



3 October 2019

Building R5, Barangaroo South (SSD 6966)

1. INTRODUCTION

1. On 28 August 2019, the NSW Independent Planning Commission (**Commission**) received from the NSW Department of Planning, Industry and Environment (**Department**) a State significant development (**SSD**) application (**Application**) from Lendlease (Millers Point) Pty Ltd (**Applicant**) in relation to Building R5 Barangaroo South, 51A Hickson Road, Barangaroo (**Site**).
2. The Application seeks approval for the construction, fit-out and use of a 30 storey tower providing for residential and retail accommodation, public domain and landscaping works and basement car parking (**Proposal**).
3. The Commission is the consent authority in respect of the Application under section 4.5(a) of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**) and clause 8A of the *State Environmental Planning Policy (State and Regional Development) 2011* (**SEPP SRD**). This is because:
 - the Application constitutes State significant development under section 4.36 of the EP&A Act as the Application comprises development on land identified as being within Barangaroo and has a capital investment value (**CIV**) greater than \$10 million (\$145,845,000), pursuant to clause 3 of Schedule 2 of the SEPP SRD; and
 - the Department received an objection from the relevant local council, being Sydney City Council.
4. While the Application was submitted prior to 1 March 2018, clause 8A of SEPP SRD nonetheless applies to the Application in accordance with sub-clause 8A(3) of SEPP SRD.
5. Professor Mary O’Kane AC, Chair of the Commission, nominated herself and John Hann (Chair of the Panel) to constitute the Commission determining the Application.

1.1 Site and locality

6. The Department’s SSD Assessment Report dated August 2019 (**Department’s AR**), outlines the site and locality.
7. Barangaroo is a large 22 hectare (ha) development precinct located on the north-western edge of the Sydney Central Business District (**CBD**). The precinct is bounded by Hickson Road and Millers Point to the east, the foreshore of Sydney Harbour to the north and west and King Street Wharf / Cockle Bay / Darling Harbour to the south (**Figure 1**).
8. Barangaroo is divided into three distinct redevelopment areas (from north to south), comprising Barangaroo Reserve, which is developed, Barangaroo Central, which is subject to remediation works but not yet developed and Barangaroo South, which is largely developed.



Figure 1 - Barangaroo development precinct (Base source: Department's AR)

9. The Site is located in the north eastern corner of Barangaroo South and is approximately 1,750 m² in size. The Site adjoins Hickson Road to the east, Watermans Quay and Building C1 and International Tower T1 to the south, future residential Buildings R4A and R4B to the west and future Hickson Park to the north (Figure 2).

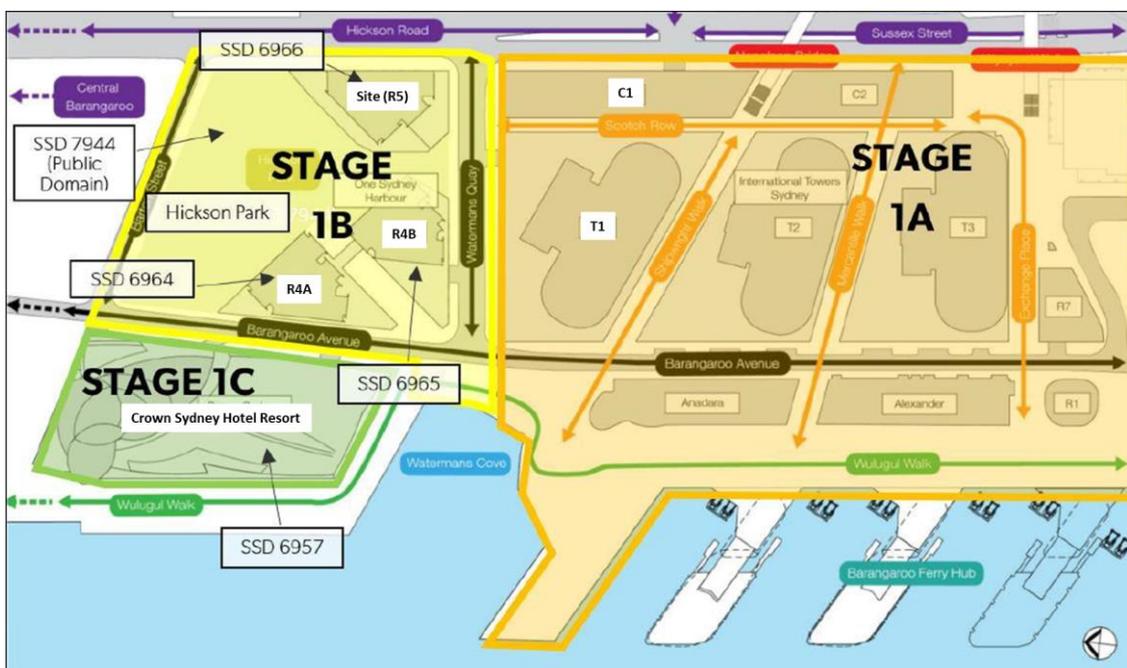


Figure 2 - Barangaroo South buildings and development stages (Base source: Department's AR)

10. The Site is also located within the Barangaroo South construction stage referred to as Stage 1B. Stages 1B and 1C are the final construction stages for Barangaroo South. In addition to the Site, Stage 1B includes future approved developments known as Buildings R4A and R4B and Hickson Park (**Figure 2**). The Site has been the subject of excavation and construction works associated with the Stage 1B joint basement car park, which when complete will service all future developments within Stage 1B.

1.2 Background to Application

1.2.1 Barangaroo concept plan approval

11. On 9 February 2007, the then Minister for Planning (**Minister**) approved the Concept Plan (MP 06_0162) (**Concept Plan**) for the renewal of the Barangaroo site for a mix of uses, including residential, retail, commercial and public recreation.
12. The Concept Plan established nine development blocks, gross floor area (**GFA**) maximums, building height limits and public open space/ public domain areas. The Concept Plan also included the Built Form Principles and Urban Design Controls (**Design Guidelines**) to guide development.
13. The Commission has previously considered matters related to the Concept Plan at Barangaroo. In March 2016 the Commission received a referral to determine Concept Plan Mod 8 (**MOD 8**) and provide advice to the Minister on associated State Environmental Planning Policy amendments (**SEPP Amendment**).
14. On 28 June 2016 the predecessor body to the Commission, the Planning Assessment Commission (**PAC**) approved Mod 8 which modified the built form and urban design outcomes on the site including:
 - increases to gross floor area, height, car parking within Barangaroo South;
 - changes to site boundaries and urban structure within Barangaroo South;
 - introducing a new set of design guidelines; and
 - amending the layout of land uses including open space and public domain areas.
15. Concurrent with its role determining MOD 8, the PAC was also requested by the then Minister for Planning to provide advice on an associated SEPP Amendment. The SEPP Amendment was required to give effect to zoning and development controls required to permit MOD 8. The Commission's advices dated 1 June 2016 and 21 June 2016 resulted in the following key changes to the SEPP Amendment.
 - increase the percentage of key worker housing (**KWH**) for Barangaroo South;
 - Hickson Park extended further north into Barangaroo Central to form its current configuration; and
 - boardwalk along the western perimeter extended to provide a 30m unencumbered foreshore promenade area.
16. The Application is consistent with the increased percentage of KWH and the revised building envelopes and requirements set out in the PAC's approval of MOD 8.

1.2.2 Other related approvals

17. The Site has been the subject to two previous approvals that will integrate with the Proposal, including:
 - On 7 March 2017, the **PAC** approved an SSD application (SSD 6960) for the construction of the Stage 1B basement and associated works, which would serve all future developments within Stage 1B and also sit below Hickson Park (**Stage 1B Basement**); and

- On 11 September 2018, the Commission approved an SSD application (SSD 7944) for all public domain works within Stage 1B Barangaroo South including Hickson Park (and the part of Hickson Park within Barangaroo Central) (**Figure 3**) (**Stage 1B Public Domain**).
- On 28 June 2016, the PAC approved an SSD application for the construction, use and fit-out of a 71 storey tower (RL 275), podium and associated basements for restricted gaming, residential, hotel and retail accommodation, car parking and public domain works (**Crown Sydney Hotel Resort**).
 - On 7 September 2017, the PAC approved two SSD applications for the construction, use and fit-out of a 72 storey building and a 60 storey building for residential and retail use (**Buildings R4A and R4B**) above the approved Stage 1B Basement.



Figure 3 – Overview of the approved Stage 1B Public Domain (Base source: Commission’s Statement of Reasons for SSD 7944, Stage 1B Public Domain)

1.2.3 Relevant Construction Works

- The Department’s AR provides a summary of the completed projects within Barangaroo South and also confirms those currently under construction. The Applicant, in its meeting with the Commission, provided an update to the predicted completion timeframes for the developments currently under construction.
- The developments currently under construction and their predicted completion dates are summarised below:
 - The Proposal (Building R5) by end of 2023 / early 2024;
 - Building R4A – completion by end of 2023 / early 2024;
 - Building R4B – completion by 2025;

- Crown Sydney Hotel Resort – completion by end of 2020 / early 2021
- Stage 1B Basement – completion by end of 2020; and
- Stage 1B Public Domain – completion by end of 2020 / early 2021.

1.3 Summary of Application

22. The Application before the Commission for determination seeks consent for the construction, fit-out and use of a 30 storey tower providing for residential and retail accommodation (including KWH), public domain works and associated works within Barangaroo South.
23. The key components of the Proposal are summarised in **Table 1** and shown at **Figures 4** and **5**.

Table 1 - Key components of the Proposal (source: Department's AR)

Aspect	Description
Demolition	<ul style="list-style-type: none"> • Demolition of existing interim basement works.
Built form	<ul style="list-style-type: none"> • Construction of a 30 storey tower.
Gross floor area (GFA)	<ul style="list-style-type: none"> • Total GFA of 19,158 m², comprising: <ul style="list-style-type: none"> ○ 18,287 m² residential GFA (including KWH); and ○ 871 m² retail GFA.
Residential use	<ul style="list-style-type: none"> • 210 residential apartments comprising: <ul style="list-style-type: none"> ○ 167 on-market apartments; and ○ 48 KWH apartments.
Public domain / landscaping	<ul style="list-style-type: none"> • Paving and soft landscaping (including four trees) around the tower; • Landscaping of roof terraces at Podium Level 2 and Level 26.
Basement	<ul style="list-style-type: none"> • Fit-out and use of the Stage 1B Basement car park providing for: <ul style="list-style-type: none"> ○ 134 car parking spaces; ○ Five shared service vehicle bays; and ○ Storage, waste rooms, management office, plant and services.
Bicycle parking	<ul style="list-style-type: none"> • Bicycle parking at basement and ground floor levels.
Signage	<ul style="list-style-type: none"> • Two building identification signage zones.
Employment	<ul style="list-style-type: none"> • 200 jobs during construction jobs and 10 during operation.
CIV	<ul style="list-style-type: none"> • \$145,845,000

24. On 17 February 2017, the Applicant provided its Response to Submissions (**RtS**), which was further revised on 20 December 2018 and 13 May 2019 (**Amended RtS**). The key changes to the Proposal included with the Amended RtS were noted in the Department's AR, including:
- an increase in height by one storey to 30-storeys;
 - re-distribution of the total GFA of 19,158 m², comprised of:
 - an increase in residential GFA from 18,249 m² to 18,287 m²;
 - a decrease in retail GFA from 909 m² to 871 m²;
 - 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;
 - 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;
- amendments to the basement layout including a reduction from 170 residential car parking spaces to 134 car parking spaces;
- increased the width of living rooms, reconfigured study rooms into open storage areas; and
- adjusted to ground floor levels.



Figure 4 – Ground floor plan of the tower and its relationship to existing and proposed neighbouring buildings and spaces (Base source: Applicant’s Supplementary Design Report)



Figure 5 – Perspective view of the tower (looking south) in context with surrounding existing and proposed buildings and spaces (Base source: Applicant’s Supplementary Design Report)

1.4 Stated need for the Proposal

25. In its Environmental Impact Statement dated September 2016 (**EIS**), the Applicant stated the Proposal was justified on the basis that it would:
- be consistent with the Concept Plan (as modified) and other relevant statutory

- documents;
- provide a transition between the mid-rise scale of buildings along Hickson Road, and the Crown Sydney Hotel Resort at the water's edge;
- define the street alignments and activate Hickson Road and Watermans Quay;
- provide high quality accommodation including key worker housing;
- provide positive social and economic benefits; and
- represent a key part of the Barangaroo foreshore renewal project.

2. THE DEPARTMENT'S CONSIDERATION OF THE APPLICATION

2.1 Key steps in Department's consideration of the Application

26. The Department carried out the following key steps in relation to the Application:
- on 2 April 2015, issued Secretary's Environmental Assessment Requirements (**SEARs**);
 - on 21 September 2016, received the Application;
 - publicly exhibited the Application between 29 September 2016 and 14 November 2016. The Department received 13 submissions comprising six from public agencies and seven from the public. The submissions are summarised at **Table 2** and paragraph 29;
 - on 17 February 2017, received the Applicant's initial RtS. However, on the 27 February 2017 the Application was put on hold at the request of the Applicant;
 - on 20 December 2018, received the Applicant's first Amended RtS;
 - publicly exhibited the Amended RtS between 17 January 2019 and 22 February 2019. The Department received 13 submissions comprising nine from government agencies and three from the public. The submissions are summarised at **Table 2** and paragraph 29;
 - on 13 May 2019, received the Applicant's second and final Amended RtS, which responded to issues raised during exhibition;
 - on 23 August 2019, waived the requirement for the Application to be subject to an architectural design competition;
 - prepared an SSD assessment report dated August 2019; and
 - on 23 August 2019, referred the SSD assessment and recommended development consent to the IPC.

2.2 Submissions

27. The submissions from public agencies, received by the Department during the exhibitions of the Application, are summarised in **Table 2**.

Table 2 - Summary of public agency submissions (source: Department's AR)

City of Sydney Council (Council)
Council objected to the Proposal raising concerns about the tower built form and particularly the lack of a podium, wind impacts and mitigation, KWH management, tower interface with the public domain, ADG non-compliances, traffic impacts and car, bicycle and service vehicle parking provision, pedestrian connectivity, construction impacts, noise mitigation, crime prevention and securing retail fit-out via separate approval(s).
Heritage Division of the Department of Premier and Cabinet (former Heritage Division of the Office of Environment and Heritage) (Heritage Division)
The Heritage Division did not object to the Proposal and made recommended in relation to archaeological management and interpretation.

Transport for NSW (TfNSW)
TfNSW did not object to the Proposal and made recommendations in relation to construction traffic and loading dock management.
Transport for NSW, Roads and Maritime (RMS)
RMS did not object to the Proposal and provided no comment.
Environment Protection Agency (EPA)
EPA did not object to the Proposal and stated it is not the regulatory authority for the Proposal.
Sydney Water
Sydney Water did not object to the Proposal and provided no comment.
Civil Aviation Safety Authority (CASA)
CASA did not object to the Proposal and provided no comment.
Sydney Airport
Sydney Airport did not object to the Proposal and made recommendations in relation to construction equipment (e.g. cranes) that may intrude into the prescribed airspace.
Port Authority of NSW (Port Authority)
Port Authority did not object to the Proposal and provided no comment.

28. The Department received ten public submissions during the exhibitions of the Application, including nine objections and one in support of the Proposal.
29. The concerns raised in submissions are summarised below:
- visual, view and privacy impacts;
 - design and built form;
 - traffic impacts, including the cumulative impact on the road network within the precinct;
 - construction noise, vibration impacts and air quality impacts;
 - a park should be provided onsite; and
 - impact on property values and sale of accommodation offshore.
30. The submission supporting the proposal stated the building had visual appeal, design quality and is of an appropriate size.

2.3 The Department's assessment report

31. The Department's AR identified design excellence, built form, public domain, amenity impacts, future residential amenity and transport and traffic impacts as the key impacts associated with this proposal.
32. The report concluded:
- *"... 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..."*
 - *... the building will exhibit design excellence and will contribute positively to the character of Barangaroo... all units will achieve an acceptable level of amenity... with*

most units receiving a high level of amenity. Inconsistencies with the ADG are acceptable...

- *... 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 traffic movements associated with the development will have minimal impact on the local road network. The car parking does not exceed the maximum amount permitted. Bicycle parking has also been provided for each unit."*

33. And further that:

"... 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... All other issues associated with the proposal have been assessed... and community concerns are addressed. The Department concludes the proposal is consistent with the strategic objectives for the area..."

3. THE COMMISSION'S MEETINGS AND SITE VISIT

As part of its determination, the Commission met with the Department, Council and the Applicant as set out below. All meeting transcripts and presented materials and site inspection notes were made available on the Commission's website on or before 24 September 2019.

3.1 Meeting with the Department

34. On 5 September 2019, the Commission met with the Department to discuss its assessment of the Application. Key discussion points include wind impacts, wind mitigation measures, public domain works including tree planting, tree maintenance and safety, the podium and tower design, construction timeframe and sequencing, KWH provision and management, lift provision and operation, basement car and bicycle parking, the location and timing of the Barangaroo Metro station. A copy of the meeting transcript was made available on the Commission's website.

3.2 Meeting with Council

35. On 5 September 2019, the Commission met with Council to discuss the Application. The key points of discussion included wind impacts, wind mitigation measures, Applicant's method of assessing wind impacts, tower typology and built form, public domain works including tree planting and soil depths, future residential amenity and ADG non-compliances, car parking, bicycle storage and mechanical ventilation. A copy of the meeting transcript was made available on the Commission's website.

3.3 Meeting with the Applicant

36. On 12 September 2019, the Commission met with the Applicant to discuss its Application. Key points of discussion included Hickson Road works, the tower built form and design rationale, the timeframe of the construction of buildings in Stage 1B and Stage 1C, tree planting and their effectiveness to mitigate wind impacts, the choice of tree species and its safety/maintenance impact, KWH provision and management, car parking and bicycle parking provision, building sustainability and provision of adaptable apartments. A copy of the meeting transcript was made available on the Commission's website.

3.4 Site inspection

37. On 12 September 2019, the Commission conducted an inspection of the site and its surroundings. Five representatives from the Applicant and one from Infrastructure NSW (INSW) attended the inspection and assisted in showing the Commission relevant aspects of the Site. Apart from the Commission and Secretariat, the following people attended and observed the site inspection:
- Daniel Baxter (Lendlease);
 - Leanne Boyle (Lendlease);
 - John Riordan (Lendlease);
 - Adam Lucas (Lendlease);
 - Michael Rowe (Ethos Urban); and
 - Jessica Kite (INSW).
38. A copy of the site inspection notes was made available on the Commission's website.

4. ADDITIONAL INFORMATION

39. In response to issues raised at the Commission's meeting with the Department, the Commission received an email from the Department dated 6 September 2019 providing:
- clarification of the wind variations by season and time of day;
 - confirmation there is only one approved retail car parking space for Buildings R4A and R4B; and
 - consideration of maintenance requirements associated with the proposed tree species.
40. In response to the Applicant's request at its meeting with the Commission to amend the adaptable housing condition, the Commission received an email from the Department dated 19 September 2019 providing clarification of its consideration of the provision of adaptable apartments within the Application.
41. In response to issues raised at the Commission's meeting with the Applicant, the Commission received a letter from the Applicant dated 27 September 2019 and email dated 1 October 2019 providing:
- the Applicant's consideration of the planting and maintenance of the four proposed *Harpullia pendula* trees; and
 - further clarification of the effect of tree planting to address wind impacts around the Site.
42. The above correspondence was provided to the Commission after receipt of the Department's AR and was made available on the Commission's website.

5. THE COMMISSION'S CONSIDERATION

5.1 Material considered by the Commission

43. In this determination, the Commission has carefully considered the following material (**Material**):
- the Application
 - the SEARs dated 2 April 2015;
 - the Environmental Impact Statement dated September 2016 and prepared by JBA Urban Planning Consultants Pty Ltd, and its accompanying appendices;
 - all submissions provided to the Department in respect of the Application by the community, Council and government agencies;
 - the Response to Submissions report dated February 2017 and prepared by JBA Urban

- Planning Consultants Pty Ltd, and its accompanying appendices;
- the Response to Submissions report dated 28 November 2018 and prepared by Ethos Urban Pty Ltd, and its accompanying appendices;
- the Response to Submissions report dated 13 May 2019 and prepared by Ethos Urban Pty Ltd, and its accompanying appendices;
- the Department's AR prepared by the Department and dated August 2019;
- the Department's recommended development consent; and
- additional information provided to the Commission described in paragraphs 40 to 42.

5.2 Mandatory considerations

44. In determining this Application, the Commission has taken into consideration the following relevant mandatory considerations, as provided in s 4.15 of the EP&A Act (**mandatory considerations**):
- the provisions of all:
 - environmental planning instruments (**EPIs**);
 - proposed instruments that are or have been the subject of public consultation under the EP&A Act and that have been notified to the Commission (unless the Secretary has notified the Commission that the making of the proposed instrument has been deferred indefinitely or has not been approved);
 - planning agreements that have been entered into under s 7.4 of the EP&A Act, and draft planning agreements that a developer has offered to enter into under s 7.4;
 - the *Environmental Planning and Assessment Regulations 2000* (**Regulations**) to the extent that they prescribe matters for the purposes of s 4.15(1) of the EP&A Act;
 - that apply to the land to which the Application relates;
 - the likely impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality;
 - the suitability of the site for development;
 - submissions made in accordance with the EP&A Act and Regulations; and
 - the public interest.

5.3 Strategic considerations

45. In determining this application, the Commission has also considered the:
- *Greater Sydney Regional Plan – A Metropolis of Three Cities* (**GSR Plan**), which sets out the NSW Government's 40-year vision and establishes a 20-year plan to manage growth and change for Greater Sydney and includes 10 directions;
 - *Eastern City District Plan* (**District Plan**) which aims to connect local planning with the longer-term metropolitan planning for Greater Sydney; and
 - *Contaminated Land Management Act 1997* (**CLM Act**) under which the site incorporates part of a 'remediation site' as declared by the EPA (EPA Declaration Area 21122).
46. Regarding the strategic merit of the Application, the Department's AR concludes that the Application supports the directions and objectives of the GSR Plan and District Plan 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.*
 - *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”.*
47. The Commission accepts the conclusions of the Department’s AR outlined in paragraph 47 above because it has been demonstrated that the Application will support the directions and objectives of the GSR Plan and District Plan.

5.4 Relevant Environmental Planning Instruments

48. The following EPIs are relevant to the application:
- SEPP SRD;
 - *State Environmental Planning Policy (State Significant Precincts) 2005 (SEPP SSP);*
 - *State Environmental Planning Policy (Infrastructure) 2007;*
 - *State Environmental Planning Policy No. 55 – Remediation of Land;*
 - *State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004;*
 - *State Environmental Planning Policy No.64 – Advertising and Signage;*
 - *State Environmental Planning Policy No.65 – Design Quality of Residential Apartment Development (SEPP 65) and the accompanying Apartment Design Guide (ADG);*
 - *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005;* and
 - *State Environmental Planning Policy (Coastal Management) 2018.*
49. The Commission has carefully considered and accepts the Department’s assessment of the relevant EPIs as set out within Appendix C of the Department’s AR. In particular the Commission finds that the Application is:
- SSD as it is development within Barangaroo that is valued in excess of \$10 million;
 - sited on land zoned B4 Mixed Use pursuant to the SEPP SSP and the development is permissible with consent within the zone.

5.5 Relevant proposed instruments

50. The following draft EPIs are relevant to the Application:
- Draft Environment State Environmental Planning Policy – Environment; and
 - Draft State Environmental Planning Policy for the Remediation of Land;

The Commission notes the Department has provided an assessment of the Application against the relevant draft EPIs at Appendix C of its AR. The Commission is satisfied with the assessment and conclusions in the Department’s AR for the reasons set out in Appendix C of the AR regarding the Application’s compliance with the identified draft EPIs.

5.6 Applicable regulations

51. The Department’s AR states *“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”.*

5.7 Consistency with the terms of the Concept Plan

52. Clause 3B(2)(d) of Schedule 2 of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017* states that *“a consent authority must not grant consent under Part 4 for the development unless it is satisfied that the development is generally consistent with the terms of the approval of the concept plan”.*
53. The Department’s AR concluded that the Application is consistent with the Concept Plan and the Design Guidelines, subject to conditions.

54. The Commission accepts the Department's conclusion outlined in paragraph 55 above and has considered the likely impacts of the development in section 5.8.

5.8 Likely impacts of the development on both natural and built environments

55. The Commission considers the key issues associated with the Application are:
- wind impacts;
 - tower form;
 - car parking; and
 - adaptable housing.

56. The Commission has considered other relevant issues at section 5.9:

5.8.1 Wind impacts

Concept Plan

57. Condition C12 of the Concept Plan requires all applications to provide wind assessment and incorporate specific mitigation into the design of buildings and public spaces.

Council's comments

58. The Commission notes Council raised concerns that the tree planting relied on by the Application to mitigate wind impacts will be ineffective as:
- it is located within the Stage 1B Public Domain construction exclusion zones (for the Application and Building R4A and R4B) and will therefore not be planted until after all Stage 1B construction is completed; and
 - the Site is located above the Stage 1B Basement and soil depths will be inadequate to support mature trees.
59. Council also recommended that a podium form should be introduced to each frontage of the tower to address wind impacts.

Applicant's consideration

60. The Applicant undertook detailed assessment of wind impacts, which is documented in its Wind Impact Assessment (WIA) provided with the EIS and updated within its Amended RtS. The WIA considered the wind impact of the Proposal, in context with the other existing/approved developments, on the surrounding public domain and Hickson Park.
61. The WIA concluded "*wind conditions for all outdoor trafficable areas within and around the proposed development will be suitable for their intended uses*" subject to the:
- "*Inclusion of strategic planting in the form of dense foliating trees at ground level around the site, as per the latest landscape drawings... ; and*
 - "*The inclusion of portable café screening on the north-western aspect of Tower R5 to be controlled by the operator to provide suitable conditions for patrons during adverse wind conditions. Conditions will be suitable as a pedestrian thoroughfare when the café area is not in operation*".
62. The Applicant's Amended RtS confirms that the WIA recommended planting to mitigate wind impacts has been incorporated into the Proposal. The planting includes four *Harpullia pendula* trees within the plaza located to the west, between the Site and Building R4B (**Figure 6**). The portable café screening will be subject to future approval for retail fit-out and use and associated outdoor seating.

63. At its meeting with the Commission and in response to Council's concern (paragraph 58), the Applicant confirmed that it is currently procuring the trees surrounding the Site and within the public domain. In addition, it stated that *"those trees will be planted and installed at the end of 2020, so you have three years before the practical completion of R5... and the trees that are being procured for the public domain... (are) about two to two and a half metres in canopy..."*
64. The Applicant's additional information dated 1 October 2019 (paragraph 4242) confirmed the four *Harpullia pendula* trees *"will be planted with a minimum height of 3m and a minimum canopy spread of 2.5m for the Occupation Certificate of R5, in line with the wind mitigation approach for this area... Harpullia pendula can grow to a height of 7-10m with a canopy of 3-5m, which will further improve the wind mitigation"*.

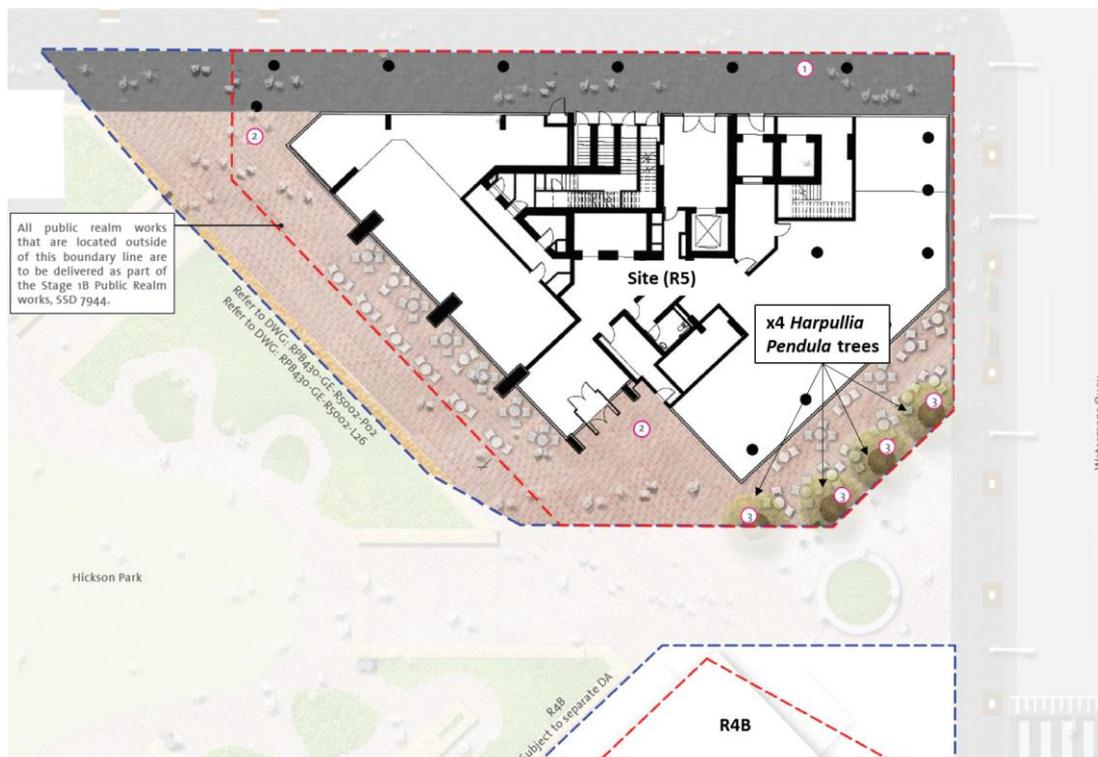


Figure 6 – Ground level public domain and landscaping, including the location of four *Harpullia Pendula* trees (Base source: Applicant's Landscape Drawings)

Department's consideration

65. The Department's AR concludes the Application will sufficiently mitigate wind impacts and states:
- *"...four harpullia 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";*
 - *The Applicant has not sought approval for the fitout of retail space. This will therefore be the subject of future applications";* and
 - *there is an existing Concept Plan condition requiring public domain works proposed under SSD 7944 (Stage 1B Public Domain) for Hickson Park to be completed prior to the occupation of Building R5".*

Commission's consideration

66. The Commission notes, in its determination of the Stage 1B Public Domain, the Commission did not permit the establishment of construction exclusion zones within the public domain and Hickson Park for buildings within Stage 1B (including Buildings R5, R4A and R4B). In addition, the Commission concluded soil depths above the Stage 1B Basement would be adequate to accommodate the growth of mature trees, consistent with the findings of the Public Domain works SSD 7944 determination. The Commission considers that the clarification of the above information addresses Council's concerns (paragraphs 59) about the effectiveness of the tree planting for wind mitigation.
67. The Commission accepts the Applicant's assessment outlined in paragraphs 62 and 51. Further, it notes the information in paragraphs 64 and 65 regarding the planting of trees within the public domain three years before practical completion of the Application and that the four *Harpullia pendula* trees to be planted on the Site will be semi-mature (minimum height of 3m and canopy spread of 2.5m).
68. The Commission accepts the conclusions of the Department at paragraph 66 and notes Condition B8 has been recommended, which requires the Application provide the wind mitigation measures set out in the WIA and Condition A6 confirms no permission is granted for retail fit-out or outdoor dining/seating areas.
69. The Commission acknowledges Council's comment that the inclusion of a podium form may mitigate wind impacts. However, the Commission considers the provision of a podium to be only one of a number of potential wind mitigation solutions for the site. In this instance, the Application has put forward a different solution (tree planting), which has been demonstrated to be acceptable. The Commission therefore finds that a podium is not required to address wind impacts.
70. Based on the Material, the Commission finds that Council's concern about the effectiveness of wind mitigation measures has been addressed and the Proposal includes appropriate wind mitigation.

5.8.2 Tower form

Concept Plan

71. Condition B5 requires future applications to demonstrate consistency with the Design Guidelines. The Design Guidelines set out broad objectives and standards to guide the design and built form of developments within Barangaroo South. The Design Guidelines address matters including building mass, separation and location, street wall, articulation, public domain, rooftop and façade design, street fronts and signage.

Public and Council's comments

72. The Commission notes Council has objected to the design of the tower and stated that the tower should include a podium on each of its three sides, not just fronting Watermans Quay and part of Hickson Road. Council considered the introduction of a full podium would:
 - align with the principles of human scale and break down the bulk of the building; and
 - would be in keeping with the built form of buildings in the Barangaroo South context, particularly those facing Hickson Road.

73. The Commission notes that the Department also received public submissions stating that the lack of a full podium was out of character with developments on Hickson Road, would have adverse visual impact and would fail to provide human scale of development.

Applicant's consideration

74. The Applicant confirmed in its Amended RtS that in responding to the matters raised in public and government agency submissions, it refined the design of the development (paragraph 24). The Amended RtS states that the Proposal, as amended:
- *“...continues to achieve design excellence and offer significant benefits in terms of providing Sydney with a new world-class building to contribute to the City's global status; and*
 - *... has been designed to create a streetscape that provides a comfortable environment for future residents, workers and visitors and that is consistent with the objectives and standards contained in the Design Guidelines”.*
75. In response to Council's concern, the Amended RtS states that *“...Building R5 incorporates a two-storey podium that includes retail tenancies and residential lobbies at ground level. The low-rise podium has been designed to be consistent with the maximum height of RL 22 set out in the Design Guidelines and will achieve a complementary height transition from Building C1, which is located immediately to the south. The height of the Building R5 podium is consistent with the podiums for the approved Buildings R4A and R4B. Changes were made as part of the first RTS to further define the ground plane by aligning the pedestrian colonnade with Building C1 and C2 to the south and greater setbacks of the podium to align with Scotch Row and Watermans Quay. The podium is defined by glass awnings and has been deliberately designed to create a human scale at ground level...”*
76. At its meeting with the Commission, the Applicant stated that the change of the tower built form from a podium to shear façade (to part of the Hickson Road elevation) is appropriate as transition acts as a marker to the opening in the Hickson Road street wall, announcing Hickson Park.

Department's consideration

77. The Department's AR has considered the consistency of the Proposal with the Design Guidelines at section 6.3 and Appendix D of its AR. The Department's AR concludes that:
- *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 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; and*
 - *The Department has considered the design excellence criteria in the SSP SEPP and Concept Plan and considers the proposed building exhibits design excellence...”*

Commission's consideration

78. The Commission notes that the development includes a two storey podium fronting Watermans Quay and part of Hickson Road. The remainder of the Hickson Road elevation comprises a shear elevation above the ground floor colonnade, as shown at **Figure 7**.



Figure 7 – 3D model showing the the Hickson Road elevation of the tower, including the part podium and shear form of the elevation and ground floor colonnade (Source: Applicant's Amended RtS)

79. The Commission notes that the tower built forms of Buildings R4A and R4B comprise a podium to their southern elevation and shear faced facades to the northern elevations (**Figure 5**). In this regard, the Application has been designed to be consistent with, and complementary to, the tower form design approach for Buildings R4A and R4B.
80. The Commission acknowledges the Applicant's built form design refinements to the Application, which are summarised at paragraph 24 and considers that they represent a positive improvement to the design of the tower. In particular, the Commission considers design of the northern tip of the building, inclusion of a 'notch' and stepped building height to the Hickson Road elevation appropriately modulates and articulates the shear component of the Hickson Road shear elevation.
81. The Commission accepts the conclusions of the Department outlined in paragraph 78 above and agrees the Application would achieve design excellence and generally complies with the Design Guidelines. The Commission also notes the international design credentials of the eminent architect – the Renzo Piano Building Workshop and the appropriate relationship of the Proposal to Buildings C1, R4A and R4B and Hickson Park.
82. The Commission has had regard to the overall design of the Proposal and the provision of a podium fronting Watermans Quay and part of Hickson Road. The Commission accepts the conclusions of the Applicant at paragraphs 76 and 77 that the podium provides a complementary built form transition from the existing Hickson Road street wall (Building C1). In addition, it accepts that it is not unreasonable that the tower form has been treated differently from the remaining buildings along Hickson Road (i.e. it includes a part shear façade to Hickson Road) to mark/announce the opening to Hickson Park.
83. Based on the Material, the Commission finds that the design of the tower form, comprising a part podium / shear façade is acceptable given the Site location, context and the design of Buildings R4A and R4B.

Materials

84. In granting development consent for Building R4A and R4B, the PAC raised concern that the proposed materials and associated façade details would be of a high quality and finish and that the architect would have an ongoing design role in the development through to completion. To ensure that was the case, the PAC imposed a condition requiring all samples to be certified by the architect and provided for the approval by the Planning Secretary.
85. The Commission notes that Condition B16 ‘Schedule of Materials’ of the Department’s recommended development consent is different to the above condition imposed by the Commission for Buildings R4A and R4B and omits the requirement for the ongoing involvement of the architect through to completion of the development.
86. In the interest of consistency, and to ensure the building materials meet the expectations of the quality required for the building to achieve design excellence, the Commission has amended recommended Condition B16 to reflect the requirements of the condition imposed on Buildings R4A and R4B. The Commission notes that the Department, in its email dated 6 September 2019 (paragraph 40), confirmed it had no objection to such an amendment to Condition B16.

5.8.3 Traffic and car parking

Concept Plan and Stage 1B Basement car parking allowance

87. Condition C4 of the Concept Plan establishes maximum residential car parking rates for the precinct and based on the Proposal’s provision of 210 apartments would allow for up to 205 residential car parking spaces on the Site.
88. Notwithstanding the Concept Plan maximum car parking rates (205 spaces for the Site), the Stage 1B Basement has allowed for 143 spaces for the Site. The car parking allocation between the Site and Buildings R4A and R4B is shown at **Table 3**.

Table 3 - Summary of Stage 1B Basement car parking allocation (Source: Department’s AR)

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
Total	813	822

Public and Council comments

89. The Commission notes Council’s submission expressed concern that the number of car parking spaces provided is excessive and is in excess of the maximum number of spaces allowed under the Sydney Local Environmental Plan (SLEP) 2012 (being 115 spaces).
90. Objections were raised in public submissions that the proposal would have an adverse cumulative impact on the surrounding road network,

Department's consideration

91. In response to Council's concern (paragraph 90), the Department's AR states that '*... the Concept Plan sets residential car parking rates, and the (Proposal's) proposed rates are substantially below what is permitted*'.
92. In its AR, the Department raised concern that no car parking spaces are provided for the KWH apartments. In addition, no evidence was submitted with the Application that suggested key workers (which includes such professions as nurses, police officers, teachers etc) occupying the KWH would not have a need/demand for car parking spaces. The Department therefore recommended a condition (Condition B28) requiring nine car parking spaces (increasing the total provision from 134 to 143 spaces) be allocated to the KWH and that the spaces be subject to sharing arrangements set out in an Operational Plan of Management (OPM) (Condition E4).
93. With regard to the concern raised about impact on road infrastructure, the Department's AR states "*... 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*".

Applicant's consideration

94. In response to Council's concern (paragraph 90), the Amended RtS states that "*Car parking is provided in accordance with rates approved by the Concept Plan, and has been amended to a total of 134 spaces*".
95. In response to concerns raised by the Public (paragraph 91), the Amended RtS states that "*...the site is optimally located with access to public transport... retail and other uses – including a gym, child care and medical facilities have also been provided at Barangaroo South to service surrounding residents... The provision of additional residents at the Barangaroo South site is consistent with the intent of the Concept Plan...*".
96. At its meeting with the Commission the Applicant stated that it is its understanding that community housing providers (**CHPs**) prefer that no car parking be provided for KWH because of potential ongoing maintenance and operational costs. The Applicant therefore proposes that Condition B28 be amended to set a maximum of nine KWH car parking spaces, with no minimum, and the final car parking allocation be confirmed following its expression of interest (EoI) process with potential CHPs for the site.

Commission's consideration

97. The Commission accepts the Department's and Applicant's conclusions at paragraphs 92 and 95 as the Application has demonstrated that it provides for a rate of residential car parking that is less than the maximum allowed by the Concept Plan and Stage 1B Basement. In addition, the provision of 210 apartments is consistent with the Concept Plan and the additional population would not impact road infrastructure beyond what was considered acceptable under the Concept Plan.
98. The Commission notes due to the nature of many key worker professions (e.g. nurse, police officer etc) employees are often required to work shifts, including night shifts. Therefore, those key workers may not be able to benefit from the normal operating hours of the public transport system. In this circumstance, the Commission considers it is not unreasonable to assume that some key workers are likely to own a car and would require a car parking space.

99. Therefore, the Commission considers that there is a justified reason to require the provision of car parking spaces for KWH. The Commission is concerned, however, that if a maximum (with no minimum) car parking requirement is set for the KWH there is the potential that no car parking spaces may be provided, owing to the operational / management costs and/or other unforeseen reasons following the Eol process.
100. Based on the Material, the Commission finds that the Application has not provided an excessive amount of car parking. In addition, the Commission is satisfied that Condition B28 'Number of Car Parking Spaces' should set a minimum of nine car parking spaces for KWH to ensure those spaces are provided.

5.8.4 Adaptable housing

Applicant's comments

101. At its meeting with the Commission, the Applicant:
- requested that Condition B36 'Adaptable Housing' be amended to remove the minimum requirement for 21 adaptable apartments. The Applicant stated that it would *'prefer that we work with our customers at the point of sale to create adaptability'*;
 - noted that Buildings R4A and R4B were not required to provide a minimum number of adaptable apartments and the Application is consistent with that approach; and
 - responded to the Commission's query about what would be the long-term impact for not providing the 21 adaptable apartments, confirming that *"... if the future purchaser beyond the initial purchasers want an adaptable apartment... if it wasn't inbuilt within that, then there wouldn't be the ability to adapt it"*.

Department's consideration

102. In response to the Applicant's request outlined in paragraph 102, the Department provided a response in its email dated 19 September 2019 (paragraph 41), stating:
- *"The Department acknowledges a numerical requirement for adaptable housing had not been included in the consents for Buildings R4A and R4B, however considered a requirement for a minimum of 10% of the development to be provided as adaptable housing was reasonable and feasible and would achieve a good outcome. In recommending this requirement, the Department notes Sydney DCP 2012 requires a minimum of 15% of units to be provided as adaptable for developments of over 30 units or more; and*
 - *The Department noted the Applicant's response, however considered the Applicant could reasonably provide for a minimum of 21 adaptable units in this building, distributed between both Key Worker Housing and non-Key Worker Housing"*.

Commission's consideration

103. The Commission notes the ADG confirms that adaptable housing is governed by *Australian Standard AS 4299-1995 (Australian Standard)* and that adaptable housing is specifically designed and built to accommodate future changes to suit occupants with mobility impairment or life cycle needs. In addition, the ADG recommends that adaptable housing be provided in accordance with the relevant council policy.
104. The Commission notes that Condition B37 'Universal Design' requires the Application include a minimum of 20% of all apartments to achieve the Liveable Housing Guideline's silver level universal design features. However, although achieving this level of design ensures a certain amount of accessibility and housing flexibility, those apartments would not achieve the necessary space/design requirements to be considered adaptable housing in accordance with the requirements of the Australian Standard.

105. The Commission acknowledges the Applicant's comments that it would like to work with its customers to provide adaptable housing within the development when it is requested. However, the Commission is concerned that if adaptable apartments are not incorporated as part of the initial layout and construction of the development, they will not be able to be provided at a later stage due to their space/design requirements.
106. The Commission considers the provision of adaptable housing to be an important requirement and therefore agrees with the Department that it is reasonable that the Application be required to include a minimum number of adaptable apartments. In addition, the Commission is satisfied that the development is capable of accommodating the recommended 10% (21 apartments) without unduly compromising the overall layout or quality of the development.
107. The Commission notes that Council did not raise any objection to the provision of 10% adaptable housing within the Application.
108. Based on the Material, the Commission finds that Condition B36 'Adaptable Housing' is necessary and reasonable and the Commission does not recommend any amendment to this condition.

5.9 Other relevant issues

109. Section 6.8, Table 8 of the Department's AR identifies the following 'other issues' relevant to the Application:
 - construction noise/construction hours;
 - construction traffic;
 - construction air quality;
 - operational noise;
 - signage zones; and
 - future retail uses.
110. The Commission is satisfied with the Department's assessment of the other issues as set out in section 6.8 of its AR because it considers the identified issues can be mitigated and/or managed to an acceptable level through the recommended conditions of consent.
111. The Commission's considers other relevant issues include:
 - view impacts;
 - key worker housing;
 - bicycle and service vehicle parking;
 - future residential amenity and the ADG;
 - impact of *Harpullia pendula*; and
 - relationship of the public domain to adjoining road levels.

5.9.1 View impacts

Public comments

112. The Commission notes the concerns raised in public submissions about the potential impact of the Proposal on views.

Applicant's consideration

113. The Applicant undertook a Visual Impact Assessment (VIA), which assessed the impact of the Proposal on public and private views, including the most affected residential apartments buildings (Highgate, Georgia, Stamford Marque and Stamford on Kent). The

Amended RtS concluded:

“Building R5 remains consistent with the views and visual impacts approved as part of the Concept Plan (MOD 8) and... will not result in any impacts that were not considered as part of the Concept Plan... 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”.

Department’s consideration

114. The Department’s AR concludes that the Applicant’s VIA accurately depicts the impact of the development and that the view impacts from the public domain and private residences are acceptable as:
- ... the Concept Plan considered view corridors from Kent Street when determining the positioning of the building...
 - ... the proposed building would not fill the approved Concept Plan building envelopes.
 - the proposed viewing angle is six degrees greater than the potential total viewing angle... from a building sited within the south-eastern extent of the... envelope.
 - the orientation and siting of the building... is consistent with the fan principle, aligning with the southern side of Hickson Park.
 - there is an improvement in view corridors... compared to the Concept Plan indicative buildings envelopes...
 - ... views to the north-west, north, east and south will be unaffected by Building R5.
 - 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”.

Commission’s consideration

115. The Commission accepts the conclusions of the Applicant and the Department regarding view impacts outlined in paragraphs 114114 and 115 as the Application has demonstrated that the Proposal will not result in significant or unacceptable impacts on existing views.
116. Based on the Material, the Commission finds that the Application would not have unacceptable impacts on views.

5.9.2 Key worker housing

Concept Plan KWH requirements

117. Condition B11 of the Concept Plan requires:
- 2.3% of residential GFA at Barangaroo South to be provided as KWH within Barangaroo South; and
 - at least 0.7% of residential GFA in Barangaroo South to be provided as KWH (or equivalent development value) provided off site within 5 km of the Site.

Council comments

118. The Commission notes Council raised concerns that insufficient information had been provided about the management of the on-site KWH and that the on-site KWH dwelling mix should include 3-bedroom apartments.

Applicant’s consideration

119. The Applicant stated in its Amended RtS that:

- *“KWH will be managed by a registered CHP, subject to an independent Expression of Interest. Management of the KWH would be determined in accordance with the selected CHPs unique management procedures and Lendlease will procure the Barangaroo Delivery Authority to grant a 99 year lease to a community housing fund or CHP; and*
- *Consultation has occurred with several CHPs... The CHPs have provided feedback that three bedroom apartments are in less demand in the CBD area as families prefer to live outside of the CBD... [and] are unlikely to find the location of Building R5 suitable”.*

Department’s consideration

120. With regard to KWH management, the Department concluded *“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”.*
121. The Department did not object to the absence of 3 bedroom KWH apartments on-site, stating that the 0.7% off-site 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... this provides sufficient opportunity and certainty that 3-bed KWH units will be provided”.*

Commission’s consideration

122. The Commission accepts the conclusions of the Applicant and Department regarding KWH management and dwelling mix as outlined in paragraphs 120 to 112 as:
- the Applicant has confirmed the KWH would be managed by a CHP and the Department has required further confirmation of this by condition (Condition E4);
 - the Applicant’s consultation with CHPs has confirmed the provision of 3 bedroom KWH apartments on-site would be inappropriate; and
 - there is opportunity for the provision of larger KWH apartments as part of the off-site KWH provision, within 5 km of the Site.
123. Based on the Material, the Commission finds that the KWH will be appropriately managed and it is not necessary for 3-bedroom KWH apartments to be provided on-site as these would be more appropriately provided at the off-site location.

5.9.3 Bicycle and service vehicle parking

Council’s comments

124. The Commission notes Council raised concern that insufficient information had been provided in relation to bicycle parking and facilities and that the Proposal includes insufficient service vehicle parking spaces.

Applicant’s consideration

125. The Amended RtS states *“Residents are provided with bicycle storage within storage cages in the shared basement... a bicycle storage area is provided for KWH residents. This approach is consistent with the previous residential buildings in Barangaroo South, as well as the common practice of residential buildings within the City of Sydney Local Government Area. End-of-trip facilities for non-residential uses are provided in Basement Level B0”.* In addition, *“The proposed number of service vehicle spaces has also accounted for the likely demand for service vehicle parking...”.*

Department's consideration

126. The Department's AR concludes that suitable and sufficient bicycle parking and facilities will be provided, noting that *"Non-KWH units would utilise individual storage cages in the shared basement... A communal bicycle parking storage area is provided for KWH at the basement level... End-of-trip facilities for non-residential uses are provided in Basement Level... One hundred visitor bicycle parking spaces will be provided as part of the approved public domain works"*.
127. The Department AR states that the Stage 1B Basement has been designed to be a shared basement between Buildings R4A, R4B and R5 and includes four service vehicle spaces, providing for 9.25m rigid vehicles and including a vehicle turntable. The Department concludes that the proposal is sufficient subject to a condition (Condition E6) requiring the preparation of a Loading Dock Management Plan (LDMP).

Commission's consideration

128. The Commission accepts the Department's conclusions at paragraphs 127 and 128 regarding bicycle and service vehicle facilities provision as the Proposal has demonstrated that sufficient bicycle parking and end of trip facilities will be provided. In addition, adequate provision has been made for service vehicles within the Stage 1B Basement and the operation of those spaces will be appropriately managed by a LDMP.
129. Based on the Material, the Commission finds that the Application will provide for adequate bicycle and service vehicle facilities.

5.9.4 Future residential amenity and the ADG

130. The Commission notes that the ADG provides important guidance to the consent authority in the assessment of development applications. However, apart from the non-discretionary development standards in SEPP 65, the ADG is not intended to be applied as a set of strict development standards, and is instead intended to be a tool to inform the assessment of a proposal. The use of the ADG was clarified in Planning Circular PS17-001 *Using the Apartment Design Guide* issued on 29 June 2017.

Public and Council comments

131. Concern was raised in public submissions about the loss of privacy to adjoining residential properties in Kent Street.
132. The Commission notes Council raised concern that the Proposal did not strictly comply with the recommended design standards within the ADG. In particular:
 - the use of opaque glazing/screens to address the ADG recommended building separation distance of 24 m results in a poor outlook;
 - more than the ADG maximum of 40 apartments are served per lift; and
 - less than the ADG minimum of 50% solar access is afforded to the communal open spaces at Level 26 and Level 2 (podium).
133. The Commission notes that Council also raised concerns about:
 - apartment room and balcony sizes. However, these concerns are in relation to very minor non-compliances for only a small number of apartments (being 25 (12%)). The Commission notes paragraph 131 above, and also that the apartments are afforded an otherwise high standard of amenity as demonstrated by the Proposal and confirmed in the Department AR. The Commission therefore is satisfied these minor non-compliances are acceptable and the intent of the ADG would be met in regard to

- apartment room and balcony sizes for the development; and
- the adequacy of solar access to rooms within future apartments. However, the Amended RtS has demonstrated that the Proposal meets the ADG solar requirements of 70% apartments receiving 2 hours of direct sunlight in mid-winter and provides less than a maximum 15% of apartments receiving no direct sunlight in mid-winter.

Applicant's consideration

134. In response to the concern raised in public submissions (paragraph 132), the Amended RtS states *"The assessment of the Concept Plan (Modification 8) considered impacts on surrounding residents, including... privacy. The proposed One Sydney Harbour buildings are entirely consistent with the Concept Plan (as modified), and therefore are consistent with the outcomes assessed and considered appropriate in respect of these matters"*.
135. In response to Council's concerns (paragraph 133), the Amended RtS states:
- "opaque facades are proposed in a limited number of apartments... (located) along one edge of the private open space, at the end of the kitchen bench and a small portion of the dining area. The primary living area and private open space are oriented towards Hickson Park and views of Sydney Harbour;*
 - the design and speed of the lifts to be installed will be able to comfortably accommodate residents movements. In the event that the KWH lift is not operational, access will be provided to the northern lift bank for use by the KWH residents; and*
 - Detailed solar access modelling... illustrates that both communal areas benefit from a significant amount of solar access during the summer months (Table 4)... Building R5 is located within a high density, inner-city area and the design of the communal open space responds to this urban environment... Where the (solar access) design criteria cannot be met, the ADG provides Design Guidance to achieve the objective... (and) the proposal satisfies the Design Guidance.*

Table 4 - Communal open space solar access results (Source: Applicant' Amended RtS)

Area	Minimum Hours of Direct Sunlight Exposure	% of Area exposed to sunlight for the listed hours			
		Winter 9am to 3pm	Winter All day	Summer 9am to 3pm	Summer All day
Level 26 Terrace	2 hours	10.7%	32.1%	89.4%	98.8%
	1 hour	47.3%	51%	92.4%	99.2%
P2 Terrace (Common Area)	2 hours	0.2%	0.2%	33.7%	62.6%
	1 hour	39.2%	39.2%	47.5%	63.9%

Department's consideration

136. With respect to privacy impacts to Kent Street properties, the Department's AR states *"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"*.
137. The Department's AR concludes that *"inconsistencies with the ADG are acceptable as the intent of the ADG is satisfied"*. In response to Council's concerns (paragraph 133) the Department's AR confirmed:
- "The proposed building separation distance satisfies the 18 m separation distance requirement contained in the Design Controls approved under the Concept Plan... The Department did not object to the use of opaque glazing to prevent overlooking between buildings;*
 - 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... there are contingency plans for shared*

- *access between lifts if full operational capacity is interrupted; and*
- the solar access to communal open space is acceptable noting the summer solar exposure (**Table 4**). The AR also stated “*residents will have direct access to the future Hickson Park, future Central Barangaroo and the completed Headland Park... the communal spaces for KWH & non-KWH are each located in a single location, which is well designed... (and) the locations on the podium and roof would have views*”.

Commissions consideration

138. The Commission acknowledges the guidance in Planning Circular PS17-001 (paragraph 131).
139. The Commission accepts the conclusions of the Applicant and the Department in paragraphs 136 and 138. In particular, the Commission is satisfied that the:
- windows affected by opaque glazing/screening will achieve an acceptable standard of amenity as they have alternative outlooks
 - service of lifts (55 seconds) is acceptable and plans are in place should service be interrupted
 - despite the inconsistency with the ADG recommended standard for solar access to open space, the Application has demonstrated that the communal open spaces will achieve a high standard of amenity and has solar access during summer months. In addition, future residents will have access to high quality alternative open spaces within the immediate vicinity of the Site.
140. The Commission accepts the conclusions of the Applicant and the Department in paragraphs 135 and 137 as the Kent Street properties are located further away from the Site than the ADG recommended minimum (26 m), and the Application is consistent with the Concept Plan.
141. Based on the Material, the Commission finds that although the Application includes a number of inconsistencies with the ADG recommended standards, those inconsistencies are minor in nature and/or would not result in any adverse amenity or design impacts and are therefore acceptable.

5.9.5 Relationship of the public domain to adjoining road levels and Hickson Park

Council's comments

142. The Commission notes that Council raised concern that the:
- ground level of the Proposal would not align with the future ground levels of Hickson Road and Watermans Quay and therefore creates the need for ramps and stairs; and
 - interface between the base of the tower and Hickson Park has not been resolved.

Applicant's comments

143. At its meeting with the Commission, the Applicant confirmed the level of the public domain around the base of the tower would be set to RL 3.5 and would therefore align with the future raised ground level of Hickson Road and Watermans Quay. In addition, the Amended RtS includes revised landscape drawings that more clearly detail the interface with Hickson Park.

Department's consideration

144. The Department's AR states “*The Applicant amended the proposal in the [amended] RtS 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”.

Commission’s consideration

145. The Commission acknowledges the information provided by the Applicant outlined at paragraph 144. The Commission accepts the conclusions of the Department at paragraph 145 and is satisfied the Proposal has appropriately taken account of the future ground level of surrounding roads and will provide an appropriate interface with Hickson Park.

5.9.6 Impact of *Harpullia pendula*

146. At its meeting with the Applicant and the Department the Commission raised concern about the potential safety and maintenance impact of the proposed tree species (*Harpullia pendula*) resulting from berries/flowers dropping onto the public domain.

Applicant’s comments

147. In its additional information dated 1 October 2019, the Applicant stated:
- *“Harpullia pendula is common street tree. It is currently planted in Barangaroo Avenue, and will also be planted in the extension of Barangaroo Avenue under the approved Stage 1B Public Domain design (SSD 7944). This species is also listed in the City of Sydney Street Tree Master Plan;*
 - *Harpullia pendula has a greenish-yellow to white flower in summer and a yellow to red fruit. The public domain area will be regularly maintained with specialist landscape contractors providing instruction to operations and maintenance for the safe care of the trees and the surrounding public domain; and*
 - *When the public domain is handed over to the entity responsible for ongoing maintenance, manuals and recommendations will be provided on the frequency and method of maintenance (including cleaning of fruit fall and maintenance in a variety of weather conditions, including wet weather)”.*

Department’s consideration

148. The Department provided a response to the Commission’s concern in its email dated 6 September 2019 stating:
- *“The Department considers this issue can be addressed with a management response by the Applicant, such as a commitment to undertake regular maintenance in the vicinity of the trees, for example by a streetsweeper. The Department notes the public domain consent provides approval for the planting of these species along Barangaroo Avenue, and therefore the Department considers the Applicant will be required to formulate a management response to this issue on a broader scale”.*

Commission’s consideration

149. The Commission accepts the Applicant’s information at paragraph 148 and is satisfied that adequate measures will be put in place to ensure that the public domain will be regularly maintained to ensure flowers/berries from the trees will not result in safety or maintenance issues.
150. Based on the Material, the Commission finds that the planting of *Harpullia pendula* within the public domain is acceptable and that the public domain will be appropriately maintained.

5.10 Suitability of the site for the development

151. It was raised in public submission that the Site should be provided as a park.
152. The Commission is generally satisfied that the Application is suitable for the Site as:
- the likely environmental issues, outlined in section 5, associated with the Application can be adequately addressed through management and/or mitigation measures;
 - the Application is generally consistent with the Concept Plan, as outlined at section 5.7;
 - the Application is generally consistent with the planning priorities set out in the GSR Plan, District Plan and CLM Act as outlined in section 5.3; and
 - the Site and surrounding area will be adequately served by Hickson Park and other open spaces within the Barangaroo Precinct.

5.11 The public interest

Department's consideration

153. The Department's AR considered the consistency of the Application with the objects of the EP&A Act and concluded that it was consistent with the objects, stating the Application:
- "... would not impact on natural and artificial resources... increase housing supply to meet a range of housing needs... and provide retail opportunities which will enhance economic and social welfare;
 - ... promotes the orderly and economic use of the land as the use is permitted on the site and is consistent with the Concept Plan...;
 - ... provide for Key Worker Housing (KWH) in a highly accessible location, providing for housing choice and diversity;
 - ... would not have an adverse impact on the natural environment;
 - ... would have acceptable impact on its heritage context...;
 - ... would exhibit good design quality and amenity...;
 - ... would be constructed in compliance with all relevant building codes and health and safety requirements; and
 - ... the proposal (is) in the public interest as it would provide social and economic benefits by providing housing choice and construction jobs in a highly accessible area.
154. The Departments AR noted the Application was considered in relation to the principles of ESD and concluded:
- **“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”.

Commission's consideration

155. The Application would enable outcomes that are broadly consistent with the Concept Plan. Other benefits include:

- a development that displays design excellence (as set out in paragraph 32);
 - high quality public domain (as set out in paragraphs 32 and section 5.9.5);
 - positive social and economic benefits (as set out in paragraph 47); and
 - provision of quality housing and retail accommodation (as set out in paragraph 47).
156. The impacts of the project have been discussed throughout Section 5.6 of this statement of reasons for decision. The Commission refers to its conclusions in Section 7, which confirm that the development is acceptable subject to the Department's recommended conditions (as amended by the Commission).
157. The Commission refers to its conclusions in paragraphs 101 and 109. Contrary to the Applicant's request, the Commission finds that it is in the public interest for KWH car parking spaces and adaptable housing to be subject to minimum requirements.
158. In determining the public interest merits of the Application, the Commission has had regard to the objects of the EP&A Act. The Commission is satisfied with the Department's AR considerations that the Application is consistent with the objects of the EP&A Act, including the principles of ESD, as discussed in paragraph 155.
159. The Commission has taken into account the Material and finds, as set out in paragraphs 154, that the Application will provide a public benefit consistent with the Concept Plan.

6. HOW THE COMMISSION CONSIDERED THE COMMUNITY'S VIEWS IN MAKING ITS DECISION

160. The views of the community were expressed through public submissions and comments received by the Department in response to the two public exhibitions of the Application, as summarised at paragraphs 29 and 30.
161. In summary, views expressed by the community raised a number of concerns about traffic impacts, visual, view and privacy impacts, built form and construction.
162. The Commission carefully considered all of these views as part of making its decision. The way in which these concerns were taken into account by the Commission is set out in section 5 above.
163. Certain public comments raised concerns about the potential impact on property values and the sale of the future apartments to overseas purchasers. It is beyond the remit of the Commission in making its determination for this Application to consider or provide comment on these issues.

7. CONCLUSION: THE COMMISSION'S FINDINGS AND DETERMINATION

164. The Commission has carefully considered the Material before it.
165. Based on the Material, the Commission finds that:
- Council's concern about the effectiveness of wind mitigation measures has been addressed (paragraph 70) and the Proposal includes appropriate wind mitigation (paragraphs 71);
 - the design of the tower form, comprising a part podium / shear façades is acceptable given the Site location, context and the design of Buildings R4A and R4B (paragraph 84) and the architect will have an ongoing involvement with the Application (paragraph 87);
 - car parking is not excessive and a minimum of nine car parking spaces should be provided for KWH (paragraph 101);

- it is reasonable that the Application be required to include a minimum of 21 adaptable apartments (paragraph 109);
 - the Application would not have unacceptable impacts on views (paragraph 117);
 - the KWH will be appropriately managed and it is not necessary for 3 bedroom KWH apartments to be provided on-site as these would be more appropriately provided at the off-site location (paragraph 124);
 - the Application will provide for adequate bicycle and service vehicle facilities (paragraph 130);
 - although the Application includes a number of inconsistencies with the ADG recommended standards, those inconsistencies are minor in nature and/or would not result in any unacceptable amenity or design impacts and are therefore acceptable (paragraph 142);
 - the Application has appropriately taken account of the future ground level of surrounding roads and will provide an appropriate interface with Hickson Park (paragraph 146);
 - the planting of *Harpullia pendula* within the public domain is acceptable and that the public domain will be appropriately maintained (paragraph 151);
 - the Department's recommended conditions, (as revised by the Commission) are adequate to manage environmental impacts resulting from the Application;
 - it is satisfied that the Application meets the objects of the EP&A Act; and
 - the Application is in the public interest as set out in section 5.11.
166. For the reasons at paragraph 166, the Commission has determined to grant consent to the Application subject to conditions. These conditions are designed to:
- prevent, minimise and/or offset adverse environmental impacts;
 - set standards and performance measures for acceptable environmental performance
 - require regular monitoring and reporting; and
 - provide for the on-going environmental management of the development.
167. The reasons for the Decision are given in this Statement of Reasons for Decision dated **3 October 2019**.



John Hann (Chair)
Member of the Commission



Mary O'Kane AC
Member of the Commission