

# ***Building R5, Barangaroo South***

*State Significant  
Development Assessment  
(SSD 6966)*



August 2019

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### **Cover photo**

Visualisation of proposed Building R5, Barangaroo South (Source: Applicant's Response to Submissions)

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# Glossary

Abbreviation	Definition
ADG	Apartment Design Guide
AHD	Australian Height Datum
Applicant	Lend Lease (Millers Point) Pty Ltd
Application	SSD 6966
BCA	Building Code of Australia
CIV	Capital Investment Value
Concept Plan	Approved Barangaroo Concept Plan for the redevelopment of the site (MP 06_0162)
Consent	Development Consent
Council	City of Sydney
CPTED	Crime Prevention Through Environmental Design
Department	Department of Planning, Industry and Environment (Planning and Assessment Group)
EESG	Environment, Energy and Science Group of the Department of Planning, Industry and Environment (former NSW Office of Environment and Heritage)
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
GFA	Gross Floor Area
Heritage Division	Heritage Division of the Department of Premier and Cabinet (former Heritage Division of the Office of Environment and Heritage)
IPC	Independent Planning Commission
KWH	Key Worker Housing, defined as housing for any nurse, teacher, child-care worker, ambulance officer, member of the police force, member of the fire brigade or retirees within an income of +/-50% of the median household income for the Sydney (Statistical Division) (as that division is defined for the purposes of the Australian Bureau of Statistics), as defined in the Barangaroo Housing Strategy
LEP	Local Environmental Plan
Minister	Minister for Planning and Public Spaces
MOD 8	Modification number eight to the Concept Approval MP 06_0162
RPBW	Renzo Piano Building Workshop
RRtS	Revised Response to Submissions
RtS	Response to Submissions

SEARs	Secretary's Environmental Assessment Requirements
Secretary	Secretary of the Department of Planning, Industry and Environment
SEPP	State Environmental Planning Policy
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SREP 2005	Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
SSD	State Significant Development
SSP	State Environmental Planning Policy (State Significant Precincts) 2005
TfNSW (RMS)	Transport for NSW (Roads and Maritime Services)
TfNSW	Transport for New South Wales





# Executive Summary

This report provides an assessment of a State Significant Development (SSD) application (SSD 6966) for the construction of a 30-storey residential building (known as Building R5) containing 210 apartments, of which 48 are designated for key worker housing, with ground floor retail at Barangaroo South. The applicant is Lend Lease (Millers Point) Pty Ltd and the site is located within the City of Sydney local government area.

The proposed development is SSD under Schedule 2 of the State Environmental Planning Policy (State & Regional Development) 2011, as it is development within Barangaroo having a capital investment value over \$10 million. Therefore, the Minister for Planning and Public Spaces is the consent authority.

## Engagement

The Department of Planning, Industry and Environment (the Department) publicly exhibited the application between 29 September 2016 and 14 November 2016. The Department received a total of 13 submissions, comprising five Government agency submissions, one submission in the form of an objection from City of Sydney Council (Council), and seven public submissions, with six objecting and one supporting.

The Department notes the proposed development was exhibited concurrently with residential Building R4A (72 storeys and RL 250 in height) and residential Building R4B (60 storeys and RL 210 in height). The planning process for these buildings proceeded ahead of Building R5, and they were approved by the Independent Planning Commission (former Planning Assessment Commission) on 7 September 2017.

In December 2018, the Applicant submitted a Response to Submissions (RtS) which increased the number of apartments from 151 to 210, including an increase of 50 on-market dwellings to 162 and nine key worker housing dwellings to 48. The RtS also increased the height of the building by one storey, redistributed gross floor area, and made several design refinements, including floorplate reconfiguration, and alterations to communal open space, the façade, colonnade and ground floor levels.

Due to the increase in height and number of dwellings, and the time period since public consultation on the original proposal (more than 2 years), the Department publicly exhibited the RtS, including notifying previous submitters and relevant Government agencies between 17 January and 22 February 2019.

Thirteen submissions were received, including nine submissions from Government agencies, three who made comments and six who advised they would not be making comments. Council advised it maintained its objection, and three public submissions by way of objection were also received, one of whom objected to the original proposal.

While Council supported the increased provision of key worker housing, it objected to the interface of the development with the public domain, including the absence of a clear podium, non-compliances with the Apartment Design Guide, traffic impacts and excessive car parking provision, and construction noise impacts.

Key issues raised in public submissions included built form, privacy and cumulative visual impacts, demand on infrastructure, increase in the number of apartments from the EIS, and construction noise and vibration impacts.

## Assessment

The Department considers the proposal exhibits design excellence and is of an appropriate scale that is consistent with the parameters set by the Concept Plan. The proposed building has a maximum height of RL 107, which is

consistent with the maximum height limit of RL 107 under the Concept Plan and State Environmental Planning Policy (State Significant Precincts) 2005. The proposed GFA of 19,158 m<sup>2</sup> is also below the maximum GFA of 20,970 m<sup>2</sup> allocated to the site under the Concept Plan and State Environmental Planning Policy (State Significant Precincts) 2005.

The Department notes proposed podium location and design of the building is consistent with the Barangaroo South Design Controls, and the realignment of the colonnade on Hickson Road with that established by Buildings C1 and C2 to the south, and amendment the footprint of the podium to align with Scotch Row, is a positive contribution to the streetscape. The orientation of the building (together with Buildings R4A and R4B).

The proposed building would not result in additional visual and privacy impacts and would improve view corridors by four degrees from three of the four existing residential buildings compared to the Concept Plan building envelopes. The Department considers the increase from 151 to 210 residential units as proposed in the RtS is acceptable as most units will receive a high level of residential amenity.

The landscape design will provide a high level of amenity for residents, employees and visitors and is consistent with the overall landscaping of the Barangaroo precinct and will sufficiently mitigate wind impacts. The Department is satisfied the proposed works are suitably integrated with the approved public domain, providing an acceptable transition between Hickson park and adjoining plaza and the proposed building.

The Department notes traffic impacts were previously considered as part of the assessment of the Concept Plan. The proposed 134 car parking spaces is 71 spaces less (or 32% less) than the maximum 205 permitted under the Concept Plan, and the Department considers the traffic movements associated with this development will have minimal impact on the local road network. However, the Department has concerns that no car parking has been provided for any key worker housing tenants.

The Department notes there is a deficit of nine car parking spaces between that approved in the approved Stage 1B Basement and that proposed to be provided in this application. Accordingly, it is recommended that nine additional spaces are provided for key worker housing tenants, subject to the Applicant providing detailed information about anticipated levels of car sharing arrangements and special allowances for persons with a disability. This information is recommended to be provided in an Operational Management Plan, to be approved by the Secretary prior to occupation or commencement of the use of the building.

A combined loading area has been approved as part of the approved Stage 1B basement with sufficient capacity accommodate the servicing of the proposed building.

The recommended Operational Plan of Management would also provide further detail to ensure key worker housing units are suitably managed, for the benefit of future occupiers.

The Department considers the applications acceptable in relation to construction noise and vibration subject to conditions, including the requirement for the existing Construction Noise and Vibration Management Sub-Plan for Barangaroo South to be updated with the specific noise and vibration control measures for the proposed development.

All other issues associated with the proposal have been assessed, and appropriate conditions recommended, where necessary, to ensure the impacts of the development are appropriately mitigated and/or managed and community concerns are addressed.

## **Conclusion**

The Department is satisfied the proposal is consistent with the strategic objectives for the area, as outlined in the Greater Sydney Region Plan and the Eastern City District Plan as it would provide greater housing choice and

affordability through new residential units, including 48 key worker housing units, and 200 construction and 10 operational jobs in a highly accessible location.

As Council objected to the proposal, it is being referred to the Independent Planning Commission (Commission) for determination.

The Department concludes the proposal is in the public interest and is approvable, subject to the recommended conditions.



# Contents

<b>Glossary .....</b>	<b>iii</b>
<b>Executive Summary .....</b>	<b>v</b>
<b>1. Introduction.....</b>	<b>1</b>
1.1 Barangaroo .....	1
1.2 The site and surroundings.....	1
1.3 Approved Barangaroo Concept Plan .....	2
1.4 Current construction works and completed projects .....	3
1.5 Related projects.....	3
1.6 Environment Protection Authority Declaration Area.....	3
<b>2. Project .....</b>	<b>6</b>
2.1 Description of proposal.....	6
<b>3. Strategic Context.....</b>	<b>12</b>
3.1 Greater Sydney Region Plan.....	12
3.2 Eastern City District Plan .....	12
<b>4. Statutory Context .....</b>	<b>13</b>
4.1 State Significant Development .....	13
4.2 Permissibility .....	13
4.3 Compliance with Clause 4.24(2) of the EP&A Act .....	13
4.4 Mandatory Matters for Consideration.....	14
<b>5. Engagement .....</b>	<b>15</b>
5.1 Department’s Engagement.....	15
5.2 Summary of Submissions.....	15
5.3 Key Issues – Government Agencies.....	15
5.4 Key Issues – Council and Community .....	16
5.5 Response to Submissions .....	17
5.6 Applicant’s Revised Response to Submissions .....	20
<b>6. Assessment.....</b>	<b>21</b>
6.1 Key assessment issues.....	21
6.2 Design excellence .....	21
6.3 Built form .....	22
6.4 Public Domain .....	27

6.5	Amenity impacts to neighbouring properties .....	31
6.6	Residential amenity for future occupants .....	40
6.7	Transport, traffic, access and parking .....	45
6.8	Other Issues .....	51
<b>7.</b>	<b>Evaluation .....</b>	<b>55</b>
	<b>Appendices.....</b>	<b>57</b>
	Appendix A – List of Documents.....	57
	Appendix B – Summary of the Consideration of Community Views.....	58
	Appendix C – Statutory Considerations.....	63
	Appendix D – Consistency with the Concept Approval.....	82
	Appendix E – Barangaroo Concept Plan – Planning History .....	94
	Appendix F – Design Excellence Waiver .....	97
	Appendix G – Recommended Instrument of Consent.....	98





# 1. Introduction

This report provides an assessment of a State significant development application (SSD 6966) seeking approval for the construction, fit-out and use of a 30-storey residential building, known as Building R5 at Barangaroo South. The Applicant is Lend Lease (Millers Point) Pty Ltd.

## 1.1 Barangaroo

Barangaroo is located on the north-western edge of the Sydney Central Business District (CBD) within the City of Sydney local government area (LGA). Barangaroo is bounded by the Sydney Harbour foreshore to the north and west, Hickson Road and Millers Point to the east, and King Street Wharf/Cockle Bay/Darling Harbour to the south.

Barangaroo has a total area of 22 hectares and has been divided into three distinct redevelopment areas (from north to south), comprising Barangaroo Reserve (former Headland Park), Barangaroo Central and Barangaroo South (**Figure 1**). Building R5 is located within Barangaroo South.



**Figure 1** | The Barangaroo site (highlighted in red) and Barangaroo South (shaded in yellow) (Base source: Google)

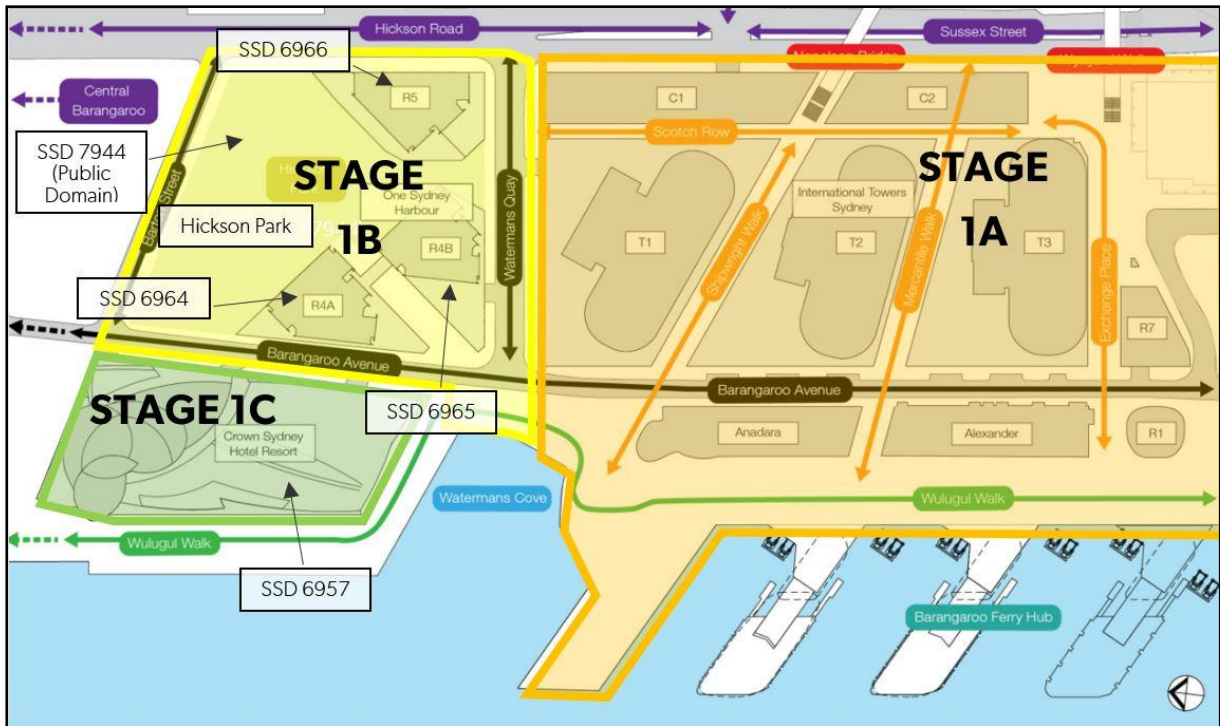
## 1.2 The site and surroundings

The proposed development is located within the Barangaroo South area, adjoining Hickson Road to the east, commercial Buildings C1 and C3 (now known as International Tower T1) to the south, residential Buildings R4A and R4B to the west, and the future Hickson Park to the north (**Figure 2**).



The address of the site is 51A Hickson Road, Barangaroo, and the site is legally described as Lot 214 in DP 1221076. The site is generally flat and has an area of 1753 m<sup>2</sup>. The closest residents are located approximately 25 m from the site on Hickson Road.

The site will be serviced by the approved Stage 1B basement car park, which services the developments within Block 4A and 4B in the Concept Plan (Buildings R4A, R4B and proposed R5).



**Figure 2** | Barangaroo South buildings and construction stages (Base source: Applicant's EIS)

### 1.3 Approved Barangaroo Concept Plan

On 9 February 2007, the then Minister for Planning approved the Barangaroo Concept Plan (Concept Plan) (MP 06\_0162) for the renewal of the Barangaroo site for a mix of uses, including residential, retail, commercial and public recreation.

The Concept Plan establishes nine development blocks, gross floor area (GFA), building height and public open space/public domain areas. The Concept Plan also includes the Built Form Principles and Urban Design Controls to guide development.

The proposed development, Building R5, is located within Barangaroo South, which has been divided into construction Stages 1A, 1B and 1C (**Figure 2**). Building R5 (on block 4B) is located within Stage 1B, along with the future Hickson Park and public domain works, approved under SSD 7944 and currently under construction, and residential Buildings R4A and R4B, which are currently under construction.

Stage 1A relates to a mixture of commercial, residential and retail buildings. All of these developments, except Building C1 (which is currently under construction) have been constructed and are occupied.

Stage 1C relates to the Crown Sydney Hotel Resort, which is also currently under construction.

A detailed planning history of the Concept Plan and its modifications is provided at **Appendix E**. In summary, eight modifications have been approved since the Concept Plan was originally approved.

## 1.4 Current construction works and completed projects

A number of key approvals have been issued for development at Barangaroo South, Headland Park and Barangaroo Central (**Figure 3**), including:

- residential Buildings R4A and R4B (approved, not yet under construction)
- stage 1B basement car park (under construction)
- stage 1B permanent public domain works (under construction)
- blocks 4 and 5 and Hickson Road remediation works (under construction)
- Crown Sydney Hotel Resort (under construction)
- Barangaroo ferry hub (complete)
- commercial Buildings C1 (under construction), C2, C3, C4 and C5 (complete)
- residential buildings R8 and R9 (complete)
- stage 1A basement car park (complete)
- stage 1A permanent public domain works (complete)
- retail Buildings R1 and R7 (complete)
- Barangaroo Reserve (former Headland Park – complete)
- Barangaroo Central foreshore promenade (complete).

## 1.5 Related projects

The proposed development has been designed to have similar layouts, built-form, materials and finishes to the approved residential Buildings R4A (SSD 6964) and R4B (SSD 6966).

The site also has two previously approved projects that will integrate with the proposed development. The public domain works for the site and the surrounding area have been approved under the Stage 1B public domain works application (SSD 7944) and the basement has been approved and is currently under construction under the Stage 1B basement car park application (SSD 6960).

## 1.6 Environment Protection Authority Declaration Area

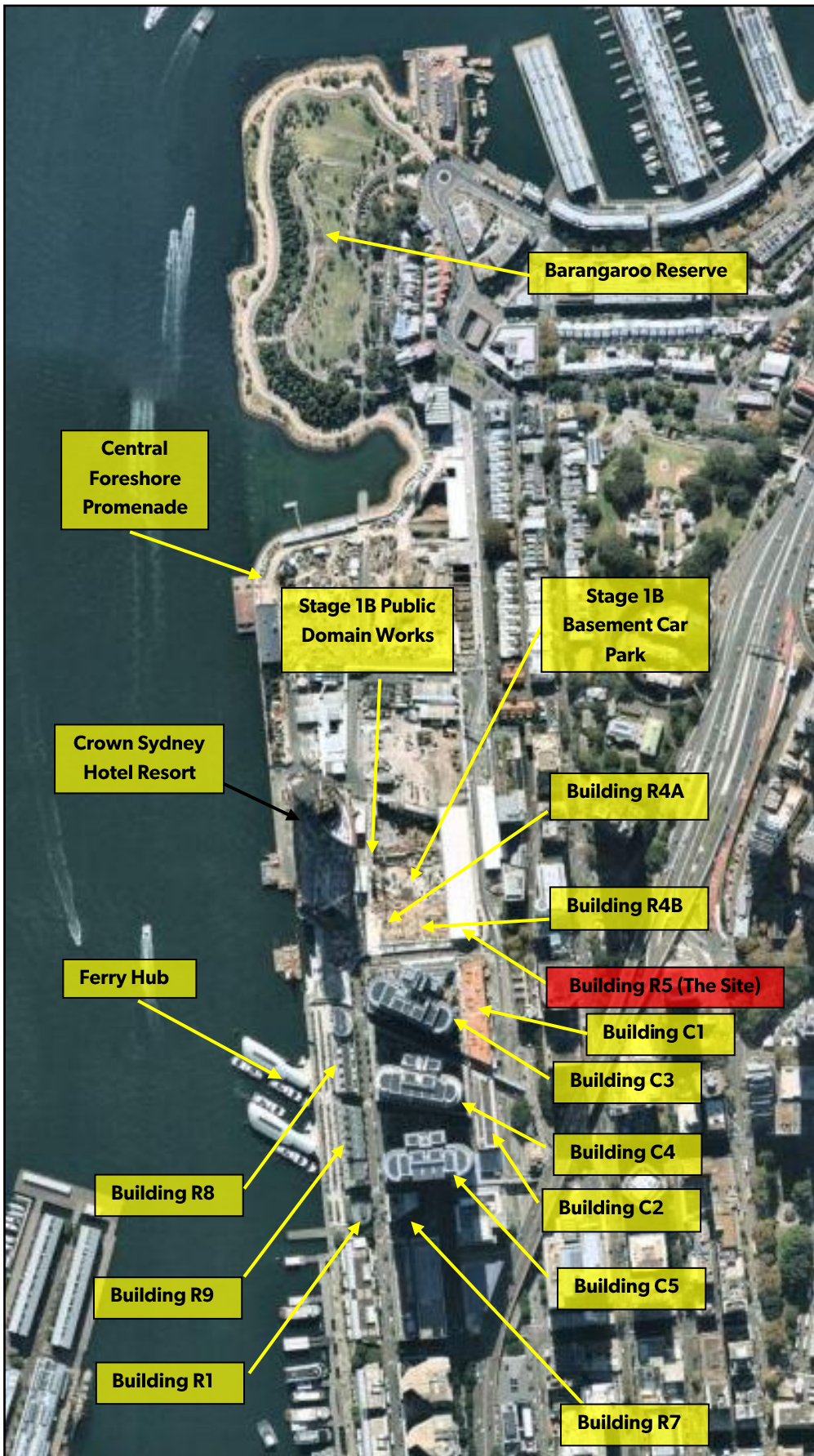
The site incorporates a part of a 'remediation site' as declared by the Environment Protection Authority (EPA) under the *Contaminated Land Management Act 1997*, (EPA Declaration Area 21122). The Declaration Area is to be remediated in three stages.

Stage 1 involves the remediation of Block 4 and the adjacent public domain areas (SSD 5897) and was approved by the Department on 10 November 2014. These works apply to the majority of the site, as shown in **Figure 4**, and have been completed. Accordingly, the subject application does not include remediation works.

Stage 2 involved the remediation of Block 5 (SSD 6533) to the north and was approved on 18 December 2015. These works have been completed.

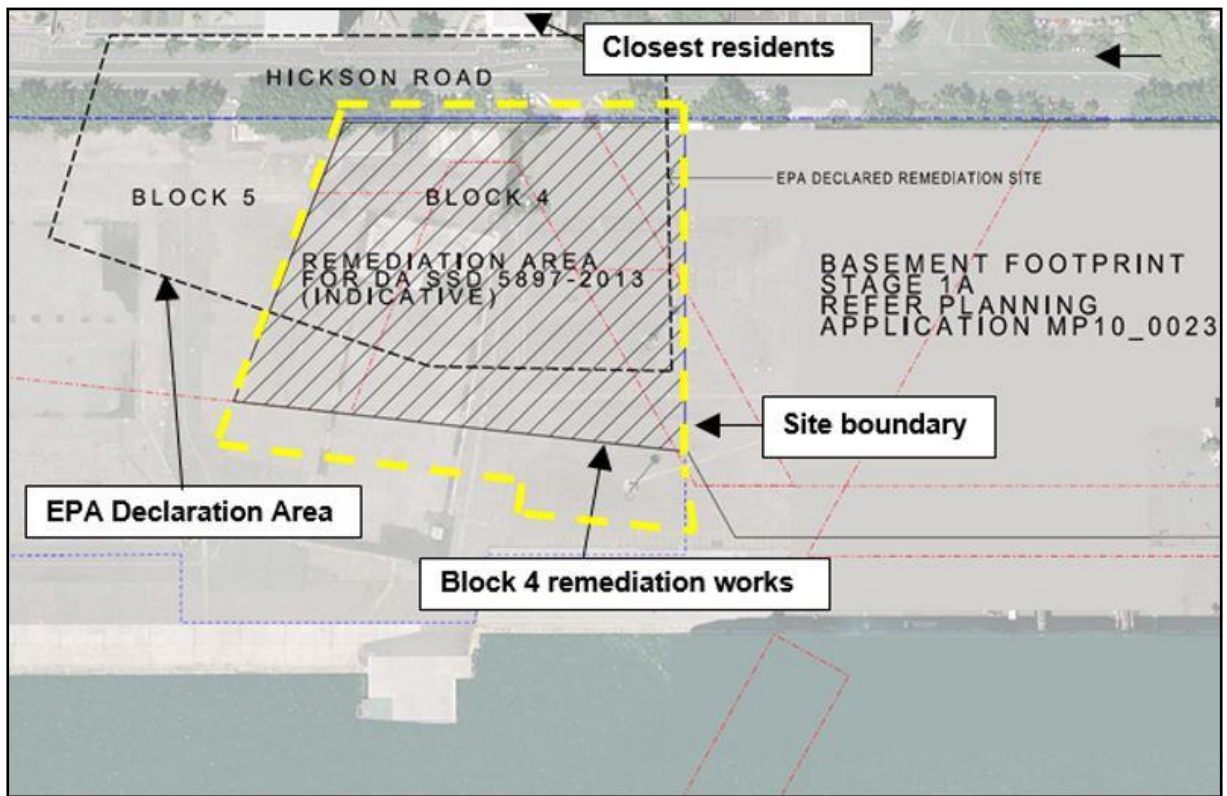
Stage 3 related to the remediation of part of Hickson Road (SSD 6617) and was approved on 25 August 2016. These works are ongoing and expected to be completed in late 2019.

The EPA has indicated that the Declaration (no. 21122) will not be lifted until the entire area has been successfully remediated.



**Figure 3** | Barangaroo construction and completed projects plan (Base source: Nearmap)





**Figure 4** | EPA Declaration Area and Block 4 Remediation Works (Base source: SSD 5897 EIS)



## 2. Project

### 2.1 Description of proposal

The application seeks approval for the construction, fit-out and use of a 30-storey residential building, known as Building R5 at Barangaroo South, and the use of the basement as a car park within the previously approved Stage 1B Basement (SSD 6960).

The major components of the development, as refined in the Response to Submissions (RtS) and Revised Response to Submissions (RRtS) are summarised in **Table 1** and depicted in **Figures 5 to 9** and **Section 6**.

**Table 1** | Key components of the proposal

Aspect	Description
Demolition	<ul style="list-style-type: none"><li>Demolition of interim basement elements, including access points and service risers temporarily constructed to allow integration between the building and basement.</li></ul>
Built form	<ul style="list-style-type: none"><li>Construction of a 30-storey building (RL 107).</li></ul>
Gross Floor Area	Total GFA of 19,158 m <sup>2</sup> , comprising: <ul style="list-style-type: none"><li>18,287 m<sup>2</sup> residential (including key worker housing)</li><li>871 m<sup>2</sup> retail located within the podium at Ground Floor Level and Podium Level 1.</li></ul>
Residential use	210 residential apartments, located on Podium Level 2 to Level 27, including 162 on-market dwellings comprised of: <ul style="list-style-type: none"><li>69 x 1-bedroom</li><li>62 x 2-bedroom</li><li>30 x 3-bedroom</li><li>1 x 4-bedroom.</li></ul> 48 key worker housing apartments <ul style="list-style-type: none"><li>34 x 1-bedroom</li><li>14 x 2-bedroom.</li></ul>
Public domain/landscaping	<ul style="list-style-type: none"><li>Paving immediately surrounding the building, landscaping on Podium Level 2 and the Level 26 rooftop and four <i>harullia pendula</i> trees at ground level, being between 7 and 10 m high with a canopy diameter of 3 – 5 m.</li></ul>
Basement	<ul style="list-style-type: none"><li>Fit-out and use of the approved Stage 1B Basement car park to accommodate car parking spaces, storage, waste rooms, facilities management offices, shared plant and services, and circulation spaces.</li></ul>
Vehicle parking	<ul style="list-style-type: none"><li>134 car parking spaces for non-KWH dwellings</li><li>No KWH or retail car parking spaces</li><li>Motorcycle parking is provided in the residential storage cages, or within the designated car parking spaces</li></ul>

	<ul style="list-style-type: none"> <li>• Five shared service vehicle bays (maximum medium rigid vehicle size).</li> </ul>
<b>Bicycle parking</b>	<ul style="list-style-type: none"> <li>• Non-KWH units would utilise individual storage cages in the shared basement</li> <li>• KWH would utilise a communal bicycle parking storage area at the Basement Level immediately below ground floor, with one space provided per unit</li> <li>• Bicycle parking for non-residential uses would be located in the public domain</li> <li>• Visitor bicycle parking will be provided as part of the future public domain works, being in an on-grade location near a major public entrance to the building and signposted.</li> </ul>
<b>Signage</b>	<ul style="list-style-type: none"> <li>• Two signage zones to accommodate building identification signage on Watermans Quay and Hickson Road.</li> </ul>
<b>Capital Investment Value</b>	<ul style="list-style-type: none"> <li>• \$145,845,000.00.</li> </ul>
<b>Employment</b>	<ul style="list-style-type: none"> <li>• 200 construction jobs and 10 operational jobs.</li> </ul>



**Figure 5** | Building R5 showing relationship to Buildings R4A and R4B and Hickson Park (Source: RtS)



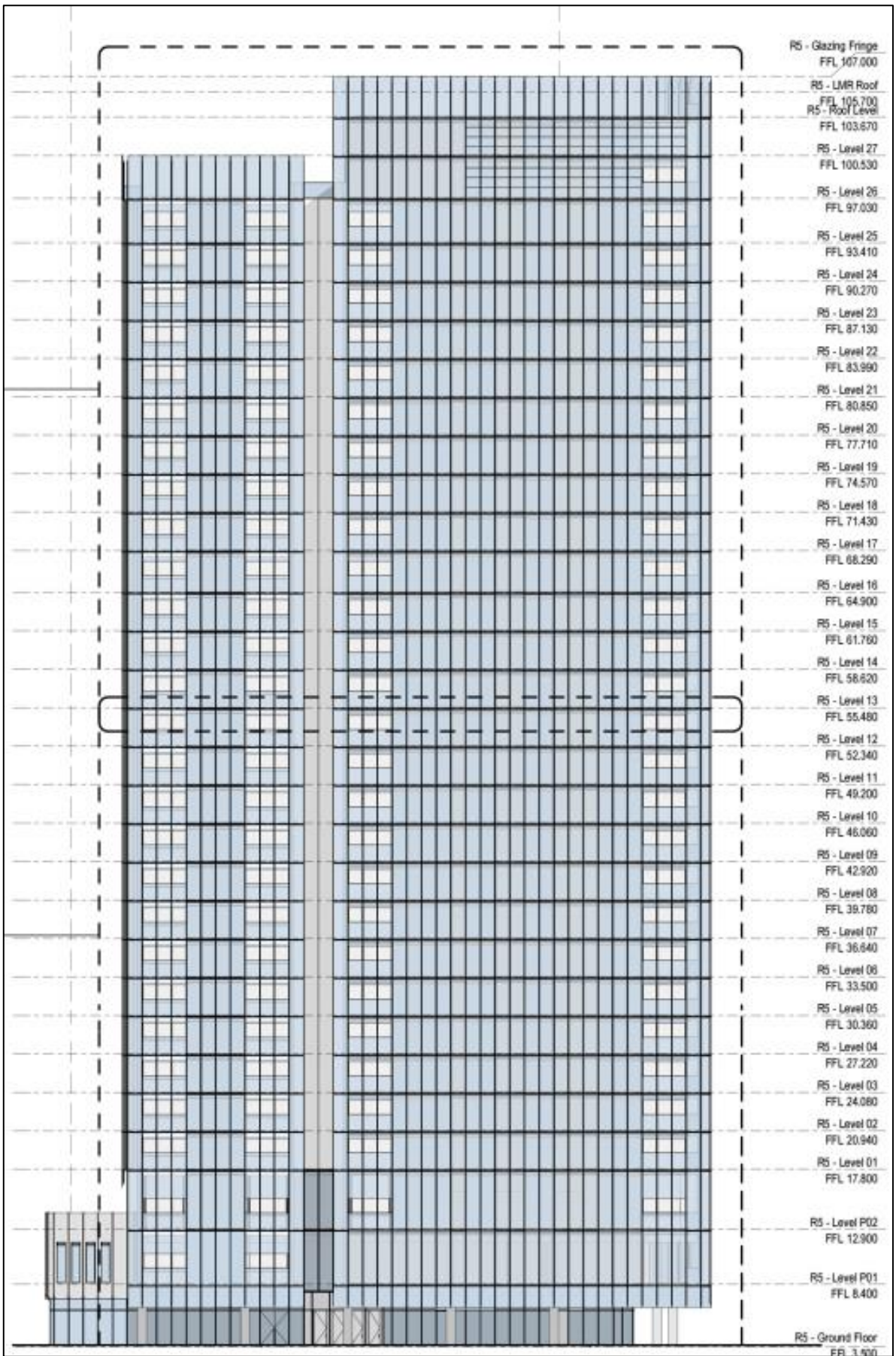


Figure 6 | Building R5 east elevation looking from Hickson Road (Source: RtS)

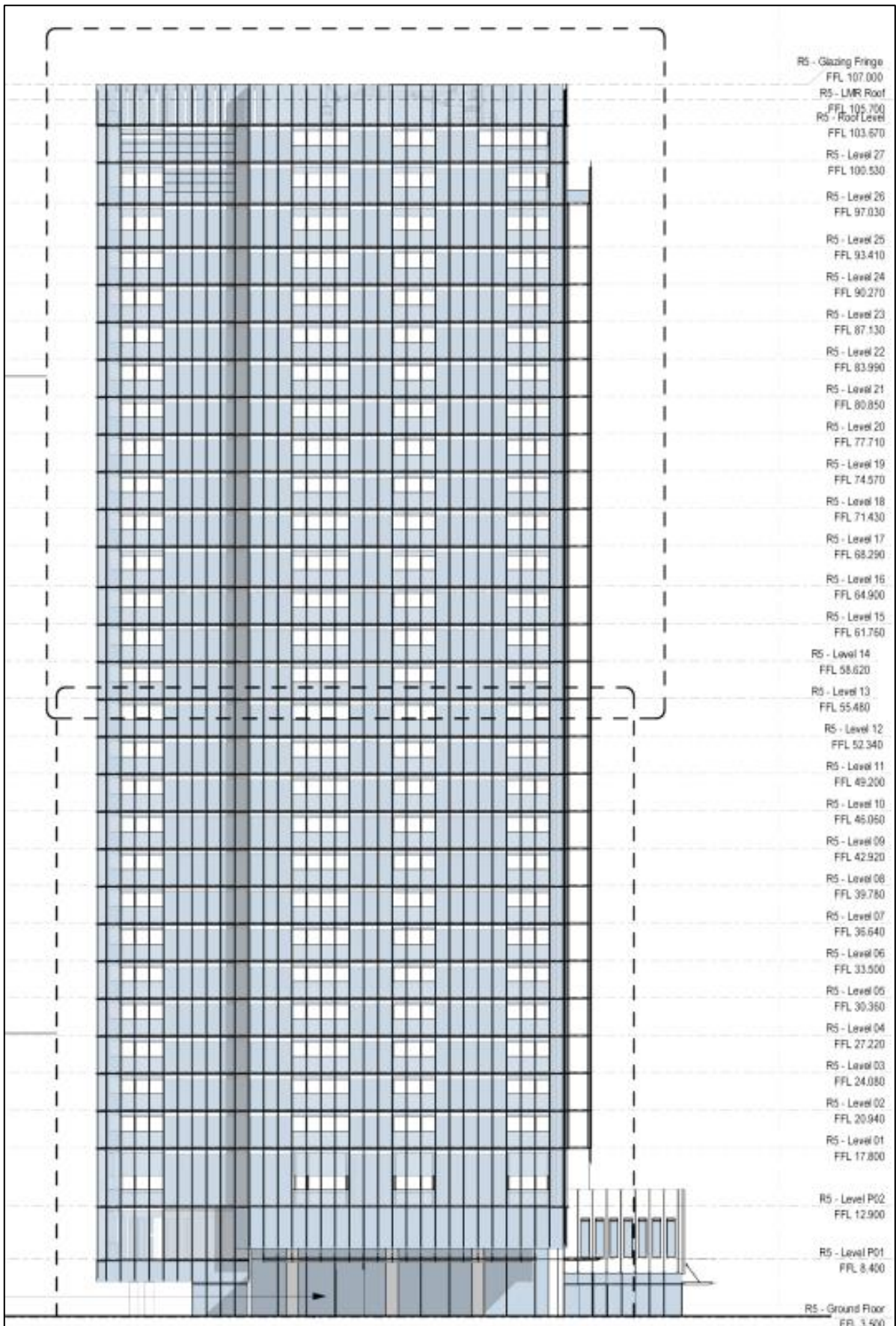
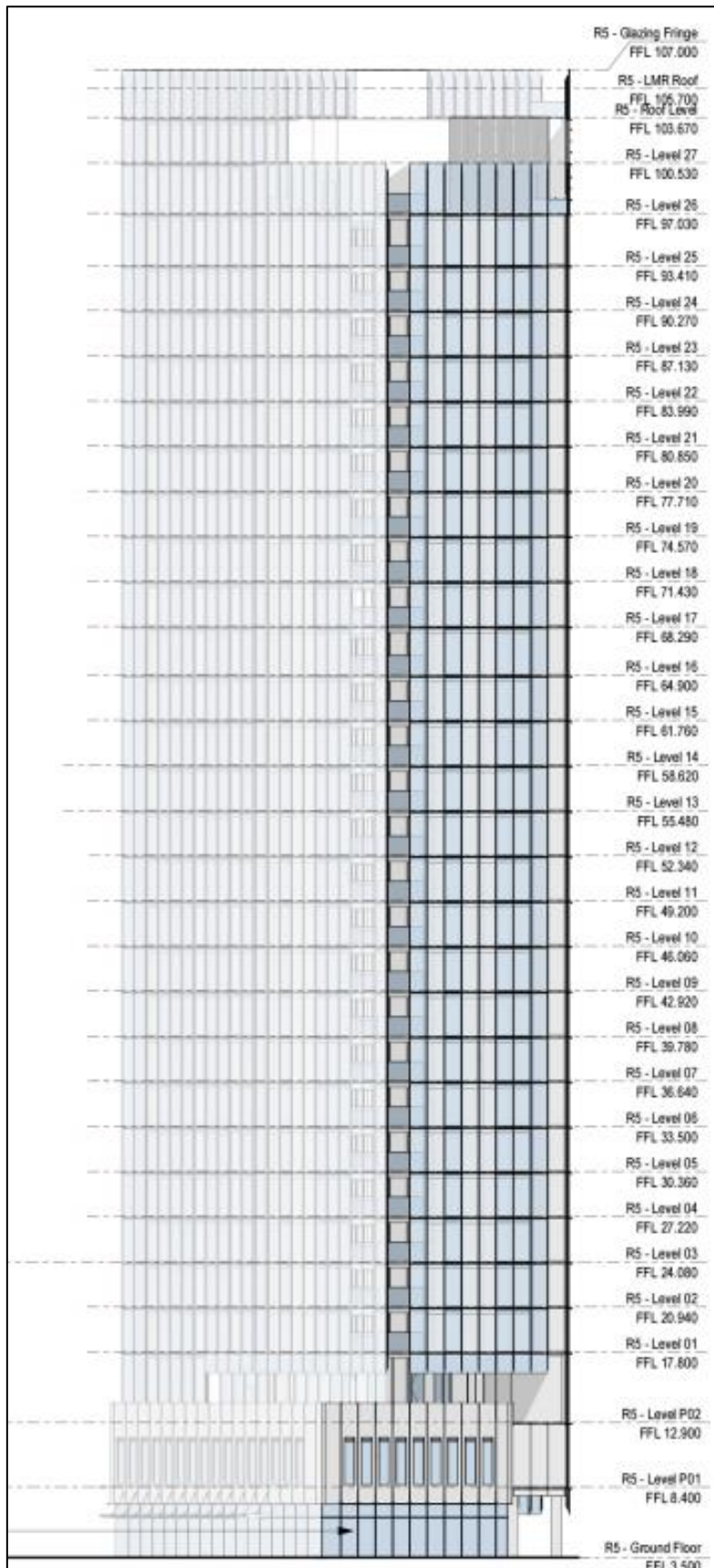
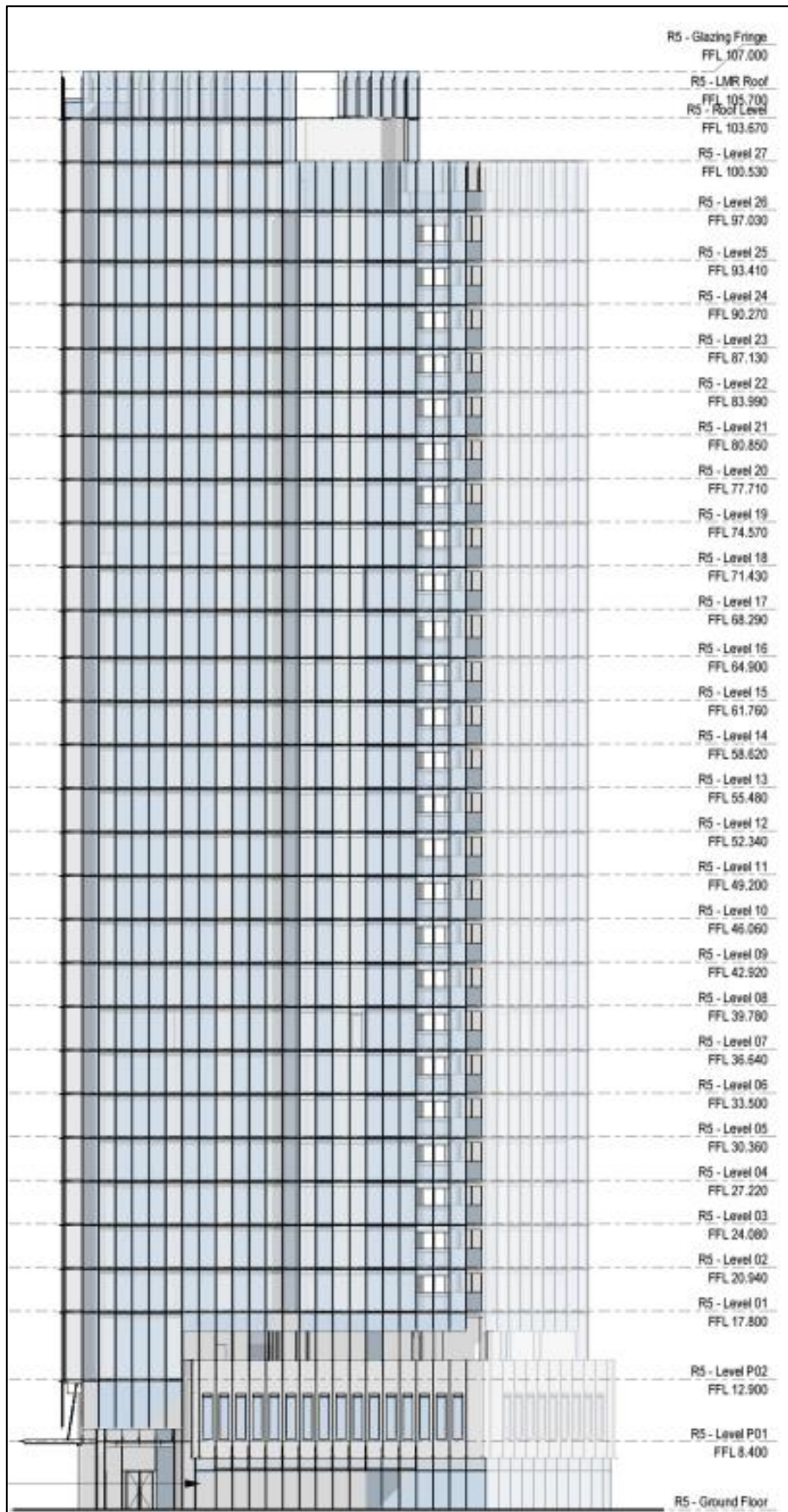


Figure 7 | Building R5 north-west elevation from Hickson Park





**Figure 8** | Building R5 south elevation from Watermans Quay (Source: RtS)



**Figure 9** | Building R5 south-west elevation from Watermans Quay (Source: RtS)



## 3. Strategic Context

### 3.1 Greater Sydney Region Plan

The Greater Sydney Region Plan (GSRP) supports a 40-year vision for a metropolis of three cities that will rebalance growth and deliver its benefits more equally and equitably to residents across Greater Sydney. The site is located within the Harbour CBD and more broadly encompassed within the Eastern Economic Corridor.

The proposed development supports the directions and objectives of the GRSP by:

- providing 210 residential units, include 48 key worker housing (KWH) units in a highly accessible area
- providing for 200 construction and 10 operational jobs in a connected and highly accessible area which contributes to making the Harbour CBD stronger and more competitive
- providing for sustainability initiatives for a resilient city.

### 3.2 Eastern City District Plan

The Greater Sydney Commission's (GSC) role is to coordinate and align planning to shape the future of Metropolitan Sydney. The GSC has prepared District Plans to inform local Council planning and influence the decisions of State agencies. The aim of the District Plans is to connect local planning with the longer-term metropolitan planning for Greater Sydney. The site is located within the Eastern City District.

The proposal supports the directions and objectives of the District Plan by:

- improving housing choice and affordability with access to jobs and public transport
- providing for job opportunities in the highly accessible Barangaroo precinct and helping to grow and invest in Barangaroo as part of Sydney's Innovation Corridor
- reducing carbon emissions through sustainability initiatives.



## 4. Statutory Context

### 4.1 State Significant Development

The proposed development is SSD under section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as it comprises development on land identified as being within Barangaroo and has a CIV in excess of \$10 million (\$145,845,000) under clause 3 of Schedule 2 of State Environmental Planning Policy (SEPP) (State and Regional Development) 2011 (SRD SEPP).

In accordance with clause 8A of the SRD SEPP and section 4.5 of the EP&A Act, the Commission is the declared consent authority if Council objects to the development within the mandatory community participation period specified in Schedule 1 of the EP&A Act. City of Sydney Council (Council) objected to the proposed development outside of the mandatory community participation period.

On 14 September 2011, the Minister for Planning delegated the functions to determine SSD applications to the Commission, where:

- the relevant Council has made an objection
- a political disclosure donation statement has been made
- there are more than 25 public submissions in the nature of objections.

Under the Ministerial delegation, the Commission must determine the application as Council has objected to the development.

#### 4.1.1 Design Competition Waiver

On 1 December 2014, the Secretary delegated her functions under Schedule 3 of State Environmental Planning Policy (State Significant Precincts) 2005 (SSP SEPP) and Schedule 2, Part C – Future Applications C2(7) of the Concept Plan to the Executive Directors who report to the Deputy Secretary, Planning Services. This enables the Executive Director, Compliance, Industry and Key Sites to waive the requirement for a design competition under Schedule 3 of the SSP SEPP and the terms of the Concept Plan.

The building has been designed by an internationally recognised architectural firm – Renzo Piano Building Workshop (RPBW), the same designer of the approved Buildings R4A and R4B. RPBW's work has been recognised by a number of design awards. As considered in **Section 6.2** of this report, the proposed building demonstrates design excellence and has been informed by the 'Master Architects' of Barangaroo South, Rogers Stirk Harbour and Partners.

It is therefore considered appropriate the Executive Director, Compliance, Industry and Key Sites, grant a Design Competition waiver for the proposed building (**Appendix F**).

### 4.2 Permissibility

Under the SSP SEPP, the site is zoned B4 Mixed Use. The proposed development, comprising residential and retail uses, is permissible with consent in the B4 zone.

### 4.3 Compliance with Clause 4.24(2) of the EP&A Act

Clause 4.24(2) of the EP&A Act specifies that while any concept development application for a site remains in force, the determination of any further development application cannot be inconsistent with the consent for the



concept proposals. The Department has considered the proposed development and is of the opinion the proposal is consistent with the Barangaroo Concept Plan as it:

- reflects the approved block configuration in the Concept Plan and is permissible with consent
- would not exceed the maximum gross floor area (GFA) or height controls specified in the Concept Plan
- complies with all relevant Built Form Principles and Urban Design Controls of the Concept Plan, or where not this is justified (**Appendix D**)
- would not adversely impact on the delivery of a high quality Hickson Park and surrounding public domain.

#### 4.4 Mandatory Matters for Consideration

Section 4.15 of the EP&A Act outlines the matters that a consent authority must take into consideration when determining development applications. These matters could be summarised as:

- the provisions of environmental planning instruments (including draft instruments), development controls plans, planning agreements, and the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation)
- the environmental, social and economic impacts of the development
- the suitability of the site
- any submissions, and
- the public interest, including the objects in the EP&A Act and the encouragement of ecologically sustainable development (ESD).

The Department has considered all these matters in its assessment of the project, as well as the Applicant's consideration of environmental planning instruments in its EIS, as summarised in **Section 6** of this report. The Department has also given consideration to the relevant provisions of the EP&A Act, including environmental planning instruments in **Appendix C**.

# 5. Engagement

## 5.1 Department's Engagement

In accordance with Schedule 1 of the EP&A Act, the Department publicly exhibited the application from Thursday 29 September 2016 to Monday 14 November 2016 (47 days). The application was made publicly available on the Department's website and Information Centre in Pitt Street, and exhibited at Council.

The Department placed a public exhibition notice in the Sydney Central Courier on Wednesday 28 September 2016, and notified adjoining landholders, Council and relevant Government agencies in writing.

All notification and public participation statutory obligations have been satisfied.

The exhibition was undertaken concurrently with residential Buildings R4A and R4B. The planning process for these buildings proceeded ahead of Building R5, and they were approved by the Independent Planning Commission (former Planning Assessment Commission) on 7 September 2017.

The Department has considered the comments raised in Council, Government agencies and public submissions during the assessment of the applications (**Section 6** and **Appendix B**) and by recommended conditions in the consent at **Appendix G**.

## 5.2 Summary of Submissions

The Department received a total of 13 submissions in response to the original exhibition, including five making comments from Government agencies, one objection from Council, and seven public submissions, with six objecting and one supporting. A link to the submissions may be viewed at **Appendix A**.

## 5.3 Key Issues – Government Agencies

The Department received five submissions from Government agencies, all of which provided comments. The key issues raised are summarised in **Table 2** below.

**Table 2** | Government agency submissions

### Heritage Division of the Department of Premier and Cabinet (former Heritage Division of the Office of Environment and Heritage) (Heritage Division)

**Heritage Division** provided the following comments:

- the proposal is of a relatively modest scale compared to the surrounding group of buildings proposed in this area of Barangaroo and will have a lesser impact on the visual setting of the State Heritage Register items and conservation areas in the vicinity.
- the height of the proposal is consistent with the existing scale of development in the area and is therefore considered to have an acceptable impact on its heritage context
- further archaeological assessment is not required for the subject site given the archaeological potential of this area was investigated as part of Block 4 Remediation consent (SSD 5897)
- interpretation should be incorporated into the detailed design of Building R5 in accordance with the Outline Interpretation Plan prepared for Barangaroo South.

### Transport for NSW (TfNSW)

**TfNSW** provided recommended conditions and the following comments:

- several construction projects within the Barangaroo and Wynyard Precincts including the Sydney Light Rail project are likely to occur at the same time as the subject SSD

- the cumulative increase in construction vehicle movements from these projects could have the potential to impact on general traffic and bus operations within the Barangaroo and Wynyard Precincts
- queuing in the loading dock area would have the potential to impact on car park operation as well as the operation of the road network adjacent to the proposed dock.

### Sydney Airport

**Sydney Airport** noted the maximum height of the building is RL 105.8 and advised if approval to operate construction equipment (i.e. cranes) is required for any intrusion into prescribed airspace (RL 156), it should be obtained prior to any commitment to construct.

Sydney Airport stated that while there are currently no national aviation standards relating to defining public safety areas beyond the airport boundary, it is recommended that proposed land uses which have high population densities should be avoided.

### The Foreshores and Waterways Planning and Development Advisory Committee - Roads and Maritime Services (The Committee)

The **Committee** advised it is generally consistent with the vision of the Barangaroo development (as outlined in the original Concept Plan).

### Environment Protection Authority (EPA)

**EPA** noted a separate development consent (SSD 5897) has been granted for remediation of the Block 4 Remediation Area/Stage 1B Basement for the site and the subject EIS states no additional excavation or bulk earthworks are proposed.

## 5.4 Key Issues – Council and Community

### 5.4.1 Council key issue

Council's submission was prepared for Buildings R4A, R4B and R5 due to their concurrent exhibition. Only the concerns relevant to Building R5 are noted below.

Council objected to the proposal on the grounds of the planning process being inappropriate and uncertain, and non-compliances with SEPP 65 and the Apartment Design Guide (ADG). In addition, Council raised the following concerns:

- there is insufficient appreciation of the context of the applications leading to inability to determine the full range of environmental impacts
- pedestrian connection and desire lines from the proposal to the Barangaroo Metro Station through Hickson Park are not determined
- the absence of podiums to the tower is contrary to principles of human scale, breaking the building bulk and mass and wind mitigation strategies
- the pedestrian wind environments within the wind report rely on a landscape design report which is flawed, and the plantings relied on in the deep soil zones are unknown. The proposed trees within the wind report are unlikely to align with a well-considered park design
- the non-compliances with the ADG such as building separation, solar access and cross ventilation are not warranted and do not satisfy the relevant aims
- the amount of car parking proposed is excessive, especially given the access to excellent existing and proposed public transport options. This will lead to congestion on local and district road networks. Sustainable and active transport should be encouraged over high private vehicle use

- the traffic modelling provided relies on lower trip generation rates than the RMS guidelines for high-density residential flat buildings and does not include construction traffic movements in the peak PM hour
- the performance of the intersection at Hickson Road/Watermans Quay would be affected, with probable vehicle queues on Watermans Quay
- a low number of service vehicle spaces are proposed
- residential, visitor and retail bicycle parking spaces are not discussed in the TMAP and are not shown on the architectural plans
- retail fitouts should be the subject to separate approvals once tenancy uses have been confirmed
- mechanical ventilation should vent to the roof and enhanced filtration must be available for proposed solid fuel cooking outlets
- exceedances of construction noise criteria are predicted at three of the identified receivers. The construction phase should be appropriately managed through community consultation and provision of respite periods from intrusive works throughout the day
- provision should be made for physical acoustic treatments within the slab between the retail level and residential levels
- additional noise mitigation measures should be introduced to reduce the noise impacts on the childcare centre
- the crime prevention through environmental design assessment is general and does not provide details on the crimes the design seeks to prevent.

#### 5.4.2 Community issues

The Department received six submissions from residents that raised concerns regarding:

- cumulative increase in the demand on existing infrastructure within the precinct
- cumulative visual impact of three SSD projects (the subject SSD and those for Buildings R4A and R4B) when viewed from Sydney Harbour and surrounding residential properties located in an easterly direction of the site
- impact on views from surrounding residential properties
- visual privacy impacts to existing developments adjoining the subject site
- built form, including density and scale being out of character with the area, architectural design and the lack of a defined podium or setback to and from Hickson Road
- cumulative construction noise and vibration impacts on nearby residential properties
- the failure to provide a park on the site
- loss of property value
- sale of property offshore.

The Department received one public submission in support of the proposal, stating the building has visual appeal, design quality and is of an appropriate size.

Several submissions referenced Buildings R4A and R4B. Only the concerns relevant to Building R5 are considered below.

### 5.5 Response to Submissions

Following exhibition of the application, the Department placed copies of all submissions received on its website and requested the Applicant provide a response to the issues raised.

On 17 February 2017, the Applicant provided a Response to Submissions (RtS). However, on 27 February 2017, the Applicant requested the application be placed on hold.

On 20 December 2018, the Applicant submitted an updated RtS, making the following changes:

- an increase in height by one storey to 30-storeys
- re-distribution of the total GFA of 19,158 m<sup>2</sup>, comprised of:
  - an increase in residential GFA from 18,249 m<sup>2</sup> to 18,287 m<sup>2</sup>
  - a decrease in retail GFA from 909 m<sup>2</sup> to 871 m<sup>2</sup>
- an increase in number of apartments from 151 to 210, including an increase of 50 on-market dwellings to 162 and nine KWH dwellings to 48
- reduction in car parking spaces from 170 residential spaces and 1 retail space to 143 residential spaces
- floorplate reconfiguration, including relocation of the core to the middle of the building
- modifications to communal open space to relocate non-KWH communal open space to Level 26 rooftop and provision of new KWH communal open space on Podium Level 2
- façade refinements including a notch in the façade to break up the massing, and a step in building height at the upper levels of the building
- colonnade and ground plane refinements
- exclusion of ground floor shop fronts from the scope of the application.

Due to the increase in height and number of dwellings, and the time period since public exhibition of the proposal (more than two years), the Department publicly exhibited the RtS from 17 January to 22 February 2019 (37 days). The Department also notified Council, Government agencies, previous submitters and surrounding landowners.

The Department received a total of 13 submissions. Nine submissions were received from Government agencies and three public objections were also received, one of whom objected to the original proposal.

A link to all submissions is provided at **Appendix A**.

### 5.5.1 Key issues – Government agencies

The Department received nine submissions from Government agencies, three which provided comments and six who advised they would not be making any comments. The key issues raised are summarised in **Table 3**.

**Table 3** | Government agency submissions to the RtS

#### Transport for NSW (TfNSW)

**TfNSW** made the following comments:

- the Applicant’s proposal to prepare a Construction Pedestrian and Traffic Management Plan in consultation with the Sydney Coordination Office and Sydney Light Rail Team within TfNSW prior to the commencement of works should be conditioned
- the Applicant’s proposal to prepare a Loading Dock Management Plan prior to the commencement of works in consultation with the Sydney Coordination Office within TfNSW should be conditioned.

#### Heritage Division of the Department of Premier and Cabinet (former Heritage Division of the Office of Environment and Heritage) (Heritage Division)

**Heritage Division** recommended conditions requiring:

- an interpretation plan to be approved by the Department prior to issue of a Construction Certificate and implemented prior to issue of an Occupation Certificate
- procedures to be put in place for unexpected discovery of archaeological deposits or relics, or Aboriginal objects.

#### Sydney Airport

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**Sydney Airport** noted the maximum building height is RL 107.

Sydney Airport stated if approval to operate construction equipment (i.e. cranes) is required for any intrusion into prescribed airspace (RL 156), it should be obtained prior to any commitment to construct.

Sydney Airport stated that while there are currently no national aviation standards relating to defining public safety areas beyond the airport boundary, it is recommended that proposed land uses which have high population densities should be avoided.

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#### Transport for NSW (Roads and Maritime Services) (Transport for NSW (RMS))

**Transport for NSW (RMS)** advised it had reviewed the application and has no further comment.

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#### Transport for NSW (Roads and Maritime Services) (Transport for NSW (RMS Maritime))

**Transport for NSW (RMS Maritime)** advised it has no comments.

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#### Port Authority of NSW (Port Authority)

**Port Authority** advised it has no comments.

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#### Sydney Water

**Sydney Water** advised it had no further comments.

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#### Civil Aviation Safety Authority (CASA)

**CASA** advised it has no comment.

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#### Environment Protection Authority (EPA)

**EPA** advised it is not the regulatory authority for the proposal and made no further comment.

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### 5.5.2 Council key issues

Council maintained its objection to the proposal on the grounds that many of the issues raised in its initial objection remain unaddressed, and provided the following additional comments:

- the increased provision of KWH is supported, however further details on management and tenure should be provided. It is recommended the KWH be managed by a recognised community housing provider in perpetuity, and that some three-bedroom apartments be provided as KWH
- the interface of the development with the public domain (including Hickson Park) is not adequately addressed, including changes in levels and implications for accessibility
- the absence of podiums to each frontage of the tower is contrary to principles of human scale, breaking the building bulk and mass and wind mitigation strategies
- the non-compliances with the ADG such as building separation and visual privacy, communal open space, apartment size and layout, private open space and balconies, and common circulation and spaces are not supported
- the number of car parking spaces proposed is excessive and should be restricted to rates within Sydney Local Environmental Plan 2012 (SLEP 2012)
- there is a lack of information regarding bicycle parking, bicycle storage, and end-of-trip facilities
- the landscape plans do not confirm the recommendations of the Wind Impact Assessment have been incorporated into the design of the ground level and podium, or provide details of trees proposed at ground level within the plaza



- there is insufficient information for the design of common open spaces, including in relation to landscaping and changes in levels.

### 5.5.3 Community issues

The Department received three submissions from residents which raised concerns regarding:

- the increase in the number of units compared to the EIS
- visual privacy impacts on existing developments adjoining the subject site
- view impacts
- built form, including the lack of a defined podium or setback to and from Hickson Road, which is out of character with the surrounding area, has an adverse visual impact on the public domain and fails to provide a human-scale streetscape
- cumulative construction noise and vibration impacts on nearby residential properties, including sleep deprivation, and requested the Department condition no construction activities take place between 9 pm and 7 am, and construction activities on Saturdays should cease by 5 pm, and monitor compliance with these conditions
- air quality, including the level of potentially hazardous asbestos dust
- underestimation of traffic generation, requesting an independent report to verify the findings.

## 5.6 Applicant's Revised Response to Submissions

Following exhibition of the RtS, the Department placed copies of all submissions received on its website and requested the Applicant provide a response to the issues raised.

On 31 May 2019, the Applicant provided a Revised Response to Submissions (RRtS) (**Appendix A**) in response to the issues raised during the exhibition of the RtS and made amendments to the basement layout including a reduction from 143 to 134 car parking spaces, increased the width of living rooms, reconfigured study rooms into open storage areas, and adjusted ground floor levels.

The RRtS was made publicly available on the Department's website. No further submissions were received.



## 6. Assessment

### 6.1 Key assessment issues

The Department has considered the proposal, the issues raised in submissions and the Applicant's RtS, RRtS, and further information in the assessment of the application. The Department considers the key issues associated with the proposal are:

- design excellence
- built form
- public domain
- amenity impacts to neighbouring properties
- residential amenity for future occupants
- transport, traffic, access and parking.

Each of these key issues is discussed in the following sections of the report. The Department's consideration regarding other issues relating to this application are addressed in **Section 6.8** of this report.

### 6.2 Design excellence

To ensure design excellence is achieved, the SSP SEPP contains provisions requiring an Applicant to undertake an architectural design competition if a building is higher than RL 57 m, or the area of the site on which the building is to be erected is more than 1500 m<sup>2</sup>, both of which are triggered by this proposal. It also provides the requirement for a design competition does not apply if the Secretary certifies in writing that the development exhibits design excellence and is satisfied that:

- the architect responsible for the design has an outstanding reputation in architecture
- necessary arrangements have been made to ensure the proposed design is carried through to completion of the development.

The Concept Plan also has the same competitive design requirements that may be waived in the same circumstances as specified in the SSP SEPP.

The Department received public objections stating the architectural design is unimaginative and unattractive. One public submission was received in support of the proposal, stating the building has visual appeal, design quality and is of an appropriate size.

The Applicant has submitted a formal waiver request which notes an international design competition was previously held to select the architect for the combined development of Buildings R4A, R4B and Building R5. The Department acknowledges the design competition was undertaken in collaboration with the Barangaroo Development Authority (BDA) but was not carried out strictly in accordance with the requirements of the SSP SEPP or the Concept Plan.

However, the proposed development (and Buildings R4A and R4B) has been designed by the winning architect, Renzo Piano Building Workshop (RPBW). The Department notes RPBW has a significant international reputation in the field of architecture and whose quality of work has been recognised with over 70 design awards. The Applicant has confirmed RPBW will have direct involvement in the design documentation phase to ensure continuity between the design process and the completed building. The Department is therefore satisfied the requirement

for a design competition can be waived as the RPBW has an outstanding reputation in architecture and necessary arrangements have been made to ensure the design is carried through to the completion of the development. The Department notes waivers were also granted for Buildings R4A and R4B.

The Department has considered the design excellence criteria in the SSP SEPP and Concept Plan and considers the proposed building exhibits design excellence because:

- the proposed 'crystal' inspired towers reflect the planning framework established for the site and respect the Concept Plan layout, heights and setbacks and the built form controls contained in the Design Controls (**Section 6.3**)
- the tower and podium elements of the building are subtly articulated and are composed of high-quality materials and finishes which are appropriate to the function and location of the building
- the residential units will satisfy or exceed the majority of the ADG design criteria, with most unit types receiving a high level of residential amenity (see **Section 6.6**)
- the form and external appearance of the building would improve the quality and visual amenity of the public domain, particularly considering its consistency with the form, and high-quality materials and finishes of Buildings R4A, R4B and the Crown Sydney Hotel Resort, such as high-performance double glazing, although the development has been scaled and modulated to ensure each tower is unique
- the proposed development would improve the quality of, and activate the public domain by, providing materials consistent with the approved Hickson Park, continuing the Hickson Road Colonnade from the south, and providing residential entries and retail tenancies fronting Hickson Road, Hickson Park, and Watermans Quay
- the building has been designed to maximise access to natural light, minimise wind and reflectivity and achieve a minimum five Green Star energy rating.

Given the above, the Department considers it reasonable that the Secretary's delegate (**Section 4.1.1**), form the view the proposed building exhibits design excellence, and waive the requirement in the SSP SEPP and the Concept Plan for the Applicant to undertake a design excellence competition (**Appendix F**).

### 6.3 Built form

The proposal seeks to construct a 30-storey building within Barangaroo South. Public submissions raised concerns that the density and scale is out of character with the area, and the architectural design does not provide a podium or setback to Hickson Road.

Council objected to the absence of podiums to all frontages of the tower, stating it is contrary to principles of human scale, breaking the building bulk and mass, and wind mitigation strategies. Public submissions also stated there would be visual impacts, view loss and privacy impacts.

The Department has considered the proposal, the issues raised in the submissions, and the Applicant's justification and considers the key issues in relation to built form are consistency with the Concept Plan and view impacts, including both public domain and private views.

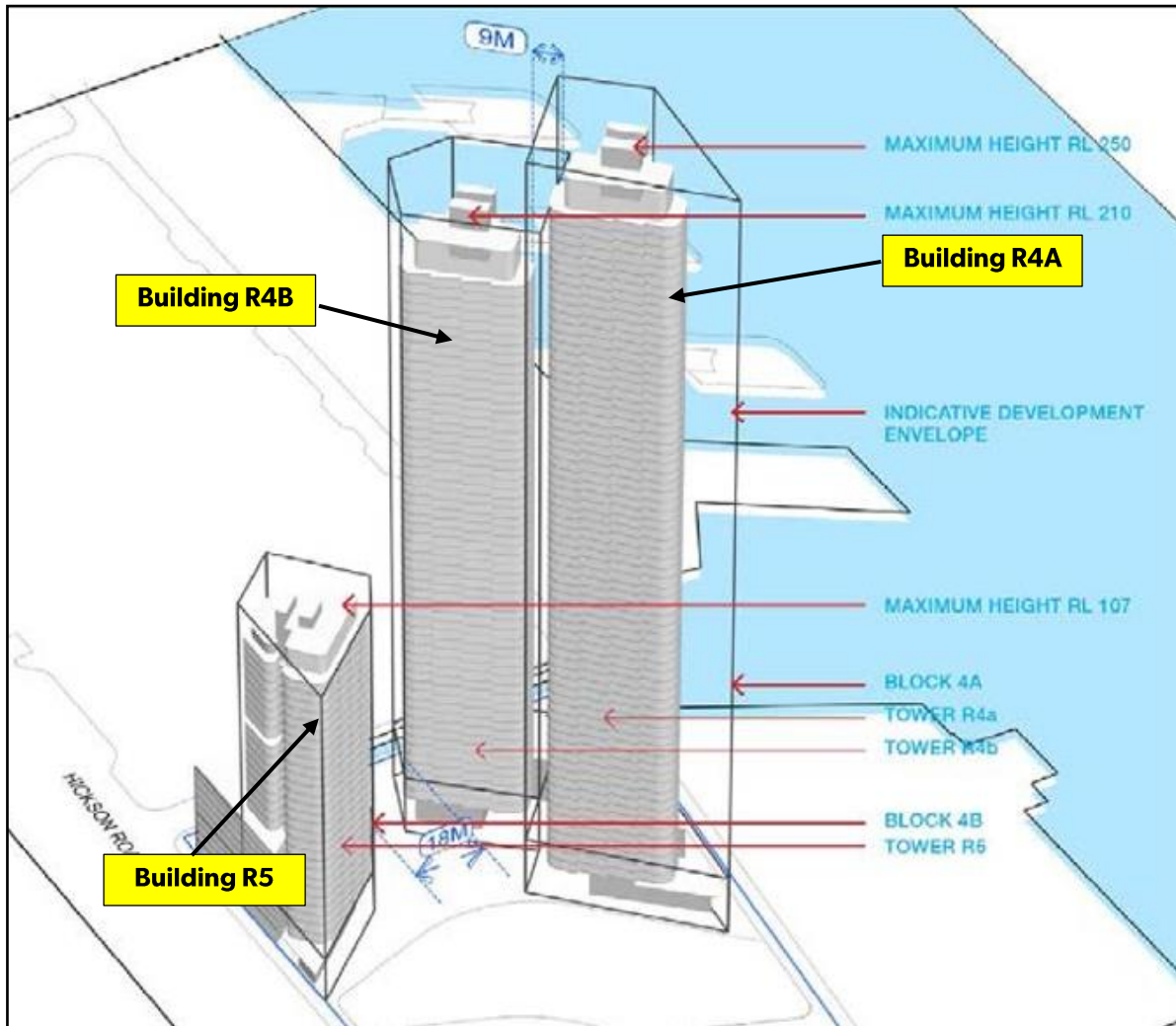
#### 6.3.1 Consistency with the Concept Plan

The Concept Plan establishes the desired future character of the Barangaroo area, including the subject site, and includes provisions to ensure design excellence and detailed built form outcomes. The consistency of the applications with these requirements is considered below.

## Concept Plan – Built Form Context

The changes to the Concept Plan approved under MOD 8 represent the current built form context in which the proposal is to be considered. The detailed planning history of the Concept Plan is provided at **Appendix E**. The Department also received public objections stating the proposed density and scale is out of character with the area

The proposed development has a maximum height of RL 107, which is consistent with the maximum height limit of RL 107 identified on the Height of Buildings Map (**Figure 10**). The total proposed GFA of 19,158 m<sup>2</sup> is below the maximum GFA of 20,970 m<sup>2</sup> applying to the site. The Department is satisfied the proposed building is consistent with the height and GFA maximums defined in the Concept Plan.



**Figure 10** | Building mass and location diagram (Base source: Design Controls)

### Design Controls

The Concept Plan requires future applications to demonstrate compliance with the Design Controls prepared by Rogers, Stirk, Harbour and Partners. These guidelines are a supplement to the Concept Plan and set out broad objectives and standards to guide the design and built form of future developments within Barangaroo South.

The objectives and standards contained in the Design Controls include building mass, separation and location, street wall heights, articulation requirements, public realm accessibility, rooftop and façade design, active streetfronts and signage.

Council objected to the proposed built form on the grounds that the interface between Building R5 and Hickson Park has not been appropriately resolved or considered, and the absence of podiums to each frontage of the tower is contrary to principles of human scale, breaking the building bulk and mass and wind mitigation strategies.

The Department received public objections stating the lack of a defined podium or setback to and from Hickson Road is out of character with the surrounding area, and that this will have an adverse visual impact on the public domain as it will fail to provide a human-scale streetscape.

A comprehensive assessment of compliance with the Design Controls is provided at **Appendix D** of this report. In summary, the Department considers the proposed building complies with these controls. **Table 4** below details the proposed podiums in relation to the relevant controls contained in the Design Controls.

**Table 4** | Consistency with Design Controls: Block R5 podium controls

Control	Consistency
Maximum podium height of RL 22.	The proposed podium height is RL 17.83m.
All predominant tower mass shall be setback from Watermans Quay by a minimum of 2 m.	The building is setback approximately 4.5 m from Watermans Quay, which exceeds the 2 m requirement.
Podiums may be built to the edge of the envelope on Watermans Quay.	The podium of the building is not built to the edge of the envelope on Watermans Quay for its full length. This would create a break in the street wall along Watermans Quay, however this would align more appropriately with Scotch Row ( <b>Figure 11</b> ) and provide a north-south pedestrian connection via the plaza to Hickson Park, both of which were approved as part of SSD 7944.
Minimum streetwall height of one storey for most of the public accessible ground floor façade.	The proposal would create a street wall along the colonnade on Hickson Road ( <b>Figure 12</b> ) and the three-storey podium to Watermans Quay. A streetwall has not been provided to Hickson Park, however this is consistent with the control relating to the tower form on the park side (see below).
All podium streetwalls define Watermans Quay.	As noted above, the podium street walls will define Watermans Quay and Hickson Road. A break in the street wall along Watermans Quay has been provided to better align more appropriately with Scotch Row, and the Department considers this would achieve significant public domain and site permeability benefits.
The tower form on the park side is to come to ground and be dominant through any lower levels of the building.	The proposed tower form extends to the ground on the future Hickson Park frontage through a glazed podium façade, creating a highly transparent and visually permeable frontage to the park edge.

The Applicant amended the proposal following consultation to realign the colonnade on Hickson Road with that established by Buildings C1 and C2 to the south, and the footprint of the podium to align with Scotch Row (**Figure 11**).

The Department acknowledges concerns raised in Council and public submissions, however considers the proposed podium complies with the Design Controls, will be appropriate within the streetscape and will be consistent with other developments within Barangaroo South. The podium would incorporate retail uses to activate the streetfront.

The Department further considers the amendment to realign the colonnade on Hickson Road as a continuation of that established in approved Buildings C1 and C2 to the south is a positive improvement.





**Figure 11** | Relationship between podium and Scotch Row – exhibited (top) and RtS (bottom) (Source: RtS)



**Figure 12** | Hickson Road Colonnade and chamfered corner (Source: RtS)

The provision of tower forms extending to ground level at the future Hickson Park frontage of the building, in-lieu of podiums, is also consistent with the controls. The relationship of the proposed development to the future Hickson Park is considered in **Section 6.4**.

Overall, the Department concludes the proposed building is consistent with the Design Controls.

#### Key Worker Housing

Key Worker Housing is defined in the Barangaroo Housing Strategy as housing for “any nurse, teacher, child-care worker, ambulance officer, member of the police force, member of the fire brigade or retirees within an income of +/-50% of the median household income for the Sydney (Statistical Division) (as that division is defined for the purposes of the Australian Bureau of Statistics)”.

Modification B11 of the Concept Plan approval requires key worker housing (KWH) for Barangaroo South to comprise at least:

- 2.3% of residential GFA on site, within Barangaroo South; and
- at least an additional 0.7 per cent of residential GFA in Barangaroo South, or its equivalent development value (but comprising at least a minimum of 1,740 m<sup>2</sup>), to be provided:
  - offsite, but within 5 km of the site, or elsewhere within the City of Sydney LGA
  - as a mix of unit sizes, including at least 40% of the GFA allocated to dwellings comprising 2 or more bedrooms
  - prior to the issue of any occupation certificates for Blocks 4A, 4B or Y.

The Applicant increased the number of KWH units from 39 to 48 in the RtS, and the proposed development provides 3301 m<sup>2</sup> of KWH (or 2.3%), which meets the requirement of 2.3% of the overall 143,443 m<sup>2</sup> of residential GFA currently proposed and required under Concept Plan (MOD 8) within Barangaroo South.

Council recommended that some 3-bedroom units be provided as KWH, to encourage a mix of income groups and household types.

The Applicant states it has consulted with a number of affordable housing providers who operate in and around the Sydney CBD and that these providers state that 3-bedroom apartments are typically occupied by families, who generally seek apartments outside the Sydney CBD, and therefore the demand in this location is for one and two-bedroom apartments.

In accordance with Modification B11, an additional 0.7 per cent of residential GFA will be provided as KWH elsewhere in the Sydney LGA, but within 5 km of the site. This additional KWH will be provided prior to the issue of an Occupation Certificate for the Crown Sydney Hotel Resort, Buildings R4A, R4B and R5 and will comprise a mix of unit sizes. The Applicant states an independently administered Expression of Interest will be run to determine a suitable location for the provision of KWH off-site, consistent with the requirements of the Concept Plan. The Department considers this provides sufficient opportunity and certainty that 3-bed KWH units will be provided.

#### Management and tenure

Council supported the increased provision of KWH in the RtS, however stated further details on management and tenure should be provided. Council recommended the KWH be managed by a recognised community housing provider in perpetuity.

The Applicant states the KWH would be managed by a registered community housing provider, subject to an independent Expression of Interest, and would seek a 99-year lease from the Barangaroo Delivery Authority.

The Applicant states the affordable housing providers it consulted advised stand-alone buildings are preferred over individual affordable housing units spread across multiple buildings. As this cannot be achieved within Stage 1B of Barangaroo South, the proposed design solution would enable the KWH to be subdivided into a separate stratum lot. In this regard, the providers also discussed the importance of being able to separately meter and operate the lot.

The Department considers the proposed management and tenure arrangements would ensure the KWH units are suitably managed, for the benefit of future occupiers, however recommends further details be sought through a condition requiring an Operational Plan of Management to be provided to the Secretary for approval, prior to issue of an Occupation Certificate.

## 6.4 Public Domain

The development proposes the following public domain works:

- landscaped communal gardens space on Podium Level 2 for KWH residents and the Level 26 rooftop area for non-KWH residents, comprising raised planter beds and lawns, hard paved areas, and outdoor furniture. Proposed species include exotic and native flowering plants
- stone paving around the perimeter of the building to match Council paving as implemented for Stage 1A of Barangaroo South, and to complement and integrate with the broader Stage 1B public domain paving
- four *harullia pendula* trees proposed at ground level, being between 7 and 10 m high with a canopy diameter of 3–5 m.

The residential lobbies of the building and retail tenancies will front the approved Hickson Park, providing increased activation of the public domain and surveillance opportunities (**Figure 13**). The KWH housing lobby would be located on Hickson Road. Awnings and canopies are proposed at ground level fronting Hickson Park, with the colonnade covering the Hickson Road frontage (**Figure 14**).



The approved public domain works cover the entire Stage 1B area, including Hickson Park located adjacent to the northern side of the proposed building, and the pedestrian plaza between Buildings R5 and R4B (Figure 15). The Concept Plan requires all public domain works, including Hickson Park, to be completed prior to the occupation of the building. As such, minimal ground level tree planting is proposed as part of this application, with the exception of the proposed four *harullia pendula* trees.

One public objection stated the site could have been provided as a park. Council objected on the grounds that the interface of the development with the public domain (including Hickson Park) is not adequately addressed, being hidden behind large garden beds, including changes in levels and implications for accessibility. Council also advised there is insufficient information for the design of the communal open space, including in relation to the plant schedule, adequate soil depth for tree planting on slabs, and the inclusion of safety balustrades. Council further advised the crime prevention through environmental design assessment is general and does not provide details on the crimes the design seeks to prevent.



**Figure 13** | Illustration of relationship of proposal (and Buildings R4A and R4B) to the public domain and Hickson Park (Source: RtS)

The Applicant amended the proposal in the RRtS to reflect the proposed raising of Hickson Road, which would ensure level access between the site, surrounding public domain and remainder of Barangaroo South. As a result, the previously proposed stairs and ramp at the ground plane of the building would no longer be required, resolving the concerns raised by Council. The Applicant expects the works to Hickson Road will be completed prior to completion of the building, however has suggested a condition to allow for an interim access solution in the event the Hickson Road works are not completed.

The Department understands the completion of Building R5 is anticipated in 2022/2023 and therefore considers the works should be completed prior to occupation of this building.

The Department has reviewed the relationship between the landscaping/public domain works for the proposed building and the future Hickson Park and surrounding public domain. The Department is satisfied the proposed

works are suitably integrated with an acceptable transition provided between the park and plaza and the proposed building. It is also noted the proposed re-alignment of the building with Scotch Row and amendments to the chamfered corner at the corner of Hickson Road and Hickson Park provide an improved response to the public domain (**Figure 14**).

The Department considers the proposed public domain works and landscaping are acceptable as they are consistent with the works undertaken as part of Stage 1A of Barangaroo South and will integrate with the materiality of the approved public domain works for the wider Stage 1B public domain area, whilst defining pedestrian access routes around the base of the building and providing a plaza for future retail uses to activate the park.

The Department also considers the works are consistent with those proposed for the approved Buildings R4A and R4B and therefore would provide a single, unified character.

The proposal is consistent with the urban design controls in that it the proposed tower form extends to the ground on the future Hickson Park frontage through a glazed podium façade, creating a highly transparent and visually permeable frontage to the park edge. The building has been designed to provide active frontages at ground level through a combination of retail floorspace and residential lobbies, with glazed façades opening onto the paved perimeter of the building. **Figure 15** illustrates the relationship of the proposal to the approved public domain and future Hickson Park.



**Figure 14** | Interface between the R5 Building and the public domain adjoining Hickson Park (to the right)  
(Source: RTS)

As previously discussed in **Section 6.3.1**, the pedestrian plaza between Buildings R4B and R5 approved as part of the public domain works has been positioned to provide visual and physical permeability between Hickson Park and Scotch Row (**Figure 16**). Public access around the block is maintained on all street edges, and awnings/canopies are provided along the future Hickson Park frontage of the building.



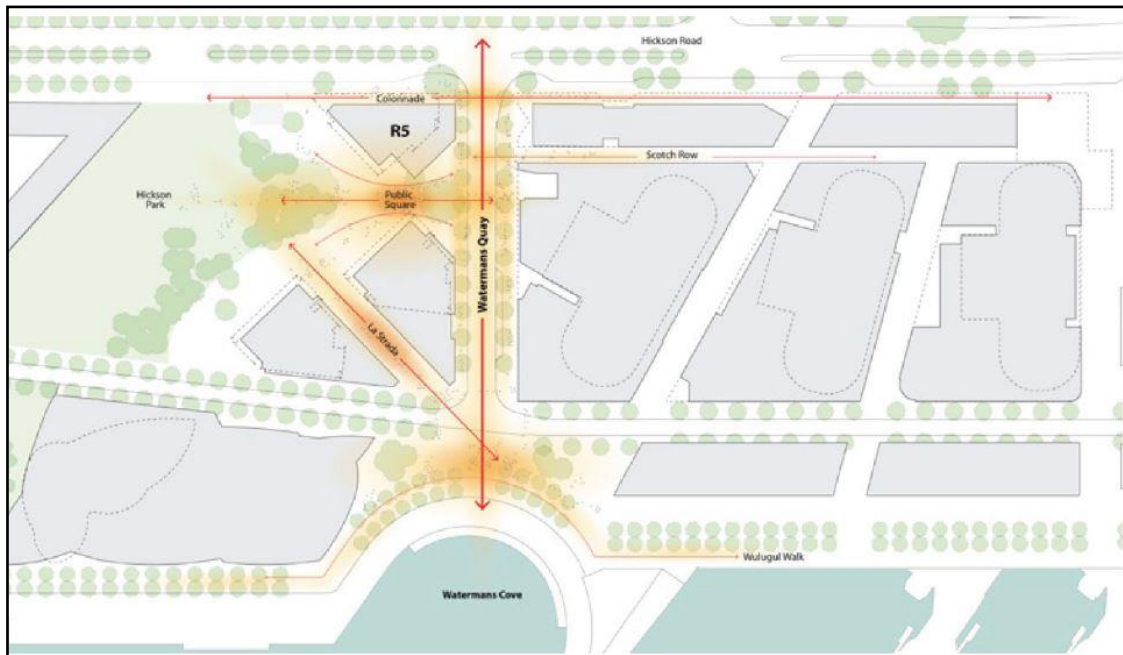
In addition to the above, the Department considers the proposal is acceptable with regard to CPTED principles because the proposal provides passive surveillance through balconies and windows that front the public domain, and the principle building entrances are identifiable and have secure access and CCTV.

With regards to Council’s objections that inadequate landscaping details have been provided, the Department has reviewed the further details provided by the Applicant in relation to the communal open space, and considers sufficient information has been provided to ensure these areas can be adequately landscaped and comply with the relevant safety and construction standards.

This includes the provision of information regarding soil provision for substantial shrub planting on slabs, and provision of a combination of open and semi-enclosed spaces, as well as a covered area on the rooftop, to allow use of the space in all weather conditions. The Department considers the landscape design will provide a high level of amenity for residents.



**Figure 15** | Stage 1B public domain plan (Base Source: SSD 7944 RtS)



**Figure 16** | Public domain permeability (Source: RtS)

With regards to the public objection that the site could have been provided as a public park, the Department considers the proposed building and surrounding area is adequately serviced by open space, including Hickson Park and Barangaroo Reserve.

#### Conclusion

The Department therefore concludes the landscape design will provide a high level of amenity for residents, employees and visitors and ties into the overall landscaping of the Barangaroo precinct. The Department recommends conditions to ensure further details of the proposed public domain and communal open space are provided prior to construction. The Department also recommends conditions to ensure the works adequately interface with the public domain.

Consistent with that included in the approved R4A and R4B developments, the Department recommends a condition to ensure the approved public domain works in SSD 7944 within the Building R5 boundary and works associated with the raising of Hickson Road are completed and publicly accessible prior to the issue of any Occupation Certificate for the R5 building. The Department notes there is an existing Concept Plan condition requiring public domain works proposed under SSD 7944 for Hickson Park to be completed prior to the occupation of the R5 Building.

## **6.5 Amenity impacts to neighbouring properties**

### **6.5.1 Views**

In its assessment of the Concept Plan, the Department carefully considered the impact of proposed indicative building envelopes in relation to view loss. The Department's assessment concluded the view affectation associated with the indicative envelopes was acceptable.

The Heritage Division stated the proposal is of a relatively modest scale compared to the surrounding group of buildings proposed in this area of Barangaroo and will have a lesser impact on the visual setting of the State Heritage Register items and conservation areas in the vicinity of the site. The height of the proposal is consistent with the existing scale of development in the area and is therefore considered to have an acceptable impact on its heritage context.

The Foreshores and Waterways Planning and Development Advisory Committee within Transport for NSW (RMS Maritime) stated the proposed development is generally consistent with the vision of the Barangaroo development outlined in the Concept Plan. The Department received public objections regarding visual impact, impacts on views from surrounding residential properties, and impacts on visual privacy.

Notwithstanding this issue was carefully considered as part of the Department’s assessment of the Concept Plan, the current application includes a View and Visual Impact Analysis (VVIA) which indicates the likely impact on public domain views, view corridors and private views. The analysis includes consideration of 22 public domain views and views from four residential buildings within the vicinity of the site. Images illustrating the view impacts resulting from the Concept Plan and the proposed development from these locations have been provided.

Public domain views

The Department received objections regarding the cumulative visual impact of the R5, R4A and R4B Buildings when viewed from Sydney Harbour and surrounding properties located in an easterly direction of the site. The R4A and R4B Buildings were approved on 7 September 2017. In its assessments of these buildings, the Commission and Department considered there would be an acceptable visual impact.

The Applicant’s VVIA states the proposal would not result in any adverse visual impacts and the development as amended will result in an improved visual impact.

Of the 22 public domain views analysed, based on criteria of distance, extent of view, number of viewers and period of view, Hickson Road was identified as having high view impacts, and High Street and Darling Harbour were identified as having medium/high view impacts.

Whilst the Darling Harbour view has been identified as having a medium/high view impact, the Department notes the Applicant’s VVIA states Building R5 is wholly located behind the group of Commercial Buildings (C3, C4 and C5) when viewed from Pyrmont Bridge and Darling Harbour. The Department therefore considers Building R5 has a negligible impact on views from these vantage points. Images comparing the view impacts of the Barangaroo Concept Plan building envelopes with the proposed buildings from Hickson Road and High Street are provided in **Figures 17** and **18**.



**Figure 17** | Comparison of view impact between Concept Plan building envelope (left) and proposed building (right) from pedestrian bridge over Hickson Road (Source: Applicant’s VVIA)





**Figure 18** | Comparison of view impact between Concept Plan building envelope (left) and proposed building (right) from High Street (Source: Applicant's VVIA)

While the proposed building would result in varying view impacts from numerous public locations, the Department considers a high degree of change to existing public views is inevitable with the redevelopment of a significant vacant urban renewal site such as Barangaroo.

Analysis of each view however, demonstrates the view impacts of the proposed building would be fully contained within the parameters set by the Concept Plan Block 4B envelope.

A Sky View Assessment was included with the application. The assessment had regard to the potential impact on the Sydney Observatory and concludes the potential impacts to be acceptable, noting sky targets around the area obstructed by the proposed building would be under conditions far from ideal and the image quality would be poor on most nights. Light spill mitigation measures are included in the design including minimising brightly lit surfaces, fitting luminaires with light shields and minimising the amount of upward directional lighting.

The Department considers the moderate height of Building R5 ensures that additional sky views are available when compared to the envelope approved under Concept Plan (MOD 8).

The Department agrees with the Heritage Division and The Foreshores and Waterways Planning and Development Advisory Committee and concludes the proposal would not have adverse visual impacts.

#### Private views

The Department received public objections to impacts on views from surrounding residential properties.

The VVIA considers the view impact of the proposed building on the four most affected residential apartment buildings, these being Highgate, Georgia, Stamford Marque and Stamford on Kent. These apartment buildings are located on Kent Street to the east of the site with varying views over the site to the west or south-west.

**Table 5** summarises the comparative difference in the size of view corridors between the indicative envelopes shown at the time of the Concept Plan approval and the proposed building. The view corridors are located between the approved Buildings R4A and R4B, proposed Building R5, existing Commercial Building C3 and the approved Crown Sydney Hotel Resort. An example of how the indicative and proposed view corridor angles have been calculated is provided in **Figures 19** and **20**.

The Department notes only the Stamford on Kent building is affected by the changes between the indicative envelopes shown at the time of the Concept Plan approval and the proposed Building R5. Images comparing the view impacts of the indicative Concept Plan envelopes and the proposed building are provided in **Figures 21** and **22**.

**Table 5** | View angle comparison

Residential building	Total Concept Plan view angle (based on indicative building envelopes)	Total proposed view angle	Difference between Concept Plan (based on indicative building envelopes) and proposed view angles
Highgate	91°	92°	+1°
Georgia	85°	87°	+2°
Stamford Marquee	79°	80°	+1°
Stamford on Kent	67°	62°	-5°

Views from Stamford on Kent have been reduced by five degrees from those considered in the indicative building envelope for Concept Plan (MOD 8) as a result of the proposed R5 Building location. However, the Department considers there is still potential to appreciate oblique view corridors and sky view opportunities are still available in part between Building R5 and Commercial Building C3, and at a higher level above Building R5 between Building R4B and Commercial Building C3. These oblique view lines would provide alternative sky views and water views.

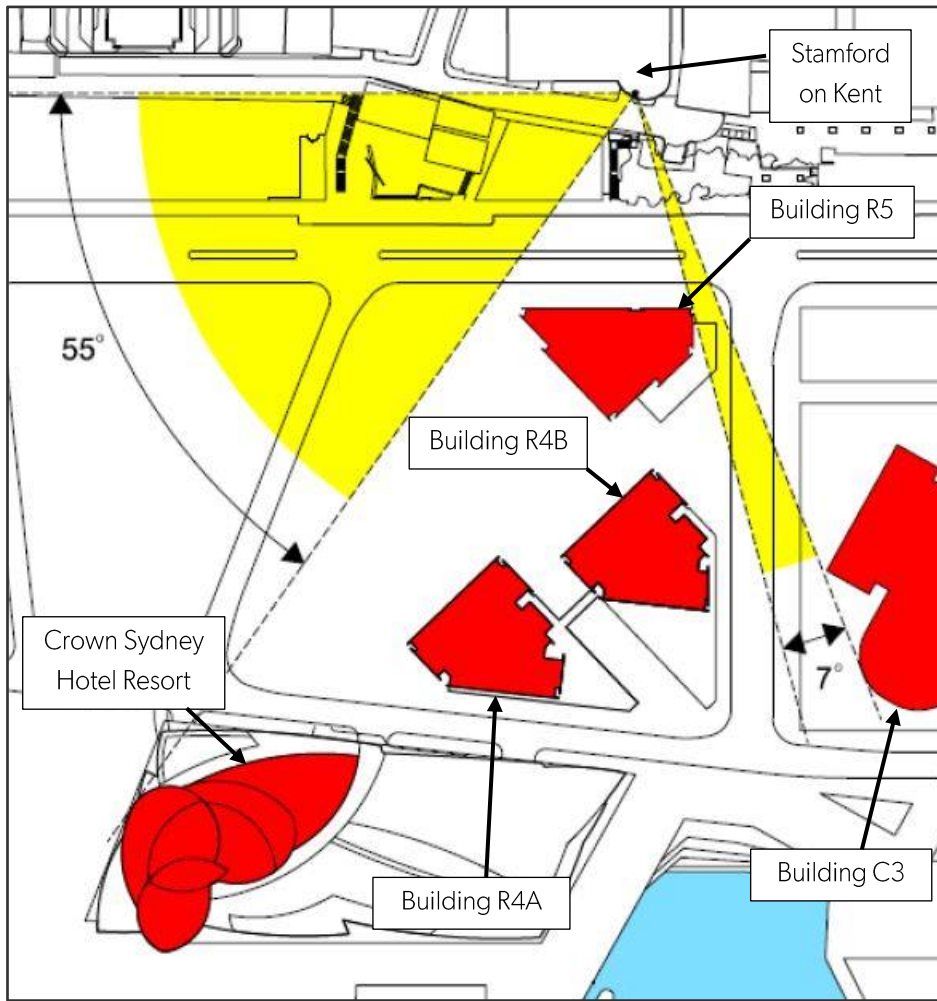
Further, the five-degree loss would be offset by the increase of four degrees resulting from the approved Buildings R4A and R4B. The Department considers the loss of one degree is acceptable due to the other improvements in design that are experienced as a result, including the revised street alignment, and the benefits of aspect and solar access for future occupiers.

Additionally, the total proposed viewing angle of 62 degrees is six degrees greater than the potential total viewing angle of 56 degrees that would result from a building sited within the south-eastern extent of the approved Concept Plan envelope, as shown in **Figure 19**.



**Figure 19** | Stamford on Kent example of view angle calculation of indicative (left) and approved maximum (right) Concept Plan building envelopes (Base Source: Applicant's VVIA)





**Figure 20** | Stamford on Kent example of view angle calculation of proposed building envelopes (Base Source: Applicant's VVIA)



**Figure 21** | Stamford on Kent: View impact of Barangaroo Concept Plan indicative building envelope (Source: Applicant's VVIA)



**Figure 22** | Stamford on Kent: View impact of Barangaroo proposed building envelope (Source: Applicant's VVIA)

The Department also notes the visual depiction indicates the perception will be minimal to the viewer's eye.

The Department considers Building R5 is consistent with the VVIA submitted as part of the Concept Plan (MOD 8) and the VVIA demonstrates that the proposed building will have a limited impact on significant views. The Department considers where there is a view impact, the design and siting of Building R5 and the entire One Sydney Harbour development has responded to the principle of view sharing, where view corridors will be achieved by providing taller more slender buildings with large spaces in between to enable improved view corridors and more oblique views to be achieved from residential properties in Kent Street. The long façade of the proposed development adjacent to Hickson Road faces east to define the road and promenade, with the building also orientated to the north-west and west to face towards the harbour.

### Conclusion

The Department has reviewed the view loss analysis from public and private locations as well as issues raised in submissions and is satisfied the photomontages accurately depict the impact of the development. The Department concludes the view impacts from the public domain or private residences resulting from the proposed building is acceptable because:

- the additional view loss experienced compared to the indicative building envelope assessed in the Concept Plan for the Stamford on Kent is acceptable as the Concept Plan considered view corridors from Kent Street when determining the positioning of the building, and the building is positioned in accordance with the Concept Plan
- the proposed viewing angle is six degrees greater than the potential total viewing angle of 56 degrees that would result from a building sited within the south-eastern extent of the approved Concept Plan envelope
- the orientation and siting of the building (together with Buildings R4A and R4B) is consistent with the fan principle, aligning with the southern side of Hickson Park

- there is an improvement in view corridors of four degrees from three of the four existing residential buildings compared to the Concept Plan indicative building envelopes, as a result of the approved Buildings R4A and R4B
- the Department considers a level of view loss is inevitable in this inner-city location, particularly given the proposed building would not fill the approved Concept Plan building envelopes
- the area of view impact is principally to the western elevation only of the Stamford on Kent Building, therefore meaning views to the north-west, north, east and south will be unaffected by Building R5
- significant northerly views will be retained from both the lower and upper levels of this building given the development on Central Barangaroo is restricted to a maximum height of RL 34, and development further to the north on Block 5 is restricted to a maximum height of RL 29
- foreground views from the Stamford on Kent will be improved to the west by the approved Hickson Park
- clear sky views have been maintained between the building and residential Buildings R4A and R4B
- it responds to the principle of view sharing, where view corridors are provided through the buildings to maintain views to Sydney Harbour and the surrounding area.

### 6.5.2 Wind impacts

The proposed building has the potential to result in wind impacts on the surrounding public domain and buildings.

A Wind Impact Assessment (WIA) for the proposed building considers the wind impacts of the building individually and collectively with other nearby developments, i.e. Buildings R4A and R4B and the Crown Sydney Hotel Resort. The WIA states that a set of treatments are required for certain locations to achieve the desired wind speed criteria for pedestrian comfort and safety (**Figure 23**), including:

- the inclusion of densely foliating trees at ground level around the site, capable of growing to approximately 7 m to 10 m in height, with a canopy diameter of approximately 3 m to 6 m
- portable café screening on the north-western side of the building to be operated during adverse wind conditions.

The Department notes the proposed portable café screening will subject to future approval for retail fit-out and use and associated outdoor seating.

Council raised concern that the landscape plans do not confirm the recommendations of the wind impact assessment have been incorporated into the design of the ground level and podium or provide details of trees proposed at ground level within the plaza (but within the site boundary).

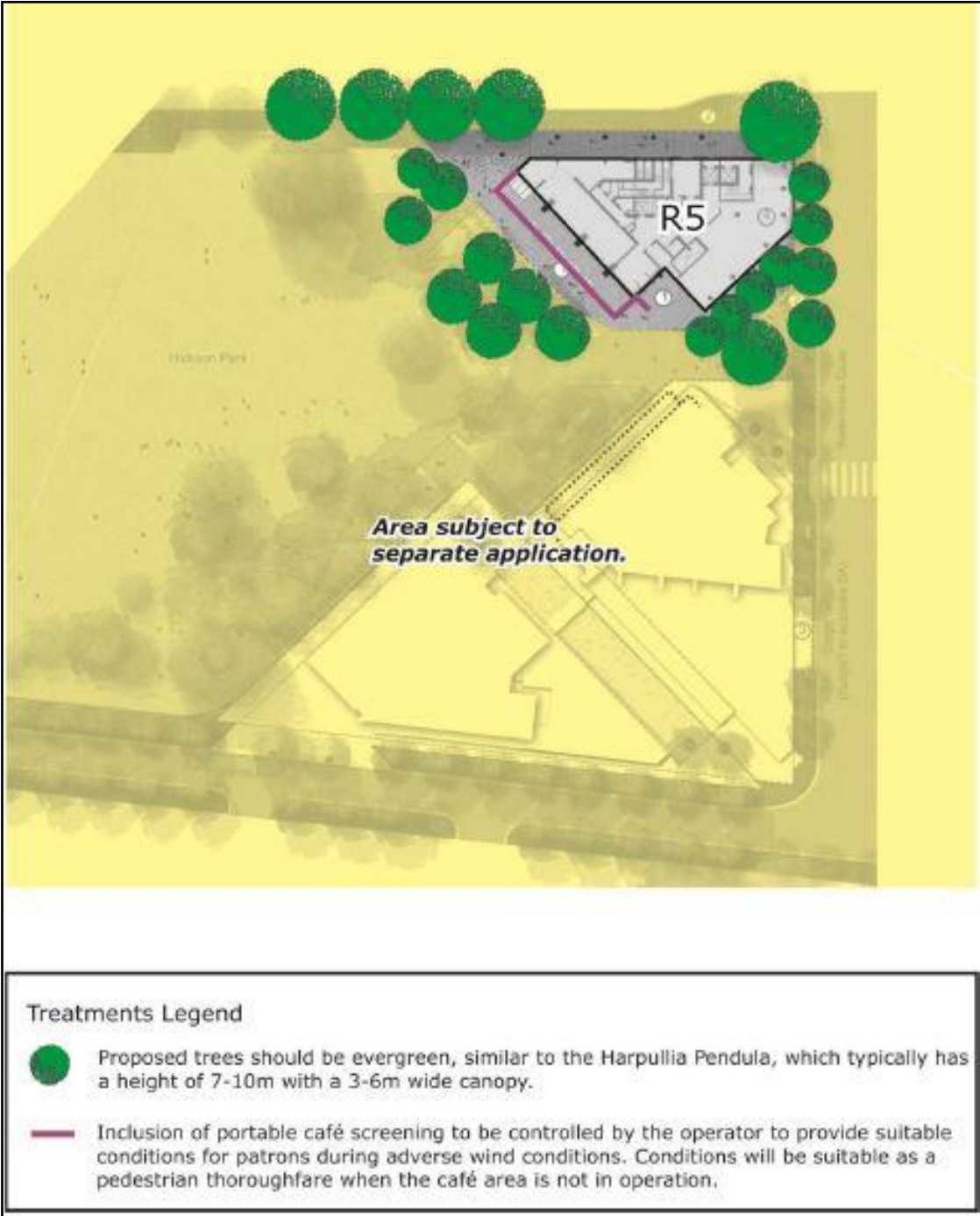
Specifically, Council states the exclusion zone provided as part of the approved public domain works (between the approved works and Building R5) means the trees relied upon to mitigate wind impacts to Building R5 would not be planted until after Building R5 is complete.

Council also states the nature of the slab restricts appropriate soil depth in this location and mature tree planting will be relying on soil mounding which will impact on the growth of the trees.

Regarding Council's concerns, the Department notes there is an existing Concept Plan condition requiring public domain works proposed under SSD 7944 for Hickson Park to be completed prior to the occupation of Building R5. The wind mitigation provided by this future landscaping will therefore ensure that mitigation is to be maximised at the ground plane. Further, in its assessment of the approved public domain works development application, the Commission considered soil conditions and landscaping treatments adequate for tree planting.



As detailed in **Section 6.4**, four *harullia pendula* trees are proposed at ground level, being between 7 and 10 m high with a canopy diameter of 3 – 5 m, confirming the recommendations of the wind impact assessment have been adhered to.



**Figure 23** | Recommended ground level wind mitigation treatments (Source: Applicant’s Wind Impact Assessment)

Tree planting around the site is also proposed as part of the broader Stage 1B public domain works which covers the entire Stage 1B area including the future Hickson Park. The Department has therefore reviewed the WIA recommendations in conjunction with the approved Stage 1B public domain works (SSD 7944) landscaping plans. The Department considers the proposed Stage 1B landscape plans suitably reflect the tree planting locations and size requirements recommended in the WIA as follows:

- *Elaeocarpus eumundi* (up to 7 m high and 4 m wide canopy) proposed on the Watermans Quay street frontage
- *Tristaniopsis laurina* (up to 8 m high and 5 m wide canopy) together with other larger trees (up to 15 m in height and 6 m wide canopy) located between the proposed building and the future Hickson Park.

Furthermore, the proposed Stage 1B public domain tree planting along the southern boundary of the future Hickson Park adjacent to the proposed building will provide shade to the public domain areas to the immediate north-west of the proposed building, will assist in breaking up the north-western façade of the proposed building and will provide an attractive outlook for future users of Hickson Park. As such, although the trees are required for wind mitigation purposes, they are not considered to impair the overall landscape strategy for Hickson Park or the interrelationship between the park and the proposed retail tenancies.

### 6.5.3 Overshadowing impacts

In its assessment of the Concept Plan, the Department considered the impact of the proposed building envelope and the resulting location and extent of overshadowing. The Department’s assessment concluded the level of overshadowing associated with the envelope was acceptable.

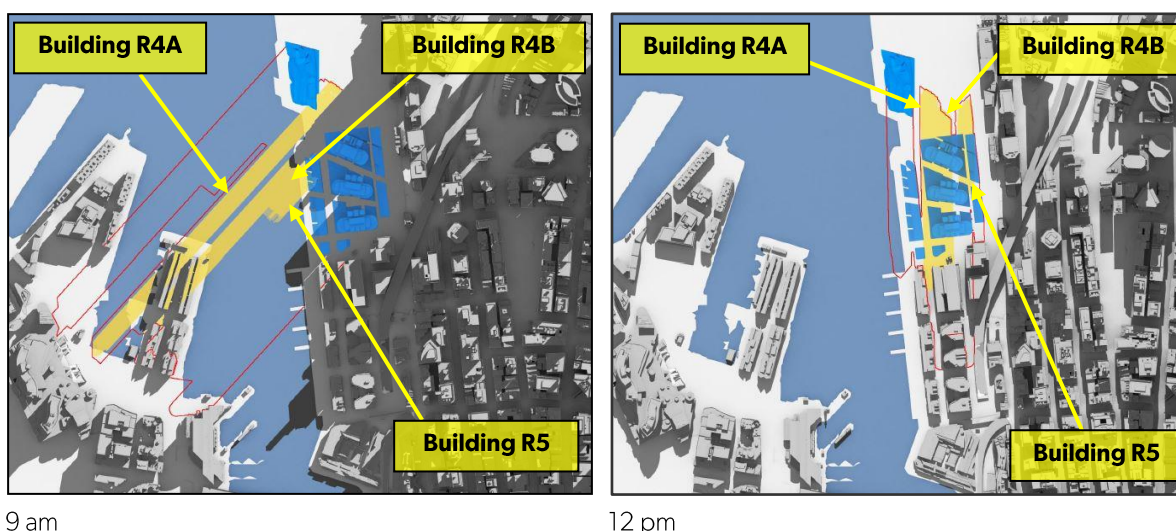
The current application includes shadow diagrams which indicate the likely overshadowing impacts of the proposed building on surrounding areas. The shadow analysis for demonstrates overshadowing will be contained within the parameters as set by the Concept Plan.

The Department further notes the proposed building will not fill the approved building envelope and the extent of overshadowing will therefore be less than the level of overshadowing considered acceptable under the Concept Plan.

**Figures 24 and 25** illustrates the extent of shadowing resulting from the approved building envelopes (outlined in red) and the built forms (shown yellow) of the three buildings in the One Sydney Harbour Development, being Buildings R5, R4A and R4B, noting Buildings R4A and R4B are approved.

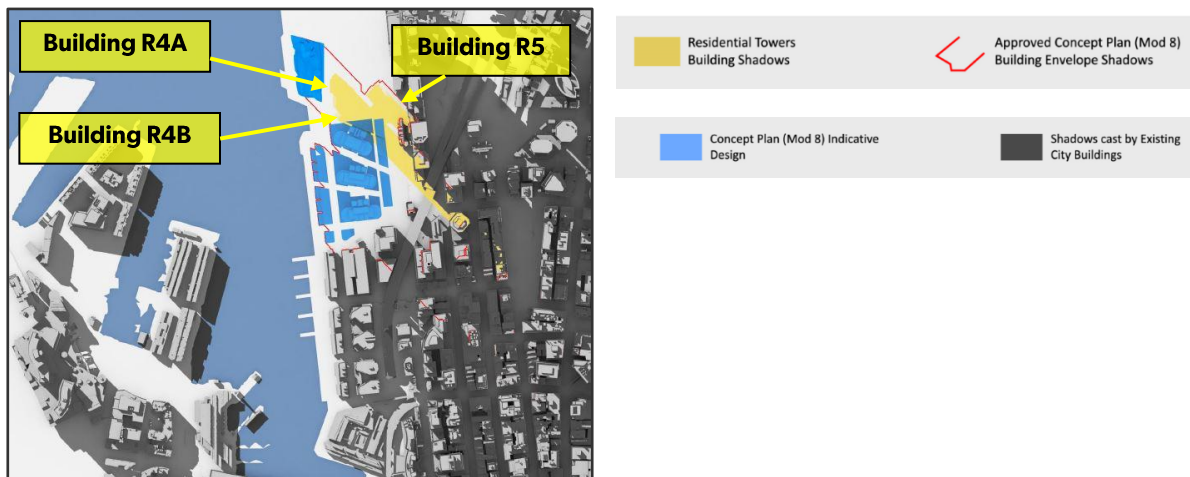
The following midwinter shadow impacts would occur (within the Concept Plan building envelope shadows):

- 9 am: Overshadowing of Sydney Harbour and Barangaroo South
- 10 am - 1 pm: Overshadowing to Barangaroo South
- 1 pm to 3 pm: Shadows would predominantly fall within shadows cast by existing buildings with some increased overshadowing to western elevations of buildings within the CBD.



**Figure 24** | Midwinter overshadowing at 9 am and 12 pm on 21 June (Source: RtS)





3 pm

**Figure 25** Midwinter overshadowing at 3 pm on 21 June (Source: RtS)

The Department concludes the level of overshadowing from the proposed building is acceptable because it will be less than the overshadowing considered under the Concept Plan.

## 6.6 Residential amenity for future occupants

SEPP 65 contains nine design principles to ensure high quality residential apartment development. SEPP 65 also requires consideration of the ADG which supports the nine design quality principles by giving greater detail as to how those principles might be achieved.

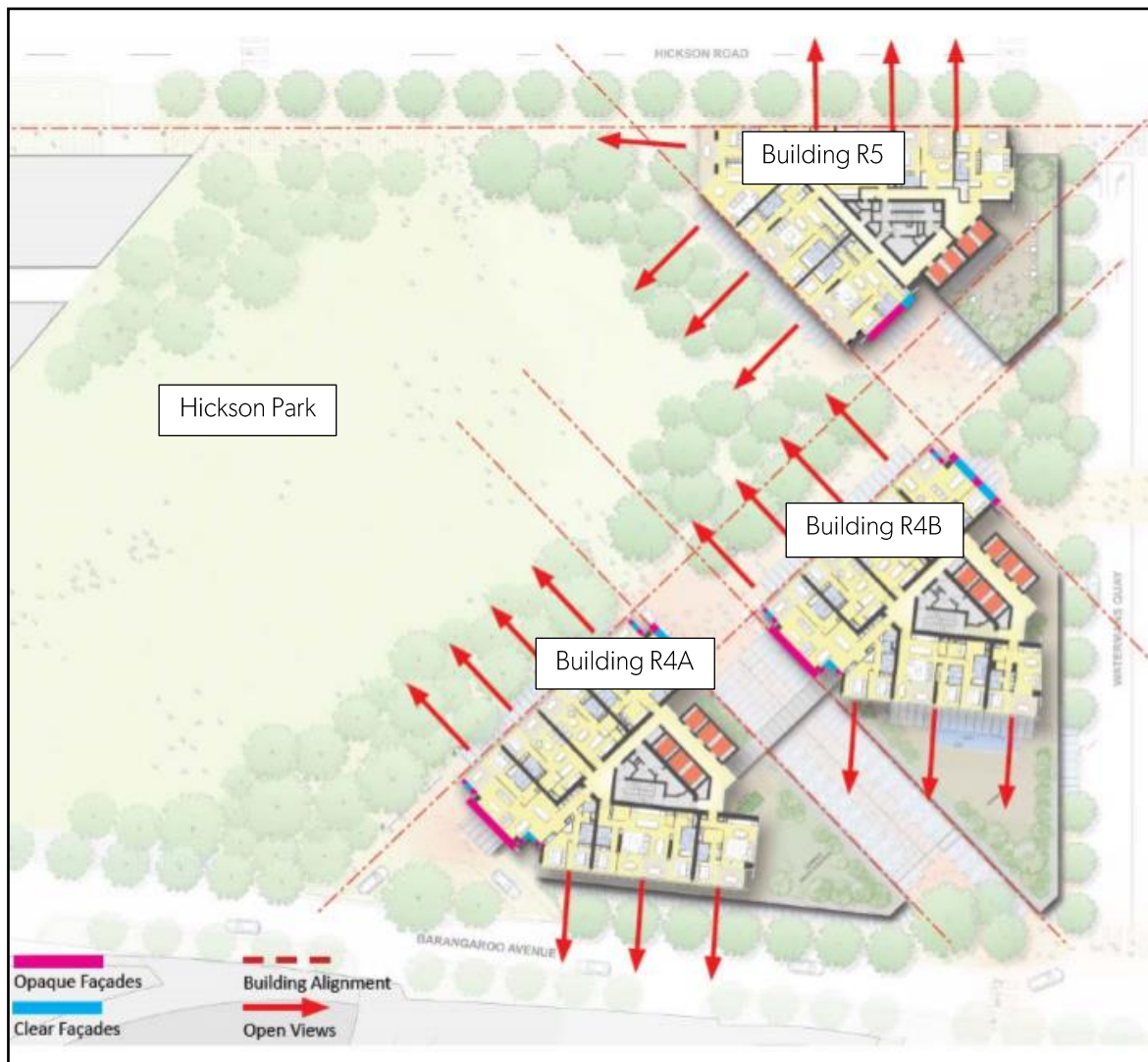
Council raised concerns that the proposal was not consistent with the ADG, including building separation and visual privacy, communal open space, solar access, apartment size and layout, private open space and balconies, natural ventilation, and common circulation and spaces. The Department received public objections stating there would be adverse impacts on visual privacy between the east-facing R5 units and the west-facing units of units on Kent Street.

**Tables 4, 5 and 6 in Appendix C** provide a detailed assessment of the proposal against the SEPP 65 design principles and relevant design criteria in the ADG. The Department's assessment of the proposal against key ADG recommendations are considered below.

### 6.6.1 Building separation

A minimum separation distance of 18 m is proposed between habitable rooms/balconies in the building and the approved Building R4B. This is consistent with the minimum applicable ADG recommendation of 12 m (up to four storeys) and 18 m (up to eight storeys), however is inconsistent with the recommendation of 24 m (nine storeys and above). The proposed building separation distance satisfies the 18 m separation distance requirement contained in the Design Controls approved under the Concept Plan.

To ensure appropriate visual privacy is provided between units in the R4B and R5 Buildings, the arrangement of the buildings has been staggered to ensure that direct sight lines between apartments are minimised and windows have been carefully located to limit overlooking between apartments. The development also incorporates several design measures, including arrangement of the floor layout of the building (i.e. main living areas do not directly face one other), use of architectural elements such as opaque façades and overlapping façade wings and orientation of views. These specifically include an opaque façade and privacy screen to the south-west side of the bedroom windows and balconies of units in Building R5 to prevent views to north-east facing living room windows and balconies/wintergardens in Building R4B (**Figure 26**).



**Figure 26** | Orientation of buildings to primary views (Base source: RtS)

While Kent Street residents have raised privacy concerns, the Department notes the separation of the proposed building from those on Kent Street is 50 m which exceeds the 18 m and 24 m separation in the Concept Plan and ADG respectively and is sufficient to mitigate privacy impacts.

### 6.6.2 Integration with key worker housing

The proposed KWH entry off Hickson Road is readily identifiable and the provision of one lift for the 48 units will provide sufficient access. The Department considers separate access to the KWH will allow for ease of management and maintenance for the future community housing provider. This includes efficiency in servicing and cleaning and will allow for costs borne by the housing provider to be minimised.

The Department considers the proposed communal open space acceptable and KWH residents would be provided with excellent access to public open space in the surrounding area, including Hickson Park, Barangaroo Central and Barangaroo Reserve (former Headland Park), in addition to the existing public foreshore areas in Barangaroo South and King Street Wharf.

The Department’s assessment finds that 14 of the 48 KWH units are consistent with 12 of the 14 of the key ADG criteria, 30 of the 48 KWH units are consistent with 13 of the 14 of the key ADG criteria, and the remaining four units are fully consistent. This results in an overall consistency with these criteria of 91.4 per cent. The Department therefore considers the future occupiers of the KWH units would be afforded a high level of amenity.

### 6.6.3 Communal Open Space

As part of the RtS, the Applicant made modifications to communal open space to relocate non-KWH communal open space to the Level 26 rooftop and provide new KWH communal open space on podium Level 2.

Podium Level 2 contains 247.4 m<sup>2</sup> of communal open space for KWH, and the Level 26 terrace contains 205.1 m<sup>2</sup> of non-KWH communal open space. The total communal open space provision of 452.5 m<sup>2</sup> is 25.8 per cent of the site area, which exceeds the minimum 25 per cent recommended by the ADG. Although, only 0.2 per cent of the podium Level 2 area and 10.7 per cent of the Level 26 terrace area will receive at least two hours solar access between 9 am and 3 pm in mid-winter compared to the ADG recommended minimum of 50 per cent.

However, the Department considers this is acceptable as:

- 39.2 per cent (97 m<sup>2</sup>) of the podium Level 2 area and 47.3 per cent (97 m<sup>2</sup>) of the Level 26 terrace area will receive at least one hour of solar access between 9 am and 3 pm in mid-winter
- 62.6 per cent of the podium Level 2 area (154.9 m<sup>2</sup>) and 98.8 per cent of the Level 26 terrace area (202.6 m<sup>2</sup>) will receive at least two hours of solar access all day in mid-summer
- the communal spaces for KWH & non-KWH are each located in a single location, which is well designed
- the locations on the podium and roof would have views over the surrounding public domain and Sydney Harbour
- non-KWH residents will have access to the shared communal facilities provided in Buildings R4A and R4B, which includes podium rooftop gardens, indoor and outdoor swimming pools, a gymnasium and a resident's lounge
- residents will have direct access to the future Hickson Park, future Central Barangaroo and the completed Headland Park.

### 6.6.4 Deep soil zones

The proposed development cannot satisfy the ADG recommendation as the building is located entirely above the approved Stage 1B basement car park. In such instances, the ADG suggests acceptable stormwater management should be achieved and alternative forms of planting should be provided such as on the structure.

The proposed landscape scheme for the development includes bed planting located in the communal open space with stone paving proposed within the site boundary. The application includes minimal tree planting as this forms part of the approved Stage 1B public domain works (**Section 6.4**), however does propose to plant four *harullia pendula* trees at ground level, being between 7 – 10 m high with a canopy diameter of 3 – 5 m.

The Department considers the proposed landscaping acceptable, as discussed in **Section 6.4** and notes the site directly adjoins the approved 11,000 m<sup>2</sup> Hickson Park which will contain several trees with maximum mature heights between 8 m and 15 m over the approved basement car park.

The Department further notes the approved Stage 1B basement which extends below the future Hickson Park, includes a requirement to provide a minimum deep soil zone area of 2000 m<sup>2</sup> with a minimum depth of 3 m to support large mature trees. A condition of consent requires the location of the deep soil zone reflect the final location of large mature trees in Hickson Park as determined by the Stage 1B public domain works.

A range of sustainable stormwater management solutions are also proposed. These include use of filter media in tree pits to treat stormwater, gross pollutant traps to remove litter, and the use of a proprietary stormwater filtration system. The Department considers the proposed stormwater management methods acceptable.

### 6.6.5 Natural ventilation

To maximise units with natural cross ventilation, the ADG recommends at least 60 per cent of units in the first nine storeys of a building be naturally cross ventilated. Units at 10 storeys or greater are deemed to be cross ventilated where balconies/wintergardens cannot be fully enclosed.

The proposed building complies with the design criteria for units at 10 storeys or greater as the wintergarden glazing system cannot be fully enclosed. Of the 62 units in the first nine storeys of the building, 31 (50 per cent), would be naturally cross ventilated.

The Applicant has also proposed a ducting system to provide a form of cross ventilation to a further eight units in the first nine storeys. The proposed ducting system is intended to facilitate air circulation by gaining air intake from an adjacent façade, carrying it through a ceiling duct and dispersing it into the unit. A similar solution was provided in the approved Buildings R4A and R4B. This would result in 39 units (62.9 per cent) achieving natural ventilation recommendations.

Council has objected to the proposed ducting arrangement as the ADG states the use of plenums/ducting are generally not considered suitable for cross ventilation.

Whilst not technically achieving natural cross ventilation, the Department considers the proposed ducting system provides a form of hybrid cross ventilation insofar as the proposed system will provide one unit per floor with a direct connection to fresh air shafts via fire isolated ducts.

The Department requested the Applicant investigate the provision of this ducting to all other non-cross ventilated units in the first nine storeys of the building. The Applicant advised this would result in non-compliances with the ADG recommended design criteria for minimum ceiling heights, and therefore a reduction in overall amenity for residents. The Department therefore considers the consequences of providing this ducting to all units would outweigh the benefits of improved amenity for the units in question.

The Department concludes the proposed level of cross ventilation within the building is acceptable because:

- units at Level 10 and above are deemed cross ventilated as each unit is provided with a wintergarden that cannot be fully enclosed
- of the 62 units below Level 10 of the building, 50 per cent (four units on all but one floor) will achieve natural cross ventilation whilst a further eight units will be provided with a form of hybrid cross ventilation, which is a satisfactory design outcome to improve the amenity of these units
- the proposed method of hybrid cross ventilation has previously been adopted in other high-density inner-city developments (for example the R4A and R4B Buildings and the Carlton United Brewery redevelopment)
- all units have been designed to have living areas with large windows opening onto generously sized balconies which will assist the movement of air.

### 6.6.6 Apartment size and layout

#### Unit size

All apartments, including bedrooms and living rooms, meet the minimum ADG internal area recommendations.

#### Habitable room windows

The ADG recommends all habitable rooms be provided with an external window. The proposed layouts originally included six units with study rooms that were not provided with an external window. In its RRtS, the Applicant has redesigned these rooms to function as an open storage area that cannot be enclosed. The Department considers this a suitable remedy and the proposal is now consistent with the recommendations of the ADG in this respect.



### Maximum depth

A total of 25 units (12 per cent) within the proposed building have open plan living areas which extend to a depth of 8.2 m measured from the window to the furthest wall of the kitchen/living area, an additional 0.2 m compared to the ADG recommended maximum depth. All other units are consistent with the requirement.

The Department considers this satisfactory as:

- it is only a 2.5 per cent variation and most of the kitchen area is within 8 m of a window
- the size of the living areas and adjacent large windows/glazed doors will provide acceptable light and amenity to these units, along with the consistency of the units with the recommended floor to ceiling heights
- the living areas and kitchen are open plan with internal access to light and ventilation.

### Minimum living room width

The ADG design criteria include a recommended minimum living room width of 3.6 m for one-bedroom units and 4 m for two and three-bedroom units. All units are consistent with the criteria except for 25 one-bedroom units (12 per cent of total units) which have 3.4 m wide living rooms.

The Department considers this shortfall will not adversely impact on the amenity of the units because:

- the proposed 9 per cent inconsistency is relatively minor
- an acceptable overall level of amenity is achieved by virtue of the space opening directly onto a balcony and having a combined frontage of over 7 m to Hickson Park
- all one-bedroom units meet the minimum unit size and adequate space will be provided for furniture.

### 6.6.7 Private Open Space and balconies

The design criteria require two-bedroom units to provide a minimum private open space area of 10 m<sup>2</sup> and depth of 2 m. Twenty-five units propose a balcony/wintergarden size of 9.2 m<sup>2</sup>. Council objects to this inconsistency with the ADG of 0.8 m<sup>2</sup>.

The Department considers this acceptable as:

- the balcony is a regular shape (rectangular) and accessible by two doors to provide for usability
- the balcony exceeds the minimum recommended depth of 2 m
- the apartments have an internal area that exceeds the recommended minimum
- future residents would have access to the adjacent Hickson Park (11,000 m<sup>2</sup>), the future Central Barangaroo Park (23,000 m<sup>2</sup>) and the completed Headland Park (57,000 m<sup>2</sup>).

### 6.6.8 Common circulation and spaces

The ADG states for buildings 10 storeys and over, the maximum number of apartments sharing a single lift should be 40. The Applicant proposes the 210 apartments would be serviced by three lifts. One lift would service the 48 KWH apartments, whilst two lifts would service the 162 non-KWH apartments.

Council requested clarification as to how KWH residents will access their units if their lift is not operational, and how this will be managed. Council also stated that any subdivision of the building should also ensure that access easements are created and placed on title in favour of KWH residents.

While the ADG nominates the tipping point from one to two passenger lifts, it does not nominate the minimum lift requirements for lifts in groups of two or more.

The Applicant has submitted a Lift System and Performance Analysis which demonstrates the efficiencies achieved when multiple lifts act as a group. The analysis notes the ADG has been created for medium-rise buildings of 10 to 20 storeys, and that therefore the proposed building is taller than buildings the ADG design criteria is based upon.

Based on more applicable international guides for vertical transportation design, the analysis concludes the lifts will result in a high quality of service providing equal or better performance than international benchmarks for luxury apartment buildings, with expected average wait times for a lift from the lobby of 55 seconds.

The Applicant states in the event the KWH lift is unavailable, access would be provided to the non-KWH lobby and lift access control would be managed to ensure all occupants could continue to experience lift service.

The Department considers this inconsistency with the ADG acceptable because the Applicant has provided sufficient information to demonstrate the lifts will adequately service the building, and there are contingency plans for shared access between lifts if full operational capacity is interrupted.

The Department recommends a condition to require details of the management of lift access to be included in an Operational Management Plan, and to ensure that any subdivision of the building should also ensure that access easements are created and placed on title in favour of the KWH residents.

#### 6.6.9 Unit type amenity

The intent of the ADG is to help achieve better design and planning for residential apartment buildings, including improving liveability through enhanced internal and external residential amenity.

An analysis has been undertaken for each proposed unit type based on 14 key ADG design criteria specific to individual units. All unit types achieve a minimum of 79 per cent consistency with the criteria, with all but 58 units out of 210 achieving 93 per cent consistency or higher and not being inconsistent with more than one ADG criteria. One and two-bedroom units are on average 91.6 and 92.2 per cent consistent with the key ADG criteria respectively, and three and four-bedroom units fully consistent.

In reviewing the overall design of these unit types in relation to the intent of the ADG, the Department notes all units meet the ADG minimum unit size, ceiling height, bedroom area and dimensions, and internal and external storage recommendations.

On 29 June 2017, the Planning Circular '*Using the Apartment Design Guide*' was issued by the Department. The Circular supports the Department's approach to assessing the residential amenity of the proposed development in that all proposed 210 units cannot reasonably achieve all of the amenity design criteria in the ADG and that the ADG notably does not require this.

Overall, the Department considers all unit types will achieve an acceptable level of amenity, with most units receiving a high level of amenity. As such, the Department concludes the proposed building satisfies the intent of the ADG.

## 6.7 Transport, traffic, access and parking

### 6.7.1 Transport context

Barangaroo is a major commercial and retail precinct within the Sydney Central Business District that is easily accessible and well supported by public transport. The transport needs of Barangaroo have been addressed in the *Transport Management and Accessibility Plan* (TMAP) prepared as part of the Barangaroo Concept Plan and TfNSW's *Barangaroo Integrated Transport Plan 2012* (BITP). The BITP provides the projected mode share and details on a range of transport actions to manage the overall impact of the precinct on key transport hubs.

The proposed development is located within walking distance from Wynyard Train Station (350 m), Barangaroo Ferry Wharf (200 m) and several taxi ranks. There are also dedicated pedestrian paths and bridges, bicycle lanes and the foreshore promenade.

In addition to existing services, there will be a substantial increase in public transport and improved accessibility to Barangaroo due to the proposed Sydney Metro station within Barangaroo Central, which is expected to commence operation in 2024. The CBD South East Light Rail, which is currently under construction and expected to be operational by 2020, will also provide additional high capacity public transport services between Sydney's south-east and Wynyard Train Station.

The Department also notes Hickson Road has been identified as a 'planned city centre bus corridor' in TNSW's Sydney's Bus Future 2013 and Sydney City Centre Access Strategy 2013 servicing Barangaroo. This is likely to involve the provision of more direct routes and rationalised stops, making it easier for passengers to understand the bus network.

Traffic safety and road congestion issues in relation to the vehicular access to the development site were considered with the Concept Plan and with the separate approval for the Stage 1B basement excavation and car park, as modified (SSD 6960).

The Department concludes there is sufficient capacity now and in the immediate future for the transport network to service workers, residents and visitors.

### 6.7.2 Traffic and access

The proposed building will jointly utilise the approved Stage 1B basement car park with the approved Buildings R4A and R4B, which will be accessed from the western end of Watermans Quay (**Figure 27**). The primary traffic access route into and out of the car park will be via Watermans Quay, and on to Hickson Road and Sussex Street. Traffic signals are proposed to be installed at the Hickson Road/Watermans Quay intersection as part of the Stage 1B development to improve traffic circulation and efficiency. Detailed design of the intersection, including phasing and lane arrangements, will be subject to further consultation with RMS.

The Department received public objections regarding the cumulative increase on the demand on existing infrastructure within the precinct, including the surrounding road network. Public objections also stated traffic generation has been underestimated and an independent report should be prepared to verify the traffic is corrected estimated and planned for.

Council raised the following concerns:

- sustainable and active transport should be encouraged over high private vehicle use
- the traffic modelling provided relies on lower trip generation rates than the RMS guidelines for high-density residential flat buildings
- the intersection at Hickson Road/Watermans Quay will not perform adequately and will result in a probable vehicle queue on Watermans Quay.

The submitted Transport Management and Accessibility Plan (TMAP) calculates the proposed development will generate a total of 30 vehicle movements in the AM peak hour and 20 vehicle movements in the PM peak hour.

Consistent with the findings of the traffic modelling previously undertaken for the Concept Plan, the modelling for the current TMAP indicates the transport network in the Barangaroo precinct could accommodate the increased traffic movements arising from the proposed development. The TMAP concludes there will be minimal changes in the operation of the local road network as a result of the proposed development.

The application was referred to Transport for NSW (TfNSW) and Transport for NSW (RMS). Neither agency raised concerns in relation to operational traffic impacts.

In relation to concerns raised in public submissions regarding the cumulative impacts on the surrounding road network, the Department notes the traffic impacts of the proposed development were previously considered as part of the assessment of the Concept Plan. The proposed development is consistent with the Concept Plan and the updated modelling concludes the increased traffic movements generated will have minimal impact on the local road network.

In relation to Council and public concerns about trip modelling, a survey was undertaken to obtain the likely traffic generation rate for the site as part of the assessment of Buildings R4A and R4B, as recommended by TfNSW and RMS. Based on these surveys, a traffic generation rate of 0.14 trips per dwelling was adopted. It was acknowledged that this is lower than 0.19 trips outlined in the RMS 'Guide to Traffic Generating Development' due to the location of the site within the CBD and in close proximity to public transport.



**Figure 27** | Intersection Site Plan (Base source: SSD 7944 RtS)

The Department therefore continues to accept this is an acceptable traffic modelling rate and that an accurate assessment of the impacts has been made. The traffic rate provided is consistent with generation rates applied on other applications and the Department accepts the information provided is sufficient to allow for an informed assessment of the impacts.



In relation to Council’s concerns about the intersection of Hickson Road and Watermans Quay, in its assessment of the approved Buildings R4A and R4B (which also factored in traffic generation from Building R5), the Applicant stated the traffic modelling considered the cumulative impacts of the Barangaroo Precinct in addition to existing development in the area and forecasted the Hickson Road and Watermans Quay intersection would operate at an acceptable level of service (level B), with an average queue length of three to four vehicles during peak periods. The Department considered this an adequate impact as it would allow the road network to function adequately. This conclusion remains unchanged in relation to the present application.

The Department notes the number of parking spaces proposed is less than the maximum allowed under the Concept Plan (**Section 6.7.3**) which will result in fewer traffic movements than previously anticipated, and further, that this has been reduced from 171 to 134 following public consultation. With regard to concerns raised by Council, the Department considers this will also encourage sustainable and active transport over high private vehicle use. The proposed vehicle access and the safety, efficiency and ongoing operation of the classified road is considered appropriate within the context of the site. The Department also considers the potential impacts of traffic noise and vehicle emissions on the proposed development have been appropriately managed.

The Department concludes the existing road network will have sufficient capacity to accommodate the additional traffic movements generated by the proposed development. Nevertheless, to encourage use of more sustainable transport modes, i.e. through introduction of a car sharing scheme, a condition is recommended requiring the implementation of an updated Travel Demand Management Plan for Barangaroo South prior to the commencement of use.

**6.7.3 Car parking and loading**

The Concept Plan specifies maximum parking rates for residential buildings. The Concept Plan requires maximum retail rates to be consistent with Council’s requirements.

The approved Stage 1 basement car park (SSD 6960) provides 822 car parking spaces to be shared by Buildings R4A, R4B and R5, with the final number of spaces being allocated to each building being determined by the individual SSD applications for the buildings.

The approved number of car parking spaces allocated to Building R4A (SSD 6964) is 377 residential spaces and 1 retail space. The approved number of car parking spaces allocated to Building R4B (SSD 6965) is 300 residential spaces and one retail space. This provides up to 143 spaces that can be allocated to Building R5.

**Table 6** details the number of parking spaces allocated to Buildings R4A, R4B and R5 compared to the total number of approved spaces under the Stage 1 Basement development consent, as modified.

**Table 6** | Basement Car Parking Rates (as modified by SSD 6960 MOD 1)

Building	Proposed Parking	Stage 1B approved spaces
Building R4A	377 residential 1 retail	378
Building R4B	300 residential 1 retail	301
Building R5	134 residential	143
<b>Total</b>	<b>813</b>	<b>822</b>

The proposed development seeks approval for a maximum of 134 car parking spaces which is nine spaces less than could be allocated to Building R5 under the Stage 1B basement. This is also 71 spaces less than the maximum 205 permitted under the Concept Plan, however the Department notes that there are only 143 spaces left available in the Stage 1B basement for use by Building R5. No car parking spaces are proposed to be provided for KWH tenants or retail tenancies.

**Table 7** compares the maximum number of spaces permitted under the Concept Plan with the total spaces proposed.

**Table 7 | Car Parking Rates**

Unit type	Parking Rate	No. of Units	Total spaces permissible	Total spaces proposed
1 bed	0.5 spaces/unit	69	34.5	10
2 bed	1.2 spaces/unit	62	74.4	62
3+ bed	2.0 spaces/unit	31	62	62
<b>Sub-total</b>		<b>162</b>	<b>170.9</b>	<b>134</b>
KWH 1 bed	0.5 spaces/unit	34	17	0
KWH 2 bed	1.2 spaces/unit	14	16.8	0
<b>Sub-total</b>		<b>48</b>	<b>33.8</b>	<b>0</b>
<b>Total</b>		<b>210</b>	<b>205</b>	<b>134</b>

Council object to the number of car parking spaces proposed and that the level of parking should be restricted to comply with rates within SLEP 2012. Council also raised concerns about the lack of information regarding residential, visitor, and retail bicycle parking and end of trip facilities. Neither TfNSW or Transport for NSW (RMS) raised concerns in relation to car parking.

The Department notes Council’s concern that residential car parking should be provided in accordance with SLEP 2012. However, the Concept Plan sets residential car parking rates, and the proposed rates are substantially below what is permitted.

In respect to no car parking being proposed for KWH tenants, the Department notes the Applicant has advised that in accordance with the strategy of minimising costs for community housing providers, no car parking is proposed. The RtS is accompanied by a letter from City West Housing which states given the proximity to Wynyard and the proposed Barangaroo Metro Station it is comfortable with no car parking being provided.

City West Housing advise that in their experience, car parking adds to the development and operational costs for affordable housing and a fair allocation system for available car parking spots is difficult to implement. However, City West Housing advise it would support car sharing, or where there is a disabled resident, provisions could be made to accommodate car parking on site.

The Department accepts that community housing providers need to minimise costs, but no evidence has been provided which supports the view that there would be no demand for car parking by future KWH tenants, particularly as KWH includes any nurse, teacher, child-care worker, ambulance officer, member of the police force, member of the fire brigade or retirees. Further, no evidence has been provided that would support the view that KWH tenants do not have special access requirements due to a disability.

The Department previously noted that there are only nine spaces left in the Stage 1B basement that could be allocated to KWH. The Department therefore recommends nine spaces are provided to KWH, subject to the submission of detailed information relating to proposed car sharing arrangements and special provisions for disabled KWH tenants. This information is recommended to be provided in the Operational Management Plan, which is required to be approved by the Secretary prior to occupation or commencement of the use of the building.

The Department accepts the additional nine spaces would result in 143 car parking spaces, but this is 62 spaces less than the maximum 205 permitted under the Concept Plan.

#### Loading

The Applicant states the proposed four service vehicle spaces for the three buildings (Building R5 and the approved Buildings R4A and R4B) are consolidated within the single basement for efficiency and will satisfy the likely demand for service vehicle parking. As required by Council, the loading dock has been designed to cater for a 9.25 m rigid vehicle and includes a turntable to allow vehicles to enter and leave in a forward direction.

Council raised concern regarding the low number of service vehicle spaces proposed. However, the Department considers the consolidated nature of the service spaces together with future building management will ensure a satisfactory level of servicing for the proposed building (including Buildings R4A and R4B).

TfNSW did not object to the proposal, however advised the Applicant's commitment to prepare a Loading Dock Management Plan prior to the commencement of works should be conditioned. The Department agrees and proposes a condition to this effect.

#### Bicycle parking

Council objected on the grounds there was a lack of information regarding bicycle parking, bicycle storage, and end of trip facilities. Neither TfNSW or Transport for NSW (RMS) raised concerns in relation to bicycle parking.

Non-KWH units would utilise individual storage cages in the shared basement, which provide sufficient space for both bicycle and general storage. The ADG requires the provision of secure undercover bicycle storage but does not specify the required dimensions for storage. The Australian Standards recommends 1.08 m<sup>3</sup> for bicycle storage, which has been provided.

A communal bicycle parking storage area is provided for KWH at the basement level immediately below ground floor. The Department considers the non-provision of separate bicycle storage for KWH acceptable as it is easily accessible from the lobby lift, located in a safe and secure location and would provide for efficient maintenance.

End-of-trip facilities for non-residential uses are provided in Basement Level B1. Bicycle parking for non-residential uses is proposed to be located in the public domain. The Department notes 100 spaces are proposed in the public domain and considers this sufficient to provide for retail customers. However, the Department considers three spaces should be provided in the basement for retail employees.

One hundred visitor bicycle parking spaces will be provided as part of the approved public domain works, comprising standard Council bicycle racks or spaces mounted on smart poles (along Watermans Quay and Barangaroo Avenue).

The Department considers the proposed bicycle parking and end-of-trip facilities to be suitable.

## 6.8 Other Issues

Other relevant issues for consideration are addressed in **Table 8**.

**Table 8** | Summary of other issues raised

Issue	Findings	Recommended Condition
<p><b>Construction noise/construction hours</b></p>	<ul style="list-style-type: none"> <li>• The following construction hours are proposed:               <ul style="list-style-type: none"> <li>◦ 7 am to 7 pm Monday to Friday</li> <li>◦ 7 am to 5 pm on Saturdays.</li> </ul> </li> <li>• Approval is also sought for various works to be undertaken outside of these hours including:               <ul style="list-style-type: none"> <li>◦ concrete pours</li> <li>◦ service installation works</li> <li>◦ works behind a façade, such as plastering.</li> </ul> </li> <li>• The Department received two public objections regarding cumulative construction noise and vibration impacts (including low frequency noise) on nearby residential properties, including sleep deprivation. The objections state that construction activities should take place between 7 am and 9 pm Monday to Friday, and should cease by 5 pm on Saturday, and compliance with these conditions should be monitored.</li> <li>• Council raised concern about exceedances of construction noise criteria are predicted at three of the identified receivers and stated the construction phase should be appropriately managed through community consultation and the provision of respite periods from intrusive works throughout the day.</li> <li>• Council also stated additional noise mitigation measures should be introduced to reduce the noise impacts on the childcare centre.</li> <li>• The EPA raised no concerns.</li> <li>• The EIS includes a Construction and Operational Noise Report which provides a detailed assessment and recommendations for managing/mitigating noise impacts on surrounding residents, child care centres and retail tenancies.</li> <li>• The report states the proposed exceedances are not considered excessive by construction standards and can be managed by existing construction management procedures.</li> <li>• The report notes the proposed hours are consistent with previous Barangaroo approvals for remediation of the declaration area and the Stage 1B basement.</li> <li>• The Department considers the proposed construction hours acceptable as these are consistent with previous approvals in Barangaroo South</li> </ul>	<ul style="list-style-type: none"> <li>• The Department recommends conditions requiring compliance with the recommendations of the Construction and Operational Noise Report, including the requirement for the existing Construction Noise and Vibration Management Sub-Plan for Barangaroo South to be updated with the specific noise and vibration control measures for the proposed development.</li> </ul>



	<p>and notes Council has not raised any concerns with the proposed hours.</p> <ul style="list-style-type: none"> <li>• The Department considers the application acceptable in relation to construction noise and vibration subject to the recommended conditions.</li> </ul>	
<b>Construction traffic</b>	<ul style="list-style-type: none"> <li>• Council raised concern that the traffic modelling provided does not include construction traffic movements in the peak PM hour.</li> <li>• The submitted TMAP profile of existing construction traffic activity in Barangaroo demonstrates the majority of movements occur outside the AM and PM peak hours of 8 am to 9 am and 5 pm to 6 pm with a significant decrease in activity after 3 pm (5% of the total volume).</li> <li>• During the AM peak hour when construction vehicles are more likely to access the site, the TMAP states the local road network operates satisfactorily and the additional construction traffic will have a negligible impact on its operation.</li> <li>• The TMAP estimates the number of construction vehicles per hour to be 16.</li> <li>• The TMAP concludes construction activity from the development will have a relatively minor impact on the operation of nearby intersections during the critical peak periods and no further works are required to accommodate the anticipated levels of construction traffic.</li> <li>• The implementation of a range of mitigation measures are also recommended to appropriately manage construction vehicle movements.</li> <li>• TfNSW did not object to the proposal and advised that the Applicant's statement that it will prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) prior to the commencement of works, should be conditioned.</li> <li>• The Department is satisfied that the surrounding road network can safely accommodate the traffic generated by the construction of the proposed development, subject to the abovementioned condition.</li> </ul>	<ul style="list-style-type: none"> <li>• Updated CPTMP to be prepared prior to the commencement of any work.</li> </ul>
<b>Construction air quality</b>	<ul style="list-style-type: none"> <li>• The Department received one objection on the grounds of air quality during construction, including the level of potentially hazardous asbestos dust.</li> <li>• The EPA did not raise any concerns in relation to air quality.</li> <li>• The Applicant's Air Quality Assessment statement found the construction of the proposed development would not substantially increase air emissions or</li> </ul>	<ul style="list-style-type: none"> <li>• Submit an updated Air Quality and Odour Management Plan for Barangaroo South to the Environment Protection Authority (EPA) for review.</li> </ul>

	<p>the cumulative air impacts of concurrent works at Barangaroo South.</p> <ul style="list-style-type: none"> <li>• The Department notes any air pollution occurring as result of the construction or operation development will be regulated under the <i>Protection of the Environment Operations Act 1997</i>.</li> <li>• Given the above, the Department is satisfied that air emissions associated with the proposed development can be effectively managed, subject to conditions of consent.</li> </ul>
<p><b>Operational noise</b></p>	<ul style="list-style-type: none"> <li>• Operational noise from the development would occur predominantly from mechanical plant located on the rooftop and contained within dedicated plant areas within the building.</li> <li>• Future uses of the retail tenancies will be subject to separate approvals.</li> <li>• Council raised concern that provision should be made for physical acoustic treatments within the slab between the retail level and residential levels.</li> <li>• The Department considers noise impacts from future retail uses can be assessed at the future development application stage for the respective tenancies.</li> </ul> <ul style="list-style-type: none"> <li>• The Department recommends a condition be imposed to limit noise emissions for mechanical plant and ensure compliance with the NSW Industrial Noise Policy with details to be approved prior to issue of any construction certificate for the building.</li> </ul>
<p><b>Signage zones</b></p>	<ul style="list-style-type: none"> <li>• The Applicant seeks consent for two building identification signage zones, on the south-west elevation, fronting the plaza off Watermans Quay and on the eastern elevation fronting Hickson Road. These zones measure approximately 2 m in height and 6 m in length (12 m<sup>2</sup>).</li> <li>• The future signs will assist in identifying the main entry points for the KWH and non-KWH components of the building.</li> <li>• Control 9 in the Design Controls stipulates signage is to be limited to one sign per frontage at podium level and are not to exceed 15 m<sup>2</sup> per sign. The proposed signage zones comply with these controls and are proportionate to the scale of the development.</li> <li>• A SEPP 64 compliance schedule has been submitted with each of the applications which indicates that the proposed signage zones are consistent, and the future signs within the proposed signage zones are capable of being consistent, with the design and siting criteria of SEPP 64.</li> <li>• The Department considers the proposed signage zones acceptable and is satisfied they meet the key assessment criteria in SEPP 64 (refer to <b>Appendix C</b>).</li> </ul> <ul style="list-style-type: none"> <li>• Separate approval to be obtained for the erection of signage.</li> </ul>

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**Future retail uses**

- Council objected that retail fitouts should be the subject to separate approvals once tenancy uses have been confirmed, and that mechanical ventilation should vent to the roof and enhanced filtration must be available for proposed solid fuel cooking outlets.
- The Applicant has not sought approval for the fitout of retail space. This will therefore be the subject of future applications.
- No approval is given for fitout or use of any retail areas within the building.



## 7. Evaluation

The Department has reviewed the EIS, RtS, and all additional information, and assessed the merits of the proposal, taking into consideration advice from Council and government agencies. Issues raised in public submissions have been considered and all environmental issues associated with the proposal have been thoroughly addressed.

The Department has considered all relevant matters under section 4.15 of the EP&A Act, the objects of the EP&A Act and the principles of ecologically sustainable development.

The Department considers the proposal is of an appropriate scale that is consistent with the parameters set by the Concept Plan, having acceptable visual and view impacts and limiting impacts on visual privacy. The proposed podium location and design of the building is consistent with the Barangaroo South Design Controls, and provides a through-site link to Hickson Park that is aligned with Scotch Row, and a colonnade to Hickson Road to continue that of the buildings to the south.

The proposed building has been designed by a world-renowned architectural firm. The Department is satisfied the building will exhibit design excellence and will contribute positively to the character of Barangaroo and the wider CBD skyline. Accordingly, the Department recommends the Executive Director, Compliance, Industry and Key Sites (as delegate of the Secretary) grants the waiver to undertake a design competition for the proposed building (**Appendix F**).

The Department considers all unit types will achieve an acceptable level of amenity following improvements made by the Applicant, with most units receiving a high level of amenity. Inconsistencies with the ADG are acceptable as the intent of the ADG is satisfied.

The Department concludes the landscape design will provide a high level of amenity for residents, employees and visitors, is consistent and integrated with the overall landscaping of the Barangaroo precinct and will sufficiently mitigate wind impacts.

The proposed development is consistent with the Concept Plan and the Department considers the traffic movements associated with this development will have minimal impact on the local road network. The proposed car parking does not exceed the maximum amount permitted. Bicycle parking has also been provided for each unit.

The Department considers the site is suitable for the development, the development is in the public interest and the impacts of the development are acceptable and can be appropriately mitigated through the implementation of the recommended conditions of consent. Key recommended conditions include requirements to:

- provide nine car parking spaces for KWH
- prepare an Operational Plan of Management
- restrict the issue of an Occupation Certificate for this building until the adjoining public domain works within the Building R5 envelope approved in SSD 7944 are completed
- provide further landscaping details for surrounding public domain and communal areas
- prepare a Construction Environmental Management Plan, Construction Pedestrian Traffic Management Plan and Construction Noise and Vibration Management Plan.



All other issues associated with the proposal have been assessed, and appropriate conditions recommended, where necessary, to ensure the impacts of the development are appropriately mitigated and/or managed and community concerns are addressed.

The Department concludes the proposal is consistent with the strategic objectives for the area, as outlined in the Greater Sydney Region Plan and the Eastern City District Plan, as it would provide housing choice and affordability through new residential units, including 48 key worker housing units, and 200 construction and 10 operational jobs in a highly accessible location.

The application is referred to the Commission as Council has objected to the proposal.

The Department considers the proposal is approvable, subject to the conditions of consent outlined within this report. This assessment report is hereby presented to the Commission for determination.



**David McNamara**  
Director  
Key Sites Assessments



**Anthea Sargeant**  
Executive Director  
Compliance, Industry and Key Sites



# Appendices

## Appendix A – List of Documents

The following supporting documents and supporting information to this assessment report can be found on the Department's website as follows:

Environmental Impact Statement

<https://www.planningportal.nsw.gov.au/major-projects/project/10161>

Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/10161>

Applicant's Response to Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/10161>

Submissions on Response to Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/10161>

Revised Response to Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/10161>

## Appendix B – Summary of the Consideration of Community Views

Issue raised	Consideration
<p>Built form (Council and public issue)</p> <ul style="list-style-type: none"> <li>density and scale are out of character with the area</li> <li>architectural design</li> <li>lack of a defined podiums, or setback to and from Hickson Road</li> <li>the building has visual appeal, design quality and appropriate size.</li> </ul>	<p><i>Assessment</i></p> <ul style="list-style-type: none"> <li>The proposal exhibits design excellence and is of an appropriate scale that is consistent with the parameters set by the Concept Plan.</li> <li>The proposed podium location and design of the building are consistent with the Barangaroo South Design Controls, providing a colonnade to Hickson Road to continue that of the buildings to the south, a through-site link to Hickson Park that is aligned with Scotch Row, and a sheer tower face to Hickson Park.</li> <li>These matters are discussed in <b>Section 6</b>.</li> </ul> <p><i>Conditions</i></p> <ul style="list-style-type: none"> <li>No conditions recommended.</li> </ul>
<p>Cumulative visual impact (public issue).</p>	<p><i>Assessment</i></p> <ul style="list-style-type: none"> <li>The proposed building is within the envelope in the approved Concept Plan, which was considered to have an acceptable visual impact. The Department therefore considers the impacts acceptable. This matter is discussed in <b>Section 6</b>.</li> </ul> <p><i>Conditions</i></p> <ul style="list-style-type: none"> <li>No conditions recommended.</li> </ul>
<p>Impact on views from surrounding residential properties (public issue).</p>	<p><i>Assessment</i></p> <ul style="list-style-type: none"> <li>The Department considers Building R5 is consistent with the View and Visual Impact Analysis (VIA) submitted as part of the Concept Plan (MOD 8) and the Applicant's VIA demonstrates that the proposed building will have a limited impact on significant views.</li> <li>The Department considers where there is a view impact, the design and siting of Building R5 and the entire One Sydney Harbour development has responded to the principle of view sharing, where view corridors are provided through the buildings to maintain views to Sydney Harbour and the surrounding area. This matter is discussed in <b>Section 6</b>.</li> </ul> <p><i>Conditions</i></p> <ul style="list-style-type: none"> <li>No conditions recommended.</li> </ul>
<p>Visual privacy impacts to existing developments (public issue).</p>	<p><i>Assessment</i></p> <ul style="list-style-type: none"> <li>As the proposal is within the parameters set by the approved Concept Plan, building separation is considered sufficient to mitigate overlooking impacts. The Department considers the development will ensure an acceptable level of visual privacy to surrounding residents. This matter is discussed in <b>Section 6</b>.</li> </ul> <p><i>Conditions</i></p> <ul style="list-style-type: none"> <li>No conditions recommended.</li> </ul>
<p>Key worker housing (Council issue)</p> <ul style="list-style-type: none"> <li>further details on management and tenure should be provided. It is recommended that the KWH be managed by a recognised community housing provider in perpetuity</li> </ul>	<p><i>Assessment</i></p> <ul style="list-style-type: none"> <li>The Department considers the proposed KWH will provide an adequate mix of unit type, can be sufficiently managed, and will be afforded a high level of amenity. The Department concludes the provision of housing for key workers in this CBD location will provide a significant benefit and will contribute to the overall provision of affordable housing throughout Central Sydney.</li> <li>This matter is discussed in <b>Section 6</b>.</li> </ul> <p><i>Conditions</i></p> <ul style="list-style-type: none"> <li>No conditions recommended.</li> </ul>

- some 3-bed units should be provided as KWH.

Increase in the number of units compared to the EIS (public issue).

*Assessment*

- The Department considers the increase from 151 to 210 units is acceptable as the development provides a sufficient level of residential amenity and does not have other adverse operational impacts associated with the increase in units, such as impacts on traffic generation. This matter is discussed in **Section 6**.

*Conditions*

- No conditions recommended.

Non-compliances with the ADG (Council issue).

*Assessment*

- The Department considers inconsistencies with the ADG are minor and will not impede the objectives of the ADG to achieve better design.
- All proposed residential units will achieve acceptable levels of amenity, with most units achieving high levels of amenity, therefore satisfying the intent of the ADG. These matters are discussed in **Section 6** and **Appendix C**.

*Conditions*

- No conditions recommended.

The interface of the development with the public domain is not adequately addressed (Council issue).

*Assessment*

- The Department considers sufficient information has been provided to determine the proposal interfaces effectively with the public domain, similar to that of the approved Building R4A and R4B applications.
- This matter is discussed in **Section 6**.

*Conditions:*

- The Department recommends a condition to ensure the approved public domain works in SSD 7944 within the R5 Building boundary are completed and publicly accessible prior to the issue of any Occupation Certificate for the R5 building.

The Crime Prevention Through Environmental Design (CPTED) is general and does not provide details on the crimes the design seeks to prevent (Council issue).

*Assessment*

- The Department considers the proposal is acceptable with regard to CPTED principles because the proposal provides passive surveillance through balconies and windows that front the public domain, and the principle building entrances are identifiable and have secure access and CCTV. This matter is discussed in **Section 6**.

*Conditions*

- No conditions recommended.

Landscaping (Council issue)

- landscape plans do not confirm the recommendations of the wind impact assessment have been incorporated into the design of the ground level and podium
- details of trees at ground level within the plaza not provided
- insufficient information is provided for the design of common

*Assessment*

- The Department considers the proposed Stage 1B landscape plans suitably reflect the tree planting locations and size requirements recommended in the Wind Impact Assessment (WIA).
- There is an existing Concept Plan condition requiring public domain works proposed under SSD 7944 for Hickson Park to be completed prior to the occupation of the R5 Building, which will therefore provide adequate wind mitigation.
- Details of trees proposed at ground level within the plaza have been provided and the Department considers these adequate and consistent with the requirements in the WIA.
- The Department has reviewed the further details provided by the Applicant in relation to the communal open space and considers sufficient information has been provided to ensure these areas can be adequately landscaped and comply with the relevant safety and construction standards. This includes the provision of information regarding soil provision for substantial shrub



<p>open spaces, including landscaping and changes in levels.</p>	<p>planting on slabs. The Department considers the landscape design will provide a high level of amenity for residents. These matters are discussed in <b>Section 6</b>.</p>
	<p><i>Conditions</i></p> <ul style="list-style-type: none"> <li>• Provide further landscaping details prior to the issue of the relevant Construction Certificate.</li> </ul>
<p>Traffic (Council and public issue)</p>	<p><i>Assessment</i></p>
<ul style="list-style-type: none"> <li>• cumulative increase in the demand on existing infrastructure within the precinct, including the surrounding road network</li> <li>• underestimation of traffic generation</li> <li>• sustainable and active transport should be encouraged over high private vehicle use.</li> </ul>	<ul style="list-style-type: none"> <li>• Traffic impacts were previously considered as part of the assessment of the Concept Plan. The proposed development is consistent with the Concept Plan and the Department considers the traffic movements associated with this development will have minimal impact on the local road network.</li> <li>• The traffic generation rate provided is consistent with generation rates applied on other applications and the Department considers the information provided is sufficient to allow for an informed assessment of the impacts.</li> <li>• The Department does not consider the number of car parking spaces encourages high private vehicle use as it is less than the maximum prescribed in the Concept Plan, and the site has excellent public transport access.</li> <li>• This issue is considered in <b>Section 6</b>.</li> </ul> <p><i>Conditions</i></p> <ul style="list-style-type: none"> <li>• No conditions recommended.</li> </ul>
<p>Parking/servicing (Council issue)</p>	<p><i>Assessment</i></p>
<ul style="list-style-type: none"> <li>• lack of information regarding bicycle parking, bicycle storage, and end of trip facilities</li> <li>• the amount of car parking is excessive</li> <li>• a low number of service vehicle spaces is proposed.</li> </ul>	<ul style="list-style-type: none"> <li>• Bicycle parking, storage and end of trip facilities are shown on the architectural plans.</li> <li>• The number of car parking spaces has been reduced from 171 to 134 following public consultation and is less than the maximum of 205 permitted under the Concept Plan.</li> <li>• The Department notes Council's concern that car parking should be provided in accordance with SLEP, however considers the Concept Plan is the relevant instrument regarding car parking rates. Despite an additional nine spaces being recommended for KWH (total 143 spaces), this is still below the amount permitted under the Concept Plan. This issue is considered in <b>Section 6</b>.</li> <li>• The Department considers the consolidated nature of the service spaces together with future building management will ensure a satisfactory level of servicing for the proposed building and approved Buildings R4A and R4B. This issue is considered in <b>Section 6</b>.</li> </ul> <p><i>Conditions</i></p> <ul style="list-style-type: none"> <li>• No conditions recommended.</li> </ul>
<p>Cumulative construction noise and vibration impacts, including sleep deprivation (Council and public issue)</p>	<p><i>Assessment</i></p>
<ul style="list-style-type: none"> <li>• additional noise mitigation measures should be introduced to reduce the noise impacts on the childcare centre.</li> </ul>	<ul style="list-style-type: none"> <li>• The Department considers the applications acceptable in relation to construction noise and vibration subject to conditions being imposed in relation to compliance with the recommendations of the Construction and Operational Noise Report, including the requirement for the existing Construction Noise and Vibration Management Sub-Plan for Barangaroo South to be updated with the specific noise and vibration control measures for the proposed development.</li> <li>• Submissions requested the Department restrict construction activities to between 7 am and 9pm, and to cease by 5 pm on Saturdays, and monitor compliance with these conditions.</li> </ul> <p><i>Conditions</i></p> <ul style="list-style-type: none"> <li>• Restrict construction hours to 7 am to 7 pm Monday to Friday and 7 am to 5 pm on Saturdays, which is consistent with previous approvals in Barangaroo South and less than requested in submissions.</li> <li>• Require the existing Construction Noise and Vibration Management Sub-Plan for Barangaroo South to be updated with the specific noise and vibration control measures for the proposed development.</li> </ul>

	<ul style="list-style-type: none"> <li>• These matters are discussed in <b>Section 6</b>.</li> </ul>
Air quality, including the level of potentially hazardous asbestos dust (public issue).	<p><i>Assessment</i></p> <ul style="list-style-type: none"> <li>• The Department is satisfied the development would not substantially increase air emissions or the cumulative air impacts of concurrent works at Barangaroo South.</li> </ul> <p><i>Conditions</i></p> <ul style="list-style-type: none"> <li>• Require submission of an updated Air Quality and Odour Management Plan for Barangaroo South to the Environment Protection Authority (EPA) for review. This matter is discussed in <b>Section 6.8</b>.</li> </ul>
<p>Future retail uses (Council issue)</p> <ul style="list-style-type: none"> <li>• retail fitouts should be the subject to separate approvals once tenancy uses have been confirmed</li> <li>• mechanical ventilation should vent to the roof and enhanced filtration must be available for proposed solid fuel cooking outlets</li> <li>• provision should be made for physical acoustic treatments within the slab between the retail level and residential levels.</li> </ul>	<p><i>Assessment</i></p> <ul style="list-style-type: none"> <li>• The Applicant has not sought approval for the fitout of retail space. This will therefore be the subject of future applications.</li> <li>• This matter is discussed in <b>Section 6.8</b>.</li> </ul> <p><i>Conditions</i></p> <ul style="list-style-type: none"> <li>• Impose a limit for noise emissions for mechanical plant and ensure compliance with the NSW Industrial Noise Policy, with details to be approved prior to issue of any construction certificate.</li> <li>• No approval is given for fitout or use of any retail areas within the building.</li> </ul>
The failure to provide a park on the site (public issue).	<p><i>Assessment</i></p> <ul style="list-style-type: none"> <li>• The proposal is consistent with the approved Concept Plan, which permits a residential building on the site. Sufficient open space is provided in the surrounding area, including the adjoining Hickson Park, planned open space in Barangaroo Central and the headland park.</li> <li>• This matter is discussed in <b>Section 6</b>.</li> </ul> <p><i>Conditions</i></p> <ul style="list-style-type: none"> <li>• No conditions recommended.</li> </ul>
<p>Loss of property value (public issue).</p> <p>Sale of property offshore (public issue).</p>	<p><i>Assessment</i></p> <ul style="list-style-type: none"> <li>• These matters are not planning considerations.</li> </ul> <p><i>Conditions</i></p> <ul style="list-style-type: none"> <li>• No conditions recommended.</li> </ul>
<p>The SSD may be prohibited development under the SSP SEPP, and inconsistent with the Concept Plan (MOD 6).</p> <p>(Council issue)</p>	<p><i>Assessment</i></p> <ul style="list-style-type: none"> <li>• The court appeal for MOD 8 to the Concept Plan and the Crown Sydney Hotel Resort was dismissed on 23 December 2016 and therefore the development is permissible with consent.</li> </ul> <p><i>Conditions</i></p> <ul style="list-style-type: none"> <li>• No conditions recommended.</li> </ul>
Surrounding context (Council issue)	<p><i>Assessment</i></p> <ul style="list-style-type: none"> <li>• Building R5 is the last application in Barangaroo South, therefore affording sufficient appreciation of the surrounding context. SSD 7944 for the Stage</li> </ul>

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- application lodged in advance of coordination with surrounding land/insufficient appreciation of the context of the applications
  - pedestrian connection and desire lines from the proposal to the Barangaroo Metro Station through Hickson Park are not determined.

1B public domain works was approved on 11 September 2018. The Department has reviewed the relationship between the proposed buildings and surrounding Stage 1B public domain works and is satisfied the works are suitably coordinated and integrated.

- the Concept Plan requires all public domain works to be completed prior to any occupation of the proposed buildings.

*Conditions*

- No conditions recommended.

## Appendix C – Statutory Considerations

In line with the requirements of section 4.15 of the EP&A Act, the Department’s assessment of the project has provided a detailed consideration to a number of statutory requirements. These include:

- the objects found in section 1.3 of the EP&A Act
- the matters listed under section 4.15(1) of the EP&A Act, including applicable environmental planning instruments and regulations.

The Department has considered all of these matters in its assessment of the project and has provided a summary of this assessment in **Tables 1** and **2** below.

**Table 1** | Consideration of objects of the EP&A Act

Objects of the EP&A Act	Summary
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State’s natural and other resources	The proposal would not impact on natural and artificial resources, as it is development within an already disturbed urban area. The proposal would increase housing supply to meet a range of housing needs (i.e. mix of mainly one, two and three-bedroom units) and provide retail opportunities which will enhance economic and social welfare.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment	The principles of ecologically sustainable development are considered following <b>Table 2</b> .
(c) to promote the orderly and economic use and development of land	The proposal promotes the orderly and economic use of land as the use is permitted on the site and is consistent with the Concept Plan. The merits of the proposal are considered in <b>Section 6</b> of this report.
(d) to promote the delivery and maintenance of affordable housing	The proposal would provide for Key Worker Housing (KWH) in a highly accessible location, providing for housing choice and diversity.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats	The proposed development would not have an adverse impact on the natural environment.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)	The Department agrees with the Heritage Division’s view that the proposal would have an acceptable impact on its heritage context, as addressed in <b>Section 6</b> of this report.
(g) to promote good design and amenity of the built environment	The Department considers the proposal would exhibit good design quality and amenity. These matters are considered in <b>Sections 6.2, 6.3</b> and <b>6.4</b> .
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants	The recommended conditions would ensure the proposed development would be constructed in compliance with all relevant building codes and health and safety requirements.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State	The proposal is SSD and therefore the Minister is the consent authority. The Department consulted with Council and relevant government agencies on the proposal, as outlined in <b>Section 5</b> of this report.



- (j) to provide increased opportunity for community participation in environmental planning and assessment. **Section 5** of this report sets out details of the Department's engagement on the proposal.

**Table 2** | Consideration of section 4.15(1) of the EP&A Act

Section 4.15(1) Evaluation	Summary
(a)(i) any environmental planning instrument	The proposed development complies with the relevant legislation, as addressed in <b>Section 4</b> of this report and the consideration of other relevant EPLs provided below.
(a)(ii) any proposed instrument	This is considered in the section following this table.
(a)(iii) any development control plan	Under clause 11 of the SRD SEPP, development control plans (DCPs) do not apply to SSD. Notwithstanding, consideration has been given to the Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005.
(a)(iiiia) any planning agreement	Not applicable.
(a)(iv) the regulations <i>Refer Division 8 of the EP&amp;A Regulation</i>	The application satisfactorily meets the relevant requirements of the Regulation, including the procedures relating to applications (Part 6), fees (Part 15), public participation procedures for SSD and Schedule 2 of the EP&A Regulation relating to EISs.
(a)(v) any coastal zone management plan	Not applicable.
(b) the likely impacts of that development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	The Department has assessed the likely impacts of the development and considers they are acceptable and/or have been appropriately managed by recommended conditions (refer to <b>Section 6</b> and <b>Appendix G</b> ).
(c) the suitability of the site for the development	The site is suitable for the development as discussed in <b>Sections 4</b> and <b>6</b> of this report.
(d) any submissions	Consideration has been given to the submissions received during and after the EIS and RtS exhibition period. See <b>Sections 5</b> and <b>6</b> of this report.
(e) the public interest	The Department considers the proposal to be in the public interest as it would provide social and economic benefits by providing housing choice and construction jobs in a highly accessible area.
Biodiversity values exempt if: (a) On biodiversity certified land (b) Biobanking Statement exists	Not applicable.

## Ecologically Sustainable Development

The Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. Section 1.3(b) of that Act states that ESD requires the effective integration of economic, environmental and social considerations in decision-making processes and that ESD can be achieved through the implementation of:

- (a) the precautionary principle
- (b) inter-generational equity
- (c) conservation of biological diversity and ecological integrity
- (d) improved valuation, pricing and incentive mechanisms.

The Department has assessed the proposed development in relation to the ESD principles and has made the following conclusions:

- **Precautionary Principle** - the proposal would not result in any serious or irreversible environmental damage.
- **Inter-Generational Equity** - the proposal would not result in adverse impacts on the health, diversity and productivity of the environment for the benefit of future generations
- **Biodiversity Principle** – the proposal would not have any adverse impacts on biodiversity.
- **Valuation Principle** – the proposal includes a number of measures to limit the ongoing cost, resource and energy requirements of the development. These include contributing to meeting precinct wide sustainability targets for Barangaroo South such as having a carbon neutral footprint, incorporating a recycled water supply system, energy efficiency measures such as LED lighting and a target diversion of up to 80 per cent of waste from landfill.

## ENVIRONMENTAL PLANNING INSTRUMENTS

Controls considered as part of the assessment of the proposal are:

- State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)
- State Environmental Planning Policy (State Significant Precincts) 2005 (SSP SEPP)
- State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)
- State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)
- Draft Remediation of Land State Environmental Planning Policy (draft Remediation SEPP)
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 (Basix SEPP)
- State Environmental Planning Policy No.64 – Advertising and Signage (SEPP 64)
- State Environmental Planning Policy (Coastal Management) 2018 (Coastal SEPP)
- State Environmental Planning Policy No.65 – Design Quality of Residential Apartment Development (SEPP 65)
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SHC SREP)
- Draft Environment State Environmental Planning Policy (draft Environment SEPP)
- Other Plans and Policies:
  - Sydney Harbour Foreshores and Waterways Area DCP 2005.

### State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)

The SRD SEPP aims to identify development that is of State significance due to its size, economic value or potential impact. The proposed development constitutes State significant development under clause 3 of Schedule 2 of the SRD SEPP, as it has a Capital Investment Value in excess of \$10 million (\$145,845,000) and is located at the Barangaroo site.

### State Environmental Planning Policy (State Significant Precincts) 2005 (SSP SEPP)

The SSP SEPP seeks to facilitate the development, redevelopment or protection of important urban, coastal and regional sites of economic, environmental or social significance to the State (State Significant Precincts) for the benefit of the State.

The Barangaroo site is listed as a State Significant Precinct under Part 12 of Schedule 3 of the SSP SEPP. The proposed development is consistent with the requirements of the SSP SEPP as detailed below.

#### Zone and zone objectives

The SSP SEPP zones the site B4 Mixed Use. The proposed development, comprising ground level retail with residential above, is permissible with consent in the B4 zone.

The Department is satisfied the proposed development is consistent with the relevant objectives of the B4 Mixed Use zone for the following reasons:

- the proposed development is a mixed-use development, consisting of residential and retail floor space
- the proposed development provides for employment opportunities within walking distance to Wynyard Station and other public transport facilities
- the proposed development exhibits design excellence
- the proposal will not have an adverse impact on any items of heritage significance
- the proposal will not result in any adverse noise, privacy or traffic impacts on nearby residents.

#### **Building height**

The proposed development has a maximum height of RL 107, which does not exceed the maximum height limit of RL 107 identified on the Height of Buildings Map.

#### **Gross floor area**

The total proposed GFA is 19,158 m<sup>2</sup> is below the maximum GFA of 20,970 m<sup>2</sup> applying to the site and is therefore compliant.

#### **Design Excellence**

The Department has considered the design excellence criteria and is satisfied that the application exhibits design excellence for the following reasons:

- the proposed development is to be constructed using high quality materials and finishes such as high-performance double glazing
- the form and external appearance of the building would improve the quality and visual amenity of the public domain, particularly considering its consistency with the materials of Buildings R4A and R4B
- the proposed development would improve the quality of and activate the public domain by providing materials consistent with the approved Hickson Park, continuing the Hickson Road Colonnade, and providing residential entries and retail tenancies fronting Hickson Road, Hickson Park, and Watermans Quay.
- the building has been designed to maximise access to natural light, minimise wind and reflectivity and achieve a minimum five (5) Green Star energy rating.

Due to the design excellence of the proposed building, it is recommended the Executive Director, Compliance, Industry and Key Sites (as delegate of the Secretary) waive the requirement for the Applicant to undertake a design excellence competition (see **Appendix F**).

#### **State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)**

The ISEPP aims to facilitate the effective delivery of infrastructure across the State by improving regulatory certainty and efficiency, identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development, and providing for consultation with relevant government agencies about certain development during the assessment process.

The proposed development has a frontage to a classified road (Hickson Road) and therefore is subject to assessment under Clause 101 of the ISEPP. The proposed vehicle access and the safety, efficiency and ongoing operation of the classified road is considered appropriate within the context of the site. The Department also considers the potential impacts of traffic noise and vehicle emissions on the proposed development have been appropriately managed.

Barangaroo South is located at the western edge of the CBD, adjacent to existing commercial development, and can rely upon existing and proposed access to bus, rail and ferry public transport services, including the new Metro

station and Barangaroo ferry hub. This will provide for the efficient movement of people to and from the site. The approved Concept Plan has considered pedestrian links to the development site and a pedestrian link from Wynyard station, known as Wynyard Walk, was completed in 2016.

Parking spaces for the proposed building is located within the approved Stage 1B basement. The number of spaces provided is less than the maximum allowed under parking rates specified in the Concept Plan, which reduces car travel demand compared to the previously assessed Concept Plan. In addition, bicycle parking has been provided for each unit.

Traffic safety and road congestion issues in relation to the vehicular access to the development site were considered with the Concept Plan and with the separate approval for the Stage 1B basement excavation and car park (SSD 6960).

The application was referred to Roads and Maritime Services (RMS) and Transport for NSW (TfNSW). RMS made no comment on the application. TfNSW raised no objection and recommended conditions of consent requiring the managing the construction traffic impacts and the loading area. The Department recommends these conditions be imposed.

The Department therefore considers the proposal to be consistent with the ISEPP. Traffic, access and car parking impacts are discussed in **Section 6.7** of this report.

### **State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)**

SEPP 55 aims to ensure that potential contamination issues are considered in the determination of a development application. SEPP 55 requires the consent authority to consider whether the land is contaminated, and if so, whether the land is suitable for the purpose for the proposed development.

The Block 4 Remediation Approval (SSD 5897) provides for the remediation of all contaminated material within the Block 4 Remediation Area/Stage 1B Basement site to make it suitable for the proposed use.

The EPA did not object to the proposal, noting SSD 5897 has been granted for remediation and the proposal does not include additional excavation or bulk earthworks.

The remedial strategy set out in the Stage 1B RAP (Remedial Action Plan) contemplated residential uses within Block 4B. As the proposed development is for a predominantly residential use it is consistent with the approved Stage 1B RAP and therefore the Department is satisfied the proposal is consistent with the requirements of SEPP 55.

### **Draft Remediation of Land State Environmental Planning Policy (draft Remediation SEPP)**

The Explanation of Intended Effect for a new Remediation of Land SEPP was exhibited until 13 April 2018. The draft Remediation of Land SEPP proposes to better manage remediation works by aligning the need for development consent with the scale, complexity and risks associated with the proposed works.

The key operational framework of SEPP 55 is to be maintained in the new SEPP and new provisions are unlikely to significantly affect this application. As such, the Department considers the proposed development would be consistent with the intent of the draft Remediation SEPP.

### **State Environmental Planning Policy (Building Sustainability Index) 2004 (BASIX SEPP)**

The BASIX SEPP, which commenced on 1 July 2004, aims to ensure consistency in the implementation of the BASIX scheme throughout the State by overriding provisions of other environmental planning instruments and development control plans that would otherwise add to, subtract from or modify any obligations arising under the BASIX scheme.



The Building Sustainability Index (BASIX) aims to deliver equitable, effective water and greenhouse gas reductions across the state. BASIX applies to all residential dwelling types and is part of the development application process in NSW.

The application is supported by an amended BASIX Certificate assessment and the proposal is in accordance with the requirements of the SEPP.

### State Environmental Planning Policy No.64 – Advertising and Signage (SEPP 64)

SEPP 64 applies to all signage that can be displayed with or without development consent and is visible from any public place or public reserve.

The proposal includes the provision for two indicative primary signage zones, to accommodate building identification signage on the south-western elevation fronting the plaza off Watermans Quay and on the Hickson Road elevation.

The Department recommends a condition requiring secondary building identification (such as wayfinding and under awning signage) and retail tenant signage details to be submitted for approval by the Department as part of a future signage strategy. This is consistent with previous approvals within Barangaroo South.

Under clause 8 of SEPP 64, consent must not be granted for any signage application unless the proposal is consistent with the objectives of the SEPP and with the assessment criteria which are contained in Schedule 1.

**Table 3** below demonstrates the consistency of the proposed signage with these assessment criteria (future signs within the proposed signage zones will be subject to separate future planning applications).

**Table 3** | Consideration of objects of SEPP 64

Assessment criteria	Department’s consideration	Compliance
<b>1 Character of the area</b>		
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	The proposed signage zones are appropriately located and integrated into the design and appearance of the building. The inclusion of a signage zone to provide for building and business identification signage is common for tower buildings/developments.	Yes
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	The proposed signage zones follow a consistent theme throughout Barangaroo.	Yes
<b>2 Special areas</b>		
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The proposed signage zones are located on the ground floor near building entries. Therefore, future signage within these zones is not expected to be located within, nor will it detract from, any other environmentally sensitive, heritage, natural, conservation, open space, waterways or residential area.	Yes
<b>3 Views and vistas</b>		
Does the proposal: <ul style="list-style-type: none"> <li>obscure or compromise important views?</li> <li>dominate the skyline and reduce the quality of vistas?</li> <li>respect the viewing rights of other advertisers?</li> </ul>	The proposed signage zones are integrated into the proposed building and are to be contained within the building envelope. The proposed signage zones would not compromise	Yes

	any important views, the skyline or interfere with other advertisers.	
<b>4 Streetscape, setting or landscape</b>		
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The scale, proportion and form of the proposed signage zones are appropriate for the streetscape and setting of the proposed development.	Yes
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	The proposed signage zones would contribute to the visual interest of the building by providing identification and recognition of the site.	Yes
Does the proposal reduce clutter by simplifying existing advertising?	The proposed signs are considered sympathetic to the architectural treatment of the building and do not propose advertising.	N/A
Does the proposal screen unsightliness?	The signage zones form part of the building façade.	Yes
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The proposed signage zones would not protrude beyond the building envelope.	Yes
Does the proposal require ongoing vegetation management?	The proposed signage zones do not contain, or impact upon any vegetation.	N/A
<b>5 Site and building</b>		
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The proposed signage zones have been designed to be integrated within the building façade, compatible with the design and architecture of the building.	Yes
Does the proposal respect important features of the site or building, or both?	The proposed signage zones would not detract from the important features of the site and building.	Yes
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The proposed signage zones have been fully integrated with the building architecture.	Yes
<b>6 Associated devices and logos with advertisements and advertising structures</b>		
Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	Specific signage details will be subject to future assessment prior to the issue of a Construction Certificate.	Yes
<b>7 Illumination</b>		
Would illumination: <ul style="list-style-type: none"> <li>• result in unacceptable glare?</li> <li>• affect safety for pedestrians, vehicles or aircraft?</li> <li>• detract from the amenity of any residence or other form of accommodation.</li> </ul> Can the intensity of the illumination be adjusted? Is the illumination subject to a curfew?	<p>Details of illumination will be subject to future assessment. Any future illumination, however, can be ensured to not result in unacceptable glare, safety impacts, or adverse impacts on residences or accommodation.</p> <p>If required, conditions can be imposed on future signage to ensure illumination can be adjusted.</p>	Yes
<b>8 Safety</b>		

Would the proposal reduce safety for:	The location of the signage zones would not obscure sightlines to or from public areas or reduce safety from public roads.	Yes
<ul style="list-style-type: none"> <li>pedestrians, particularly children, by obscuring sightlines from public areas?</li> <li>for any public road?</li> </ul>		

### State Environmental Planning Policy (Coastal Management) 2018 (Coastal SEPP)

The Coastal SEPP consolidates and replaces SEPP 14 (Coastal Wetlands), SEPP 26 (Littoral Rainforests) and SEPP 71 (Coastal Protection).

The Coastal Management SEPP gives effect to the objectives of the *Coastal Management Act 2016* (NSW) from a land use planning perspective. It defines four coastal management areas and provides assessment criteria tailored for each coastal management area. The consent authority must apply those criteria when assessing proposals for development that fall within one or more of the mapped areas.

The Coastal SEPP identifies the site as being located within the coastal environment area and coastal use area. Land within these areas are subject to clause 13 and 14, however as the site is located on land within the Foreshores and Waterways Area of the SHC SREP, clauses 13 and 14 of the Coastal SEPP do not apply.

### State Environmental Planning Policy No.65 – Design Quality of Residential Apartment Development (SEPP 65)

SEPP 65 seeks to improve the design quality of residential developments and encourage innovative design. The Apartment Design Guide (ADG) is closely linked to the principles of SEPP 65 and sets out best practice design principles for residential developments. The Department has assessed the proposal against the aims and objectives of SEPP 65 in **Table 4** below.

**Table 4** | Consideration of Design Quality Principles of SEPP 65

Principle	Department’s Response
1: Context and neighbourhood character	<p>The proposed building is part of a larger Concept Plan approval which approved the renewal of greater Barangaroo, an area undergoing significant change. The building is consistent with the use and built form requirements of the Concept Plan and with the existing and desired future character of the area. The proposal will have acceptable impacts on the amenity of existing and future adjoining development.</p> <p>The high density of the building and its architectural design, having a clear glass façade, is broadly consistent with the surrounding residential, commercial and mixed-use development, in particular, the approved Crown Sydney Hotel Resort and Buildings R4A and R4B.</p>
2: Built form and scale	<p>The proposal is consistent with the building envelope parameters set by the Concept Plan (as modified).</p> <p>The proposal provides a transition between surrounding buildings and the Crown Sydney Hotel, is of a slender build to reduce the building’s mass, has a consistent and complimentary design to the approved Crown Sydney Hotel Resort and Buildings R4A and R4B, encourages access to the public domain and seeks to activate street frontages through retail and residential uses fronting proposed Hickson Park, Barangaroo Avenue.</p> <p>The development has an appropriate relationship with nearby heritage items and conservation areas.</p>
3: Density	<p>The building is of an appropriate density and scale and is consistent with the GFA controls in the Concept Plan.</p> <p>The proposed development is close to jobs, shops, services and transport, and benefits from access to the public domain created by the renewal of the greater Barangaroo area.</p> <p>All units exceed the minimum internal areas nominated by the ADG, providing a sufficient level of residential amenity. Further discussion of the consistency of the apartments with</p>

	<p>the design criteria in the Apartment Design Guide is contained in <b>Section 6.6</b> and <b>Table 5</b>.</p>
4: Sustainability	<p>The proposed development benefits from Barangaroo South’s precinct sustainability initiatives, including the district cooling plant, on-site renewables and generation strategy and precinct recycled water plant.</p> <p>Barangaroo South has a number of sustainability targets including a carbon neutral precinct, positive water impact through the use of potable water, zero net waste to landfill by 2020, 20% reduction in embodied carbon (cradle to gate), on site renewables to offset public realm and recycled water treatment plant energy use, Green Star Multi Unit Residential Design and as-built ratings for all eligible buildings.</p> <p>A BASIX certificate was provided for the building which demonstrate the proposed development meets the BASIX water, thermal and energy efficiency targets.</p>
5: Landscape	<p>The proposal includes communal open space on podium Level 2 and the Level 26 rooftop and public domain improvements (see <b>Sections 6.4</b> and <b>6.6</b>). The landscaped design will provide a high level of amenity for residents, employees and visitors and ties into the overall landscaping of the Barangaroo precinct.</p>
6: Amenity	<p>The proposed building is consistent with the principles of SEPP 65 and satisfies the intent of the ADG in terms of achieving a high level of residential amenity for future residents (see <b>Section 6.6</b> and the <b>Table 5</b>).</p> <p>The proposed apartments will achieve satisfactory levels of solar access to living areas, natural ventilation and privacy. Inconsistencies with the ADG are discussed in <b>Section 6.6</b>.</p>
7: Safety	<p>The proposal provides passive surveillance through balconies and windows that front the public domain.</p> <p>The principle building entrances are identifiable and have secure access and CCTV.</p> <p>An Independent Crime Prevention Consultancy report submitted with the application concludes the drawings reflect architectural understanding and application of ‘Crime Prevention Through Environmental Design’ (CPTED) in the design of ground level, podium and shared basement.</p>
8: Housing diversity and social interaction	<p>The proposal provides a mix of apartment sizes to meet a range of housing needs in close proximity to public transport and employment opportunities.</p> <p>The proposal includes affordable housing in the form of 1 and 2-bedroom apartments to cater for key workers.</p> <p>Communal open space provided includes an external landscaped garden on Podium Level 2 for KWH residents and the Level 26 rooftop area for non-KWH residents.</p>
9: Aesthetics	<p>The proposed building is of a slender design with a glass façade which focuses on views towards the harbour and iconic buildings near the harbour. The building is of a design that is consistent and complimentary to those in the surrounding area, particularly Buildings R4A and R4B, and the Crown Sydney Hotel Resort.</p> <p>Overall, the proposed building demonstrates a high standard of architectural design that achieves design excellence. The architectural detail responds appropriately to the site’s opportunities and constraints and relates suitably to the adjacent areas of public domain.</p>



The Department has provided an assessment of the proposal against the ADG best practice design principles in **Table 5**.

**Table 5** | Consideration of the relevant provisions of the Apartment Design Guide under SEPP 65

ADG – Relevant Criteria	Proposal
<p><b>3B Orientation</b></p> <ul style="list-style-type: none"> <li>Building type/layouts respond to streetscape, optimising solar access.</li> <li>Overshadowing of neighbouring properties is minimised during mid-winter.</li> </ul>	<ul style="list-style-type: none"> <li>The proposed building is consistent with the Concept Plan.</li> <li>The shadow analysis indicates that all shadows cast by the proposed building remain within the extent of building envelope shadows approved under the Concept Plan and the Department therefore considers the proposal acceptable in this regard.</li> </ul>
<p><b>3C Public Domain Interface</b></p> <ul style="list-style-type: none"> <li>Transition between public/private without compromising security.</li> <li>Amenity of public domain is retained and enhanced.</li> </ul>	<ul style="list-style-type: none"> <li>Council objected that the interface of the development with the public domain (including Hickson Park) is not adequately addressed.</li> <li>However, the Department considers the interface is adequate for the following reasons: <ul style="list-style-type: none"> <li>active frontages are provided at all street frontage</li> <li>residential lobbies and retail entries are easily identifiable</li> <li>the landscaping provided around the building will enhance the quality of the public domain.</li> </ul> </li> <li>This matter is further discussed in <b>Section 6.4</b>.</li> </ul>
<p><b>3D Communal and Public Open Space</b></p> <ul style="list-style-type: none"> <li>minimum 25% of the site.</li> <li>minimum 50% direct sunlight to principal usable part of the communal open space for a minimum of 2 hours in mid-winter.</li> <li>Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting.</li> <li>Communal open space is designed to maximise safety.</li> <li>Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood.</li> </ul>	<ul style="list-style-type: none"> <li>452.5 m<sup>2</sup> provided (25.8%), which exceeds 25% of the 1753 m<sup>2</sup> site area, which includes useable and landscaped open space.</li> <li>Podium Level 2 contains 247.4 m<sup>2</sup> of communal open space for KWH, and the Level 26 terrace contains 205.1 m<sup>2</sup> of non-KWH communal open space.</li> <li>The Level 26 communal open space would be protected from wind conditions by a step in the building height.</li> <li>0.2% of the Podium Level 2 area and 10.7% of the Level 26 terrace area will receive direct sunlight for 2 hours in mid-winter. However, the Department considers this is acceptable as the intent of the ADG objectives are met, as discussed in <b>Section 6.6</b>.</li> </ul>
<p><b>3E Deep soil zones</b></p> <ul style="list-style-type: none"> <li>For sites greater than 1500 m<sup>2</sup>, a minimum of 7% of the site with a minimum dimension of 6 m should provide for deep soil zone(s)</li> </ul>	<ul style="list-style-type: none"> <li>No deep soil area has been provided, however the ADG recognises achieving this design criteria may not be possible in the CBD, in high density areas, where there is 100% site coverage or where non-residential uses are at the ground floor. Refer to <b>Section 6.6</b> for further discussion.</li> </ul>
<p><b>3F Visual privacy</b></p> <ul style="list-style-type: none"> <li>Separation distances from building to boundary:</li> </ul>	<ul style="list-style-type: none"> <li>18 m separation has been provided between the R5 and R4B building envelopes, which is less than the 24 m recommended by the ADG.</li> </ul>

Height	Habitable rooms	Non-habitable rooms
Up to 12m (4 storeys)	6 m	3 m
Up to 25m (5-8 storeys)	9 m	4.5 m
Over 25m (9+ storeys)	12 m	6 m

- Separation distances between buildings on the same site should combine required building separations depending on the type of room. A minimum 18 m separation is therefore required between the proposed towers up to eight storeys and a minimum 24 m separation is required above nine storeys.
- Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space.

- The proposed building is consistent with the Concept Plan (as modified), which requires a lesser building separation than the ADG.
- Condition B5 of the Concept Plan requires compliance with the Barangaroo South Design Controls (Design Controls). As detailed in **Section 6.6**, the proposed building separation distances comply with the requirements contained in the Design Controls.

### 3G Pedestrian Access to Entries

- Building entries and pedestrian access connects to and addresses the public domain.
- Access, entries and pathways are accessible and easy to identify.
- Large sites provide pedestrian links for access to streets and connection to destinations.
- Entries and pedestrian access connect to and addresses the public domain.
- Entries are well located, designed and easily identifiable.
- The proposal includes pedestrian links through the podium connecting surrounding public domain and streets.

### 3H Vehicle access

- Vehicle access points are to be designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes.
- A single vehicular access point from Watermans Quay to the Stage 1B car park was approved under SSD 6960. A single vehicular access point will minimise the potential for pedestrian/vehicular conflicts.
- Appropriate sight lines are achieved.

### 3J Bicycle and Car Parking

- Minimum parking requirement as set out in the Guide to Traffic Generating Developments or local Council requirement, whichever is the less.
- Parking and facilities are provided for other modes of transport.
- Car park design and access is safe and secure.
- Visual and environmental impacts of underground car parking are minimised.
- 134 car parking spaces are proposed for the non-KWH units, which is less than the maximum amount of car parking (171 spaces) for these units permitted under the Concept Plan.
- No car parking is proposed for KWH, however the Department considers the development can reasonably provide this, and recommends a condition that this be provided. This matter is discussed further in **Section 6.7**.
- Non-KWH units would utilise individual storage cages in the shared basement, which provide sufficient space for both general storage and bicycles, including the additional 1.08m<sup>3</sup> of storage volume recommended by Australian Standards – refer to **Section 6.7**.
- KWH would utilise a communal bicycle parking storage area at the basement level immediately below ground floor, with one space provided for each unit.
- Bicycle parking for non-residential uses will be located in the public domain.
- 100 visitor bicycle parking spaces will be provided as part of the approved public domain works, comprising standard Council bicycle

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racks or spaces mounted on smart poles (along Watermans Quay and Barangaroo Avenue).

- End-of-trip facilities for non-residential uses are provided in the basement.
  - All car parking would be provided in the basement, which will therefore be secure.
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#### 4A Solar and Daylight Access

- To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.
  - Minimum of 70% of apartments' living rooms and private open spaces receive 2hrs direct sunlight between 9 am -3 pm in mid-winter in the Sydney Metropolitan Area.
  - Maximum of 15% of apartments have no direct sunlight between 9 am - 3 pm in mid-winter.
  - Daylight access is maximised where sunlight is limited.
  - Design incorporates shading and glare control, particularly for warmer months.
  - The Applicant provided further information in the RRTS in response to Council's comment that the Solar and Daylight Access Study does not show every floor of the building and confirmed 146 (70%) of the 210 apartments receive 2 hours direct sunlight between 9 am – 3 pm on June 21.
  - The number of units with no direct sunlight between 9 am – 3 pm in mid-winter is 25 (12%).
  - Therefore, despite Council's concerns the Department considers the development consistent with the ADG recommendation.
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#### 4B Natural Ventilation

- At least 60% of apartments are cross ventilated in the first nine storeys (apartments 10 storeys or greater are deemed to be cross ventilated).
  - Overall depth of a cross-over or cross-through apartment does not exceed 18m.
  - Over the first 9 levels of the building, 31 units (50%) would be naturally cross ventilated. A further 8 units would be provided with ventilation ducting to achieve cross ventilation. This would result in 39 units (62.9%) being cross ventilated, achieving consistency with the recommendation. This matter is discussed further at **Section 6.6**.
  - Units at 10 storeys or greater are deemed to be cross ventilated where balconies cannot be fully enclosed. The building contains balconies that cannot be fully enclosed and therefore all units at 10 storeys or greater comply with this requirement.
  - Overall depths do not exceed 18 m.
- 

#### 4C Ceiling Heights

Measured from finished floor level to finished ceiling level, minimum ceiling heights are:

- Habitable rooms 2.7 m
  - Non-habitable rooms 2.4 m.
  - Ceiling heights meet or exceed the recommended minimums.
- For two-storey apartments:
- 2.7 m for main living area floor
  - 2.4 m for second floor, where its area does not exceed 50% of the apartment area.
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#### 4D Apartment Size and Layout

- Minimum apartment sizes
    - Studio 35 m<sup>2</sup>
    - 1 bedroom 50 m<sup>2</sup>
    - 2 bedroom 70 m<sup>2</sup>
    - 3 bedroom 90 m<sup>2</sup>.
  - All apartments, including bedrooms and living rooms, meet the minimum size requirement.
  - The proposal is consistent with the remainder of these recommendations, with the exception of those discussed below.
  - The living room of 25 units (12%) is 3.4 m wide and therefore does not achieve the 3.6 m minimum.
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- Every habitable room must have a window in an external wall with a total glass area of not less than 10% of the floor area. Daylight and air may not be borrowed from other rooms.
- Habitable room depths are limited to 2.5 x the ceiling height.
- In open plan layouts the maximum habitable room depth is 8m from a window.
- Master bedroom have a minimum area of 10 m<sup>2</sup> and other bedrooms have 9 m<sup>2</sup>.
- Bedrooms have a minimum dimension of 3m (excluding wardrobes).
- Living rooms have a minimum width of:
  - 3.6 m for studio and one bed
  - 4 m for 2 and 3 bed.
- The width of cross-over or cross-through apartments are at least 4m internally.
- 25 units (12%) have open plan living areas which extend to a depth of 8.2 m measured from the window to the back wall of the living area, exceeding the ADG requirement of 8 m (a 2.5% inconsistency).
- The Department considers these inconsistencies with the ADG recommendations would not adversely impact on the amenity of the proposed units, as discussed in **Section 6.6**.

#### 4E Private Open Space and Balconies

- Primary balconies are provided to all apartments providing for:
  - Studios apartments min area 4 m<sup>2</sup>
  - 1-bedroom min area 8 m<sup>2</sup> min depth 2m
  - 2-bedroom min area 10 m<sup>2</sup> min depth 2m
  - 3-bedroom min area 12 m<sup>2</sup> min depth 2.5m.
- For apartments at ground floor level or similar, private open space must have a minimum area of 15 m<sup>2</sup> and depth of 3 m.
- Private open space and primary balconies are integrated into and contribute to the architectural form and detail of the building.
- Primary open space and balconies maximises safety.
- 25 units propose a balcony size of 9.2 m<sup>2</sup>. This 0.8 m<sup>2</sup> inconsistency with the 10 m<sup>2</sup> requirement is considered acceptable as the intent of the requirement is achieved. See **Section 6.6** for further discussion.
- Dedicated open space has been provided for KWH on Podium Level 2 and for non-KWH on Rooftop Level 26.
- No ground floor units are proposed.
- All balconies are integrated into the architectural form/detail of the building.
- Balcony design avoids opportunities for climbing and falls.

#### 4F Common circulation and spaces

- Maximum number of apartments off a circulation core is eight (or no more than 12 apartments).
- For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40.
- Natural ventilation is provided to all common circulation spaces where possible.
- Common circulation spaces promote safety and provide for social interaction between residents.
- Longer corridors are articulated.
- A maximum of eight apartments is proposed on any floor.
- The 210 apartments would be serviced by 3 lifts. One lift would service the 48 KWH apartments, whilst 2 lifts would service the 162 non-KWH apartments, which is inconsistent with the requirements.
- The Applicant has submitted a Lift System and Performance Analysis that notes the ADG has been created for medium rise buildings of 10 to 20 storeys and the proposed building is therefore taller than the buildings the ADG design criteria is based upon. The analysis concludes the lifts will result in a high quality of service providing equal or better performance than international benchmarks for luxury apartment buildings.
- The Department notes that while the ADG nominates the tipping point from one to two passenger lifts, it does not nominate the



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minimum lift requirements for lifts in groups of two or more.

- The Department considers this inconsistency acceptable and also comparable to the approved Buildings R4A and R4B, as discussed in **Section 6.6**.
- The corridors on each level allow the maximum number of units to have a suitable level of amenity. Natural ventilation and light are provided to the residential internal corridor/circulation areas.
- The residential lobbies and circulation spaces provide opportunities for interaction.
- The corridors are a suitable length.

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#### 4G Storage

- The following storage is required (with at least 50% located within the apartment):
  - Studio apartments 4 m<sup>3</sup>
  - 1-bedroom apartments 6 m<sup>3</sup>
  - 2-bedroom apartments 8 m<sup>3</sup>
  - 3-bedroom apartments 10 m<sup>3</sup>
- Additional storage is conveniently located, accessible and nominated for individual apartments.

- The proposed internal and basement storage cages can accommodate the recommended storage area. The external storage is located in the basement below the building and is therefore accessible.
- The basement storage cages include bicycle storage. The ADG requires the provision of secure undercover bicycle storage but does not specify the required dimensions for storage. The Australian Standards recommends 1.08m<sup>3</sup> for bicycle storage, which is met for non-KWH units.

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#### 4H Acoustic Privacy and 4J Noise Pollution

- Noise transfer is minimised through the siting of buildings and building layout and minimises external noise and pollution.
- Noise impacts are mitigated through internal apartment layout and acoustic treatments.

- Noise transfer would continue to be minimised through the appropriate layout of the building.
- Apartments are appropriately stacked and laid out to prevent noise transfer.

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#### 4K Apartment Mix

- Provision of a range of apartment types and sizes.
- Apartment mix is distributed to suitable locations within the building.

A variety of types and sizes would be provided within the 210 units, as outlined below.

The 162 non-KWH apartments would be comprised of:

- 69 x 1-bedroom apartments (42%)
- 62 x 2-bedroom apartments (38%)
- 30 x 3-bedroom apartments (19%)
- 1 x 4-bedroom apartments (1%)

The 48 KWH apartments would be comprised of:

- 34 x 1-bedroom apartments (71%)
- 14 x 2-bedroom apartments (29%)

A range of apartment types and sizes would be provided, and the apartments would be logically located within the building.

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#### 4L Ground floor apartments

- Street frontage activity is maximised where ground floor apartments are located.
- Design of ground floor apartments delivers amenity and safety for residents.

- There are no ground floor apartments.

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#### 4M Facades

- Building facades provide visual interest along the street while respecting the character of the local area.
- Building functions are expressed by the façade.
- The proposed facades are of a high standard of design and will positively contribute to the Barangaroo precinct and city skyline.
- The retail and residential uses are externally expressed in the design of the building.

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#### 4N Roof design

- Roof treatments are integrated into the building design and positively respond to the street.
- Opportunities to use roof space for accommodation and open space is maximised.
- Roof design includes sustainability features.
- The roof design is architecturally expressed and visually interesting.
- The roof comprises a glazed 'fringe', which is an extension of the main curtain walls. The proposed roof features conceal roof plant and services.
- Podium Level 2 contains the communal open space for KWH, and the Level 26 terrace contains the non-KWH communal open space.
- The drainage design proposes to capture and convey rainwater from roof and podium areas through conventional gutters, roof top drainage outlets and associated downpipes, with no physical impact on existing infrastructure as a result of the development.

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#### 4O Landscape design

- Landscape design is viable and sustainable.
- Landscape design contributes to the streetscape and amenity.
- Appropriate soil profiles are provided and plant growth is maximised (selection/maintenance).
- Plant growth is optimised with appropriate selection and maintenance.
- Building design includes opportunity for planting on structure.
- The proposes landscaping works include paving immediately surrounding the building and landscaping on Podium Level 2 and the Level 26 rooftop.
- The communal area for KWH at Podium Level 2 and non-KWH communal area at Level 26 include landscaped areas in raised planter beds, with outdoor furniture, as discussed in **Section 6.6**.
- The ground level and public domain landscaping would be consistent with the design of the approved Stage 1B public domain works (SSD 7944).
- The Department considers the landscaping adequate and recommends a condition requiring further landscaping details to be provided prior to obtaining a relevant Construction Certificate.
- Landscaping is further discussed in **Section 6.4**.

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#### 4P Planting on structures

- Appropriate soil profiles are provided.
- Plant growth is optimised with appropriate selection and maintenance.
- Planting on structures contributes to the quality and amenity of communal and public open spaces.
- Appropriate soil profiles are provided for planting on slabs.
- Submission of further details on selected plants prior to the issue of a Construction Certificate will ensure plants are tolerant for growing in planters and on rooftops.
- The proposed planting will contribute to the quality and amenity of communal open space and the public domain.

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#### 4Q Universal design

- Universal design features are included in apartment design to promote flexible housing for all community members (Developments achieve a benchmark of 20% of the total apartments
- The proposal is capable of complying with the requirements for universal design. All apartments are of a size and layout that allows for flexible use and design and therefore can accommodate a range of lifestyle needs.
- The Department proposes a condition requiring 20% of apartments to incorporate the Living

<p>incorporating the Livable Housing Guidelines silver level universal design features).</p> <ul style="list-style-type: none"> <li>• A variety of apartments with adaptable designs are provided.</li> <li>• Apartment layouts are flexible and accommodate a range of lifestyle needs.</li> </ul>	<p>Housing Guideline’s silver level universal design features.</p>
<p><b>4S Mixed use</b></p> <ul style="list-style-type: none"> <li>• Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement.</li> <li>• Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents.</li> </ul>	<ul style="list-style-type: none"> <li>• The development appropriately addresses the surrounding streets and public domain through active retail frontages and residential entries.</li> <li>• Residential circulation areas are clearly defined and access to communal open space is provided. Adequate building security is proposed.</li> </ul>
<p><b>4T Awning and Signage</b></p> <ul style="list-style-type: none"> <li>• Awnings are well located and complement and integrate with the building.</li> <li>• Signage responds to the context and design streetscape character.</li> </ul>	<ul style="list-style-type: none"> <li>• Glass awnings are proposed at the podium level, appropriately located at the main residential and retail entrances, and are incorporated into the overall building design, consistent with the approved Buildings R4A and R4B.</li> <li>• Signage zones comply with SEPP 64.</li> <li>• The Applicant will be required to submit an application for future signage within the signage zones.</li> </ul>
<p><b>4U Energy Efficiency</b></p> <ul style="list-style-type: none"> <li>• Development incorporates passive environmental and solar design.</li> <li>• Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer.</li> <li>• Adequate natural ventilation minimises the need for mechanical ventilation.</li> </ul>	<ul style="list-style-type: none"> <li>• The development meets BASIX thermal and energy efficiency targets.</li> <li>• The building and its individual apartments have been orientated to maximise solar access and achieve natural ventilation.</li> <li>• The proposed development benefits from Barangaroo South’s precinct sustainability initiatives, including the district cooling plant, on-site renewables and generation strategy.</li> <li>• Barangaroo South has a number of sustainability targets including a carbon neutral precinct, zero net waste to landfill by 2020, 20% reduction in embodied carbon (cradle to gate), on site renewables to offset public realm, and Green Star Multi Unit Residential Design and As-Built ratings for all eligible buildings.</li> </ul>
<p><b>4V Water management and conservation</b></p> <ul style="list-style-type: none"> <li>• Potable water use is minimised.</li> <li>• Urban stormwater is treated on site before being discharged to receiving waters.</li> <li>• Flood management systems are integrated into site design.</li> </ul>	<ul style="list-style-type: none"> <li>• The development meets BASIX water targets.</li> <li>• The proposed development benefits from Barangaroo South’s precinct sustainability initiatives, including onsite wastewater treatment and water recycling, capacity to export recycled water and sewer mining to reduce demand.</li> <li>• The drainage design proposes to capture and convey rainwater from roof and podium areas through conventional gutters, roof top drainage outlets and associated downpipes, with no physical impact on existing infrastructure as a result of the development.</li> </ul>

#### 4W Waste Management

- Waste storage facilities are designed to minimise impacts on streetscape, building entry and residential amenity.
- Domestic waste is minimised by providing safe and convenient source separation and recycling.
- Residential and retail waste storage rooms are located at basement level, which is considered convenient.
- Separate waste and recycling containers will be provided.

#### 4X Building maintenance

- Building design detail provides protection from weathering.
- Systems and access enable ease of maintenance.
- Material selection reduces ongoing maintenance costs.
- The building has been appropriately designed to allow ease of maintenance.
- The materials are robust.

The intent of the ADG is to help achieve better design and planning for residential apartment buildings including improving liveability through enhanced internal and external residential amenity. As such, the Department considers it appropriate to assess how each unit type responds to a combination of the key criteria to ensure all proposed unit types achieve an overall acceptable level of amenity (see **Section 6**).

An analysis has been undertaken for each proposed unit type based on 14 ADG design criteria specific to individual units (see **Table 6** below).

**Table 6** | ADG unit type amenity analysis

Unit type		No. of units	Design Criteria Achieved		Average %
1 bed	PO502 & LA502	15	89%	12.5/14	91.6%
	MA502 & LO502	3	93%	13/14	
	UA502	8	93%	13/14	
	PO503 & LA503	15	93%	13/14	
	MA503 & LO503	3	100%	14/14	
	UA503	8	100%	14/14	
	PO504	1	93%	13/14	
	LA504	14	93%	13/14	
	MA504	2	100%	14/14	
	LO504 & UA504	9	100%	14/14	
	LA507, MA507, LO507 & UA507	25	84%	11.7/14	
2 bed	LA505 & LA505A	14	86%	12/14	92.5%
	MA505 & LO505	3	86%	12/14	
	UA505 & UA505A	8	86%	12/14	
	LA506, MA506, LO506 & UA506	25	93%	13/14	

	PO506, LA508, MA508 & LO508	26	98%	13.7/14	
3 bed	PO501, LA501, MA501, LO501 & UA501	26	100%	14/14	100%
	PO505	1	100%	14/14	
	DA502	1	100%	14/14	
	DA504	1	100%	14/14	
4 bed	DA501	1	100%	14/14	100%
	DA503	1	100%	14/14	

\* ADG design criteria reviewed: apartment size, private open space size, private open space depth, master bedroom size, secondary bedroom size, minimum bedroom dimensions, minimum habitable room depth, minimum living room width, storage (internal and external), solar access (two hours in mid-winter), solar access (any in mid-winter), natural cross ventilation, floor to ceiling heights.

### Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SHC SREP)

The SHC SREP provides planning principles for development within the Sydney Harbour catchment. The site is located within the Sydney Harbour Catchment area and is in the foreshores and waterways area. No items of heritage significance are identified within or immediately near the site.

#### Aims of the plan

The proposal is consistent with the aims of the plan as it:

- would not adversely affect the catchment, foreshores and waterways of Sydney Harbour or access to the harbour and its foreshores
- would not have adverse environmental impacts, subject to the Department's recommended conditions.

#### Matters for consideration

The proposal is consistent with the relevant matters for consideration for land within the foreshores and waterways area as it would not:

- have any adverse impacts on the biodiversity or ecology of the area
- impact on public access and use of the foreshore
- reduce the capacity of Sydney Harbour to function as a working harbour
- have adverse impacts on the use of the waterways
- detract from the scenic quality of the foreshore and waterway, or views to and from Sydney Harbour given the development is consistent with the controls in the Concept Plan, as discussed in **Section 6**.

#### Foreshores and Waterways Planning and Development Advisory Committee

The proposal is a type referred to in Schedule 2 of the SHC SREP and therefore the Department referred the application to the Committee under clause 29 of the SHC SREP. The Committee did not object to the proposal as it is generally consistent with the vision of the Barangaroo development. The Department therefore considers the proposal acceptable in this regard.

#### Strategic Foreshore Sites

The site is identified as a 'Strategic Foreshore Site' on 'Sheet 1 - City Foreshores Area' of the Strategic Foreshore Sites Map. Clause 41 of the SHC SREP states that development consent must not be granted for the carrying out of development on a strategic foreshore site unless there is a master plan for the site, and the consent authority has taken the master plan into consideration.



The Department considers that the proposal is generally consistent with the relevant land use and general master planning provisions contained within the Barangaroo Concept Plan, as identified in **Section 6** of this report.

### **Draft State Environmental Planning Policy (draft SEPP Environment)**

The Explanation of Intended Effect for the Environment SEPP was exhibited until 31 January 2018. The Environment SEPP proposes to simplify the planning rules for the protection and management of the natural environment by consolidating seven existing SEPPs, including the SHC SREP.

The relevant matters for consideration and the general provisions relating to Sydney Harbour are proposed to remain in accordance with those in the current SHC SREP and therefore the proposed development would be consistent with the intended effect of the Environment SEPP.

The Sydney Harbour Foreshores and Waterway Area DCP 2005 is proposed to be transitioned into one or more guidelines that would cover the current content and provide updated guidance to consent authorities based on design principles and landscape character, however these guidelines are not currently in draft form.

### **Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005**

The Sydney Harbour Foreshore and Waterways Area Development Control Plan (the DCP) complements the SHC SREP and provides more detailed design parameters for development within the foreshore area of Sydney Harbour.

The site is within the defined Foreshores and Waterways Area under the SHC SREP and is therefore subject to the controls in the DCP. The DCP includes aims and performance criteria in relation to ecological assessment, landscape assessment, and design guidelines for development within the area.

The location of the building is not affected by any ecological or specific landscape character area (Part 2 and Part 3), and due to the existing Concept Approval, the design guideline provisions are not relevant to this application. Additionally, as the development is contained within the Barangaroo site and would be separated from the water's edge by another building (the Crown Sydney Hotel Resort), future Barangaroo Avenue alignment and the public foreshore boardwalk, it would not result in any significant impacts to the harbour foreshore.

The Department considers the proposal to be generally consistent with the DCP regarding landscaping, access to waterways, built form and visual impacts.

## Appendix D – Consistency with the Concept Approval

An assessment of the proposal against the relevant Concept Plan requirements, Modifications and Future Assessment Requirements of the Concept Approval is provided in **Table 7** below.

Consideration of the Barangaroo Concept Plan Built Form Principles is provided in **Table 8** and Barangaroo Urban Design Controls in **Table 9**.

**Table 7** | Consideration of the relevant requirements, Modifications and Future Assessment Requirements of the Concept Approval

Concept Approval	Department's comment
<b>Term of Approval</b>	
<b>A4 Determination of Future Applications</b>	
Determination of future applications is to be generally consistent with the terms of Concept Plan MP06_0162.	The proposal is generally consistent with the terms of Concept Plan MP06_0162 (as modified by MOD 8).
<b>Modifications to Concept Plan</b>	
<b>B4 Built Form</b>	
<p>1. A mixed use development involving a maximum of 594,354 m<sup>2</sup> gross floor area (GFA), comprised of:</p> <ul style="list-style-type: none"> <li>a) a maximum of 183,031 m<sup>2</sup> of residential GFA of which a maximum of 154,031 m<sup>2</sup> will be in Barangaroo South</li> <li>b) a maximum of 76,000 m<sup>2</sup> of GFA for tourist uses of which a maximum of 59,000 m<sup>2</sup> will be in Barangaroo South</li> <li>c) a maximum of 34,000 m<sup>2</sup> of GFA for retail uses of which a maximum of 30,000 m<sup>2</sup> will be in Barangaroo South</li> <li>d) a maximum of 5,000 m<sup>2</sup> of GFA for active uses in the Public Recreation zone of which 3,500 m<sup>2</sup> will be in Barangaroo South</li> <li>e) a minimum of 12,000 m<sup>2</sup> GFA for community uses.</li> </ul> <p>2. GFA requirements for Block 4B:</p> <ul style="list-style-type: none"> <li>• Block 4B shall not exceed a maximum of: <ul style="list-style-type: none"> <li>○ Total GFA: 19,158 m<sup>2</sup></li> <li>○ Residential GFA: 18,287 m<sup>2</sup></li> <li>○ Height (Max AHD): RL 107</li> <li>○ Height above existing ground level (m): 173</li> </ul> </li> </ul> <p>3. Future development applications for buildings within Blocks 2, 3, 4A and 4B and Y, may accommodate a redistribution of GFA (but not in excess of the total GFA for those blocks) resulting from the Urban Design Controls identified in Modification B9.</p> <p>4. Wintergardens may be excluded from the maximum residential GFA stipulated for Blocks 4A, 4B and Block Y, subject to compliance with the revised Built Form Principles and Urban Design Controls required to be prepared in accordance with Mod B9(4).</p>	<p>1. The proposal complies with the maximum GFA requirements, comprised of:</p> <ul style="list-style-type: none"> <li>a) total residential GFA of 18,287 m<sup>2</sup></li> <li>b) N/A</li> <li>c) total retail GFA: 871 m<sup>2</sup></li> <li>d) N/A</li> <li>e) N/A.</li> </ul> <p>The proposal is equal to the maximum requirement and therefore consistent.</p> <p>No redistribution sought.</p> <p>Partially enclosed balconies are proposed, which would be excluded from the GFA calculations.</p>

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## B5 Revised Design Principles

Future applications in Barangaroo South are to demonstrate consistency with the Built Form Principles and Urban Design Controls within the supplementary Urban Design Statement by Rogers Stirk Harbour and Partners (February 2015) as amended by the required modifications as outlined in Mod B9.

The proposal is generally consistent with the Built Form Principles and Urban Design Controls (Design Controls) as amended by MOD 8. See **Tables 8 and 9**.

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## B9 Envelope Amendments and Built Form Controls

The Built Form Principles and Urban Design Controls shall be modified in accordance with the requirements of the Concept Plan and submitted prior to determination for new above ground works on Block Y.

The revised Design Controls have been modified in accordance with this condition and have been approved by the Department.

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## B11 Key Worker Housing

Key worker housing for Barangaroo South shall be provided in accordance with Statement of Commitment 34 and comprise at least:

- a) 2.3% of residential GFA onsite within Barangaroo South
- b) At least an additional 0.7% of the residential GFA of Barangaroo South, or its equivalent development value (but comprising at least a minimum of 1,740 m<sup>2</sup> of residential GFA) to be provided:
  - i. Offsite, but within 5 km of the site, or elsewhere within the City of Sydney LGA;
  - ii. Including at least 40% of the GFA allocated to dwellings comprising 2 or more bedrooms;
  - iii. Prior to the issue of any Occupation Certificate for Blocks 4A, 4B or Y.

48 Key worker housing units are proposed to be delivered as part of this application.

a) 3301 m<sup>2</sup> is proposed, which exceeds the 2.3% requirement (3299 m<sup>2</sup>) of the 143,443 m<sup>2</sup> of residential GFA in Barangaroo South.

b) The Applicant states an independently administered Expression of Interest will be run to determine a suitable location for the provision of KWH off-site.

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## B12 Staging

Prior to the issue of any occupation certificate within Block 4A, 4B or Y, the foreshore promenade (to the full extent mapped in the SEPP Amendment), pier, Watermans Cove and Hickson Park (other than the temporary construction road corridor on the alignment of the former Barton Street) shall be constructed, landscaped and publicly accessible.

SSD 7944 has been approved for the foreshore promenade, pier, Watermans Cove and Hickson Park. The consent includes a condition requiring these works to be completed and publicly accessible prior to the issue of any Occupation Certificate for the proposed building.

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## Future Assessment Requirements

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### C2 Design Excellence

1. This provision applies to the following development:
  - a) The erection of a new building that will be greater than Reduced Level (RL) 57,
  - b) The erection of a new building on a site greater than 1,500 square metres.
2. The Proponent shall hold a design excellence competition for all development identified at (1) above.
3. The design competition brief shall be approved by the Director General or his delegate.
4. The Director General shall establish a design review panel for the design excellence competition(s) that will consider whether the proposed development exhibits design excellence.
5. The design review panel shall also be utilised for any significant changes to the Concept Plan, as determined by the Director General.

1. The proposal is greater than RL 57 and occupies a site greater than 1500 m<sup>2</sup>.
2. The proposal held a design excellence competition, however it does not accord with Future Assessment Requirement C2 (3), (4) and (6).
3. Due to the excellence of the proposed design, the Department recommends the Executive Director, Compliance, Industry and Key Sites (as delegate of the Secretary) waive the requirement for the Applicant to undertake a design excellence competition (**Appendix F**). Design excellence is further discussed in **Section 6**.

6. For the purposes of this modification, a *design review panel* means a three to five member panel comprised of appropriately qualified design professionals, chaired by a registered architect.
7. Notwithstanding (2) above, the requirement for a design excellence competition may be waived if the Director General:
  - a) certifies in writing that the development is one for which an architectural design competition is not required because of the excellence of the proposed design for the development concerned, and
  - b) is satisfied that:
    - i) the architect responsible for the proposed design has an outstanding reputation in architecture, and
    - ii) necessary arrangements have been made to ensure that the proposed design is carried through to the completion of the development concerned.

#### C4 Car Parking

1. The following maximum car parking rates shall apply to future development within the site:
  - b) Residential:
    - 1 bed/bedsit unit – 1 space/2 units
    - 2 bed unit – 1.2 spaces/unit
    - 3+ bed unit – 2 spaces/unit
  - c) Other Uses: City of Sydney Council rates

The proposal complies with the car parking controls and proposes:

- a) Residential: 134 spaces
- b) Other Uses: 0 spaces (retail).

Overall, the proposed maximum of 134 car parking spaces is 71 spaces less than the maximum 205 permitted under the Concept Plan, comprised of a maximum 171 for non-KWH and 34 for KWH.

No car parking is proposed for KWH, however the Department considers the development can reasonably provide this, and recommends a condition that this be provided. This matter is discussed further in **Section 6.7**.

#### C7 Pedestrian Linkages, Activation of Streets and Public Domain

Does the proposal protrude above buildings, structures or tree canopies in the area or locality?

The development includes appropriate internal through site links.

#### C12 Wind Assessment Report

A wind assessment report is to accompany all future development application/s (for above-ground works) and is to incorporate specific mitigation measures into the design of the building and public domain.

A Wind Assessment Report was included with the applications and recommends mitigation measures to address wind impacts (see **Section 6**).

#### C13 Lighting Strategy

A Preliminary Lighting Strategy is to be submitted for all future applications for above-ground works. The strategy is to:

- a) be prepared in consultation with the Sydney Observatory;
- b) include, but not be limited to, an assessment of potential impact on the Sydney Observatory; and
- c) is to recommend relevant mitigation measures to minimise any adverse lighting impacts to neighbouring properties.

A Sky View Assessment was included with the application. The assessment had regard to the potential impact on the Sydney Observatory and concludes the potential impacts to be acceptable, noting sky targets around the area obstructed by the proposed building would be under conditions far from ideal and the image quality would be poor on most nights. Light spill mitigation measures are included in the design including:

- minimising brightly lit surfaces
- fitting luminaries with light shields

- minimising the amount of upward directional lighting.

### C15 Airspace

The Proponent shall ensure that for all future development applications involving the erection of a building, all necessary approvals are obtained under the *Airports (Protection of Airspace) Regulations 1996*, where required.

As outlined in **Section 5**, Sydney Airport did not object to the development, but stated if approval to operate construction equipment (i.e. cranes) is required for any intrusion into prescribed airspace (RL 156), it should be obtained prior to any commitment to construct. The Department recommends a condition to this effect, to ensure due consideration is given to this matter should it be necessary.

**Table 8** | Consideration of the Barangaroo Concept Plan Built Form Principles

Built form principles	Department's Comment	Consistent?
<h4>1 City's New Western Façade</h4> <p>To create an integrated new western frontage to the city centre, the slender ends of buildings (above podium level) are to be oriented to the waterfront.</p>	<p>The proposed building will assist in creating an integrated new western frontage to the City centre. The towers have been designed to maximise outlook to the park to the north and harbour to the west.</p>	Yes
<h4>2 Hickson Road as a Boulevard</h4> <p>Promote the scale of Hickson Road as a grand boulevard, buildings are to provide a consistent street wall definition to Hickson Road but with variegated massing heights along the street frontage. The corner to the park at R5 wraps around as a marker to Hickson Park and a bookend to Barangaroo South.</p>	<p>The proposed materials are consistent with those of the approved Buildings R4A and R4B and would present as a continuation of the colonnade fronting Hickson Road that has been established in Buildings C1 and C2. The proposed building would act as a marker to Hickson Park and a bookend to Barangaroo South.</p>	Yes
<h4>3 Buildings to Define Streets</h4> <p>To define the public space of the street, all building façades are to be set to the street alignment.</p>	<p>The proposed building façade is set to the street alignment.</p> <p>The building line of the podium would align with Scotch Row, providing a link to the pedestrian thoroughfare through Barangaroo South and into Hickson Park.</p> <p>The façade also includes active uses (i.e. retail outlets) on the ground level, which will address the street and activate public space.</p>	Yes
<h4>4 North South Pedestrian Connections</h4> <p>Provide greater pedestrian permeability through blocks, particularly north south connections between Block 2 to 4, Wulugul Walk and Barangaroo Avenue, and Scotch Row at ground level being not less than 6 m wide, 50% open to the sky and a minimum clear height of 2 storeys. Provide east-west links through Watermans Quay, Shipwright Walk, Mercantile Walk and Exchange Place.</p>	<p>North-south pedestrian connections are provided through the block via the colonnade along Hickson Road, and for the alignment with Scotch Row, as outlined above.</p> <p>The proposal would also provide retail uses along Watermans Quay to activate this east-west link.</p>	Yes
<h4>5 Marking the City Frame</h4>		Yes



To continue a built form dialogue with the adjoining city, building heights across the site are in keeping with the rest of the city, with the highest form at the north of the precinct.	The proposed building complies with the Concept Plan height controls and is higher than the existing buildings to the south along Hickson Road.	
<b>6 Open Space Within Blocks</b>		
To create blocks permeated with laneways, courtyards, walkways and parklands around the edges of blocks. To provide open space at podium level between tower forms.	The proposed building will be confined to the block as determined by the Concept Plan. The key access ways, including the Hickson Road Colonnade and Watermans Quay would be maintained as part of the development.  Public domain works are proposed around the building, to integrate with the approved Stage 1B public domain works (see <b>Section 6</b> ).  Communal open space for residents is proposed at podium level (KWH) and rooftop (non-KWH), as discussed in <b>Section 6</b> .	Yes
<b>7 View Sharing</b>		
To promote the equitable access to views towards the harbour, the built form is to be arranged to define the street corridors and to allow view corridors from the existing private buildings to the east.	The proposed building complies with the Concept Plan building envelopes. As detailed in <b>Section 6</b> , the proposed building will largely preserve the view corridors permitted in the Concept Plan including to existing private buildings to the east.	Yes
<b>8 Orientation of Buildings</b>		
To provide optimum orientation and transparency across the site and to create a silhouette of gaps between slender towers. Orientation of towers to relate to fanning principle. Long facades to face north and buildings facing Hickson Road and the waterfront to be oriented to the east and west to define road and promenade.	The proposed building is slender and would create a silhouette of gaps between it and the surrounding towers.  The orientation and siting of the building (together with Buildings R4A and R4B) is consistent with the fan principle, aligning with the southern side of Hickson Park.  The long façade of the proposed development adjacent to Hickson Road faces east to define the road and promenade, with the building also orientated to the north-west and west to face the harbour.	Yes

**Table 9** | Consideration of the Barangaroo Urban Design Controls

Urban Design Controls (Blocks 4A and 4B)	Department's Comment	Consistent?
<b>1 Building Mass and Location</b>		
<b>Objectives</b>		
Adoption of "fanning principle" for siting of buildings.	The orientation and siting of the building (together with Buildings R4A & R4B) is consistent with the fan principle, aligning with the southern side of Hickson Park.	Yes
To ensure building mass is appropriate within the envelope.	The building is within the envelopes of the Concept Plan.	Yes

The podium shall be low to allow sunlight penetration through the buildings to the public domain.	The building has a podium with a height of RL 17.83 m (14.3 m above ground). The building is positioned to the south of the future Hickson Park and would allow sufficient sunlight to the public domain.	Yes
Building placement to consider existing view corridors from Kent Street buildings.	The Concept Plan considered view corridors from Kent Street when determining the positioning of the building, and the building is positioned in accordance with the Concept Plan (see <b>Section 6</b> ), therefore minimising impacts.	Yes
Ensure views to the sky between all towers from key vantage points	Clear sky views have been maintained between Buildings R4A, R4B and R5.	Yes
Allow balconies on towers to be partially enclosed and not count towards GFA	The building includes partially enclosed balconies, which are excluded from GFA calculations.	Yes

## Standards

The height of towers within the block shall be varied and ascend in height from east to west.	The height of the towers (including the approved Building R4A, R4B) ascend from east to west. Building R4A extends to RL 250, Building R4B extends to RL 210 and Building R5 extends to RL 107.	Yes
All predominant tower massing shall provide a minimum of 27 m separation from the Block Y tower massing.	A compliant minimum separation distance of 27 m is proposed between Building R4A (nearest residential building) and the approved Crown Hotel Sydney Resort (Block Y). This is not affected by Building R5 as it located further from Block Y than Block 4A.	Yes
All predominant tower mass shall be set back from Watermans Quay by a minimum of 2 m.	The building is setback approximately 4.5 m from Watermans Quay, which exceeds the 2 m minimum requirement.	Yes
Podiums may be built on the edge of the envelope on Watermans Quay.	The podium of the building is not built to the edge of the envelope on Watermans Quay for its full length, as it has been amended to align more appropriately with Scotch Row and provide a north-south pedestrian connection to Hickson Park, as required by the Design Controls. See <b>Section 6</b> for further discussion.	No, but considered acceptable
For residential and tourist accommodation with a height over 30m, the maximum external balcony area shall not exceed 15% of the GFA of the apartment or room to which it is connected, and the bulk of the building is not greater than if the balconies were not partially enclosed.	The building is greater than 30 m in height and all balconies are less than 15% of the GFA of the adjoining apartment. The bulk of the building is no greater than it would be if balconies were not partially enclosed.	Yes

## 2 Street Wall Establishment

### Objectives

Ensure the street walls defines Barangaroo Avenue.	Building R5 does not have a frontage to Barangaroo Avenue.	N/A
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Ensure a human scale streetscape.	A human scale streetscape is created through the use of a podium, which will assist in creating a human scale streetscape.	Yes
Podium height to foster a coordinated streetscape and appropriate street level environment.	The proposed podium height of RL 17.83 m is within the maximum podium height of RL 22 m. The podium would incorporate retail uses to activate the streetfront.	Yes

### Standards

Building form to create a street wall with a one storey minimum height for most of the public accessible ground floor façade.	The proposal would create a street wall along Hickson Road and part of Watermans Quay, through the three storey podium that would extend across part of the site.	Yes
All podium street walls define Watermans Quay and Hickson Road.	As noted above, the podium street walls will define Watermans Quay and Hickson Road. A break in the street wall along Watermans Quay has been provided to better align more appropriately with Scotch Row, and the Department considers this would achieve significant public domain and site permeability benefits (see <b>Section 6</b> ).	Yes
Hickson Road street wall will continue the colonnade form existing on Blocks 2 and 3.	A colonnade is provided along the Hickson Road frontage, which aligns with that of Buildings C1 and C2 to the south.	Yes

## 3 Building Articulation

### Objectives

To establish an articulated, well-proportioned building mass.	The proposed building is suitably articulated and provides a well-proportioned building mass, consistent with its role in providing a transition between existing buildings along Hickson Road, Buildings R4A and R4B and the Crown Sydney Hotel and Resort.	Yes
To reduce the impact on the building's mass.	The proposed building has been designed as a slender tower, which is set within the approved building envelope. To further reduce the perceived mass of the building, a range of features have been incorporated into the façade design (see Control 7 – Facades below).	Yes
To ensure the podium and towers in Blocks 4A and 4B are considered as a holistic composition.	The proposed tower (and approved Buildings R4A and R4B) have been designed to form a holistic composition that increases in scale from east to west. The towers have been conceived as three 'crystals' with staggered roof profiles and slim proportions.	Yes

### Standards

The building envelopes and floor plates are to be articulated.	The triangular building footprint is emphasised through the continuation of the façade beyond the internal floor plates. A 'notch' at the north-east corner of the building further accentuates the triangular form and articulation of the building.	Yes
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Tower form is to express sustainability features e.g. access to natural light, ventilation and solar shading.	The building achieves sufficient levels of access to natural light and ventilation.	Yes
Establish complimentary relationship between the tower Blocks in 4A and 4B such as common chassis.	The building has been designed with a common design language and the same structural design as Buildings R4A and R4B.	Yes
Vertical articulation and breaks are encouraged to minimise perceived building mass.	The verticality of the building is enhanced by its slender form and narrow pattern of fenestration which together with the corner notch, and the maintenance of sky views between the nearby towers, will assist in minimising the perceived building mass.	Yes
Horizontal articulation and breaks are encouraged to reduce the impact of building mass.	The building incorporates horizontal wind and sun shading elements to assist in reducing the impact of the building mass.	Yes
Ensure a transparent and visually permeable frontage to the park edge. The tower form on the park side is to come to ground and be dominant in the lower levels of the building.	The proposed tower form extends to the ground on the future Hickson Park frontage.	Yes

#### 4 Building Legibility

##### Objectives

Constituent elements of the building need to be legible.	Constituent elements of the building will be legible i.e. reading of the separate uses, glazed façades, balconies and shading devices.	Yes
To ensure that building elements and structure are legible at the base.	The building has been designed to align with Hickson Road, Watermans Quay and the future Hickson Park which will allow for legibility at the base.	Yes
To ensure that towers in Block 4A and 4B are complimentary and read as a cohesive composition.	The proposed building, along with Buildings R4A and R4B have been designed as a cohesive composition of three crystal forms.	Yes

##### Standards

Express facade elements including balconies/wintergardens shading and wind amelioration.	The proposed façades incorporate various elements including wind deflectors to balconies, which will contribute to the faceted appearance.	Yes
Consider common architecture expression to ensure towers in Block 4A and 4B are complimentary but still unique.	The proposed towers (including Buildings R4A and R4B) display a consistent architecture but are scaled and modulated to ensure each tower is unique.	Yes
Ensure visual permeability of the tower lobbies on the park to allow the structure to be legible at the base.	The residential lobby has been located to maximise outlook over the park to the north of Building R5. The KWH housing lobby would be located on Hickson Road, however the remainder of the frontage to the park would be retail uses.	Yes

#### 5 Ground Floor Permeability and Accessibility of Public Realm

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**Objective**

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To provide permeability and accessibility through Barangaroo South. Through-site permeability is provided via a publicly accessible plaza between Building R5 and Building R4B.

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**Standard**

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Public access around the block is to be maintained on all edges. Public access is maintained on all street edges. Yes

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Provide two north to south primary connections across the block including the Hickson Road colonnade and Barangaroo Avenue. North-south pedestrian connections are provided by the approved plaza between Building R4B and Building R5 and the Hickson Road colonnade that is continued from the alignment of Buildings C1 and C2 to the south. Yes

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Watermans Quay retail and podium buildings should consider the address to Scotch Row view. The pedestrian plaza between Buildings R4B and R5 has been positioned to provide visual and physical permeability between Hickson Park and Scotch Row. The podium was set back as part of the RtS to align its south-western edge with Scotch Row, and therefore better address it.

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Ground floor retail and residential lobbies should consider a relationship to the northern parkland public space. The residential lobbies of the building and retail tenancies will front the approved Hickson Park, providing increased activation of the public domain and surveillance opportunities.

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Canopies to be located at the park edge. Awnings/canopies are provided along the future Hickson Park frontage of the building.

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Consider lobby address on Barangaroo Avenue for R4A, Watermans Quay for R4B and Hickson Road for R5 off the plaza. Residential lobbies for Building R5 are provided off Hickson Road and the pedestrian plaza.

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## 6 Ensuring Quality of Rooftops

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**Objective**

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To ensure that the mass of the rooftop is articulated and legible. The roof form has been articulated with a glazed 'fringe' as an extension to the main curtain walls. Yes

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**Standards**

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Roofs forms should be sympathetic to its context, use good quality materials, incorporate architectural treatment of exposed elements and avoid exposure of mechanical equipment. The three buildings forming Block 4A and 4B (R4A, R4B and R5) have been designed to read as a collection of three 'crystal' forms, each with a glazed 'fringe' above the main curtain walls. These will conceal roof plant and assist in visually unifying the three buildings. Yes

Roof design may integrate sustainable features such as photovoltaics.

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## 7 Facades

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**Objectives**

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To ensure the architectural quality of the facades. The building would have highly transparent glass facades extending from ground level to beyond Yes

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	the roof line. The facade is of high architectural quality.	
To articulate the buildings functions and massing with appropriate façade design and detailing.	The building contains a three storey podium. Where required the opacity of the podium level facade has been altered for service and fire escape stairs.	Yes
To ensure the facades contribute to the building's articulation and mass.	The facade of the building incorporates several design elements such as balconies, roller blinds and integrated metal nosing. These elements contribute to the buildings' articulation and mass.	Yes
To contribute to the carbon neutral aims for Barangaroo South.	The building is consistent with the carbon neutral aims for Barangaroo South.	Yes
Enable the partial enclosure of balconies to provide private open space that is usable and has a high level of amenity.	The proposed balconies would be partially enclosed and therefore provide private open space that is usable and has a high level of amenity.	Yes

### Standards

Choice of materials for longevity, durability and flexibility (e.g. steel and glass).	The predominant façade material is glass, which is a high-quality material and finish which has suitable longevity, durability and flexibility.	Yes
Environmentally sustainable design to be incorporated on all facades.	The different design elements of the building such as open cavity facades, glazing, and balconies, allow access to direct sunlight and light transmittance, provide thermal insulation and achieve natural ventilation.	Yes
Depth and layering of facades to be achieved through relief and protrusions.	The building would achieve depth and layering through the incorporation of several façade elements and the use of a notch at the northern corner to articulate its edges.	Yes
Façade components such as external shading to be used to provide light and shade to the building.	As noted above, external shading would be used to allow access to direct sunlight and light transmittance.	Yes
Glass wind screens enclosing balconies shall be designed to ensure the balcony remains external open space and wind screen design shall ensure permanent natural ventilation and cannot be fully enclosed or sealed from weather.	The proposed balconies cannot be fully enclosed and will be adequately ventilated.	Yes

## 8 Active Streetfronts

### Objective

To ensure an activated public domain at street level.	Retail uses and a lobby are proposed for the ground floor of the building. These uses also front Hickson Road, Watermans Quay, the future Hickson Park and the pedestrian link to Hickson Park from Watermans Quay through Buildings R5 and R4B.	Yes
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### Standards

At least 60% of the ground level is to be active on the primary street wall facades.	<p>This standard is met. The building would provide a colonnade to Hickson Road as a continuation of that established in approved Buildings C1 and C2 to the south and would be activated by retail floorspace and the KWH lobby.</p> <p>The north-eastern façade of the building fronts the future Hickson Park and would be activated fully by retail floorspace and the lobby for non-KWH.</p> <p>The approved pedestrian plaza between Buildings R5 and R4A would create a break in the street wall along Watermans Quay, however this would be fully activated by retail uses and the Department considers this would achieve significant public domain and site permeability benefits.</p>	Yes
Building vehicle access, area for service and egress shall not count towards the 60%.	There are no vehicular access points proposed within the building.	N/A
Building service areas, parking entrances and loading docks may be accessed from Watermans Quay.	<p>Vehicular entrances to the Stage 1B carpark that will service this building are accessed from Watermans Quay, and the driveway entry will form part of the approved Building R4B.</p> <p>The driveway and associated infrastructure are being constructed under the Stage 1B Basement consent and integrated into the Building R4B structure when it is being constructed.</p>	Yes
The width of driveways shall be minimised.	The driveway entry does not form part of this building.	N/A

## 9 Signage

### Objective

To ensure the location, size, appearance and quality of signage in the building is appropriate.	<p>A suitable primary signage zone is proposed on the building's south-west elevation, fronting the plaza off Watermans Quay and on the eastern (Hickson Road) elevation, as discussed in <b>Section 6.8</b>.</p> <p>The Department recommends a condition requiring secondary building identification (such as wayfinding and under awning signage) and retail tenant signage details to be submitted for approval by the Department as part of a future signage strategy.</p>	Yes
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### Standards

Building identification signage is to be limited to one sign per frontage at podium level.	As noted above, only one signage zone is proposed on each of the Watermans Quay and Hickson Road elevations.	Yes
Signage shall not exceed 15 m <sup>2</sup> per sign.	The signage zones have an area of less than 15 m <sup>2</sup> .	Yes
Details of signage are to be considered as part of the overall design of the building for the purposes of design excellence.	No detailed signage is proposed. Secondary building identification and retail tenant signage will form part of a future signage strategy to be approved by the Department pursuant to a recommended condition of consent.	N/A

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Each new application for the erection of a new building should include a minimum description of signage location and form. Separate applications may be required for signage not detailed in applications for new buildings.

See above comment.

N/A

## Appendix E – Barangaroo Concept Plan – Planning History

### Barangaroo Concept Plan (MP 06\_0162)

The then Minister for Planning approved the Barangaroo Concept Plan (MP 06\_0162) (Concept Plan) on 9 February 2007.

The Concept Plan allowed for:

- mixed use development involving a maximum of 388,300 m<sup>2</sup> of GFA contained within eight blocks on a total site area of 22 hectares (ha)
- approximately 11 ha of new public open space/ public domain, including a 1.4 kilometre (km) public foreshore promenade
- a maximum of 8,500 m<sup>2</sup> GFA for a passenger terminal and a maximum of 3,000 m<sup>2</sup> GFA for active uses that support the public domain within the public recreation zone
- built form design principles, maximum building heights and maximum GFA for each development block within the mixed use zone
- alteration of the existing seawalls and creation of a partial new shoreline to the Harbour
- retention of the existing Sydney Ports Corporation Port Safety Operations and Harbour Tower Control Operations, including employee parking
- an underground car park beneath the northern headland park, containing approximately 300 car parking spaces.

The capital investment value of the approved Concept Plan was \$1.5 billion with the generation of up to 16,000 operational jobs.

The following outlines the subsequent seven modification approvals to the Concept Plan:

#### MP 06\_0162 MOD 1

On 25 September 2007, the then Executive Director, Strategic Sites and Urban Renewal, as delegate of the Minister for Planning, approved a minor modification to the Concept Plan to correct minor typographical errors and re-wording of the design excellence terms. This modification did not alter the maximum GFA or mix of uses.

#### MP 06\_0162 MOD 2

On 16 February 2009, the then Minister for Planning approved a second modification to the Concept Plan to increase the GFA of commercial uses by 120,000 m<sup>2</sup> in Blocks 2, 3, 4 and 5, to a total overall GFA of 438,000 m<sup>2</sup>. The modification increased the total maximum GFA for Barangaroo to 508,300 m<sup>2</sup> (an increase of 120,000 m<sup>2</sup> or 31 per cent over the whole site).

#### MP 06\_0162 MOD 3

On 11 November 2009, the then Minister for Planning approved a third modification to the approved Concept Plan, generally meeting the requirements of the Concept Plan approval relating to the northern headland and northern cove, with other changes as follows:

- the reinstatement of a headland at the northern end of the site with a naturalised shape and form, including a build-up of height and a landscaped connection to physically link Clyne Reserve to allow direct pedestrian access from Argyle Place
- an enlargement of the northern cove to achieve a greater naturalised shape, form and edges (note this modification and the one above were required modifications in the terms of the original Concept Plan, contained in Modification B1 and B2, and following recommendations made in the jury report regarding the original winning competition scheme)

- the consequential re-alignment of Globe Street to turn right towards Hickson Road immediately south of the enlarged cove, rather than continuing north around the headland
- the consequential removal of development Block 8 and part of Block 7 and redistribution of the associated land use mix
- the demolition of three heritage items being the Sandstone Seawall, the Sydney Ports Harbour Control Tower, and the MWS & DB Sewage Pumping Station
- amendments to the Statement of Commitments relating to the preparation of relevant plans and strategies so that work can commence in stages.

This modification slightly reduced the approved GFA and mix of uses, with a resulting total GFA of 501,000 m<sup>2</sup>.

#### **MP 06\_0162 MOD 4**

On 16 December 2010, the then Minister for Planning approved a fourth modification to the Concept Plan. The modified Concept Plan provides for the following:

- a maximum of 563,965 m<sup>2</sup> mixed uses GFA, including residential, commercial and retail uses which includes:
  - a maximum of 128,763 m<sup>2</sup> of residential uses
  - a maximum of 50,000 m<sup>2</sup> of tourist uses GFA
  - a maximum of 39,000 m<sup>2</sup> of retail GFA.
- a maximum of 4,500 m<sup>2</sup> of active uses GFA (3,000 m<sup>2</sup> of which will be in Barangaroo South)
- a minimum of 12,000 m<sup>2</sup> of community uses GFA (10,000 m<sup>2</sup> of which will be in Barangaroo South)
- approximately 11 ha of new public open space/ public domain, with a range of formal and informal open space serving separate recreational functions and includes a 2.2 km public foreshore promenade
- built form principles, maximum building heights and GFA for each development block within the mixed use zone
- public domain landscape concept including parks, streets and pedestrian connections
- alteration of the existing seawalls and creation of a portion of the new shoreline to the Harbour.

In order to accommodate the changes made to the Concept Plan, Schedule 3 of Part 12 of the Major Development SEPP was concurrently amended. The amendment rezoned parts of the Barangaroo site and the adjoining areas from 'RE1 Public Recreation' and 'W1 Maritime Waters and Transport' to 'B4 Mixed Use' and 'RE1 Public Recreation'. Modifications to the distribution of GFA and building heights were also included in the amendment.

#### **MP 06\_0162 MOD 5**

This modification was lodged in February 2011, and proposed modifications to clarify the outcomes with respect to the distribution of community uses GFA across the Barangaroo site, and to correct a number of minor typographical errors. This application was subsequently withdrawn on 22 March 2011.

#### **MP 06\_0162 MOD 6**

This modification application proposed to modify the approved Concept Plan for Barangaroo South. The proposed modifications, as publicly exhibited, sought approval for the following:

- the realignment of the development block boundaries for Blocks 3, 4A and 4B
- revisions to the Urban Design Controls to reflect the changes to the Block boundaries for Blocks 3, 4A and 4B
- change the requirement for a 'minimum' of 12,000 m<sup>2</sup> of community uses GFA to be delivered to a 'maximum'
- allow architectural roof elements and building management units to be excluded from the maximum height limit definition



- specify the car parking rates for 'other' uses thus removing the requirement to comply with Council's current car parking rates.

On 25 March 2014, the Commission approved the application.

### **MP 06\_0162 MOD 7**

On 11 April 2014, the then Minister for Planning and Infrastructure approved a seventh modification to the Concept Plan to allow the construction, operation and maintenance of a concrete batching plant to supply concrete for the construction of future development under this Concept Plan at Barangaroo South.

### **MP 06\_0162 MOD 8**

On the 28 June 2016, the Commission approved an eighth modification to the Concept Plan, providing for the following modifications:

- increase in the maximum GFA from 563,965 m<sup>2</sup> to 594,354 m<sup>2</sup>, and increase in maximum GFA contained in the development blocks from 549,465 to 579,354 m<sup>2</sup>
- increase in height from RL 170 m to RL 275 m and GFA from 33,000 m<sup>2</sup> to 77,500 m<sup>2</sup> for Block Y, increase in height from RL 41.5 m to RL 250 m and GFA from 8,150 m<sup>2</sup> to 86,979 m<sup>2</sup> for Block 4A
- decrease in height from RL 175 m to RL 107 m and GFA from 29,900 m<sup>2</sup> to 19,158 m<sup>2</sup> for Block 4B, decrease in height from RL 80 m to RL 25 m and GFA from 9,400 m<sup>2</sup> to 1,927 m<sup>2</sup> for Block 1, and deletion of Block 4C
- decrease in GFA from 209,213 m<sup>2</sup> to 197,280 m<sup>2</sup> for Block 2, and decrease in GFA from 142,669 m<sup>2</sup> to 129,934 m<sup>2</sup> for Block 3
- amend development block configurations for Block Y and Blocks 4A and 4B
- increase GFA outside of blocks from 14,500 m<sup>2</sup> to 15,000 m<sup>2</sup>
- amend GFA allocated for various land uses (residential, tourist, retail, active)
- amendment of Barangaroo site boundary, relocation of pier and reduction in the Southern Cove (now Watermans Cove)
- amendment of *Built Form Principles and Urban Design Controls*.

### **Court case**

- On 29 July 2016, the Environmental Defenders Office, acting on behalf of Millers Point Fund Incorporated, lodged an appeal in the Land and Environment Court against the Commission's decision to approve MOD 8 and Crown Sydney Hotel Resort.
- On 23 December 2016, the Court dismissed the appeal, finding the Commission had not failed to exercise its powers, duties and functions, did not take into account irrelevant considerations and no error of law had been made.

## Appendix F – Design Excellence Waiver

### **Record of Secretary’s Certification of Waiver (“Certification”) of Architectural Design Competition Pursuant to State Environmental Planning Policy (State Significant Precincts) 2005 (“SSP SEPP”), Schedule 3, Part 12, Clause 19(4) and Barangaroo Concept Plan Approval MP\_06 0162, Schedule 2, Part C – Future Applications C2(7).**

I, Anthea Sargeant, delegate of the Secretary of the Development of Planning, Industry and Environment, certify that the development described in Schedule 1 of this Certification (**‘Development’**) is development for which an architectural design competition is not required pursuant to:

- Schedule 3, Part 12, Clause 19(4) of the SSP SEPP
- Schedule 2, Part C – Future Applications C2(7) of the Barangaroo Concept Plan.

For the purposes of the SSP SEPP and Barangaroo Concept Plan (noted above), I am satisfied that:

- the building exhibits design excellence
- the architect responsible for the proposed design of the development has outstanding reputations in architecture
- necessary arrangements have been made to ensure that the proposed design is carried through to the completion of the development concerned.

#### **Schedule 1**

Proposal for the construction of a 30-storey commercial building (RL 107 m), known as Building R5, at Barangaroo South, as described under SSD 6966.



**Anthea Sargeant**

Executive Director

Compliance, Industry and Key Sites

Date 23/08/2019

## Appendix G – Recommended Instrument of Consent

The recommended conditions of consent for SSD 6966 can be found on the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/10161>