



MATTHEW PALAVIDIS
VICTOR FATTORETTO
MATTHEW SHIELDS

357-363 Crown St & 2-4 Gladstone Avenue, Wollongong

Construction Noise and Vibration Management Plan (Early Works SSD)

SYDNEY
9 Sarah St
MASCOT NSW 2020
(02) 8339 8000

ABN 98 145 324 714
www.acousticlogic.com.au

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1 EXECUTIVE SUMMARY

This report has been prepared to address construction noise and vibration impacts associated with the proposed mixed use residential development at 357-359 and 363 Crown Street, and 2 & 4 Gladstone Avenue, Wollongong in support of the early works State Significant Development Application (SSD-97973958).

The construction noise and vibration impact assessment has been conducted in accordance with the following guidelines:

- NSW EPA 'Interim Construction Noise Guideline' (ICNG)
- Australian Standard AS2436:2010 "Guide to Noise Control on Construction, Maintenance and Demolition Sites"
- DIN4150, 'Vibration in Buildings (2016-12)
- EPA "Assessing Vibration: A Technical guideline".

The subject site and identified sensitive receivers are indicated in Figure 1.

2 INTRODUCTION

This Construction Noise and Vibration Management Plan (Early Works SSD) prepared by Acoustic Logic Pty Ltd on behalf of Wollongong Developments No 5 Pty Ltd (the 'Applicant') This CNVMP supports an Early Works State Significant Development Application (SSDA)(SSD-97973958) as an Amending SSDA to DA-2023/156 for a mixed-use shop top housing development at No. 357-359 and 363 Crown Street, and No. 2 & 4 Gladstone Avenue, Wollongong (the Site).

This Amending DA seeks approval for the undertaking of early construction works comprising bulk excavation and shoring works to enable the excavation of basement parking areas,

The approval of DA-2023/156 included the carrying out of the nominated early works across part of the site. This application seeks consent to extend the area of those approved works to certain other areas of the site. For a further detailed project description, please refer to the Environmental Impact Statement prepared by Planning Ingenuity.

This report should be read in conjunction with the Environmental Impact Statement prepared by Planning Ingenuity, plans of the proposed works prepared by BKA Architecture, and the other accompanying documents that form part of the State Significant Development Application.

3 SITE DESCRIPTION

The site is situated at 357-359 & 363 Crown Street and No 2 & 4 Gladstone Avenue, Wollongong. The site is located within the Wollongong Local Government Area (LGA) approximately 70km south of the Sydney CBD.

It is a well-located site, approximately 100m walking distance from the Wollongong Railway Station which provides access to numerous destinations including Sydney, Port Kembla, Shellharbour and Kiama.

The site is in close proximity to the Wollongong Health Precinct including Wollongong Public and Private Hospitals. Wollongong TAFE and Wollongong University are approximately 2km from the site.

Public open spaces near the site include Rotary Park, the Beaton Park Leisure Centre and MacCabe Park in the city centre.

The site consists of the following parcels of land and is legally described as in **Table 1**.

Table 1 – Site Address and Lot

Street Address	Lot/DP
357-359 Crown Street, Wollongong	Lot 2/DP 201949
363 Crown Street, Wollongong	Lot 1/DP 201949
2 Gladstone Avenue, Wollongong	Lot 6/DP 14480
4 Gladstone Avenue., Wollongong	Lot 7/DP 661845

The land is wholly owned by Wollongong Developments No 5 Pty Ltd. The site is irregular shape with an area of approximately 6,514m², with road frontages to Crown Street and Gladstone Avenue and an unnamed laneway near Frederick Street. In addition, the site benefits from a right of carriageway over the adjacent site to the west providing vehicle access to Parkinson Street.

The nearest noise sensitive receivers have been identified in Figure 1 along with unattended noise monitoring and attended measurement locations. Noise sensitive receivers can be summarised by the following:

- Receiver **R1** – Residential apartment building on the Western boundary.
- Receiver **R2** – The mantra hotel on the Southern boundary.
- Receiver **R3** – Existing residential dwellings on the Southwest boundary.
- Receiver **R4** – Future residential development on the East, across Gladstone Avenue.
- Receiver **R5** – Existing residential dwellings on the Northeast across Crown Street.
- Receiver **C1** – Existing commercial dwellings along the Northern boundary across Crown Street.
- Receiver **C2** – Shopping Centre also known as Piccadilly Centre on the East.



Figure 1: Aerial view of the project site and sensitive receivers.

- Project Site
- Commercial Receivers
- Residential Receivers
- Future Residential Receivers

4 SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

This report has been prepared to respond to the Secretary's Environmental Assessment Requirements (SEARs) for SSD-97973958. Specifically, this report has been prepared to respond to those SEARs outlined in the table below.

Table 2 – SSD 97973958 SEARS

SEAR	Response / Location in Report
<p>10 Noise and Vibration</p> <p>Provide a noise and vibration assessment prepared in accordance with the relevant NSW Environment Protection Authority (EPA) guidelines. The assessment must detail construction and operational noise and vibration impacts on nearby sensitive receivers and structures and outline the proposed management and mitigation measures that would be implemented.</p>	<p>Noise and Vibration Impact Assessment</p>

5 ABBREVIATIONS AND DEFINITIONS

The following Abbreviations and definitions are used in this noise impact assessment.

dB	Decibels - unit for the measurement of sound
dB(A)	A-weighted decibels. Unit of measurement for broadband sound with the A-frequency weighting applied to approximate human loudness perception to sounds of different pitch.
L_{eq}	Energy, time averaged sound level
L_{max}	Maximum sound pressure level, fast response
L₉₀	Sound level exceeded for 90% of the measurement period
R_w	Frequency weighted sound reduction index.
NRC	Average absorption co-efficient for the octave bands with centre frequencies of 250Hz to 2 kHz inclusive.
Day*	For noise emissions assessment - the period from 7 am to 6 pm (Monday to Saturday) and 8 am to 6 pm(Sundays and public holidays). For transportation noise - the period from 7 am to 10 pm
Evening*	Refers to the period from 6 pm to 10 pm.
Night*	The period from 10 pm to 7 am (Monday to Saturday), and 10 pm to 8 am(Sundays and public holidays). For transportation noise - the period from 10 pm to 7am
Project Trigger Level	Target receiver noise levels for a particular noise-generating facility.
Assessment Level (ABL)	Background A-weighted background noise level representative of a single period. (Calculated in accordance with NPfl unless noted otherwise)
Rating Background Level (RBL)	The overall, single-figure A-weighted background level representing each assessment period (day/evening/night) over the whole monitoring period. (Calculated in accordance with NPfl unless noted otherwise)

* Unless nominated otherwise.

6 CONSTRUCTION NOISE AND VIBRATION ASSESSMENT PRELIMINARY ADVICE

A preliminary construction noise and vibration advice is provided in the following section. A detailed assessment is typically conducted once the proposed construction activities and equipment has been finalised. This assessment will present the relevant the noise management levels, and vibration criteria based on industry standards as follows:

- NSW EPA 'Interim Construction Noise Guideline' (ICNG)
- Australian Standard AS2436:2010 "Guide to Noise Control on Construction, Maintenance and Demolition Sites"
- DIN4150, 'Vibration in Buildings (2016-12)
- EPA "Assessing Vibration: A Technical guideline".

6.1 EPA INTERIM CONSTRUCTION NOISE GUIDELINE

The EPA Interim Construction Noise Guideline (ICNG) assessment requires:

- Determination of noise generation goals (based on ambient noise monitoring).
- Review of operational noise levels at nearby development.
- If necessary, recommendation of noise controls strategies in the event that compliance with noise emission goals is not possible.

Based on the background noise levels obtained during preliminary stages, the following noise management levels have been based on the background noise presented in the Noise and Vibration Impact Assessment report (*ref: 20251025.1/0912A/R1/SW dated 4th February 2026*). EPA guidelines adopt differing strategies for noise control depending on the predicted noise level at the nearest receivers. As the surrounding receivers are Industrial, the following management levels applies.

Table 3– Summarised Noise Management Levels

Receivers	Noise Management Level – dB(A) $L_{eq}(15min)$ RBL + 10	Highly Noise Affected level dB(A) $L_{eq}(15min)$
Residential Receivers – R1 and R5	62	75
Residential Receivers – R2 and R4	61	
Residential Receivers – R3	58	

*Note – EPA minimum noise level for daytime period, plus 10dB(A)

If noise levels exceeded the management levels identified in the table above, reasonable and feasible noise management techniques will be reviewed.

6.2 VIBRATION CRITERIA

Vibration caused by construction at any residence or structure outside the subject site must be limited to:

- For structural damage vibration, German Standard DIN 4150-3 *Structural Vibration: Effects of Vibration on Structures*; and
- For human exposure to vibration, the evaluation criteria presented in the British Standard BS 6472:1992 *Guide to Evaluate Human Exposure to Vibration in Buildings (1Hz to 80Hz)* for low probability of adverse comment.

6.2.1 Structure Borne Vibration (Building Damage)

German Standard DIN 4150-3 (2016-12) provides vibration velocity guideline levels for use in evaluating the effects of vibration on structures. The criteria presented in DIN 4150-3 (2016-12) are presented in Table 3.

It is noted that the peak velocity is the value of the maximum of any of the three orthogonal component particle velocities as measured at the foundation, and the maximum levels measured in the x- and y-horizontal directions in the plane of the floor of the uppermost storey.

Table 4– DIN 4150-3 (2016-12) Safe Limits for Building Vibration

TYPE OF STRUCTURE		PEAK PARTICLE VELOCITY (mms ⁻¹)			
		At Foundation at a Frequency of			Plane of Floor of Uppermost Storey
		< 10Hz	10Hz to 50Hz	50Hz to 100Hz	All Frequencies
1	Buildings used in commercial purposes, industrial buildings and buildings of similar design	20	20 to 40	40 to 50	40
2	Dwellings and buildings of similar design and/or use	5	5 to 15	15 to 20	15
3	Structures that because of their particular sensitivity to vibration, do not correspond to those listed in Lines 1 or 2 and have intrinsic value (e.g. buildings that are under a preservation order)	3	3 to 8	8 to 10	8

6.2.2 Assessing Amenity

The NSW EPA document “Assessing Vibration: A Technical Guideline” provides procedures for assessing tactile vibration and regenerated noise within potentially affected buildings and is used in the assessment of vibration impact on amenity.

Relevant criteria are presented below.

Table 5– EPA Recommended Vibration Criteria

		RMS acceleration Z-axis (m/s ²)		RMS velocity Y-axis (m/s ²)		Peak velocity X-axis (m/s ²)	
Place	Time	Preferred	Maximum	Preferred	Maximum	Preferred	Maximum
Continuous Vibration							
Residences	Daytime	0.010	0.020	0.0071	0.014	0.0071	0.014
	Night-time	0.007	0.014	0.005	0.010	0.005	0.010
Impulsive Vibration							
Residences	Daytime	0.30	0.60	0.21	0.42	0.21	0.42
	Night-time	0.10	0.20	0.071	0.14	0.071	0.14

6.3 ACTIVITIES TO BE CONDUCTED AND THE ASSOCIATED NOISE LEVELS

For early works SSD, the most significant sources of noise generated would be excavation for the basement levels and civil and piling works until the lower ground level.

A summary of sound power levels of major construction processes/equipment have been detailed in Table 6 below. The highest noise levels are likely to be generated during demolition and excavation of shale and stone.

With respect to construction noise, the impact on nearby development will be dependent on the activity in question and where on the site the activity is undertaken. The primary construction equipment and sound power levels associated with the works are as follows:

Table 6 - Sound Power Levels of the Proposed Equipment

Equipment / Process	Sound Power Level – dB(A)*
Excavation	
Excavator Mounted Pneumatic Hammering	118
Excavator (Bucket)	105
Large Trucks	105
Piling	
Piling Rig with Drill	103

***Noise levels take into account correction factors (for tonality, intermittency where necessary).**

The noise levels presented in the above table are derived from the following sources, namely:

- Table A1 of Australian Standard 2436-2010.
- Data held by this office from other similar studies.

Noise levels take into account correction factors (for tonality, intermittency where necessary).

6.4 NOISE PREDICTIONS

The predicted noise levels during excavation and construction will depend on:

- The activity undertaken.
- The distance between the work site and the receiver. The distance between the noise source and the receiver will vary depending on which end of the site the work is undertaken. For this reason, the predicted noise levels will be presented as a range.

Predicted noise levels are presented in the following tables. Predictions take into account the expected noise reduction as a result of distance only.

6.5 PREDICTED NOISE LEVELS

The predicted noise levels during excavation and construction will depend on:

- The activity undertaken; and
- The distance between the work site and the receiver. For many of the work areas, the distance between the noise source and the receiver will vary depending on which end of the site the work is undertaken. For this reason, the predicted noise levels will be presented as a range.

Predicted noise levels are presented below. Predictions take into account the noise reduction as a result of distance only.

NML – Noise Management Level

HNAL - Highly Noise Affected Level

Table 7 – Predicted Noise Generation to R1

Activity	Predicted Level – dB(A) L_{eq}(15min) (External Areas)	Comment
Excavator Mounted Pneumatic Hammering	73-88	Bulk excavation for the lower ground level is expected to be the most significant source to the R1 and will exceed HNAL throughout this period. Excavation for the basement levels will generate less noise in comparison due proximity of works are expected to be further way from the receiver.
Excavator (Bucket)	60-75	
Large Trucks	57-72	Trucks ingress and egress points will be along the northern boundary close to R1. Notwithstanding, trucks are only expected generate high noise levels when during movement, the remaining times the engine are to be switched off.
Piling Rig with Drill	56-67	Piling works are expected to occur along the perimeter of the site with setback distance from the site boundary. It is anticipated to maintain below the HNAL.

Table 8 – Predicted Noise Generation to R2

Activity	Predicted Level – dB(A) L_{eq}(15min) (External Areas)	Comment
Excavator Mounted Pneumatic Hammering	74-82	Bulk excavation for the lower ground level is expected to be the most significant source to the R2 and will exceed HNAL throughout this period. Excavation for the basement levels will generate less noise in comparison as these works are maintained further north from the receiver.
Excavator (Bucket)	61-69	
Large Trucks	46-47	Trucks ingress and egress points will be along the northern boundary away from R2. Therefore the noise generated from truck movements will generally be below the NML.
Piling Rig with Drill	59-67	Piling works are expected to occur along the perimeter of the site with setback distance from the site boundary. It is anticipated to maintain below the HNAL.

Table 9 – Predicted Noise Generation to R3

Activity	Predicted Level – dB(A) L_{eq}(15min) (External Areas)	Comment
Excavator Mounted Pneumatic Hammering	65-67	Bulk excavation for the are expected to be occasionally exceed the NML throughout this period.
Excavator (Bucket)	52-54	
Large Trucks	45-46	Trucks ingress and egress points will be along the northern boundary away from R2. Therefore the noise generated from truck movements will generally be below the NML.
Piling Rig with Drill	48-51	Piling works are expected to occur along the perimeter of the site with setback distance from the site boundary. It is anticipated to maintain below the NML.

Table 10 – Predicted Noise Generation to R4

Activity	Predicted Level – dB(A) L_{eq}(15min) (External Areas)	Comment
Excavator Mounted Pneumatic Hammering	64-69	Bulk excavation for the are expected to be occasionally exceed the NML throughout this period.
Excavator (Bucket)	51-56	
Large Trucks	45-48	Trucks ingress and egress points will be along the northern boundary away from R2. Therefore the noise generated from truck movements will generally be below the NML.
Piling Rig with Drill	49-54	Piling works are expected to occur along the perimeter of the site with setback distance from the site boundary. It is anticipated to maintain below the NML.

Table 11 – Predicted Noise Generation to R5

Activity	Predicted Level – dB(A) L_{eq}(15min) (External Areas)	Comment
Excavator Mounted Pneumatic Hammering	61-65	Bulk excavation for the is expected to be below the HNAL throughout this period.
Excavator (Bucket)	49-52	
Large Trucks	43-44	Truck movements along is expected to ingress/egress mainly from Darling Point Road. Trucks are only expected generate high noise levels when during movement, the remaining times are to be switched off.
Piling Rig with Drill	47-50	Piling works are expected to occur along the perimeter of the site with setback distance from the site boundary. It is anticipated to maintain below the NML.

6.6 DISCUSSION – NOISE

Exceedances to the highly noise affected level are expected to affect R1, R2 and R3 the most due to the proximity of the works to the receivers. The remaining receivers are less likely to be affected by construction but from traffic along the Crown Street and Gladstone Avenue. Mobile cranes (electric and diesel) are expected to be used throughout construction stage it is likely to generate noise impacts to the surrounding immediate residential receivers.

Work practices which are above the highly affected noise management level should be scheduled in shorter duration to minimise impact to the receivers. Notwithstanding, other general construction works are expected to be of a lower noise level with many activities below the ICNG noise management levels. A further noise reduction would be expected for any internal works once façade works have been completed.

Specific recommendations are detailed in Section 7.

6.7 DISCUSSION - VIBRATION

Bulk excavation works for the basement level are expected to have the most significant impact on the adjacent residential receivers R1 and R2. It is recommended that vibration monitoring to be undertaken at the boundary of these receivers to ensure vibration impacts are minimised. Refer to Section 7.1 for recommended vibration monitoring location.

The remaining receivers are maintained at least 20m away from the site boundary thus the vibration levels impacting the receivers are expected to maintain below the DIN 4150-3 and EPA vibration limits.

7 RECOMMENDATIONS

In light of the above assessment, and to mitigate any potential noise and vibration impacts from the development, we recommend the following management controls be implemented:

- The scheduling of construction activities should be undertaken to reasonably minimise noise and vibration impacts to all surrounding residents.
 - Based on the ICNG, the recommended hours of works are:
 - 7am and 6pm, Monday to Friday; and
 - 8am and 1pm, Saturdays.
 - No work may be carried out on Sundays or public holidays.
- Community consultation is proposed be undertaken throughout the construction process. In this regard regular letterbox drops detailing site progress and scheduled works is proposed. In particular, these should detail the extent and times of rock hammering which is planned to be undertaken.
- Where feasible, concrete pumps and trucks should be located within the bounds of the site.
- Materials handling/vehicles:
 - Trucks and forklifts in general use on site are to use a non-tonal reversing beacon where possible (subject to OH&S requirements) to minimise potential disturbance of surrounding receivers;
 - Avoid careless dropping of construction materials into empty trucks.
 - Trucks, trailers and delivery vehicles should, where feasible, turn off engines when idling to reduce noise impacts (unless required for concrete pumping or similar).
- Complaints handling:
 - An after hours contact number is displayed outside of the building site, so that in the event that surrounding development believes that a noise breach is occurring, they may contact the site.
 - In the event of complaint, the procedures outlined in Section 8 are adopted.
- Site Induction:
 - A copy of the Noise Management Plan is to be made available to contractors. The location of the Noise Management Plan should be advised in any site induction.

7.1 VIBRATION MONITORING

- Vibration Monitoring
 - Vibration monitoring service is to be carried out by the Acoustic Consultant. We recommend minimum one Texcel type monitors with externally mounted geophones installed at the nearest building façade of the affected receiver or along the boundary of the project site.
 - It is recommended that the monitor be installed for, at minimum, the duration of excavation and piling works, and an additional 4-week period during the structural construction works. If levels are found to be maintained well below the applicable criteria during this period, the monitor can then be removed from site.
 - Additionally, in the result of complaint from any other surrounding receiver, monitoring should be provided to ensure resultant vibration levels are within the requirements mandated within Section 6.2 of this document.
 - Refer to the figure below for indicative location. In the event on-going complaints are received from other receivers, additional monitoring or attended noise/vibration measurements are to be carried out.

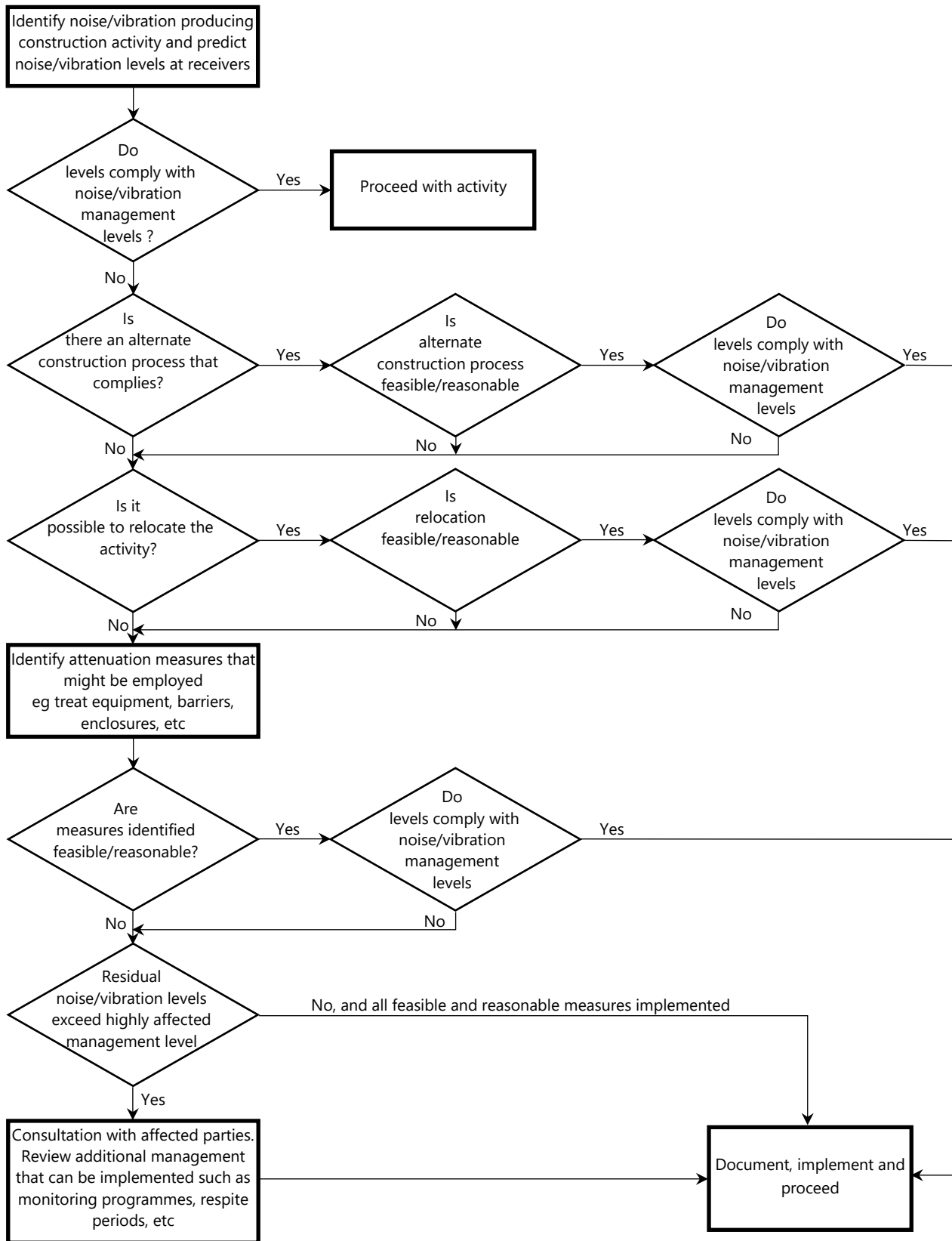


Figure 3 – Proposed Vibration Monitoring Location

- The monitors are proposed to be fitted with GSM modem and audible alarms for vibration exceedance. The vibration monitors will be downloaded remotely using the GSM modem. The vibration monitors should be programmed to issue alerts (whether visual or via SMS alert) as detailed below to notify the relevant parties of potential exceedances of the DIN 4150-3 criteria (refer to Section 6.2)
- Residential Receivers – V1 and V2
 - Monitors are to be installed as close as possible to the footing of the residential dwelling or along the boundary.
 - Based on the DIN4150(2016) standard for residential receivers is classified as Type-2 receiver, the following vibration limits applies:
 - Alarm Level – 4mm/s PPV at vibration at receiver location, SMS alarm message will be sent to operator, project manager and acoustic engineer if magnitude of vibration events exceed this level. Project manager shall respond immediately by taking courteous work methodology.
 - Stop work level – 5mm/s PPV at vibration at receiver location, SMS alarm message will be sent to operator, project manager and acoustic engineer if magnitude of vibration events exceed this level. Project manager shall stop the work at geophone immediately.

8 CONTROL OF CONSTRUCTION NOISE AND VIBRATION – PROCEDURAL STEPS

The flow chart presented below illustrates the process that should be followed in assessing construction activities.



Noise and Vibration Management Flow Chart

9 ADDITIONAL NOISE AND VIBRATION CONTROL METHODS

In the event of complaints, there are a number of noise mitigation strategies available which can be considered. The determination of appropriate noise control measures will be dependent on the particular activities and construction appliances. This section provides an outline of available methods.

9.1 ACOUSTIC BARRIER

Given the position of adjacent development, the installation of noise screens around the perimeter of the site boundary will provide a significant acoustic benefit towards the surrounding receivers, especially for the receivers along the south and east.

The placement of barriers at the source is generally only effective for static plant. Equipment which is on the move or working in rough or undulating terrain cannot be effectively attenuated by placing barriers at the source. Barriers can also be placed between the source and the receiver.

The degree of noise reduction provided by barriers is dependent on the amount by which line of sight can be blocked by the barrier. If the receiver is totally shielded from the noise source reductions of up to 15dB(A) can be affected. Where only partial obstruction of line of sight occurs, noise reductions of 5 to 8dB(A) may be achieved. Where no line of sight is obstructed by the barrier, generally no noise reduction will occur.

As barriers are used to provide shielding and do not act as an enclosure, the material they are constructed from should have a noise reduction performance that is approximately 10dB(A) greater than the maximum reduction provided by the barrier. In this case the use of a material such as 10mm or 15mm thick plywood (radiata plywood) would be acceptable for the barriers.

9.2 MATERIAL HANDLING

The installation of rubber matting over material handling areas can reduce the sound of impacts due to material being dropped by up to 20dB(A).

9.3 COMBINATION OF METHODS

In some cases it may be necessary that two or more control measures be implemented to minimise noise.

9.4 NOISE MONITORING TECHNIQUES

Noise monitoring may be undertaken in the event of a complaint. Where noise monitoring is undertaken (either by attended short-term measurements or long-term unattended noise monitoring), it should be conducted at a practical location representative of the impact to nearby noise sensitive receivers. Where this is not possible, noise measurements of construction processes should be taken such that noise levels can be accurately predicted to receivers. Any reporting of noise measurement results may include the following information:

- The date and time that the measurements were undertaken;
- The location of measurements, noise receivers and construction processes. A site map should be included for clarity.
- A description of the construction processes being undertaken during the measurement period.
- The measured noise construction noise levels, and the noise level at the façade of nearby receivers (if noise levels are predicted).
- A comparison to the NSW EPA Interim Construction Noise Guideline noise management levels.

10 DEALING WITH COMPLAINTS

Should ongoing complaints of excessive noise or vibration recommendations occur immediate measures shall be undertaken to investigate the complaint, the cause of the exceedances and identify the required changes to work practices.

If a noise complaint is received the complaint should be recorded. Any complaint form should list:

- The name and address of the complainant (if provided);
- The time and date the complaint was received;
- The nature of the complaint and the time and date the noise was heard;
- The name of the employee who received the complaint;
- Actions taken to investigate the complaint, and a summary of the results of the investigation;
- Required remedial action, if required;
- Validation of the remedial action; and
- Summary of feedback to the complainant.

A permanent register of complaints should be held.

11 CONCLUSION

This report has presented as assessment of construction noise and vibration impacts for the proposed mixed use residential development at 357-363, Crown Street, and 2 & 4 Gladstone Avenue, Wollongong. The assessment uses the methodology contained within the EPA ICNG to determine appropriate noise and vibration management levels and identify those that are likely to impact nearby receivers.

The outcomes of the assessment have been used to prepare a management plan that should be adopted and refined to minimise impacts to the extent that is feasible and reasonable.

The assessment indicates that:

- Airborne noise impacts:
 - Bulk excavation and piling works associated with the subject site are likely to generate noise levels that are measured to be above the highly noise affected level at the nearest receivers to the site during some of these periods.
 - Recommendations with respect to mitigation measures have been provided to minimise noise impacts as far as is practical.
- Ground-borne vibration:
 - Ground vibration goals have been set in this report to safeguard existing structures close to the project site. In this regard:
 - Unattended vibration monitoring is proposed during high vibration intensive works at the nearest affected structures, mainly the heritage building on the west.
 - Vibration limits according to the DIN4150-3 have been established for the type of receiver.
 - Vibration monitor will alert the excavation/piling contractor as well as site foreman in the event of any vibration exceedance. Where this occurs a detailed review of the activities generating exceedance and potential mitigation techniques may be explored.
 - In the event of complaints from neighbouring properties, attended noise or vibration measurements may be considered where access is permitted.

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

Yours faithfully,



Acoustic Logic Pty Ltd
Samantha Wong