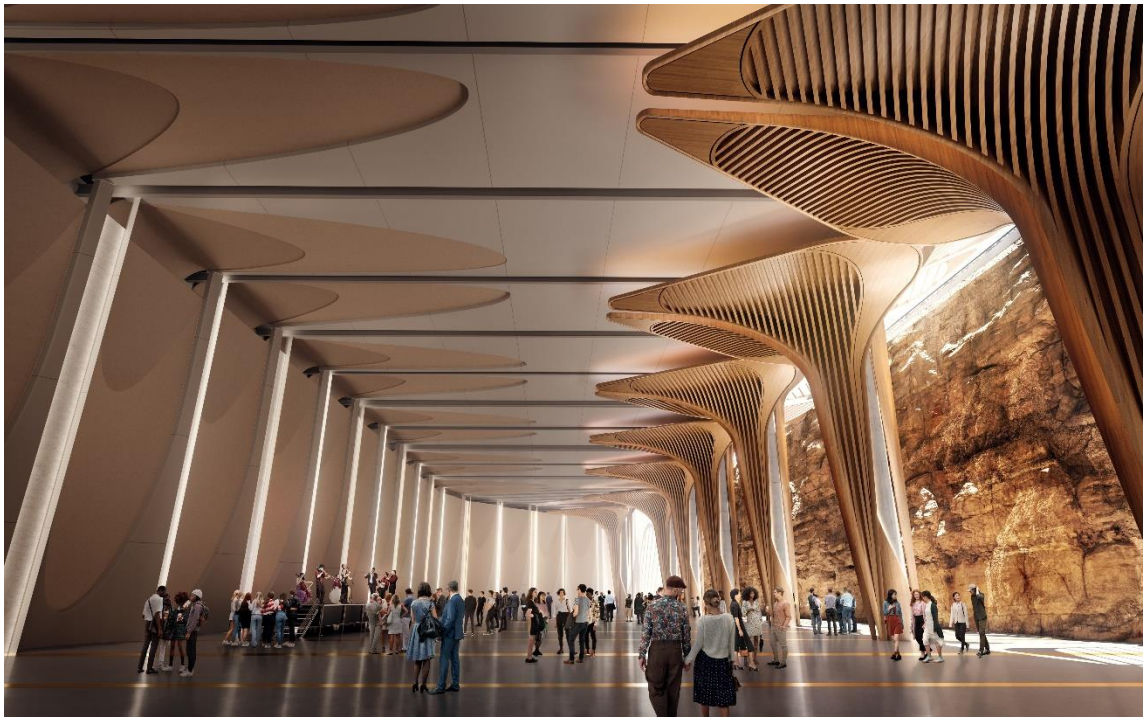
Place Management NSW

Cutaway Cultural Facility Barangaroo Reserve



OPERATIONAL NOISE MANAGEMENT PLAN

Development Consent Plan: Condition D24
February 2026

Revision Table

Version	Date	Description	Author
1	05/11/2025	First Draft	PMNSW
2	21/11/2025	Second Draft	PMNSW
3	30/01/2026	Third Draft	PMNSW
4	06/02/2026	Fourth Draft	PMNSW
5	03/03/2026	Fifth Draft	PMNSW

Contents

1. INTRODUCTION

1.1 Background

This plan is submitted in response to the Conditions of Approval (COA) set out in the Development Consent for Application No: SSD 47498458 granted on 22 December 2023 on behalf of the Minister for Planning and Infrastructure to the Applicant, Infrastructure NSW (INSW), regarding the development at 29-51 Hickson Road, Barangaroo, known as the 'Cutaway'. This plan has been prepared by Place Management NSW (PM NSW) on behalf of INSW.

INSW are the landowners of Barangaroo and the Cutaway, however it will be managed and operated by ICC Sydney Pty Ltd (the Operator) on behalf of PM NSW.

1.2 Conditions of Approval

This *Operational Noise Management Plan (ONMP)* is written in satisfaction of Condition E24 (b) and must be implemented and adhered to at all times by the Applicant following the occupation or commencement of use in accordance with Condition D24.

For clarity, after the following introductory information, this ONMP is structured consistent with the clauses contained in Condition D28.

For a complete excerpt of Condition D24, see *Appendix 8.1*.

1.3 About this ONMP

This ONMP sets out the overarching operational management framework for events supporting activities to be undertaken in the Cutaway.

The purpose of this document is to outline the approach to compliance with Conditions E24 (b) and D24, including to ensure that all such events and activities will:

- Minimise the generation of significant or unacceptable impacts on the amenity of residents of the locality.
- Be safe for event organisers and their guests, event attendees, the Operator's team members, workers, and contractors.
- Minimise interference with the public enjoyment of Barangaroo Reserve and public domain generally.
- Comply with all laws applicable to the Cutaway.

This ONMP will be an integral part of the management framework for the precinct. It will be supplemented by the Operator's existing event management systems and processes, customised to the Cutaway's unique context and design, utilising a shared services model.

With the ICC Sydney venue now having been in operation since December 2016, the Operator's systems are now mature and have a record of success in Sydney and around the world. Consistent

with its current practice, the Operator will prepare individual Event Management Plans, for agreement with each client, prior to the hosting of each event at the Cutaway.

The ONMP may be amended to ensure it remains up to date with respect to legislation, government policy, and/or operational requirements. The Operator will also monitor the operational effectiveness of the ONMP and may revise it from time to time, particularly after the accumulation of operating experience at the Cutaway, to ensure the plan's ongoing effectiveness and suitability.

1.4 About the Cutaway

The Cutaway is envisioned as one of Sydney's most distinctive event spaces—an expansive, architecturally striking venue carved beneath the sandstone and green landscape of Barangaroo Reserve. Just minutes from the waterfront, this 120-metre-long underground venue offers a unique and dramatic setting for events of all kinds.

Purpose-built to deliver a sense of scale and impact, The Cutaway is designed as a major, flexible-format venue that supports events, exhibitions, festivals and cultural uses. Its objective is to provide memorable, high-impact experiences while increasing attendance at cultural events and strengthening the broader cultural and infrastructure networks of the Barangaroo precinct

The primary facilities will be supported by appropriate back of house and ancillary facilities to allow the Cutaway to be positioned as a preferred venue for events, exhibitions, cultural uses, festivals, and installations.

It is envisaged that the Cutaway will:

- Become one of Sydney's premier cultural and event facilities.
- Be recognised globally for hosting the performing and visual arts, exhibitions and events.
- Engage both the local community, national, and international visitors; celebrate the First Nations connection to Country and to the site by applying a Connecting with Country framework, and
- Demonstrate excellence in design and sustainability.

The Cutaway will occupy three levels within the existing Cutaway structure and will feature a dedicated First Nations education space, event and gallery areas, back-of-house facilities, amenities, offices, and ancillary retail and café offerings. The facility will also include a loading dock, mezzanine level, performance space, and additional amenities. It will provide parking for up to 300 vehicles and accommodate a maximum capacity of 2,995 occupants.

2. ABOUT THE FACILITIES

Conditions D28 (a) to (c)

2.1 Patron Capacity

A Fire Engineering Assessment Report Number JN22-00157 - V08 has been prepared by Red Fire Engineers.

The Fire Engineering Assessment report concludes that the **occupant load** of **2,995 at any given time** is acceptable to comply with the relevant fire safety Performance Requirements of the Building Code of Australia. This occupant load is based on the following capacities at each level of the Cutaway:

- Ground - 2,340
- Level 1 - 300
- Level 2 – 355.

The ratio of patrons and workers composed in the occupant load at each level will be an important consideration for the Operator's Event Planners and will vary according to each specific event type and the design of each specific Event Plan to meet client requirements.

2.2 Operational Hours

2.2.1 Events

Operational hours of events will be from **8am to 6pm** daily. Other events include:

a) 5-Hour Medium Scale Events: 10am-11pm, up to a maximum of 15 times per year
b) Single Day Medium Event: 10am to 10pm, up to a maximum of 6 times per year
c) Major Events: 7am to 11pm, up to a maximum of 4 times per year
d) New Years Event's: 10am to 2am, once per year

It is proposed that the facility will operate to allow for overnight cleaning, kitchen operation, security operations or moving in/out, up to a 24/7 basis as required, in accordance with the acoustic framework outlined in the *Noise & Vibration Impact Assessment*.

2.2.2 Reception/Information – Education Space

A reception servicing the First Nations education space on Level 2 will be open based on bookings and accessible to the public via the Waranara Terrace.

2.2.3 Car Park & Lifts

Car park operating hours are proposed to be **6am to 12am** daily, 365 days per year, except for the New Year's Eve period. Access to public lifts will be maintained during these hours.

2.2.4 Loading Dock & Special Events

Consistent with the recommendations of the *Noise & Vibration Impact Assessment* the hours of operation of the loading dock will be as follows:

- Deliveries and vehicle movements are permitted only between **7:00am and 10:00pm**.
- No vehicle movements to or from the loading dock shall occur between **10:00pm and 7:00am**, except in the case of **special events**, such as touring shows where overnight move-out is essential and cannot be deferred to the following day.
- Such exceptions for special events must be justified by operational necessity.

The loading dock and logistics team in conjunction with the events team and organisers will ensure that vehicle movements are scheduled to minimise impact of noise and traffic to surrounding roads, residents and businesses.

2.3 Public Access

The Cutaway will be open to the public and the community during scheduled public events, whether ticketed or unticketed.

Outside of these times, public access will be limited to the use of the amenities, car park and the public lifts.

The First Nations education space will be open depending on bookings and accessible to the public via the Waranara Terrace.

3. INEGRATION OF NOISE CONTROL MEASURES INTO DESIGN

The design and fit-out of the Barangaroo Cutaway Cultural Facility have incorporated the operational noise management measures recommended in the *Barangaroo Cutaway Cultural Facility Noise and Vibration Impact Assessment* prepared by Arup (26 January 2023). The building's form, materials and mechanical systems have been developed to control both internal noise transfer and external noise emissions.

3.1. Building Envelope and Structure

All facades, skylights and roof structures have been designed and sealed to prevent noise breakout from event spaces. Natural ventilation paths have been removed and the skylight and smoke exhaust systems incorporate acoustic linings between the roof and ceiling to limit sound transmission to the surrounding public domain (Appendix Table 28).

3.2 Internal Separation

High-performance partitions, acoustic doors and glazing systems have been installed between the Event Hall, Pre-function spaces and Galleries to meet specified sound insulation ratings. These treatments reduce sound transfer between spaces during simultaneous use, particularly where amplified events occur alongside exhibitions or education programs.

3.3 Mechanical and Building Services

3.3.1 Mechanical Services

Plantrooms, ductwork and air-handling units have been acoustically treated through internally lined ducting, attenuators, vibration isolation and reduced air velocity design.

Pumps are chosen based on the highest efficiency rating to reduce the impact of sound and vibration.

Doors and Louvres will remain closed during noisy events to minimise risk of noise leakage into the surrounding precinct.

3.3.2 Electrical Services

Electrical floor boxes have an acoustic backing to maintain sound insulation.

3.3.3 Hydraulic Services

All event spaces where flowing hydraulic, drain and waste pipes (excluding fire systems) exist an acoustic insulation is installed.

3.4 Room Acoustic Treatments

Fixed absorptive and diffusive finishes within event and gallery spaces achieve minimum reverberation control and clear speech sound. This reduces the need for excessive amplification and supports effective sound management during event operations.

3.5 Environmental Noise Controls

The facade and mechanical system designs look to ensure that operational and event noise at surrounding receptors (including Barangaroo Reserve and Hotel Palisade) remain below the Project Noise Trigger Levels identified in the ARUP assessment—56 dB(A) daytime, 48 dB(A) evening, and 43 dB(A) night-time for residential receivers.

4. NOISE MANAGEMENT

4.1 About Noise Management

This section outlines the proposed mitigation and management measures to control noise impacts from events held at the Cutaway under the approved SSDA and DA. Adapted from the Operator's established Noise Management systems, these measures aim to minimise disturbance to surrounding noise-sensitive properties, including residential, commercial and ecological areas.

The Operator will implement and maintain best-practice management systems to control noise generated by all activities at the Cutaway, including those undertaken by the Facility Manager. This includes community and stakeholder notification protocols for upcoming events, as well as a clear and accessible complaints management process.

4.2 Noise Monitoring Program

4.2.1 About the Noise Monitoring Program

A Noise Monitoring Program will be adopted that identifies sensitive receivers and monitoring locations. This "whole-of-facility" approach is designed to reduce the noise impact on staff, visitors, neighbouring residents, businesses and local wildlife, aligning with best practice in environmental noise management.

The overarching responsibility for managing noise across the precinct rests with PMNSW. Both the Operator and PMNSW will have dedicated liaison officers to act as single points of contact, ensuring efficient coordination, timely reporting and effective resolution of issues. This collaborative partnership is well established and will remain essential throughout the operational life of the Cutaway to ensure continuous improvement in noise management practices.

4.2.2 Event Categories, Noise Limits and Controls

The period and time subject to change based on DA modification. More detail on predicted noise levels can be found in appendix 8.4.

Table 20 provides information on the Noise Policy For Industry project specific noise levels on General event or non-event days.

Table 20: NPfI Project Specific Noise Levels

Receiver	Intrusive Level, $dBL_{Aeq(15minute)}$			Project Amenity Level[1], $dBL_{Aeq(15min)}$		
	Day	Evening	Night	Day	Evening	Night
Residential						
All residential receivers	56	55	47	58	48	43
Hotels						
C1 - Hotel Palisade	N/A			63	53	48
Commercial						
C1 - Blythe & Co	N/A			63 – when in use		
Passive recreation						
P1 – Barangaroo Reserve	N/A			48 – when in use		

Note:

1. A+3 dB correction has been to adjust $L_{Aeq(period)}$ Project Amenity Level to an $L_{Aeq(15min)}$ in accordance with the NPfI [1].

Table 22 outlines the noise levels based on the specific event types within the DA of the Cutaway.

Table 22: Event noise limits for residential and commercial receivers

Period	Time	Criteria	
		$dBL_{Aeq(10min)}$	$dBL_{Ceq(10min)}$
Major Events[1] – Max 4 per year			
Day / Evening	10am to 10pm	65	75
Shoulder (early morn and late night)	7am to 10am, 10pm to 11pm	55	65
New year's period[1] – Max 1 per year			
New year's eve	10pm to midnight	65	75
New year's day	Midnight to 2am	55	65
Single Day Medium Events[2] - Max 6 per year			
Day / Evening	10am to 10pm	55	65
5 Hour Duration Medium Events[3] - Max 15 per year			
Day / Evening	10am to 10pm	55	65
Night	10pm to 11pm	50	60
Outside of nominated event times[4] – in accordance with NPfI			

Notes:

1. Major Events and New Years Period previously termed 'Category 1' events in D/2015/938/A
2. Single Day Medium Events previously termed 'Category 2' events in D/2015/938/A
3. 5 hours duration Medium Events previously termed 'Category 4' events in D/2015/938/A
4. Previous 'Category 3' events will be assessed in accordance with the NPfI [1] outlined in Section 4.2.1.

4.2.3 Noise Mitigation Techniques

To ensure compliance with noise management requirements and minimise impacts on surrounding sensitive receivers, the Operator will adopt a proactive and structured approach to predict, assess and manage noise levels for events at the Cutaway.

The following methodology and modelling techniques will be implemented:

- **Event Noise Assessment at Enquiry Stage:** Preliminary review of proposed event activities and likely noise impacts.
- **Identification of Major Noise Sources:** Includes PA systems, amplified music, crowd noise, generators and mechanical equipment.
- **Source Location Mapping:** Identification of all sound source locations, including their elevation relative to the ground.
- **Receiver Location Identification:** Mapping of noise-sensitive receptors, such as residential and commercial areas, within the surrounding precinct.
- **Weather Forecast Review:** Particular attention to conditions such as wind speed and direction and the potential for temperature inversions which may affect sound.
- **Estimation of Attendance:** Quantification of expected crowd size, which may influence overall noise levels.
- **Audio System Assessment:** Comparison of the proposed audio design with previous configurations to evaluate likely noise impacts.
- **Use of Rehearsals and Sound Checks:** During the test event phase, the Operator will establish base levels as a guide to achieve compliance with SSDA requirements.
- **Monitoring at Mixing Desk:** Installation of attended or unattended noise monitors at main stage mixing desks for the duration of all performances.
- **Mandatory Pre-Event Sound Checks:** Required for all events utilising amplified sound to verify system settings and ensure compliance.
- **Residential Noise Monitoring:** Ongoing monitoring during rehearsals and sound checks will equip acoustic consultants and audio engineers with reliable data to inform noise management decisions and mitigate risks prior to the main event.
- **Mechanical ventilation:** Doors and louvres will be closed during events to reduce the risk of sound leakage into the precinct.

This systematic approach ensures event organisers, acoustic professionals and the Operator are aligned in managing event noise proactively, transparently and in accordance with best practice and compliance obligations.

4.3 Noise Monitoring Methodology & Reporting

Commissioning tests of internal sound isolation, building services noise and external noise emissions will verify compliance. Results will inform the ongoing Operational Noise Management Plan, ensuring the venue operates within approved limits under varying event conditions.

Collectively, these design features embed the ARUP recommendations into the physical and operational framework of the facility, providing a robust foundation for sustainable, compliant event operations that balance cultural activation with community amenity protection.

4.3.1 Methodology

The methodology to test noise emissions has been provided in section 6.5 of the Acoustic Performance Specification from Arup and is quoted below. The results of the testing will be used as a baseline when planning events specifically with regard to the acoustic components.

To provide a foundation for the management of live-music events in the Event Hall, the sound insulation between the Event Hall and the residents on Merriman St shall be measured by the Contractor's acoustic consultant. The following method shall be used:

- A sound system shall be set up in the Event Hall capable of producing the LZeq levels listed in Table 10 at the middle of the audience area, with a crest factor of at least 6 dB above these LZeq levels.
- The loudspeakers shall be installed at a location that would be typically used for a large contemporary music concert or dance event.
- With the system reproducing the test signal at the levels in Table 10 as measured at the middle of the audience area, the LZeq levels shall be measured in each octave band (31 Hz to 8 kHz) inside the Events Hall and outside the receivers on Merriman St.
- Measurements of the internal sound level in the Event Hall shall be made as a spatial average over the central part of the audience area. Measurements at receivers shall be made at a distance of 1.5 m above the ground and 1.5 m from the nearest residential receiver's façade.
- The test signals shall include pink noise and music.
- The internal and external measured levels and differences between both shall be reported in octave bands.

4.3.2 Reporting

The Noise Monitoring Reports include the following information:

- Field calibration results (pre- and post-measurement).
- Dates and times of all measurements.
- Qualitative description of the noise environment during measurements.
- Recorded LA1 and LAeq values.
- Meteorological conditions at the time of monitoring.
- Estimation or measurement of background noise from other significant sources.

4.3.3 Results

ARUP conducted thorough acoustic testing of the facilities and produced the *303367_AC30 v1 Cutaway Noise Verification Report (Appendix 8.5).* The report summarises the outcomes of the acoustic commissioning and testing of the Cutaway. The testing quantified sound insulation and performance, reverberation times, internal building services noise levels and noise emission levels. Noise emissions were tested and measured at the closest identified receivers being;

- Merriman Street and Blythe & Co. (1 Munn Street) for the Event Hall, and
- Palisade Hotel (35 Bettington Street) for the Pre-function.

Pink noise was introduced in both spaces at the sound levels detailed in Table 9. Levels were "generally considered to be representative of target event noise levels within both spaces."

Table 7: Internal event noise levels

Space	Item	Sound pressure level in octave band, dB $L_{eq,10min}$								
		31.5	63	125	250	500	1k	2k	4k	8k
Event Hall	*Event noise level target*	*108*	*113*	*101*	*98*	*98*	*98*	*98*	*98*	*98*
	Measured level during testing (pink noise)	110	115	108	102	103	100	95	94	94
Pre-function space	*Event noise level target*	*98*	*103*	*91*	*88*	*88*	*88*	*88*	*88*	*88*
	Measured level during testing	95	102	101	97	94	90	86	84	81

Measurements were conducted from 7:45pm to minimise extraneous noise influence and were conducted over two minute time periods. Over the testing period, music measurements were "barely audible" as shown in table 8.

Table 8: Event noise emission levels

Item	Location	Noise level		Comments
		$dBL_{Aeq(10min)}$	$dBL_{Ceq(10min)}$	
Event Hall				
'Major Event' noise emission criteria	*Applies at nearest residential and commercial receivers*	*65*	*75*	
Item	**Location**	**Noise level**		**Comments**
		$dBL_{Aeq(10min)}$	$dBL_{Ceq(10min)}$	
Measured noise level – pink noise	R3 - 42 Merriman Street	53	68	Event Hall pink noise was barely noticeable at nearest residences. **Compliant with criteria**
Measured noise level – background		50	64	Noise sources included harbour noise including marine vessels with significant low-frequency noise content, city 'hum' and natural surrounds.
Measured noise level - music	R2 -27 Bettington Street	54	69	Inaudible. **Compliant with criteria**
Measured noise level – pink noise		52	70	Inaudible. **Compliant with criteria**
Measured noise level – background		50	64	Noise sources included harbour noise including marine vessels with significant low-frequency noise content, city 'hum' and natural surrounds.
Prefunction				
'Major Event' noise emission criteria	*Applies at nearest residential and commercial receivers*	*65*	*75*	
Measured noise level – pink noise	C1 - 'Blythe & Co.', 1 Munn Street	57	71	Event Hall pink noise was barely noticeable. Harbour noise and construction works noted during measurements. **Compliant with criteria**
Measured noise level – pink noise	H1 - Palisade Hotel, 35 Bettington St	52	65	Inaudible. **Compliant with criteria**

Further to this, report *303367_AC30 v1 Cutaway Noise Verification Report* (Appendix 8.5) produced by ARUP assessed operational noise emissions against the following clauses in the Conditions of Consent (D23, E20, E21). The report stated in its conclusion that "Measurements

have been undertaken for Cutaway operational noise emissions and these were used to verify compliance with criteria for mechanical and event noise emissions. Compliance with the SSDA conditions considered to be demonstrated under both normal mechanical and major event scenarios".

4.4 Noise Limits Table

The following cumulative broadband LAeq,10min limits (with LCeq guidance for low-frequency management) apply at the boundary of the nearest noise-sensitive receivers:

- General Events (Category 3): ≤ project noise trigger levels 08:00–18:00.
- 5-hour Medium (Category 4): 10:00–22:00 ≤55 dB(A); guideline ≤65 dB(C). 22:00–23:00 ≤50 dB(A); guideline ≤60 dB(C).
- Single-day Medium (Category 2): 10:00–22:00 ≤55 dB(A); guideline ≤65 dB(C); outside these hours amplified noise inaudible.
- Major Events (Category 1): 10:00–22:00 ≤65 dB(A); guideline ≤75 dB(C). 07:00–10:00 & 22:00–23:00 ≤55 dB(A); guideline ≤65 dB(C).
- New Year's Event (Category 1): 10:00–24:00 ≤65 dB(A); guideline ≤75 dB(C). 00:00–02:00 ≤55 dB(A); guideline ≤65 dB(C).

5. EVENT MANAGEMENT

5.1 Events to be Held at the Venue

5.1.1 Description of Events

The Cutaway is a versatile venue capable of hosting a wide range of events in multiple configurations.

Potential uses include:

- Live music and staged performances,
- Art installations and exhibitions, including festivals like the Sydney Festival or Biennale,
- Cultural events featuring dance and music,
- Temporary gallery artworks,
- Public events such as markets and festivals,
- Fashion shows,
- Conferences, meetings, seminars,
- Exhibitions and trade shows,
- Banquets, functions and product launches.

The Cutaway is equipped with essential infrastructure to support events, including back-of-house services (kitchen, waste, cleaning, storage, maintenance, operations, loading dock and goods lift),

reception and cloaking, offices and staff amenities, public amenities, retail and ticketing areas, a café and bar, a cultural gallery and a First Nations education and community learning space.

All activities will be managed by the Operator, ranging from small, low-impact bookings to large-scale complex events. Event management is overseen by ASM Global, delivered through the Operator's Event Delivery team under the leadership of the General Manager – Operations.

This section outlines the required procedures and management strategies for special event bump-in, operational and bump-out activities. Throughout the event lifecycle noise management must be carefully considered and managed proactively.

5.2 Applicability & Approvals

As per the DA, overnight works are allowed less than 4 times per year and by operational necessity. Where overnight works are required, written approval shall come from the General Manager – Operations.

The approved document will be distributed to DHL, PMNSW and Community groups no less than 14 days prior to the works taking place. Notification to local residents shall take place no less than 48 hours prior to the works taking place.

The security and logistics team or the most senior person onsite during overnight works are responsible for minimising the noise and impact on local residents and businesses through the use of:

- Minimising audible reversing tones or utilising quack sounds over beep sounds.
- Lowering of roller doors where possible.
- No external PA.
- Advising drivers to minimise the use of compression breaking.
- The security, logistics or the most senior person onsite during overnight works has full authority to stop work where it is deemed to be making unnecessary or excessive noise or where a complaint has been received by an external party. Noise complaints are managed in line with section 7.3

Following a stop work decision:

- A toolbox talk will be conducted by the most senior representative of the operator onsite with the supervisors of all participant companies.
- The noise management process and preventative measures will be reiterated to all parties following which, a decision on whether a noise reduction is reasonably possible or not.
- If noise reduction is possible then works will continue with the agreed noise minimisation steps in place.
- Tasks which cause excessive noise and can be postponed to the next day should be.
- Where a conflict exists or further stop work is required due to non-compliance the General Manager – Operations or CEO shall be notified.

6. SECURITY MANAGEMENT

6.1 About Security Management

The Operator's Security Operations team is committed to providing a safe, harmonious and secure environment for all areas falling under the Operator's control. The safety and security of stakeholders, team members, clients, visitors and contractors is of the highest importance.

The Security Operations team safeguard the venue and client assets including its people and property while always conducting themselves in a professional, courteous and customer service-oriented manner.

The Security Operations team reflects a customer service delivery approach by providing building and event related Security Operations. The Security Operations department is responsible for access control, building security including surveillance and monitoring, emergency and incident response, event security, escorts and crowd control.

6.2 OBJECTIVES

The Security Operations Team provide a safe and secure environment for the protection of people and assets while supporting the business through:

- Preventing unauthorised entry or disruption to authorised activities falling under the control of the Operator,
- Minimising unauthorised activities that may be damaging to the overall image of the Operator,
- Deterring crime by providing a visible security presence,
- Providing First Aid response if required and ensuring adequate first aid equipment is available and accessible throughout the venue,
- Coordinating emergency response including evacuation,
- Protecting team members, contractors, clients and other visitors,
- Managing and reporting on excessive noise after hours,
- Assisting with the swift and discreet egress of patrons post event.

6.3 Security Facilities

There are dedicated facilities within the venue relating to security operations, which include:

- Security Control Room
- Fire Control Room
- First Aid Rooms
- External Lighting

6.3.1 Security Control Room

All Security Operations equipment at The Cutaway is centrally monitored from the Security Control

Room located on Level 2. This integrated system manages access control, alarms, CCTV, communication tools, fire safety systems, car park operations and equipment monitoring. A CCTV system is also installed and operational at the venue.

6.3.2 CCTV

Closed-circuit television (CCTV) is in place throughout the Cutaway and key public areas. CCTV supports event and public safety, with cameras positioned at principal entrances and exits for pedestrian and vehicles. The CCTV system is actively monitored by Security personnel with recordings retained for subsequent review if required. Footage access is strictly controlled and limited to legal or police requests. Usage complies with the *NSW Government Security Industry Act* and the *ICC Sydney/Barangaroo CCTV Policy*. The CCTV system and process must be in line with E57 – E64 of The Cutaway SSDA Conditions of Consent (appendix 8.7)

6.3.3 Lighting

External lighting is particularly important in providing a safe and secure environment surrounding the venue. The external lighting systems have been designed to assist in deterring anti-social behaviour and provide a safe precinct environment, augmenting CCTV systems and indicating main access points to the venue.

6.4 Building Security

Building Security provides the base level security plan for the venue, upon which Event Security plans will be built.

Core daily building security activities include access control, surveillance and alarm monitoring, patrols and guarding, asset protection, first aid provision, emergency management in coordination with emergency services, and noise management and monitoring outside event operational hours.

6.5 Event Security

Security Operations ensures a safe and respectful event environment through a professional, low-disruption, customer-focused approach. In addition to building security, event-specific services include risk assessments, access control, crowd management, RSA coordination, escort services, asset protection and managing special security requirements. During events, the Event Security team serves as first responders to incidents or emergencies, coordinating with the Central Security Control Room to manage first aid, incidents, emergencies and other necessary responses. The event security team assist with noise management during event hours. Liaising with the events team they manage the egress of patrons through the precinct and into to major transport hubs, whilst minimising impact to local residents and businesses.

7. STAKEHOLDER & COMMUNITY ENGAGEMENT

7.1 About Stakeholder & Community Engagement

Effective consultation and communications are an integral part of establishing clear expectations around operations of the Cutaway and management of events. Advantageously, the Operator has established mature relationships and communication channels in the nearby Darling Harbour Precinct which can be utilised or adapted for the Cutaway.

The approach to stakeholder and community engagement activities is designed with a 'whole of precinct' approach in mind, to minimise any possible negative impacts of the Operator Services on Barangaroo precinct businesses and residents, and maximise economic and social benefits, realising the State's vision for the project. This will be achieved through the implementation of appropriate communication protocols and interfaces, and active stakeholder engagement and consultation.

Key stakeholders and community members include:

- NSW Government, represented by INSW and PM NSW
- DHL Partnership
- Regulatory agencies and authorities
- Emergency services
- Adjacent businesses, including hotels and educational institutions
- Nearby businesses and residents, and
- The public

The Operator will implement specific communication structures and protocols, appoint key personnel to specific interface roles, and participate, as required, in a range of business and community forums.

7.2 Community Consultation

7.2.1 Community Consultation Channels

Effective community engagement is essential to the successful delivery of events at the Cutaway. Proactive communication will help build awareness, manage expectations, and minimise disruptions to nearby residents and businesses.

Engagement channels may include:

- Community meetings and briefings.
- Notifications to strata managers and resident associations.
- Website.
- Social media platforms and/or Electronic Direct Mail.

7.2.2 Pre-Event Community Consultation

The Operator's Event Management Processes ensure that Community engagement measures will include timely communication of key event details, including:

- Event dates and times
- Rehearsal, setup, and pack-down schedules, and
- Any potential impacts such as noise levels or increased foot traffic.

Businesses and residents as shown in appendix 8.5 will be notified in advance of any events expected to generate elevated noise levels including, but not limited to, any Major Event, New Years Event or Single Day Medium Event.

7.2.3 Post-Event Community Consultation

Following events, written updates will be provided to local residents, PMNSW, and community stakeholders such as body corporate contacts.

These updates will include:

- Event dates, times, and durations
- Summary of any noise complaints
- Internal monitoring outcomes, and
- Corrective actions taken and any future mitigation measures.

Feedback will be encouraged, with contact details for the Operator provided for ongoing community input.

7.3 Complaints Management

All noise-related feedback and complaints will be managed through the Operator's established Feedback Management System, which provides a coordinated and transparent process for addressing community concerns (appendix 8.6).

The Feedback Management System follows an incident management process workflow and includes:

- Both a dedicated phone number and email address, staffed during event hours, will be available for the community to report any noise-related issues.
- All complaints and incidents will be logged and managed through the Operator's established Feedback Management software system.
- The system will record all details of the feedback, actions taken in response, proposed corrective actions, and any recommendations for improvement.

Consistent with established reporting processes, a summary of all such feedback and actions taken in response will be provided by the Operator to external stakeholders on a monthly reporting basis such as Darling Harbour Live and PMNSW.

8. APPENDIX

8.1 Condition D24

Operational Noise Management Plan

Prior to the occupation or commencement of use, an Operational Noise Management Plan (ONMP) must be prepared in consultation with Council and approved by the Planning Secretary which includes, but is not limited to:

(a) Details of how the operational noise management measures recommended in the report titled 'Barangaroo – Cutaway Cultural Facility Noise and Vibration Impact Assessment' prepared by ARUP and dated 26 January 2023 (as amended by conditions of this consent) have been incorporated into the design

(b) Compliance with all other operational conditions of this consent, hours of operation, noise and security management

(c) Mitigation measures to manage operational noise impacts, including from events, bump in and out activities, use of the loading dock, and patrons entering and exiting the venue

(d) Provide a definitive list of streets for which residents and businesses whom occupy the adjacent land will be notified prior to any Major Event, New Years Event or Single Day Medium Event

(e) A community notification and complaints handling procedure.

8.2 Table of D28 Conditions Required in ONMP

The following table lists all conditions (a–p) under SSD Condition D28 that must be addressed in the Events and Operations Management Plan.

Condition Reference	Description	ONMP location reference
(a)	Details of how the operational noise management measures recommended in the report titled 'Barangaroo – Cutaway Cultural Facility Noise and Vibration Impact Assessment' prepared by ARUP and dated 26 January 2023 (as amended by conditions of this consent) have been incorporated into the design	Page 7-8
(b)	Compliance with all other operational conditions of this consent, hours of operation, noise and security management	Page 8-12
(c)	Mitigation measures to manage operational noise impacts, including from events, bump in and out activities, use of the loading dock, and patrons entering and exiting the venue	Page 12-16
(d)	Provide a definitive list of streets for which residents and businesses whom occupy the adjacent land will be notified prior to any Major Event, New Years Event or Single Day Medium Event	Page 16-18
(e)	A community notification and complaints handling procedure.	Page 19-20

8.3 Glazed Skylight Model

Table 28: Modelled glazed skylight section transmission loss

Transmission loss[1]	**Octave Band Centre Frequency, Hz, dB**								
	31	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
512m^2 area glazed skylight section: • 18mm toughened glass • 233mm cavity with independent frames • 12mm Stadip silent acoustic laminate glass	-25	-35	-42	-51	-61	-69	-77	-87	-87

Note:

1. Assumed transmission loss based on test data from BRE Acoustics

8.4 Predicted Noise Levels

Event period	Activity type	Para-meter	Indicative internal patron & music noise level[1], $dBL_{eq(10min)}$	Predicted noise level at worst affected receivers[2], $dBL_{eq(10min)}$	*Criteria, $dBL_{eq(10min)}$*	Complies
Major Events						
Day / Evening	Concert main act	dBA	105	50	*65*	Yes
		dBC	114	75	*75*	Yes
Shoulder	Amplified live band	dBA	95	40	*55*	Yes
		dBC	104	65	*65*	Yes
New years period						
New years eve	Concert main act	dBA	105	50	*65*	Yes
		dBC	114	75	*75*	Yes
New years day	Amplified live band	dBA	95	40	*55*	Yes
		dBC	104	65	*65*	Yes
Medium Events Single Day						
Day / Evening	Amplified live band	dBA	95	40	*55*	Yes
		dBC	104	65	*65*	Yes
Medium Events 5 Hour Duration						
Day / Evening	Amplified live band	dBA	95	40	*55*	Yes
		dBC	104	65	*65*	Yes
Night	Cocktail party music	dBA	90	35	*50*	Yes
		dBC	99	60	*60*	Yes
Outside of nominated event times[3]						
Day	Crowd socialising with background music	dBA	90	23	*56*	Yes
		dBC	93	49	*71*	Yes
Evening		dBA	90	23	*48*	Yes

Event period	Activity type	Para-meter	Indicative internal patron & music noise level[1], $dBL_{eq(10min)}$	Predicted noise level at worst affected receivers[2], $dBL_{eq(10min)}$	*Criteria, $dBL_{eq(10min)}$*	Complies
	Crowd socialising with background music	dBC	93	49	*63*	Yes
Night	Crowd socialising with background music	dBA	90	23	*43*	Yes
		dBC	93	49	*58*	Yes

Note:

1. Internal noise levels are indicative and based on the transmission loss of the glazed skylight in Table 28. Noise levels have been modelled as sound pressure levels directly beneath glazed skylight sections. Modelled spectra are presented in Table 27.
2. Worst affected receivers are identified as those along Merriman Street, overlooking the glazed skylight sections.
3. In accordance with the NPfI [1], criteria apply as $dBL_{Aeq(15mins)}$

8.5 Community Notification Distribution

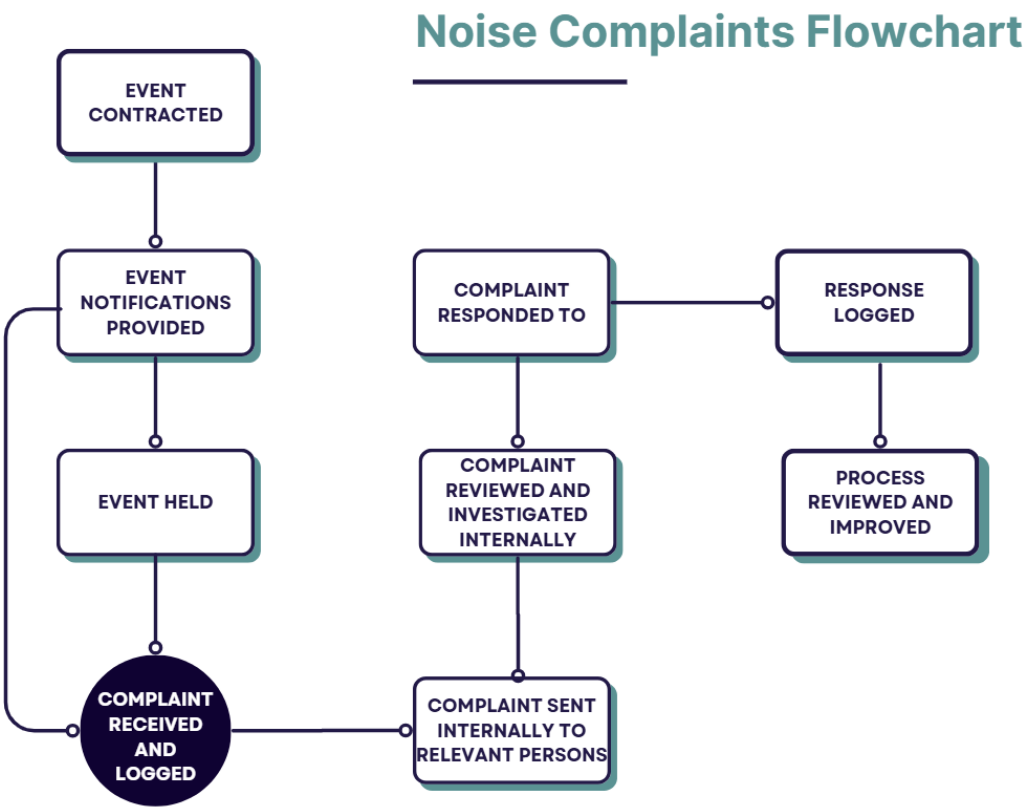
In line with the requirements of this plan and the EOMP, notifications will be distributed to properties within the below distribution area (subject to ongoing review).

Streets in this area include:

- Hickson Road from Argyle Place to Towns Place
- High Street from Argyle Place to Lance Place
- Argyle and Lance Lane
- Argyle Place from Dalgety Road to Kent Street
- Windmill Street from Dalgety Road to Kent Street
- Dalgety Road
- Bettington Street
- Rhodens Ln
- Merriman Street
- Towns Place

The notification will also be available online on the Cutaway website and provided to community organisations and strata committees in electronic form.

8.6 Complaint Management Flowchart



8.7 The Cutaway SSDA Conditions of Consent (E57 – E64)

	SURVEILLANCE CAMERAS
E57	CCTV surveillance cameras must be strategically installed, operated and maintained throughout the premises with particular coverage to: (a) principal entrance/s and exits; (b) all areas within the premise occupied by the public (excluding toilets); (c) staircases in multilevel premises; and (d) the area within a 10m radius external to the public entrance(s) to the premise
E58	Suitable and clearly visible signage must be displayed at the principal entrance(s) to the premise and in a prominent position on each floor accessible to the public, in lettering not less than 50mm in height with the words "Closed Circuit Television in use on these premises".
E59	All CCTV recording equipment and cameras must be of high grade digital quality capable of establishing the population and identification of patrons, offenders and incidents within the depth of field view of the cameras. In this respect each surveillance camera must be capable of recording a minimum rate of 10 frames per second and at high resolution.
E60	CCTV recording discs or hard drive recordings must be retained for 28 days before being re-used, destroyed or deleted. Time and date must be auto recorded on the disc or hard drive. The CCTV recording equipment must be capable of reproducing a CD, DVD, USB or other appropriate digital copy of recorded footage on demand of PMNSW or Police Officers either immediately or within 12 hours of the request being made. Stored digital copies of CCTV recordings must be handed to Council, Police Officer or Special Inspectors as required.
E61	All CCTV recording devices and cameras must be checked daily to ensure the equipment is operating correctly. The Licensee must record this daily checking activity in the security/incident register book that meets the standards required by the Licensing Police and PMNSW. If it is discovered at any time that the equipment is not in full operating order all reasonable steps must be taken to repair the system as soon as practicable. Where the system will not be functioning in full operating order for a period of longer than 24 hours the manager/licensee is to notify the relevant Local Area Commander of the NSW Police.
E62	All CCTV recording devices and cameras must be operated at all times when the premises are open to the public and, where premises do not operate 24 hours a day, continuously for at least 1 hour prior to opening and closing times of the premises.
E63	The CCTV recording device must be secured within the premises and only be accessible to senior management personnel so as to maintain the integrity of the recorded footage. When the premises is operating there must be at least one staff member present at the premises who is authorised to access the CCTV system and able to immediately review recordings and produce copies.
E64	Camera views are not to be obstructed by temporary or permanent structures, signage or other impediments.

8.8 303367_AC30 v1 Cutaway Noise Verification Report

ARUP

By email
21 January 2025

Our ref 303367
File ref AC30

‘The Cutaway’ - 1 Merriman St, Barangaroo, Sydney

Acoustic Compliance Measurements

Arup was engaged by FDC to undertake an acoustic assessment of operational noise emissions from ‘The Cutaway’ to external receivers at 1 Merriman St, Barangaroo, Sydney, Australia.

Noise monitoring of building services and event noise emissions was undertaken to determine compliance with noise emission criteria.

1. Qualification

This letter has been prepared by Mathew Simon of Arup, a suitably qualified acoustic engineer and a member of the Association of Australian Acoustical Consultants and the Australian Acoustical Society (Member ID M1238).

2. Requirements

This letter has been prepared to address relevant SSD 47498458 (22 December 2023) Conditions of Consent Clause D23, reproduced below:

> ***Acoustic Verification Report***
>
> *D23.*
>
> *Prior to the occupation or commencement of use, the Applicant must submit a written Acoustic Verification Report, prepared by a Suitably Qualified Acoustic Consultant, to the satisfaction of the Certifier that the noise mitigation recommendations in the report titled ‘Barangaroo – Cutaway Cultural Facility Noise and Vibration Impact Assessment’ prepared by ARUP and dated 26 January 2023 (as amended by conditions of this consent) have been incorporated into the design to ensure the development will not exceed the recommended operational noise levels.*
>
> *All physical aspects of the building’s structure installed to meet the performance parameters must be maintained at all times.*

As the construction of the development is complete, noise measurements were undertaken to determine operational noise emission levels and verify compliance with established criteria. It follows that required treatment and physical aspects of the building’s structure have been installed to meet performance parameters.

2.1 Event noise emissions

Event noise emissions will vary both between events and throughout events, largely dependent on amplified music levels. As these amplified levels will be controlled by event organisers and sound technicians, event noise emissions will be addressed in the Operational Noise Management Plan required for the Cutaway.

This report presents findings of measurements conducted to determine the performance of the building envelope and confirm its adequacy to mitigate indicative internal event noise levels to meet external criteria.

2.2 Mechanical noise emissions

Noise criteria for commercial plant, namely mechanical building services, is outlined in Clause E20 and E21 of SSD 47498458, reproduced below:

> ***NOISE – COMMERCIAL PLANT / INDUSTRIAL DEVELOPMENT***
>
> *E20. Noise from commercial plant must not exceed a project amenity/intrusiveness noise level or maximum noise level in accordance with relevant requirements of the NSW EPA Noise Policy for Industry 2017 (NPfI). Further:*
>
> > *(a) background noise monitoring must be carried out in accordance with the long-term methodology in Fact Sheet B of the NPfI*
> >
> > *(b) commercial plant is limited to heating, ventilation, air conditioning, refrigeration and energy generation equipment.*
>
> *E21. An $L_{Aeq,15\ minute}$ (noise level) emitted from the commercial plant associated with the development must not exceed the $L_{A90,\ 15\ minute}$ (background noise level) by more than 3dB when assessed inside any habitable room of any affected residence or noise sensitive commercial premises at any time. Further:*
>
> > *(a) the noise level and the background noise level must both be measured with all external doors and windows of the affected residence closed.*
> >
> > *(b) background noise measurements must not include noise from the development but may include noise from necessary ventilation at the affected premise.*
> >
> > *Note: Corrections in Fact Sheet C of the NPfI are applicable to relevant noise from the development measured in accordance with this condition, however duration corrections are excluded from commercial noise.*

2.2.1 Condition E20

All mechanical services plant noise emissions are assessed against NPfI Project Noise Trigger Levels (PNTLs) established in the Noise and Vibration Impact Assessment[1], which represent the more stringent of the project amenity or intrusiveness criteria.

The PNTLs are presented in Table 1:

Table 1: Condition E20 plant noise emission criteria – NPfI Project Noise Trigger Levels

Receiver	PNTLs, $dBL_{Aeq(15minute)}$		
	Day	Evening	Night
Residential			
Residential receivers	*56*	*48*	*43*

[1] 289692 ACD02 v5 Cutaway NVIA, Arup (26 January 2023)

Receiver	PNTLs, dBL$_{Aeq(15minute)}$		
	Day	Evening	Night
Hotel			
H1 – Hotel Palisade	*63*	*53*	*48*
Commercial receivers			
C1 - Blythe & Co	*63 – when in use*		
Passive recreation			
P1 – Barangaroo Reserve	*48 – when in use*		

1. Note: The NPfI defines day, evening and night-time period as follows:

D - Day: the period from 7 am to 6 pm Monday to Saturday; or 8 am to 6 pm on Sundays and Public Holidays.

E - Evening: the period from 6 pm to 10 pm, Monday to Sunday & Public Holidays.

N - Night: from 10 pm to 7 am, Monday to Saturday, or 10 pm to 8 am on Sunday & Public Holidays.

Sleep disturbance

The NSW NPfI recommends the following screening criteria for the assessment of potential sleep disturbance, for the period between 10 pm and 7 am:

- *$L_{Aeq,15min}$ 40 dBA or the prevailing RBL plus 5 dB, whichever is the greater; and/or*
- *L_{AFmax} 52 dBA or the prevailing RBL plus 15 dB, whichever is the greater.*

L_{Amax} sleep disturbance criteria based on RBL + 15 dB have been adopted.

2.2.2 Condition E21

In addition to the above, Condition E21 states noise emissions must not exceed the $L_{A90,\ 15\ minute}$ (background noise level) by more than 3dB. The background noise level or rating background level (RBL) representing the day, evening and night-time assessment periods as defined in the Noise Policy for Industry (NPfI) (NSW Environment Protection Authority, 2017).

External plant noise emissions would be attenuated by a residential or commercial building envelope an equivalent amount to external background noise levels in the area. Cutaway plant noise has therefore been assessed at the nearest residential and commercial external property boundaries which are considered to demonstrates compliance with internal criteria. This represents a conservative assessment, as internal background noise levels within a residence or commercial premise may be controlled by the premise's own building services, thereby increasing the relative criteria.

Table 2 presents the RBLs for the day, evening and night period in accordance with the NPfI (NSW Environment Protection Authority, 2017).

Table 2: Condition E21 plant noise emission criteria – background noise levels and criteria

Measurement location	Rating Background Level, dBL$_{A90}$			Plant noise emission criteria, dBL$_{Aeq(15min)}$		
	Day	Evening	Night	Day	Evening	Night
Any habitable room of any affected residence or noise sensitive commercial premises	51	50	42	54	53	45

Measurement location	Rating Background Level, dBL_{A90}			Plant noise emission criteria, $dBL_{Aeq(15min)}$		
	Day	Evening	Night	Day	Evening	Night

Notes:

1. Day is defined as 7:00 am to 6:00 pm, Monday to Sunday & Public Holidays.
Evening is defined as 6:00 pm to 10:00 pm, Monday to Sunday & Public Holidays.
Night is defined as 10:00 pm to 7:00 am, Monday to Sunday & Public Holidays.

As these criteria are less stringent than NPfI criteria, assessment to Table 1 criteria is considered to demonstrate compliance overall.

2.3 Event noise emission criteria

A summary of proposed patron and music noise limits during nominated event times is provided in Table 3.

Table 3: Event noise limits for residential and commercial receivers

Period	Time	Criteria	
		$dBL_{Aeq(10min)}$	$dBL_{Ceq(10min)}$
Major Events[1] – Max 4 per year			
Day / Evening	10am to 10pm	65	75
Shoulder (early morn and late night)	7am to 10am, 10pm to 11pm	55	65
New year's period[1] – Max 1 per year			
New year's eve	10pm to midnight	65	75
New year's day	Midnight to 2am	55	65
Single Day Medium Events[2] - Max 6 per year			
Day / Evening	10am to 10pm	55	65
5 Hour Duration Medium Events[3] - Max 15 per year			
Day / Evening	10am to 10pm	55	65
Night	10pm to 11pm	50	60
Outside of nominated event times[4] – in accordance with NPfI			

Notes:

1. Major Events and New Years Period previously termed 'Category 1' events in D/2015/938/A
2. Single Day Medium Events previously termed 'Category 2' events in D/2015/938/A
3. 5 hours duration Medium Events previously termed 'Category 4' events in D/2015/938/A
4. Previous 'Category 3' events will be assessed in accordance with the NPfI (NSW Environment Protection Authority, 2017)

3. Receivers

Table 4 and Figure 1 show the representative assessment locations used. Figure 1 also shows proximity of relevant source locations to receivers.

Table 4: Monitoring locations for nearby sensitive receivers

Receiver type	ID	Address [Assessment Type]
Residential	R1	14 Merriman Street, Millers Point [Mechanical Noise]
	R2	42 Merriman Street, Millers Point [Event Noise]
	R3	27 Bettington Street, Millers Point [Mechanical/Event Noise]
Hotel	H1	Hotel Palisade, 35 Bettington Street, Millers Point [Event Noise]
Commercial	C1	'Blythe & Co.', 1 Munn St, Millers Point [Event Noise]
Recreation (Passive)	P1	Clyne Reserve, 2 Merriman Street, Millers Point [Mechanical Noise]
	P2	Stargazer Lawn (South), Barangaroo Reserve, Hickson Road [Mechanical Noise]

Figure 1: Nearest receivers and noise sources

4. Mechanical noise emission testing

A site visit was conducted on Thursday 8 January 2026 to undertake noise measurements to quantify mechanical noise emissions and determine compliance with criteria outlined in the NVIA.

Measurements were conducted for day, evening, and night-time NPfI periods.

4.1 Instrumentation

A Brüel & Kjær 2250 (S/N 3029878) sound level meter was used to conduct all measurements.

This meter complies with AS IEC 61672.1 2004 "Electroacoustics – Sound Level Meters" and is designated Class 1, suitable for field use. All measurement equipment used holds a current accredited laboratory certification certificate. The equipment was checked for calibration before and after measurements were taken, with no significant drift observed.

4.2 Measurement details

Short-term attended noise monitoring was conducted to quantify steady-state mechanical noise levels at nearest receiver locations. L_{90} noise levels were used to represent plant noise contributions as L_{90} levels better represent steady-state characteristics and are less susceptible to the influence of fluctuating extraneous noise such as pedestrians, harbour traffic or wind blowing trees. Plant noise was not audible during any measurements, described in Table 5.

Daytime measurements were conducted over two minute periods largely to qualify noise sources and confirm plant noise was inaudible.

Evening and night-time measurements were conducted over five-minute periods deemed sufficient to quantify mechanical noise, and to minimise effects of extraneous noise. These were the primary focus as form the assessment against most onerous residential criteria. Skies were generally clear though there was moderate wind during the evening and night-time periods of the short-term monitoring.

Table 5: Short-term monitoring results and noise environment description

Measurement location	Start-time (8 Jan 2026)	Measured noise level, dB(A)		Plant operation	Description of noise environment
		L_{A90}	L_{Aeq}		
R1 - 14 Merriman Street, Millers Point	[Day] 10:01am	*44*[1]	*47*[1]	On	**Plant noise inaudible.** Measurement affected by noise environment on Stargazer lawn – sprinklers active, some talking from Sydney Festival ceremony. Some general urban hum from harbour environment.
	[Evening] 9:45pm	48	53	On	**Plant noise inaudible.** Measurement affected by wind noise. Background noise level controlled by wind in trees.
	[Night] 10:00pm	48	52	On	**Plant noise inaudible.** Measurement affected by wind noise. Background noise level controlled by wind in trees.
	[Night] 10:32pm	48	52	Off	**Plant noise inaudible.** Measurement affected by wind noise. Background noise level controlled by wind in trees.
R2 - 27 Bettington Street, Millers Point	[Day]10:39am	*50*[1]	*52*[1]	On	**Plant noise inaudible.** Measurement dominated by urban hum from harbour bridge and city (Barangaroo direction). Distant Barangaroo station audible.

Measurement location	Start-time (8 Jan 2026)	Measured noise level, dB(A)		Plant operation	Description of noise environment
		L_{A90}	L_{Aeq}		
	[Evening] 9:52pm	50	53	On	**Plant noise inaudible.** Measurement affected by wind noise. Distant noise from pedestrians, harbour bridge traffic, general noise from harbour.
	[Night] 10:10pm	48	51	On	**Plant noise inaudible.** Measurement affected by wind noise. Some distant noise from pedestrians, harbour bridge traffic, general noise from harbour. Wind controlling background level.
	[Night] 10:22pm	49	53	Off	**Plant noise inaudible.** Measurement affected by wind noise. Some distant noise from pedestrians, harbour bridge traffic, general noise from harbour. Wind controlling background level.
P1 – Clyne Reserve	[Day]10:08am	*47*[1]	*50*[1]		Noise environment characterised by park ambience – bird noises, sprinklers, distant aircraft and traffic. Mech emissions barely audible from plantroom louvre.
P2 - Stargazer Lawn (South)	[Day]10:30am	*50*[1]	*54*[1]	On	**Plant noise inaudible.** Noise environment controlled by distant air traffic and insects, urban hum from harbour and city surrounds, conversations in park.

Notes:

1. Multiple measurements were undertaken to capture a short duration (~2min) less affected by subjectively extraneous noise sources around the Barangaroo Reserve in the daytime.

4.3 Results

A summary of the nearest affected receiver noise levels at the assessment locations during the night period when extraneous noise was minimised is presented in Table 6 below.

Table 6: Mechanical noise emission levels

Measurement location	Noise criteria, $L_{eq(15min)}$ dBA	Measured level, L_{90} dB(A)		Comment	Plant contribution, dBA	Compliant
		Plant fully operational	Plant off			
	Normal operations					
R1 - 14 Merriman Street	43 [Night]	48 – plant inaudible	48 – no decrease	Plant inaudible when operational. No decrease in noise level when turned off, indicating plant contribution is more than 10dB below measured levels.	<38	Compliant
R2 – 27 Bettington Street	43 [Night]	48 – plant inaudible	49 – slight increase as noise levels controlled by wind		<38	Compliant

Measurements during the most sensitive night time period show plant noise contributions were no more than 38dBA when fully operational, which are considered to represent fully operational noise emissions throughout the day.

Noise emissions during the day and evening are therefore considered to be compliant with less onerous criteria, supported by their inaudibility during these periods.

Compliance at the nearest residential receivers are considered to demonstrate compliance at other surrounding receivers which are further from plant locations, or have less onerous criteria.

As plant noise emissions are characterised as constant, there is no significant risk of exceedance of sleep disturbance criteria as L_{max} levels would be similar to both L_{90} and L_{eq} noise emissions.

5. Event noise emission testing

Noise emissions from the Event Hall and Prefunction Space were measured at the nearest receivers to each space, identified as residences on Merriman Street for the Event Hall and 'Blythe & Co.' at 1 Munn St and the Palisade Hotel at 35 Bettington St, for the Prefunction. Measurements were made on December 1 2025.

5.1 Instrumentation

The sound level meters used to conduct attended surveys were a Bruel & Kjaer 2270 (Serial Number 2754328) and Bruel & Kjaer 2250 (Serial Number 2449851).

All the acoustic instrumentation employed during the noise measurements comply with the requirements of "*AS IEC 61672.1-2004 Electroacoustics – Sound level meters – Specifications*" and was calibrated prior to and after the monitoring session with a drift in calibration not exceeding ± 0.5 dB.

All instruments used were within their current National Association of Testing Authorities, Australia (NATA) certified in-calibration period (i.e. calibration in the last 2 years).

5.2 Measurement details

Measurements were conducted from 7:45pm to minimise extraneous noise influence, however periods during measurements were controlled by background noise sources including marine vessels on the harbour. Measurements were conducted over a period of two minutes each, considered to adequately represent the constant pink noise source.

Pink noise was played at levels in Table 7 in both spaces. Levels were generally considered to be representative of target event noise levels within both spaces.

Table 7: Internal event noise levels

Space	Item	Sound pressure level in octave band, dB $L_{eq,10min}$								
		31.5	63	125	250	500	1k	2k	4k	8k
Event Hall	***Event noise level target***	***108***	***113***	***101***	***98***	***98***	***98***	***98***	***98***	***98***
	Measured level during testing (pink noise)	110	115	108	102	103	100	95	94	94
Pre-function space	***Event noise level target***	***98***	***103***	***91***	***88***	***88***	***88***	***88***	***88***	***88***
	Measured level during testing	95	102	101	97	94	90	86	84	81

5.3 Results

Measured event noise emission levels are presented in Table 8 against relevant criteria.

Table 8: Event noise emission levels

Item	Location	Noise level		Comments
		$dBL_{Aeq(10min)}$	$dBL_{Ceq(10min)}$	
Event Hall				
'Major Event' noise emission criteria	***Applies at nearest residential and commercial receivers***	***65***	***75***	

Item	Location	Noise level		Comments
		$dBL_{Aeq(10min)}$	$dBL_{Ceq(10min)}$	
Measured noise level – pink noise	R3 - 42 Merriman Street	53	68	Event Hall pink noise was barely noticeable at nearest residences. **Compliant with criteria**
Measured noise level – background		50	64	Noise sources included harbour noise including marine vessels with significant low-frequency noise content, city 'hum' and natural surrounds.
Measured noise level - music	R2 -27 Bettington Street	54	69	Inaudible. **Compliant with criteria**
Measured noise level – pink noise		52	70	Inaudible. **Compliant with criteria**
Measured noise level – background		50	64	Noise sources included harbour noise including marine vessels with significant low-frequency noise content, city 'hum' and natural surrounds.
Prefunction				
'Major Event' noise emission criteria	***Applies at nearest residential and commercial receivers***	***65***	***75***	
Measured noise level – pink noise	C1 - 'Blythe & Co.', 1 Munn Street	57	71	Event Hall pink noise was barely noticeable. Harbour noise and construction works noted during measurements. **Compliant with criteria**
Measured noise level – pink noise	H1 - Palisade Hotel, 35 Bettington St	52	65	Inaudible. **Compliant with criteria**

Tabel 7 demonstrates compliance with Major Event criteria when highest anticipated internal event noise levels were taking place. For other event noise categories, noise emissions will be managed by controlling amplified noise within the venue. This report demonstrates the performance of the building envelope is adequate to control noise emissions provided internal operational noise limits are included in the Operational Noise Management Plan, as required by Consent Conditions.

6. Conclusion

Measurements have been undertaken for Cutaway operational noise emissions and these were used to verify compliance with criteria for mechanical and event noise emissions.

Compliance with the SSDA conditions is considered to be demonstrated under both normal mechanical and major event scenarios.

Yours sincerely

Mathew Simon
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