



PCU021113

urbis

23 March 2011

Mr Michael Buckley
Department of Planning
GPO Box 39
SYDNEY NSW 2001



Dear Michael,

Section 75W Modification to MP 09_0044

Park Hyatt Hotel, The Rocks

1 Introduction

This letter accompanies a request to modify Major Project No. 09_0044 pursuant to Section 75W of the Environmental Planning and Assessment Act, 1979 (the Act). The proposed modification relates to *Condition D1 Hours of Construction* in which the proponent is seeking to extend the hours outlined in Condition D1 to facilitate the efficient and timely delivery of the project.

This letter provides:

- A brief background to the existing development
- A summary of the existing development and site context
- Details of the proposed modification
- An Environmental Assessment and justification for the proposed modifications.

The application is accompanied by a Construction Noise & Vibration Assessment Report by Acoustic Studio.

In summary, the proposed modification seeks an amendment to Condition D1 to allow "quiet", internal works beyond the approved construction hours from Monday to Saturday in a second work shift during the evening and overnight period.

The nature of these "quiet", internal works range from:

- Preloading for Floors from basement to the work faces on each level via the internal lifts. This is to facilitate efficiency during the day shift and ensure the narrow corridors are not blocked during the day shift with horizontal materials handling.
- Trade works - No external works are proposed and the trade work undertaken is proposed to be associated with internal refurbishment. This includes new internal partitioning, joinery, fixtures, fittings and finishes within the envelope of the existing building. The service trades would relate to carpentry, plasterboard setting, painting and tiling.

- Internal strip out entailing dismantling / stacking / relocation of items such as doors / panels, carpet removal etc.
- The evening shift will not involve loading out of materials or truck deliveries.

2 Background

On 3rd March 2011, Major Project (MP 09_0044) for alterations and additions to, and the refurbishment of the existing hotel was approved. The development approved under MP00_0044 is summarised as follows:

"Refurbishment to Park Hyatt Hotel including:

- *New roof top level, including executive suites;*
- *Reconfiguration of roof top pool terrace area*
- *New stair access to promenade*
- *Internal and external works, including reconfiguration of internal layout and porte cochere and room refurbishment;*
- *Signage."*

3 The Site and Context

3.1 REGIONAL CONTEXT

The site is situated within the City of Sydney LGA and is located within the historic 'Rocks' precinct of Sydney Cove. The 'Rocks' has international tourism recognition and is a major tourism draw card for Sydney in both the international and domestic tourism markets.

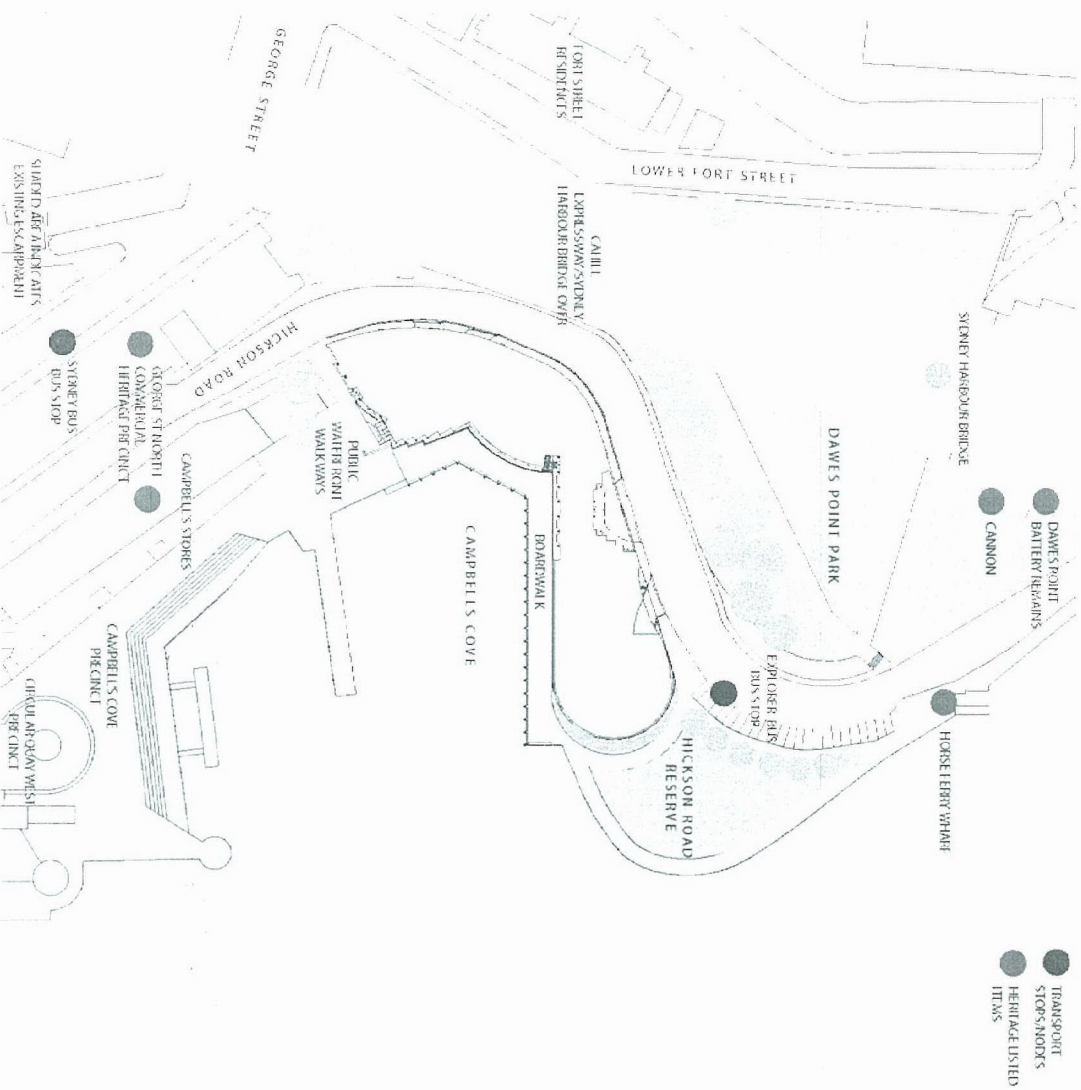
The Park Hyatt Sydney is recognised as Sydney's leading hotel on the basis of the standard of facilities the hotel offers, the unrivalled waterfront location and the unsurpassed views of Sydney Harbour.

Importantly, the Park Hyatt Sydney not only has regional significance within the Sydney context, but is viewed as an important asset in ensuring that Sydney as a whole retains its status as a major destination and gateway into Australia. The Hotel plays a major role in providing world class accommodation and facilities that enhance the image of Sydney, NSW and Australia as a whole.

3.2 LOCAL CONTEXT AND SURROUNDING PROPERTIES

The site is relatively isolated from adjacent developments, being bound by Hickson Road and the Sydney Harbour Bridge to the west and Dawes Point Park to the north. The site directly abuts the waterfront promenade that extends along the western edge of Sydney Cove, providing pedestrian access from Dawes Point to Circular Quay. Please refer to Local Context Plan at Figure 1.

FIGURE 1 – LOCAL CONTEXT PLAN



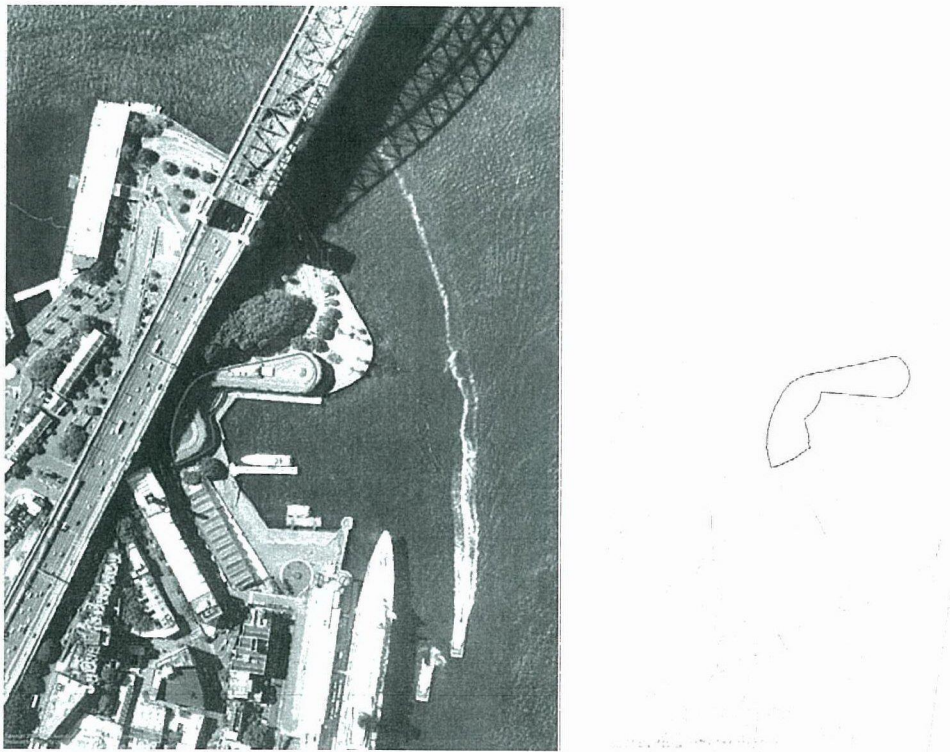
The principal features of the local context include:

- To the north is Dawes Point Park, a small recreational open space area that forms the focal space below the southern portion of the Sydney Harbour Bridge.
- To the east a public promenade abuts Sydney Harbour, providing connections between Dawes Point Park and Circular Quay.
- To the south of the site is Campbell's Storehouse. The ground floor of the building is used for the purpose of restaurants fronting the promenade. The building has significant heritage value and is a heritage listed item.
- The western boundary of Hickson Road is formed by a high concrete wall associated with the Bradfield Highway and the Sydney Harbour Bridge.

3.3 SUBJECT SITE

The Park Hyatt Sydney is located at 7 Hickson Road, The Rocks, as illustrated in the aerial photo and locality plan at Figure 2. The subject site is legally described as Lot 2 in DP 804776. It is an irregular shaped allotment with a frontage to Hickson Road of 174 metres and a total site area of 4,592 square metres. The curvilinear configuration of the site has dictated the serpentine building footprint of the existing hotel which follows the northern curvature of Campbells Cove.

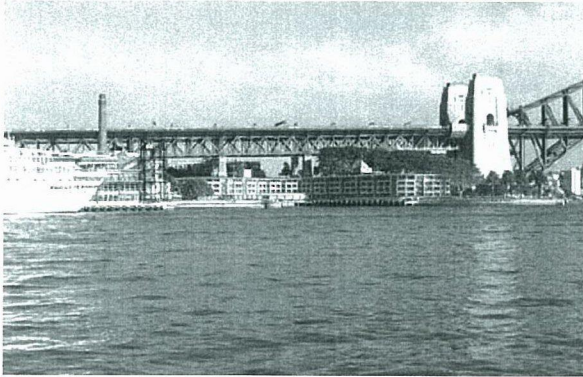
FIGURE 2 – AERIAL PHOTO AND LOCALITY PLAN



The development of the site was the result of a competition for architectural design and for land tenure in 1986, and culminated in a 4 storey international hotel with 158 rooms (Figure 3). The hotel includes restaurants, bars, recreational facilities, parking and service facilities.

The site is owned by the Sydney Harbour Foreshore Authority (SHFA) with a 99 year leasehold in operation.

FIGURE 3 – SITE CONTEXT PHOTOS



PICTURE 1 – VIEW OF SITE FROM EAST CIRCULAR QUAY

PICTURE 2 – VIEW OF SITE FROM CIRCULAR QUAY ON
SYDNEY HARBOUR

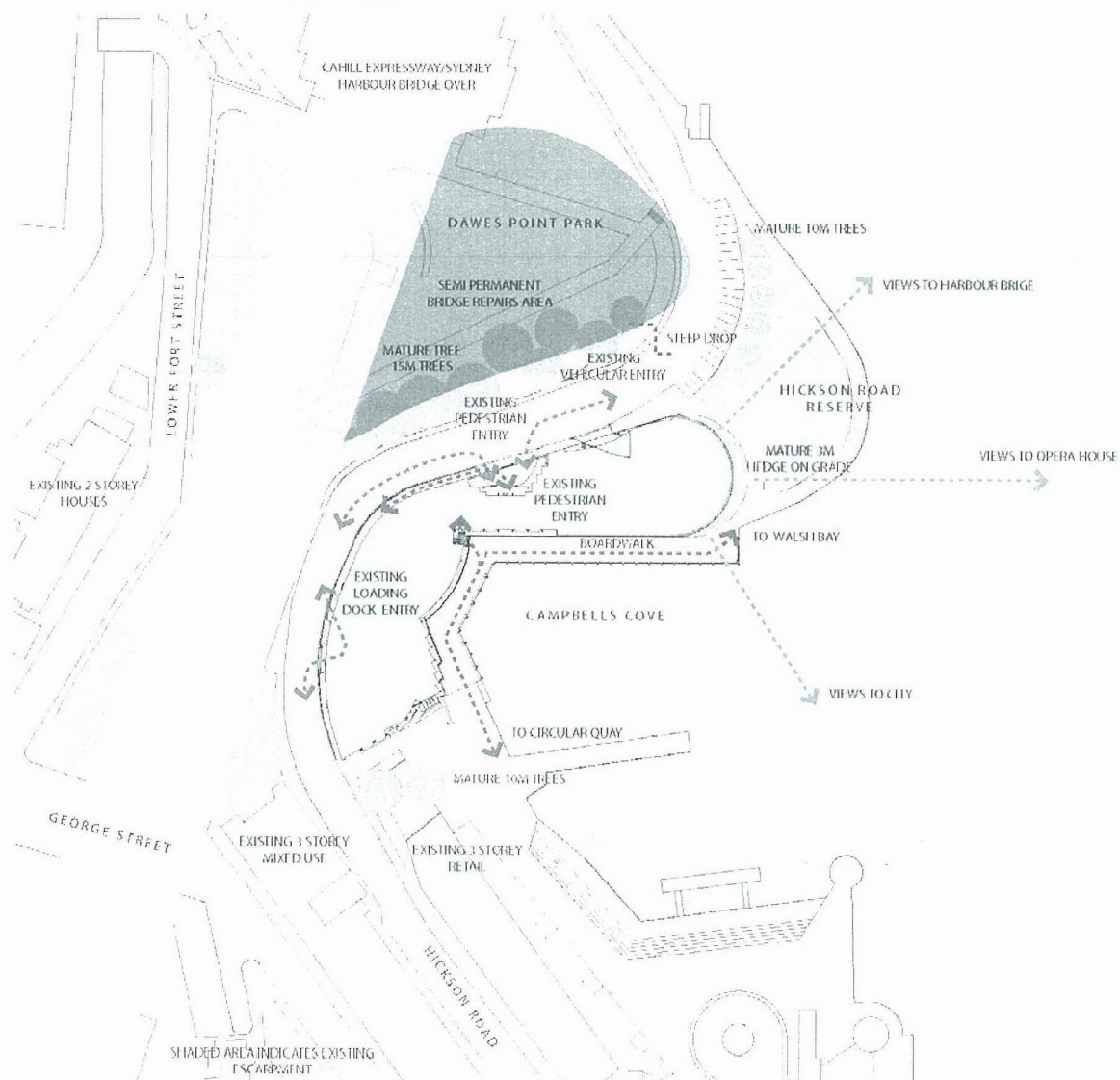


PICTURE 3 – VIEW OF SITE FROM THE SOUTH ALONG
PUBLIC PROMENADE



PICTURE 4 – VIEW OF SITE FROM THE NORTH ALONG
HICKSON ROAD

FIGURE 4 – SITE ANALYSIS PLAN



4 Proposed Modifications

The purpose of the proposed hours of construction is to enable an efficient and timely delivery of the project. This will entail two work shifts over a 24 hour period from Monday to Saturday 3pm, with working resuming at 7am Monday. The second work shift, occurring during the evening and overnight period will be limited to “quiet”, internal works as described in Section 1.

To facilitate the proposed extension to construction hours, the Project Approval will require:

- Amendment to Condition D1 relating to the proposed construction hours; and

4.1 AMENDMENT TO CONDITION D1 – HOURS OF CONSTRUCTION

The proposed modification detailed above will result in rewording to Condition D1. Condition D1 currently reads as follows:

“D1 Hours of Construction

The hours of construction and work on the proposed development shall be as follows:

(a) All work, including demolition and building work in connection with the proposed development must only be carried out between the hours of:

- *7.00am and 7.00pm on Mondays to Fridays, inclusive;*
- *8.00am and 3pm on Saturdays; and*
- *No work must be carried out on Sundays or public holidays.*

Work may be undertaken outside these hours only where:

- *the delivery of materials is required outside these hours by the Police or other authorities, or*
- *works are required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm, or*
- *written approval is obtained from Sydney Harbour Foreshore Authority's Planning Assessment Manager prior to carrying out the work and tenants likely to be affected are notified of the timing, nature and duration of the work at least 24 hours prior to commencement.”*

The proposed modified Condition D1 would read as follows:

“D1 Hours of Construction

The hours of construction and work on the proposed development shall be as follows:

(a) All work, including demolition and building work in connection with the proposed development is to be carried out between the hours of:

- 7.00am and 7.00pm on Mondays to Fridays, inclusive;
- 8.00am and 3pm on Saturdays; and
- No work must be carried out on Sundays or public holidays.

Work may be undertaken outside these hours only where:

- *The works are limited to “quiet” works as defined below;*
- *the delivery of materials is required outside these hours by the Police or other authorities, or*
- *works are required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm, or*
- *written approval is obtained from Sydney Harbour Foreshore Authority’s Planning Assessment Manager prior to carrying out the work and tenants likely to be affected are notified of the timing, nature and duration of the work at least 24 hours prior to commencement.*

“Quiet” works are those associated with internal refurbishment, including:

- *the construction of new internal partitions, joinery, fixtures, fittings and finishes within the envelope of the existing building entailing the services trades of carpentry, plasterboard setting, painting and tiling.*
- *strip out works involving dismantling / stacking / relocation of items such as doors / panels, carpet removal etc.*
- *Preloading for floors from basement to the work faces on each level via the internal lifts.*
- *No external works and no loading out of materials is included in quiet works.”*

5 Statutory Context

5.1 PART 3A OF THE ENVIRONMENTAL PLANNING & ASSESSMENT ACT

Part 3A of the EP&A Act relates to projects that are identified in a State Environmental Planning Policy (SEPP) or are considered by the Minister to have State or Regional Significance.

On 9 March 2009, the Director General, as delegate to the Minister for Planning declared the proposal to be Major Project under the terms of SEPP (Major Projects) 2005. The Minister approved Major Project application (MP 09_0044) on 3rd of March 2011.

5.2 SECTION 75W MODIFICATION OF PROJECT APPROVAL

Section 75W of the Environmental Planning and Assessment Act 1979 allows the proponent to request the Minister to modify approval for a project.

Section 75W also provides for the Director-General to notify the proponent of specific environmental assessment requirements with which the application must comply. For the purposes of assessing this

75W application we have considered the relevant issues raised in the Director General's Environmental Assessment Requirements (DGRs) dated 4 June 2010.

6 Environmental Assessment

The following environmental assessment addresses the relevant matters raised in the DGRs for the project application.

6.1 STATUTORY COMPLIANCE

The proposed modification to the construction hours do not result in any changes to the proposal's compliance with the:

- State Environmental Planning Policy (Major Development) 2005;
- Sydney Cove Redevelopment Authority Scheme;
- Sydney Cove Savings and Transitional Regulations;
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005;
- State Environmental Planning Policy No.55 – Remediation of Land; and
- State Environmental Planning Policy No.64 – Advertising and Signage

6.2 SYDNEY HARBOUR FORESHORES AND WATERWAYS AREA DEVELOPMENT CONTROL PLAN 2005

The consent authority is to have regard to the Sydney Harbour Foreshores And Waterways Area Development Control Plan 2005. The proposed hours of construction do not affect the previous assessment of the proposal.

6.3 ACOUSTIC CONSTRUCTION IMPACTS

The attached Construction Noise & Vibration Assessment Report by Acoustic Studio provides an assessment of the potential noise and vibration impacts at nearby receivers relative to the proposed "quiet" works beyond the approved construction hours. The assessment is based upon measured noise environmental noise survey data and environmental noise limits, based on the measured noise levels and the City of Sydney Construction Works Code of Practice for the CBD area.

The Construction Noise & Vibration Assessment Report provides an individual assessment of the range of "quiet" internal works, as detailed in Section 5.3.10.4 of that report relative to nearby residences and businesses.

The closest and most sensitive noise receivers to the site are the terraces along Lower Fort Street. The acoustic impact assessment provides an assessment of the proposed "quiet" construction works during the periods beyond the approved construction hours, that is from 7pm to 7am. The results of the assessment conclude that the proposed works will be well within the maximum noise criteria as defined by the City of Sydney Code of Practice for Construction Site Works. In this regard, there will be no adverse noise impacts to the Lower Fort Street properties as result of the proposed extension to construction hours for "quiet" works.

In respect to other sensitive noise receivers in the area, namely the Wharf Restaurants and Hickson Road Commercial offices; the Kirribilli Water front residences and No. 1 Macquarie Street residences the assessment further concludes that there will be no adverse noise impacts during the 7pm to 7am period.

A review of the potential expected vibration impacts has also been carried out in respect to the proposed quiet works during the proposed extended period. Due to the nature of the works it is expected that the quiet works will not impact on the amenity of nearby residential properties and therefore the proposed modified is considered to be acceptable.

Refer to the attached Construction Noise & Vibration Assessment report by Acoustic Studio for further details.

7 Conclusion

The proposed modification is considered to be acceptable as the proposed "quiet" works to be carried out beyond the current approved construction hours will be within the maximum noise criteria for maintaining acoustical amenity to nearby properties.

The proposal modification does not alter the approved development scheme and relates to a change to approved construction hours and therefore can be determined under the provisions of Section 75W of the EP&A Act.

Based on the above, we recommend the approval of the requested modifications to allow for the timely and efficient delivery of the project.

Yours sincerely,



Audrey Chee
Senior Consultant

List of Enclosures:

- Construction Noise and Vibration Assessment Report by Acoustic Studio

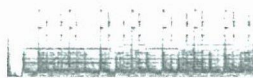
PARK HYATT SYDNEY

REFURBISHMENT PROJECT

Construction Noise & Vibration Assessment for Section 75W Application – Construction Works During Extended Hours

Issued

23 March 2011

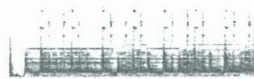


acoustic studio

abn 76 106 325 982
address Unit 27 43-53 Bridge Road Stanmore NSW 2048 Australia
tel (+61) 2 9557 6421
fax (+61) 2 9557 6423
email mail@acousticstudio.com.au

Contact for this Report

Jason Cameron
jason.cameron@acousticstudio.com.au



acoustic studio

abn 76 106 325 982
address Unit 27 43-53 Bridge Road Stanmore NSW 2048 Australia
tel (+61) 2 9557 6421
fax (+61) 2 9557 6423
email mail@acousticstudio.com.au

Proj & Code	Park Hyatt Sydney Refurbishment Project	COF-1830
Doc Title	Construction Noise & Vibration Assessment for Section 75W Application – Construction Work During Extended Hours	
Ref	DAI1728.0007.Rep.110323.doc	
Date	23 March 2011	Revision: Issue 1
Author(s)	Jason Cameron	
Circulation	Organisation	Location
Mamoru Kohda	Daisho Developments Sydney	Sydney
		Delivered Via
		e-mail
Attachment(s)	Appendices as listed in the Table of Contents	

*Acoustic Studio is a member of the
Association of Australian Acoustical Consultants*



*This report takes into account the particular instructions and requirements of our Client.
It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to
any third party.*

Table of Contents

Executive Summary	4
1 Introduction	6
1.1 Approved Construction Hours	6
1.2 Proposed Construction Hours	7
2 Description of Proposal	8
2.1 Site Location	8
3 Acoustic Issues	9
4 Existing Noise Environment	10
4.1 General Survey Information	10
4.2 Monitoring Locations	11
4.3 Long-term Noise Monitoring	11
4.3.1 Park Hyatt Rooftop	11
4.3.2 1 Macquarie Street	12
4.4 Short-term Noise Monitoring	13
4.5 Summary of Noise Monitoring Results	16
5 Construction Noise and Vibration Assessment	17
5.1 Relevant Codes and Standards	17
5.2 Definitions	18
5.3 Construction Noise Assessment	19
5.3.3 Control Elements	19
5.3.4 Working Hours and Site Operational Noise Level Limits	20
5.3.5 Managing Plant and Equipment Noise Levels	21
5.3.6 Monitoring and Reporting	22
5.3.7 Communication and Complaints	23
5.3.8 Safety	24
5.3.9 Non-compliances	24
5.3.10 Site-specific Construction Noise Assessment Results	24
5.4 Construction Vibration Management	35
5.4.11 Control Elements	35
5.4.12 Vibration Surveys	35
5.4.13 Vibration Monitoring	36
5.4.14 Control of Vibration	36
5.4.15 Non-compliances	36
5.4.16 Site-specific Vibration Management Considerations	36
5.4.17 Summary of Expected Vibration Impacts and Vibration Management Strategy	38
Appendices	39
Appendix A: Long-term Monitoring Results	40
Appendix B: General approach to managing construction noise impacts on the community	46
Appendix C: Certificate of Acoustic Performance for Construction Works Appliances	47
Appendix D: Vibration Criteria	48

Executive Summary

A noise and vibration assessment for the construction works associated with the Park Hyatt Refurbishment Project has been undertaken.

The assessment considers the proposed extended hours of construction for quieter works to occur 24 hours per day from Monday to Friday, continuing up to 3pm Saturdays and recommencing at 7am on Mondays.

Long and short-term noise monitoring has been carried out to establish the existing background and ambient noise levels around the site.

The construction noise and vibration assessment establishes the potential impacts of noise and vibration of the proposed construction associated with the project at the nearest sensitive receivers.

Appropriate criteria for both noise and vibration have been discussed and set according to established guidelines and standards.

The predicted equipment noise levels indicate that quieter works can occur for the proposed hours and achieve compliance with the noise criteria at all times at each receiver location.

Therefore, it is expected that there will be no adverse noise impacts as a result of quiet works occurring 24 hours per day from Monday to Friday, continuing up to 3pm Saturdays and recommencing at 7am on Mondays.

The works proposed during the extended construction hours exclude grinding, cutting or drilling of the existing building structures. Therefore, there are no significant potential sources of vibration associated with the works proposed during the extended construction hours.

This, coupled with the need to control vibration levels to avoid structural damage to the existing hotel structure, means that vibration levels from the proposed works are not expected to exceed acceptable limits for human comfort or building damage at adjacent buildings.

Having said this, the Contractor should consider carrying out a review of vibration generated by construction activities. The levels of vibration generated will be site specific and will depend upon the type of activity, the particular equipment used, and the proximity of the construction activity to the sensitive structures and nearest occupied spaces within the affected properties.

A preliminary vibration survey could be adopted, at the Contractors discretion, to determine whether a means of vibration mitigation will be necessary on the site.

To ensure adverse effects are avoided at all receivers, and that damage to the building structure is avoided, monitoring of noise and vibration levels could be carried out. If the noise and vibration criteria are exceeded, the offending activities could be stopped, providing it is safe to do so, and action taken to ensure compliance.

Noise control measures and construction best practices are also presented to minimise noise impacts on the neighbourhood where required.

1 Introduction

Daisho Developments Sydney is proposing refurbishment works for the Park Hyatt Sydney, including:

- New rooftop level, including executive suites
- Reconfiguration of rooftop pool terrace area
- Internal and external works, including reconfiguration of internal layout, porte cochere and room refurbishment
- Signage

A Project Application for the works has been lodged by Daisho Developments Sydney – Application No MP09_0044. Approval has been granted on 3 March 2011.

1.1 Approved Construction Hours

The Project Approval for MP09_0044, dated 3 March 2011, requires, in Condition D1 Hours of Construction, that hours of construction and work on the proposed development shall be as follows:

“All work, including demolition and building work in connection with the proposed development must only be carried out between the hours of:

- *7.00 am and 7.00 pm on Mondays to Fridays, inclusive;*
- *8.00 am – 3.00 pm on Saturdays; and*
- *no work must be carried out on Sundays or public holidays.*

Work may be undertaken outside these hours only where:

- *the delivery of materials is required outside these hours by the Police or other authorities, or*
- *works are required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm, or*
- *written approval is obtained from Sydney Harbour Foreshore Authority’s Planning Assessment Manager prior to carrying out the work and tenants likely to be affected are notified of the timing, nature and duration of the work at least 24 hours prior to commencement.”*

1.2 Proposed Construction Hours

As part of the Section 75W Application, Daisho Developments Sydney is seeking approval for extended hours of construction work – for quieter works to occur outside of the Hours of Construction nominated in Condition D1 of the Project Approval.

The proposed hours of construction for the quieter works are:

- 24 hours per day from Monday to Friday, continuing up to 3pm Saturdays and recommencing at 7am on Mondays

“Quieter” works are generally those associated with the internal refurbishment - including internal strip-out works plus new internal partitioning, joinery, fixtures, fittings and finishes within the envelope of the existing building. They do not include external works nor truck deliveries or removals.

Quieter works include painting, carpet laying, rough-in of services (excluding masonry drilling), fit-off of switches (cordless drills only), carpentry (cordless drills only), tiling (hand mixing only), plumbing works (excluding masonry drilling and oxy-acetylene works), setting and sanding of plasterboard, cleaning and emptying / changeover of bins. They also include strip-out works such as dismantling, stacking and relocation of items including doors and panels.

This construction noise and vibration assessment report has been prepared in support of the application for these construction hours at the site – specifically for the periods where these proposed hours are outside of the approved construction hours for the site.

Noise and vibration generated during the construction stage is addressed in this report according to relevant Australian Standards plus State and Local Authority documents and guidelines.

The report assesses potential noise and vibration impacts at nearby receivers during the extended construction hour periods.

This report presents the findings of the construction noise and vibration assessment. It includes measured environmental noise survey data and environmental noise limits, based on the measured noise levels in the area. Compliance with these limits will ensure that any noise or vibration from the construction works will have no negative impact on the affected receivers.

2 Description of Proposal

2.1 Site Location

The Park Hyatt Sydney is an existing hotel over 4 levels (Ground Floor plus Levels 1 to 3), with an existing rooftop pool and terrace.

The nearest residential land-use are located to the north-west of the site, being the terraces on Lower Fort Street, plus residences across Sydney Cove to the north-east on the Kirribilli water-front and to the south-east at 1 Macquarie Street East Circular Quay. Wharf restaurants, with outdoor dining, plus commercial premises on Hickson Road are located to the south. All other land-use and buildings are assumed to be commercial and retail, plus the Sydney Opera House to the east.

Figure 1 below shows the location of the site and the surrounding area. The site is highlighted red and the residential land-uses plus wharf restaurants are highlighted blue.

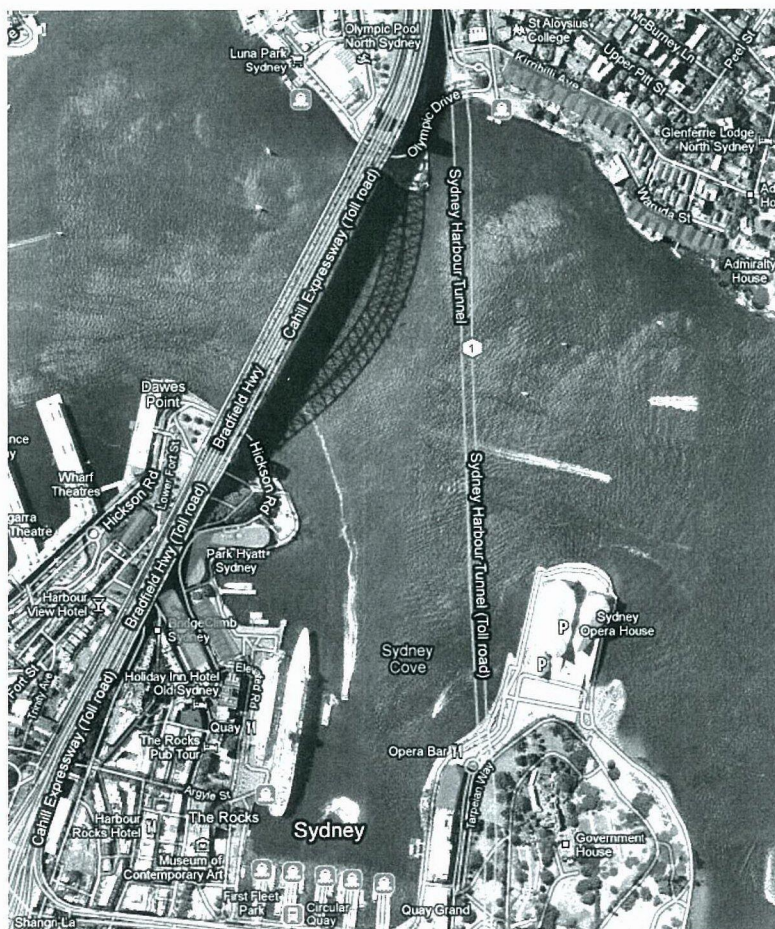


Figure 1: Project site and surrounds

Goods delivery for the hotel is currently provided from Hickson Road during the daytime, evening and nighttime.

3 Acoustic Issues

The impact of noise and vibration generated during the construction stage of the project on surrounding residential, retail and commercial premises is addressed as part of this assessment.

The development will potentially contribute noise and vibration to the surrounding environment during the construction stages. Typically, this comprises intermittent noise and vibration from construction equipment and plant commonly used on construction sites, plus noise from loading / unloading of goods vehicles.

This report provides an assessment of the quiet construction works proposed to be undertaken outside of the approved construction hours.

Design noise and vibration limits have been set for the project for these works.

The expected construction noise and vibration impacts from these works have been determined from the standard construction procedures proposed for use on the site.

The limits and expected impacts are reported in Section 5 of this report.

4 Existing Noise Environment

4.1 General Survey Information

A survey of the existing noise environment around the site was conducted with an unattended noise monitor used to continuously record the noise levels at the site. Long-term noise monitoring was carried out from Wednesday 23 February to Monday 28 February 2011 to establish the range of ambient noise levels around the site and surrounding residential properties.

Long-term noise monitoring was carried out with an RTA Technology Environmental Noise Logger Type 02. The calibration of the logger was checked before and after use and no variation was noted.

Operator attended short-term monitoring was also carried out during the same period, at various time of the day, evening and night in order to support and confirm the validity of the long-term data across the site and, particularly, at the affected residential land-uses. The timing of this attended monitoring was selected to coincide with the key extended hours proposed by the application.

Long-term and Short-term noise monitoring undertaken by Acoustic Studio recently (May 2010) as part of the construction noise assessment for the Project Application for the Sydney Opera House VAPS project has also been used as a reference for the noise levels affecting the 1 Macquarie Street residences.

All short-term measurements were made with a Brüel & Kjær Hand-held Analyser Type 2250 (Serial Number 2446899). The calibration of the analyser was checked before and after the measurements and no variation in level occurred.

A windshield was used to protect the microphone of both the logger and the analyser.

Weather conditions were generally calm and dry during the surveys.

Matthew Shriffer and Jason Cameron of Acoustic Studio Pty Ltd carried out the surveys.

4.2 Monitoring Locations

Long and short-term noise monitoring locations are shown in Figure 2.

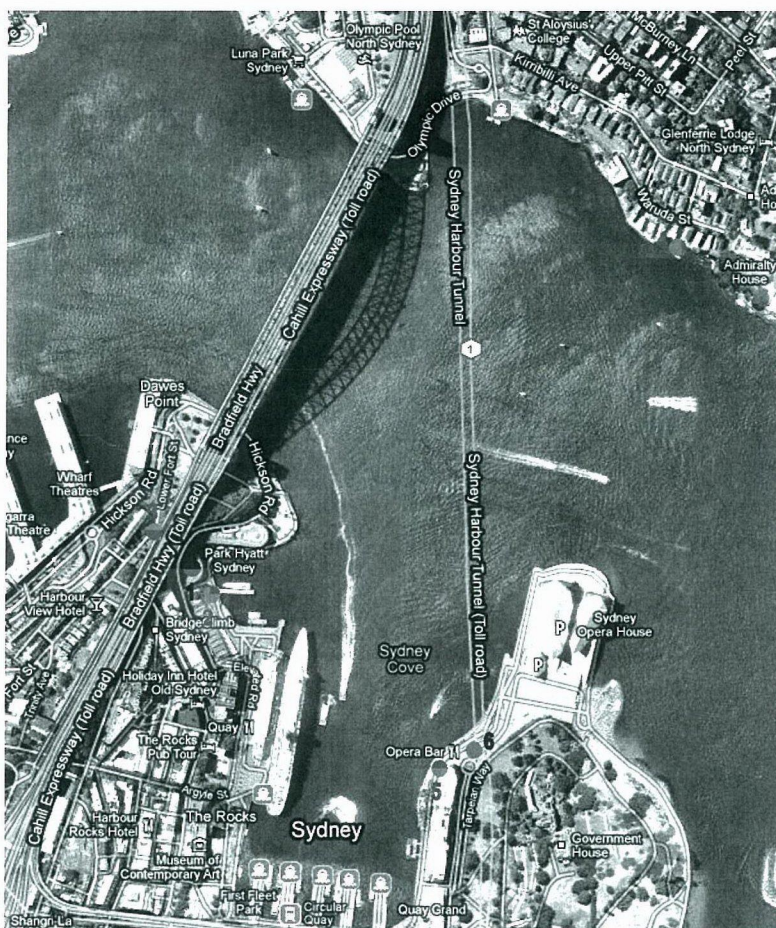


Figure 2: Noise monitoring locations

- Indicates long-term monitoring (noise logger) location
- Indicates short-term, attended noise monitoring location

4.3 Long-term Noise Monitoring

4.3.1 Park Hyatt Rooftop

Long-term noise monitoring was carried out from Wednesday 23 February to Monday 28 February 2011 to establish the range of ambient noise levels at the site and surrounding residential properties.

The long-term noise monitoring position was a secure location on the rooftop of the existing hotel.

The noise monitor was set up in the free-field. The selected monitor location is considered representative of the ambient and background noise environment around the site.

The noise levels captured during this long-term monitoring represent the existing noise levels at the residences on Lower Fort Street plus the outdoor dining areas at the wharf restaurants.

The results of the long-term noise monitoring at Location 1 are shown in Appendix A, and the measurement location is shown in Figure 2.

Table 1 below shows background and ambient noise levels measured for three time periods (day, evening and night) for each of three times of the week (Weekday, Saturday, Sunday).

Location	L ₉₀ Background Noise Levels, dB(A)			L _{eq} Ambient Noise Levels, dB(A)		
	Day	Evening	Night	Day	Evening	Night
	7am-6pm	6pm-10pm	10pm-7am	7am-6pm	6pm-10pm	10pm-7am
Hotel Rooftop - Weekday	72	63	58	74	66	61
Hotel Rooftop - Saturday	72	63	58	74	66	61
Hotel Rooftop - Sunday	63	62	55	66	65	59

Table 1: Long-term background and ambient noise levels measured at existing hotel rooftop

4.3.2 1 Macquarie Street

Long-term monitoring undertaken by Acoustic Studio recently (May 2010) as part of the construction noise assessment for the Project Application for the Sydney Opera House VAPS project has also been used as a reference for the noise levels affecting the 1 Macquarie Street residences.

This long-term noise monitoring was carried out from Monday 10 May to Monday 17 May 2010 to establish the range of ambient noise levels at the site and surrounding residential properties.

The long-term noise monitoring position was a secure location on the rooftop of the SOH Security Gatehouse.

The noise monitor was set up in the free-field.

The noise levels captured during this long-term monitoring represent the existing noise levels at the residences at 1 Macquarie Street.

The results of the long-term noise monitoring at Location 6 are shown in Appendix A, and the measurement location is shown in Figure 2.

Table 2 shows background and ambient noise levels measured for three time periods (day, evening and night) for each of three times of the week (Weekday, Saturday, Sunday).

Location	L ₉₀ Background Noise Levels, dB(A)			L _{eq} Ambient Noise Levels, dB(A)		
	Day	Evening	Night	Day	Evening	Night
	7am-6pm	6pm-10pm	10pm-7am	7am-6pm	6pm-10pm	10pm-7am
SOH Security Gate rooftop - Weekday	55	53	45	64	60	57
SOH Security Gate rooftop - Saturday	55	58	53	64	61	58
SOH Security Gate rooftop - Sunday	55	53	45	63	56	50

Table 2: Long-term background and ambient noise levels measured at SOH Security Gatehouse (1 Macquarie Street)

4.4 Short-term Noise Monitoring

Four (4) short-term noise monitoring locations were chosen as representative of the most sensitive residences located closest to the Park Hyatt site, plus the outdoor dining areas of the wharf restaurants and commercial premises on Hickson Road as follows:

Location 2

Sydney Cove Wharf, on the eastern boundary of the wharf restaurants and approximately 1.5 metres from the closest outdoor dining area to the southern façade of the hotel. Measurements were undertaken in the free-field (i.e. away from reflective surfaces).

Location 2 is representative of background and ambient noise levels at the outdoor dining areas of the wharf restaurants and at the commercial premises on Hickson Road .

Background and ambient noise levels at the time of the measurements were dominated by continuous noise from traffic on the Sydney Harbour Bridge and the Harbour Bridge cleaning plant (during the daytime) plus intermittent noise from harbour traffic pedestrians / patrons of nearby restaurants and trains on the Sydney Harbour Bridge.

Location 3

Lower Fort Street footpath, on the eastern boundary of the Lower Fort Street residences and approximately 1.0 metre from the road kerb. Measurements were undertaken in the free-field (i.e. away from reflective surfaces).

Location 3 is representative of background and ambient noise levels at the Lower Fort Street residences.

Background and ambient noise levels at the time of the measurements were dominated by continuous noise from traffic on the Sydney Harbour Bridge and the Harbour Bridge cleaning plant (during the daytime) plus intermittent noise from harbour traffic, pedestrians and trains on the Sydney Harbour Bridge.

Location 4

Waruda Street Wharf, Kirribilli - on the opposite side of Sydney Cove from the hotel. Measurements were undertaken in the free-field (i.e. away from reflective surfaces).

Location 4 is representative of daytime background and ambient noise levels at the Kirribilli waterfront residences.

Background and ambient noise levels at the time of the measurements were dominated by continuous noise from traffic on the Sydney Harbour Bridge, plus intermittent noise from harbour traffic and trains on the Sydney Harbour Bridge.

Location 5

1 Macquarie Street East Circular Quay - on the opposite side of Sydney Cove from the hotel. Measurements were undertaken in the free-field (i.e. away from reflective surfaces) approximately 2 m from the ground floor façade of the 1 Macquarie Street building.

Location 4 is representative of daytime background and ambient noise levels at the 1 Macquarie Street residences.

Background and ambient noise levels at the time of the measurements were dominated by continuous noise from traffic on the Sydney Harbour Bridge, plus intermittent noise from harbour traffic, pedestrians / patrons of nearby bars and restaurants and trains on the Sydney Harbour Bridge.

During the short-term monitoring, the analyser was set to collect the following data:

- A-weighted equivalent continuous noise level (L_{Aeq}).
- Statistical indices including the L_{A90} . This is the A-weighted noise level exceeded for 90% of the sample time, and is defined as the background sound level.

The analyser was set to sample every tenth of a second, and to calculate the statistical results over a 15-minute sample period.

The results of the short-term background and ambient noise monitoring are shown in Table 3. The results provided are the lowest of the measured noise levels from the short-term monitoring at each location and at each time of day / evening / night.

Loc	Day & Time of Measurements	Assessment Period	L _{90,15min} Background Noise, dB(A)	L _{eq,15min} Ambient Noise, dB(A)
2	Thurs 24/2/11, 11:10am / 2:25 pm	Day	58.5 / 61*	60 / 63*
3	Thurs 24/2/11, 11:30am / 1pm	Day	59.5 / 72*	65.5 / 73*
4	Thurs 24/2/11, 12:40pm	Day	56	60
5	Thurs 24/2/11, 12:10pm	Day	59	62
2	Mon 28/2/11, 11:00pm	Evening	57	58.5
3	Tues 22/2/11, 11:00pm	Evening	55.5	59.5
4	Tues 22/2/11, 11:50pm	Evening	49.5	54.5
5	Tues 22/2/11, 11:20pm	Evening	53.5	57
2	Wed 23/2/11, 1:00am	Night	50	53
3	Wed 23/2/11, 2:00am	Night	50	53
4	Wed 23/2/11, 2:30am	Night	43	44.5
5	Wed 23/2/11, 1:30am	Night	49.5	51.5

Table 3: Short-term background noise levels measured at closest affected receivers

* Higher level is that measured during cleaning of the Sydney Harbour Bridge – noise level is dominated by plant associated with the bridge cleaning.

4.5 Summary of Noise Monitoring Results

The measured short-term noise levels at Locations 2 and 3 are consistently 5 to 7 dB lower than the noise levels from the long-term monitoring by the noise logger at Location 1.

This is most likely due to the greater exposure of the rooftop location to a larger number of surrounding noise sources – particularly traffic.

The short-term monitoring results are considered to be accurate, and most relevant, to the residential land-uses for each time period.

On this basis, the existing background and ambient noise levels at each affected receiver are those shown in Table 4.

Location	L ₉₀ Background Noise Levels, dB(A)			L _{eq} Ambient Noise Levels, dB(A)		
	Day 7am-6pm	Evening 6pm-10pm	Night 10pm-7am	Day 7am-6pm	Evening 6pm-10pm	Night 10pm-7am
2 - Wharf Restaurants / Hickson Road Commercial Premises	58.5 / 61*	57	50	60 / 63*	58.5	53
3 - Lower Fort Street Residences	59.5 / 72*	55.5	50	65.5 / 73*	59.5	53
4 - Kirribilli Waterfront Residences	56	49.5	43	60	54.5	44.5
5 - 1 Macquarie Street Residences	59	53.5	49.5	62	57	51.5

Table 4: Existing background and ambient noise levels at properties surrounding hotel site

* Higher level applies at times when cleaning of the Sydney Harbour Bridge is occurring – generally Monday to Friday from 8am to 11am and 12:30pm to 5pm, plus Saturdays from 8am to 11am and 12:30pm to 2pm.

5 Construction Noise and Vibration Assessment

Noise and vibration levels likely to be generated during the construction stages of the project have been assessed in terms of the likely impacts on the surrounding land-use given the proposed extended hours of operation for construction works.

The detailed construction program is currently being developed. This report provides general recommendations based on the program and schedule of works developed to date, and provides applicable criteria together with best noise and vibration control practices to be observed during the construction of the proposed development.

5.1 Relevant Codes and Standards

In preparing this construction noise and vibration assessment, the following legislation, codes and standards have been referenced:

The City of Sydney “*Construction Hours / Noise within the Central Business District – Code of Practice*”, 1992

The Department of Environment, Climate Change and Water (DECCW) “*Interim Construction Noise Guideline*”, 2009

The Department of Environment, Climate Change and Water (DECCW) “*Assessing Vibration: A Technical Guideline*”, 2006

Environment Protection Authority (EPA, currently DECCW) “*Environmental Noise Control Manual*”, 1994

Standards Association of Australia “*AS 2436-2010: Guide to Noise Control on Construction, Maintenance & Demolition Sites*”, 2010

Standards Association of Australia “*AS 2670.2-1990: Evaluation of human exposure to whole-body vibration – Part 2: Continuous and shock-induced vibration in buildings (1 to 80 Hz)*”, 1990

British Standards Institution “*BS 6472:1992 – Evaluation of human exposure to vibration in buildings (1 Hz to 80 Hz)*”, 1992

Protection of the Environment Operations Act 1997

5.2 Definitions

Contractor

Refers to the Contractor employed to undertake the construction works in accordance with the contract requirements.

Acoustic Consultant

Refers to a suitably qualified acoustic consultant appointed by the Contractor to measure and assess noise impacts in accordance with the statutory requirements.

Background Noise Level

Refers to the L_{A90} sound pressure level (equivalent to the average minimum, $L_{A\text{ av min, T}}$). When used in assessing the nuisance level, the background noise level is the 8-hour background L_{Aeq} noise level.

$L_{A\text{ av, max, T}}$

Refers to the average maximum sound pressure level, measured in dB(A) on fast response during the stated measurement period, generated by a machine when operating in a normal operational duty cycle.

For the purpose of this assessment, the duration interval (T) shall be 1 minute when considering noise at a distance of 7 m from an appliance.

$L_{A10, T}$

Refers to the sound pressure level, measured in dB(A), exceeded for 10 percent of the stated measurement period, T.

For the purpose of assessment of compliance with this procedure the duration interval (T) shall be 1 minute when considering noise at a distance of 7 m from an appliance. L_{A10} is deemed to be equivalent to $L_{A\text{ av, max}}$.

5.3 Construction Noise Assessment

5.3.1 Control Elements

As a general rule, prevention shall be applied as universal work practice at any time of day, but especially for construction works to be undertaken at critical times outside normal daytime/weekday periods. This includes, specifically, the evening and nighttime periods and the proposed extended hours.

It is noted that the reduction of noise at the sources, and the control of transmission paths between the construction site and the receivers are the preferred options for noise minimisation. Providing treatments at the affected residences or other sensitive land uses should only be as a last resort.

Construction noise shall be managed by implementing the strategies listed below:

- Plant and equipment
 - Use quieter methods.
 - Use quieter equipment.
 - Operate plant in a quiet and effective manner.
 - Where appropriate, limit the operating noise of equipment
 - Maintain equipment regularly.
 - Where appropriate, obtain acoustic test certificates for equipment
- On site noise management
 - Strategically locate equipment and plant.
 - Avoid the use of reversing alarms or provide for alternative systems.
 - Maximise shielding in the form of existing structures or temporary barriers.
 - Schedule the construction of barriers and structures so they can be used as early as possible.
- Consultation, notification and complaints handling
 - Provide information to neighbours before and during construction.
 - Maintain good communication between the community and project staff.
 - Have a documented complaints process and keep register of any complaints.

- Give complaints a fair hearing and provide for a quick response.
- Implement all feasible and reasonable measures to address the source of complaint.
- Work scheduling
 - Schedule activities to minimise noise impacts.
 - Ensure periods of respite are provided in the case of unavoidable maximum noise levels events.
 - Keep truck drivers informed of designated routes, parking locations and delivery hours.

5.3.2 Working Hours and Site Operational Noise Level Limits

The proposed extended construction hours for the works consist of quieter, internal works which, due to the program constraints and to keep the duration of the construction phase as short as possible, are proposed to be carried out throughout the day and night.

As part of the Section 75W Application, Daisho Developments Sydney is seeking approval for extended hours of construction work – outside of the Hours of Construction nominated in Condition D1 of the Project Approval.

The proposed hours of construction for the quieter works are:

- 24 hours per day from Monday to Friday, continuing up to 3pm Saturdays and recommencing at 7am on Mondays

The construction noise and vibration assessment has been undertaken for the periods where these proposed hours are outside of the approved construction hours for the site.

Monitoring of noise levels will be put in place to ensure that the noise levels comply with the requirements of The City of Sydney’s “Construction Hours / Noise within the Central Business District – Code of Practice”, 1992.

Furthermore, deliveries of building materials and spoil removal, etc will not occur outside of the approved construction hours so as to not adversely impact on the amenity of the surrounding residential receivers outside of the standard daytime construction hours.

The ability to carry out internal works outside of the standard (daytime) construction hours is expected to considerably reduce the total construction timeframe. This is considered to be of significant benefit in terms of heritage, safety and visual impacts of the site, with no unacceptable amenity impacts to surrounding premises.

Given the above proposals for extended construction hours, all categories of working hours and associated noise criteria presented in the City of Sydney Construction Works Code of

Practice (CWCP) for the CBD area will be applicable to the project at this stage. These are shown below.

DAY	TIME ZONE	CATEGORY	NOISE CRITERIA (which must not be exceeded)
Monday to Friday	00.00 - 07.00	4	Background + 0 dBA
	07.00 - 08.00	1	Background + 5 dBA
	08.00 - 19.00	1	Background + 5 dBA + 5 dBA to be determined on a site basis
	19.00 - 23.00	2	Background + 3 dBA
	23.00 - 24.00	4	Background + 0 dBA
Saturday	00.00 - 07.00	4	Background + 0 dBA
	07.00 - 08.00	1	Background + 5 dBA
	08.00 - 17.00	1	Background + 5 dBA + 5 dBA to be determined on a site basis
	17.00 - 23.00	2	Background + 3 dBA
	23.00 - 24.00	4	Background + 0 dBA
Sundays and Public Holidays	00.00 - 07.00	4	Background + 0 dBA
	07.00 - 17.00	3	Background + 3 dBA
	17.00 - 24.00	4	Background + 0 dBA

Table 5: Categories of construction works hours and noise criteria for Park Hyatt Sydney Refurbishment Project

All noise levels presented in the table above are to be measured at the nearest residential receivers. The permissible noise level is to be complied during each 15-minute period of the relevant Category of Hours.

Special requirements, such as noise monitoring, apply for work intended during Category 2, 3 and 4 hours.

5.3.3 Managing Plant and Equipment Noise Levels

Specific equipment / plant to be used during the construction stages of the project are not yet defined.

Therefore, the allowance noise levels for construction appliances as per City of Sydney CWCP for the CBD areas are shown in Table 6 below.

It is noted that all noise levels shown in the table below are to be $L_{A\text{ av, max, T}}$ measured at 7 metres from the point nearest to the appliance. Furthermore, a Certificate of Acoustic Performance (see Form D from City of Sydney CWCP on Appendix C) shall be provided for each appliance from Group A.

GROUP A (see Note 2)	GROUP B 90dBA	GROUP C 85dBA	GROUP D 80dBA	GROUP E 75dBA	GROUP F 70Dba
Pile drivers	Earthmoving equipment of engine capacity above 200kW NEP	Impulsive tools - air, electric or hydraulic	Concrete agitators	Air compressors above 170 L/s capacity	Air compressors up to 170 L/s capacity
Hydraulic hammers		Earthmoving equipment of engine capacity between 100kW and 200kW NEP	Concrete pumps	Construction dumpers over 1m ³ capacity	Fluid pumps
Machine mounted rock breakers	Warning sirens*		Concrete saws	Public address system*	Internal combustion or electrically driven equipment (unless grouped elsewhere) up to 14kW NEP
Sand blasters	Reversing alarms+	Explosive power tools	Cranes (fixed)		
Steam cleaners	Trucks	Impact wrenches	Cranes (mobile)	Internal combustion or electrically driven equipment (unless grouped elsewhere) over 14kW NEP	
Mole borers		Refuse chutes*	Earthmoving equipment up to and including engine capacities of 100kW NEP		
		Scabblers	Concrete vibrators		
		Chain saws	Portable hand tools		
		Rock drills	Vibratory compacters		

* To be measured at the site boundary closest to the affected area.

+ Reversing alarms must be controlled so that noise levels produced do not exceed the background sound level by more than 10dBA.

Table 6: Listed appliances and allowable noise levels for Park Hyatt Sydney Refurbishment Project

5.3.4 Monitoring and Reporting

As a condition of approving construction works during Category 2, 3 and 4 hours, the approval authority may require that the applicant undertake noise monitoring at nominated affected occupancies and report to Council / the approval authority at specified times that monitoring is being conducted in accordance with Form B of CWCP as shown in the table below.

Noise Monitoring Procedures

1. Noise Monitoring shall be carried out when Operations are being performed on the Construction Site and also during one weekday, one Saturday and one Sunday/public holiday (as appropriate) when no Construction Work is being performed.
2. Monitoring locations. Monitoring shall be carried out at locations specified by the Council at a point 1.2 metres above the ground or the floor (inside and outside) as appropriate. Details of the monitoring locations and of the occupancy at which monitoring is carried out are to be recorded.
3. Monitoring equipment. Equipment used for monitoring shall be a sound level meter complying with AS1259, or any other instrument approved by the Council.
4. Noise measures to be recorded. Statistical noise measurements shall be carried out during each 15 minute period over the specified hours and the L_{A1} , L_{A10} , ($L_{A\text{eq}} \text{ max}$), L_{A50} and L_{A90} descriptors shall be determined. These descriptors shall be graphed for each 24 hour period and shall be retained in accordance with para 47 of the Code.

Table 7: Noise monitoring procedures for Park Hyatt Sydney Refurbishment Project

5.3.5 Communication and Complaints

The Contractor shall establish a communications register for recording incoming complaints. The registration of a particular item will remain open until the complaint has been appropriately dealt with.

In addition, the following procedures are an example of the procedures that should be specifically adopted for complaints relating to noise. Upon receipt of a complaint the Contractor should:

- Try to ascertain from the complaint which appliance is causing the problem i.e. inside or outside the site and in what position.
- Establish from the monitoring equipment if the allowable noise levels have been complied with.
- Establish if the appliance positioning has previously been highlighted as a problem area. If not and the noise levels are above the allowable limit, then the equipment and its position shall be noted.
- Move machinery if the allowable levels have been exceeded or take other acoustic remedial action.

If the activity is occurring during Category 2, 3 or 4 working hours, the activity should be immediately stopped. Where stopping the activity would create a safety issue the activity

may be permitted to continue only as long as is necessary to make the area safe. The activity should then cease.

Any activity which is directed to cease due to excessive noise should not recommence until the Project Manager is satisfied that the requirements of the CWCP can be met and has given permission to recommence the activity. The Site Supervisor should ensure that a report of any incident is provided to the Project Manager.

The Contractor should provide a 24-hour telephone contact number and this number should be prominently displayed on the site.

5.3.6 Safety

Personnel involved in operations should be issued with ear plugs or ear muffs which must be used whenever noise levels interfere with normal speech when individuals are standing at a distance of 1m from each other, or when the eight hour equivalent continuous A-weighted sound pressure level, $L_{Aeq,8hr}$ measured with a properly calibrated sound level meter exceeds 85 dB.

Signs should be erected and made visible at the entry to all areas where noise levels will exceed 85 dB(A).

5.3.7 Non-compliances

Non-compliance reports should be used as appropriate to deal with failures to meet the construction noise management plan requirements.

5.3.8 Site-specific Construction Noise Assessment Results

5.3.8.1 Noise Sources and Anticipated Airborne Noise Levels

As details of each *specific* item of construction equipment / plant to be used during the construction stages of the project are not known at the time of this assessment, a generic approach has been adopted and noise sources / equipment which the contractor expects to use in the refurbishment works have been taken into consideration.

The anticipated airborne noise levels for the likely quiet construction noise sources for the proposed extended hours for the project are listed in Table 8.

Typical Plant or Equipment	Max Sound Pressure Level, dB L _A AV. MAX at 10 m
Painting	< 70
Carpet laying	< 70
Rough-in of electrical cables (excluding masonry drilling)	< 70
Fit-off of switches, etc (cordless drill only)	74
Carpentry works (cordless drill only)	74
Tiling (no mixers for screed – hand mixing only)	< 70
Plumbing works (excluding masonry drilling and oxy-acetylene works)	74
Mechanical installation works (excludes masonry drilling)	74
Installation of fire pipes to corridors and rooms (excludes masonry drilling)	74
Setting and sanding of plasterboard	75
Cleaning	< 70
Emptying of bins (use of internal lifts and bin lifters in basement)	< 70

Table 8: Anticipated maximum airborne sound pressure levels for quiet construction noise sources/plant proposed for the extended construction hours

5.3.8.2 Noise Sensitive Receivers

The closest and most sensitive receivers to the site, which are potentially affected by noise from the construction works during the extended construction hours are:

- Terraces on Lower Fort Street.
- Residences across Sydney Cove to the north-east on the Kirribilli waterfront.
- Residences across Sydney Cove to the south-east at 1 Macquarie Street, East Circular Quay.
- Wharf restaurants, with outdoor dining, to the south.
- Commercial Premises on Hickson road, to the south.

These are shown in Figure 1.

5.3.8.3 Construction Noise Criteria

As presented in Section 5.3.2, noise limits at locations affected by construction noise will depend on the day of the week and time period, associated to 4 different Categories, as defined in City of Sydney Code of Practice for Construction Site Works.

Tables 9, 10, 11 and 12 show the stated noise criteria at each sensitive receiver location for each Category, being the time periods for those categories as defined in Section 5.3.2 plus the background noise levels as presented in Section 4, Table 4.

In addition to the criteria presented in Tables 9, 10, 11 and 12 the Contractor shall also comply with individual equipment / plant levels as provided in Section 5.3.3.

It is noted that construction works for the project will occur during ALL time periods presented.

Day	Time Zone	Category	Noise Criteria	Noise Limit
Monday to Friday	7am – 8am	1	Background + 5dB	58.5 + 5 = 63.5 61 + 5 = 66 (during bridge cleaning)
	8am – 7pm	1	Background + 5dB + 5dB ¹	58.5 + 10 = 68.5 61 + 10 = 71 (during bridge cleaning)
	7pm – 11pm	2	Background + 3dB	57 + 3 = 60
	11pm – 7am	4	Background + 0dB	50 + 0 = 50
Saturday	7am – 8am	1	Background + 5dB	58.5 + 5 = 63.5 61 + 5 = 66 (during bridge cleaning)
	8am – 5pm	1	Background + 5dB + 5dB ¹	58.5 + 10 = 68.5 61 + 10 = 71 (during bridge cleaning)
	5pm – 11pm	2	Background + 3dB	57 + 3 = 60
	11pm – 7am	4	Background + 0dB	50 + 0 = 50
Sunday and Public Holidays	7am – 5pm	3	Background + 3dB	58.5 + 3 = 61.5
	5pm – 7am	4	Background + 0dB	50 + 0 = 50

Note: 1. May be reduced to Background + 5 dB (to be determined on a site basis)

Table 9: Construction noise criteria for Wharf Restaurants and Hickson Road Commercial Premises – Location 2

Day	Time Zone	Category	Noise Criteria	Noise Limit
Monday to Friday	7am – 8am	1	Background + 5dB	$59.5 + 5 = \mathbf{64.5}$ $72 + 5 = \mathbf{77}$ (during bridge cleaning)
	8am – 7pm	1	Background + 5dB + 5dB ¹	$59.5 + 10 = \mathbf{64.5}$ $72 + 10 = \mathbf{82}$ (during bridge cleaning)
	7pm – 11pm	2	Background + 3dB	$55.5 + 3 = \mathbf{58.5}$
	11pm – 7am	4	Background + 0dB	$50 + 0 = \mathbf{50}$
Saturday	7am – 8am	1	Background + 5dB	$59.5 + 5 = \mathbf{64.5}$ $72 + 5 = \mathbf{77}$ (during bridge cleaning)
	8am – 5pm	1	Background + 5dB + 5dB ¹	$59.5 + 10 = \mathbf{64.5}$ $72 + 10 = \mathbf{82}$ (during bridge cleaning)
	5pm – 11pm	2	Background + 3dB	$55.5 + 3 = \mathbf{58.5}$
	11pm – 7am	4	Background + 0dB	$50 + 0 = \mathbf{50}$
Sunday and Public Holidays	7am – 5pm	3	Background + 3dB	$59.5 + 3 = \mathbf{62.5}$
	5pm – 7am	4	Background + 0dB	$50 + 0 = \mathbf{50}$

Note: 1. May be reduced to Background + 5 dB (to be determined on a site basis)

Table 10: Construction noise criteria for Lower Fort Street Terraces – Location 3

Day	Time Zone	Category	Noise Criteria	Noise Limit
Monday to Friday	7am – 8am	1	Background + 5dB	56 + 5 = 61
	8am – 7pm	1	Background + 5dB + 5dB ¹	56 + 10 = 66
	7pm – 11pm	2	Background + 3dB	49.5 + 3 = 52.5
	11pm – 7am	4	Background + 0dB	43 + 0 = 43
Saturday	7am – 8am	1	Background + 5dB	56 + 5 = 61
	8am – 5pm	1	Background + 5dB + 5dB ¹	56 + 10 = 66
	5pm – 11pm	2	Background + 3dB	49.5 + 3 = 52.5
	11pm – 7am	4	Background + 0dB	43 + 0 = 43
Sunday and Public Holidays	7am – 5pm	3	Background + 3dB	56 + 3 = 59
	5pm – 7am	4	Background + 0dB	43 + 0 = 43

Note: 1. May be reduced to Background + 5 dB (to be determined on a site basis)

Table 11: Construction noise criteria for Kirribilli Waterfront Residences – Location 4

Day	Time Zone	Category	Noise Criteria	Noise Limit
Monday to Friday	7am – 8am	1	Background + 5dB	59 + 5 = 64
	8am – 7pm	1	Background + 5dB + 5dB ¹	59 + 10 = 69
	7pm – 11pm	2	Background + 3dB	53.5 + 3 = 58.5
	11pm – 7am	4	Background + 0dB	49.5 + 0 = 49.5
Saturday	7am – 8am	1	Background + 5dB	59 + 5 = 64
	8am – 5pm	1	Background + 5dB + 5dB ¹	59 + 10 = 69
	5pm – 11pm	2	Background + 3dB	53.5 + 3 = 58.5
	11pm – 7am	4	Background + 0dB	49.5 + 0 = 49.5
Sunday and Public Holidays	7am – 5pm	3	Background + 3dB	59 + 3 = 62
	5pm – 7am	4	Background + 0dB	49.5 + 0 = 49.5

Note: 1. May be reduced to Background + 5 dB (to be determined on a site basis)

Table 12: Construction noise criteria for No.1 Macquarie Street Residences – Location 5

5.3.8.4 Predicted Construction Noise Levels

At this stage of the project there is no detailed information for the specific types of plant and equipment that will be used during construction, or on the construction scheduling or program. Therefore, this assessment provides an estimate of the potential noise impact of various generic items of plant and equipment at the most affected receivers.

The noise sources / equipment / processes considered in the assessment are based on those which the contractor expects to use in the refurbishment works during the proposed extended construction hours.

Tables 13, 14, 15 and 16 present the predicted construction noise levels at the nearest affected residential receiver locations for each item of equipment considered in the assessment.

Noise levels are predicted for each item of equipment either located inside the building or external to the building (as appropriate), assuming the sound reduction provided by the existing building fabric (for equipment located inside the building) and the distance between the plant and the receiver location. **The predicted levels assume continuous operation over the assessment period.** Allowances have been made for distance and building fabric attenuation, shielding, ground / water reflections plus reflections from existing structures.

Predicted noise levels are compared against the most restrictive noise criteria for each receiver – being the nighttime / Category 4 period.

All predicted equipment noise levels indicate compliance with the noise criteria at all times at each receiver location.

Therefore, we do not expect any adverse noise impacts as a result of these works during the proposed extended construction hours.

Item	Noise Criteria (Weekday nighttime, most restrictive)	Predicted equipment noise level, dB L _A AV. MAX - assuming plant inside hotel accommodation at south end
Painting	50	< 35
Carpet laying	50	< 35
Rough-in of electrical cables (excluding masonry drilling)	50	< 35
Fit-off of switches, etc (cordless drill only)	50	< 40
Carpentry works (cordless drill only)	50	< 40
Tiling (no mixers for screed – hand mixing only)	50	< 35
Plumbing works (excluding masonry drilling and oxy- acetylene works)	50	< 40
Mechanical installation works (excludes masonry drilling)	50	< 40
Installation of fire pipes to corridors and rooms (excludes masonry drilling)	50	< 40
Setting and sanding of plasterboard	50	< 40
Cleaning	50	< 35
Emptying of bins (use of internal lifts and bin lifters in basement)	50	< 35

Table 13: Predicted equipment/plant noise levels at Wharf Restaurants and Hickson Road Commercial Premises – Location 2

Item	Noise Criteria (Weekday nighttime, most restrictive)	Predicted equipment noise level, dB L _A AV, MAX - assuming plant inside hotel accommodation on west elevation
Painting	62.5	< 35
Carpet laying	62.5	< 35
Rough-in of electrical cables (excluding masonry drilling)	62.5	< 35
Fit-off of switches, etc (cordless drill only)	62.5	< 40
Carpentry works (cordless drill only)	62.5	< 40
Tiling (no mixers for screed – hand mixing only)	62.5	< 35
Plumbing works (excluding masonry drilling and oxy- acetylene works)	62.5	< 40
Mechanical installation works (excludes masonry drilling)	62.5	< 40
Installation of fire pipes to corridors and rooms (excludes masonry drilling)	62.5	< 40
Setting and sanding of plasterboard	62.5	< 40
Cleaning	62.5	< 35
Emptying of bins (use of internal lifts and bin lifters in basement)	62.5	< 35

Table 14: Predicted equipment/plant noise levels at Lower Fort Street Residences – Location 3

Item	Noise Criteria (Weekday nighttime, most restrictive)	Predicted equipment noise level, dB L _A AV, MAX - assuming plant inside hotel accommodation on north end of hotel
Painting	43	< 20
Carpet laying	43	< 20
Rough-in of electrical cables (excluding masonry drilling)	43	< 20
Fit-off of switches, etc (cordless drill only)	43	< 20
Carpentry works (cordless drill only)	43	< 20
Tiling (no mixers for screed – hand mixing only)	43	< 20
Plumbing works (excluding masonry drilling and oxy- acetylene works)	43	< 20
Mechanical installation works (excludes masonry drilling)	43	< 20
Installation of fire pipes to corridors and rooms (excludes masonry drilling)	43	< 20
Setting and sanding of plasterboard	43	< 20
Cleaning	43	< 20
Emptying of bins (use of internal lifts and bin lifters in basement)	43	< 20

Table 15: Predicted equipment/plant noise levels at Kirribilli Waterfront Residences – Location 4

Item	Noise Criteria (Weekday nighttime, most restrictive)	Predicted equipment noise level, dB L _A AV. MAX - assuming plant inside hotel accommodation on eastern elevation of hotel
Painting	49.5	< 20
Carpet laying	49.5	< 20
Rough-in of electrical cables (excluding masonry drilling)	49.5	< 20
Fit-off of switches, etc (cordless drill only)	49.5	< 20
Carpentry works (cordless drill only)	49.5	< 20
Tiling (no mixers for screed – hand mixing only)	49.5	< 20
Plumbing works (excluding masonry drilling and oxy- acetylene works)	49.5	< 20
Mechanical installation works (excludes masonry drilling)	49.5	< 20
Installation of fire pipes to corridors and rooms (excludes masonry drilling)	49.5	< 20
Setting and sanding of plasterboard	49.5	< 20
Cleaning	49.5	< 20
Emptying of bins (use of internal lifts and bin lifters in basement)	49.5	< 20

Table 16: Predicted equipment/plant noise levels at 1 Macquarie Street Residences – Location 5

5.3.8.5 Noise Control Measures to Manage Noise

All predicted equipment noise levels indicate compliance with the noise criteria at all times at each receiver location.

Therefore, we do not expect any adverse noise impacts as a result of these works during the proposed extended construction hours.

However, if, during construction, an item of equipment exceeds either the noise criteria as per Tables 9 to 12 at any location or the equipment noise level limits given in Table 8 the following noise control measures, together with construction best practices presented in Section 5.3.3, shall be considered to minimise the noise impacts on the neighbourhood.

- Schedule the noisier activities to occur outside of the most sensitive times of the day for each nominated receiver. For example, the residential receivers are likely to be more sensitive to noise before 9 am than the wharf restaurant receivers and Hickson Road commercial premises.
- Consider implementing equipment-specific screening or other noise control measures recommended in Appendix E of AS2436.
- Provide enclosed spoil and waste chutes for demolition work being carried out on the upper floors.
- Ensure that any miscellaneous equipment (extraction fans, etc) not specifically identified in this plan incorporates silencing equipment as required to meet the noise criteria.

5.4 Construction Vibration Management

This section of the report includes general procedures to be followed, vibration surveys and monitoring to be considered and vibration criteria to ensure human comfort and prevent building damage to the affected buildings and their occupants.

On-site measurements should be considered at the commencement of each key construction process to determine the level of vibration generated by the particular equipment used.

This document discusses general guidelines for the management strategy of vibration arising from the construction works in relation to this project. Criteria to ensure human comfort and prevent building damage and disruption to equipment and processes are discussed in Appendix D.

5.4.1 Control Elements

The Contractor should carry out a preliminary assessment to determine whether the existence of significant vibration levels justifies a more detailed investigation.

A more detailed investigation would involve methods of constraining activities generating high vibration levels. A method of monitoring vibration levels could then be put in place. Vibration mitigation measures and a review of vibration criteria may then be necessary.

All practical means should be used to minimise impact on the affected buildings and occupants from activities generating significant levels of vibration on site.

The following considerations should be taken into account:

- The layout of the site, including the location of static sources of vibration.
- Techniques used in construction to minimise generated vibration levels.
- Hours of work with regard to the nature of operations in the affected buildings and the duration of the works.

5.4.2 Vibration Surveys

Since the actual vibration levels experienced will be dependent upon the site characteristics and the specific equipment being used, early vibration level checks should be carried out on site at the outset of each key vibration generating activity (if vibration is considered to be an issue).

Shortly before the commencement of each activity the background vibration level could be measured and again once the activity has begun. If the survey indicates levels of vibration exceeding those expected, the vibration management strategy for that process could be re-assessed.

5.4.3 Vibration Monitoring

If required, a vibration monitoring system could be implemented. This system would monitor vibration levels when there is potential for them to change. This could happen in various situations, such as, changes in equipment and activities or changes to work procedures that might affect existing vibration control measures. The monitoring procedure would be carried out with appropriate equipment so that results obtained are readily comparable with results obtained earlier. If results indicate vibration levels exceed allowable limits appropriate action, as described in Section 5.4.4, would be taken.

5.4.4 Control of Vibration

If measured vibration levels exceed the appropriate criteria, one or more of the following measures could be taken:

- Modifications to construction equipment used.
- Modifications to methods of construction.
- Rescheduling of activities to less sensitive times.

If the measures given above cannot be implemented or have no effect on vibration levels or impact generated, a review of the vibration criteria should be undertaken and the vibration management strategy amended.

5.4.5 Non-compliances

Non-compliance reports can be used as appropriate to deal with failures to meet the construction vibration management and control requirements.

5.4.6 Site-specific Vibration Management Considerations

5.4.6.1 Vibration Sources

The works proposed during the extended construction hours exclude grinding, cutting or drilling of the existing building structures.

Therefore, there are no significant potential sources of vibration associated with the works proposed during the extended construction hours.

Having said this, the Contractor may carry out a review of vibration generated by the construction activities. The levels of vibration generated will be site specific and will depend upon the type of activity, the particular equipment used, and the proximity of the construction activity to the nearest occupied spaces within the affected properties.

A preliminary vibration survey will determine whether a means of vibration mitigation will be necessary on the site.

5.4.6.2 Vibration Sensitive Receivers

Neither the City of Sydney Council nor the DECCW relevant documentation to construction issues does not include any discussion of vibration criteria and, therefore, cannot be referred to for any appropriate criteria.

Relevant Australian and international vibration criteria to ensure human comfort, prevent building damage and prevent disruption to equipment and processes are discussed in Appendix D.

Vibration limits for building damage are less stringent than limits for human comfort. Both are relevant to this project, with the most critical being as follows.

Human comfort

- Occupants of the residences at Lower Fort Street, 24 hours a day, 7 days a week.
- Staff and patrons of the wharf restaurants adjacent to the site, when in use.
- Tenants of commercial premises along Hickson Road, when in use.

Building damage

- Nearby residential, retail and commercial structures adjacent to the site, 24 hours a day, 7 days a week.
- The existing Park Hyatt hotel building structure, 24 hours a day, 7 days a week.

5.4.6.3 Vibration Criteria for Human Comfort

Vibration levels arising from demolition and construction activities should not exceed the following limits:

Location	Continuous Vibration (r.m.s.), mm/s	Intermittent Vibration (r.m.s.), mm/s
In any residence adjacent to the site	Curve 2 in Figure 5b, AS2670.2:1990	Curve 60 in Figure 5b, AS2670.2:1990
Within any retail or commercial premises adjacent to the site	Curve 4 in Figure 5b, AS2670.2:1990	Curve 128 in Figure 5b, AS2670.2:1990

Table 17: Vibration criteria for human comfort

5.4.6.4 Vibration Criteria for Building Damage

The criteria given in Table 17 (Human Comfort) shall generally form the limiting vibration criteria for the project.

For unoccupied buildings, or during periods when the buildings are unoccupied, the criteria for building damage suggested by Australian Standard AS2187-1993 of 5 mm/s should be adopted.

5.4.7 Summary of Expected Vibration Impacts and Vibration Management Strategy

The works proposed during the extended construction hours exclude grinding, cutting or drilling of the existing building structures.

Therefore, there are no significant potential sources of vibration associated with the works proposed during the extended construction hours.

However, the levels of vibration generated by the construction activities will be site specific and will depend upon the type of activity, the particular equipment used, and the proximity of the construction activity to the nearest occupied spaces within the affected properties.

The Contractor should carry out a review of vibration generated by these construction activities, and assess these against the criteria for human comfort and building damage provided in Sections 5.4.6.3 and 5.4.6.4.

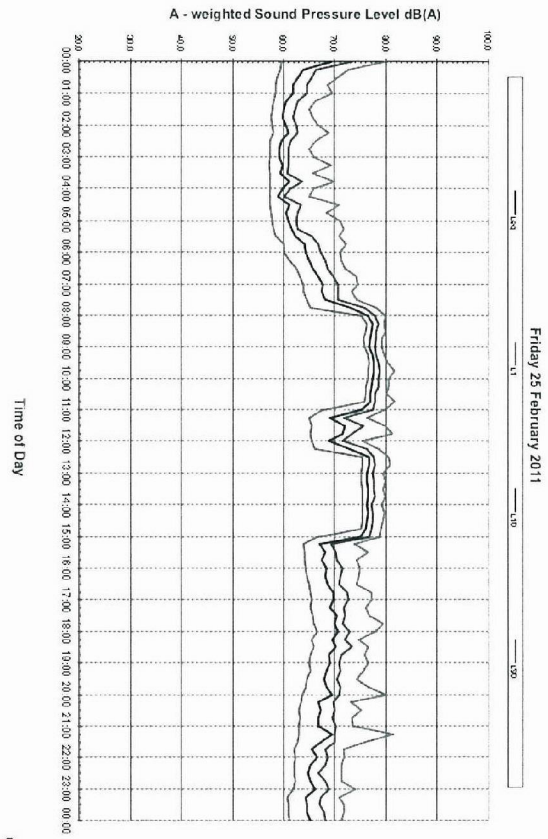
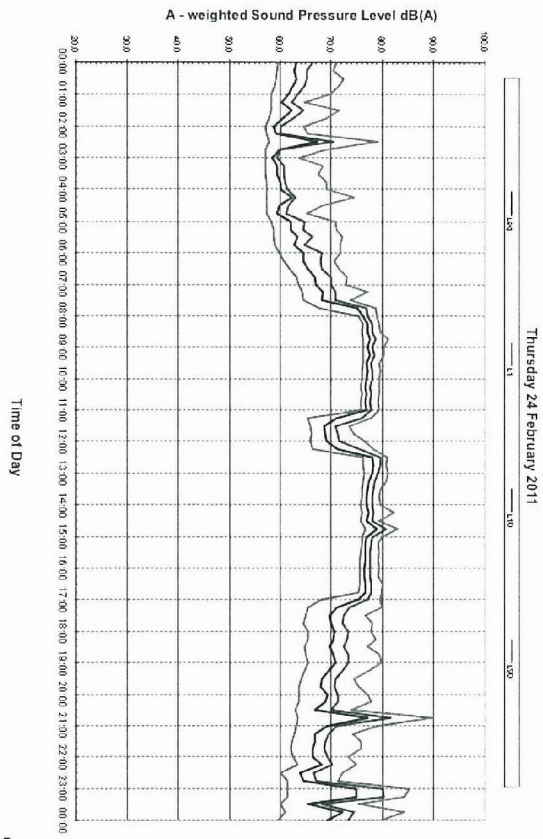
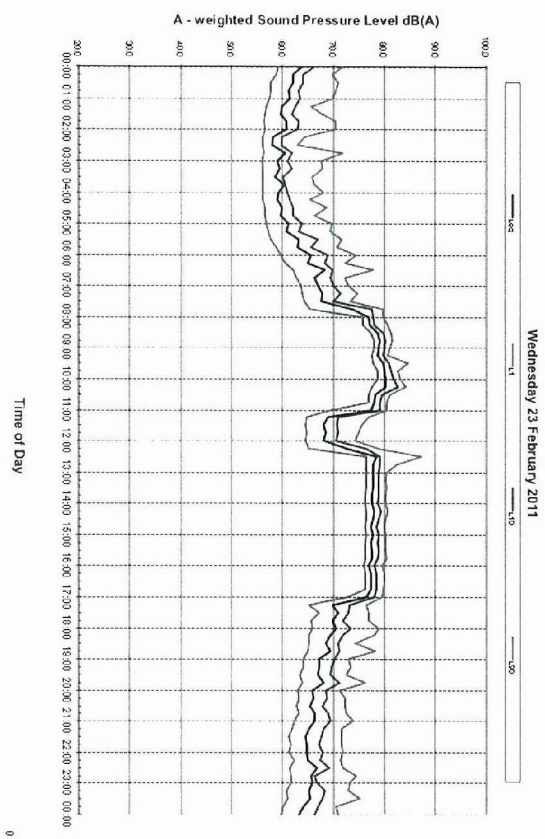
A preliminary vibration survey on site will determine the actual vibration levels generated by each activity, and whether a means of vibration mitigation will be necessary for any equipment or processes on the site.

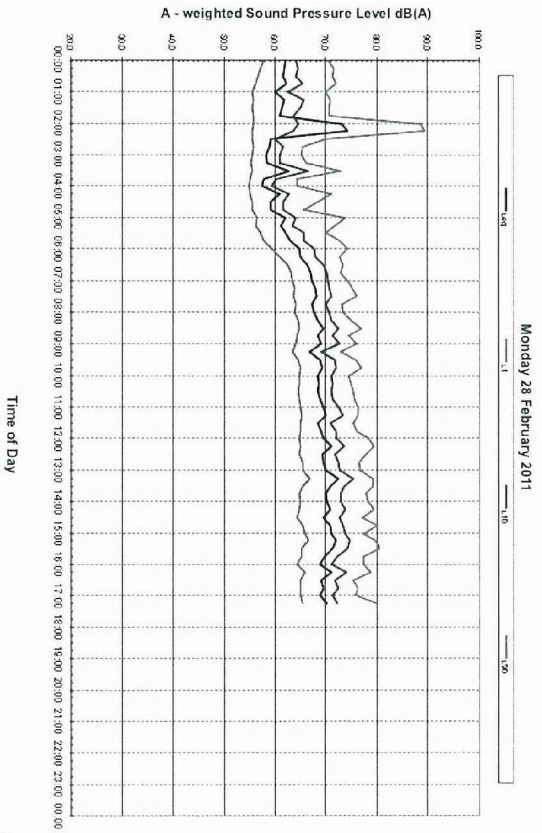
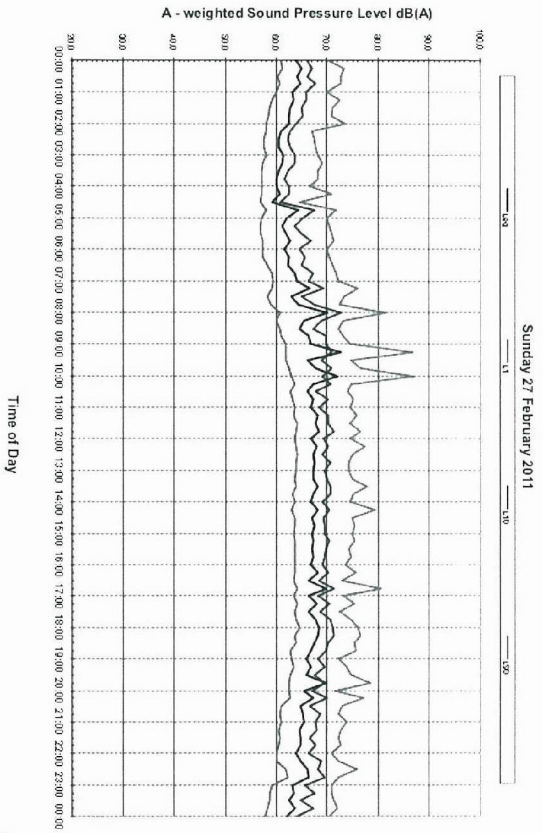
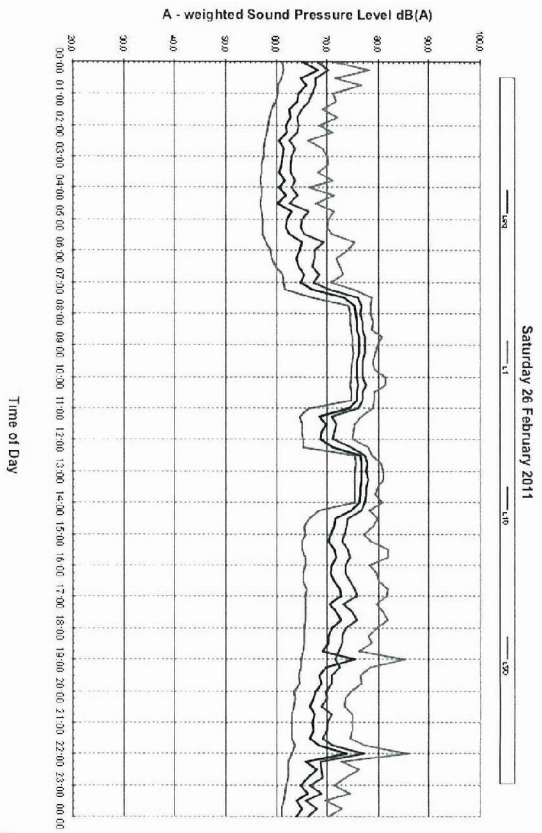
Given the nature of the works, the distance to the closest affected receivers plus the need to control vibration levels affecting the existing hotel building structure to avoid building damage, we consider that vibration limits at the affected receivers are unlikely to be exceeded and vibration mitigation will not be required.

Appendices

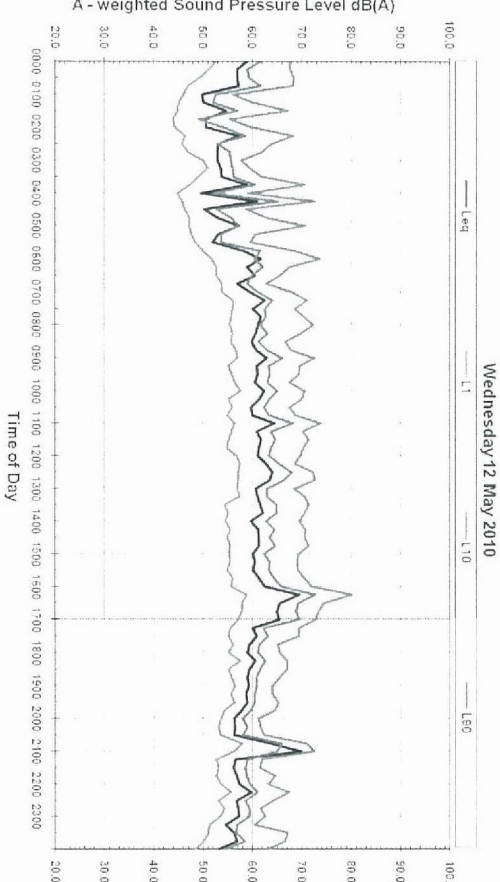
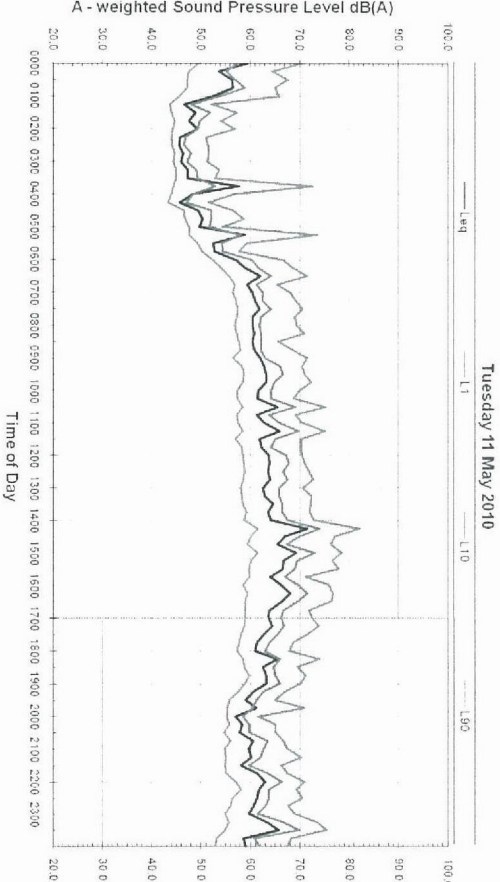
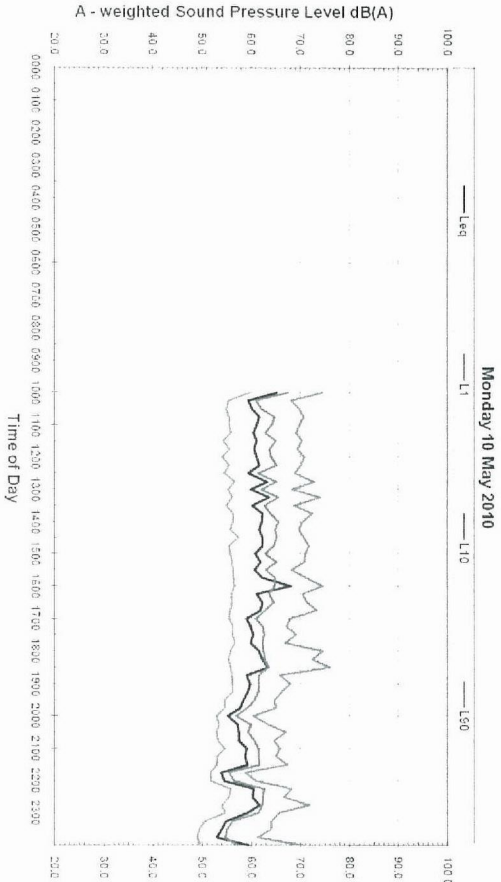
Appendix A: Long-term Monitoring Results

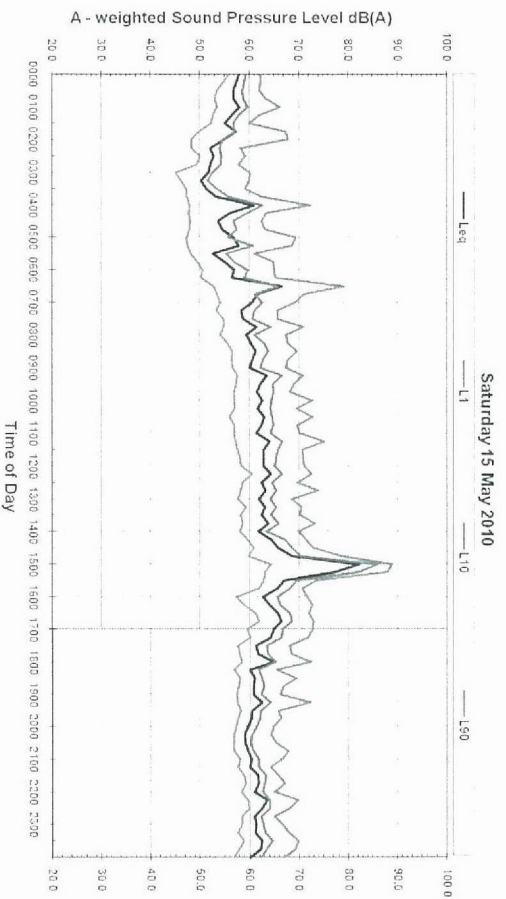
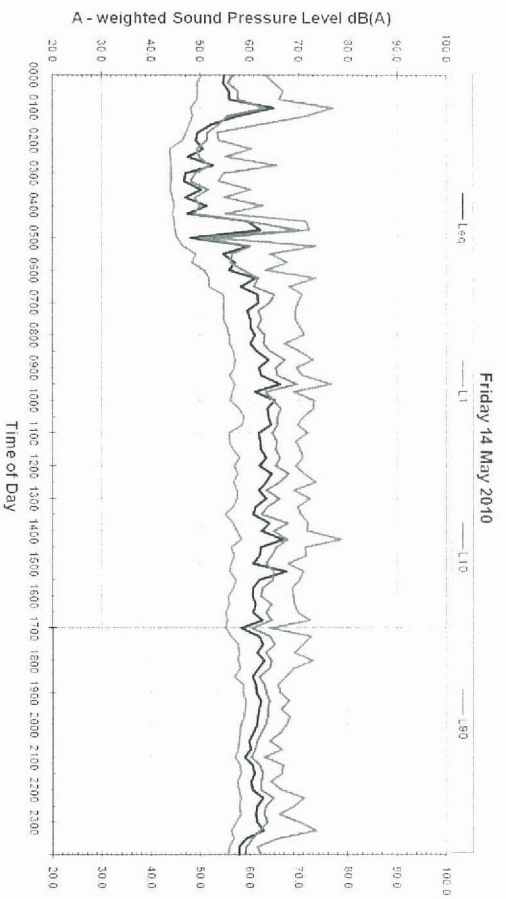
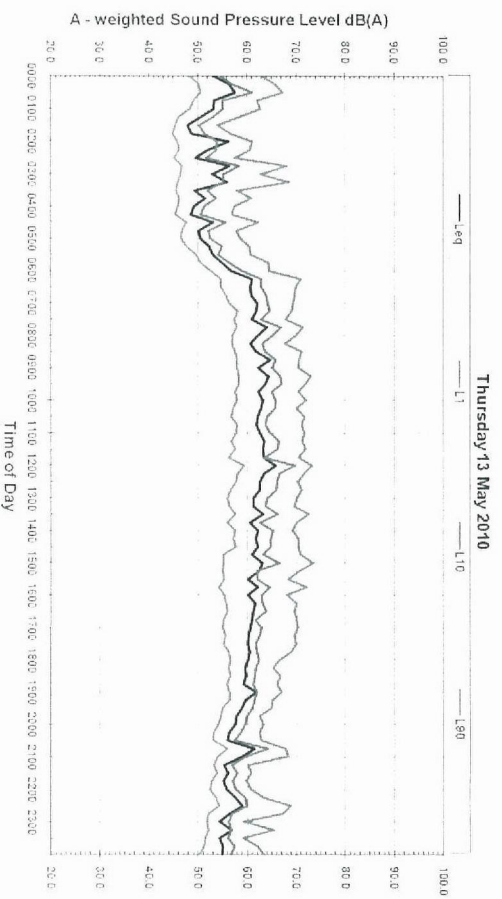
A1 Results from Noise Logger on Park Hyatt Rooftop

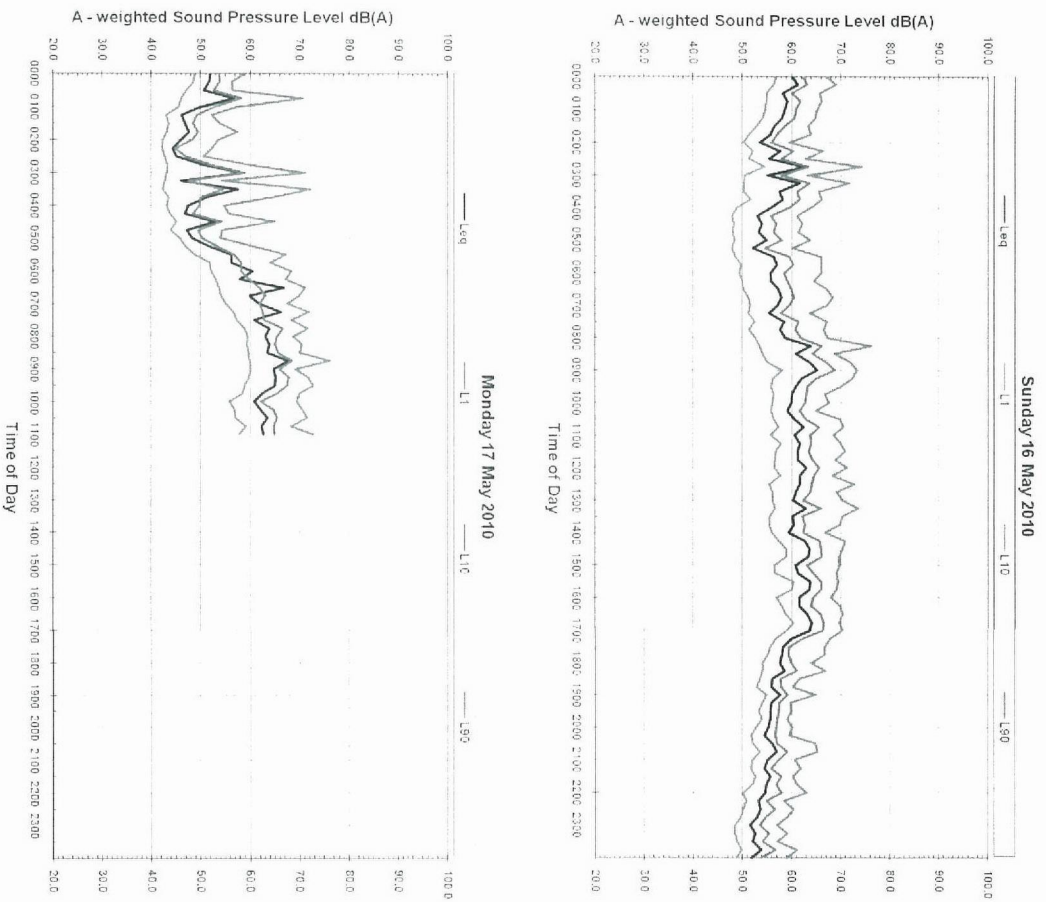




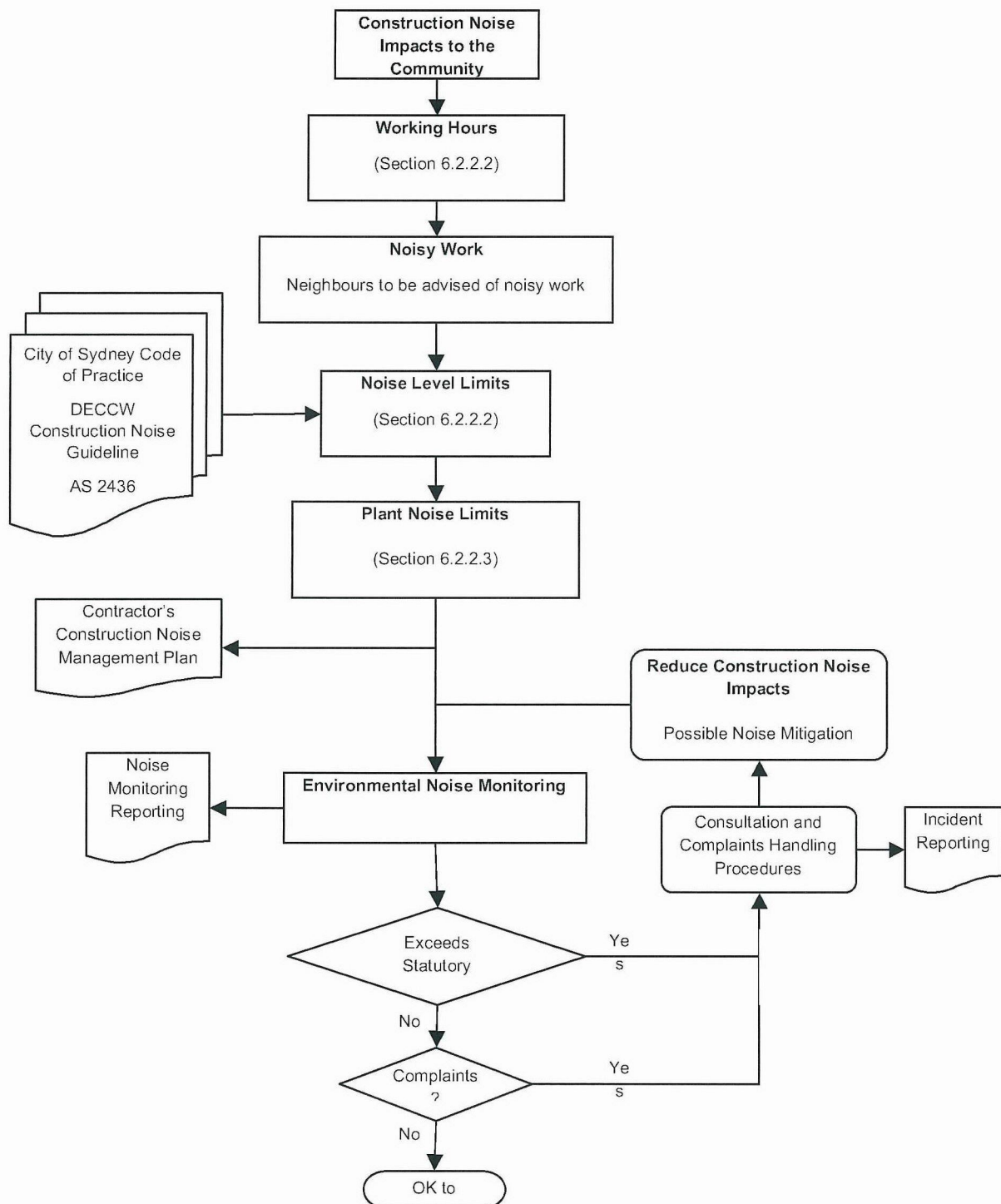
A2 Results from Noise Logger at 1 Macquarie Street (on Sydney Opera House Security Gate House)







Appendix B: General approach to managing construction noise impacts on the community



Appendix C: Certificate of Acoustic Performance for Construction Works Appliances

FORM D

Certificate Of Acoustic Performance

1. General information

- a. Construction Site (address)
- b. Applicant
- c. Acoustic Adviser
- d. Date and time of test
- e. Weather conditions during test
- f. Instruments used for Noise Measurements
- g. Details of Nominated Affected Occupancy (example windows open/closed, air-conditioned)

2. Appliance noise levels. The following $L_{A\text{ av max}}$ noise levels were measured at a distance of 7 metres from the nearest point of each Appliance:

Appliance $L_{A\text{ av max}}$ Noise level (dBA)

3. Noise levels at boundaries. The following $L_{A\text{ av max}}$ noise levels were measured at the boundaries nominated during the Construction Work/...(specified) .. Operation:

Boundary $L_{A\text{ av max}}$ Noise level (dBA)

Boundary $L_{A\text{ av max}}$ Noise level (dBA)

4. Noise Levels at Nominated Affected Occupancy. The following $L_{A\text{ av max}}$ noise levels were measured at the Nominated Affected Occupancy during Construction Work/.... (specified)....Operation:

Address/ $L_{A\text{ av max}}$ Noise level (dBA)
Location

5. Background Noise Levels. The following ambient L_{A90} noise levels were measured during the 15 minute periods shown at the Nominated Affected Occupancy:

Address Time Period L_{A90} Noise Level (dBA)

I (full name), qualified Acoustic Adviser of(name of company/employer) certify that this form has been prepared in accordance with the City of Sydney Code of Practice for Construction Hours/Noise Code 1992.

(signature)

Appendix D: Vibration Criteria

Human Comfort

The Environmental Noise Control Manual, Chapter 174, issued by the Environmental Protection Authority (EPA), contains guidelines to limit vibration levels generated by activities on construction sites.

Guidelines are given in terms of satisfactory vibration levels related to the minimum adverse comment level by building occupants. Table D1 gives the vibration limits for both continuous and intermittent vibration to prevent adverse comment in various working areas. Daytime is between 7am and 10pm and night-time is between 10pm and 7am. These limits apply at the site boundary.

Space	Time	Continuous Vibration (mm/s)	Intermittent Vibration (mm/s)
Residential	Day	0.2	6.0
	Night	0.14	2.0
Office	Day	0.4	12.7
	Night	0.4	12.7
Workshops	Day	0.8	12.7
	Night	0.8	12.7
Precision Laboratories	Day	0.1	0.1
	Night	0.1	0.1

Table D1: Vibration Criteria to Ensure Human Comfort

Building Damage

There is little reliable data on the threshold of vibration-induced damage in buildings. Although vibrations induced in buildings by ground-borne excitation are often noticeable, there is little evidence that they produce even cosmetic damage¹. This lack of data is one of the reasons that there is variation between international standards, why the British Standards Institution (BSI) did not provide guidance before 1992 and why there are still no International Organisation for Standardisation (ISO) guidance limits.

There are however several standards that can be referred to.

¹ Building Research Establishment (1995), 'Damage to Structures from Ground-borne Vibration', *BRE Digest*

German Standard

The relevant German standard is DIN 41 50: Part 3: 19862. This standard gives guidelines for short-term and steady state structural vibration. For short-term vibration in buildings the following limits are given:

Structural type	Vibration Velocity, v_i , in mm/s			
	Foundation			Plane of floor of uppermost full storey
	less than 10 Hz	10 to 50 Hz	50 to 100 Hz	Frequency mixture
Commercial, Industrial or Similar	20	20 to 40	40 to 50	40
Dwellings or Similar	5	5 to 15	15 to 20	15
Particularly Sensitive	3	3 to 8	8 to 10	8

Table D2: Guideline Values of Vibration Velocity, v_i , for Evaluating the Effects of Short-term Vibration

The guidelines state that:

Experience to date has shown that, provided the values given in Table D2 are observed, damage due to vibration, in terms of a reduction in utility value, is unlikely to occur. If the values of table D2 are exceeded, it does not necessarily follow that damage will occur. Should these values be significantly exceeded, further investigation is necessary.

Swiss Standard

The relevant Swiss standard is SN 640 312:1978. For steady state vibration, from machines, traffic and construction in buildings the following limits are given:

Structural type	Vibration Velocity, v_i , in mm/s	
	Foundation	
	10 to 30 Hz	30 to 60 Hz
Commercial, Industrial including retaining walls	12	12 to 18
Foundation walls and floors in concrete or masonry. Retaining walls and ashlar construction	8	8 to 12
Foundations and basement floors concrete, with wooden beams on upper floors. Brick walls.	5	5 to 8
Particularly sensitive	3	3 to 5

Table D3: Guideline Values of Vibration Velocity, v_i , for Evaluating the Effects of Steady State Vibration

British Standard

The relevant standard is BS7385: Part 2: 1993². This standard was developed from an extensive review of UK data, relevant national and international documents and other published data, which yielded very few cases of vibration-induced damage. This standard contains the most up-to-date research on vibration damage in structures. Part 2 of the standard gives specific guidance on the levels of vibration below which building structures are considered to be at minimal risk.

The Standard proposes the following limits on the foundations of the building:

Structural type	Peak component particle velocity in frequency range of predominant pulse	
	4 Hz to 15 Hz	15Hz and above
Unreinforced or light framed structures	15mm/s @ 4Hz increasing to 20mm/s @ 15Hz	20mm/s @ 15Hz increasing to 50mm/s @ 40Hz and above
Residential or light commercial type buildings		

Table D4: Transient Vibration Guide Values for Cosmetic Damage

The standard states in Annex A, that ... *the age and existing condition of a building are factors to consider in assessing the tolerance to vibration. If a building is in a very unstable state, then it will tend to be more vulnerable to the possibility of damage arising from vibration or any other ground-borne disturbance.* It is recommended that buildings of importance be considered on a case-by-case basis with detailed engineering analysis being carried out if necessary.

Annex B of the Standard gives a breakdown of data that should be recorded. Included in this are details of the building structure, such as general condition of the structure, list of defects, photographs, details of all major extensions, repairs and renovations. A crack exposure report should be prepared both pre and post exposure, both internally and externally.

Australian Standard

There is no specific Australian Standard referring to structural vibration in buildings. There is however AS 2187.2 - 1993³, which, in Appendix J, recommends maximum peak particle velocities, measured at the ground surface due to blasting. The lower

² BS 7385: Part 2: 1993 Evaluation and Measurement for vibration in Buildings, Guide to damage levels from groundborne vibration

³ AS 2187.2 - 1993 Explosives - Storage, transport and use. Part 2: Use of explosives

recommended peak particle velocity is 10 mm/s. The standard states however, that structures that may be particularly susceptible to ground-borne vibration should be examined on an individual basis. It is suggested that in the absence of a particular site-specific study then a maximum peak particle velocity of 5 mm/s is used.

Summary

Table D5 gives a summary of recommended vibration limits for buildings to prevent damage. The most stringent limit recommended in the German and Swiss standards is 3 mm/s. However, this criterion is applicable to particularly sensitive constructions such as heritage buildings. Therefore, the next most stringent level of 5 mm/s has been conservatively chosen as an appropriate limit whilst the construction work is carried out. This limit should be met across the full frequency range of relevance i.e. typically 4 Hz – 250 Hz encountered in building construction.

Standard	Type of building	Recommended vibration limit	Comments
DIN 4150	Structures of particular sensitivity or worthy of protection	3 mm/s to 20 mm/s @ < 10 Hz 3-40 mm/s @ 10-50 Hz 8-50 mm/s @ 50 Hz+ Also measurement at the top floor with limit of 8 mm/s to 40 mm/s across frequency range	Limit is for peak particle velocity in x,y, and z directions. Measurement on the top floor in x and y directions only
BS 7385	Un-reinforced or light framed	15 mm/s @ 4 Hz rising to 20 mm/s @ 15 Hz then rising to 50 mm/s @ 40 Hz and above ¹	Limit is for peak particle velocity in x, y, and z directions
AS 2187	Houses and low-rise residential, commercial buildings not of reinforced or steel construction	5 mm/s ¹	For buildings particularly susceptible to vibration. Limit is for peak <i>resultant</i> particle velocity, measured on the ground adjacent to the structure
SN 640 312	Structures of particular sensitivity	3 mm/s to 12 mm/s @ 10-30 Hz 3 mm/s to 18 mm/s @ 30-60 Hz	Limit is for peak particle velocity in x, y, and z directions

Table D5: Summary of International Standards

Request to modify a major project



NSW GOVERNMENT
Department of Planning

Date duly made: ____/____/____

Modification No. _____

1. Before you lodge

This form is required under section 75W of the *Environmental Planning and Assessment Act 1979* (the Act) in order to request the Minister to modify the Minister's approval to carry out a project or concept plan to which Part 3A of the Act applies.

Before making this request, it is recommended that you first consult with the Department of Planning (the Department) concerning your modification. The Director-General may issue environmental assessment requirements that must be complied with before your request will be considered by the Minister. If the changes proposed by the modification will result in a project that is consistent with the existing approval, the Minister's approval for a modification is not required.

Disclosure Statement

Persons making a request to modify a project or concept plan are required to declare reportable political donations (including donations of or more than \$1,000) made in the previous two years.

Note: For more details about political donations disclosure requirements, including a disclosure form, go to www.planning.nsw.gov.au/donations.

Lodgement

All modification requests must be lodged with the Director-General of the Department of Planning, by courier or mail. An electronic copy should also be e-mailed to the assessment contact officer assigned to the project.

NSW Department of Planning
Ground floor, 23-33 Bridge Street, SYDNEY NSW 2000
GPO Box 39 SYDNEY NSW 2001
Phone 1300 305 695

2. Details of the proponent

Company/organisation/agency

DAISHO DEVELOPMENTS SYDNEY C/- URBIS

ABN

~~5005~~

50105256228

☒ Mr ☐ Ms ☐ Mrs ☐ Dr ☐ Other

First name

TIM

Family name

BLYTHE

Position

DIRECTOR

STREET ADDRESS

Unit/street no.

LEVEL 21, 321

Street name

KENT STREET

Suburb or town

SYDNEY

State

NSW

Postcode

2000

POSTAL ADDRESS (or mark 'as above')

AS ABOVE

Suburb or town

State

Postcode

Daytime telephone

02 82339900

Fax

8233 9966

Mobile

Email

tblythe@urbis.com.au

3. Identify the land

STREET ADDRESS (where relevant)

Unit/street no.

7

Street or property name

HICKSON ROAD

Suburb, town or locality

THE ROCKS, SYDNEY

Postcode

2000

Local government area(s)

CITY OF SYDNEY

State Electorate(s)

REAL PROPERTY DESCRIPTION

LOT 2 DP 804776

Note: The real property description is found on a map of the land or on the title documents for the land. If you are unsure of the real property description, you should contact the Department of Lands.

Please ensure that you place a slash (/) to distinguish between the lot, section, DP and strata numbers. If the proposed modification applies to more than one piece of land, please use a comma to distinguish between each real property description.

OR: detailed description of land attached: ☐

MAP: A map of the site and locality should also be submitted with this request.

4. Details of the original major project or concept plan

Briefly describe what the original approval allows

ALTERATIONS & ADDITIONS TO, AND REFURBISHMENT OF THE EXISTING HOTEL. INCLUDED VARIATION TO THE SYDNEY COVE REDEVELOPMENT AUTHORITY SCHEME.

What was the original project application no.?

MP 09-0044

What was the date of the approval?

3 MARCH 2011

What was the original application fee?

\$85,853.00

Note: Clause 245K of the *Environmental Planning and Assessment Regulation 2000* provides information on calculating the maximum fee for a request for modification.

5. Describe the modification you propose to make to the approval

Describe the proposed modification

EXTENSION TO APPROVED CONSTRUCTION HOURS AS DETAILED IN ATTACHED LETTER.

Your modification request may need to be accompanied by an Environmental Assessment, including plans. An electronic and hard copy of this document will be required.

ESTIMATED CAPITAL INVESTMENT VALUE

Please indicate the estimated capital investment value (CIV) of the modification to the project approval or concept plan (excluding GST).

\$ NO CHANGE TO CURRENT ESTIMATED CAPITAL INVESTMENT VALUE

FULL TIME EQUIVALENT JOBS

Please indicate the number of jobs created by the proposed modification. This should be expressed as a proportion of full time equivalent (FTE) jobs over a full year.

Construction jobs (FTE)

Operational jobs (FTE)

6. Landowner's consent (where required)

As the owner(s) of the above property, I/we consent to this request being made by the proponent:

Land

Land

Signature

Signature

Name

Name

Date

Date

Note: Under Clause 8F of the *Environmental Planning and Assessment Regulation 2000* (the Regulation), certain applications for approval under Part 3A of the Act do not require consent of the landowner, however, the proponent is required to give notice of the application (e.g. linear infrastructure, mining & petroleum projects, and critical infrastructure).

7. Political donation disclosure statement

Persons making a request to modify a project or concept plan are required to declare reportable political donations (including donations of or more than \$1,000) made in the previous two years.

Have you attached a disclosure statement to this request?

☐ Yes

☐ No

Note: For more details about political donations disclosure requirements, including a disclosure form, go to www.planning.nsw.gov.au/donations.

8. Proponent's signature

As the proponent(s) of the project and in signing below, I/we hereby:

- provide a description of the modification to the project approval or concept plan and address all matters required by the Director-General pursuant to Section 75W of the Act, and
- declare that all information contained within this form is accurate at the time of signing.

Signature

In what capacity are you signing if you are not the proponent

Name

Name, if you are not the proponent

Date