

11 September 2020

2200201

Jim Betts
Planning Secretary
Department of Planning, Industry and Environment
12 Darcey Street
Parramatta NSW 2150

SECTION 4.55(2) MODIFICATION APPLICATION
Building R4B, One Sydney Harbour, Barangaroo South Sydney

This modification application has been prepared by Ethos Urban on behalf of Lendlease (Millers Point) Pty Ltd, pursuant to section 4.55(2) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) to modify Development Consent SSD 6965 relating to Building R4B Barangaroo South (the site). The proposed modifications relate to:

- Increase in the number of apartments from 283 to 290, including a revision to the dwelling mix.
- Internal layout refinements of apartments, including redesign of sky homes and subsequent roof redesign.
- Minor alterations to the tower façade.
- Amendment to the water feature within the ground level lobby and the entry vestibule design at the ground level.
- Amendments to the podium façade and circulation within the podium amenities.
- Amendments to the landscaped podium pool layout.
- Amendment to the façade of carpark entrance.
- Increase in the total number of car parking spaces from 320 to 324.
- Relocation of the lift motor room from level 33-34 to level 35-36.

This application identifies the consent, describes the proposed modifications and provides a planning assessment of the relevant matters for consideration contained in section 4.55(2) of the EP&A Act and is accompanied by:

- Architectural Plans prepared by Peddle Thorp and Walker (PTW) & Renzo Piano Building Workshop (RPBW) (**Attachment A**).
- Design Report prepared by Renzo Piano Building Workshop (**Attachment B**).
- Design Verification Statement prepared by Peddle Thorp and Walker & Renzo Piano Building Workshop (**Attachment C**).
- Landscape Drawings prepared by McGregor Coxall (**Attachment D**).
- BASIX Certificate prepared by Lendlease Technical Services (**Attachment E**).
- Solar and Daylight Access Study prepared by Lendlease Integrated Solutions (**Attachment F**).
- Vertical Transport Assessment prepared by Lendlease Integrated Solutions (**Attachment G**).
- Cross Ventilation Letter prepared by Aurecon (**Attachment H**).
- Traffic Assessment prepared by JMT Consulting (**Attachment I**).
- Building Code of Australia Assessment prepared by McKenzie Group (**Attachment J**).
- Accessibility Statement prepared by Morris Goding Access Consultants (**Attachment K**).
- Fire Engineering Report prepared by Worrrington Fire (**Attachment L**).
- Structural Engineering Report prepared by Robert Bird Group (**Attachment M**).

1.0 Consent proposed to be modified

Development consent SSD 6965 was granted by the NSW Minister for Planning on 7 September 2017 for a 60-storey mixed use building, with 297 residential units and retail floorspace at ground level. This included a total gross floor area (GFA) of 38,896m², 38,602m² of which was approved for residential floor space, and the remaining 294m² was approved for retail floorspace. The original consent also approved associated building public domain works, fit-out and use of the basement, a link bridge connecting to Building R4A and associated building identification signage.

On 7 February 2020, development consent SSD 6965 was amended to account for a range of design changes, including an increase in retail GFA by 15m², a reduction in the number of apartments to 283, a revised dwelling mix, floor level adjustments, façade and landscaping amendments and an addition of 20 residential car parking spaces and removal of one retail car parking space. Therefore, this modification application represents the second amendment to the development consent.

2.0 Proposed modifications to the consent

The proposed modifications to the development consent comprises:

- Increase in the number of apartments from 283 to 290, including a revision to the dwelling mix.
- Internal layout refinements of apartments, including redesign of sky homes and subsequent roof redesign.
- Minor alterations to the tower façade.
- Amendment to the water feature within the ground level lobby and the entry vestibule design at the ground level.
- Amendments to the podium façade and circulation within the podium amenities.
- Amendments to the landscaped podium pool layout.
- Amendment to the façade of carpark entrance.
- Increase in the total number of car parking spaces from 320 to 324.
- Relocation of the lift motor room from level 33-34 to level 35-36.

The proposed modifications are illustrated on the Architectural Plans prepared by PTW & RPBW (**Attachment A**) and described in further detail in the Design Report prepared by RPBW (refer to **Attachment B**). A summary is outlined below.

Increase to Total Apartments and Revised Dwelling Mix

An increase of seven apartments is proposed as part of this modification application, bringing the total number of apartments to 290. These additional apartments are contained within the approved building envelope but have arisen through the reconfiguration of apartments (discussed further below) and a resulting amendment to the proposed dwelling mix. The amended dwelling mix is set out in **Table 1** below.

Table 1 Approved and Proposed Dwelling Mix

Heading	Approved	Proposed
One Bedroom	107	107
Two Bedroom	104	120
Three Bedroom	54	61
Four Bedroom	18	0
Five Bedroom	0	2
TOTAL	283	290

Internal Layout Refinements (Low Rise and Mid Rise)

This modification application proposes four primary internal layout adjustments to the low and mid-rise floor plates within Building R4B, which have arisen through design development. These changes are proposed throughout the tower, and in some instances have resulted in the creation of new apartments.

Firstly, it is proposed that west facing apartments LB-05 and LB-06 on the low-rise and mid-rise floor plates are to be repositioned, placing the two bedroom apartments on the corner, providing dual aspect, and the one bedroom apartments shifting north on the plate, allowing for an increase in primary façade frontage and increased internal area (refer to **Figure 1**). To respond to this change, it is also proposed that some minor façade changes are made, including shifting the operable window eastwards.

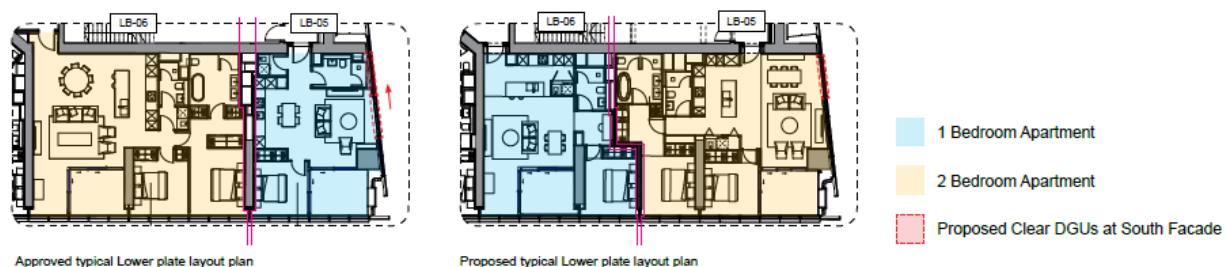


Figure 1 Proposed residential changes on the low-rise and mid-rise plates.

Source: RPBW

Secondly, the apartment on the northern corner of Building R4B, apartment LB-01 on residential levels one to four, will reflect the three-bedroom layout consistent with the rest of the stack within the low-rise levels.

Thirdly, on levels 48 to 55, it is proposed to reconfigure the three approved apartments per level to four apartments. This reconfiguration is achieved by reducing the approved four bedroom apartments to three bedrooms, and reducing the approved three bedroom apartment to two bedroom apartments (refer to **Figure 2**). These changes have been made to respond to recent market demands.



Figure 2 Revised dwelling mix proposed for the upper plates.

Source: RPBW

Finally, it is proposed to reintroduce study areas in some apartments in the R4B building. In response to market demand for home work spaces and studies, a study area has been re-introduced in apartments LB-04 (levels 1 – 32) and MB-03 (levels 33 – 46). The space is connected to the main living space with a minimum 1.2m entry way for ventilation and to enable daylight access. The original 2017 R4B approval included a study in a similar location, and this modification seeks to revert to this design given the current and expected future demand for such spaces. An example of this change is shown in **Figure 3**.



Figure 3 Example of study area reintroduced in mid-rise apartment (shown in red).

Source: Various

Redesign of the Sky homes and Roof Terraces

The sky homes at the top of the building are also proposed to be reconfigured due to design development and in response to recent market feedback. The number of apartments will reduce from three apartments to two apartments across both floors. Subsequent amendments are also proposed to the roof terraces at the top of the building. The proposed changes involve internal reconfigurations and split roof top terraces, as illustrated in **Figure 4**.

Due to the reconfiguration of the sky home terraces at the roof level, amendments are required to the approved awning located on the rooftop (refer to **Figure 5**).

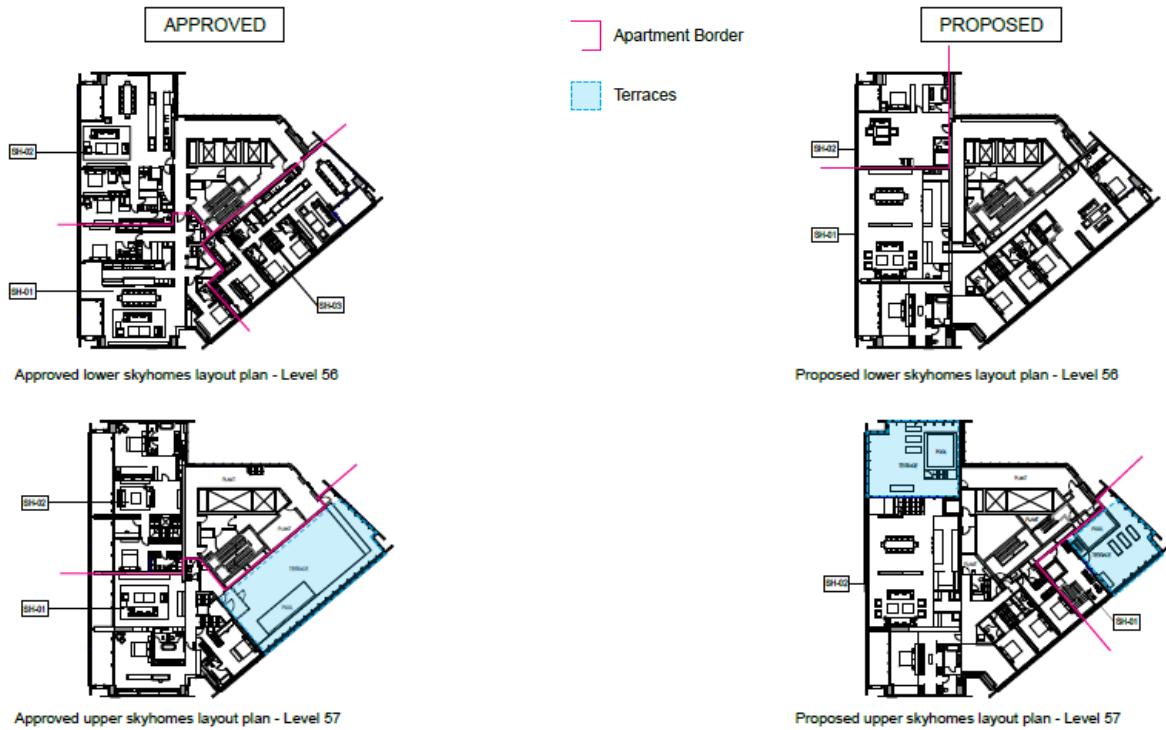


Figure 4 Proposed changes to the sky home levels

Source: *RPBW*



Approved Roof Layout

Figure 5

Tower Façade Amendments

Several amendments are proposed to the façade of the building, largely resulting from the internal changes outlined above. As discussed, the operable windows on the western facing apartments in the low-rise and mid-rise levels are being adjusted slightly to the east to reflect the internal changes, overall providing additional glazing to the apartments. These changes are illustrated in the Architectural Plans (**Attachment A**) and discussed further in the Design Report (**Attachment B**).

At the sky home levels, the reconfiguration and rationalisation of the terraces has resulted in the need for a reallocation of façade features for the wintergardens. These changes are illustrated in **Figure 6**.

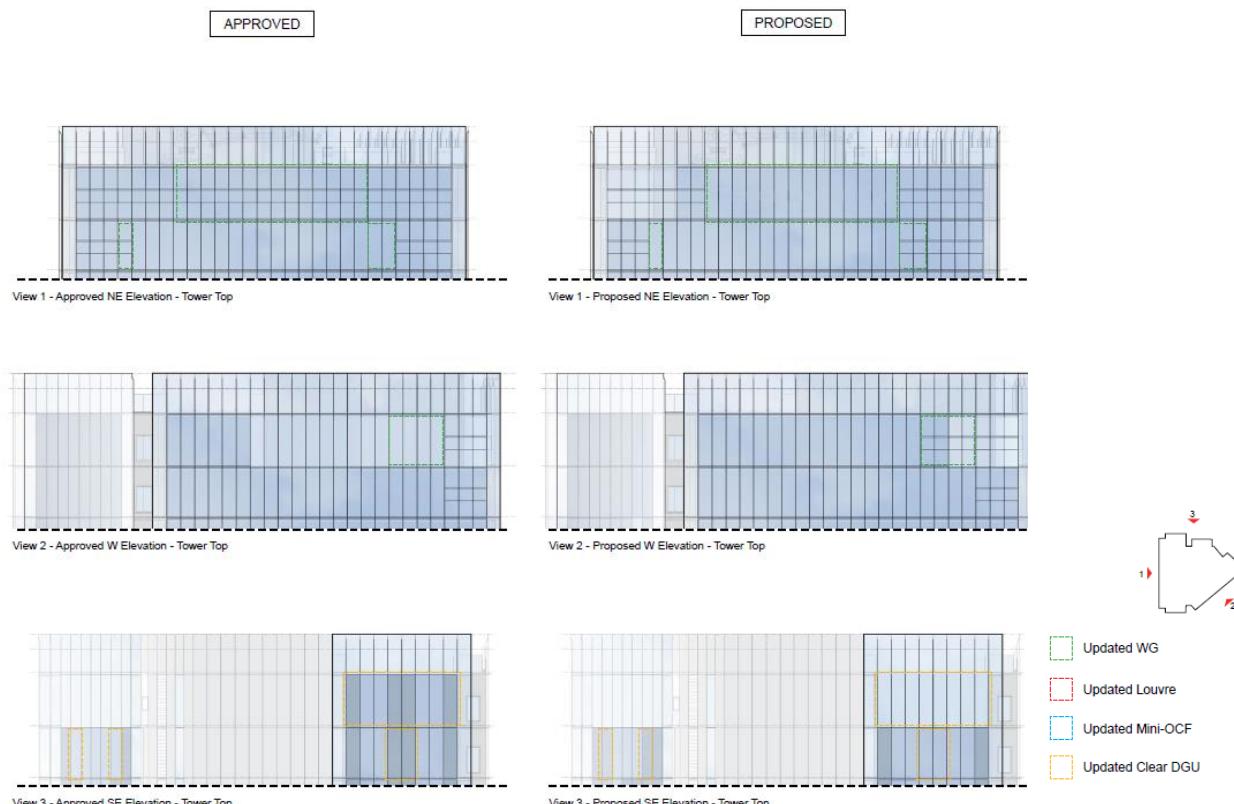


Figure 6 Proposed façade changes on the upper levels

A minor amendment is also proposed to the lowermost façade panels of the residential lobby and uppermost façade panels of the fringe located at the top of the building. A cap is proposed for both panels to create a consistent visual framing of the building so the skirt, fringes and wings share similar appearances at its edge and to better respond to both structure and durability concerns. This amendment is consistent with the change proposed for Building R4A and will therefore ensure consistency across the One Sydney Harbour buildings. The change is illustrated in **Figure 7**.

As part of design development, detailed analysis of the awning and skirt relationship at the lower levels has also been undertaken. As an outcome of this analysis it has determined that the skirt should be raised by 200mm and the awning lowered by 300mm to avoid conflict. This change, as illustrated in **Figure 7**, is proposed for both the north-east park façade and entry vestibule awnings.

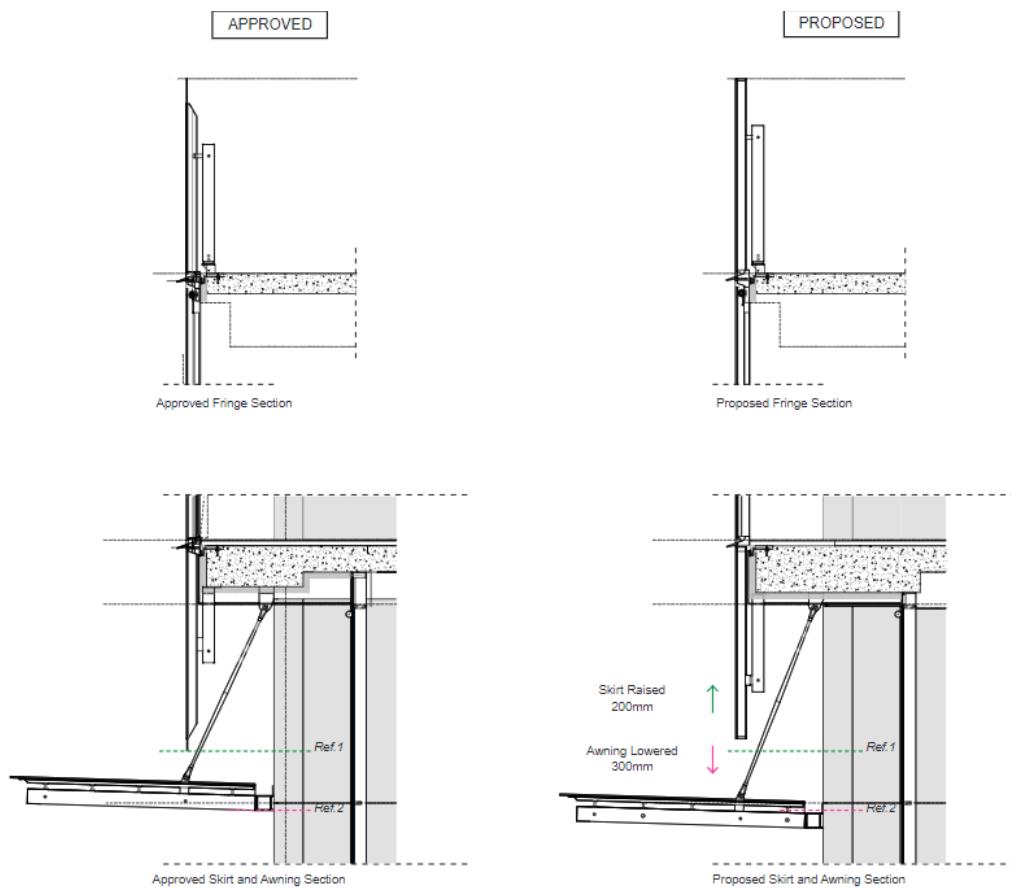


Figure 7 Proposed change to the awning and skirt of the residential lobby façade

Source: RPBW

Refinements to the Residential Lobby

A number of internal and external design modifications are proposed to the residential lobby on the ground level as a result of further design development. The first change relates to the water feature and involves the reconfiguration of the water feature design to be three-sided and contained within the internal space, allowing for better management of external conditions (for example, water spray) by removing the outdoor water elements (refer to **Figure 8**).

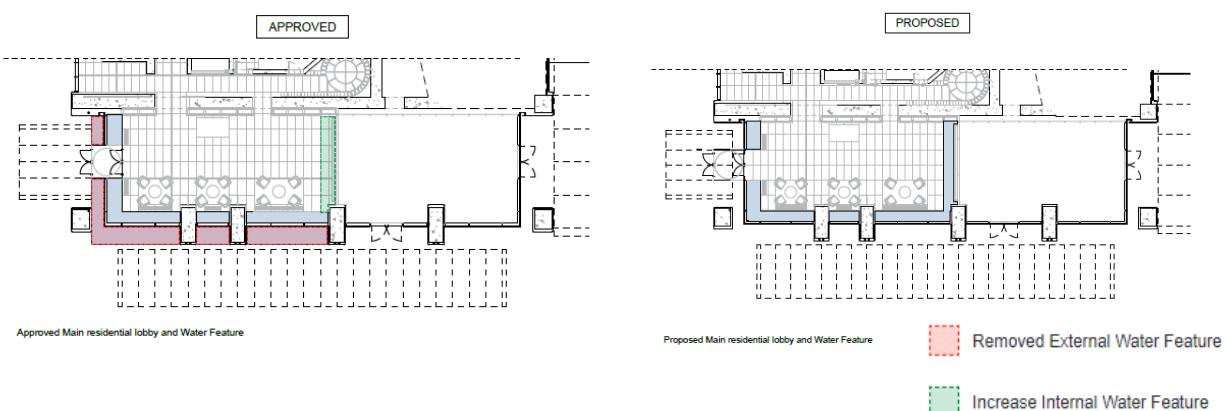


Figure 8 Reconfiguration of the residential lobby water feature

Source: RPBW

Secondly, the entry vestibule has been revised to better respond to the changes to the water feature. It is proposed that the glass box is shifted approximately 1.2 metres, locating the vestibule outside the perimeter of the water feature (refer to **Figure 9**). This change will result in a slight increase of GFA at the ground floor level.

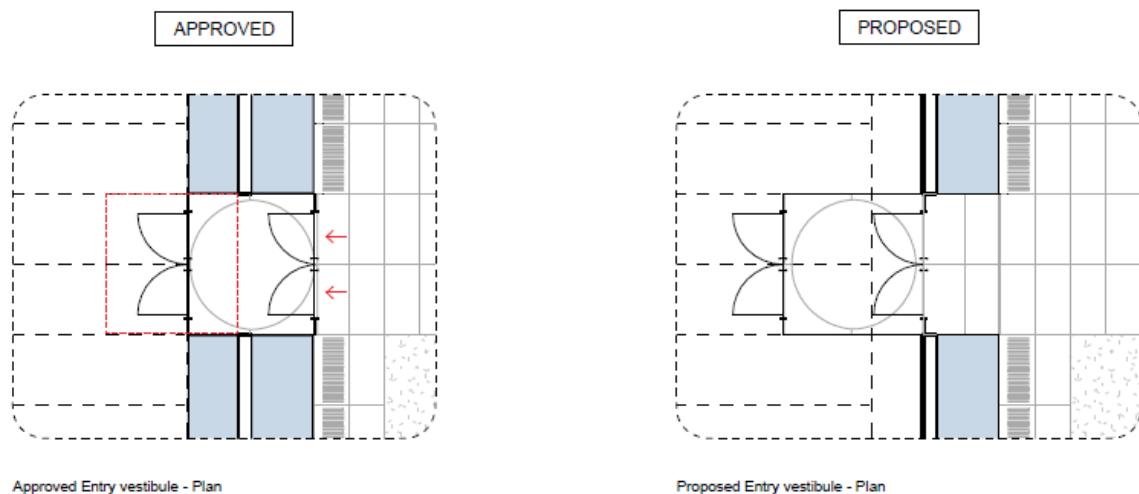


Figure 9 The proposed movement of the entry vestibule

Source: RPBW

Podium Façade and Amenities Circulation Amendments

Several external and internal changes are proposed to the podium level of the R4B building.

Firstly, on Level P2, the windows are proposed to be amended from an Open Cavity Façade (OCF) windows (operable windows) to Double Glazed Units (DGU) (inoperable windows). While the OCF windows were operable and allowed for ventilation, the blind component of these windows sat behind the glass and was deemed to be difficult to operate. As this level is approved as an amenities space, it is proposed that these windows are changed to a DGU façade, where the blind will sit inside the building and will be easily accessible for future residents and will in turn enable simplified maintenance.

Secondly, the internal layout of the podium levels has been reconfigured to provide greater direct circulation through the communal areas. These changes generally relate to simplified circulation and a rationalisation of the internal lift lobby. A number of façade amendments are also proposed at Level P1, comprising additional windows to the existing service corridor and external façade, as well as a slight refinement of the façade at the south-western corner. Further details of these amendments are illustrated on the Architectural Plans at **Attachment A** and in the Design Report at **Attachment B**.

Car Park Entry Amendments

The approved basement car parking ramp is proposed to be setback from Watermans Quay and recessed into the building, allowing for a more rationale solution and efficient use of the entry door. The change results in the reduction of the entry ramp opening and associated awning by one module on each side.

Car Parking Provision

Due to the revised dwelling mix, the number of car parking spaces is proposed to be increased by four spaces. Through the detailed design of the basement, additional parking has been created within the approved envelope of the basement, and therefore no change is proposed to the basement extent approved under SSD 6960 and the car parking provision will remain within the approved rates of the Concept Plan (as modified).

Lift Core Amendments

The low-rise lift core is proposed to be raised in height by approximately two levels to align with the uppermost level of the low-rise floor plate. This change is proposed in light of further development on the lift services and detailed considerations regarding the lift motor room and overrun sizes, the lift core volume of the SE façade. The lift core has shifted to contain the lift motor room at Level 35, the lift roof at Level 36 and the uppermost overhanging glass fringe spanning over the roof until Level 37.

As a result of this amendment, the façade panels relating to the lift core will be extended by another two levels (refer to **Figure 10**).

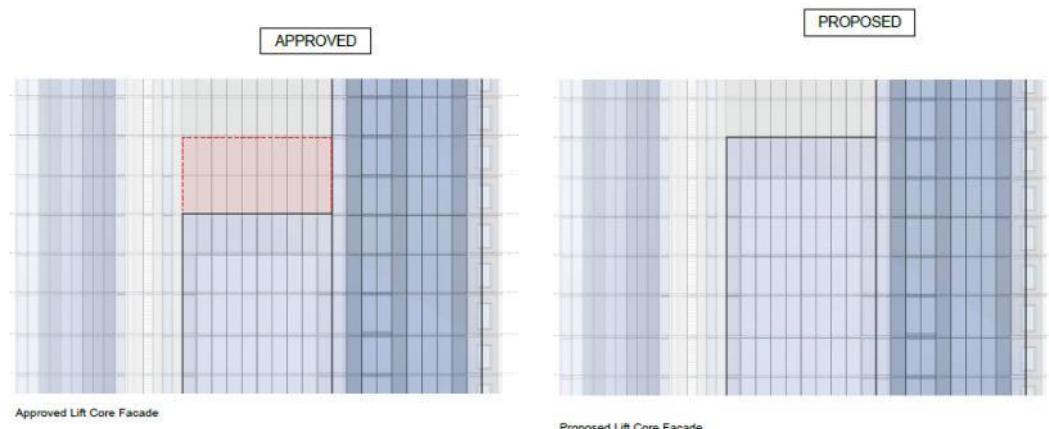


Figure 10 Reconfiguration of the Lift Core

Source: RPBW

GFA Redistribution

The proposed amendments are contained within the current approved GFA and therefore no amendment to the approved GFA is requested by this modification application.

Changes to the Landscaped Podium

A minor reconfiguration of the landscaped podium is proposed to provide greater amenity for the communal landscaped space. The proposed changes include the following:

- Addition of a shallow pool as an extension of the existing pool.
- Reconfiguration of the amenity spaces, including restrooms, showers, change rooms and pool side storage.
- Reconfiguration of the planted area in the south-eastern corner to increase usable space. The reconfigured planter area also provides clearer view lines to the harbour from the pool and makes pool maintenance from the southern end more accessible.
- Changes to the entry level with the arrival to the pool area from the corridor of the internal common amenities.

These changes overall make the landscaped podium more functional. The approved and proposed design of the landscaped podium is illustrated in **Figure 11**. The Landscape Plans are provided at **Attachment D**.



Figure 11 Landscaped podium as approved

Source: Grant Associates

2.1 Modifications to Conditions

The proposed modifications described above necessitate amendments to the consent conditions which are identified below. Words proposed to be deleted are shown in ***bold italics strike through*** and words to be inserted are shown in ***bold italics***.

SCHEDULE 2

2. Schedule 1 – Approved Development is amended by the deletion of struck out words and the insertion of bold and underlined words as follows:

Construction, use and fit out of a 60 storey (RL 208.23) mixed-use building, including:

- A total GFA of 38,911m² comprising 38,602m² residential GFA (***297 290*** apartments) and 309m² retail GFA
- Public domain works
- Fit-out and use of the Stage 1B basement car park for Building R4B, including ***320 324*** allocated parking spaces
- Demolition of interim basement elements
- A signage zone to accommodate future building identification signage.

A2 TERMS OF CONSENT

The Applicant, in acting on this consent, must carry out the development:

- e) In accordance with the following drawings:

Architectural plans prepared by Renzo Piano Building Workshop

Drawing No.	Revision	Name of Plan	Date
<i>BR4B_ASD_PA1_0000</i>	<i>20</i>	<i>Title Sheet and Drawing List</i>	<i>19/06/2020</i>
BR4B_ASD_PA1_0001	<i>19-20</i>	Context Plan	<i>03/05/2019-19/06/20</i>
BR4B_ASD_PA1_0005	<i>19-20</i>	Thermal Performance Assessment	<i>03/05/2019-19/06/20</i>
BR4B_ASD_PA1_1002	<i>20-21</i>	Setout Plan Basement Level B3	<i>03/05/2019-19/06/20</i>
BR4B_ASD_PA1_2000	<i>19-20</i>	Plan Ground Floor Level 00	<i>03/05/2019-19/06/20</i>

Architectural plans prepared by Renzo Piano Building Workshop

BR4B_ASD_PA1_2001	19-20	Plan Podium Level P1	03/05/2019-19/06/20
BR4B_ASD_PA1_2002	19-20	Plan Podium Level P2	03/05/2019-19/06/20
BR4B_ASD_PA1_3001	19-20	Plan Lower Plate Level 01	03/05/2019-19/06/20
BR4B_ASD_PA1_3005	19-20	Plan Lower Plate Level 05-19-02-19, 21-32	03/05/2019-19/06/20
BR4B_ASD_PA1_3033	19-20	Plan Mid Plate Level 33-46	03/05/2019-19/06/20
BR4B_ASD_PA1_3048	19-20	Plan Mid Plate Level 48-55	03/05/2019-19/06/20
BR4B_ASD_PA1_3064	20	Plan Skyhomes Level 56	19/06/2020
BR4B_ASD_PA1_3065	20	Plan Skyhomes Level 57	19/06/2020
BR4B_ASD_PA1_3066	20	Plan Roof Level	19/06/2020
BR4B_ASD_PA1_4001	19-20	Elevation North East (Park)	03/05/2019-19/06/20
BR4B_ASD_PA1_4002	19-20	Elevation West (Barangaroo Avenue)	03/05/2019-19/06/20
BR4B_ASD_PA1_4003	19-20	Elevation South-East (Lift Lobby)	03/05/2019-19/06/20
BR4B_ASD_PA1_4004	19-20	Elevation South (Watermans Quay)	03/05/2019-19/06/20
BR4B_ASD_PA1_4005	19-20	North-East Enlarged Elevation (Park) – Low Rise	03/05/2019-19/06/20
BR4B_ASD_PA1_4007	19-20	North-East Enlarged Elevation (Park) – High Rise	03/05/2019-19/06/20
BR4B_ASD_PA1_4008	19-20	West Enlarged Elevation (Barangaroo Ave) – Low Rise	03/05/2019-19/06/20
BR4B_ASD_PA1_4010	19-20	Wes Enlarged Elevation (Barangaroo Ave) – High Rise	03/05/2019-19/06/20
BR4B_ASD_PA1_4201	19-20	Building Signage Zone South-East Enlarged Elevation	03/05/2019-19/06/20
BR4B_ASD_PA1_6001	20	Wintergarden Façade Details	28/08/2019-19/06/20
BR4B_ASD_PA1_6003	20	Skyhome North East Façade Details – Open Cavity Façade + Wintergarden	28/08/2019-19/06/20
BR4B_ASD_PA1_6004	19-20	Skyhome West Façade Details – Open Cavity Façade	03/05/2019-19/06/20
BR4B_ASD_PA1_6005	19-20	Skyhome West Façade Details	03/05/2019-19/06/20
BR4B_ASD_PA1_6006	19-20	Plant Level Façade Details	03/05/2019-19/06/20
BR4B_ASD_PA1_6007	19-20	North-West, South, South-East Façade Details	03/05/2019-19/06/20
BR4B_ASD_PA1_6008	19-20	Podium Façade Details	03/05/2019-19/06/20
BR4B_ASD_PA1_6009	19-20	Lobby Façade Details	03/05/2019-19/06/20
BR4B_ASD_PA1_6010	19-20	Typical Retail Entry Systems	03/05/2019-19/06/20
BR4B_ASD_PA1_6011	19-20	Bridge	03/05/2019-19/06/20
BR4B_ASD_PA1_9000	19-20	R4B GFA Calculation	03/05/2019-19/06/20
BR4B_ASD_PA1_9003	19-20	R4B GFA Calculation – Sheet 3	03/05/2019-19/06/20

Architectural plans prepared by Renzo Piano Building Workshop

BR4B_ASD_PA1_9004	19-20	R4B GFA Calculation – Sheet 4	03/05/2019-19/06/20
BR4B_ASD_PA1_9005	19-20	R4B GFA Calculation – Sheet 5	03/05/2019-19/06/20
BR4B_ASD_PA1_9006	19-20	R4B GFA Calculation – Sheet 6	03/05/2019-19/06/20

Landscape Drawings prepared by Grant Associates McGregor Coxall

Drawing No.	Revision	Name of Plan	Date
BR2LDU1L0200	G	Cover Page	19/06/2020
BR2LDU1L0201	G	Concept Plan	19/06/2020
BR2LDU1L0202	H	Landscape Section R4B	19/06/2020
BR2LDS1L0201	A	Modifications Summary	19/06/2020
R4B430-GE-R4B001-GA	U	General Arrangement	03/07/2019
R4B430-GE-R4B002-GRND	Q	Ground Floor	03/07/2019
R4B430-GE-R4B003-PO2	R	Podium Level 02	03/07/2019

B12 BASIX CERTIFICATION

The development must be implemented and all BASIX commitments thereafter maintained in accordance with BASIX Certificate No. **649694M_05 649694M_06** and an updated certificate issued if amendments are made. The BASIX certificate must be submitted to the Certifying Authority with all commitments clearly shown on the Construction Certificate plans.

B20 NUMBER OF CAR PARKING SPACES

The maximum number of car parking spaces to be provide for the development shall comply with the table below. Details confirming the parking numbers must be submitted to the Certifying Authority prior to the issue of the relevant Construction Certificate.

Car Parking Allocation	Number
Residential	320-324
Retail	0

E16 ENVIRONMENTAL PERFORMANCE

Prior to the issue of the relevant Occupation Certificate, the Applicant shall implement the commitments outlined in BASIX Certificate No. **649694M_03 649694M_06**.

3.0 Substantially the same development

Section 4.55(2) of the EP&A Act states that a consent authority may modify a development consent if *“it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all)”*.

The development, as proposed to be modified, is substantially the same development as originally approved in that:

- The proposed modifications are minor and relate to refinements in response to design development, to enhance amenity and increase diversity in apartment types offered.
- The majority of changes are internal and seek to enhance apartment amenity while directly responding to market feedback without significantly altering apartment types and layouts.
- The refined façade design maintains the approved Renzo Piano Building Workshop design intent of a glass façade that appear as ‘crystals’ with a highly transparent glass façade.
- The proposed modifications do not alter the key components of the approved development, being a mixed-use building comprised of residential and retail uses.
- The proposed modifications continue to achieve a high standard of design excellence.
- The changes to the façade and the internal layout are minor and will not result in additional environmental impacts.

4.0 Environmental assessment

Section 4.55(2) of the EP&A Act states that a consent authority may modify a development consent if *“it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which consent was originally granted and before that consent as originally granted was modified (if at all)”*. Under section 4.55(3) the consent authority must also take into consideration the relevant matters to the application referred to in section 4.15(1) of the EP&A Act and the reasons given by the consent authority for the grant of the original consent.

The following assessment considers the relevant matters under section 4.15(1) and demonstrates that the development, as proposed to be modified, will be of minimal environmental impact.

4.1 State Environmental Planning Policies

The proposed modification is assessed against the relevant State Environmental Planning Policies at **Table 2**.

Table 2 Assessment against relevant SEPPs

Instrument	Assessment	
SEPP 65 – Design Quality of Residential Apartment Development	The proposed modification continues to achieve a high level of residential amenity, consistent with the approved building. An assessment of the proposed modification against the Apartment Design Guide (ADG) is provided in Section 4.3 and the Design Verification Statement at Attachment C .	
State Significant Precinct SEPP	The Barangaroo site is listed as a State Significant Site under Part 12 of Schedule 3 of the State Significant SEPP. The following is an assessment of the proposal's compliance with the State Significant Precinct SEPP.	
	Clause 8 – Zone B4 Mixed Use	The proposed shop top housing, comprising ground level retail with residential uses above is permissible and consistent with the objectives of the B4 Mixed Use zone.

Instrument	Assessment	
	Clause 17 – Height of buildings (maximum RL 250)	The maximum RL to the top of Building R4B, including the glazed roof feature is RL 208.230. This application does not seek to make any changes to the approved maximum height.
	Clause 18 – Gross Floor Area Restrictions – maximum 86,979m ² (across Building R4A and R4B)	The total GFA of R4A and R4B is 86,144m ² and therefore is consistent with the maximum GFA restriction for Block 4A.
	Clause 19 – Design Excellence	The proposed development will continue to achieve a high standard of design excellence, as illustrated in the supporting Design Report at Attachment B .
SEPP BASIX	A BASIX Certificate has been provided at Attachment E , demonstrating that the proposed development meets all relevant BASIX requirements.	

4.2 Barangaroo Concept Plan

An assessment of the proposed modifications against the Concept Plan (Mod 10) is provided in **Table 3** and **4** below. This assessment demonstrates that the proposed development is generally consistent with the approved Concept Plan (Mod 10) and Built Form and Urban Design Controls.

Table 3 Concept Plan (Mod 10) – Numerical Overview

Concept Plan (Mod 10) Control – Block 4A (Building R4A and R4B)	Building R4A (not subject to this application)	Building R4B	Total	Assessment
Maximum Residential GFA – 91,816m ²	47,564m ² (no change)	38,602m ² (no change)	86,166m ² (no change)	✓
Other Uses GFA – 813m ²	438m ²	309m ²	747m ²	✓
Total GFA – 92,629m ²	48,002m ²	38,911m ²	86,913m ²	✓
Maximum height – RL 250	-	RL 208.230	-	✓
Tower setbacks – setbacks are generally in accordance with the Building Envelope Plan in the Concept Plan. Predominant tower mass is set back from Globe Street by a minimum of 2m.	-	No changes	N/A	✓

Table 4 Concept Plan (Mod 10) – Built Form and Urban Design Controls (select)

Concept Plan (Mod 10) Block 4A Controls	Building R4B	Assessment
Control 3 Building Articulation – Objectives		
To ensure the podium and towers in Block 4A and 4B are considered as a holistic composition.	The proposed modifications are minor and will ensure a consistent design language between R4A and R4B. Further detail is provided in the Design Report at Attachment B .	Consistent
Control 3 Building Articulation – Standard		
Tower Form is to express sustainability features e.g. Access to natural light, ventilation and solar shading.	The minor modifications to the façade will improve the ongoing maintenance efficiency of the building and the overall architectural language.	Consistent

Concept Plan (Mod 10) Block 4A Controls	Building R4B	Assessment
To establish a complementary relationship between the towers in Blocks 4A and 4B such as a common chassis.	The towers have been designed with common design language, and the structural design carried across all towers. The proposed changes to the façade will not have a discernible impact on the complementary nature of the design of Building R4B with R4A or R5.	Consistent
Vertical articulation and breaks are encouraged to minimise the perceived building mass.	The towers design and vertical articulation is not proposed to be amended from the approved design, with strong verticality adopted in the building form, materiality and composition of the façade.	Consistent
Horizontal articulation and breaks are encouraged to reduce the impact of the building mass.	The façade has been carefully designed to include horizontal articulation and breaks to reduce the visual impact of the building mass. The proposed modifications do not seek to change this.	Consistent
Ensure a highly transparent and visually permeable frontage to the park edge. The tower form on the park side is to come to ground and be dominant through any lower levels of the building.	The proposed modifications do not result in any change to the approved design that would affect compliance with this criteria.	Consistent
Control 4 Building Legibility – Objectives and Standard		
To ensure that towers in Block 4A and 4B are complimentary and read as a cohesive composition.	As described above, the building has been designed in the composition of the three crystal forms together with Building R4A and Building R5.	Consistent
Express façade elements including shading and wind amelioration.	The proposed modifications to the façade will continue to achieve a high level of expression and articulation.	Consistent
Control 7 Facades – Objectives		
To ensure the architectural quality of the facades	The proposed changes to the various elements of the building's façade will not reduce the previously approved architectural quality of the façade.	Consistent
To ensure the façade contributes to the building's articulation and mass.	The minor changes to the façade will continue to achieve a high level of articulation to reduce any perceptions of building mass.	Consistent
Depth and layering of the façade is to be achieved through relief and protrusions.	The minor changes to the façade incorporate relief and protrusions to create depth and layering.	Consistent

4.3 Residential Amenity

Building R4B will provide a high level of residential amenity in accordance with the design criteria recommended by the Apartment Design Guide (ADG), as demonstrated in the detailed Design Verification Statement at **Attachment C** and as originally approved. The detailed compliance table included in the Design Report at **Attachment B** includes an overall assessment against each design criteria for every apartment.

The proposals consistency with the objectives of the ADG remains unchanged from the original approval. Due to the proposed increase in apartments and in light of the proposed apartment reconfigurations, the measured percentage of the proposal's achievement of certain design criteria has slightly changed. A full assessment of the proposal's consistency with the key recommended design criteria of the ADG is provided at **Table 5**, highlighting where slight amendments have occurred since the most recent approval.

Table 5 ADG Assessment

Design Criteria	Comments												
Part 3 Siting the Development													
3D Communal and Public Open Space													
<p>Objective An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.</p> <p>Design Criteria Communal open space has a minimum area equal to 25% of the site.</p>	<p>The proposed modifications to Building R4B do not impact the previously approved common open space provided.</p> <p>✓</p> <p>The proposed modifications to Building R4B maintain adequate communal open space and do not impact upon the previously approved common open space provided.</p> <p>✓</p>												
Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)	<p>The original SSD application was approved with minor variations to this provision. This modification does not seek to vary this any further, and therefore it achieves the intent of the original SSDA approval.</p>												
3E Deep Soil Zones													
<p>Objective Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality.</p> <p>Design Criteria Deep soil zones are to be met the following minimum requirements:</p> <table border="1"> <thead> <tr> <th>Site Area</th> <th>Minimum Dimensions</th> <th>Deep Soil Zones (% of site area)</th> </tr> </thead> <tbody> <tr> <td>Less than 650m²</td> <td>-</td> <td rowspan="4">7%</td> </tr> <tr> <td>650m² – 1,500m²</td> <td>3m</td> </tr> <tr> <td>Greater than 1,500m²</td> <td>6m</td> </tr> <tr> <td>Greater than 1,500m² with significant existing tree cover</td> <td>6m</td> </tr> </tbody> </table>	Site Area	Minimum Dimensions	Deep Soil Zones (% of site area)	Less than 650m ²	-	7%	650m ² – 1,500m ²	3m	Greater than 1,500m ²	6m	Greater than 1,500m ² with significant existing tree cover	6m	<p>The proposed modifications to Building R4B maintain the objectives relating to deep soil.</p> <p>✓</p> <p>The original SSD application was approved with minor variations to this provision. This modification does not seek to vary this any further, and therefore it achieves the intent of the original SSDA approval.</p>
Site Area	Minimum Dimensions	Deep Soil Zones (% of site area)											
Less than 650m ²	-	7%											
650m ² – 1,500m ²	3m												
Greater than 1,500m ²	6m												
Greater than 1,500m ² with significant existing tree cover	6m												
3F Visual Privacy													
<p>Objective Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy.</p> <p>Design Criteria Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to site and rear boundaries are as follows:</p> <table border="1"> <thead> <tr> <th>Building Height</th> <th>Habitable rooms and balconies</th> <th>Non-habitable rooms</th> </tr> </thead> <tbody> <tr> <td>Up to 12m (4 storeys)</td> <td>6m</td> <td>3m</td> </tr> <tr> <td>Up to 25m (5-8 storeys)</td> <td>9m</td> <td>4.5m</td> </tr> <tr> <td>Over 25m (9+ storeys)</td> <td>12m</td> <td>6m</td> </tr> </tbody> </table>	Building Height	Habitable rooms and balconies	Non-habitable rooms	Up to 12m (4 storeys)	6m	3m	Up to 25m (5-8 storeys)	9m	4.5m	Over 25m (9+ storeys)	12m	6m	<p>The proposed modification to Building R4B meets the visual privacy objectives.</p> <p>✓</p> <p>The original SSD application was approved with minor variations to this provision. This modification does not seek to vary this any further, and therefore it achieves the intent of the original SSDA approval.</p>
Building Height	Habitable rooms and balconies	Non-habitable rooms											
Up to 12m (4 storeys)	6m	3m											
Up to 25m (5-8 storeys)	9m	4.5m											
Over 25m (9+ storeys)	12m	6m											

Design Criteria	Comments
3K Bicycle and Car Parking	
<p><i>Objective</i> Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas.</p>	<p>The proposed modification meets the bicycling and car parking objectives.</p> <p>✓</p>
<p><i>Design Criteria</i></p> <p>For development in the following locations:</p> <ul style="list-style-type: none"> On sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or On land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre. <p>The minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less.</p> <p>The car parking needs for a development must be provided off street.</p>	<p>The proposed modifications to Building R4B complies with the bicycle and car parking requirements.</p> <p>✓</p>
Part 4 Designing the Buildings	
4A Solar and Daylight Access	
<p><i>Objective</i> To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.</p>	<p>The proposed modifications meet the solar and daylight access objectives.</p> <p>✓</p>
<p><i>Design Criteria</i></p> <p>Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas.</p>	<p>The original SSD application was approved with minor variations to this provision. The most recent modification to this consent included a total of 65% of apartments achieving this provision, while now 63% of apartments will achieve the two hours of solar access under the modification. This variation is minor, and the principles of the original design and approach to amenity remain, with the proposal achieving the intent of the original SSD approval. The building continues to benefit from other amenity benefits afforded to the site including immediate access to open space, views and recreational opportunities of the Barangaroo site and broader CBD.</p> <p>The reduction in number of apartments achieving this provision is a result of the redesign of levels 48 – 55. Whilst not compliant with the direct solar access provisions in mid-winter, these apartments are located at the top of the building and benefit from significant outlook and daylight access. These apartments also benefit from ceiling heights of 3 metres in habitable spaces, increasing the overall amenity of these apartments.</p> <p>Additionally, the proposed façade typology continues to allow a high light transmission glass to be used, with automated cavity blinds providing solar control.</p> <p>This minor variation is discussed further in the Solar and Daylight Access Study provided at Attachment F and below.</p>

Design Criteria	Comments
A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid winter.	<p>The original SSD application was approved with minor variations to the design criteria (9% variation), and the initial approved modification to the building increased this variation to 16% (previously misreported as 19%). The proposed modification slightly increases the number of apartments receiving no direct sunlight between 9:00am and 3:00pm in mid-winter to 18%. This represents a small number of additional apartments (2% or 8 apartment) when compared to the first modification. When measured across a greater time period of 9:00am to 5:00pm, only 1% or 3 apartments receive no direct sunlight. While the number of apartments receiving no direct sunlight on mid-winter is slightly increased, the high level of amenity experience across the building remains consistent, with apartments benefiting from excellent outlook, views, extensive glazing, and a central position in Sydney's CBD. This is discussed further in the Solar and Daylight Access Study provided at Attachment F.</p>
4B Natural Ventilation	
<p><i>Objective</i></p> <p>The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents.</p>	<p>The proposed modification meets the natural ventilation objectives.</p> <p>✓</p>
<p><i>Design Criteria</i></p> <p>At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed.</p>	<p>As a result of the reconfiguration of apartments LB-05 and LB-06, 50% of apartments are proposed to be naturally cross-ventilated, which is in line with the current approval. Due to the re-location of these apartments and proximity to fire stairs, the proposed mechanical ventilation system (which was adopted to meet the cross-flow requirement in the prior consent) is proposed to be removed due to the impact on the layout, internal area and overall amenity of the apartments.</p> <p>It is our view that the benefits of implementing a mechanical hybrid system for cross ventilation these apartments, whilst technically still possible, is outweighed by the benefits of greater improved layouts, compliant ceiling heights and overall amenity in the proposed non-compliant scheme.</p> <p>This is discussed further at Attachment C and below.</p>
Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.	<p>The proposed modification to Building R4B comply with the cross-ventilation design criteria.</p> <p>✓</p>
4C Ceiling Height	
<p><i>Objective</i></p> <p>Ceiling height achieves sufficient natural ventilation and daylight access.</p>	<p>The modifications comply with the objectives of ceiling height.</p> <p>✓</p>

Design Criteria	Comments										
<p>Design Criteria</p> <p>Measured from finished floor level to finished ceiling level, minimum ceiling heights are:</p> <table border="1"> <thead> <tr> <th colspan="2">Minimum ceiling height</th> </tr> </thead> <tbody> <tr> <td>Habitable rooms</td><td>2.7m</td></tr> <tr> <td>Non-habitable rooms</td><td>2.4m</td></tr> <tr> <td>For 2 storey apartments</td><td>2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area</td></tr> <tr> <td>Attic spaces</td><td>1.8m at edge of room with a 30 degree minimum ceiling slope.</td></tr> </tbody> </table> <p>These minimums do not preclude higher ceilings if desired.</p>	Minimum ceiling height		Habitable rooms	2.7m	Non-habitable rooms	2.4m	For 2 storey apartments	2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area	Attic spaces	1.8m at edge of room with a 30 degree minimum ceiling slope.	<p>Minor variations to ceiling heights in the kitchens of some apartments has been approved previously, in relation to the height of the bulkhead over the kitchen island. However, due to the flipping of the apartments LB05 and LB06 (as discussed in Section 2.0), this modification application seeks approval to bring the ceiling heights of these apartments in line with the remainder of the apartments as approved in MOD 1.</p> <p>Therefore, the living, dining and kitchen areas of these apartments are open plan and the majority of the ceiling height is 2.7m. However, the bulkhead located in the kitchen reduces the ceiling height to 2.4m above the kitchen island, consistent with the current approved approach. The bulkhead is integrated with the design of the kitchen, and because it only varies the ceiling height of a small area of the kitchen, this is considered acceptable.</p> <p>Furthermore, the proposed changes to building R4B result in a minor variation to the ceiling heights of some non-habitable rooms of level 1-19 and levels 21-46 of the building. To accommodate the wall layout for large format tiles, the ceiling heights of these non-habitable areas is 2,370mm, which is 30mm lower than the 2,400mm required by the ADG.</p> <p>Despite this variation, the reduced ceiling heights still achieve sufficient natural ventilation and daylight access from the wider apartment, which therefore meets the objectives of the design criteria. The variation to the ceiling height also meets the minimum ceiling height required under the BCA for non-habitable rooms, which is 2.1 metres.</p> <p>This is discussed further at Attachment C.</p>
Minimum ceiling height											
Habitable rooms	2.7m										
Non-habitable rooms	2.4m										
For 2 storey apartments	2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area										
Attic spaces	1.8m at edge of room with a 30 degree minimum ceiling slope.										

4D Apartment Size and Layout											
<p>Objective</p> <p>The layout of rooms within the apartment is functional, well organised and provides a high standard of amenity.</p>	<p>The modification meets the apartment size and layout objectives.</p> <p>✓</p>										
<p>Design Criteria</p> <p>Apartments are required to have the following minimum internal areas:</p> <table border="1"> <thead> <tr> <th>Apartment Type</th> <th>Minimum internal area</th> </tr> </thead> <tbody> <tr> <td>Studio</td> <td>35m²</td> </tr> <tr> <td>1 bedroom</td> <td>50m²</td> </tr> <tr> <td>2 bedroom</td> <td>70m²</td> </tr> <tr> <td>3 bedroom</td> <td>90m²</td> </tr> </tbody> </table> <p>These minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each. A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each.</p>	Apartment Type	Minimum internal area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	70m ²	3 bedroom	90m ²	<p>The proposed modifications to Building R4B comply with the apartment size and layout requirements.</p> <p>✓</p>
Apartment Type	Minimum internal area										
Studio	35m ²										
1 bedroom	50m ²										
2 bedroom	70m ²										
3 bedroom	90m ²										

Design Criteria	Comments															
Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air must not be borrowed from other rooms.	The original SSD application was approved with minor variations to this provision, namely in relation to studies. This modification reverts to the approved approach adopted in the original SSD application in relation to studies, with studies reintroduced with clear sightlines to a window and open spaces to achieve an integrated flow with the apartment. As such, the modified proposal continues to achieve the intent of the original SSDA approval.															
Objective Environmental performance of the apartment is maximised.	The modification meets the apartment size and layout objectives. ✓															
Design Criteria Habitable room depths are limited to a maximum of 2.5 x the ceiling height.	The proposed modifications to Building R4B comply with the habitable room depths.															
In open plan layouts (where living, dining and kitchen are combined), the maximum habitable room depth is 8m from a window.	The original SSD application was approved with minor variations to this provision. This modification does not seek to vary this any further, and therefore it achieves the intent of the original SSDA approval.															
Objective Apartment layouts are designed to accommodate a variety of household activities and needs.	The proposed modifications meet the design and apartment layout objectives. ✓															
Design Criteria Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² (excluding wardrobe space).	The proposed modifications to Building R4B comply with the provisions for master bedroom areas. ✓															
Bedrooms have a minimum dimension of 3m (excluding wardrobe space).	The proposed modifications to Building R4B comply with the minimum bedroom dimension. ✓															
Living rooms for or combined living/dining rooms have a minimum width of: • 3.6m for studios and 1 bedroom apartments • 4m for 2 and 3 bedroom apartments	The proposed modifications to Building R4B comply with the minimum living room dimension. ✓															
The width of cross over or cross through apartments are at least 4m internally to avoid dep narrow apartment layouts	The proposed modification to Building R4B comply with the width of the cross-over provision. ✓															
4E Private Open Space and Balconies																
Objectives Apartments provide appropriately sized private open space and balconies to enhance residential amenity.	Building R4B provides appropriately sized open spaces. ✓															
Design Criteria All apartments are required to have primary balconies as follows:	The original SSD application was approved with minor variations to this provision. This modification does not seek to vary this any further, and therefore it achieves the intent of the original SSDA approval.															
<table border="1"> <thead> <tr> <th>Dwelling Type</th> <th>Minimum Area</th> <th>Minimum Depth</th> </tr> </thead> <tbody> <tr> <td>Studio apartment</td> <td>4m²</td> <td>-</td> </tr> <tr> <td>1 bedroom apartment</td> <td>8m²</td> <td>2m²</td> </tr> <tr> <td>2 bedroom apartment</td> <td>10m²</td> <td>2m²</td> </tr> <tr> <td>3+ bedroom apartment</td> <td>12m²</td> <td>2.4m²</td> </tr> </tbody> </table>	Dwelling Type	Minimum Area	Minimum Depth	Studio apartment	4m ²	-	1 bedroom apartment	8m ²	2m ²	2 bedroom apartment	10m ²	2m ²	3+ bedroom apartment	12m ²	2.4m ²	
Dwelling Type	Minimum Area	Minimum Depth														
Studio apartment	4m ²	-														
1 bedroom apartment	8m ²	2m ²														
2 bedroom apartment	10m ²	2m ²														
3+ bedroom apartment	12m ²	2.4m ²														
The minimum balcony depth to be counted as contributing to the balcony area is 1m.																

Design Criteria	Comments										
For apartments at ground level or on podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m ² and a minimum depth of 3m.	N/A										
4F Common Circulation and Spaces											
<i>Objective</i> Common circulation spaces achieve good amenity and properly service the number of apartments.	The proposed modifications meet the common circulation and spaces objectives. ✓										
<i>Design Criteria</i> The maximum number of apartments off a circulation core on a single level is eight.	The building has a maximum of 6 apartments per core. ✓										
For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40.	The original SSD application was approved with minor variations to this provision. This modification does not seek to vary this any further, and therefore it achieves the intent of the original SSDA approval. See Attachment G .										
4G Storage											
<i>Objective</i> Adequate, well designed storage is provided in each apartment.	The storage provided in Building R4B meets the storage objectives. ✓										
<i>Design criteria</i> In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:	The proposed modifications meet the storage objectives and design criteria. ✓										
<table border="1"> <thead> <tr> <th>Dwelling Type</th> <th>Minimum Area</th> </tr> </thead> <tbody> <tr> <td>Studio apartment</td> <td>4m³</td> </tr> <tr> <td>1 bedroom apartment</td> <td>6m³</td> </tr> <tr> <td>2 bedroom apartment</td> <td>8m³</td> </tr> <tr> <td>3+ bedroom apartment</td> <td>10m³</td> </tr> </tbody> </table> <p>At least 50% of the required storage is to be located within the apartment.</p>		Dwelling Type	Minimum Area	Studio apartment	4m ³	1 bedroom apartment	6m ³	2 bedroom apartment	8m ³	3+ bedroom apartment	10m ³
Dwelling Type	Minimum Area										
Studio apartment	4m ³										
1 bedroom apartment	6m ³										
2 bedroom apartment	8m ³										
3+ bedroom apartment	10m ³										

Solar Access

A slight reduction in the percentage of apartments achieving two hours of solar access between 9am and 3pm at mid-winter is proposed due to the reconfiguration of apartments and introduction of additional apartments in locations not benefiting from continuous direct sunlight in mid-winter. The overall reduction of 2% from 65% to 63% of apartments equates to five apartments and is significantly minor when considered against the 290 apartments to be delivered in Building R4B. Importantly, 80% of apartments receive direct sunlight for at least 2 hours between 9am and 5pm.

In granting the original consent, the Planning Assessment Commission (now the Independent Planning Commission) acknowledged that a *“large portion of the units will receive adequate solar access due to the unimpeded westerly access overlooking the harbour”*. The number of apartments benefiting from these significant views is maximised in the proposed amendments, and all new apartments provided through the modification application are located in the upper level of the building (levels 48 – 55), with high amenity achieved in terms of views, outlook, floor-to-ceiling glazing, increased ceiling heights (at 3 metres for these apartments in habitable areas) for daylight access, and general access to high quality amenities, open spaces, and the facilities and services of the Barangaroo South precinct and Sydney Central Business District.

As such, the proposal is considered to retain the original principles of the approved development, and the additional apartments which do not strictly achieve two hours of solar access on mid-winter will nonetheless have significantly high amenity.

Natural Ventilation

A unique approach was approved to ventilation in the initial development, comprising a mixture of naturally ventilated apartments (50%) and a ducted solution which provided natural ventilation to a stack of two-bedroom apartments (17%). When combined, this solution provided natural ventilation to 67% of apartments in the first nine levels of the building, exceeding the relevant design criteria of the ADG which calls for 60% of apartments in the first nine levels to be naturally ventilated.

Due to the proposed reconfiguration of apartment locations and layouts in the low-rise levels, the ducted solution initially proposed is no longer able to be achieved without comprising other aspects of the building. The switching of the one bedroom and two bedroom apartment on the low-rise level has enabled the larger two bedroom apartment to be located on the dual aspect corner (refer to **Figure 12**). While beneficial in providing the larger apartment with a dual aspect, this has meant the ducted solution would need to extend further within the floor plate as the one bedroom apartment shifts further away from the southern façade. This would ultimately result in a ducted solution which is much longer and indirect, compared to the initial solution proposed for this location (refer to **Figure 12**). A letter prepared by Aurecon outlining the requirements of the ducted solution is provided at **Attachment H**.



Figure 12 Reconfiguration of the apartment locations and layouts

Source: RPBW

Technically, a mechanical duct could be provided to the reconfigured layout and it would meet the requirements to enable cross-flow, however, the solution provides other impacts, including:

- The length of the duct in the originally approved solution would be required to extend the flow path beyond the recommended 18m distance between openings.
- As the duct extends in length, and more bends are introduced, the size of the duct must increase to maintain performance levels.
- Due to the substantial length and number of bends, the sizing of the duct would need to increase significantly in order to achieve the required cross flow benefits
- If the ducted solution were to be required, it would be much larger than originally considered and useable areas would be lost in both apartments generally as follows:

One bedroom apartment

- Kitchen: Reduction in ceiling height, usable bench space and removal of kitchen cupboards
- Bathroom: Reduction in size
- Study: Loss of additional study space, cupboard space, and shelving

Two bedroom apartment

- Master Bedroom: Loss of storage space
- Hallway: Loss of linen storage space
- Entrance: Reduction in ceiling height in the common lobby entrance

The issues now faced with this extended ducting solution are in keeping with the issues highlighted to the Planning Assessment Commission during their assessment of the initial application when ducting solutions were being considered to additional apartments. The Planning Assessment Commission considered that on balance, the impact of providing an extended ducted solution would mean broader negative effects on the communal amenity and quality of the building, and therefore the provision of the further ducted solutions was not in the best interests of an overall and balanced amenity outcome.

With this in mind, the amended proposal provides a balanced amenity outcome for residents of the building, and will ultimately provide an improved outcome despite the removal of the ducted solution for the following reasons:

- The two bedroom apartment is relocated to the dual aspect corner, consistent with Objective 4K-2 for "*larger apartment types are (to be) located ... on corners where more building frontage is available*".
- The two bedroom apartment, which is likely to contain more residents, will benefit from natural ventilation, greater daylight, and enhanced views due to the dual aspect.
- Two additional open cavity façade glazing bays are provided to the one bedroom apartment, increasing the width of the living and dining room and the opportunity for natural light, natural ventilation and views.
- More useable and functional layouts are able to be achieved for both the one bedroom and two bedroom apartment, in particular retaining the elements highlighted above which would otherwise be lost due to the extended ducting requirements.

Overall, the proposed reconfiguration of the apartments in the low-rise levels considers the holistic amenity of the building and the subject apartments. The building as a whole achieves significantly high amenity as outlined throughout this modification application, and as acknowledged in the original determination. Whilst the hybrid system could be implemented, the amended proposal retains the design principles and intent of the originally approved development, and on balance, a high level of amenity is provided to all apartments consistent with the objectives of the ADG.

4.4 Traffic

The slight increase in apartments and revised dwelling mix results in an increase of four car parking spaces to a total of 324 spaces. An assessment undertaken by JMT Consulting has been prepared and is provided at **Attachment I**. This assessment notes that the increase in car parking spaces remains in line with the Barangaroo Concept Plan (Mod 10) maximum parking rates. The increase in parking spaces is forecast to generate up to one additional traffic movement during the AM and PM peak periods. An increase in traffic movements of this magnitude is considered negligible by JMT Consulting in the context of current and future traffic movements in the Barangaroo Precinct.

The Traffic Assessment concludes that given the minor increase in on-site parking numbers and traffic movements generated from the site, the modification will not impact upon the operation of the transport network nor change the findings of the original traffic study undertaken for the R4B building.

4.5 Building Code of Australia

A Building Code of Australia (BCA) Assessment has been prepared by McKenzie Group Consulting and is included at **Attachment J**. The assessment identifies that the proposed changes to Building R4B comply with the Building Code of Australia 2016.

4.6 Accessibility

An assessment against the Disability Discrimination Act (DDA) has been prepared by Morris Goding Access Consultants and provided at **Attachment K**. The assessment concludes that the proposed changes to Building R4B will not impacts the ability to meet DDA requirements.

4.7 Sustainability

An updated BASIX certificate has been prepared and is included at **Attachment E**. This certificate demonstrates that the proposed Building R4B supports the site wide sustainability requirements included in the approved Barangaroo Concept Plan (Mod 10). The project will meet the requirements of the Building Sustainability Index (BASIX).

4.8 Fire Safety

An assessment of the fire safety of Building R4B following the proposed modifications has been prepared by Warrington Fire, provided at **Attachment L**. This assessment finds that proposed modifications will not impact the building's ability to meet fire safety requirements, and it would be possible to develop performance solutions for identified departures from the National Construction Code.

4.9 Structure

A review of the structural integrity of Building R4B following the proposed modifications has been undertaken by Robert Bird Group, and their summary is provided at **Attachment M**. This review finds that the proposed changes has sufficient structural capacity, and structural elements have been upgraded where necessary to accommodate additional loads.

4.10 Reasons for granting consent

The Planning Assessment Commission (now the Independent Planning Commission) determination report sets out the following reasons for approval of SSD 6965:

- The development will deliver building outcomes of design excellence.
- The development is consistent with the Concept Plan.
- The development is in the public interest.

The proposed design modifications remain consistent with these reasons for granting consent, reinforcing these reasons through the proposed amendments. The proposed refinements seek to enhance amenity and design outcomes to maintain a high standard of design excellence and remain consistent with the Concept Plan (as modified).

5.0 Conclusion

The proposed modification seeks consent for design changes relating to a slight increase in the total apartments, a revised dwelling mix, internal layout amendments, façade alterations, layout changes to the pool and podium landscaped area, updated car parking arrangements, a revised car park entry design, amendments to lift core design and a minor redesign of the residential lobby. These changes are the result of ongoing design development and are made to improve the overall design quality of the building.

In accordance with section 4.55(2) of the EP&A Act, the Department may modify the consent as:

- The consent, as proposed to be modified, is substantially the same development as that originally approved.
- The proposed modifications are minor and will not have any substantial environmental impacts.
- The modifications comply with the Barangaroo Concept Plan and relevant State Environmental Planning Policies.
- The modifications will result in greater residential amenity and more balanced, refined design in the building.

In light of the above, we recommend that the proposed modification is supported. We trust that this information is sufficient to enable a prompt assessment of the proposed modification.

Yours sincerely,



Brendan Hoskins
Principal
9956 6962
bhoskins@ethosurban.com



Ella Coleman
Junior Urbanist
9409 4923
ecoleman@ethosurban.com