

20250483.9/1812A/R0/AW

18/12/2025

Mirvac Constructions Pty Ltd
Level 28
200 George Street
SYDNEY NSW 2000

Attn: Eliza Potter

Harbourside Retail - Response to Request for Additional Information

1 INTRODUCTION

This letter has been prepared in response to the Request for Additional Information provided by the City of Sydney with respect to the retail component of the Harbourside development (D/2025/1021). The request, and a further meeting with the City of Sydney on the 3rd of December 2025, requested additional assessment with reference to Section 3.18.1 of the Sydney DCP.

The originally submitted acoustic report presents an assessment of noise emissions with reference to the acoustic requirements detailed in the approved acoustic reports within:

- SSD-49295711 – Harbourside Shopping Centre Redevelopment – Podium and Tower and all associated modifications, including MOD-2, which incorporated land use provisions for event and conference use on the Level 01 floorplate.
- SSD-49653211 - Harbourside Shopping Centre Redevelopment – Public Domain and Bridges.

This response details the acoustic requirements for entertainment venues within the DCP as well as application to the proposed retail uses.

2 REVIEW OF REQUEST AND WIDER HARBOURSIDE REDEVELOPMENT APPROVAL

Within the SSDA Acoustic Assessments, previously prepared and approved by DPHI in support of the above approved proposals, an assessment framework for the noise emissions generated by the ground floor and level 02 entertainment uses was provided based on the following documentation:

- For existing residential receivers outside of the bounds of the project site, assessment was provided with respect to the typical L_{A10} noise conditions historically applicable to site's under the control of NSW Office of Liquor and Gaming. The requirements of the historic L_{A10} noise condition have been provided below, for reference.

The L_{10} noise level emitted from the premises shall not exceed 5dB above the background L_{90} sound level in any Octave Band Centre Frequency (31.5kHz to 8kHz inclusive) between the hours of 7.00am to 12.00 midnight when assessed at the boundary of the nearest affected residential premises.

L_{10} noise level emitted from the premises shall not exceed the background L_{90} sound level in any Octave Band Centre Frequency (31.5kHz to 8kHz inclusive) after midnight when assessed at the boundary of the nearest affected residential premises.

After midnight, noise emissions from the Place of Public Entertainment are to be inaudible within any habitable rooms in nearby residential properties.

- It is prudent to note that these requirements are no longer considered applicable to entertainment venues, given the changes to Section 97a of the NSW Liquor and Gaming Act 2007 Schedule 4.
- Supplementary to the above, noise impacts to the Harbourside Redevelopment residential tower were assessed to the alternative internal noise criteria proposed and approved in the SSDA Acoustic Assessment submitted in support of SSD-49295711.
- The requirement to nominate alternative noise criteria for the residential tower was mandated by the SSD-7874 Concept Approval, whereby the Future Environmental Assessment Requirements (FEARs) C18 - C20 nominated the following requirements:

"C18.

Future Development Application(s) must demonstrate that apartments within the proposal are adequately separated from lower floor active uses and events within the public domain to minimise the likelihood of noise disturbance.

C19.

Future Development Application(s) must be accompanied by a Noise and Vibration Impact Assessment (NVIA) that identifies and provides a quantitative assessment of the main noise generating sources and activities during operation. The NVIA must include:

- a) an alternative noise criterion for future apartments within the development utilising internal noise measurements with windows closed and designed to maximise the usage of the retail tenancies and events in the public domain without resulting in excessive impact on new and existing residents.*
- b) details of any mitigation measures to ensure the amenity of sensitive land uses, and the function and 24-hour operation of noise generating uses are protected during the operation of the development.*
- c) noise management and mitigation strategies for commercial uses which restricts hours of operation as a last resort*

C20.

Future Development Application(s) must demonstrate that the proposed apartments include sufficient acoustic attenuation to enable compliance with the alternative noise criteria."

- The formulated alternative internal noise criteria applicable to the Harbourside Tower is summarised as below:
 - Daytime and Evening (7am-10pm):
 - 38dB(A) $L_{eq(15 \text{ min})}$ in bedrooms (internally, with windows closed); and
 - 43dB(A) $L_{eq(15 \text{ min})}$ in living rooms (internally, with windows closed).
 - Late Evening (10pm-12am):
 - 35dB(A) $L_{eq(15 \text{ min})}$ in bedrooms (internally, with windows closed); and
 - 40dB(A) $L_{eq(15 \text{ min})}$ in living rooms (internally, with windows closed).
 - Overnight (12am-7am):
 - 25dB(A) $L_{eq(15 \text{ min})}$ in habitable spaces (internally, with windows closed).
- This detailed assessment framework has been utilised for the assessment of entertainment noise within supplementary planning submissions to the City of Sydney with respect to different fit-out elements of the development, inclusive of the Doltone House Fit-Out.
- The commentary provided by the city within the RFI presented in Section 1 of this letter requests assessment in line with the framework outlined within the City of Sydney DCP Section 3.18.

3 CITY OF SYDNEY DCP

Tables 3.18.1-1 and 3.18.1-2 of Section 3.18 of the CoS DCP have been reproduced below, and nominate the following internal noise level requirements:

Table 1 - External sound criteria as measured at the property boundary of the nearest identified sensitive receiver (DCP Table 3.18.1-1)

Sensitive Receiver	Time Period	Sound Criteria <i>L_{Zeq(15-min)}</i>
<i>Residential Accommodation or Serviced Apartments</i>	<i>7am – 12am</i>	<i>Must not exceed 5dB above RBL in each octave band</i>
	<i>12am – 7am</i>	<i>Must not exceed RBL in each octave band</i>

Table 2 - Internal sound criteria as measured inside any habitable room of the nearest sensitive receiver (DCP Table 3.18.1-2)

Sensitive Receiver	Time Period	Sound Criteria <i>L_{Zeq(15-min)}</i>
<i>Residential Accommodation or Serviced Apartments</i>	<i>7am – 12am</i>	<i>Must not exceed L_{Z90(15 min)} in each octave band</i>
	<i>12am – 7am</i>	<i>Must not exceed 12dB below L_{Z90(15 min)} or the threshold of audibility in each octave band</i>
<i>Where the dwelling is inside the same building</i>	<i>7am – 12am</i>	<i>Must not exceed 3dB below L_{Z90(15 min)} in each octave band</i>
	<i>12am – 7am</i>	<i>Must not exceed 12dB below L_{Z90(15 min)} or the threshold of audibility in each octave band</i>

(5) For Table 3.18.1-1, the rating background level (RBL) is the background L_{Z90} level for each 1/1 octave band from 31.5 Hz to 4 kHz, for the following periods measured in accordance with Fact Sheet B of the NSW Noise Policy for Industry:

- (a) 7am to 10pm
- (b) 10pm to midnight
- (c) midnight to 3am
- (d) 3am to 8am

- With respect to the above requirements the following assessment has been undertaken.
 - For receivers external to the development (primarily 50 Murray Street),
 - Given all apartments are elevated above the ground level, the external noise requirements detailed in DCP Table 3.18.1-1 is applied at the façade/balcony edge.
 - Internal noise requirements detailed in DCP Table 3.18.1-2 are applied within the apartment, assuming that windows or doors are open. Where the façade is open, internal noise levels will be driven by the external ambient noise. As such, the acoustic requirement will be compared to the external noise level.
 - For apartments within the Harbourside development,
 - Internal noise requirements detailed in DCP Table 3.18.1-2 are applied within the apartment, assuming that windows or doors are closed and the ventilation system is operating.
 - Internal noise levels with ventilation operating (i.e. the background level within the apartment) have been determined based on the mechanical equipment and layouts selected for the project.

We note that the above requirements represent a more stringent acoustic requirement than previously assessed as part of the original application, specifically in relation to the 'background + 0' internal noise requirements.

A summary of Section 3.18.1 DCP requirements as applied to the project are summarised in the table below.

Table 3 – DCP Section 3.18.1 Requirements – dB(Z) $L_{eq}(15min)$

Receiver	Time	31.5Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	A-wt
R8 (Low Level) Windows Open	Day + Evening (7am-10pm)	57	56	62	53	50	48	42	33	53
	Night (10pm-12am)	52	51	57	48	45	43	37	28	48
	Post-Midnight (12am-3am)	40	39	45	36	33	31	25	16	36
R8 (High Level) Windows Open	Day + Evening (7am-10pm)	61	62	68	59	56	54	48	39	59
	Night (10pm-12am)	56	55	61	52	49	47	41	32	52
	Post-Midnight (12am-3am)	44	43	49	40	37	35	29	20	40
R12 Windows Open	Day + Evening (7am-10pm)	61	60	66	57	54	52	46	37	57
	Night (10pm-12am)	56	55	61	52	49	47	41	32	52
	Post-Midnight (12am-3am)	44	43	49	40	37	35	29	20	40
HS Residential Tower (Any Time) Internal, Windows Closed with Ventilation Operating	Anytime	39	40	41	41	39	33	34	34	41

4 ENVIRONMENTAL NOISE MODELLING

4.1 OPERATIONAL SCENARIOS

Two scenarios have been presented for assessment against the DCP requirements:

- The original assessment, as detailed in the previously submitted acoustic report.
- An alternative scenario, which meets the most stringent of the DCP requirements (i.e. background + 0). The purpose of this scenario is to demonstrate the impacts to retail uses on the Harbourside development.

These scenarios and the associated restrictions are summarised in the table below.

Table 4 – Modelled Operational Scenarios (Refer Figure 1)

Level	Area	Operational Area	Original Assessment	Amended Assessment	
Ground Floor	Area 1	Internal	Open Façade to 10pm	Unchanged	
		External	N/A		
	Area 2	Internal	Façade open to 12am	Unchanged	
		External	Unrestricted external dining to 12am	Unrestricted external dining to 10pm	
	Area 3	Internal	Open façade to 12am	Open façade to 10pm	
		External	Unrestricted external dining to 12am, 50% capacity dining to 3am	Unrestricted external dining to 10pm	
	Area 4 (Eat Street)	Internal	Open Façade to 12am	Unchanged	
		External	Unrestricted external dining to 12am		
	Area 5	Internal	Façade Open All Times	Unchanged	
		External	Unrestricted External Use to 3am		
	Area 6	Internal	Open Façade to 12am	Unchanged	
		External	N/A		
	Level 2	Area 1	Internal	Open façade to 10pm	Façade closed at all times
			External	Unrestricted dining to 10pm	Unchanged
Area 2		Internal	Open façade to 10pm	Façade closed at all times	
		External	Unrestricted dining to 12am	Unrestricted dining to 10pm	

4.2 NOISE LEVEL ASSUMPTIONS

Assumptions for patron and music noise used for both scenarios are detailed below.

- A sound power level per patron of 75dB(A) L_{eq} with 1 in 2 talking within a licenced environment at any one time has been modelled within external licensed areas.
- Noise from breakout from internal areas has been assessed assuming all glazing area to be open (sliding doors,) unless specified otherwise.
- Indoor operational activity has been modelled with a conservative capacity of 1 person per m^2 .
- Inclusive of music, the spatially averaged internal noise level within each individual retail tenancy has been modelled as 84 dB(A) L_{eq} . This is considered a conservative internal noise level relative to similar uses in the experience of this office.
- Tenancies which are wholly located inside the ground floor floorplate have been excluded from assessment. Additional barriers and distance between these tenancies and receivers will have a significant attenuation impact when compared to the modelled tenancies, and the overall noise profile from the site will have limited impact from these internal tenancies.
- Noise levels for people talking have been modelled at a height of 1.5m AFL, assuming external areas are standing areas. This is considered conservative, and where external areas operate in a seated arrangement, additional barrier / distance attenuation will be observed by surrounding noise sensitive receivers.
- Noise emissions from outdoor spaces have been modelled to the areas nominated within the figures presented below.

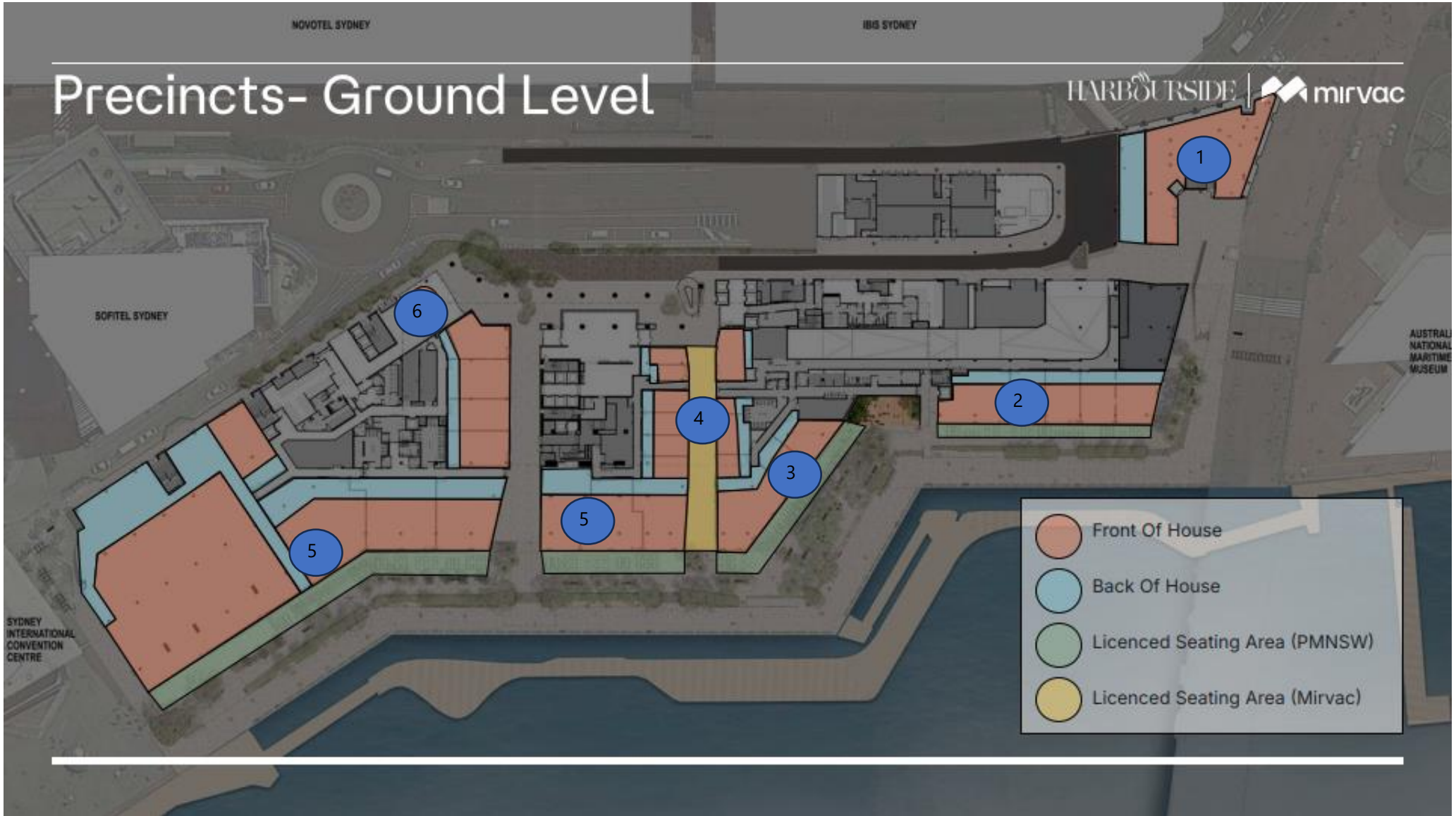


Figure 1 – Ground Floor Retail Layout

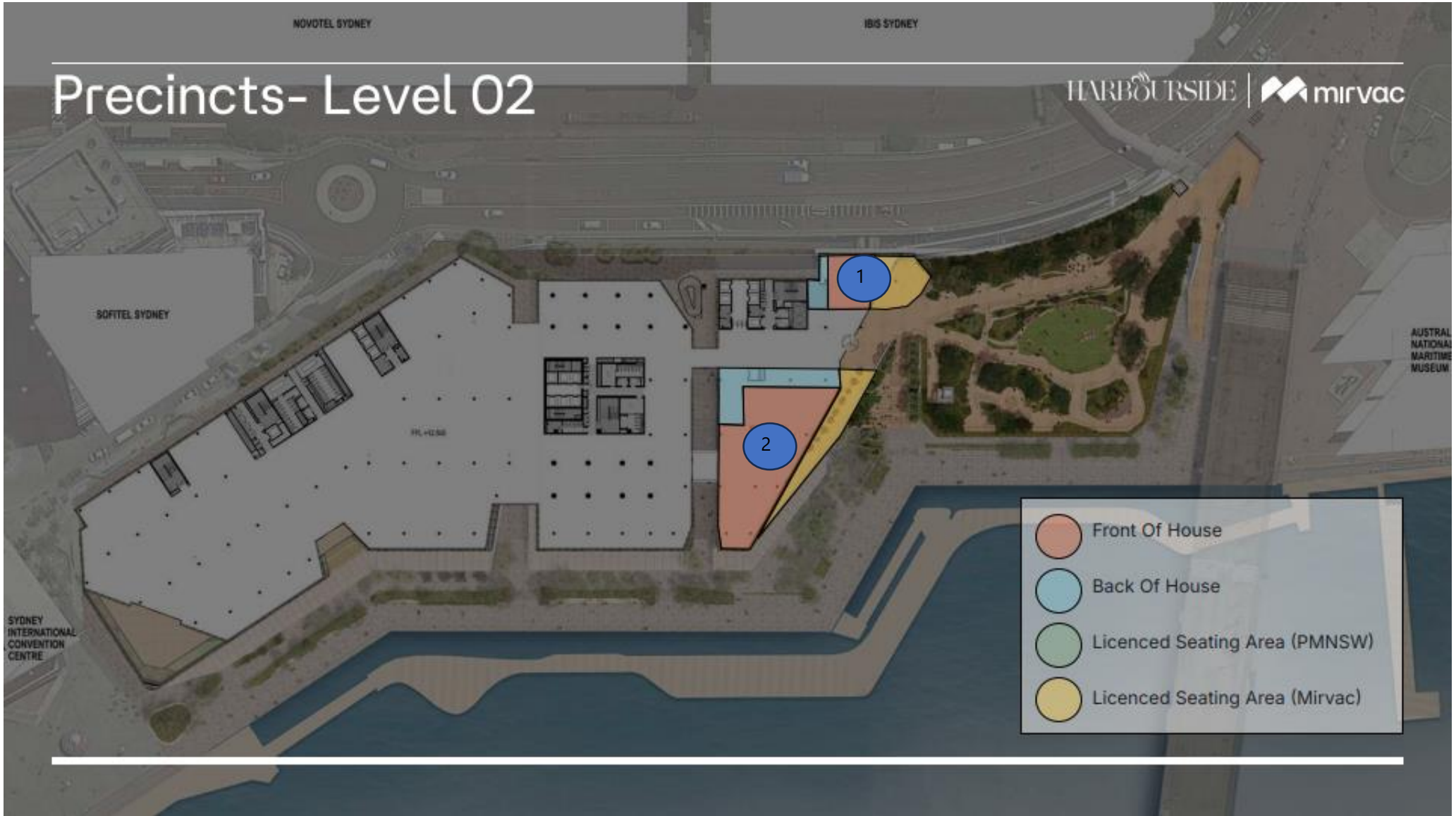


Figure 2 – Level 2 Retail Layout

4.3 PREDICTED NOISE LEVELS

Noise levels have been predicted at the receiver locations using SoundPLAN™ 8.0 modelling software implementing the ISO 9613-2:1996 "Acoustics – Attenuation of Sound During Propagation Outdoors – Part 2: General Method of Calculation" noise propagation standard.

Noise enhancing meteorological effects have been adopted as recommended by the NPfI, noting that the ISO 9613 modelling approach assumes that all receivers are 'downwind' (i.e., that noise enhancing wind conditions are in effect at all times).

Ground absorption was conservatively calculated with a ground factor of 0 for all areas except for localised lawns and greenery with a ground factor of 0.6 as recommended in *Engineering Noise Control* (Bies & Hanson).

In line with Factsheet C of the NPfI, penalties for annoying noise characteristics should be applied at the receiver, where applicable. Based on the predicted noise levels, no penalty should be applied (either for tonality, intermittency, or otherwise).

4.3.1 Scenario 1 (Original Assessment)

Noise levels for the original operational assumptions have been compared to Section 3.18 requirements of the DCP in the following tables. For each time period, noise levels have been compared to the most stringent noise requirements.

Table 4-5 – Predicted External Noise Levels – dB(Z) $L_{eq}(15min)$ – R8

Receiver	Noise Level dB(Z) L_{eq}	31.5Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	A-wt
R8 Windows Open	Daytime + Evening Predicted Noise Emission Level (7am – 10pm)	<45	<45	49	49	53	51	45	36	56
	Day + Evening Criteria (7am-10pm)	57	56	62	53	50	48	42	33	53
	Compliance	Yes	Yes	Yes	Yes	+3	+3	+3	+3	-
	Night Predicted Noise Emission Level (10pm-12am)	<40	<40	<50	44	48	46	40	28	44
	Night Criteria (10pm-12am)	52	51	57	48	45	43	37	28	48
	Compliance	Yes	Yes	Yes	Yes	+3	+3	+3	Yes	-
	Post-Midnight Predicted Noise Emission Level (12am-3am)	<35	<35	<40	31	36	33	28	15	37
	Post-Midnight Criteria (12am-3am)	40	39	45	36	33	31	25	16	36
	Compliance	Yes	Yes	Yes	Yes	+3	+2	+3	Yes	-

Table 4-6 – Predicted External Noise Levels – dB(Z) $L_{eq(15min)}$ – R12 High Level

Receiver	Noise Level dB(Z) L_{eq}	31.5Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	A-wt
R12 Windows Open	Daytime + Evening Predicted Noise Emission Level (7am – 10pm)	<50	<50	<60	<50	44	41	<40	<30	45
	Day + Evening Criteria (7am-10pm)	61	60	66	57	54	52	46	37	57
	Compliance	Yes								
	Night Predicted Noise Emission Level (10pm-12am)	<40	<40	<40	<40	44	40	34	20	44
	Night Criteria (10pm-12am)	56	55	61	52	49	47	41	32	52
	Compliance	Yes								
	Post-Midnight Predicted Noise Emission Level (12am-3am)	<30	<30	<30	<30	29	<30	<25	<20	32
	Post-Midnight Criteria (12am-3am)	44	43	49	40	37	35	29	20	40
	Compliance	Yes								

Table 4-7 – Predicted External Noise Levels – dB(Z) $L_{eq(15min)}$ – R12 High Level

Receiver	Noise Level dB(Z) L_{eq}	31.5Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	A-wt
Harbourside Residential Tower Windows Closed and Ventilation System Operating	All Times (Daytime + Evening Worst Case)	31	34	37	33	31	22	18	-	31
	Predicted Noise Level									
	Internal Noise Criteria (Anytime)	39	40	41	41	39	33	34	34	41
	Compliance	Yes								

4.3.2 Scenario 2 (Revised Assessment/Restrictions)

Noise levels for amended (more restrictive) operational assumptions have been compared to Section 3.18 requirements of the DCP in the following tables. For each time period, noise levels have been compared to the most stringent noise requirements.

Table 4-8 – Predicted External Noise Levels – dB(Z) $L_{eq}(15min)$ – R8

Receiver	Noise Level dB(Z) L_{eq}	31.5Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	A-wt
R8 Windows Open	Daytime + Evening Predicted Noise Emission Level (7am – 10pm)	<45	<45	46	43	50	47	42	31	53
	Day + Evening Criteria (7am-10pm)	57	56	62	53	50	48	42	33	53
	Compliance	Yes								
	Night Predicted Noise Emission Level (10pm-12am)	<40	<40	<50	40	45	42	36	23	47
	Night Criteria (10pm-12am)	52	51	57	48	45	43	37	28	48
	Compliance	Yes								
	Post-Midnight Predicted Noise Emission Level (12am-3am)	<35	<35	<40	31	33	28	22	9	34
	Post-Midnight Criteria (12am-3am)	40	39	45	36	33	31	25	16	36
	Compliance	Yes								

Table 4-9 – Predicted External Noise Levels – dB(Z) $L_{eq(15min)}$ – R12 High Level

Receiver	Noise Level dB(Z) L_{eq}	31.5Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	A-wt
R12 Windows Open	Daytime + Evening Predicted Noise Emission Level (7am – 10pm)	<50	<50	<60	<50	44	41	35	22	44
	Day + Evening Criteria (7am-10pm)	61	60	66	57	54	52	46	37	57
	Compliance	Yes								
	Night Predicted Noise Emission Level (10pm-12am)	<40	<40	<40	<40	42	39	34	21	43
	Night Criteria (10pm-12am)	56	55	61	52	49	47	41	32	52
	Compliance	Yes								
	Post-Midnight Predicted Noise Emission Level (12am-3am)	<30	<30	<30	<30	27	<30	<25	<20	30
	Post-Midnight Criteria (12am-3am)	44	43	49	40	37	35	29	20	40
	Compliance	Yes								

Table 4-10 – Predicted External Noise Levels – dB(Z) $L_{eq(15min)}$ – R12 High Level

Receiver	Noise Level dB(Z) L_{eq}	31.5Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	A-wt
Harbourside Residential Tower Windows Closed and Ventilation System Operating	All Times (Daytime + Evening Worst Case)	28	31	34	30	28	19	15	-	28
	Predicted Noise Level									
	Internal Noise Criteria (Anytime)	39	40	41	41	39	33	34	34	41
	Compliance	Yes								

4.4 DISCUSSION OF RESULTS

There is an approximate 3dB reduction between operational scenarios, which represents a limited reduction with respect to perceptible noise levels. In terms of noise impact, there is little difference between the two scenarios.

However, significant operational changes are required to achieve this reduction. Specifically, several outdoor dining areas are required to close at 10pm (rather than midnight), and there are further restrictions on the operation (closure) of façades.

We also note that the 3dB exceedance is only applicable to the internal (background + 0) noise requirement – were the windows to be open - as detailed in DCP Table 3.18.1-2. For the external (background + 5) noise requirement, as detailed in DCP Table 3.18.1-1, compliance is achieved to all receivers at all times for both Scenario 1 and Scenario 2.

With respect to the marginal 3dB exceedance noted for Scenario 1, this only applies at 50 Murray Street (R8). All other residences are compliant at all times with the more stringent DCP requirements at all times.

5 CONCLUSION

This letter has provided a response to the Request for Additional Information provided by the City of Sydney with respect to the retail component of the Harbourside development (D/2025/1021). The request, and a further meeting with the City of Sydney on the 3rd of December 2025, requested additional assessment with reference to Section 3.18.1 of the Sydney DCP.

Two operational scenarios have been presented and compared to the Section 3.18 DCP requirements.

Please contact us should you have any further queries.

Yours faithfully,



Acoustic Logic Pty Ltd
Alex Washer