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Acoustic Impact Assessment

For Change of Use of Existing Residential Dwelling to a Light Industrial Storage Area and Office Spaces

at

No. 93 Lakemba St, Belmore

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1.0 CONSULTING BRIEF

ANAVS- Acoustic, Vibration & Noise Pty Ltd was engaged to investigate the environmental noise impact emanating from the change of use of an existing residential dwelling to a light industrial storage area and office spaces at No. 93 Lakemba St, Belmore (Figure 1 – Site Location) on the surrounding area, as per City of Canterbury Bankstown Council requirements.

This report has been prepared in conjunction with the Statement of Environmental effects dated the 24th June, 2024 prepared by Weir Phillips Heritage and Planning, and the architectural plans dated the 19th June, 2024 prepared by A&H Building Designers Pty Ltd.

The report will be carried out in accordance with the NSW Environmental Protection Authority (EPA), NSW Industrial Noise Policy, City of Canterbury Bankstown Council Conditions/Requirements and the relevant Australian Standards.

This commission involves the following:

- Inspect the site and environs.
- Measure the background noise levels at critical locations and times.
- Prepare an Environmental Noise Impact Report
- Establish acceptable noise level criterion.
- Quantify noise emissions from the distribution centre
- Calculate the level of noise emission, taking into account building envelope transmission loss, screen walls and distance attenuation.
- Provide in principle noise control recommendations.

2.0 DESCRIPTION OF OPERATIONS AND ENVIRONS

The existing site is currently occupied by a single-storey residential dwelling at No. 93 Lakemba St, Belmore (Figure 1 – Site Location). The site is located in a mixed industrial and residential area with industrial premises located north, east and west of the site and residential dwellings located south of the site. Background noise levels are dominated by traffic noise arising from Lakemba St as well as operational noise from the neighboring industrial premises (Figure 2 – Surrounding Environment).

The proposal involves the change of use of an existing shed at the rear of the site into a storage area which will function as a storage facility for a tiling business, accommodating trucks once or twice per day to load materials for distribution to various job sites. (Figure 3 – Proposed Site Plan). The internal layout of the existing dwelling will be unchanged; however, all habitable spaces (bedrooms and living rooms) will be converted into office spaces.

The proposal submitted to the Council seeks the approval for the following hours of operation listed in Table 2.1 below.



Table 2.1 – Proposed Hours of Operation		
DAY	APPROVED HOURS OF OPERATION	
Monday, Wednesday & Friday	7:00 am – 4:30 pm	
Tuesday & Thursday	6:30 am – 4:30 pm	

The nearest residential receivers that have the potential to be impacted by the proposal are located as per Table 2.2 below (Figure 4 – Nearest Residential & Commercial Receivers).

Table	2.2 -	Nearest	Residential	Receivers
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Receiver	Address	Type of Dwelling
R1	No. 91 Lakemba St Belmore (East of site)	Single Storey Residential Dwelling
R2	No. 72 Lakemba St Belmore (South of site)	Single Storey Residential Dwelling
R3	No. 74 Lakemba St Belmore (South of site)	Single Storey Residential Dwelling

As previously mentioned, the proposed site is located in a mixed industrial and residential area. The following businesses operate along Lakemba St adjacent to the existing business at No. 93 Lakemba St, Belmore:

- Manna Soy Bean Sprouts (No. 95 Lakemba St, Belmore) C1
- Light Industrial Business Complex (No. 87-89 Lakemba St, Belmore) C2

Three (3) car spaces will be available on site for staff. An average of two (2) trucks per day are expected to come to site to load/unload material. There will be a maximum of four (4) staff on site at any one time.

The noise emissions from the proposed storage area and office spaces must not exceed acceptable levels at the locations of the receivers. Noise control may be required for the development to comply with the noise criteria set out in Section 4 of this report. The noise controls in Section 6 of this report are reasonable and feasible in reducing the noise to an acceptable level.



3.0 NOISE SURVEY, INSTRUMENTATION & RESULTS

On June 28th, 2024, an engineer from this office visited the site to inspect the surroundings and carry out noise measurements for the above proposal. Unattended noise readings were carried out <u>south of the site away from any noise that might be associated with any existing use of the premises</u>. Unattended noise readings were measured away from the site at the front eastern boundary of No. 70 Lakemba St, Belmore (Figure 5 – Noise Reading Location - Point A).

The unattended environmental noise monitoring was carried out for a period of seven (7) days from June 21st, 2024 to June 27th, 2024. All measurements were taken in accordance with the Australian Standards AS 1055 "*Acoustics – Description and Measurements of Environmental Noise*".

The noise survey was conducted to determine a conservative reading of the existing $L_{(A90, 15 \text{ minutes})}$ and $L_{(Aeq, 15 \text{ minutes})}$ for the Day (7:00 – 18:00), Evening (18:00 – 22:00) and Night (22:00 – 7:00) periods.

All sound level measurements and analysis performed throughout this project are carried out with a NSRTW_MK3 wireless sound level data logger (Serial No. CPp0Dd04c1c9iLtiSwBRPD- Office Tag -Machine 1-). The sound logger specification is as follows:

- Type 1 digital MEMS microphone
- Non-volatile 128 Mb recording memory
- Records L-max, L-min and Leq levels
- Log interval adjustable from 125 ms (8 points per second) up to hours
- A, C and Z weighting curves
- Oscilloscope and spectrum analyser features
- Observes and records 100% of the acoustic signal
- Software calculates global Leq according to ISO and OSHA methods
- WIFI connectivity to report measured levels remotely
- Weatherproof casing designed for indoor/outdoor applications
- Activity detection and logging.
- Long-term measurement and recording of acoustic levels for environmental impact studies.

The factory-calibrated noise reading machine (Figure 6 – Calibration Certificate) was calibrated prior to and after reading with our Svantek SV 33A S/N: 90200 Class 1 Calibrator and no significant drift recorded. Any readings affected by strong wind or rain have been disregarded $^{(1)}$.



The Full Average Statistical Noise Parameters $L_{(Aeq, 15 \text{ minutes})}$, $L_{(A90, 15 \text{ minutes})}$, $L_{(A10, 15 \text{ minutes})}$

Location	Time Period	Arithmetic Mean LAeq dB(A)	Arithmetic Mean LA90 dB(A)	RBL dB(A)*
	Day Time (7:00am- 6:00pm)	54	48	46
Point A	Evening Time (6:00pm- 10:00pm)	52	45	41
	Nighttime (10:00pm- 7:00am)	46	40	37

Table 3.1 - Summary	of Existing Noise	Survey between 21	st June, 2024 –	27 th June, 2024 (Point A)*
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* RBL is calculated in accordance with the Noise Policy for Industry 2017 (Fact Sheet B).

Note ¹: Noise data is validated using the weatherzone website addresses: <u>https://www.weatherzone.com.au/station/SITE/66194/observations/2024-06-21</u> to <u>https://www.weatherzone.com.au/station/SITE/66194/observations/2024-06-27</u>

4.0<u>ACCEPTABLE NOISE LEVELS</u>

4.1<u>NSW NOISE POLICY FOR INDUSTRY (2017)</u>

Noise from the proposed site is governed under Section 2 of the Noise Policy for Industry 2017. The above policy seeks to promote environmental well-being through preventing and minimizing noise by providing a framework and process for deriving noise limits conditions for consent and licenses.

The Noise Policy for Industry 2017 recommends two separate noise criteria to be considered, the Intrusive Noise Criteria and the Amenity Noise Criteria. A project noise trigger level being the lowest of the amenity and the intrusiveness noise level is then determined.

If the predicted noise level L_{Aeq} from the proposed project exceeds the noise trigger level, then noise mitigation is required. The extent of any 'reasonable and feasible' noise mitigation required whether at the source or along the noise path is to ensure that the predicted noise level L_{Aeq} from the project at the boundary of most affected residential receiver above is not greater than the noise trigger level.



4.1.1 AMENITY NOISE CRITERIA

The amenity noise levels presented for different receivers are presented in Table 2.2 of the Noise Policy for Industry 2017. These levels are introduced as guidance for appropriate noise levels in residential, commercial and industrial areas surrounding proposed developments. Therefore, the recommended amenity noise levels are presented in the table below:

Type of Receiver	Noise Amenity Area	Time Period	Recommended Leq Noise Level, dB(A)	
		Day	60	
Residence	Urban*	Evening	50	
		Night	45	
Commercial	All	When in Use	65	
Industrial	All	When in Use	70	
Industrial interface (applicable only to residential noise amenity areas)	All	All	Add 5 dB(A) to recommended noise amenity area	

*RBL > 45,40,35 for Day, Evening and Night.

Where a noise source contains certain characteristics such as tonality, intermittency, irregularity or dominant low-frequency content, a correction is to be applied which is to be added to the measured or predicted noise levels at the receiver before comparison with the criteria. Shown below are the correction factors that are to be applied:

Factor	Correction
Tonal Noise	$+ 5 \text{ dB}^{1,2}$
Low-Frequency Noise	$+ 2 \text{ or } 5 \text{ dB}^{-1}$
Intermittent Noise	+ 5 dB
Duration	+0 to 2 dB(A)
Maximum Adjustment	Maximum correction of 10 dB(A) 1
	(excluding duration correction)

 Table 4.1.1.2 – Modifying Factor Corrections as per Fact Sheet C (Noise Policy for Industry 2017)

1. Where a source emits tonal and low-frequency noise, only one 5-dB correction should be applied if the tone is in the low-frequency range, that is, at or below 160 Hz.

2. Where narrow-band analysis using the reference method is required, as outlined in column 5, the correction will be determined by the ISO1996-2:2007 standard.

Correction for duration is to be applied where a single-event noise is continuous for a period of less than two and a half hours in any assessment period. The allowable exceedance of the $L_{Aeq,15min}$ equivalent noise criterion is depicted in Table 4.1.1.3 for the duration of the event. This adjustment accounts for unusual and one-off events and does not apply to regular and/or routine high-noise level events.



Allowable duration of noise	Allowable exceedance of LAeq,15min equivalent project noise trigger level at receptor for the period of the noise event, dB(A)		
(one event in any 24-nour perioa)	Daytime & evening (7 am–10 pm)	Night-time (10 pm–7 am)	
1 to 2.5 hours	2	Nil	
15 minutes to 1 hour	5	Nil	
6 minutes to 15 minutes	7	2	
1.5 minutes to 6 minutes	15	5	
less than 1.5 minutes	20	10	

 Table 4.1.1.3 – Adjustment for Duration as per Fact Sheet C (Noise Policy for Industry 2017)

According to Section 2.4 of the above policy, the project amenity noise level is determined as follows:

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Project amenity noise level for industrial developments = recommended amenity noise level (Table 2.2) minus 5 dB(A)

convert from a period level to a 15-minute level, a plus 3 is added as per Section 2.2 of the policy.

Therefore, the project amenity noise levels for the proposed Storage Area and Office Spaces are as follows:

- Day period: 60+5-5+3=63 dB(A)
- Evening period: 50+5-5+3 = 53 dB(A)
- Night period: 45+5-5+3 = 48 dB(A)

4.1.2 INTRUSIVE NOISE CRITERIA

The Noise Policy for Industry in Section 2.3 summarizes the intrusive criteria as below:

 $L_{Aeq.15 \text{ minute}} \leq \text{rating background level plus 5}$

The background noise level known as $L_{A90,15 \text{ minutes}}$ is the noise exceeded 90% of a period over which annoyance reactions may occur (taken to be 15 minutes). The RBL is defined as the overall single-figure $L_{A90,15 \text{ minutes}}$ background level representing each assessment period (day/evening/night) over the whole monitoring period.

For the short-term method, the rating background noise level is simply the lowest measured $L_{AF90,15min}$ level.

For the long-term method, the rating background noise levels are defined as the median value of the daily, evening and night lowest tenth percentile of L_{90} background noise levels and calculated in accordance with Fact Sheet B of the NPfI 2017.



Therefore, the acceptable L_{eq} noise intrusiveness criteria for the background noise during the day, evening and night at point A are as follows:

Day period:	46 + 5 = 51 dB(A)
Evening period:	41 + 5 = 46 dB(A)
Night period:	37 + 5 = 42 dB(A)

4.1.3 PROJECT NOISE TRIGGER LEVEL

The project noise trigger level at the nearest residential receivers is the lower (that is, the most stringent) value of the amenity and intrusiveness noise levels for the day, evening and night-time. Therefore, the project noise trigger levels for the proposed conversion are as shown below:

-	Day period LAeq,15 min:	51 dB(A) at point A
-	Evening period LAeq,15 min:	46 dB(A) at point A
-	Night period LAeq,15 min:	42 dB(A) at point A

For the <u>industrial receivers</u>, the Noise Criteria is 65 dB(A).

4.2<u>SLEEP DISTURBANCE CRITERIA</u>

In order to minimize the potential of sleep disturbance due to transient noises from the proposed light industrial storage area during night hours/early morning (6:3am – 7:00am), Section 2.2.4 of the Noise Guide For Local Government recommends that $L_{A1,1-minute}$ level of any noise outside a bedroom should not exceed the background noise level by more than 15dB. Therefore, the following criteria will apply at the outside window of the nearest residential receivers:

• LA1, 1 minute =< 40 + 15= 55 dB(A) at external window of Nearest Residential Receivers

Similar text about sleep arousal is adopted in the Noise Policy for Industry 2017 as below:

Where the subject development/premises night-time noise levels at a residential location exceed:

- LAeq,15min 40 dB(A) or the prevailing RBL plus 5 dB, whichever is the greater, and/or
- LAFmax 52 dB(A) or the prevailing RBL plus 15 dB, whichever is the greater,

a detailed maximum noise level event assessment should be undertaken.



4.3<u>NSW ROAD NOISE POLICY - TRAFFIC NOISE</u> <u>GENERATION CRITERIA</u>

Table 3 on Page 11 of the Road Noise Policy states that the $L_{eq,(1 \text{ hour})}$ level of noise intrusion from land use developments with the potential to create additional traffic on local roads should not exceed 55 dB(A) during daytime (7am to 10pm) and 50 dB(A) during nighttime (10pm to 7am).

5.0NOISE FROM THE STORAGE AREA AND OFFICE OPERATIONS

As previously mentioned, the main noise produced by the use of the proposed premises will be as follows:

- Noise from vehicles and trucks on the road, entering & exiting the site and the garage roller door opening and closing and
- Noise from mechanical plant & air-conditioning

5.1<u>NOISE FROM ADDITIONAL TRAFFIC GENERATION ON</u> THE ROAD

The existing site features a carpark fitted for a maximum of three cars; however, parking can easily be found on Lakemba, Oxford and Brande St, south of the site.

The predicted noise levels at 1.0 m from the building line of the nearest residential receivers on Lakemba St, due to additional traffic generation is presented in Table 5.1.1 below:

Activity	Period	Expected Leq 1hr dB(A) 1.0m from Building Line of R1,R2, & R3	Complies with Traffic Generation Noise Criteria- as per Section 4.3
Noise from Additional Traffic Generation	7:00 a.m – 4:30 p.m (Day) 6:30 a.m – 7:00 a.m (Shoulder Period- Morning)	43 dB(A) 25 dB(A)	Yes Yes <55 dB(A) Day Time Criteria Yes <50 dB(A) Nighttime Criteria

Table 5.1.1 – Predicted Noise from Additional Traffic Generation at 1.0m from Building Line of R1,R2,R3*

*Assumes all Recommendations in Section 6 are adhered to.



5.2<u>NOISE LEVELS & PREDICTED NOISE FROM ROLLER</u> DOOR, CARS IN CARPARK, TRUCKS & LOADING DOCK

Three (3) car spaces will be available on site for staff. Access to the carpark will be from Lakemba Street. Staff cars will typically arrive in the morning to open the business and leave in the afternoon once the business is closed.

Carparking noises typically may comprise of people talking, car radios, cars starting, car doors closing and cars moving. The following table summarizes the noise from a typical car activity (Sound Power Levels -Swl-).

Car Park Noise Source	Average Sound Power Level, dB(A)
Car Door Closing*	95
Car Starting*	91
Car Accelerating	91
Car Moving @ 10 km/hr	81
Roller Door Opening and	85
Closing	

 Table 5.2.1 – Car Park Noise Source Levels

*Taking place inside enclosed storage area

As the car park is located inside the enclosed storage area, the only noise generated will be from cars moving in and out of the driveway. The remainder of car activities listed in the table above will be attenuated by the enclosure.

The business will have a maximum of one (1) Light to Medium Rigid delivery trucks\ leaving and returning to the site 1-2 times per day to deliver materials to work sites. There will also be an average of 1-2 supplier deliveries per day which will typically arrive in Medium to Heavy Rigid Trucks but also Light Vehicles (couriers).

The noise affiliated with the use of the loading bay in the proposed development will be the combination of all the following major noise activities:

Truck entering and exiting the loading dock,

- Loading & unloading of products,
- People talking, and
- Garbage collection.

The following table is a summary of noise levels associated with the above activities.



Noise Sources Servicing Proposed	Sound Power Level
Development	Leq dB(A)
Trucks	100
Small trucks	87
Garbage trucks	114
10 people talking loudly	85

Table 5 2 2_	Evnected	Sound Powe	r I evels from	different Noise	Sources- Loadin	a Ray Activities.
1 aut 5.4.4	Елрини	Sound I Owe			Sources- Loaun	g Day Activities-

The predicted noise levels at the boundary of the nearest receivers LAeq _{15min} due to cars activities (doors closing, engines starting, moving,..) and trucks loading & unloading are presented in Tables 5.2.3 and 5.2.4.

 Table 5.2.3 – Predicted noise from vehicles in the carpark and loading dock at the Nearest Commercial

 Predicted noise from vehicles in the carpark and loading dock at the Nearest Commercial

 Predicted noise from vehicles in the carpark and loading dock at the Nearest Commercial

	N		
Activity	Period	Expected Leq dB(A) at Commercial Receiver C1	Compliance with (Noise Policy For Industry 2017).
Noise	7.00am - 4.30pm (Day)	42 dB(A)	Yes < 65 dB(A)
vehicles and trucks entering site and loading/unloading	6:00pm – 10:00pm (Evening)	-	Yes * < 65 dB(A)
in the loading dock	6:30pm – 7:00am (Night- Early Morning Shoulder Time)	_	Yes * < 65 dB(A)

** Commercial Receivers do not operate during the evening & nighttime/early morning.

Table 5.2.4 – Predicted Noise levels from Loading Dock and Carpark at Nearest Residential Receivers*****

Activity	Period	Expected Leq _{15min.} dB(A) at R1	Expected Leq _{15min} . dB(A)) at R2	Expected Leq _{15min.} dB(A) at R3	Compliance with Noise Trigger level (Noise Policy For Industry 2017).
Noise impact from	7.00am - 4.30pm (Day)	49 dB(A)*	32 dB(A)*	32 dB(A)*	Yes < 51 dB(A)
vehicles and trucks entering site and loading/unloading in	6:00pm - 10:00pm (Evening)	-	-	-	Yes ≺49 dB(A)
the loading dock	6:30am – 7:00am (Night)	35 dB(A)*,**	18 dB(A) *,**	18 dB(A) ^{*,**}	Yes < 42 dB(A)

*Predicted Noise levels at boundary

**Noise from cars only; no trucks allowed on-site before 7:00am

*** R1 is zoned industrial with an existing residence occupying the property. Trucks and Deliveries will take place once to twice a day. Above levels represents the Maximum Leq Ismin any time of the day evening and night.



5.3 MECHANICAL PLANT NOISE EMISSION

There are no proposed changes to the existing mechanical plant at the site. The existing mechanical plant includes an AC condenser that is located on the roof of the premises away from any residential/commercia receiver and inaudible at any boundary.

5.4 <u>CUMULATIVE NOISE FROM STORAGE AREA INCLUDING</u> <u>CARPARK NOISE & MECHANICAL PLANT</u>

Based on noise predictions from patrons, vehicles entering/exiting the carpark and the operation of the mechanical plant as listed in Sections 5.1, 5.2 & 5.3 above, the predicted cumulative noise from the above listed activities as shown in Table 5.4.1 below, complies at all nearest residential receivers' boundaries.

Table 5.5.1 – Predicted Cumulative Noise from at <u>Boundary</u> of Nearest Residential Receivers (R1, R2, R3, R4)

Operational Activities	Predicted L _{(Aeq, 15} minutes) dB(A) at R1/R2/R3*	Compliance with NPfI Night Noise Trigger Level as per Section 4.1.3
Cumulative Noise Cars in the Carpark + Mechanical plant 7:00 a.m -4:30 p.m	49/32/32 dB(A)	Yes ✓ Day (<51 dB(A))
Cumulative Noise Cars in the Carpark + Mechanical plant 6:30 a.m -7:30 a.m	35/18/18 dB(A)**	Yes ✓ Night (<42 dB(A))

*Predicted Noise levels at boundary

**Noise from cars only; no trucks allowed on-site before 7:00am

5.5 MAXIMUM NOISE LEVELS & SLEEP DISTURBANCE COMPLIANCE

The Maximum noise levels expected in the morning from the change of use occurs when all three cars are using the carpark simultaneously. No deliveries and loading/unloading of trucks is allowed prior to 7:00 a.m.

Table 5.5.1 below presents the predicted $LA_{1,1min}(LAmax)$ noise levels from the change of use at the <u>external façade</u> of all nearest residential receivers and their compliance with the Sleep Disturbance Criteria.



Table 5.5.1 –	Predicted Maximum	Noise Level - LA	1 1min at Facades of	f Nearest	Residential	Receivers
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Activity	Expected LA _{1,1min} <i>dB(A) at</i> <i>R1/R2/R3</i> *	Complies with Sleep Disturbance Criteria as per Section 4.2.1
(L Amax) of Cumulative Noise Cars in the Carpark + Mechanical plant 6:30 a.m -7:30 a.m	48/31/31 dB(A)	Yes ✓ LA1, 1 minute <55 dB(A), [L90+15] LA1, 1 minute <52 dB(A), [RBL+15] LAFmax <52.

* No trucks or deliveries are allowed on-site before 7:00am

6.0 NOISE CONTROL RECOMMENDATIONS

6.1 NOISE CONTROL AT SOURCE

The noise at the factory is generated from a combination of vehicle movements and machinery, however the dominant noise source is from trucks moving around the site particularly when loading/unloading material and reversing.

- NO deliveries **from or into** the site before 7:00 a.m. or after 6:00 p.m.
- The proprietor is to ensure truck ignitions are turned off while loading/unloading activities are carried out.
- Ensure maintenance and lubrication of Roller door motor bearings, door tracks and joints.

6.2<u>SIGNS</u>

Signs within the site requesting all employees/workers and delivery staff to enter and exit the site in an orderly fashion and to work adhering to the rules and regulations put in place by the business manager/stakeholder.

Staff and customers entering and exiting the site car park during the early hours (between 6:30am-7:00am) are to be advised to do so in a quiet manner.

6.3 NOISE MANAGEMENT PLAN

A Noise Management Plan should be implemented and should include the following:

• Install a contact number at the front of the site so that complaints regarding the operation can be made.

• Implement a complaint handling procedure. If a noise complaint is received the complaint should be recorded on a Complaint Form. The Complaint Form should contain the



following:

- Name and Address of the Complainant
- Time and Date the Complaint was received
- The nature of the complaint and the time/date the noise was heard
- The name of the employee that received the complaint
- Actions taken to investigate the complaint and the summary of the results of the investigation
- Indication of what was occurring at the time the noise was happening (if applicable)
- Required remedial action (if applicable)
- Validation of the remedial action
- Summary of feedback to the complaint

Also a permanent register of complaints should be held on the premises, which shall be reviewed monthly by staff to ensure all complaints are being responded to. All complaints received shall be reported to management with initial action/investigation commencing within 7 days. The complaint should also be notified of the results and actions arising from the investigation.

7.0 NOISE IMPACT STATEMENT

ANAVS- Acoustic, Noise & Vibration Solutions Pty Ltd have taken noise level measurements at the most noise-sensitive locations for the change of use of an existing residential dwelling to a light industrial storage area and office spaces at No. 93 Lakemba St, Belmore. The levels of noise emission from the proposal have been calculated and quantified using reliable test data.

Provided the noise controls recommended in Section 6 of this report are fully implemented, we are confident that the noise emission levels from the proposed change of use of an existing residential dwelling to a light industrial storage area and office spaces at No. 93 Lakemba St, Belmore will be controlled and meet Canterbury Bankstown Council requirements.

We hope this report meets your requirements. Should you require further explanations, please do not hesitate to contact us.

Yours sincerely,

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8.0 APPENDIX

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Member Member Since 19 May, 2008



Figure 1 - Site Location





Figure 2 - Surrounding Environment





Figure 3 - Proposed Site Plan





Figure 4 - Nearest Residential & Commercial Receivers





Figure 5- Noise Reading Location – Point A



Category Calibration	egory-2	2S - Traceab	inst Die Certificat	22A Car c rument Cho te	van Road D Phone: 1: ustomer-ser ice is a tradi	Dry Creek South Aust 300 737 871 Fax: 130 vice@instrumentchoi www.instrumentchoi ng name of Synotron (ABN: 828)
Calibration	Certificate	Details	Calibration	Schedu	ile	
Calibration D	Date	14/08/2023	Calibration In	terval	1 year	
Certificate N	umber	2S-1408202301B	Next Due Dat	e	07/20	24
Company D	etails					
Company Na	ime	ANAVS - Acoustic Office 9, 438 For Hurstville NSW 2 Australia	: Noise & Vibration So est Rd 220	olutions F	P/L	
Equipment	Details					
Instrument	Гуре	Sound Meter	Serial Number	0	Pp0Dd04	4c1c9iLtiSwBRPI
Manufacture	er	Convergence	Model	N	SRTW_n	nk3
Physical Con	dition	Good		-		State Sheet
RH whilst pe Reference Meter	rforming tes Acceptable Difference	E Supplied Meter Reading Before	Supplied Meter Reading After	Differ	ence	Pass/Fail
Reading		Calibration	Calibration			100000000
94.0dB	±1dB	93.9dB	94.0dB	0.0	dB	Pass
114.00B	±10B	113.808	113.908	0.1	dB	Pass
Traceability	Details					
Make		S/N	Cal Report No:		Tested	at NATA Lab
Casella CEL-1	20/1	5230660	C35894A		9262	
Any Problem	ns Identifie	d				
The meter is	performing a	is expected			Lan 's	- Andora
Category-2	S Pass: (es)	No	Battery Replacer	nent:(Ye	s)/ No	-
Name		Bang Hoang	Service and service and			
Signed		-	0	Y		2
DiBuca			the second se			
Date		14/08/2023				

Figure 6 - Calibration Certificate





Figure 7 -- Noise Survey



