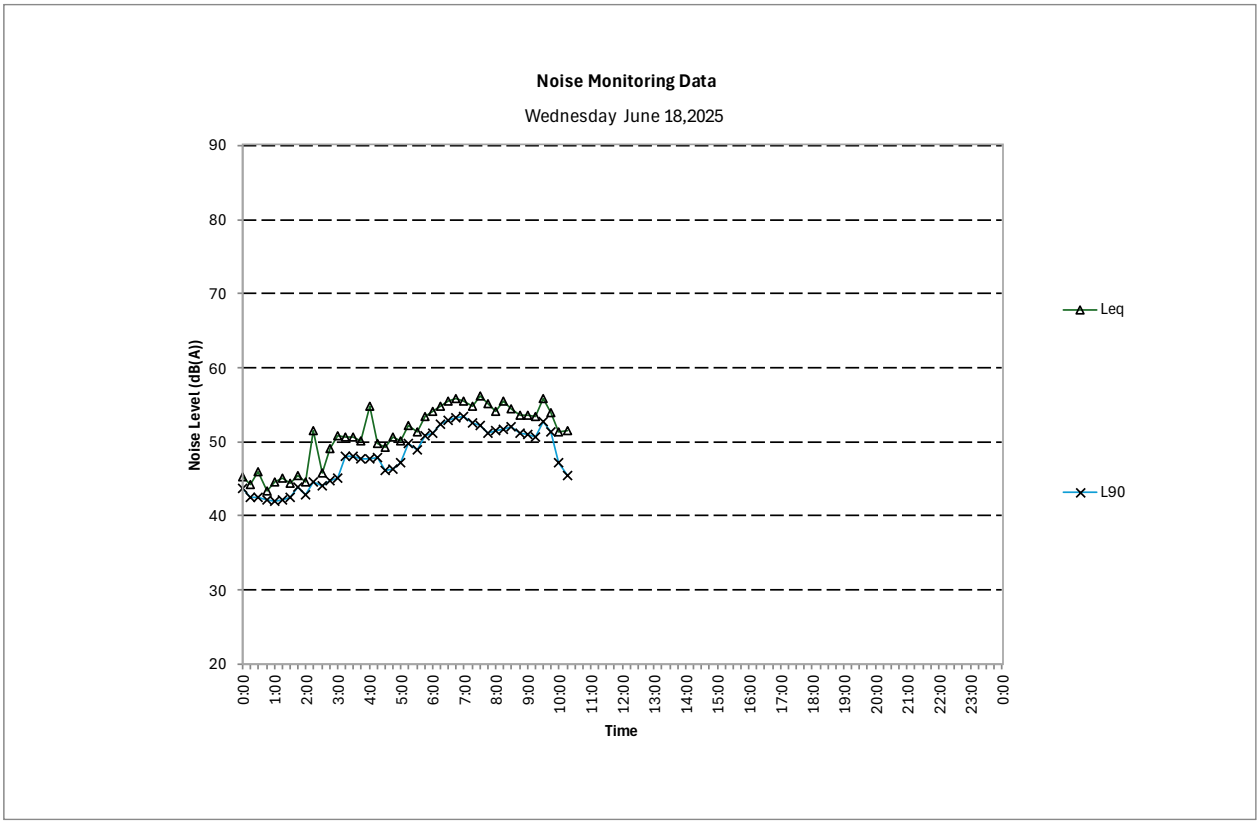


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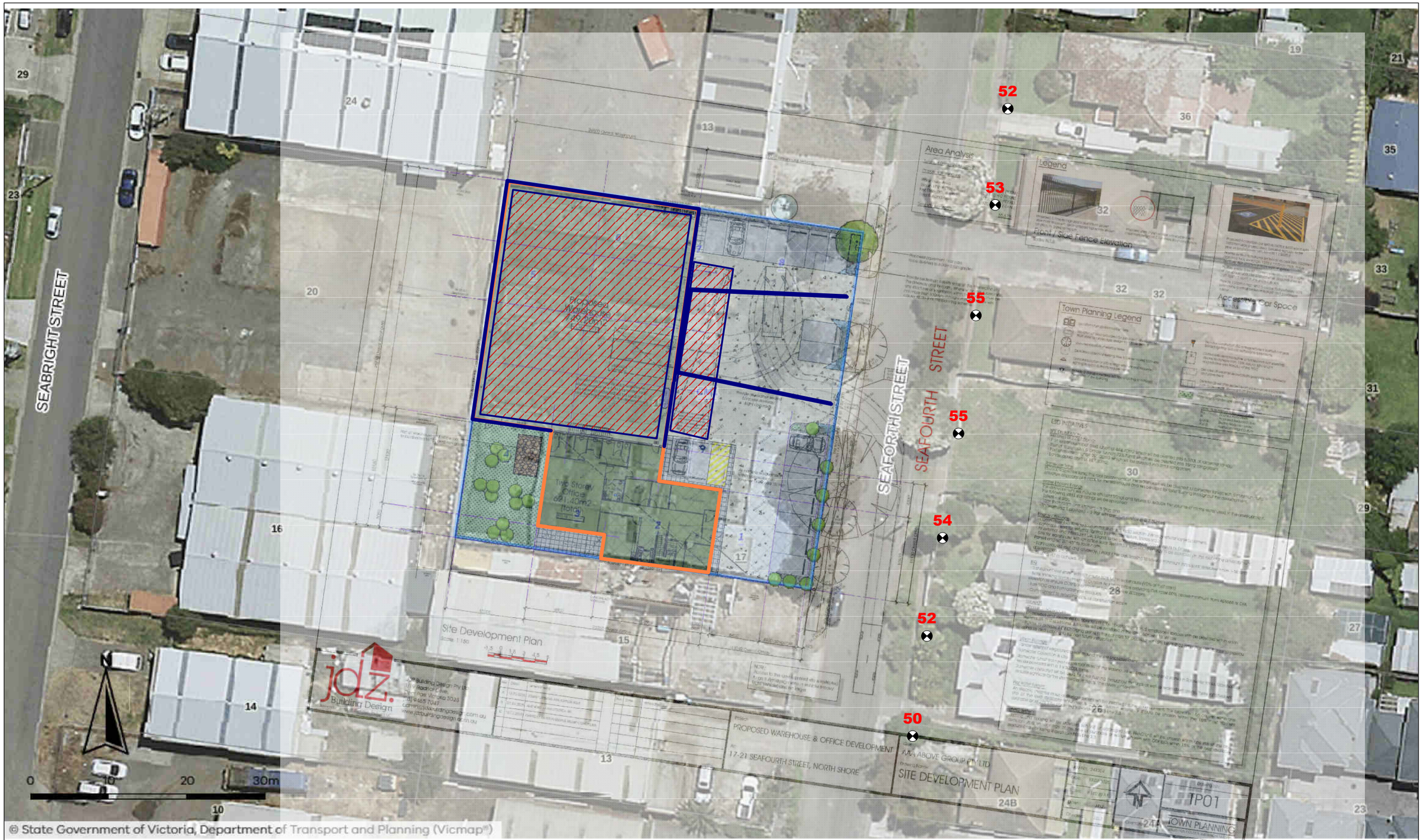
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Appendix B: Noise Modelling Maps

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Legend:

- Line Source
- Area Source
- vert. Area Source
- Crossing
- Building
- Receiver

Scale: 1: 461 @ A3

ENFIELD ACOUSTICS NOISE VIBRATION

PO Box 920
North Melbourne, VIC 3051
P: 03 9111 0090

NOISE EMISSIONS LEVELS - ALL WAREHOUSE ACTIVITIES

LAeq-30min Noise Levels

Noise Protocol Assessment - Day Period

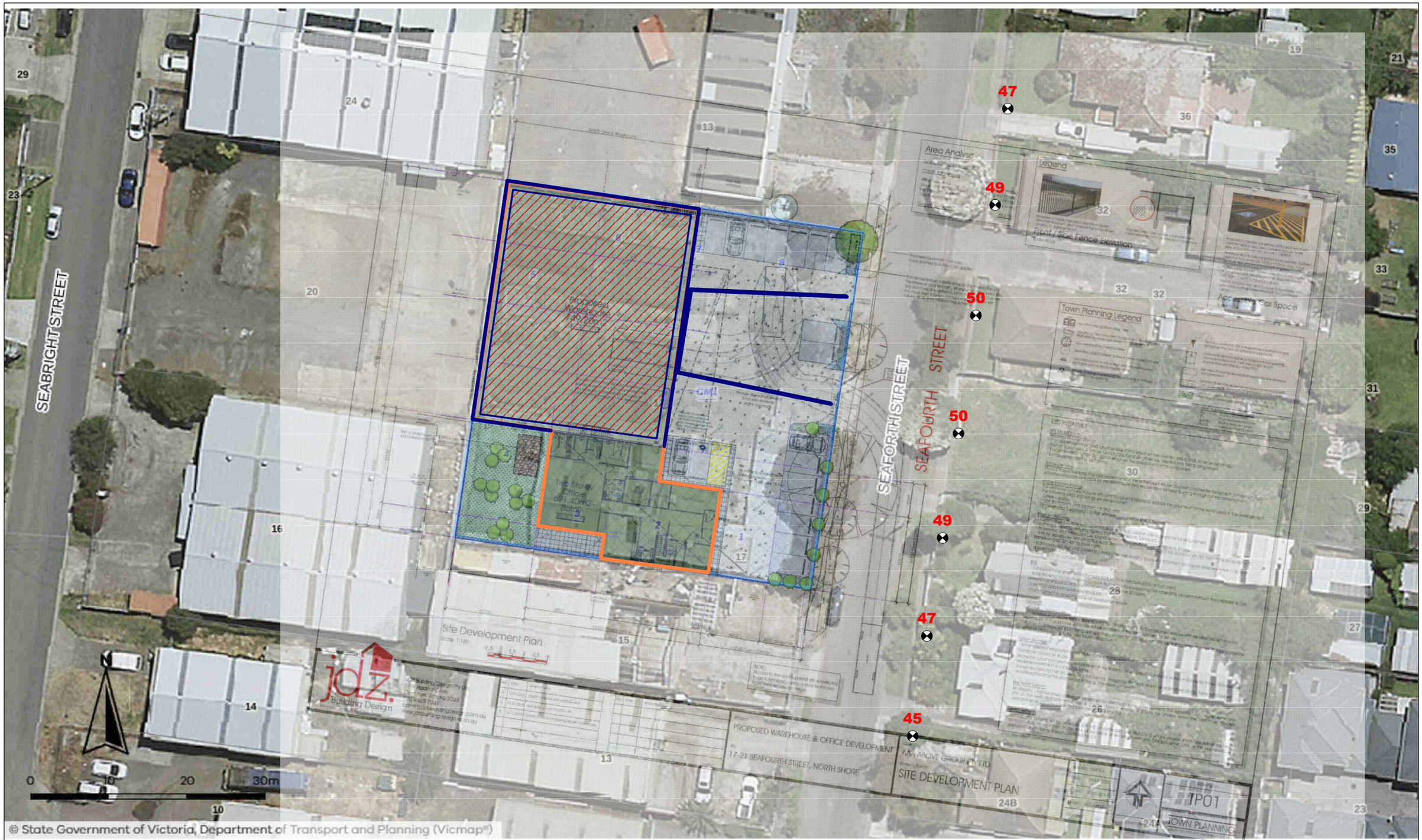
+2dB tonal adjustment

Project No: V2885 Drawing No: MAP-01 Date: 16.09.2026

NOTES:

*Propagation in accordance with ISO9613

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Legend:

- Line Source
- Area Source
- vert. Area Source
- Crossing
- Building
- Receiver

Scale: 1: 461 @ A3

ENFIELD ACOUSTICS NOISE VIBRATION

PO Box 920
North Melbourne, VIC 3051
P: 03 9111 0090

NOISE EMISSIONS LEVELS - ALL WAREHOUSE ACTIVITIES

LAeq-30min Noise Levels

Noise Protocol Assessment - Night Period

+2dB tonal adjustment

Project No: V2885 Drawing No: MAP-02 Date: 16.09.2026

NOTES:

*Propagation in accordance with ISO9613