URBIS

WATERLOO METRO QUARTER OVER STATION DEVELOPMENT- CENTRAL PRECINCT DETAILED DESIGN SSD-10439

Response to Submissions

Prepared for

WL DEVELOPER PTY LTD

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1. INTRODUCTION

This 'Response to Submissions' Report (**RtS**) has been prepared by Urbis on behalf of WL Developer Pty Ltd to address the matters raised by government agencies, and public and community organisation groups during the public exhibition of the proposed Waterloo Metro Quarter (**WMQ**) Over Station Development (**OSD**), specifically the Central Precinct SSD-10439.

The Department of Planning, Industry and Environment (**DPIE**) issued a letter to the applicant on 14 February 2020, requesting a response to the comments raised during the public exhibition period for SSD-10439.

Where applicable, this RtS provides consolidated responses to the submissions received which are relevant to multiple applications across the Waterloo Metro Quarter (**WMQ**) site. Conversely, separate responses are provided for the submissions only relevant to the Central Precinct application.

1.1. OVERVIEW

The application was on public exhibition 5 November 2020 to 2 December 2020. During this period, submissions were received from NSW government agencies, the City of Sydney Council (**the Council**) and other key public authorities. The submissions received from public authorities included those from:

- Environment Protection Authority
- Department of Planning, Industry and Environment - Biodiversity and Conservation Division
- Transport for New South Wales (**TfNSW**)
- Sydney Metro
- City of Sydney
- Sydney Water
- NSW Health
- Sydney Airport Corporation
- Civil Aviation Safety Authority

In addition, submissions were received from neighbouring property owners and residents, the broader community, and an elected representative. The key matters raised in the agency and public submissions include:

- Adequate provision of affordable housing;
- Suitability of the childcare centre use;
- Adequate provision of community facilities;
- Provision of car parking;
- Traffic generation and traffic impacts;
- Increased pedestrian movement;
- Overshadowing, privacy, and visual impacts to neighbouring residences;
- Overshadowing and amenity of existing and proposed public open space and conservation area;
- Wind conditions on the site;
- Management of the public pen space; and
- Commentary on overall architectural quality of the proposed designs.

This RtS provides an in-depth and holistic response to the above key matters and all other matters raised by public authorities and community submissions. Specific design changes are also proposed to the

development in response to the submissions received. Revised specialist documentation to support the revised scheme are provided in support of the RtS which includes:

- Amended Architectural Plans (Appendix A)
- Supplementary Architectural Design Report (Appendix B)
- Response to Submission Landscape Response Letter (Appendix C)
- Amended Landscape Plans (Appendix D)
- Supplementary Landscape Report (Appendix E)
- Amended Design Integrity Report (Appendix F)
- Amended e Waterloo Metro Quarter Design and Amenity Guidelines (Appendix G)
- Updated Pedestrian Wind Environment Assessment (Appendix H)
- Technical Memo on Natural Ventilation (Appendix I)
- Technical Memo on Acoustic (Appendix J)
- Technical Memo in response to City of Sydney Council Flux Consultants Peer Review (Appendix K)
- Public Benefits Advice (Appendix L)
- Supplementary Solar Access Assessment (Appendix M)
- Supplementary Overshadowing Assessment (Appendix N)
- ESD Technical Memo (Shading Devices, Sustainability Strategy Responses) (Appendix O)
- Supplementary Traffic and Parking Assessment (Appendix P)
- Technical Memo addressing Changes to Botany Road Public Domain (Appendix Q)
- Technical Memo on Waste Management Requirements (Appendix R)
- Technical Memo on Flood Risk Management Plan (Appendix S)
- Childcare Lift Design Memo (Appendix T)
- Supplementary Childcare Centre Design Memo (Appendix U)

1.2. SUMMARY OF SUBMISSIONS

A breakdown of the submissions by respondent type and their position is provided in the tables below.

Table 1 Central Precinct Detailed SSD DA Submissions Received by Respondent Type

Submitter	Position	Number of Submissions
Public Authorities and NSW Government Agencies		
Environment Protection Authority	Comment	1
Biodiversity and Conservation Division	Comment	1
TfNSW	Comment	1
City of Sydney	Object	1
Sydney Water	Comment	1

Submitter	Position	Number of Submissions
Sydney Metro	Comment	1
NSW Health	Comment	1
Sydney Airport Corporation	Comment	1
Civil Aviation Safety Authority	Comment	1
SUBTOTAL		**9**
Community and Organisations		
General public	Support	2
General public	Object	8
Organisation	Object	4
Organisation	Comment	1
SUBTOTAL		**15**

1.3. ACTIONS COMPLETED FOLLOWING EXHIBITION

Since the public exhibition of the proposed detailed SSD DA, the proponent has consulted with government agencies as follows:

- Meeting with the DPIE on 16 December 2020 to discuss the key matters required to be addressed in the response to submissions and the supporting assessment and design analysis required to be demonstrated.
- The proposed development was re-presented to the Design Review Panel (**DRP**) on 18 February 2021 in accordance with the Design Excellence Strategy endorsed under the Concept SSD 9393. The DRP provided the following feedback:

  Built form

  – The DRP acknowledges that it is difficult for this building to meet minimum Apartment Design Guide (**ADG**) requirement for solar access to apartments. The DRP also notes that whilst not compliant, a larger number of apartments will still have reasonable solar access during winter days.

  – The DRP suggests that further improvement in cross ventilation could be achieved by splitting the northern two apartments from the adjacent east and west apartments and adding staggered openings through these walls within the resulting gap. It is recommended that the Project Team consider this option and its impact on the internal planning as part of ongoing design development.

  – The DRP supports the design change to raise the retail tenancies and adjacent footpath above the flood plane to Botany Road.

  – The DRP supports the increased level of detail provided to Council on the material intent of the building.

Minutes of this meeting are provided at **Appendix J**. This feedback is addressed through this RtS report at Section 4.2.

2. AMENDMENTS TO THE PROPOSED DEVELOPMENT

Since lodgement and public exhibition of the detailed SSD DA, the applicant has further developed the design of the proposed development. As a result, minor modifications are proposed to the Central Precinct development. A summary of the proposed changes is provided below.

Design changes are proposed to the ground floor of the Central Building in order to comply with 1% Annual Exceedance Probability (**AEP**) flood level along Botany Road. The design change includes raising the floor level of the building located along the southern portion of Botany Road (area highlighted in blue on Figure 1) to 15.70m AHD.

The Botany Road frontage can continue to provide activation through an elevated lane that is line with shopfronts to the east and landscaping to the west. Offering a pedestrian buffer to the roadway and a more pleasant space for visitors. Integrated seating is also provided.

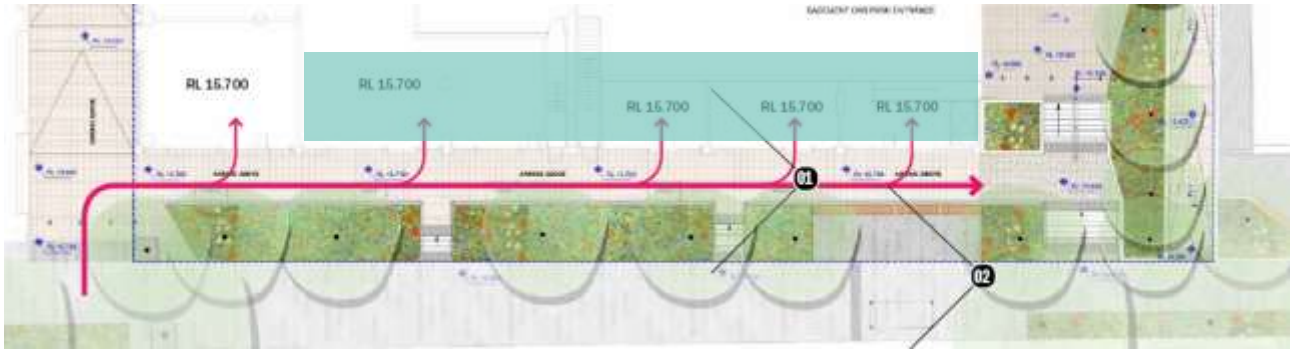
Landscape design changes are also proposed in response to the amended ground level (amended landscape plan is attached at Appendix D). This has created a low terrace along the building façade with a low height retaining wall fronting the street and footpath. Precast steps on steel beams bridge the 3m deep soil area between the footpath and the terrace, while maximising the deep soil area possible on the site. Low height shrubs and ground covers soften and screen the retaining wall, whilst maintaining sightlines and visual connection between the building and the street.

Equitable access into the retail area is achieved from the northern end of Botany Road, adjacent to Grit Lane, where a gradual change in RL (RL 15.75 to RL 15.7) is provided (refer to Figure 1).

An additional Pedestrian Movement Technical Memo has also been provided to assess the likely pedestrian movements along Botany Road as a result of flood planning public domain change (refer Appendix Q of this RtS). Overall, the flood planning changes are not likely to materially change or impact operations along the footpath and bus stop environment.

The design change along Botany Road was presented to the DRP and was supported by the Panel as outlined in Section 2.1.

Figure 1 Botany Road DDA Access Route



Source: Hassell

The minor amendments proposed to the Central Building are illustrated on the amended Architectural Plans at Appendix A and are discussed in the Design Report attached at Appendix B.

Additional information is provided within this RtS to support the operation of the childcare centre as a community facility, including the mechanism to satisfy the public benefit offer under Condition A12 of Concept SSD 9393 and the *Sydney Local Environmental Plan 2012* (**SLEP**) requirements.

Additional technical and design information is also provided to demonstrate the acceptable level of solar amenity and natural cross ventilation, as well as providing further detail on the alternative mechanical ventilation solution.

3. RESPONSE TO DPIE ASSESSMENT

The NSW DPIE wrote to the applicant on 14 December 2020 requesting a response to the submissions and matters raised during the public exhibition period for SSD-10439.

The comments provided by the DPIE required further clarification on built form and amenity impacts (both external and internal) of the modified building envelope and detailed OSD designs.

The DPIE have raised key concerns that applied to the entire WMQ site, including the Central Precinct. These key concerns are categorised under the following headings:

- Public Benefits;
- Design Integrity Reports;
- Wind Impact Assessment; and
- Active Street Frontages

Each of these key matters are addressed in the following sections.

The key matters that relate to the Central Precinct SSD DA are subsequently addressed in Section 3.4.

3.1. PUBLIC BENEFITS

Condition A12 of the Concept SSD-9393 requires that the following is provided across the WMQ site:

> *a) a minimum 5% of approved residential gross floor area dedicated or transferred to a Registered Community Housing Provider as affordable housing*
>
> *b) 70 social housing dwellings dedicated or transferred as agreed by NSW Land and Housing Corporation*
>
> *c) publicly accessible open space provision of minimum 2,200m2 across the Metro Quarter site including its final area, design and ongoing management, noting partial provision of this publicly accessible open space may also be delivered under the CSSI Approval*
>
> *d) community facilities gross floor area of a minimum 2,000m2 including its final area, design and future operating model. Community facilities are as defined in the Sydney Local Environmental Plan 2012.*

The above is satisfied through the four detailed SSD DAs lodged currently for the WMQ OSD, including this SSD DA. The specific mechanisms of satisfying Condition A12 of SSD 9393 and the SLEP 2012 requirements are outlined within the letter provided at Appendix L.

In summary it is noted that the proposed WMQ OSD will deliver the required public benefits as follows:

- A minimum of 5% of the total residential gross floor area (**GFA**) proposed to be delivered across the WMQ site is to be delivered as affordable housing contained in the Central Precinct. For the purpose of total residential GFA calculation, the total residential GFA across the WMQ site comprises student housing and social housing contained in the Southern Precinct (SSD-10437) as well as the residential GFA contained in the Central Precinct.
  - The required affordable housing will be constructed by the applicant, as required under the Project Delivery Agreement between the applicant and Sydney Metro. The stratum title of the affordable housing will be registered and transferred to a Registered Community Housing Provider, as required under the terms of the Project Delivery Agreement.
- 70 social housing dwellings are proposed to be delivered within ‘Building 4’ of the Southern Precinct (SSD-10437). The social housing dwellings have been designed to satisfy the design and functional requirements of the NSW Land and Housing Corporation.
  - The required social housing dwellings will be constructed by the applicant, as required under the Project Delivery Agreement between the applicant and Sydney Metro. The stratum title of the social housing will be registered and transferred to the NSW Land and Housing Corporation by Sydney

Metro for the purposes of social housing, as required under the terms of the Project Delivery Agreement and will be secured by way of a Public Positive Covenant on title.

- A minimum of 2,200m^2 of publicly accessible open space is proposed to be delivered by the applicant and Sydney Metro across the Waterloo Metro Quarter. This area generally comprises Raglan Plaza (684m^2) documented on the landscape plans submitted with the Northern Precinct SSD DA (SSD-10440) and the Cope Street Plaza (1,675m^2, including areas for future licensed outdoor dining) documented on the landscape plans submitted with the Southern Precinct SSD DA (SSD-10437).
  - The required publicly accessible open space will be constructed by the applicant and the station contractor for Sydney Metro, as required under the Project Delivery Agreement and Station Delivery Deed. The stratum of the publicly accessible open space will remain under the ownership of Sydney Metro and the applicant. The applicant's land will be burdened by a section 88A instrument registered on the title to secure the relevant public access and recreation easement in perpetuity.
- A tenancy within Level 1 and Level 2 of the Central Building podium is nominated to be used as a community facility, as shown on the submitted architectural plans and in the EIS of the Central Precinct and is in accordance with the definition provided within the SLEP 2012. The minimum gross floor area of this tenancy is 2,000m^2.
  - This tenancy will be used in perpetuity for 'community facilities' as required by Condition A12 and will be secured by way of a Public Positive Covenant on title.
- In addition to the community non-for-profit childcare centre, a total of 630sqm is dedicated for community spaces across the three precincts within the WMQ site, including a 60sqm community hub located on the ground floor of the Central Precinct. These community spaces will be used for a variety of community uses. For example, a medical/health centre, enterprise café, Makerspace, community hub etc. The specific uses are to be determined at a future stage.

3.1.1. Proposed Childcare Centre meeting the definition of a Community Facility

The Public Benefit Advice attached at Appendix L demonstrates how the proposed childcare centre meets the definition of a community facility, including the proposed mechanism that would be put in place to restrict the use of the property for a community facility in perpetuity.

In summary:

- As per the requirement of the community facility definition under SLEP 2012, the community facility tenancy is required to be controlled by a non-for-profit organisation (or public authority) registered under the Australian Charities and Not-for-profits Commission (**ACNC**).
- Consistency with ACNC qualification, the proposed childcare centre is to the benefit of the public and are for 'advancing social or public welfare', specifically the 'advancement of education' as the recognised charitable purpose. As such the proposed centre-based childcare facility meets the definition of a 'community facility' and is able to satisfy the community facility floor space as required under the Concept SSD 9393.
- A lease is the effective way to provide control over the tenancy. Such a lease for this particular tenancy provides control to a non-for profit entity or government for the design, fit-out and operation for a centre-based childcare facility related to the tenancy shown on plan, with a minimum area of 2,000sqm GFA.
- The use of the tenancy as a community facility will be secured in perpetuity by a condition of approval, which requires the developer to register on title a restriction on use that would ensure the use to remain in perpetuity as a community facility.
- The above commitment is to be secured via a deed documented between the applicant and a government entity, which would tie OC of the relevant stratum with registration of an encumbrance on the title being an 88E instrument that restricts the use of it to a community facility. This deed would serve as the legally binding agreement which secures the community facility use in perpetuity.

3.2. DESIGN INTEGRITY REPORTS

A revised Design Integrity Report has been prepared in response to the DPIE comments and is included at Appendix F. The revised Design Integrity Report relevantly includes:

- advice letters from each DRP review session as endorsed by Panel Chair, and
- a log of advice from the above letters, including a comprehensive matrix of how DRP comments have been responded to. All relevant matters related to the Central Precinct have been addressed and closed out through the detailed SSD DA and the amended plans submitted with this RtS.

3.3. WIND IMPACT ASSESSMENT

The DPIE requested the applicant demonstrate the proposed development's compliance with the requirements of Condition B14 of the Concept SSD 9393 regarding applying standing criteria to waiting zones at crossings of intersections, including on the opposite sides of the streets.

In response to this, a revised Wind Impact Assessment has been prepared by RWDI and included at Appendix H.

The key waiting areas around the site include the bus stop zone along Botany Road, adjacent to the Central Precinct, as well as the four main pedestrian crossings at the corners of the precinct. Prior to the implementation of mitigation measures, the bus stop zone along Botany Road generally satisfies the standing criteria, whilst the pedestrian crossing areas are noted to satisfy the walking criteria.

The inclusion of awnings and street tree planting result in the entire bus stop zone and pedestrian crossing areas satisfying the standing criteria as outlined in the Waterloo Metro Quarter Design and Amenity Guidelines (**WMQ Design Guidelines**) document. Areas for the bus stop waiting zone will also satisfy the sitting criteria conditions.

With regards to the surrounding footpaths, wind conditions on the pedestrian footpaths opposite the site along Botany Road, Cope Street, Raglan Street and Wellington Street were found to generally satisfy the standing criteria.

Some localised areas within the southern end of Cope Street, the central area of Wellington Street, the northern end of Botany Road, and the eastern end of Raglan Street are noted as meeting the walking criteria. Additional testing with the inclusion of proposed new street trees in their mature form, as well as the inclusion of existing nearby adjacent trees in the wind model, indicate that wind conditions are further improved resulting in only localised areas satisfying the walking criteria, with the majority of areas satisfying the standing criteria.

Wind impact assessment to the rooftop communal space is further discussed in section 4.2 of the report.

In conclusion, the majority of the precinct will satisfy the required wind comfort criteria. As the tree planting grows to full maturity, the trees will further enhance the plantings ability to mitigate localised wind conditions throughout the precinct. Localised additional mitigation measures should be implemented to ensure all areas have been address for suitable wind comfort conditions.

3.4. ACTIVE STREET FRONTAGES

The Central Precinct site has a western frontage to Botany Road and a northern frontage to Grit Lane. All ground floor premises on the western and northern elevations are retail premises with glazing and entries from Botany Road and Grit Lane, to enable an activated street frontage.

In response to Council's comment on flood planning, retail tenancies along the southern end of Botany Road are raised to 15.70m AHD to comply with the 1% AEP flood level, and therefore stairs are required to provide access to the footpath adjacent to the retail tenancy. The Botany Road frontage can continue to provide activation through an elevated lane that is line with shopfronts to the east and landscaping to the west. Offering a pedestrian buffer to the roadway and a more pleasant space for visitors. Integrated seating is also provided as seen in View 2 below.

Figure 2 Botany Road Frontage Montage

Source: Hassell

The proposal will deliver truly active and integrated street edge throughout the entire Central Precinct and complies with clause 7.27 of SLEP 2012.

3.5. CENTRAL PRECINCT SSD DA

3.5.1. Affordable Housing

As discussed in Section 3.1 and in Appendix L, the required affordable housing will be constructed by the applicant, as required under the Project Delivery Agreement between the applicant and Sydney Metro. The stratum title of the affordable housing will be registered and transferred to a Registered Community Housing Provider as affordable housing, as required under the terms of the Project Delivery Agreement.

3.5.2. Childcare centre operation and fit-out details

The proposed lifts having sufficient size and capacity for the proposed number of children.

A lift is provided on the ground floor, providing basement and street level access to the childcare centre proposed within the podium.

A technical lift design memo has been prepared by WSP and is attached at Appendix T. The memo assessed the capacity of the proposed childcare lift and confirmed that:

- The proposed design of the childcare lift has a maximum capacity of 1275kg, equating to a size of 1400mm wide by 2000mm deep. This complies with the National Construction Code (**NCC**) requirements, which can accommodate up to 15 people per trip or two prams with four adults.
- Based on the proposed capacity of 146 children, the arrival and departure rate would be equivalent to maximum 300 people (parent and child) over an anticipated 2-hour period. This equates to approximately 13 persons per 5-minute period and in a single direction, which the proposed lift can easily accommodate.

Based on the above, WSP can confirm that the single lift has the capacity to meet the future childcare centre demand.

The proposed emergency and evacuation management procedures for the facility, particularly in response to any building and site constraints, such as flooding.

The Technical Memo on Flood Risk Management Plan prepared by WSP confirmed that the childcare facility and its entrance points are not affected by flooding (attached at Appendix S). Emergency management procedures can be developed post approval and incorporated in the final Operational Management Plan prior to occupation of the building.

A Childcare Centre Emergency Management Plan has been prepared by Omnii and was submitted with the Central Precinct EIS (Appendix QQ). The Childcare Centre Emergency Management Plan outlines detailed fire safety provisions, emergency response measures, evacuation plan and maintenance and training requirements for the childcare centre.

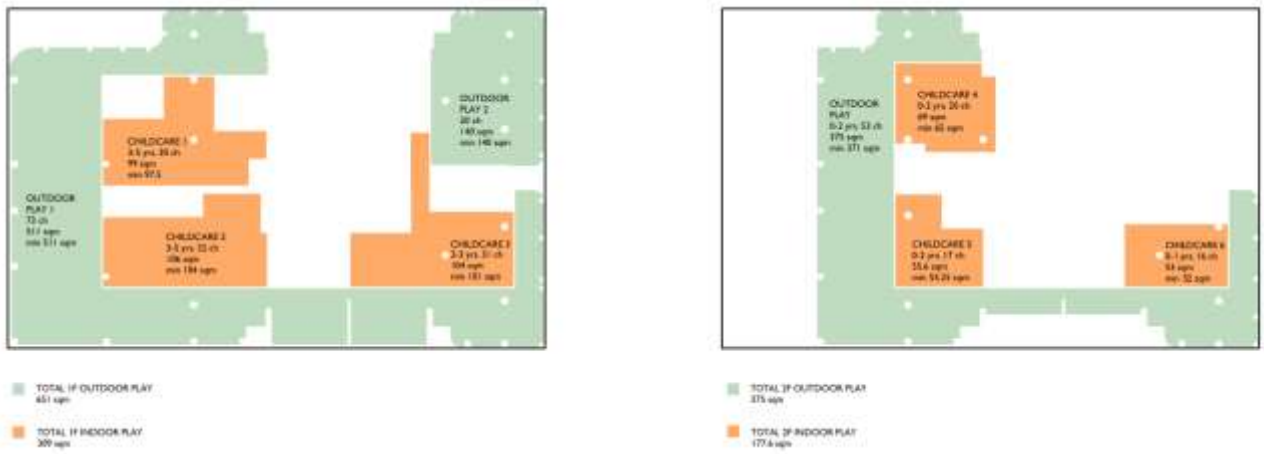
The emergency and evacuation procedure (in the event of fire) will be adopted in the final Operational Management Plan prepared by the operator and prior to occupation of the building.

The size of the floorplate dimensions and building services that would allow grouping of children into separate play spaces, with the required amenity and supervision. The proposed size and capacity of servicing and amenities to accommodate the demands of the childcare centre.

Childcare by Design has prepared a response letter (attached at Appendix U) which assesses the internal areas of the proposed childcare centre. It concludes that the floorplate can sufficiently provide for the needs of 146 children and associated staff.

As shown in Figure 3 and the area summary table prepared by Childcare by Design, the proposed floorplate allows for 146 children aged 0 – 5 years to be grouped in designated rooms over two podium levels, which is consistent with *Education and Care Services National Regulations (***Childcare Regulations***)*.

Figure 3 Proposed Childcare Centre Area Breakdown



Source: Hassell

Room Label	Age Group	Actual/ Required Area	Number of Children	Number of Toilets	Number of Basins	Nappy Change	Sleep Room	Bottle Prep
Childcare 1	3 – 5 years	99.00m² 97.50m²	30	5 Shared	5 Shared	Yes Shared + Shower	N/A	N/A
Childcare 2	3 – 5 years	106.00m² 104.00m²	32				N/A	N/A
Childcare 3	2 – 3 years	104.00m² 101.00m²	31	4	3	Yes + Shower	N/A	N/A
Childcare 4	0 – 2 years	69.00m² 65.00m²	20	2 Shared	2 Shared	Yes	Yes 10 cots	Yes
Childcare 5	0 – 2 years	55.65m² 55.25m²	17			Yes	Yes 8 cots	Yes
Childcare 6	0 – 1 years	53.00m² 52.20m²	16	1	1	Yes	Yes 16 cots	Yes
TOTAL	**All age groups**	**487.00m2 474.75m2**	**146**	**12**	**11**			

Source: Childcare by Design

As assessed by Childcare by Design and shown in the table above, the floor space of the internal playrooms exceeds the required 3.25sqm per child requirement under the Childcare Regulation. The number of toilets, handbasins and showers also exceed the requirement under the Childcare Regulation. Other required facilities such as sleep rooms and bottle preparation rooms can also be provided within the proposed floorplate.

All internal playrooms have direct access to outdoor simulated play areas. 1,026sqm of simulated outdoor space is provided across the two podium levels, which meet the 7sqm per child requirement under the Childcare Regulation. Facilities such as bathrooms and nappy change can be accessed by the educators and children from the play space.

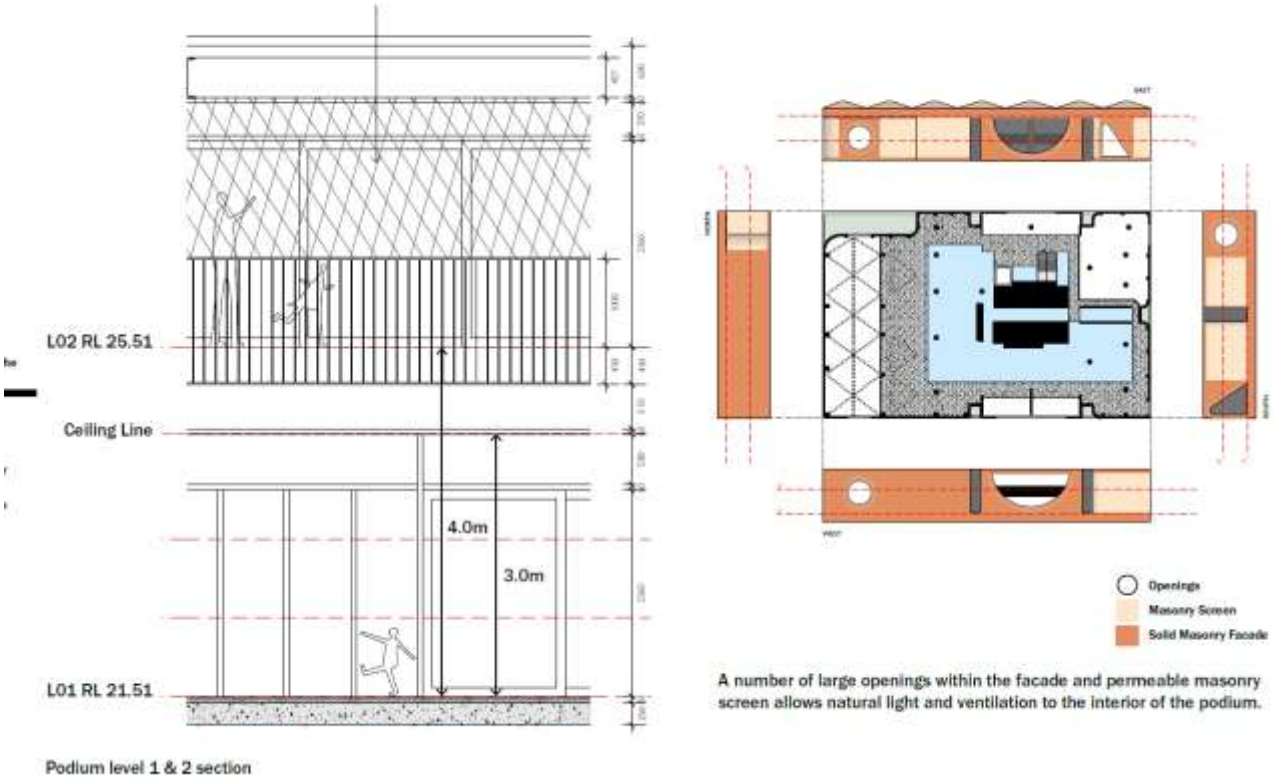
Given that the proposal relies on the use of simulated outdoor play space, the future fitout DA is required to seek a waiver from strict compliance with Section 108 of the Childcare Regulation under Clause 22(1)(b) of the E*ducational Establishment and Child Care Facilities SEPP 2017*. Concurrence from the Regulatory Authority is required for a proposal that does not strictly meet the outdoor unencumbered space requirements of Section 108 of the Regulation.

Childcare by Design has undertaken a preliminary assessment of the proposal against the design requirements for simulated outdoor space. The assessment noted that the play spaces on both levels have 3m high ceilings and the number of window and door openings are generous to have access to fresh air, ventilation, natural light, and thermal and acoustic comfort (refer to Figure 4).

Hassell has also illustrated in the Supplementary Design Report (Appendix B) that the large openings on the eastern and western façade maximise solar access in the morning and afternoon. The permeable masonry screen allows ventilation and dappled light while providing shade and privacy.

The layout and design of the floorplate also made provision for numerous plantings and other natural elements in the future detailed fitout design. Therefore, the podium and the floorplate are well designed to support the future simulated outdoor space and assist the space to achieve good level of amenity as recommended by the Childcare Guideline.

Figure 4 Podium design and material



Source: Hassell

Childcare by Design has recommended that supervisory line-of-sight of the indoor and outdoor areas can be readily achieved by strategically positioned mirrors, which is a common interior solution used by many childcare operators.

In summary, the floorplate of the childcare centre supports the grouping of children into separate play spaces, both indoors and outdoors, with provision of required amenity and supervision. Further, the size and capacity of the service areas and amenities support the demands of the day-to-day operations of a compliant and functional childcare centre.

Children and staff numbers with respect to car parking and access.

No visitor parking spaces are proposed to support the childcare centre, and one long term parking space is provided for the staff of the childcare centre within level P1 of the basement. The *Sydney Development Control Plan 2012* (**SDCP**) notes a recommended childcare parking visitor parking rate as follows:

> *Minimum: 1 space per 8 children and limited in duration to no more than 30 minutes.*

It should be noted in accordance with clause 11 of the *State Environmental Planning Policy (State and Regional Development) 2011* (**SRD SEPP**), the provisions of DCP do not apply to SSD development. Further, the Concept SSD DA (SSD 9393) does not mandate the delivery of car parking spaces to service the childcare centre, noting rather a preference to reduce reliance on private vehicle car parking by prescribing maximum car parking rates for the site.

Notwithstanding, Parking, Traffic and Civil Consultant (**ptc.**) has provided further justification for the provisions of no visitor car parking spaces to support the childcare centre in the Supplementary Transport and Parking assessment attached at Appendix P. It is anticipated that the childcare centre will be predominantly used by local residents and workers in the vicinity of the site. Therefore, trips would be undertaken by public transport, walking or as part of a combined trip, utilising parking already provided within the development.

It should also be noted that the childcare is within an OSD and located directly above a metro station. Staff and visitors of the childcare centre would also be able to use public transport to access the centre.

The proposed parking arrangement is also consistent with other approved Childcare Centres located in proximity to public transport. For example, the Barangaroo Early Learning Centre located at 62 Sussex Street, Barangaroo South (DA D2016/1012) and 505 George Street Sydney (DA D2019/857). Both centres are located close to train stations and provide no off-street car parking spaces.

Additional temporary parking spaces to support the operation of the childcare centre is therefore not required and is acceptable in this context.

3.5.3. Solar Access

The ADG requires 70% of the apartments (105/150 units) to have a minimum 2 hours direct solar access to private open space and living areas between 9.00am 3.00pm mid-winter.

57% (85/150 units) of the proposed apartments within the Central Precinct achieve 2 hours direct solar access to private open space and living areas between 9.00am to 3.00pm mid-winter, which does not strictly comply with the ADG design criteria. 23% (34 units) of additional apartments (a total of 80% of apartments) are able to achieve solar access between 9.00am to 3.30pm to private open space and living areas.

While not achieving the ADG design criteria for solar access, it is noted that the proposed development has maximised the achievement of solar access to the greatest number of apartments throughout mid-winter and has responded contextually to the following:

- Site constraints and the impact on solar access at mid-winter;
- Key design responses to maximise solar access at mid-winter; and
- Technical justification which demonstrates that there is no material difference in solar irradiance between 3.00pm and 3.30pm. Therefore, the additional 34 apartments that receives solar between 9.00am to 3.30pm is considered to have comparable solar amenity to ADG compliant apartments and is a relevant matter for consideration in the distribution of solar access to the greater number of apartments within the building.

It should be noted that these justifications were presented to the DRP on 18 February 2021. The DRP acknowledged that it is difficult for this building to meet minimum ADG requirement. The DRP also notes that whilst not compliant, a larger number of apartments will still have reasonable solar access during winter days.

Justification for the design response to the ADG design criteria for solar access is discussed below and provided in the Supplementary Design Report (attached at Appendix B).

Site constraints

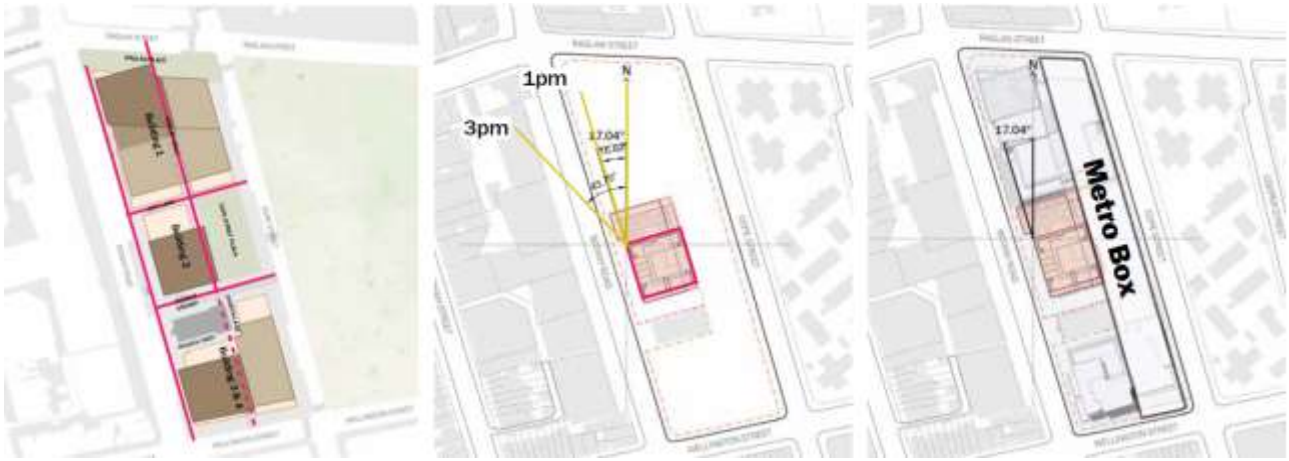
The site is constrained in its ability to achieve solar access in mid-winter in the following ways (refer to Figure 5):

- The dimension of the Concept SSD 9393 central building tower envelope is square in proportion (approx. 32m x 32m) and is aligned to the street grid between Botany Road and Cope Street. The massing of Central Building envelope follows the site boundary and street grid to ensure alignment in the public realm (footpaths, awning etc) and basement functionality. This envelope has already been approved as part of the Concept SSD 9393.
- The alignment of Central Building envelope results in the building orientation being approximately 17.04 degrees off north, where the mid-winter sun at 1.00pm is at 16.82 degrees. This means the building orientation precludes the possibility of solar access to windows and or private open space for the western aspect apartments in mid-winter at 1:00 pm. Solar access to western apartments is available in the afternoon from 1.30pm.

- In response to this site constraint, rotation of the building envelope was considered at preliminary design phase. The rotation of the building was not adopted in the final scheme, because:
  - It will extend beyond the Concept SSD 9393 approved building envelope.
  - It will compromise the metro box interface with Cope Street Plaza and the Central Building.
  - It will cause adverse visual impact on Cope Street Plaza and reduce the 24m separation distance to the Northern Precinct.
  - It will increase overshadowing to Alexandria Park compared to the proposed building design.

The design team has acknowledged the importance of building alignment to the street and alternatives were considered at preliminary design phase. However, the design alternatives were not considered appropriate due to the impact on the approved building envelope and the public domain. Therefore building orientation has become a site constraint when designing the apartments to comply with solar access design criteria between 9.00am to 3.00pm, especially for the western facing apartments.

Figure 5 Site Constraints



Source: Hassell

Apartment layout tests

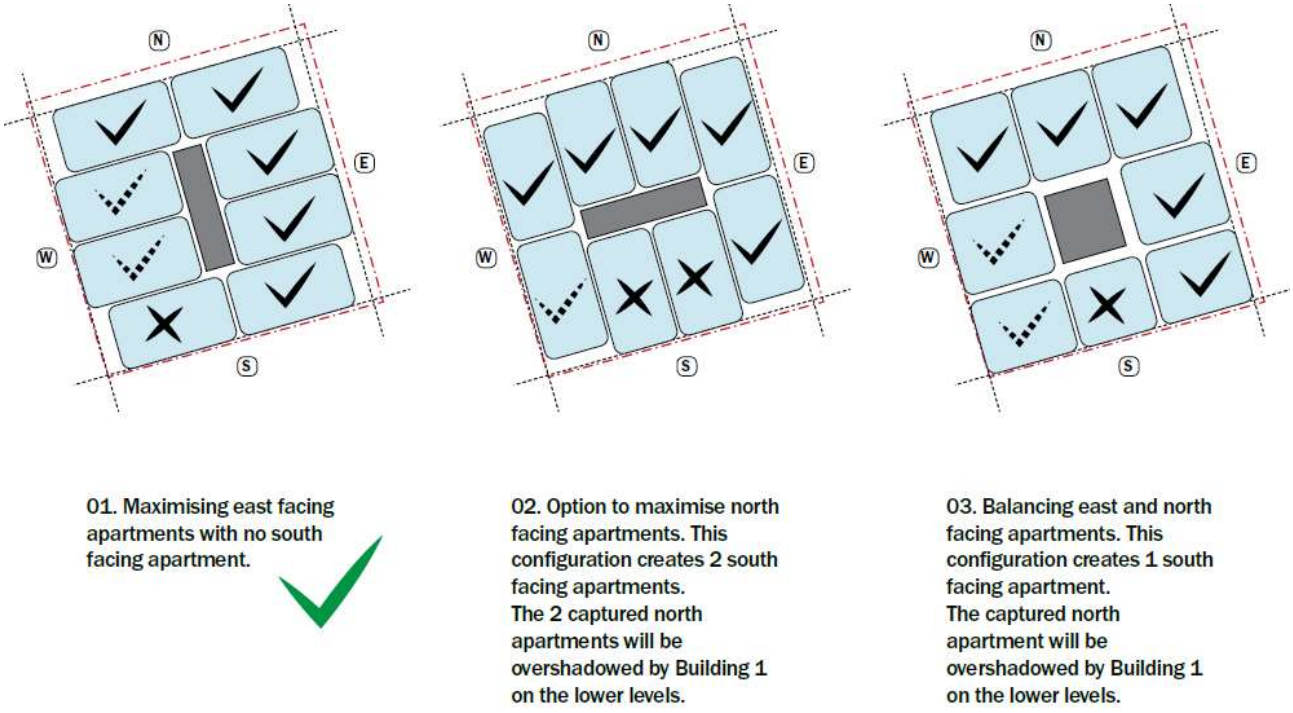
Considering the site constraints outlined above, the proposal reduced the overall Concept SSD building height of the Central Building and Building 1 on the Northern Precinct (as outlined in the RtS for SSD-10440), to improve solar access for the site.

Following the review of building rotation, different apartment layout and configurations were explored by the design team to maximise east and north facing apartments, while minimising south facing apartments within the envelope (refer to Figure 6).

The typical floorplate layout presented as part of the Concept SSD 9393 comprised two single aspect south facing apartments, which would not receive any direct sunlight in mid-winter.

The proposed floorplate maximises east facing apartments and does not comprise any single aspect south facing apartment. The modular facade concept is an integral response to solar daylight and privacy. In comparison, the proposed floorplate is an improvement from the floorplate presented as part of the Concept SSD 9393.

Figure 6 Apartment layout test



Source: Hassell

In addition to apartment configuration, a number of design options were explored to test the implications of strictly complying with the solar guideline under the ADG.

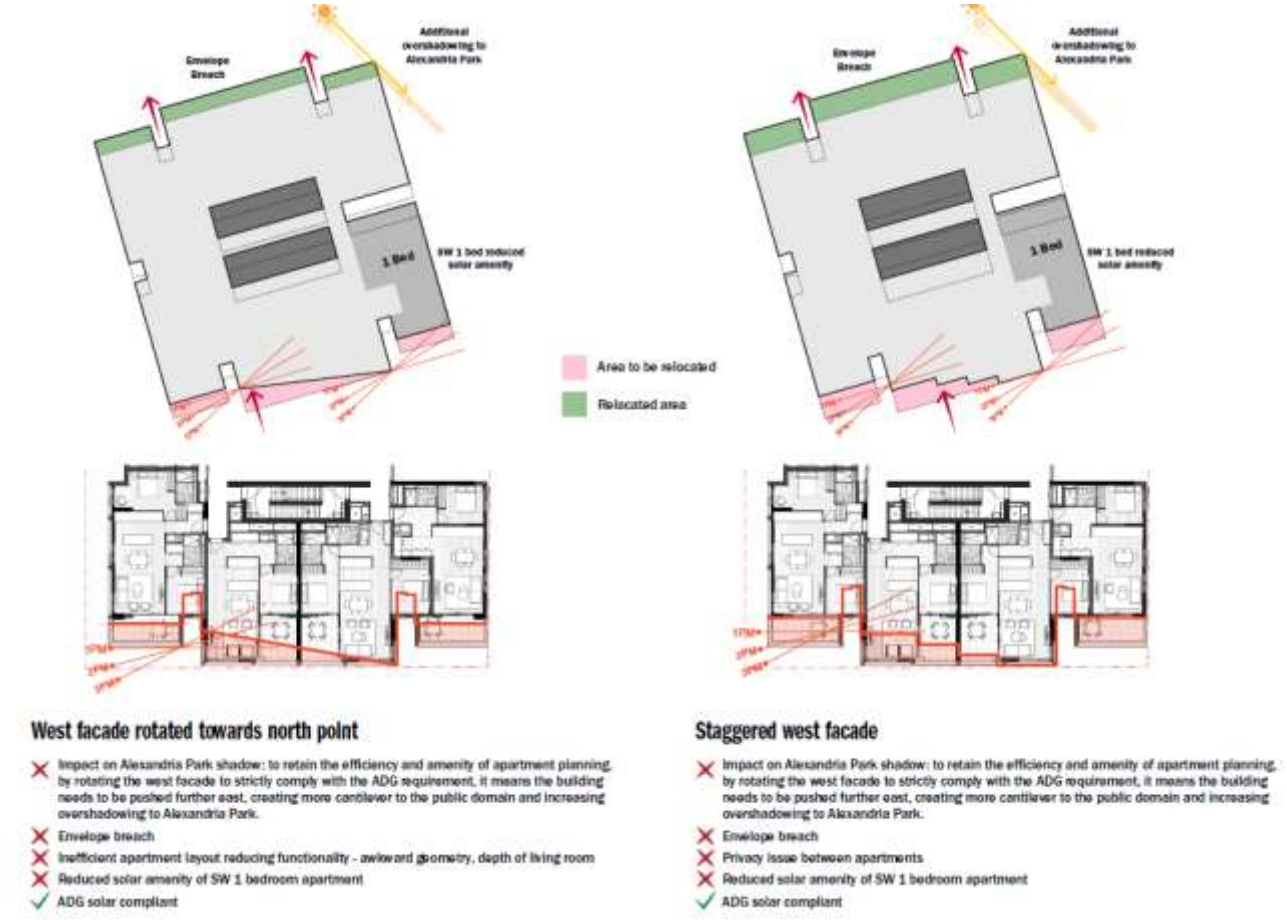
This design options include (refer to Figure 7):

1. Rotating the western façade to the north point
2. Staggered western façade

Whist these options can strictly comply with ADG requirement, both design options have detrimental impact to the quality of internal apartment amenity, the architecture expression and will create additional overshadow to Alexandria Park.

Therefore, on balance, the proposal presents a best design outcome that is able to receive reasonable solar access, provide high quality internal amenity, retain design integrity and will not create additional impact to Alexandra Park.

Figure 7 Design options to test solar compliance



Source: Hassell

Key design responses to maximise solar access

The final design adopted key façade and setback refinements to maximise solar access to western and centrally located apartments (refer to Figure 8). The design refinements included:

- 24m setback from Building 1 to maximise solar amenity and privacy.
- Maximising the number of dual aspects and east facing apartments.
- No single aspect south facing apartment is proposed.
- An additional building setback on the northeast and southeast corners to increase solar access to eastern facing and western facing apartments.
- Setbacks on the facades are designed to maximise the number of corner apartments in order to improve amenity for the centrally located apartments.
- Setbacks on the facades are also designed to maximise the number of corner apartments in order to improve amenity for the centrally located apartments.
- Living rooms on the western elevation are designed to the building edge with a glazed western facade to maximise solar access in mid-winter.

Given the site constraints and the design responses described above, the proposal is considered to have maximised solar to apartments and is acceptable in this context.

Figure 8 Maximise apartment solar through façade design and setback

Source: Hassell

Technical justification

A technical memo on solar access has been prepared by RWDI and is attached at Appendix M. The technical memo confirms the solar compliance numbers and assess solar irradiance between 3.00pm to 3.30pm.

A review of the Bureau of Meteorology solar parameters data has been undertaken for the winter period at the closest ground station in Wagga Wagga (in terms of distance) and Mildura (in term of latitude). This assessment will evaluate solar irradiance at location that is closest to the site and also in similar latitude, which will provide a more accurate comparison.

The direct normal solar irradiation for the two ground stations are noted as follows:

Table 2 Solar Irradiance measurements

Station location	**Direct Normal Solar Irradiance (% variance)**	
	3:00pm	**3:30pm (interpolated)**
Mildura (Closest site in terms of latitude)	100%	83-88 %
Wagga Wagga (Closest site in terms of distance)	100%	71-79 %

The 12%-29% difference in solar irradiance levels highlights the marginal variance in solar access between 3.00pm to 3.30pm in the winter period. In addition, the slightly lower angle of the sun after 3.00pm will provide greater solar penetration into the apartment instead of just at the glazing line.

In accordance with the assessment above, an additional 34 apartments (a total of 80% of apartments) receive solar access between 9am to 3.30pm which is considered to have comparable solar amenity to strictly ADG compliant apartments.

In conclusion, whilst not achieving the numeric provisions in the ADG design criteria, when taking into consideration the site constraints, the floorplate configuration and the key design responses, a larger number of apartments is able to achieve reasonable solar access during winter days.

Apartment layout and design options were tested to maximise solar access. The final proposed apartment design represent a well balanced design outcome, which is able to receive reasonable solar access, provide high quality internal amenity, retain design integrity and will not create additional impact to Alexandra Park.

In addition, the proposal has adopted the following design guidance in section 4A of the ADG:

- The design maximises north aspect and the number of single aspects south facing apartments is minimised.
- Living areas are best located to the north and non-primary living area to the south and west of apartments.
- Dual aspect apartments.
- Shallow apartment layout.

Overall, the proposal is able to maximise solar access in this context and is consistent with Section 4A design guidance of the ADG.

3.5.4. Remediation works (to Waterloo Congregational Church)

The Central Precinct is built over the Basement, which is the subject of a separate detailed SSDA (SSD-10438). The Basement SSD addressed the contamination and remediation requirements for the WQM site, including the Central Precinct.

As outlined in the Contamination and Remediation Statement prepared by Douglas Partners and submitted at Appendix GG of the Basement SSD, the proposed remediation works in response to SEPP 55 relate to the Basement and Southern precincts only. In addition, no remediation or building works (structural foundations in particular) are to be carried out on the Waterloo Congregational Church land. As such, landowner's consent for this allotment is not required.

3.5.5. Retail Premises Basement Access

Central building retail tenancies are able to access the Northern Precinct basement for services and loading via the routes outlined in Figure 8 below.

Figure 9 Central building retail tenancies basement access routes

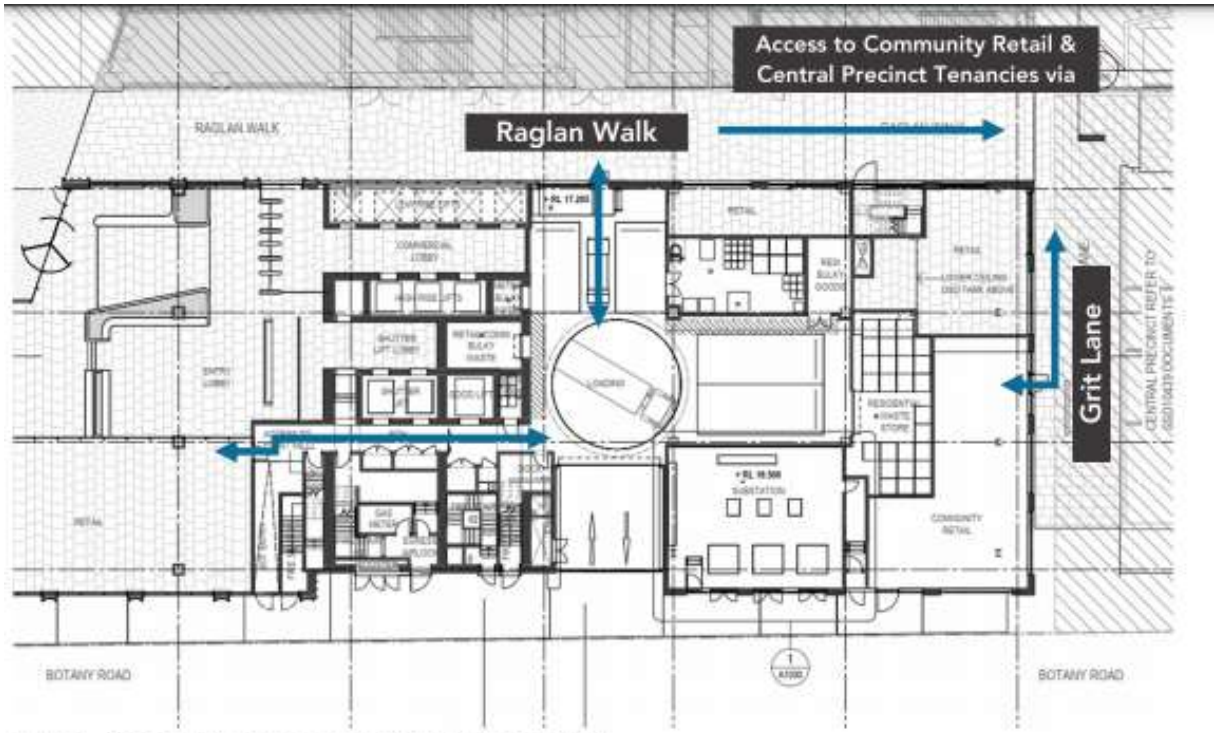


Figure 1 - Access to Retail Tenancies from Northern Loading Dock

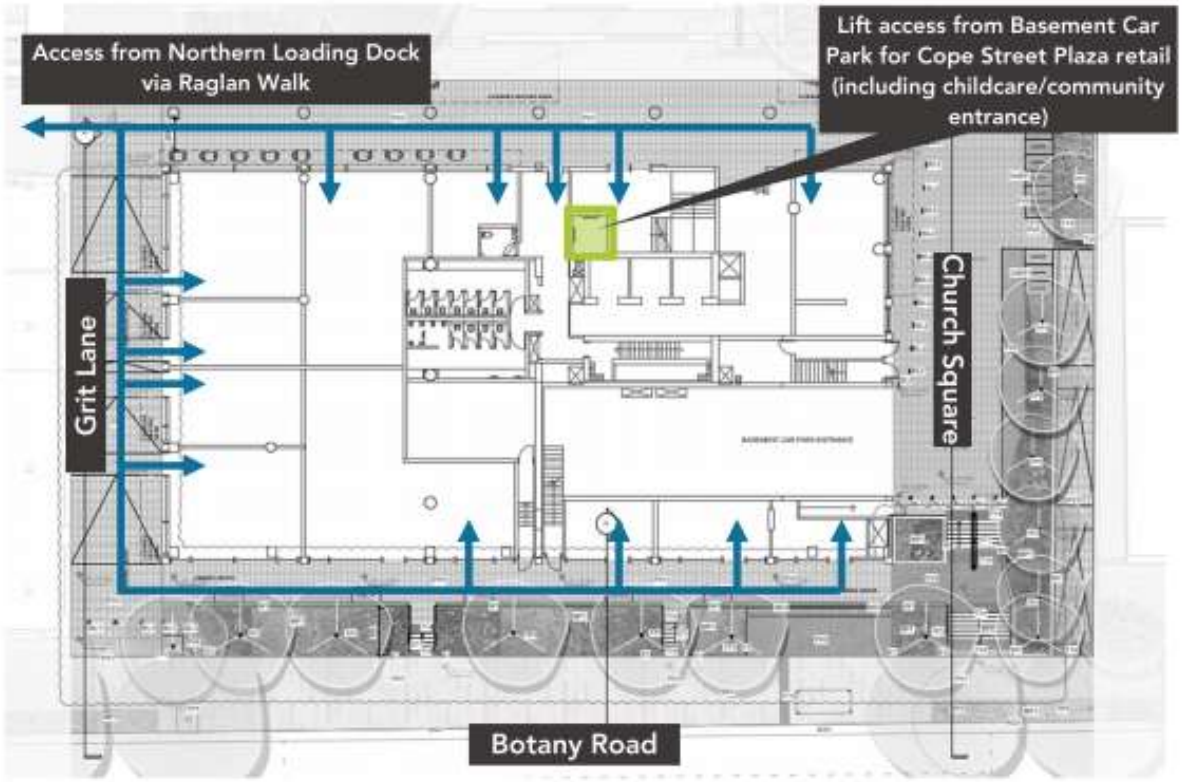


Figure 2 – Access to Retail Tenancies within Central Precinct

Source: ptc.

4. RESPONSE TO PUBLIC AUTHORITY SUBMISSIONS

4.1. STATE PUBLIC AUTHORITY COMMENTS

Table 3 Response to Public Authority Submissions – Central Precinct SSD DA

Comment	Response
Environment Protection Authority	
No comment.	No response required.
Biodiversity and Conservation Division (BCD): Environment, Energy and Science Group (EES)	
A Biodiversity Development Assessment Report (BDAR) Waiver was approved on 24 July 2020.	No response required.
Floodplain risk management *The reports have not included flood level mapping for any scenarios, except the 1% AEP flood event plus climate change. This is a significant omission. This mapping, including water level contours at appropriate intervals, must be provided as a minimum for the 5% and 1% AEP flood events and the PMF event. It is not possible to verify any of the flood level information quoted in the report without this mapping. A proper review of the submission cannot be completed until this has been provided.*	A flood impact technical memo in response to EES comments has been prepared by WSP and is attached at Appendix S. Maximum flood levels for the 1%AEP, 1% AEP + Climate Change (**CC**) and PMF flood events are included in Table 4 of EIS Appendix O - Stormwater Management & Flood Impact Report prepared by WSP. Flood levels included in Table 4 represent the maximum water levels for the 1%AEP,1% AEP+CC and PMF flood events in correspondence to relevant building areas. Flood planning levels have been informed by the 1% AEP, 1% AEP+CC and PMF maximum flood levels. WSP confirmed that flood levels for the 5% AEP flood event were not originally included in the flood impact assessment report as they were not relevant in the determination of flood planning levels. Water level contour maps (with a 50 mm contour interval) for the 5%AEP,1% AEP and PMF flood events have been prepared by WSP and attached to Appendix S for review.
Flood impacts of the proposed development *The individual buildings of the over station development are not expected to cause any flood impacts; however, the ancillary road works are predicted to cause unacceptable impacts.* *The report notes that the Council of the City of Sydney was consulted and noted that an acceptable tolerance for flood level increase would be 10mm. This is considered reasonable and within*	As stated by EES, the Central building does not affect topography levels outside the existing buildings footprint (i.e. pre-development conditions prior to any work associated with the metro station construction).Therefore the Central Precinct will not negatively affect flood conditions to adjacent land. The road works along Cope Street are not part of this development application. Proposed road works along Cope Street was part of the metro station

Comment	Response
the level of accuracy of current best practice flood modelling. The Concept Water Quality, Flooding and Stormwater Report of 2018 showed flood level increases that were within the limit of 10mm. It appears that road works were not included in the concept stage modelling. *The current report documents flood level increases that are well in excess of the 10mm tolerance. Increases of up to 100mm are documented for both the 1% and 5% AEP flood events. It appears that an attempt has been made to justify allowing the increase in levels on the premise that these occur for a short period of time, which is not appropriate.* *Limited detail has been provided on the topographical changes that would cause the predicted increase. A reduced carriageway width and reconfiguration of two intersections are changes noted in the flood report. Reference is made to the "civil design report for a detailed discussion on the proposed development topography" however, no such discussion is available in that report.* *The report states that mitigation measures to ameliorate the flood impacts are under development.* *This work would need to be finalised and submitted for review by EES before a recommendation could be given to approve the project.* *If impacts cannot be reduced to a tolerable level, a detailed investigation of the affected properties, including at least three residential buildings on the other side of Cope St, including floor level survey would allow proper assessment of the impacts.*	Critical State Significant Infrastructure (**CSSI**) scope. Council was consulted in September and October 2020 on the flood impacts from the metro station CSSI application. It was understood by WSP that any flood impact from metro station CSSI application were anticipated by Council.
Flood risk for the development – Flood Planning Levels *Except for Area 11, the floor levels appear to generally comply with the requirements. However, the concept report indicated raised areas leading to internal access to a higher area for shelter in place, which have not been included in the design.* *Floor levels for Areas 1, 5, 7-10, 12 and 15 are above the PMF level. Areas 2-4 and 14 (community area) are above the 1% AEP flood level. Area 6 comprises an entry area below the 1% AEP flood*	EES and Council were consulted as part of the RtS to confirm the FPL criteria. WSP confirmed that the following guidelines and policies have been reviewed to inform the FPLs: *1) Interim Floodplain Management Policy, City of Sydney; and,* *2) Waterloo Metro Quarter (WMQ)– Design and Amenity Guidelines, 2020 New South Wales Government – Sydney Metro.*

Comment	Response
level and an area above. Area 10 is the basement carpark entry ramp, which rises to a level above the PMF and the 1% AEP flood level plus 0.5 m freeboard, which meets the requirements. Area 11 comprises three retail tenancies with a proposed floor level approximately 0.5 m below the 1% AEP flood level, which does not comply with the requirements. The report has not attempted to quantify the frequency of flooding at this location. *Flood depth mapping for the 5% AEP suggests 0.3 – 0.5m depths immediately outside these tenancies. Proper analysis would need to be undertaken to confirm the flood frequency, but the data provided suggest these tenancies would flood every 2 to 5 years on average. This would be an unacceptable outcome for a newly constructed building. The design must be reconsidered.* *An FFL for Area 13 has not been provided. A connection is open to the south to Church Square which is flooded in the PMF.*	As part of the RtS design response amendment and to respond to flood impact, the finished floor levels for Area 6 and Area 11 have been raised to 15.70 m AHD, which is above the 1% AEP flood level. As indicated by EES and assessed in Appendix O - Stormwater Management & Flood Impact Report of the EIS, Areas 1,5,7,8,9,10,12 and 15 have finish floor levels above the PMF. Areas 2,3,4 and 14 have finish floor levels above the 1%AEP flood level. Therefore, the proposed floor levels are acceptable. FFL for Area 13 (fire control room) is 16.58 m AHD which is above the PMF flood level.
Flood risk for the development – Residual Risk and Emergency Management *It is recommended that the proponent engage a suitably qualified and experienced professional to develop an appropriate strategy for flood emergency management.* *The discussion regarding timing of flooding in relation to evacuation has not demonstrated an understanding of the principals involved and is not consistent with current available guidelines. Before the proposal moves to the next stage, a proper assessment of the flood behaviour as it relates to emergency management is required, together with the development of a strategy for flood emergency management. Detailed information on the timing/duration of extreme events should be considered and presented. Shorter and longer durations should be considered for emergency planning, not only the duration that generates the peak flood level.* *An attempt has been made to identify areas where occupants could shelter in place. However, no consideration has been given to the number of persons at risk and whether there is enough space for these individuals in the nominated shelter areas.*	A flood emergency management plan will be provided post approval and prior to occupation of the building. WSP has assessed different storm durations for the 1% AEP, 1%AEP+CC and PMF events, to determine the critical storm durations and define appropriate floor levels. This is as per the accepted industry standard. As indicated within the flood study report, storm durations tested are the same as what was considered in the Alexandra Canal Catchment flood model, which is currently adopted by CoS and recommended by EES. An additional storm duration of 90 minutes was also considered for the 1% AEP flood event. The site area is located at the top of the catchment and only events with short duration and high intensity rainfall are relevant when assessing flood protection/emergency. WSP considered that the finished floor levels proposed for the Central Precinct can provide adequate and sufficient flood protection in the event of a flood emergency. Finished floor level

Comment	Response
Any persons in external licenced seating areas, must be accounted for in emergency planning. *Lifts and escalators may not be operational during extreme floods. It is not considered acceptable for persons coming from the basement to exit onto the street in extreme floods. Direct stair access must be provided to refuge internal to the building.* *Emergency response planning must consider human behaviour. It is not considered appropriate to expect a worker to remain alone inside a small meter room or similar until an extreme flood event pass. Consideration should be given to possible medical evacuations necessary during an extreme flood event.* *The City of Sydney policy requires a raised area to be provided above the PMF level for shelter in place purposes. The reports have demonstrated cases where the raised area would only be above the 1% AEP flood level. In this case, alternative provisions must be in place for evacuation during extreme floods, specifically internal access to a shelter.* *Areas 1, 5, 7-10, 12 and 15 are above the PMF level. Areas 2-4 and 14 (community area) are above the 1% AEP flood level, but do not have internal access to reach upper levels and are below the PMF level.* *Area 6 comprises an entry area below the 1% AEP flood level and an area above. The internal raised area provided should be above the PMF if internal access to a refuge area cannot be provided.* *Area 11 comprises three retail tenancies with a proposed floor level approximately 0.5m below the 1% AEP flood level, which does not comply with the requirements.* *The report has demonstrated a lack of effective warning time to evacuate persons from these tenancies. With an average frequency of flooding in the order of 2 to 5 years and a lack of warning time, this proposal would introduce unacceptable risk to life and limb. This design must be reconsidered.* *None of the retail areas have internal access to reach upper levels, with only Area 15 having access to fire stairs. The emergency response*	and emerging response for each area is listed below: ▪ Area 1: Floor level for area 1 is above the PMF flood level and no evacuation is necessary. ▪ Area 2: Floor level for area 2 is above the 1%AEP+670mm freeboard. In an extreme flood event (i.e. PMF) water depth is expected to be up to 120mm. Flood risk is low. No emergency evacuation is deemed necessary. ▪ Area 3: Floor level for area 3 is above the 1%AEP+660mm freeboard. In an extreme flood event (i.e. PMF) water depth is expected to be up to 130mm. Flood risk is considered low. No emergency evacuation is deemed necessary for occupants. ▪ Area 4: Floor level for area 4 is above the 1%AEP+390mm freeboard. In an extreme flood event (i.e. PMF) water depth is expected to be up to 400mm. Flood risk is considered low. If necessary, occupants of area 4 can easily access areas located at a higher ground (i.e. above the PMF) outside the central building as indicated on Appendix B of the flood impact technical memo. ▪ Area 5, 7, 8, 9, 12, 13, 15: Floor levels are above the PMF flood level and no emergency evacuation is necessary. ▪ Area 14: Floor level for area 14 is above the 1%AEP+751mm freeboard. In an extreme flood event (i.e. PMF) water depth is expected to be up to 90mm. Flood risk is considered low and no evacuation is necessary. ▪ Area 6 and Area 11: Finish floor levels for Area 6 and Area 11 have been raised to 15.7 m AHD, which is above the 1%AEP flood level. In a PMF flood event Area 6 and Area 11 would have flood depth up to 400mm. In an extreme flood event, evacuation to areas above the PMF flood level is possible outside the Central Building as indicated on Appendix B of the flood impact technical memo. The residual risk for flood event larger than the 1%AEP flood event for Area 6 and Area 11 is considered acceptable.

Comment	Response
section of the report has not demonstrated suitable consideration of the issues. It is not acceptable to consider the 1% AEP only and state that occupants can 'remain safe'. *The full range of floods must be considered. It is not appropriate to use an outdoor area as a shelter during an extreme rainfall event. The emergency response provisions for the proposed childcare facility require consideration of medical evacuation.* *The emergency response provisions for the proposed childcare facility require consideration of medical evacuation.*	▪ The footpath outside area 6 has floor levels above the 1% AEP flood event and connects to higher ground area above the PMF outside the Central Precinct. Occupants of the basement are protected by flooding. Access points to the basement are above PMF and 1%AEP + 500 mm freeboard flood level. The childcare facility is not affected by flooding. A Childcare Centre Emergency Management Plan has been prepared by Omnii and was submitted with the Central Precinct EIS (Appendix QQ). Emergency management procedures in the event of a flood will be adopted in the final Operational Management Plan prepared by the operator and prior to occupation of the building. It is important to note that during a flood event (i.e. 1%AEP and PMF), vehicular road access is typically unavailable. This is the case across the LGA. Notwithstanding, this site is benefitted by an onsite metro station where access, despite a flood event, could be maintained.
Transport for NSW	
Safety Assessment of the Proposed Development Requested a Stage 2 (Concept Plan) Road Safety Audit for the proposed access arrangements to the loading docks in accordance relevant Austroads guidelines. Based on the results of the road safety audit, the applicant shall review the design drawings and implement safety measures in consultation with TfNSW as required.	In accordance with design criteria 3P of the WMQ Design Guidelines, both the Northern and Southern loading docks include mechanical turntables to ensure service and refuse collection vehicles can enter and exit in a forward motion. This will minimise potential pedestrian and vehicle conflicts throughout the site. It is noted that comments to this affect were not provided by TfNSW at the initial RtS stage of similar OSD projects such as Victoria Cross and Pitt Street (north and south). Addressing this request at the construction stage does not compromise the implementation of design measures to address potential pedestrian or road safety (if required). In accordance with ptc' s recommendation (refer to Appendix P), it is suggested that a condition of consent is included on any consent issued for independent road safety audits to be carried out during the detailed design stage prior to the

Comment	Response
	Construction Certificate stage to the following effect: *"Prior to the issue of the Construction Certificate, the applicant shall undertake a Stage 2 (Concept Plan) Road Safety Audit for the Loading Dock arrangements to the loading docks. This audit shall be undertaken in accordance with Austroads Guide to Road Safety Part 6: Managing Road Safety Audits and Austroads Guide to Road Safety Part 6A: Implementing Road Safety Audits by an independent TfNSW accredited road safety auditor.* *Based on the results of the road safety audit, the applicant shall review the design drawings and implement safety measures in consultation with TfNSW as required, prior to the issue of the relevant Construction Certificate."*
Green Travel Plan (GTP) Requested condition requiring GTP to be updated in consultation with TfNSW, prior to the issue of the Occupation Certificate. The GTP must be implemented accordingly and updated annually.	A Green Travel Plan (**GTP**) was prepared by ptc. and submitted as part of the EIS (refer Appendix I of the EIS). The applicant will update the GTP in consultation with TfNSW prior to the occupation of the site. It is anticipated that a standard condition requiring the preparation of a GTP would be imposed for the WMQ OSD, as has been imposed for other over station developments.
Transport Access Guide Request that the applicant be conditioned to update the Transport Access Guide (**TAG**), in consultation with TfNSW, prior to the issue of the Occupation Certificate.	A GTP was prepared by ptc. as part of the application and included a TAG to inform residents, employees and visitors of the available travel choices. The applicant is committed to updating the TAG in consultation with TfNSW prior to the issue of an Occupation Certificate, as per the requested condition in relation to the TAG matter. The TAG will include information such as: ▪ information regarding lack of off-street car parking and passenger pick-up and set-down areas at the development site; ▪ suitable nearby drop-off/pick-up locations; ▪ identify areas where drop-off/pick-up is prohibited and instruct visitors to avoid use of these areas; and

Comment	Response
	▪ suitable nearby taxi zones.
Construction Pedestrian and Traffic Management Requested condition to prepare a Construction Pedestrian and Traffic Management Plan (**CPTMP**) in consultation with TfNSW.	A Preliminary CPTMP was prepared by ptc. and submitted as part of the EIS (refer to Appendix J of the EIS). The CPTMP will be further updated as required prior to the issue of any construction certificate or any preparatory, demolition or excavation works (whichever is earlier), in consultation with the Sydney Coordination Office within TfNSW in response to the imposed condition of consent for construction pedestrian and traffic management.
Freight and Servicing Management Request further details in relation to the management of service bays for the whole of WMQ. All new developments should not rely on on-street parking or loading zones. Resolve inconsistencies for the development applications in relation to the management of service bays for the whole of WMQ. Freight and Servicing Management Plan to be updated in consultation with TfNSW, prior to the issue of any Construction Certificate.	Ptc prepared a Freight and Servicing Management Plan (**FSMP**) submitted as part of the EIS (refer to Appendix I of the EIS). The FSMP is to manage processes and procedures for vehicles accessing the loading docks. In accordance with the SEARs, the FSMP details the loading dock and service provision, adequacy and management with consideration of precinct wide shared loading docks and provides a detailed queuing analysis to show that vehicles will not queue onto the surrounding road network. As outlined in the supplementary Traffic and Parking Assessment memo prepared by ptc. (Appendix P), all loading and servicing will occur within the designated loading docks on-site or the additional service bays within the basement car park. The proposal does not rely on any kerbside loading zones. The proposed loading docks and service bays within the basement car park will be managed by means of an integrated site-wide booking system. This will allow each bay to be pre-booked prior to arrival to ensure that there are available bays for any delivery or service vehicles. A concept timetable has been prepared as part of the FSMP to demonstrate that there are a large number of time slots available which allow the bays to be shared across the site amongst the different components of the development. In this regard, the proposed loading/servicing provision is considered acceptable and able to be managed for the coordination of deliveries and servicing.

Comment	Response
	The FSMP will be updated to provide a site-wide plan in consultation with TfNSW prior to the issue of any Construction Certificate. The applicant will implement the FSMP following the issue of an Occupation Certificate.
Active Transport Recommend locating bicycle facilities in secure, convenient, accessible areas close to the main entries, incorporating adequate lighting and passive surveillance and in accordance with Austroads guidelines.	A total of 150 dedicated bicycle parking spaces are proposed within the basement car park to support the residential use of the Central Building, in addition to basement storage cages. The residential bicycle parking is located on level P1 of the basement. Retail and childcare employee bicycle parking area is also located within level P1 of the basement. The end of trip facilities is also provided within the same basement level, which are to be shared between the employees of both Northern and Central Precinct. Visitor bicycle parking is provided within the public domain area. Bicycle parking is proposed to be accessed via the ramp or lift no.4. The proposal will ensure adequate lighting and clear wayfinding signage is provided throughout the detailed design phases to ensure workers, residents and visitors know where they are travelling.
Sydney Metro Corridor Protection	
No comment.	No response required.
Sydney Water	
Water Servicing *Potable water servicing should be available via a 150mm CICL watermain (laid in 1897) on Botany Road. Amplifications or alterations to the potable water network may be required complying with the Water Services Association of Australia (WSAA) code – Sydney Water edition* *Recycled Water Servicing* *Sydney Water is open to working in partnership with developers to consider potential decentralised recycled water servicing solutions that may offset*	Noted. No response required.

Comment	Response
potable water demands for irrigation, toilet flushing and domestic washing machines, as well as air cooling towers. Consideration can also be given for rainwater capture and stormwater runoff reduction. *Wastewater Servicing* *Wastewater servicing should be available via a 400 VC wastewater main (laid in 1891) within the property boundary.* *Amplifications or alterations to the wastewater network may be required complying with the Water Noted.* *Stormwater* *Our available records indicate that there is a major Sydney Water stormwater channel located on the western side of Cope Street. Detailed requirements, including any potential extensions or amplifications, will be provided once the development is referred to Sydney Water for a Section 73 application.*	
NSW Health	
Cumulative Impacts Consider cumulative impacts and mitigation measures beyond those normally employed for isolated impacts.	Potential broader cumulative impacts on concurrent/consecutive projects and further mitigation measures will be considered and managed accordingly throughout the ongoing detailed design, construction and operational phases of the project. Where appropriate, additional mitigation measures will be considered and implemented when required.
Noise Impacts	Noted. To date, all reasonable and feasible acoustic mitigation measures have been considered and implemented into the detailed design of the residential building. A technical memo has been prepared by Stantec and submitted at Appendix J.
Public/active transport incentives Support the incentives to use public, active, and shared transport. Clarify on basement plans if access to parking/bike parking/car share spaces is equitable for those in social housing, affordable housing, and private housing residences.	Not specifically relevant to this SSDA. Notwithstanding this, the basement car park (SSD10438) accommodates vehicle parking to support several uses including commercial, residential accommodation, social housing, a place of public worship (adjacent church) and Sydney Metro. In addition, the basement facilitates provisions for car share, commercial and retail

Comment	Response
	EOTF, as well as commercial, retail and residential bicycle parking to encourage and support active and public transport opportunities available at the WMQ site and within the surrounds. The Basement Level P1 Plan clearly denotes parking spaces for affordable housing, private housing, social housing and car share. This includes 67 parking spaces for private and affordable housing (for Central Building), eight (8) social housing spaces (for Building 4) and a total of four (4) car share spaces. These provisions are below the maximum permissible parking spaces in accordance with relevant SLEP 2012, SDCP 2012 and concept SSD 9393 conditions of consent. Furthermore, the parking provisions are suitable for the number of apartments for the overall WMQ site and are consistent with the objective of providing reduced car parking in proximity to public transport. All parking areas are easily accessible from the Central Precinct via the lift cores as well as off Cope Street Plaza.
Water recycling/rainwater Support water recycling however public health risks from using recycled water will need to be managed appropriately, including approval by the appropriate regulatory authorities	Noted. The proposal will ensure potential public health risks from using recycled water will need to be managed appropriately.
Sydney Airport Corporation	
No comment.	No response required.
Civil Aviation Safety Authority	
No comment.	No response required.

4.2. CITY OF SYDNEY COMMENTS

A response to the matters raised by the City of Sydney either to the entire WMQ OSD proposal or specifically in relation to the Central Precinct SSD DA is provided in Table 4 below.

Table 4 Response to City of Sydney Council Submission – Central Precinct SSD DA

Comment	Response
Social Planning and community land uses	
1. Affordable housing - The development must be held to provide the affordable housing in perpetuity	The required affordable housing will be constructed by the applicant, as required under the Project

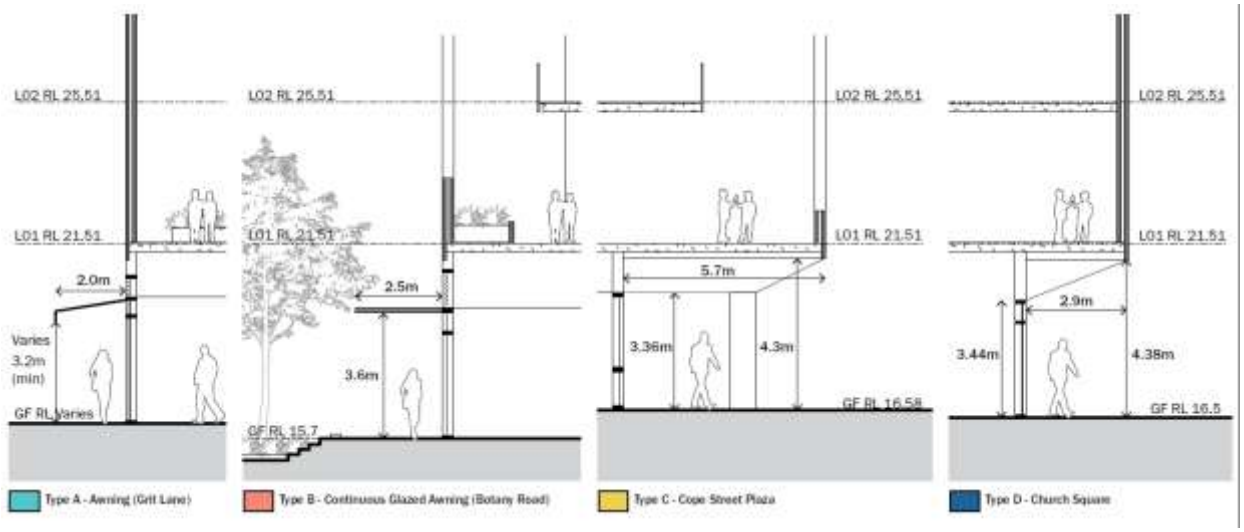
Comment	Response
as previously promised and in accordance with the statutory provisions (Clause 6.45 (2)) applicable to the Metro Quarter.	Delivery Agreement between the applicant and Sydney Metro. The stratum title of the affordable housing will be registered and transferred to a Registered Community Housing Provider as affordable housing, as required under the terms of the Project Delivery Agreement.
2. A wholistic approach to development - The developer and DPIE are to have greater consideration to the provision of community infrastructure and the future redevelopment of the Waterloo Estate to avoid duplication of infrastructure, provide flexible spaces for community uses and adequately meet the needs of the community in the decades to come.	To avoid duplication of infrastructure and community uses, a 'whole of precinct' approach has been adopted the development of the WMQ OSD. The Central Precinct will deliver the community non-for-profit childcare centre and a Community Hub, which will complement the other community facilities and uses in other detailed SSD DAs. As outlined in the Consultation Report submitted with the EIS, over the next few years while the station is being built, engagement will occur with community organisations to identify locally relevant activations for publicly accessible areas and facilities when the precinct is operational. For example, the nature and operation of the Community Hub and Markerspace (in the Southern Precinct) will be developed over the three-year construction period in consultation with the community to ensure it is responsive to the needs of the community.
3. Engaging with the community - The development must imbed commitments to culturally appropriate design and community consultation in future contracts and tenders.	The Public Art Strategy and Placemaking Strategy have placed a strong emphasis on recognition and celebration of culturally appropriate design, specifically Aboriginal culture, as well as multicultural and social diversity of the area. Opportunities for skill development with local NCIE, TAFE, retailers and community services, as well as youth at risk and mature age ex-offenders or people in recovery are a high priority.
4. Centre-based childcare - There is projected to be an oversupply of centre-based childcare within the surrounding area. It is recommended that this significant proportion of the required community uses floor space is instead allocated for a Health One facility.	In addition to the non-for-profit childcare centre on the podium level of the Central Building, a total 630sqm of ground level GFA is dedicated for community spaces across the three precincts within the WMQ site, including a 60sqm community hub located within the Central Precinct. These community spaces will be used for a variety of community uses. For example, a medical/health centre, enterprise café, Makerspace, community

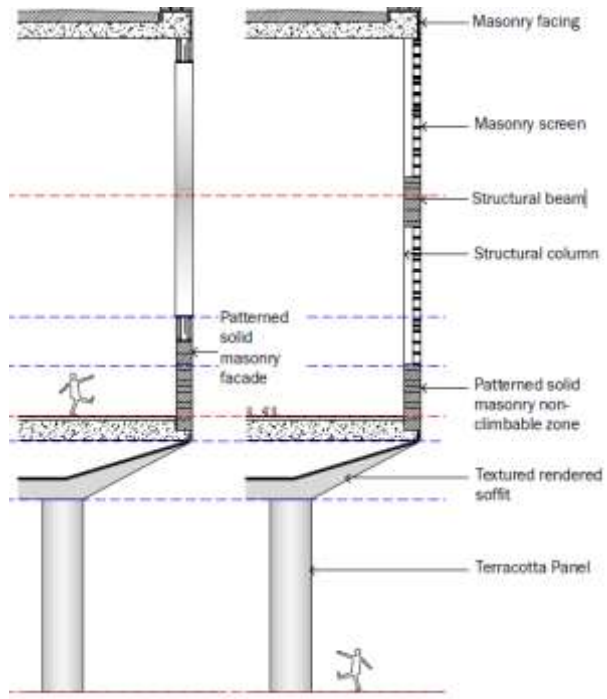
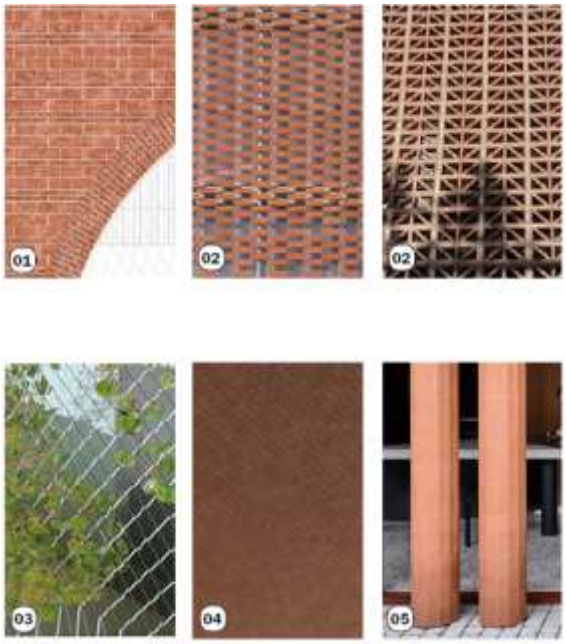
Comment	Response
	hub etc. The specific uses are to be determined at a future stage and in consultation with the community.
5. Social enterprise café - The operator of the social enterprise cafe should be bound to provide opportunities for local employment, access to healthy food, growing of produce, and/or how to cook healthily.	Noted. The specific uses of the community spaces are to be determined post approval in consultation with community organisations to identify local facilities. For example, the nature and operation of the Community Hub and Markerspace (in the Southern Precinct) will be developed over the three-year construction period in consultation with the community to ensure it is responsive to the needs of the community.
6. Makerspace - Consider the space would be best used as workspaces for industrial design and woodwork type practices. Recommend the fit out of the space happen after construction with further input from the City.	Not relevant to SSD-10439.
7. Place Manager - Further information regarding the role of a place manager to coordinate activities on site.	A place manager will be appointed by the Precinct Leadership Group to administer activation and place making activities. This role will be filled prior to PC and will be the point of contact for the community on all (non-metro) issues related to the development. The role is yet to be fully defined by the Precinct Leadership Group however it is expected to have a stated mission to support positive social, cultural and environmental interactions between the community, commuters, visitors, tenants and residents. Practically, this will include both a community engagement role as well as administrative tasks around events and space management. They will be available to meet with the future Waterloo redevelopment team as appropriate
8. Voluntary Planning Agreement - Any Planning Agreement should address the provision of a place manager and require the social enterprise cafe and makerspace to be operated by an appropriate NGO, NFP or other suitable organisation in perpetuity, negotiated in consultation with the City of Sydney.	A Voluntary Planning Agreement is not proposed to be entered into order to satisfy condition A12 of the Concept SSD 9393. The requirement for community facilities is satisfied through the provision of a centre-based childcare facility to be operated by a non-for-profit entity as outlined in Section 3.1 and Appendix L.

Comment	Response
Non-compliance with development standards	
9. Active Frontages - The location of services and infrastructure in areas fronting Botany and Wellington Street is contrary to Clause 7.27 and Section 3I of the Waterloo Metro Design and Amenity Guidelines.	As discussed in Section 3.4, this is not relevant to SSD-10439.
10. Location of loading facilities - It would have been preferable for loading facilities to be co-located underground within the basement car park to allow for greater activation on these streets and reduce vehicle crossings across the site. However, it is acknowledged that this option would require excavation under the Church which does not form part of the application site and that the driveway is required on Botany Road for servicing the metro.	Noted. Service vehicle entry points have been located as envisaged under the Concept SSD 9393 to ensure the overall site operations and functionality of both the metro station and commercial aspect of the remaining development.
11. Clause 4.6 - The applicant must provide a statement addressing Clause 4.6 of the SLEP to overcome non-compliance with Clause 7.27.	Not relevant to SSD-10439.
Design Excellence	
12. Wind – concerned regarding the Raglan Street and Cope Street plazas and areas surrounding the retail tenancies for sitting and outdoor dining. The development fails to satisfy Section 3G of the Waterloo Metro Quarter Design and Amenity Guidelines.	An amended wind assessment has been prepared by RWDI and submitted at Appendix H. **Raglan Street** The wind conditions along Raglan Street generally satisfy the standing comfort criteria throughout the year. Localised areas at the eastern and western ends of Raglan Street are exposed to the northeasterlies and westerly winds respectively, which interact with the built form resulting in conditions which satisfy the walking criteria. The inclusion of street trees in their initial state and awnings on the subject development is noted to further improve these conditions by helping to filter these winds directed along Raglan Street and reducing downwashed winds from the form above. such the majority of the Raglan Street area will satisfy the standing criteria. A portion of the Raglan Plaza space is also noted to satisfy the sitting criteria during the summer months. Only one location at the corner of Raglan Street and Botany Road is noted to marginally exceed the standing criteria (94% of the time satisfy) during the summer months. It is noted that as the tree planting along Raglan Street matures,

Comment	Response
	the conditions will further improve, with a large number of locations satisfying the sitting criteria, especially during the cooler winter months. **Cope Street Plaza** Cope Street Plaza is noted to generally satisfy the standing criteria without the consideration of landscaping within the plaza. Some localised areas at the southern end of the plaza satisfy the walking criteria which is in line with the wind comfort standards. Areas adjacent to the Central Building where outdoor seating is noted to be proposed will satisfy the sitting criteria throughout the year without any mitigation measures. Consideration has been made for the inclusion of landscaping in the form of trees at the southern and northern ends of the plaza, with slightly more mature trees along Cope Street. These are noted to ensure that conditions throughout the entire Cope Street Plaza will satisfy either the standing or sitting criteria throughout the year. This includes areas adjacent to Central Building where seating areas are proposed in the landscape design. Currently, the majority of the Cope Street plaza (over 60%) was found to achieve sitting conditions for 90% or more of the time, with the northern portion of the Plaza found to be slightly more shielded during the winter period. It should be noted that the wind tunnel modelling does not include the raised planters or moulded soil elements within Cope Street Plaza landscape design. These elements will further enhance localised wind conditions for the adjacent seating areas within Cope Street Plaza. It is noted that as documented in the Design Integrity Report, the proposed design of the Cope Street Plaza has been supported by the DRP. The DRP specifically stated on 20 November 2020 that: *"The Panel accepts the investigations undertaken in response to the Panels comments re. wind mitigation, and supports the design team's recommendation not to plant additional trees to Cope Street entrance, as the anticipated wind conditions are already acceptable and any minor*

Comment	Response
	improvement to wind mitigation does not outweigh the impediment they may create to wayfinding, accessibility and solar access." **Section 3G** The inclusion of awning elements and street tree planting noted in the landscape plan results in the entire bus stop zone as well as the pedestrian crossing areas satisfying the standing criteria as outlined in the WMQ Design Guidelines. Furthermore, areas for the bus stop waiting zone will also satisfy the sitting criteria conditions.
13. Awnings – all awnings located over the public domain and through-site links are to be between 3.2m and 4.2m above finished ground level and to be setback a minimum 800mm from the kerb. Awning widths are to be between 2 metres and 3.6 metres whilst remaining clear of smartpoles by 1 metre and street trees by 1.5 metres.	The ground floor of the Central Building incorporates a variety of awning types to provide shelter in front of building entries. The variety of awning types is consistent with the Urban Design principles for the precinct. Sections showing awning details and type are included in the Supplementary Design Report prepared by Hassell and attached at Appendix B. The following awning types are proposed (refer to Figure 9): ▪ Type A awning: 2m deep localised awnings are provided along Grit Lane. ▪ Type B awning: a 2.5m deep continuous glazed aluminium awning is provided along Botany Road. To provide protection for pedestrians and retail tenancy users, as well as providing weather protection for people waiting for buses. ▪ Type C awning: the podium above projects beyond the ground floor facade by 5.7m. Providing weather protection for pedestrians and outdoor seating zones, as well as residential and childcare entries. ▪ Type D awning: the podium above projects beyond the ground floor facade by 2.9m. Providing weather protection for pedestrians and parking entry.

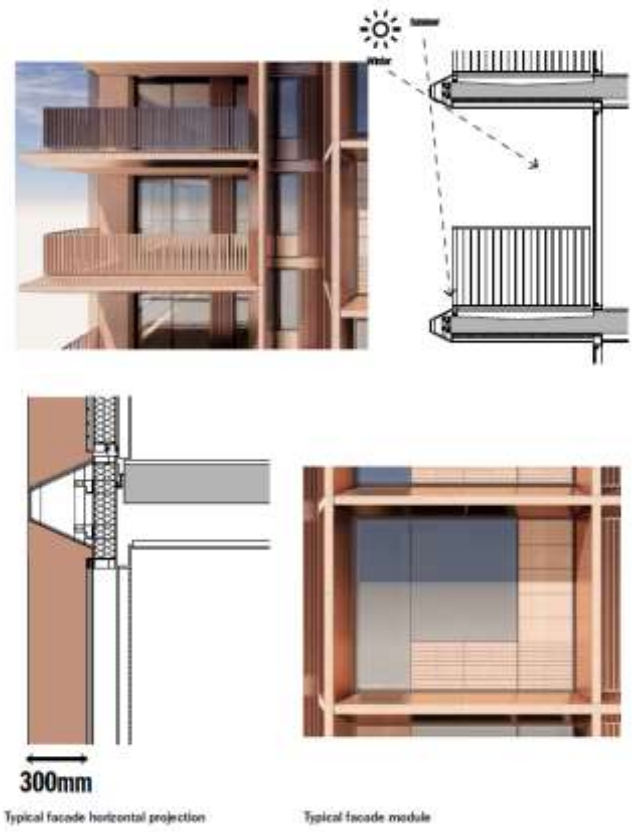
Comment	Response
Figure 10 Awning Types (source Hassell) 	
16. Building 2 (Central Precinct)	
a. Lack of detail on facade design – request 1:20 design intent facade sections.	Additional façade details, including 1:20 sections are provided in the Supplementary Design Report prepared by Hassell and attached at Appendix B.
b. Require certainty and clarity of the proposed finishes. References to options allowing later substitutions should be removed.	Additional information regarding the proposed materials and finishes (including colour) is provided in the Supplementary Design Report prepared by Hassell and attached at Appendix B.
c. Require detail on the “patterned masonry screen” referred to as MAS-02 to confirm suitability. Request a 1:20 brickwork elevation and 1:10 plan and section details. . The reference image does not show a feasible masonry screen and the impact will be a vast reduction of available light and air through the screen. A 1:20 brickwork elevation and 1:10 plan and section details should be provided;	For MAS - 02, the project team is currently exploring two product options - breeze block and Flexbrick. Both products are capable of delivering design intent as high quality materials, balancing both architectural expression and achieving the desired amenity for the childcare. A number of large openings within the facade and permeable masonry screen allows natural light and ventilation to the interior of the podium. The permeable masonry screen allows fresh air and dappled light to the interior of the podium, while providing shade and privacy for the childcare centre. In addition, the childcare centre has a floor to ceiling height of 4m to maximise ventilation. Refer to Figure 10 and Appendix B.

Comment	Response
Figure 11 Podium Finish (Source: Hassell)   **BUILDING 2 PODIUM FINISH** 1. Patterned Solid Masonry Facade — Solid masonry in bands of split face finish & smooth face finish Colour - "Pottery" 2. Masonry Screen — Flexbrick terracotta tile system on SS mesh Colour - "Rojo Rustic" OR Perforated masonry blockwork Colour - "Pottery" 3. Mesh Screen — Woven metal mesh Providing framework for climbing plants 4. Textured Render — Textured rendered finish to FC Colour - "Dark clay" 5. Terracotta Panel — Thin format terracotta panel in glazed finish Colour - "Dark clay"	
d. FAC-03 – do not support a lightweight painted cladding panel to ground level solid façade areas.	Terracotta panel with matt finish is proposed for the ground floor level. Material and colour detail is provided in Supplementary Design Report prepared by Hassell and attached at Appendix B.
e. Do not support lightweight cladding panels for the tower on the basis of design excellence. Require more detail of proposed materials for the tower.	Adopting the finishing on the ground floor level, terracotta panel with matt and glazed finish is proposed for the tower. Material and colour detail is provided in Supplementary Design Report prepared by Hassell and attached at Appendix B.

Comment	Response
f. Require glazing type to be specified.	Additional material and finishes detail, including glazing is provided in Supplementary Design Report prepared by Hassell and attached at Appendix B.
g. Support Level 24 plant room. Recommend a condition of consent to require the integration of all roof services within the Level 24 plant room and to prohibit the installation of any roof plant on any other areas of the roof.	As noted in the submitted architectural drawings, plant equipment is consolidated and housed in the level 23 plant room. This will be a semi enclosed structure designed to be part of the overall building facade. The roof area adjacent to level 23 plant room and the roof is proposed to house photovoltaic panels.
Amenity – Central Residential Building	
18. Solar access – does not support non-compliance with Objective 4A-1 of the Apartment Design Guide (ADG). Need to illustrate alternatives to achieve compliant solar access within the widely accepted criteria (9am to 3pm).	Solar access and apartment layout alternatives are discussed in Section 3.5.3 of the report. Whilst not achieving the numeric provisions in the ADG design criteria, when taking into consideration of the site constraints, the floorplate configuration and the key design responses, a larger number of apartments is able to achieve reasonable solar access during winter days. The proposal has adopted the following design guidance in section 4A of the ADG: ▪ The design maximises north aspect and the number of single aspects south facing apartments is minimised. ▪ Living areas are best located to the north and service area to the south and west of apartments. ▪ Dual aspect apartments. ▪ Shallow apartment layout. An additional 34 apartments are able to achieve solar access to 3.30pm, which will have similar level of solar amenity to ADG compliant apartments. Overall, the proposal is able to maximise solar access in this context and is consistent with Objective 4A of the ADG by way of an alternative design.
19. External sun shading – contrary to Objective 4A-3 of the ADG. Despite probable compliance with internal thermal targets via energy rating tools, the tower facade design does not provide residents with the means to passively shade and cool their	A technical memo has been prepared by Cundall and submitted at Appendix O. The memo addresses the effectiveness of the proposed

Comment	Response
home, particularly where economic circumstances prohibit the use of air-conditioning. These apartments are not designed to withstand extreme heat events. External, operable shading devices should be provided to all facades with exposure to mid-morning and mid to late-afternoon sun.	shading strategy to the western facade. The study is based on the layout and façade design. The passive shading strategy was presented to DRP on 18 February 2021 for feedback. Detailed facade shading strategy is included in the Design Report (Appendix B). External sun shading devices were explored but were not adopted in the design, as they offer little improvement to overall energy usage and thermal comfort. The external sun shading will result in additional amenity impact: ▪ External shading (operable and fixed) on the non-balcony western facades would have detrimental impact on solar access to the living room mid-winter. ▪ The additional material required for external sun shading increases the overall embodied carbon of the building while failing to provide improvements to thermal comfort. Objective 4A-3 of the ADG recommends design features to facilitate shading thats not limited to shading device: *A number of the following design features are used:* *• balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas* *…* *• high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided)* The proposal adopts this recommendation. The façade design and selection of glazing material achieves thermal comfort through (refer to Figure 11): ▪ The western façade comprises deep balconies (provide a 2,400mm to 3,900mm shading overhang to the majority glazing), which will provide passive shading to internal living areas.

Comment	Response
	▪ The setback notch on the western façade also divert sunlight in summer. ▪ The facade grid projects 300mm over the façade. Horizontal and vertical solid panels are also provided, which provide shading to the glazed area of the façade. ▪ Aluminium framed double glazing (high VLT, low reflectivity) is proposed to all units, except for sliding doors and operable windows. Performance glazing is proposed to reduce heat gains in addition to passive shading. ▪ Apartments on the north and west elevation will be fitted with internal blinds, which will further assist with shading. On average, the portion of the façade without balcony or setbacks is 56% solid. The solid to glazed ratio provides balanced amenity for solar, privacy, sunlight and views. While the balconies and notch provide passive shading to 75% of the western elevation. Therefore, the proposed façade design is able to achieve thermal comfort without incorporating external shading devices.

Comment	Response
Figure 12 Passive Shading Design Solutions (Source: Hassell) 	
20. Natural cross ventilation - centrally located apartments do not meet the definition under the ADG. Apartments that do meet the definition of natural cross ventilation are noise affected and will require windows and doors to be closed to comply with Objective 4J-1. As such the development provides well below the minimum recommended.	A Technical Memo addressing natural ventilation has been prepared by RWDI and included at Appendix I. Further design justifications are also included in the Supplementary Design Report attached at Appendix B. The proposal is calculated to achieve the following natural cross ventilation: ▪ 6 apartments are not noise affected and can achieve natural cross ventilation. ▪ 30 apartments are noise affected and acoustic plenums are provided to achieve cross ventilation. ▪ Overall, 36 of the 48 apartments (75%) are considered naturally cross ventilated in accordance with the design criteria of ADG and exceeds the requirement of 60%. The relationship between the achievement of naturally cross ventilated apartments and achieving the relevant noise mitigation criteria is discussed in items 29-33 below.

Comment	Response
	The apartments are assessed in accordance with the design criteria and guidance under Section 4B of the ADG as discussed below: ▪ Natural cross ventilation is maximised through proposed floorplate design and layout: – Corner apartments are maximised compared to layout presented for the Concept SSD 9393. The corner apartments are set back on the eastern and western aspect to create a stepped form and enable exposure to the prevailing winds in accordance with the ADG design guidance. – In addition, the indentation in the building design allows centrally located apartments to have dual aspect apartments that have at least two major external walls facing different directions. The indentation/setbacks in the design maximises apartments' ability to have direct exposure to the prevailing winds through windows located in the significantly different pressure regions. – It is also noted that an unobstructed window opening of at least 5% of the floor area served for all habitable rooms will be incorporated in the design, allowing suitable air flow through the apartment. ▪ Cross ventilation of the Central Building has been modelled based on open location orientation for dual or adjacent aspects and prevailing wind directions and pressure differential at the openings to enable cross flow (North-easterly, southerly and westerly). This is consistent with the ADG design criteria outlined in Section 4B. ▪ Subsequently a detailed review of the Sydney wind climate was undertaken against the building design alignment to the predominant winds for the region. These prevailing winds and the shielding from the other buildings of the development were considered when assessing the expected pressures at the opening location for the proposal.

Comment	Response
	▪ An assessment of the expected pressure differential was then carried out. This enabled a better understanding of the expected pressure differential at main opening locations of the apartment in accordance with building alignment. From this assessment, it was noted that Apartment Types 01 and 05 will experience significant pressure differential from a range of different predominant wind directions at the window openings. However due to the site alignment, Apartment Types 06 and 09 would experience similar pressure values at opening locations. Based on this assessment, apartment types 06 and 09 were not considered as part of the natural cross ventilation count, which is a conservative approach to the ADG requirements (refer to Figure 1). ▪ When considering noise effected apartments, alternative mechanical ventilation solution is provided for noise affected apartments to achieve both cross ventilation and internal noise criteria. This is an acceptable design solution supported by DRP, consistent with Objective 4J-1 of the ADG and a common design practice in other noise affected buildings in the locality. In conclusion, the proposed design maximises corner apartments, and indentation/setback is provided to allow dual aspect centrally located apartments to achieve natural cross ventilation. The assessment of natural cross ventilation compliance has also been undertaken in accordance with the design guidance and criteria under Section 4B of the ADG. In addition, a more conservative assessment criteria were adopted. With this more conservative approach, 75% of the apartments have been assessed to achieve natural cross ventilation which is compliant with ADG requirement. **DRP's recommendation on splitting the northern 2 apartments and adding staggered openings through these walls within the resulting gap:** We welcome DRP's suggestion and note that the suggestion was considered by the design team and assessed by technical engineer (refer to Figure 13).

Comment	Response
	The technical investigation concluded that this design option will not improve differential wind pressure, therefore will not result in additional apartments achieving cross ventilation. This is further discussed in Appendix I. Due to the pressure within the slot being governed by the location of the external opening, which will tend to stagnate deeper within the slot itself. The expected pressure differentials will remain unchanged, and will not result in additional cross ventilated apartments compared to the proposed. In addition, this option will impact on apartment layout and may create additional adverse amenity impact as discussed below: ▪ By splitting the northern two apartments will result in the reduction in building separation to building 1 (Northern Precinct). ▪ The reduced building separation will impact solar amenity of the lower apartments and impact on residential privacy. ▪ The shifted northern edge of the building may also create additional overshadowing to Alexandria Park. Considering the above, the current layout is deemed to be acceptable.

Comment	Response

Figure 13 Cross Ventilation on typical layout (Source: Hassell)

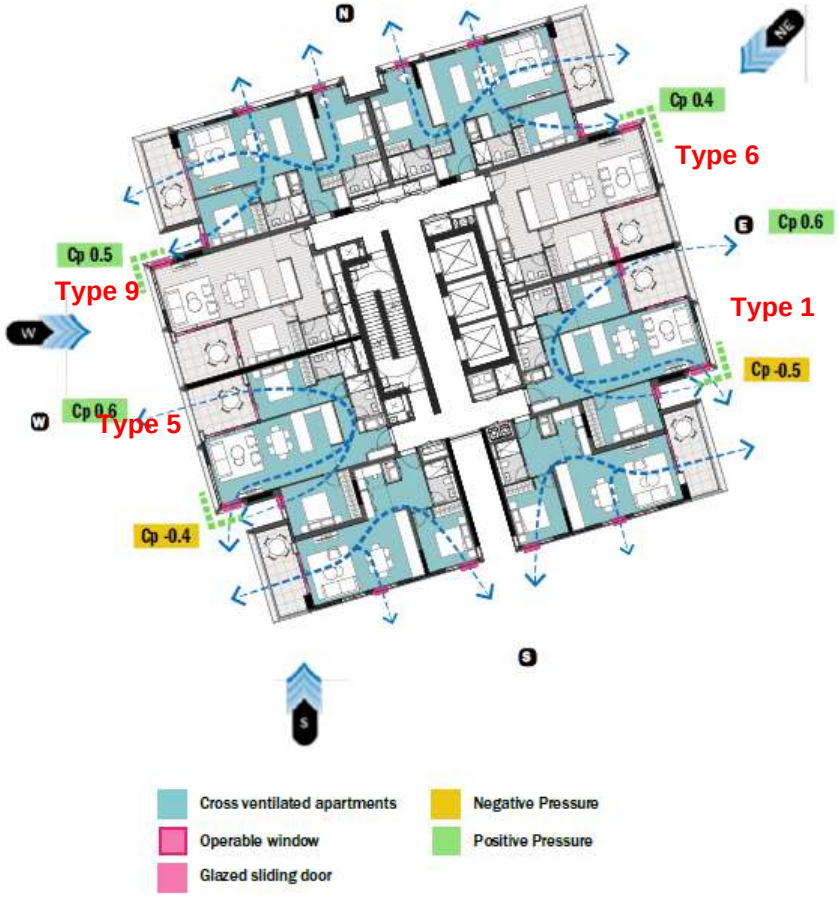
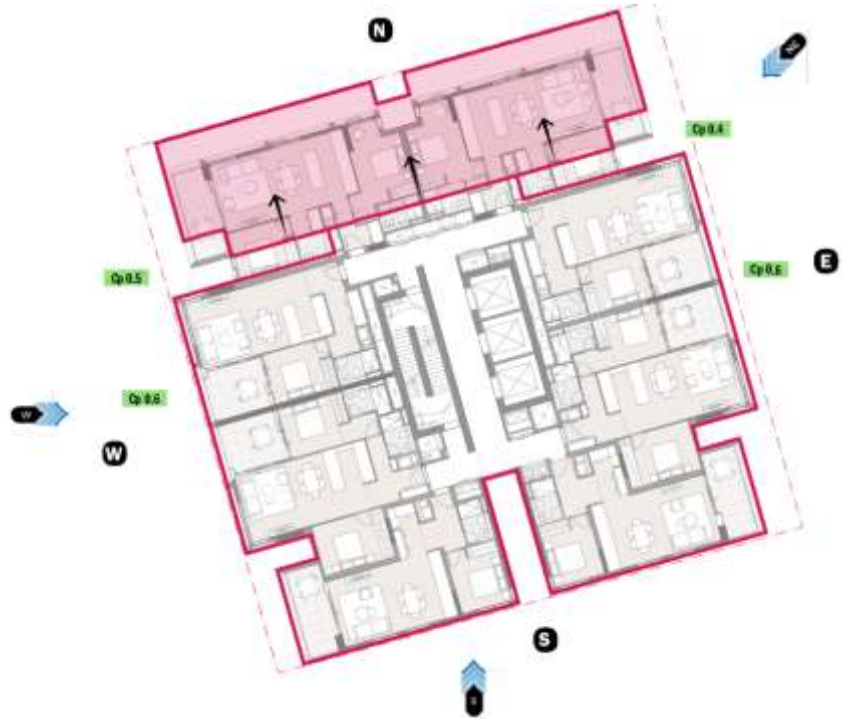


Figure 14 DRP cross ventilation feedback diagram (Source: Hassell)



Comment	Response
21. Communal open space – underprovided at 186sqm (7.5%) on level 22 in contrast to the minimum 25% minimum recommended under Objective 3D-1 of the ADG. The wind analysis concludes that the terrace only achieves 'walking' comfort criteria in summer, and 'standing' conditions for the winter period. Neither is acceptable – the communal open space should be suitable for 'sitting' activities.	**Communal open space area:** As discussed in Section 6.7.1 of the EIS, the proposal provides 185sqm of outdoor communal open space, which equates to 7.5% of the site area and does not comply with the design criteria under Objective 3D-1 of the ADG. Whilst the proposed development seeks a departure from the area requirement, the proposal achieves the objective of the control which is to: *Objective 3D-1 An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.* The proposed location and area of communal open space is considered appropriate on merit for the following reasons: ▪ Communal open space area has been optimised on site. The applicable site area of Central Building is 2,460sqm, which excludes the public domain area including Church Square, which is proposed as a public plaza. The podium rooftop is dedicated for the play space of the childcare centre. ▪ It is located on Level 22 and benefits from excellent solar access and view amenity. ▪ It provides direct and accessible access for all residents, including affordable housing residents from a common circulation area. ▪ The communal terrace will provide shade and space for undercover activities. Landscaped planters and a community garden is also proposed to provide good outdoor amenity. ▪ Within the immediate vicinity of the Central Building, residents have access to high quality public spaces and amenities both within the WMQ site and surrounding neighbourhood. Consideration has been given to the design guidance provided in the ADG. An assessment of the proposal against ADG design guidelines is provided in table 10 of the EIS. Accordingly, for the reasons outlined above the proposal communal open space area is considered

Comment	Response
	appropriate on merit having and is consistent with the design guidance of ADG. **Wind:** A technical memo in response to communal open space wind condition has been prepared by RWDI and is attached at Appendix V. The level 22 communal terrace is elevated with exposure to prevailing winds in all directions. Wind tunnel study was undertaken and concluded that that all areas on level 22 will satisfy the wind safety criteria. In relation to comfort criteria, standing wind comfort conditions are generally found to be acceptable for short duration activity locations, such as main building entrances, bus stops and other key outdoor spaces. These locations and activities are consistent with the intended uses of the communal outdoor space. Sitting wind comfort conditions are generally applied for longer duration activity areas such outdoor dining areas, which is not intended for the majority of the communal open space area. Accordingly, standing wind comfort criteria is an appropriate criterion for communal outdoor space. In addition, the standing criteria for communal outdoor area is applied to other residential tower, including the podium communal area of Tower R4a, One Sydney Harbour, Barangaroo approved by DPIE. As discussed in the submitted Wind Assessment Report (Appendix KK of EIS), the communal open space is able to achieve the following: ▪ The entire rooftop area will satisfy the standing criteria during the summer months for at least 89% of the time. ▪ Sitting conditions will be satisfied for at least 66% of the time during the summer months and at least 72% of the time during the winter months. The principal areas (the BBQ area) of the communal space are setback from the façade and shield from wind impact. Other paved areas can comply with standing and sitting criteria most of the time during the year.

Comment	Response
	Note: the modelling included only the balustrade and pergola structure noted in the architectural drawings. To further improve comfort criteria, landscaping is provided around the building edge. These will buffer local wind effects, assist in improving the comfort level as the landscape mature. In conclusion, given the intended use of the communal open space, standing comfort criteria is the appropriate criterion for communal outdoor area and has been applied to other residential tower development. The communal open space area has been designed to shield from prevailing wind and is able to comply with standing comfort criteria during majority time of the year. Furthermore landscape treatment is proposed to reduce wind impact and further improve comfort level. Accordingly, the proposed communal open space has been designed to minimise wind impact.
22. Private open space – Insufficient size of balconies. 3-bedroom apartment balconies have less than the minimum 2.4m width.	The 3-bedorom apartments on level 20 and 21 have balcony with an internal depth of 2m, which does not comply with the minimum depth of 2.4m required under Objective 4E-1 of the ADG. Alternative design options were explored, including enlarging the balcony by extending the building envelope to the west (0.4m towards Botany Road frontage). This option was not adopted, because the minor extension will create built form impact and overshadow to Alexandria Park. The depth of the balcony could be enlarged to 2.3m by extending the balustrade to the edge of the balcony, filling in the usable balcony area while retaining the proposed building envelope (refer to Figure 14). This is to be further explored at detailed design stage. Given the above, the proposed balconies are considered to be acceptable provided that: ▪ Two balconies are provided with direct access to living area or the bedroom. The two balconies have a total area of 14sqm, exceeding the minimum private open space area requirement. ▪ The balcony adjacent to the living room is able to accommodate a table and four to six chairs,

Comment	Response
	which is a functional outdoor space and is consistent with the design intent of ADG. ▪ Balcony balustrade edge detail will be explored at detailed design stage to increase the depth of balcony to 2.3m.

Figure 15 Private Open Space diagram (Source: Hassell)

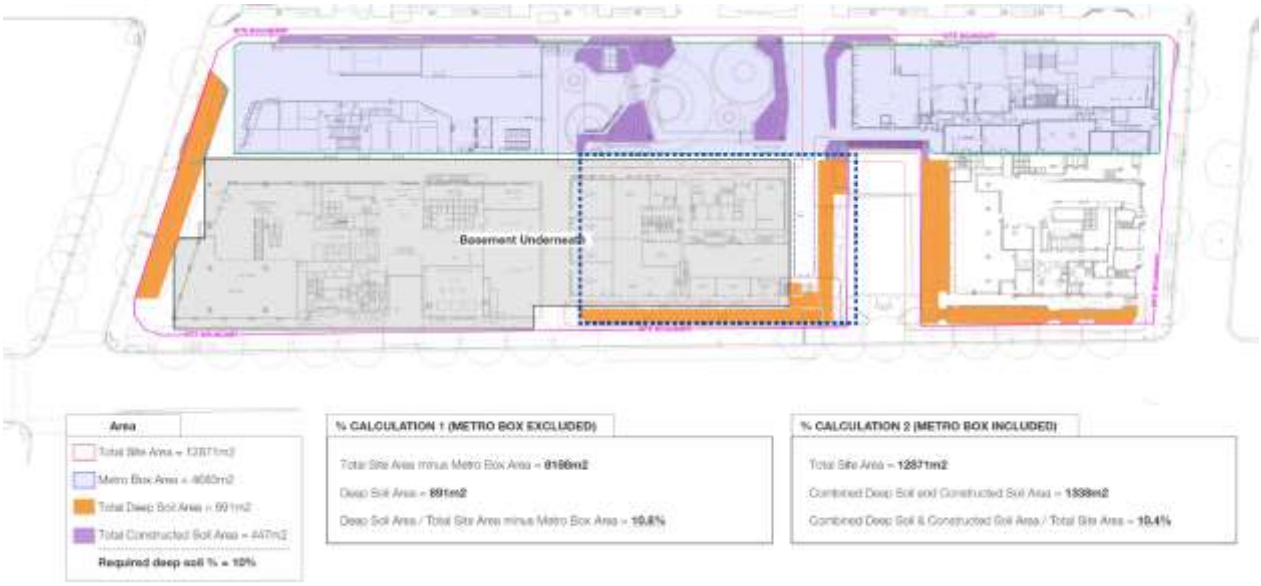
23. Storage – require a typical storage diagram for each type of apartment.	Storage diagrams for the typical levels of the residential tower is provide in the Supplementary Design Report prepared by Hassell and attached at Appendix B.
Natural ventilation and noise	
29. The applicant has identified apartments within the central and southern precincts as being noise affected and requiring acoustically attenuated natural (non-mechanical) ventilation systems to meet these objectives.	A technical response to Item 29-33 has been prepared by Stantec and submitted at Appendix J. The building has been sited and layouts designed to minimise the impact of external noise and pollution to the most sensitive spaces such as bedrooms. The Noise and Vibration Report submitted with the EIS (appendix K) has identified apartments within the Central Precinct as being noise affected and requiring an alternative means of ventilation that meets the requirements of the *Building Code of Australia (mechanical or natural).* The *State Environmental Planning Policy (Infrastructure)*

Comment	Response
	*(**ISEPP**) 2007* and DPIE *Development Near Rail Corridors and Busy Roads – Interim Guideline* states “if internal noise levels with windows or doors open exceed the criteria by more than 10dBA, the design of the ventilation for these rooms should be such that occupants can leave the windows closed, if they so desire, and also to meet the ventilation requirements of the Building Code of Australia”. The applicant has integrated an alternative means of natural ventilation within the proposed development to align with the site’s sustainability targets and to offer enhanced benefit and living to the occupants of the apartments.
30. Concerned the acoustic report has not sufficiently assessed the performance of the building (Central and South) to mitigate road noise, and the application has not adequately demonstrated compliance with Clause 102 of the State Environmental Planning Policy (Infrastructure) (ISEPP).	As per above, a technical memo has been prepared by Stantec and submitted at Appendix J. As discussed, the acoustic report has assessed the performance of the buildings to mitigate road noise and demonstrated compliance with Clause 102 of the ISEPP. Road noise from Botany Road has been measured both before and during COVID-19. The monitor on Botany Road was installed in a location similar to that of SLR’s monitoring location for the Concept SSD 9393. Comparing the LAeq,15h (day) and LAeq,9h (night) noise data from both periods, the traffic noise emissions measured during COVID-19 are 1 dB(A) larger and 2 dB(A) smaller than that prior to, respectively. Given this, the higher of the two noise levels for each period was used to calibrate the road noise emissions model for Botany Road. Extensive noise monitoring studies were conducted to carefully quantify the magnitude of noise emissions from Botany Road. The noise emissions model used to calculate the incident noise levels on the façade of the Central Building was created within SoundPLAN, a model recognized by DPIE for use for projects of this scale and complexity. The modelling provided the incident noise levels on the façade for use when calculating the resultant internal noise level within the space, applying the transmission loss associated with the components making up the building envelope (glass, solid wall, etc). The required acoustic performance of the two

Comment	Response
	types of elements making up the building envelope has been provided to demonstrate compliance with clause 102 of the ISEPP 2007. The development will comply with the noise criteria applied to bedrooms and anywhere else within the development, which is: *(a) in any bedroom in the residential accommodation—35 dB(A) at any time between 10 pm and 7 am,* *(b) anywhere else in the residential accommodation (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.* Compliance with the requirements of this clause has been stated, provided that the acoustic performances outlined in the report are implemented.
31. The report focuses on the incorrect measure for assessing acoustic privacy with windows open, which under the Development Near Busy Roads & Rail Corridors - Interim Guideline is the criteria under Clause 102(3) + 10dB.	The measure for which acoustic privacy was assessed with windows open was using the criteria outlined within the SDCP 2012. This is consistent with the requirements of the WMQ Design Guidelines, which is the governing guideline for the assessment of traffic noise impacts on the residential spaces.
32. Where windows are required to be closed and an alternative ventilation strategy proposed, the development must demonstrate that the criteria under Clause 102 (3) is met without the 10dB variance.	If an occupant chooses to operate/open another natural ventilated opening within the façade to provide natural ventilation (for example, through an acoustically attenuated opening such as the acoustic ventilator), it is reasonable to assign a criteria similar to what a naturally ventilated opening would be required to achieve, that is, 102(3) + 10 dB(A). If the alternative means of ventilation integrated within this design was mechanical, then it is reasonable to assume the fan will supply air into the noise-affected space and also meet criteria under clause 102 (3) without the 10dB(A) variance. It is not reasonable to force a direct natural ventilation opening in a façade (window or acoustic ventilator) to perform identically to a solid pane of glass, particularly the glass types and performances nominated facing Botany Road. The ventilation rates modelled through each apartment have been designed to meet the

Comment	Response
	Building Code of Australia, together with the *City of Sydney's Draft Alternative natural ventilation of apartments in noisy environments – Performance Pathway Guideline*. The points above demonstrate how Stantec have derived the criteria for the naturally ventilated opening being in the open position, and why it is reasonable to assume an opening/hole directly exposed in the façade should not perform similar to that of a solid façade element such as a solid wall or glass line.
33. Acoustic report has not used correct criteria to demonstrate compliance with Clause 102(3). The City notes that the following information is pertinent to demonstrating compliance with the standard and must be forthcoming in the report: (a) The road traffic noise levels through noise monitoring, noting that traffic volumes may currently be depressed due to the pandemic. (b) The relevant materials and finishes of the building, both internal and external. (c) Whether the windows or doors can be open or are required to be closed.	Road traffic noise level data has been provided within the report, both prior to COVID-19 and during the COVID-19 pandemic. Please see response to item 30 for more information. Materials and finishes of the building have been provided to demonstrate compliance with clause 102(3) of the ISEPP 2007. This has been provided in the form of glazing type acoustic performance and solid façade type acoustic performance. Windows and doors shall have the ability to be operable where required for functionality and design, to meet the requirements of the ADG and BCA. The occupant will choose to open the window, door or acoustic ventilator to provide natural ventilation to the apartment. The report also outlines the spaces within apartments where the occupant should not have to rely on opening a window or door to provide natural ventilation to the apartment, and instead be provided with an alternative means of ventilation. These spaces have been noted as "noise-affected" and have been identified for relevant apartments within the Central Precinct.
34. City staff are continuing to review the efficacy of the alternative natural ventilation system and will provide an addendum to this submission when that review is complete. However, concern is raised regarding the assessment of the acoustic performance of the system. There is no calculation of the ventilator performance in keeping with the variables outlined above. As the windows closed ventilator open design criteria within the report is incorrect, the ventilator performance requirement will need to be increased.	An addendum letter has been prepared by Stantec and submitted at Appendix K**.** The letter responds to City of Sydney's submission and peer review by Flux Consultants.

Comment	Response
Landscaping	
35. Landscape drawings lack some critical information required to confirm the detail and viability of the proposals. This includes: ▪ Levels ▪ Detailed sections	A Landscape Response letter prepared by Aspect Studio is provided at Appendix C, and updated landscape plans are provided at Appendix D.
36. Request the applicant provides top of wall levels to all walls, and more detailed spot levels across all landscape spaces on all buildings and ground level.	All landscape plans have been updated to include more detailed levels information, providing top of wall and more detailed spot levels. Refer to Landscape Plans. ▪ WMQ-BLD2-ASP-LS-DRG-DA-001 ▪ WMQ-BLD2-ASP-LS-DRG-DA-002 ▪ WMQ-BLD2-ASP-LS-DRG-DA-004
37. Request comprehensive landscape sections through all green roofs and accessible landscape terraces, demonstrating soil depth and build-up, as well as the interface with the building.	Sections have been provided for all green roofs and accessible terraces, showing typical soil depths and interfaces with building. Refer to Landscape Section. ▪ WMQ-BLD2-ASP-LS-DRG-DA-300 ▪ WMQ-BLD2-ASP-LS-DRG-DA-301 ▪ WMQ-BLD2-ASP-LS-DRG-DA-302 ▪ WMQ-BLD2-ASP-LS-DRG-DA-303
38. Deep soil – Deep soil is underprovided. Sydney DCP and ADG both have a minimum deep soil dimension of three metres. Many of the proposed garden beds are less than these three metres minimum and it is noteworthy that the remaining quantity of compliant deep soil relies heavily on permeable paving. City staff calculate that approximately 470sqm or 5.7% of the site area is allocated to deep soil.	Deep soil areas have been amended and the calculations updated to only include soil areas with a minimum depth of 3m. This includes a 3m wide deep soil area to the Botany Road frontage, removing raised planter retaining walls and providing a continuous planting area with steps (refer to Figure 15). The deep soil area allocated to the overall WMQ site is 10.8% of the site area (excluding the station box area), which complies with ADG deep soil requirement. Refer to Supplementary Landscape Design Report attached at Appendix E.

Comment	Response
Figure 16 Deep Soil Calculation (Source: Aspect) 	
39. Bollards - The use of bollards is awkward and excessive. To the Cope Street Plaza and the shared surface, bollards are spaced 1.2 metres apart and often directly adjacent to an alternative 'barrier' such as a raised planter or steps. Not only is the duplication of barriers unnecessary, but the 1.2 metres spacing may be prohibitive to wheelchair users who can just get through such a gap. Please remove bollards where they are unnecessary, such as in front of a natural barrier like stairs or a raised planter and increase the spacing of bollards to a more comfortable 1.5 metres.	The bollards are required for Hostile Vehicle Mitigation (**HVM**) for the shared lane and public plaza. They are spaced 1200mm between the outside faces of the bollards. Typical occupied widths of wheelchairs is 800mm, therefore the bollard spacing allows for sufficient wheelchair access. Bollards have only been placed where required to meet the HVM requirements as stipulated by Sydney Metro.
40. Green roofs – Clarify maintenance access to all green roofs and planters. Wherever possible, planting should be able to be maintained without the use of specialist safety systems.	All planters can be maintained safely from the accessible areas of the terraces. Inaccessible green roof on level 1 can be safely maintained from maintenance paths around the planters away from the edge of the building. The communal rooftop open space on level 22 provides a series of raised allotment planters spaced 1.2m apart to allow accessible movement and featuring a 300mm timber edge for perching or placing tools on.
Tree Protection	
43. City does not support the high number of trees and existing canopy coverage proposed for removal.	No tree removal is proposed under this SSD DA.

Comment	Response
44. The redevelopment of Waterloo Metro will result in a significant loss of existing tree canopy. The various NSW Government documents should be applied to this site, retain medium-high 14 significance trees and increase the canopy coverage of the area including more tree planting within the site.	
45. Existing street trees and trees with medium-high retention values must be retained and protected.	
46. The location of any new driveway must ensure it does not require the removal of any existing street tree. The driveway shall be appropriately setback so as it does not adversely impact on any existing street trees both below and above ground.	
47. All trees to be retained must be in accordance with *AS 4970-2009 Protection of Trees on Development Sites*, a Project Arborist must be engaged to assist with tree management advice during the various stages of the design and construction process. City staff met with the developer on 23 November 2020 where a commitment was made to provide the City with detailed sub-service plans (existing and proposed) within the TPZ and SRZ of existing trees and greater detail of their trenched (size, location etc). The developer also committed to undertake exploratory root investigations to inform location of new services. This information must be provided in the Response to Submissions.	As outlined in the Landscape Plans at Appendix E, any tree retention is problematic on all four street frontages of the WMQ site, given the extensive replanting strategy committed by the applicant and Sydney Metro. Further as part of the construction of the metro station, it is noted that in-grounding of above ground HV power lines, and the installation of street lighting on all street frontages will have implications on any possible retention of existing trees.
48. The protection and retention of all existing street trees is a priority for the City of Sydney. Street trees are long term assets that the community highly values. The City of Sydney Street Tree Master Plan includes general street tree protection measures and conditions that must be followed. See Section 8 of the document.	
49. The designers must liaise with an AQF Level 5 Arborist to design a development that will accommodate the retention of street trees and trees with medium/high retention values that will have minimal impact on the long-term viability of these trees, where possible.	Adequate provision of deep soil and tree spacing to create areas of continuous canopy has been provided in the public domain. Appropriate detailing and specification will be considered to ensure the successful establishment of street trees.

Comment	Response
50. All new street trees must be planted in accordance with the City's STMP 2011, this includes species, adequate spacing (refer to Part D Section 2.2 STMP), soil and tree pit type etc.	
51. Newly planted trees must meet Australian Standard 2303: Tree Stock for Landscape Use (2015).	
52. All street tree plantings must be in accordance with the City's Street Tree Master Plan 2011. The street trees must be a minimum container size of 200 litres, at the time of planting and stock must be sourced well in advance.	
Heritage	
53. Construction Management – request CMP includes specific construction methodology strategies to ensure that bulk excavation adjacent to the Waterloo Congregational Church will have no physical impact on the stability of the ground beneath.	The CEMP developed by John Holland dated 30 September 2020 and included at Appendix J of the EIS will be further developed prior to commencement of construction and address specific construction methodology strategies. To ensure that bulk excavation adjacent to the Waterloo Congregational Church will have no physical impact on the stability of the ground beneath.
54. A detailed dilapidation report of the church and surrounds to record the existing conditions should be prepared and submitted for approval prior to works commencing on site.	These comments are noted, and it is anticipated that these requirements will inform conditions on any development consent issued for the WMQ OSD.
55. If any damage to the church fabric occurs during the excavation or the construction, it should be reported to DPIE and City of Sydney along with a remediation report to rectify the works in consultation with the heritage consultant.	
56. Vibration measurements should be conducted on the structure of the Waterloo Congregational Church to ensure the vibration generated on the structure does not exceed the values for cosmetic damage and structural damage outlined in BS 7385 and DIN 4150.	
57. Detailed material, colours and finishes schedule and sample boards to be provided for all the buildings.	This comment is noted. Additional details regarding materials and finishes are provided within the Supplementary Design Report prepared by Hassell and attached at Appendix B.

Comment	Response
58. A detailed Heritage Interpretation Strategy should be prepared in consultation with the Council, implemented prior to OC and certified by their Heritage Consultant to Council's satisfaction. The HIS should be developed in conjunction with the Landscape and Public Art strategies.	This comment is noted, and it is anticipated that this requirement will inform a condition on any development consent issued for the WMQ OSD.
59. Adopt all heritage and archaeology related recommendations and strategies in the Heritage Impact Statement, Geotechnical Report, Structural Report, Public Art Strategy, Landscaping Strategy and Heritage Interpretation Strategy.	Noted. All heritage and archaeology related recommendations and strategies in the Heritage Impact Statement, Geotechnical Report, Structural Report, Public Art Strategy, Landscaping Strategy and Heritage Interpretation Strategy will be implemented.
Transport	
60. Walking access (a) Concerned regarding pedestrian priority and functionality of the new shared street and the surrounding intersections during peak hours (having regard to Section 3D of the Waterloo Metro Design and Amenity Guide), particularly morning peak is of concern. Vehicle parking on the site should be constrained further to reduce conflicts between people walking to and from the site and people driving through the shared zone.	The Supplementary Traffic and Parking memo prepared by ptc (Appendix P) reiterates that the projected peak hour trip generation from the WMQ basement car park (southern and northern) is approximately 57 trips, representing a net reduction of 41 trips in comparison to the Concept SSD 9393 (that had 98 trips). The projected traffic generation of 57 trips is deemed a low traffic volume equating to less than one (1) vehicle trip per minute. The approximate 40% reduction in vehicular trips per hour will reduce potential conflicts between pedestrians and vehicles. With reference to Technical Direction 2016/001 prepared by RMS, ptc. noted the following: *The proposed shared zone has been designed to ensure that drivers are aware of the clear pedestrian priority, including promotion of low vehicle speeds. Additional speed control devices can be provided to forcibly reduce vehicle speeds for improved pedestrian safety, where appropriate and if required.* WSP have noted that the majority of pedestrians accessing the metro station would utilise Grit Lane or Cope Street Plaza to access the zebra crossings and bus stops along Botany Road. The combination and dispersion of pedestrian movement via these alternate pathways, together with the lower vehicle volumes, reduces pedestrian movements across or through the shared zone and

Comment	Response
	further reduces potential pedestrian-vehicle conflicts. The shared zone will be fully designed at the detailed design stage and will be submitted to TfNSW for approval. The shared zone will be subject to an independent safety audit process to assess the safety aspects of the proposed layout. In addition, a Traffic Management Plan will be prepared and submitted to TfNSW for approval of the design and suitability.
(b) It is recommended that level of service for walking follow Transport for NSW's guidance to ensure that sufficient space is provided to achieve comfortable environments which encourage people to walk as relevant to the NSW context.	Pedestrian activity response has been provided by WSP and formed part of the supplementary traffic and parking response memo. The 'Walking Space Guide' recommends a minimum of level of service (LoS) C should be achieved. Internal and adjacent footpaths for the WMQ achieve a LoS C or better for both 'interchange' and more onerous street criteria typically adopted in a high-pedestrian environment such as WMQ. Raglan Walk and Grit Lane can be considered as a Type 3 or 4 footpath due to the proximity to the metro station (i.e. within 200m) and the number of peak hour users (70-2000 per hour). For these footpath types, a minimum footpath width of 3-3.7m is recommended to achieve a LoS C. The proposed design adopts the "not adjacent" width as it includes additional footpath space (in addition to the clear width) that may comprise street furniture and/or retail frontage. As per the WMQ Project Delivery Agreement between the applicant and Sydney Metro, minimum footpath requirements for the project include a minimum clearance width (free of retail frontages or furniture) of 3.5m for key connections has been provided. This has been determined to accommodate the anticipated pedestrian flows for the metro station. It is noted that the footpath provision at these locations is significantly wider, though may include some retail frontage or furniture. Overall, the minimum requirements are satisfied. Raglan Place may represent a Type 5 footpath (minimum of 3.9m) and is within 50m of the metro station. A footpath width of 5.5-6.5m is proposed in

Comment	Response
	the design, and a LoS C or better is achieved based on the peak pedestrians per hour. Other internal connections can be treated as Type 2 or 3 footpaths due to their proximity and comparatively lower patronage. In this regard WSP notes the following: ▪ Cope Street Plaza and Church Square – sufficient width for the shared zone is proposed. ▪ Church Lane and Church Yard – behave as Type 2 connections as both developments front onto Wellington Street as their main walkable connection, hence the proposed widths in combination with the adjacent walkable landscaped areas provide sufficient width and capacity. Overall WSP have confirmed that pedestrian movement throughout the WMQ OSD satisfies the Walking Space Guide requirements.
61. Vehicle parking (a) The vehicle parking proposed for residential and commercial use is excessive for a transit-oriented development and should be minimised.	67 residential parking spaces (including 9 accessible car parking spaces), 2 residential accessible visitor space,1 wash bay and 2 car share residential parking spaces area allocated for the Central Precinct. This equates to a total of 72 residential car parking, which is below the maximum 80 permissible parking provision as prescribed under the Concept SSD 9393 and the WMQ Design Guidelines. In addition, nil parking is proposed for non-residential uses, apart from the one long term visitor space for the childcare use. Overall, the proposal incorporates parking below the maximum permissible rates. Therefore, the proposed parking provision is a balanced approach, provided that it is able to encourage walkability and reduce car dependency in an accessible location is consistent, which is consistent with objective of Council, while proposed basement parking will alleviate on-street parking pressures.
(b) The amount of parking directly impacts the overall objective of the new metro line which aims to reduce reliance on cars.	As noted above, the provision of minimal parking spaces for the residential component and providing nil parking for non-residential uses (apart from the

Comment	Response
The mode share targets to shift private car users to public and active transport uses will never be achieved without making the parking supply competitive. (c) DPIE are strongly advised to insist the proponent work together with the development partners, TfNSW, RMS and strive for 'zero' car parking provision or absolute minimums.	one long term visitor space for the childcare use) directly aligns with the overall objective of the new metro line, which aims to reduce reliance on cars. A GTP has also been prepared to encourage a modal shift away from car usage and encourage active transport.
(d) If parking is to be provided, accessible car parking space provision should be prioritised and provided for as per SDCP. All accessible car spaces are to be allocated to adaptable units.	A total of 23 adaptable units are proposed within the Central Precinct. A total of 11 accessible car parking spaces are allocated for the Central Precinct comprising 9 accessible car parking for residents and 2 residential accessible visitor space, which is below the DCP accessible carparking rate. The proposed number of accessible spaces is supported by access consultant Morris Goding and is justified in the Accessibility Statement attached at Appendix S of the EIS. The assessment concluded that the reduction of accessible car space is in proportion with the reduced ratio of the overall car parking to apartments proposed for the Central Precinct. The reduction of accessible car space is a reasonable proposition given the immediate proximity of the Waterloo metro station, and precedence with regards to the reduction of accessible car space for other approved residential projects at Barangaroo and Darling Square. Equitable access to car parking is therefore achieved across the site for various occupants.
(e) Parking for loading and servicing should be prioritised over general vehicle parking. Given the rate of vehicle parking provided the site should provide for the required amount of loading and servicing.	The Northern and Southern loading docks are provided with access and egress driveways separate from the basement parking area and therefore do not interact with the general parking access driveways. The remaining service bays located in the basement, will be line marked and signed accordingly and will be solely for the use of general service/loading vehicles (e.g. residents moving into residences and unloading Utes and vans).
62. Traffic modelling (a) It is unclear from the submitted documentation if the traffic modelling includes the cumulative traffic	The traffic modelling does not currently include defined traffic generation from adjacent developments as this information it not currently

Comment	Response
generation from adjacent developments plus the projected traffic generation for the subject proposal.	finalised or available. However, to ensure that the network is being tested to the extent that new developments are expected, the traffic modelling includes a background traffic growth up to 2036.
(b) The zero trip generation rates for student housing are unrealistic.	No car parking is provided for the student accommodation component of Southern Precinct SSD – 10437, which is consistent with similar student accommodation developments in the area with no parking for students (i.e. Iglu Broadway and Urbanest Darlington). Zero trip generation is therefore reflective of the car parking provision of similar developments and the proposal has sought to minimise car parking, consistent with the objectives of the City of Sydney, which is to reduce car dependency. It is further noted that the residents of the student accommodation are less likely to own private cars than occupants of residential flat buildings and are anticipated to use public transport and active travel options readily to and from the site.
(c) The traffic modelling should include changes to the street network and intersections proposed as part of the Metro development.	The future road network improvements associated with the Sydney Metro station have been included in updated traffic modelling provided at Appendix P.
63. Bike parking (a) Bike parking and end of trip facilities should be maximised and world class in design and provision to assist in the transition away from private vehicle use.	This comment is noted. The proposal will deliver bicycle parking and end of trip facilities to encourage sustainable modes of transport and maximise patronage of Sydney Metro. As outlined in the EIS submitted with Basement SSD-10438, the basement design accommodates bicycle parking and end of trip facilities (showers and lockers) for commercial and retail uses in accordance with the SDCP 2012 controls.
(b) Bike parking for the student accommodation should be provided as per residential studio apartment rates (i.e. 1 per studio apartment) in accordance with design criteria 3 Section 3N of the Waterloo Metro Design and Amenity Guideline.	Not relevant to SSD-10439.
64. Loading and servicing (a) The proposal presents a shortfall of loading and servicing and should be provided as per the SDCP 2012 rates.	If the loading dock requirements are calculated separately for each land use type within the overall WMQ development, this results in a shortfall in service vehicle parking as per the SDCP 2012. However, this approach ignores the ability to accommodate more than one vehicle per day in

Comment	Response
	each dock and dismisses the efficiencies created by grouping land uses. The proposed loading docks and service bays within the basement car park will be managed by means of an integrated site-wide booking system. This will allow each bay to be pre-booked prior to arrival to ensure that there are available bays for any delivery or service vehicles. A concept timetable has been prepared as part of the FSMP to demonstrate that there are a large number of time slots available which allow the bays to be shared across the site amongst the different components of the development. In this regard, the proposed loading/servicing provision is considered acceptable and able to be managed for the coordination of deliveries and servicing.
(b) All loading and servicing should occur onsite and the development should not be potentially reliant on kerbside loading arrangements which are open to other users and subject to change.	Loading and servicing will occur within the designated loading docks on-site or the service vehicle bays within the basement car park. The proposed development does not rely on kerbside loading zones.
(c) Parking for loading and servicing should be prioritised over general vehicle parking.	The Northern and Southern loading docks are provided with access and egress driveways separate from the basement parking area and therefore do not interact with the general parking access driveways. The remaining service bays located in the basement, will be line marked and signed accordingly and will be solely for the use of general service/loading vehicles (e.g. residents moving into residences and unloading Utes and vans).
(d) The design of the loading areas to accommodate a City of Sydney 9.25m waste collection vehicle is supported. This needs to be ensured and should be conditioned.	As outlined in the Supplementary Traffic and Parking Assessment prepared by ptc. (Appendix P), the loading docks have been designed to accommodate entry and egress of a 9.25m Council waste vehicle.
Sustainable development	
65. General – consider advancing sustainable outcomes.	We note that the City has recognised that the development is consistent with SEARs requirement and achieves 5 Star Green Star rating, exceeding minimum targets in some instances and incorporated many other key targets to reflect

Comment	Response
	current best practice for sustainable building design.
66. Green star – encourages the Applicant and DPIE to move to the new Green Star Buildings tool.	As outlined in the ESD Response provided at Appendix O, The development team is currently engaged in a process of reviewing the design and construction impacts of achieving either a 6 star rating under the Green Star Design and As-Built tool or a 5 star rating under the Green Star Buildings tool. In particular, the new Green Star Buildings tool has multiple unknowns involved, so sufficient due diligence is needed to ensure all commitments can be achieved post approval.
67. SSD10439 Rating tools: The City supports the energy ratings scores and methodologies used to achieve these efficiencies. The provision of 30kW of solar PV and electric heat pumps for domestic hot water systems is supported. Energy efficiency The City acknowledges the insulation mark-ups on plans being good practice and should be maintained on any future amended plans. The size and capacity of the PV array must be clearly stated on the plans. While the ESD report states that the 30 kW capacity is subject to final review, this should be conditioned as a minimum provision. Potable water savings Rainwater harvesting and use for landscaping, vehicle washing, and toilet flushing is supported. The capacity of the retention tank and connections should be noted on the plans.	The development team is committed to the achievement of the following: ▪ The installation of a solar PV system and electric heat pumps for domestic hot water. ▪ A continuation of insulation mark-ups for any amendment plans. ▪ A solar PV system with a suitable capacity utilising the key roof areas. The 30kW cannot be committed at this point due to the stage of design. Further works are required during the detailed design stage to ensure the locations nominated can provide a safe and secure area to accommodate the 30kW capacity. ▪ Rainwater harvesting for irrigation, vehicle washing and toilet flushing in the communal precinct amenities. ▪ The rainwater retention tenant and connections. The total sizing cannot be committed at this point due to the stage of design. Further works are required at detailed design stage to ensure the spatial allowances are fully considered and the nominated size is suitable for the development.
Public Art	

Comment	Response
68. Comment the work of Aileen sage Architects, Tess Allas and Sebastian Goldspink. The City wishes to make the following recommendations: 69. Confirm if the artists will have access to the material budgets for the project when working with integrated opportunities such as awnings and paving. If this is not the current intent these budgets should be made available to the artists over and above the $4M specified and this should be made clear in the Strategy.	The expectation is that the $4M budget allocated for the Public Artwork Strategy will include the cost for the integration of the artwork within existing structures or features of the precinct. However, depending on the selected artwork, if there are additional costs required for connections to awnings or modification to landscaping, this will be assessed at the time and the priority given to ensure the artwork is well integrated in the precinct.
70. A powerful extension of the public art process could be for the landscape architects to work with Murawin and the relevant artists to extend and integrate any additional Aboriginal ideas and stories relevant to this specific site (captured through the development of the artworks) through the landscape design and species selection across the site, if appropriate. It is noted that the work Murawin have done to date has informed the Landscape Plan so this would only be relevant if new stories come to light through the development of the artworks.	The opportunity to make an artistic expression in the landscape design is acknowledged. The proponent will continue to progress the Public Artwork Strategy in parallel with the landscape design.
71. It is noted that none of the public art opportunities are to be advertised as open Expressions of Interest. In the interest of equality and facilitating access to all artists, it may be worth considering identifying at least one of these opportunities as an open call for all Aboriginal artists.	The proposed artist selection criteria and experience of the curatorial team as noted in the Public Artwork Strategy is a sound process to ensure the artist's experience, quality of previous work and connection to community will deliver a broad range of artistic expressions within the precinct.
Waste	
72. Requests that the developer use the waste calculator and demonstrate that sufficient area has been provided to meet the needs of each use proposed on site. Please note that the City discourages more than 3 collections per week to minimise traffic movements.	Elephants foot has provided a waste memo that addresses items 72 and 74 and is attached at Appendix R. A comparison of spatial requirements derived from City of Sydney Council's waste calculator and proposed waste room sizes for each waste area have been assessed and provided in the waste memo. It is concluded that residential and retail areas can comply with Council's requirements.
73. The turntable is to be a minimum dimension of 10.5 metres in accordance with the City's Guidelines for Waste Management and Section 3P	Turntable requirement is addressed in the Supplementary Traffic and Parking Assessment prepared by ptc. and attached at Appendix P.

Comment	Response
of the Waterloo Metro Design and Amenity Guidelines.	Ptc. noted that the DCP requirement relates to the turning radius of the waste vehicle accessing the service area and does not relate to the diameter of the turntable. The Northern and Southern Loading Docks have been designed to include a 9.25m diameter turntable based on a swept path assessment of Councils 9.25m refuse vehicle. The swept paths analysis demonstrated that there is a minimum of 300mm clearance around the body of the vehicle to any walls or obstructions. Therefore the provided turntable clearance satisfies the requirements for waste vehicle access and AS2890.2.
74. Sufficient space must be provided for food waste for each relevant use. The City is trialling a food waste collection service and the developer is encouraged to make provision for this service, rather than providing on-site composting which in the City's experience is likely to fail. Again, the Guidelines for Waste Management in New Development provides suitable provisions.	Elephants foot has provided a waste memo that addresses items 72 and 74 and is attached at Appendix R. <u>Residential:</u> Food waste generation rates, available bin sizes and collection frequencies are not readily available at this stage. If City of Sydney Council's current food waste trial progresses to a scheduled Council collection service during operation of the site, the residential component of the development will consider options to integrate separate food waste facilities. Elephant Foot has assessed food waste requirement based on the food waste generation rate available for single dwellings (40L/dwelling/week). 25 x 120L bins would substitute 3 x 1100L general waste bins. If the substitution of general waste bins is to occur during operation, 25 x 120L food waste bins will be provided in the residential chute discharge room in basement 2. Chute offsets and linear track systems will be caged off with prohibited access to residents. Residents will then be required to walk their food waste down to the allocated 120L food waste bins. <u>Retail, Commercial and Childcare</u> Separate food waste bins have been provided for the retail, commercial and childcare component, including 15 x 120L bins. The Waste Management

Comment	Response
	Plan stipulates that food waste receptacles will be provided in all kitchen areas and then transferred by staff and/or cleaners to the central 120L bins when required.
Signage	
75. Insufficient information such as form, size, siting, materiality, illumination and proliferation, has been provided to support the indicative signage zones. It is recommended that a wholistic signage strategy be the subject of a separate application to Council post consent.	An assessment of the proposals compliance with the Schedule 1 Assessment Criteria under *State Environmental Planning Policy 64 – Advertising and Signage* is provided in the EIS submitted with the application. The scope of the detailed SSDA seeks consent for signage locations for the proposed retail tenancies and site identification signs for residential and childcare lobby entries. As shown on the Architectural Plans attached at Appendix D of the EIS, signage zones have been included on the ground floor of the northern, southern, eastern and western (Botany Road) elevations. The detailed design (including dimensions and signage type) and location of the sign within the signage zone are subject to future applications.
76. Do not support top of building signs to the commercial and student housing buildings. The proposal is inconsistent with the Schedule 1 Assessment Criteria under *State Environmental Planning Policy 64 – Advertising and Signage* as top of building signs are prohibited within this location in accordance with sections 3.16.5.2 and 3.16.12.15 of the SDCP. Furthermore, the signs are not accommodated under the Waterloo Metro Quarter Design and Amenity Guidelines.	Not relevant to SSD-10439.
77. As top of building signs are not common in the locality and are not accommodated within existing planning policies, they cannot be considered reflective of either the existing or desired future characters of the area. Support for these signs will establish an unacceptable precedent for future development in the area and should therefore be refused.	
Public domain	

Comment	Response
78. Public domain works - There is a discrepancy between the scope of works to be undertaken by the station development under CSSI and these SSDs. It is strongly recommended that the Interface Agreement and the scope of public domain work is agreed prior to the detailed design SSDs being approved.	We note that the documentation submitted to the City of Sydney previously under the CSSI approval may not have aligned with the agreed OSD scope of works previously outlined between Sydney Metro and the DPIE. This comment is noted and is to be verified with the full scope of works approved under the CSSI application being submitted to the City of Sydney. For completeness it is noted that the landscape plans submitted with this SSD DA illustrate the complete public domain works proposed for the WMQ site across both the CSSI and OSD applications demonstrating consistency of outcome across the three precincts.
79. Flood planning - Each application has its own site-specific flood assessment which is based on the proposed building layout to produce flood planning levels for the individual precincts. The flood planning levels specified in the assessment are in accordance with Councils Interim flood plain management policy with the exception of a retail strip fronting Botany Road identified as retail area 11 in the Central precinct. In this case the proposed floor levels of 15.2m AHD are below the flood planning level of 15.7m AHD. The flood planning level being the 1% AEP flood level for retail floor space.	A flood impact technical memo has been prepared by WSP and is attached at Appendix S. The finished floor level of the retail areas (area 6 and 11) fronting Botany Road has been raised to 15.7 m AHD, which is above the 1%AEP flood level. This design response was presented to the DRP and was supported by the Panel.
80. The reason given for the non-compliance is the relatively small areas of retail floor space available does not allow for adequate DDA compliant ramping form the surrounding Botany road public domain level. This reasoning is not supported and given this is a new development with no site constraints, compliance with the required flood planning levels should be achieved. The depth of flooding in the proposed retail space of up to 500mm during the 1% AEP storm is not acceptable	Equitable access into the retail area is achieved from the northern end of Botany Road and adjacent to Grit Lane, where a gradual change in RL (RL 15.75 to RL 15.8) is provided (refer to Figure 1).
81. Public access - A public access easement (or similar) is required for the private land along Botany Road and Raglan Street. The buildings along these frontages have been set back to allow for public access but a formal guarantee is required so that these access paths will remain in perpetuity.	This is noted and it is expected that a condition would be imposed on any development consent granted for the development requiring the registration of a right of way easement on title to benefit public pedestrian access for all widened public footpaths.

5. RESPONSE TO COMMUNITY AND ORGANISATION SUBMISSIONS

The table below provides a detailed response to the public submissions made specially to this SSD DA.

Table 5 Response to Public Submissions

Comment	Response
Adequate provision of affordable housing	
Reduction of affordable housing units in comparison to the concept approval.	A minimum of 5% of the total residential gross floor area (GFA) proposed to be delivered across the WMQ site is to be delivered as affordable housing contained in the Central Precinct. For the purpose of total residential GFA calculation, the total residential GFA across the WMQ site comprises student housing and social housing contained in the Southern Precinct (SSD-10437) as well as the residential GFA contained in the Central Precinct. The proposal meets the requirements set under the site-specific planning controls within the SLEP and the conditions of the Concept approval. Overall, the proposed WMQ development is anticipated to create a vibrant mixed-use precinct on the fringe of the Sydney CBD. The proposed mixed of uses are supported by the market assessment identifying demand for the proposed uses.
Suitability of the childcare centre use	
▪ The suitability of the childcare centre as a community facility. ▪ The hours of operation should be commensurate with the commercial, retail and residential needs of the immediate community.	Refer to section 3.1 of the report that demonstrates the suitability of the childcare centre as a community facility. The proposed childcare facility will operate in accordance with the following hours of operation: ▪ Monday to Friday: from 7am to 7pm. ▪ Saturdays: from 9am to 3pm The proposed hour of operation is consistent with the recommended hours in the Childcare Guideline. Any extended hours (if required) will be applied for as part of the detailed fitout DA.
Adequate provision of community facilities	
▪ Community rooms should be on the ground floor for easy access. ▪ Reduction in the provision of community facilities - In the original concept scheme, there was planned space for community,	A minimum of 2,000sqm GFA will be provided for the purposes of community facilities within the Central Precinct. The community facility will be used for the purposes of not-for-profit, community centre-based childcare.

Comment	Response
health facility and support services. These services should be allocated. ▪ Should reinstate the Community Centre envisioned in the concept design. ▪ Practical uses with appropriate funding should be made to offer community services. For example, art galleries, music or art classes, affordable sport clubs. ▪ Inclusion of arts and cultural space.	In addition to the not-for-profit community childcare centre provided in the Central Precinct, a total 630sqm of ground level GFA is dedicated for community spaces across the three precincts within the WMQ site, including a 60sqm community hub located within the Central Precinct. These community spaces will be used for a variety of community uses. For example, a medical/health centre, enterprise café, Makerspace, community hub etc. The specific uses are to be determined at a future stage. The provision of community facility GFA exceeds the requirement under clause 6.45 of the SLEP 2012, and more than what is anticipated in the Concept SSD 9393.
Provision of car parking	
▪ Should provide greater number of car share vehicle spaces. ▪ Too much parking space. ▪ Should consider power points for installation of car charging stations in each car parking space. ▪ Inadequate car parking space for residential units, support workers, care providers, nursing staff and student accommodation - may create adverse impact on the local streets. ▪ Project requires more consideration of providing more parking for units and student accommodation to minimise impacts on local streets	The proposed WMQ development provides car share parking for the residential and commercial land uses in accordance with the WMQ Design Guidelines and Concept SSD 9393 conditions of consent. The basement incorporates four car share parking bays. Overall, the WMQ development provides a maximum of 155 car parking spaces, which is less than what is permitted under the Concept SSD 9393 conditions of consent and the site-specific controls within the SLEP which are equivalent to rates prescribed for the Sydney CBD. The proposal seeks to strike a balance to support a reduction in the reliance of private vehicle ownership across the WMQ site and encourage active / sustainable modes of transport, whilst alleviate on-street parking pressures within the surrounding area. The proposal will install trickle-EV charges to nominated car parking spaces as required to meet total demand. These can be suspended from cable trays and wall or floor mounted depending on parking space location.
Traffic generation and traffic impacts	
▪ Consider winding of Botany Road for additional bus lane. ▪ There is no bus stopping bay at the Waterloo station on Botany Road. Busses may block a lane on the extremely busy Botany Road. ▪ The proposed southern loading dock on Wellington Street is concerning for pedestrian, cyclists and driver safety. The location of the loading dock will also	Botany Road is a publicly owned and managed road situated outside the property boundary and scope of this proposal. There are two new bus stops provided on Raglan Street and Botany Road. Widened footpaths around the perimeter of the precinct will enable waiting bus passengers to safely queue whilst also allowing pedestrians to pass. The loading dock accessed off Wellington Street relates to the Southern Precinct and not the basement proposal.

Comment	Response
create traffic congestion on Wellington Street, as a number of vehicles wait to access the loading dock area on a very small stretch of road on Wellington Street. The loading dock should be relocated to Botany road to create a more effective and safer access and exit point. ▪ Increase traffic congestion on surrounding road network.	Notwithstanding, it is noted that the Southern Precinct loading dock incorporates a mechanical turntable to ensure loading/servicing vehicles enter and exit in a forward direction, mitigating potential pedestrian/cyclist safety impacts. Further, a FSMP was submitted as part of Appendix I of the EIS. The FSMP outlines that the loading dock will be available for use by appointment only through the use of an online booking system, which will allocate the times and durations vehicles will be allowed to access the site, any potential queuing onto the external road network will be minimised. As outlined in the EIS and accompanying Traffic and Parking Impact Assessment, the traffic modelling undertaken demonstrated that the external road network will continue to operate at an acceptable level of service and experiences no changes in current level of service or at a level of service less than the Concept SSD 9393, and therefore, the development is not considered to have a detrimental impact on the operation of the road network.
Increased pedestrian movement	
▪ Future increased pedestrian movement across Botany Rd and Wyndham St should be considered. ▪ Adequate provision of pedestrian crossing should be considered for safety.	Modelling and analysis of the existing and future pedestrian and cyclist movement, connectivity and circulation within the extent of the site and to surrounding areas have been assessed in the Pedestrian Modelling Report prepared by WSP (attached at Appendix I of the EIS). An additional Pedestrian Movement Technical Memo has been provided to assess the likely pedestrian movements along Botany Road as a result of public domain change to address flood planning level (refer to Appendix Q). Overall, the changes are not likely to materially change or impact operations along the footpath and bus stop environment. The WMQ precinct design is compliant with the project requirements under the 2056 assessment scenario within the internal walkways, footpaths surrounding the site, Raglan Street and Botany Road and Raglan Street and Cope Street intersections, Botany Road bus stops. A new pedestrian crossing on Botany Road will provide direct connection to the proposed Grit Lane and the metro stations, providing safe pedestrian connection into the site.
Overshadowing, privacy, view and visual impacts to neighbouring residences	

Comment	Response
▪ Development should consider overshadow impact on existing buildings to the east. ▪ The project will have significant view impact to the eastern boundary of the Alexandria Park Heritage Conservation Area and Alexandria Park. The loss of crucial access to sky views from these areas would damage vital heritage value for the area.	The majority of overshadowing from the proposed development falls to the west and south of the site. Additional modelling on solar impacts has been undertaken for neighbouring dwellings to east (62-72 Botany Road), the west and south of the site. The assessment is attached at Appendix N. The assessment concluded that 62-72 Botany Road is located to the west of the site. Real estate floor plans of 62-72 Botany Road indicate that the bedrooms are located along Botany Road with the living spaces and private outdoor areas are oriented to the west. All aspects of the development will be unaffected by the proposal from 11:00am and the apartments will maintain the same level of solar access to the living spaces and private outdoor areas. Cardno have prepared a Visual Impact Assessment (**VIA**) and was submitted with the EIS. This VIA identifies the visual changes from the Concept SSD 9393 built form and the proposed detailed built form, including view from Alexandria Park. Distant views along view corridors within the conservation area are rare towards the site and the location of the proposed development. As such, the proposal would have a negligible, if any, visual impact on the conservation area.
Overshadowing and amenity of existing and proposed public open space and conservation area	
▪ The development should maximum the amount of solar into adjacent apartments. ▪ The development shadow Alexandria Park Heritage Conservation Area in Winter Solstice 9am-11am and Equinox 9am-10am. This result in – Significant impact on heritage east-west facing, adjoining terraces with loss of crucial morning sunlight for significant periods of the year. – Significant impact on heritage value of Alexandria Park that provides civic and visual focus for the Alexandria Park Heritage Conservation Area.	As discussed above, additional modelling on solar impacts has been undertaken for neighbouring dwellings, including 62-72 Botany Road. The assessment is attached at Appendix N. Shadow impact to Alexandria Park Heritage Conservation Area is discussed in section 8.4.2 of the EIS and assessed by RWDI (appendix LL of the EIS). The proposed WMQ development does not create any additional overshadowing to the Heritage Conservation Area. The Concept DA envelope was predicted to create additional shadow and reduce solar access below 2 hours within the Heritage Conservation Area. The proposed development has been reduced in height, which reduces the total impacted area by approximately 1,330 m², or approximately 12%, and is a significant improvement from the Concept SSD. An annual assessment of potential sunlight hours on the ground was also conducted to provide an understanding of sunlight impacts during other times of year. The

Comment	Response
	assessment compared the total hours of potential sunlight gained under the detailed SSD design against the concept DA scheme. Improvements in solar access were predicted up to 450m, though the majority of improvement is confined to a radius of approximately 250m. Along Botany Road, the proposal increases potential solar access at grade between 50 and 200 hours per year. Along Wellington Street, solar access is increased up to 300 hours per year. Overall, the proposed development will have a minimal impact on solar access to the residences in the Heritage Conservation Area. The impact on other neighbouring buildings is also reduced compared to the shadow impact from the Concept DA scheme.
To encourage more tree planting	
Should incorporate more trees to block wind and provide shade.	Street trees and additional planting are proposed along the street boundary, the proposed laneway, and around the Cope Street Plaza. The WMQ site provides 54.8% of street tree canopy coverage, and 12% private land canopy coverage, which equates to 25.7% overall canopy coverage for the site and complies with the tree coverage requirements under the WMQ Design Guidelines. The proposed street trees and planting contributes to the landscape of the WMQ site, mitigate wind impact and provide shade in public domain areas.
Commentary on overall architectural quality of the proposed designs	
▪ Inconsistent with the context and character of Waterloo. ▪ Design of the development should consider transition to lower scale residential area and the urban landscape. ▪ The materiality and design of the Central building is inconsistent with the character of Waterloo and the nearby heritage conversation area/item. ▪ The three precincts should be considered as whole.	The proposed building height for the Central Precinct is lower than what is permitted in the Concept SSD 9393. The design of the proposed buildings and public domain within he WMQ have benefited from an extensive DRP process. The team has focused on developing highly distinctive buildings, while also ensuring the overall WMQ site remains cohesive. A diverse palette of building materials and finishes have been employed to provide visual interest with a focus on highly detailed podium structures. Overall, the proposed development delivers a built form that is responsive to the context of the existing and future desired character of the site and the surrounding area of Waterloo including, the heritage conservation area.

Comment	Response
Public open space	
▪ The land/plaza around the buildings will be privately owned by the Developer – does this mean that the public has no access to these areas. ▪ More public open space and green recreational open space should be provided for the increased population.	All proposed public domain space, including Cope Street Plaza are publicly accessible. It is to be managed by the building manager; however the public open space will not restrict public access. Positive public covenants will be in place to ensure the public open space is retained into perpetuity. The overall WMQ site achieves 10.7% deep soil coverage, exceeding the DCP and ADG guidelines. The proposed Cope Street Plaza provides 1,325m^2 of public open space. Raglan Street plaza provides 875m^2 of open space. The combined area of new public domain is 2,680m^2, which exceeds the required 2,200m^2 under the Waterloo Design Amenity Guidelines and is able to achieve the best public domain outcome for the site.

The majority of the issues raised in the organisation submissions have been addressed in the responses provided to the public submissions in Table 5. Notwithstanding the submissions received from community organisations are addressed in Table 6 below.

Table 6 Response to Organisation Submissions

Comments	Response
Counterpoint Community Services	
Community consultation concerns The pre-lodgement consultations were significantly disadvantaged by Covid19 restrictions and the effectiveness of which questionable.	The timeframe for engagement coincided with the restrictions imposed to respond to the COVID 19 pandemic. Accordingly, engagement activities were modified to comply with restriction requirements to minimise community exposure and transmission. The community and stakeholders were informed about the public exhibition and how to make a submission in the following ways: ▪ Newsletter – letter box drop on 5 November 2020 to 5,100 properties located within a 500 metre radius of the Waterloo Station site. – email to approximately 2,193 people and groups registered for updates on the metro station and the integrated station development on 5 November. ▪ Public advertisement – published in the Sydney Morning Herald on 7 November 2020. ▪ Overview Booklet – distributed on request to residents and community groups. – displayed on a monitor in the window of the Land and Housing Corporation office for Waterloo Estate residents. ▪ WISD website – information about making a submission, including the overview planning booklet and newsletter, and links to the DPIE website. ▪ Webinars – two were held on 19 and 21 November to provide information about making submissions and an opportunity to ask questions about the development. About 30 people attended these webinars. ▪ Emails: – individual emails to 12 stakeholders who had previously expressed concerns about the development. – 11 November: e-news sent to 2197 registered stakeholders as a reminder to

Comments	Response
	attend webinars to find out about the development and how to make a submission. – 19 November: e-news sent to 2,097 registered stakeholders, overview booklet attached and link to information about how to make a submission included. – 1 December: e-news sent to 2,362 registered stakeholders to remind them of exhibition period closing. ▪ Community manager attended WRG meeting and provided a run through of the presentation that would be used in the webinars, encouraging WRG to attend webinars to ask questions. Note: email numbers can change monthly as people subscribe and unsubscribe.
<u>General comment on amended proposed plan</u> ▪ No health impact study completed, ▪ It is not clear that planning controls will protect any future request to increase the height. ▪ Preparation of a local employment strategy to ensure targeted employment creation is realistic.	Key environmental and health issues have been addressed in detail through the EIS report prepared for the SSDAs. The height of the building is governed by the approved plans and the approved Concept SSD 9393, any future increase in height limit will need to be sought via a section 4.55 modification application to both Concept SSD 9393 and detailed SSD. The Eastern City District Plan includes planning Priorities that directly relates to employment target for the area.
<u>Placemaking /management</u> ▪ Missed opportunity for shared use of facilities in conjunction with the overall Waterloo Redevelopment. ▪ Placemaking strategies are lacking attention to the physical, cultural, and social identities that define Waterloo Metro Quarter and support its ongoing evolution. ▪ Limited details on cultural/community dynamics strategies for residents from different backgrounds.	Proposed basement and servicing requirements are shared between the uses with the WMQ. The proposed public plaza and community facilities will be shared with residents and visitor of the Waterloo area. The Public Art Strategy and Placemaking Strategy has a strong emphasis on recognition and celebration of Aboriginal culture and the multicultural diversity of the area. Comments on diversity and social identify of Waterloo have been noted. There is a commitment to establish a placemaking fund to run events and activations. A place manager will also be employed to coordinate activities on site. As the site is being constructed, the developer will be working with local organisations to explore how this would be curated.
<u>Traffic and pedestrian safety</u>	The Pedestrian Movement Memo prepared by WSP confirms that all internal walkways, external footpaths and

Comments	Response
Adequate pedestrian and bike paths around the Metro Quarter	intersection ques achieve a LoS C or higher in accordance with TfNSW Walking Space Guide. As previously stated, a new zebra crossing is being provided across Botany Road as part of the Waterloo metro station. Internal walkways such as Grit Lane and Church Square (shared zone) directly connect to the bus stop and crossing on Botany Road. Bike paths are provided around the WMQ site, which link directly into the regional cycle network via the bike path on Wellington Street.
<u>Central Precinct</u> ▪ No social mix considered. ▪ Private open space and the rooftop residential terrace is only accessible by the residents of the building discourage holistic community development.	The central building incorporates affordable and market housing, as well as community facility (childcare centre) and retail uses on the ground floor to encourage social mix. Private open space and residential communal space is provided for the residents to satisfy ADG requirements and to provide good residential amenity. Accessible public plaza is provided on the ground floor and public community facilities are provided on the podium to service the general public.
Shelter NSW	
Affordable Housing to be provided in perpetuity.	The required affordable housing will be constructed by the applicant, as required under the Project Delivery Agreement between the applicant and Sydney Metro. The stratum title of the affordable housing will be registered and transferred to a Registered Community Housing Provider as affordable housing, as required under the terms of the Project Delivery Agreement.
Overstates the potential contribution to low-cost affordable housing (especially for 'key workers' in the case of affordable housing). Affordable housing provisions should be extended and that local key workers (for the Waterloo Metro and Waterloo Estate) be given special consideration. Affordable Housing should be managed by a Community Housing Provider.	Affordable housing as defined by the *State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)* includes key workers. The Affordable housing will be managed by a Tier 1 Community Housing Provider and designed to be 'tenure blind.
The provision of affordable and social housing represents a very small contribution to Sydney LGA's housing targets. The proposed development will not reduce the extent of housing stress.	The WMQ site will provide 70 social housing dwellings and 24 affordable housing dwellings, which exceeds 5% of the total proposed residential GFA and will assist with contribute to affordable/housing in the LGA.

Comments	Response
Social and affordable housing should be reviewed to better match consumer demand of two and three bedrooms.	24 affordable housing apartments to be delivered as a mixture of 1 bedroom (50%) 2 bedroom (50%) which responds to the demand of the locality.
Inner Sydney Voice	
Central Precinct Community centre has now been allotted to a commercially run childcare centre instead, benefitting only working parents and children.	In addition to the not-for-profit community childcare centre provided in the Central Precinct, a total of 630sqm of ground level GFA is dedicated for community spaces across the three precincts within the WMQ site, including a 60sqm community hub located within the Central Precinct. These community spaces will be used for a variety of community uses. For example, a medical/health centre, enterprise café, Makerspace, community hub etc. The specific uses are to be determined at a future stage.
REDWatch	
The scale and density of the development will have a major impact on the surrounding community with no adequate infrastructure support.	The WMQ development is a transit orientated development supported by planning metro infrastructure. Utility infrastructure has been considered in the Utilities and Infrastructure Servicing Report, which identifies the existing capacity of the site to service the Waterloo Metro Quarter OSD and any augmentation requirements for utilities.
Cumulative impact from this development, and the lack of integration of proposed nearby developments. Impacts on possible open space and the development to the east is not assessed.	Cumulative impacts (traffic, noise, dust, etc.) associated with concurrent construction and operation of station and OSD, and other development in the area have been considered throughout the EIS and technical report submitted to each SSD. Mitigation measures are also recommended to minimise impact. The site is located in close proximity to a number of public open space areas that will be able to accommodate existing and the incoming population. In addition, the development facilitates new public open space including the delivery of the Church Square, expanded footpaths on Botany Road and public domain upgrades.
Need for affordable retail.	A total 630sqm of ground level GFA is dedicated for community spaces across the three precincts within the WMQ site. These community spaces will be used for a variety of community uses. For example, a medical/health centre, enterprise café, Makerspace, community hub etc. The specific uses are to be determined at a future stage.
Central Precinct	Noted. The specific uses of the community spaces are to be determined post approval in consultation with community

Comments	Response
The size of the community room is insufficient and should be managed by an NGO. 24 storeys are too high for this site.	organisations to identify local facilities. For example, the nature and operation of the Community Hub and Markerspace (in the Southern Precinct) will be developed over the three-year construction period in consultation with the community to ensure it is responsive to the needs of the community.

6. REVISED PLANNING ASSESSMENT

6.1. ASSESSMENT OF PROPOSED MODIFICATIONS

This section provides an assessment of the amended design proposal against the relevant statutory planning framework including relevant Acts, environmental planning instruments, draft environmental planning instruments, and development control plans under section 4.15 of the EP&A Act.

Table 7 Assessment of amended proposal against relent statutory planning framework

Consideration	Response
Strategic Planning Context	The minor design changes proposed to the Central Precinct remain consistent with the strategic planning framework as outlined in the EIS previously submitted with SSD-10439.
Acts	
Environmental Planning and Assessment Act 1979	Pursuant to Section 4.36(2) of *the Environmental Planning and Assessment Act 1979* (EP&A Act): *(2) A State environmental planning policy may declare any development, or any class or description of development, to be State significant development.* The proposal is classified as SSD. In accordance with Section 4.5 of the EP&A Act, the Independent Planning Commission is designated as the consent authority if there is a Council objection to the DA or there are more than 25 submissions, unless otherwise declared by the Minister as a State Significant Infrastructure related development. Unless otherwise declared, the Minister will be the consent authority for the detailed SSDA (refer Clause 8A of the SRD SEPP and Instrument of Delegation dated 11 October 2018). An assessment of the proposal against the objectives contained within Section 1.3 of the EP&A Act is provided in the EIS. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Central Precinct SSD.
Biodiversity Conservation Act 2016	The purpose of the Biodiversity Conservation Act 2016 is to *'maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and in the future, consistent with the principles of ecologically sustainable development.'* The NSW DPIE granted a waiver on 24 July 2020 under Clause 7.9(2) of the Biodiversity Conservation Act 2016, concluding that: *"The proposed development is not likely to have any significant impact on biodiversity values. The application, therefore, does not need to be accompanied by a BDAR."* The assessment and conclusions in the EIS are unaffected by the proposed changes to the Central Precinct SSD.
State Environmental Planning Policies (SEPPs)	

Consideration	Response
State Environmental Planning Policy (State and Regional Development)	The *State Environmental Planning Policy (State and Regional Development) 2011* (**SRD SEPP**) has the purpose of identifying development that is SSD, State significant Infrastructure (**SSI**) (including critical) and regionally significant development. The Concept SSD 9393 was classified as SSD under Section 4.36 of the EP&A Act as the development had a CIV in excess of $30 million and was for the purpose of residential accommodation associated with railway infrastructure under clause 8(1)(b) of the SRD SEPP. The proposed development remains consistent with the SRD SEPP and the Concept SSD 9393. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Central Precinct SSD
State Environmental Planning Policy (Infrastructure) 2007	The *State Environmental Planning Policy (Infrastructure) 2007* (**ISEPP**) came into force in December 2007 and aims to facilitate the effective delivery of infrastructure across the State. The SEPP identifies matters for consideration in the assessment of types of infrastructure development, including all new development that generates large amounts of traffic in a local area. Further clarification regarding the proposal's compliance with Clause 102 of the ISEPP is provided in Section 4.2 and in the Supplementary Traffic and Parking Assessment attached at Appendix P. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Central Precinct SSD.
State Environmental Planning Policy (Building Sustainability Index: Basix) 2004	The proposed residential units have been assessed in accordance with the relevant requirements, and a BASIX Certificate has been issued. The certificate confirms that the proposed development achieves the minimum water and thermal performance ratings required. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Central Precinct SSD.
State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017	The *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017* (**Vegetation SEPP**) works together with the *Biodiversity Conservation Act 2016* and the *Local Land Services Amendment Act 2016* to create a framework for the regulation of clearing of native vegetation in NSW. The Vegetation SEPP applies to the Sydney metropolitan areas and land zoned for urban purposes. No tree removal is proposed under this SSD and no further consideration of the Vegetation SEPP is required. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Central Precinct SSD.

Consideration	Response
State Environmental Planning Policy No.55 – Remediation of Land (SEPP 55)	*State Environmental Planning Policy No.55 – Remediation of Land* (**SEPP 55**) provides a State-wide approach to the remediation of contaminated land, and primarily promotes the remediation of contaminated land for the purpose of reducing risk of harm to human health. Remediation works for the WMQ will be undertaken under the CSSI approval to make the site suitable for a metro station. However, Douglas Partners have prepared a Contamination Site Strategy to ensure that the site can be made suitable for the proposed OSD uses. Within the Central Precinct this includes residential and non-residential uses (retail and community uses) and public domain spaces. It is noted that the Central Precinct is built over the basement which is the subject of a separate basement SSDA (SSD-10438), any contamination and remediation requirements required for the Central Precinct is addressed in the basement SSDA. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Central Precinct SSD.
State Environmental Planning Policy No. 64 (Advertising and Signage) (SEPP 64)	*State Environmental Planning Policy No. 64 – Advertising and Signage* (**SEPP 64**) aims to ensure that advertising and signage is compatible with the desired amenity and visual character of an area and provides effective communication in suitable locations and is of high-quality design and finish. It does not regulate the content of signs and advertisements. The scope of the detailed SSDA seeks consent for signage zones/locations for the proposed retail tenancies and site identification signs for residential and childcare lobby entries. Clause 13 of SEPP 64 indicates that a consent authority must not grant consent to display signage unless it is consistent with the objectives of the policy and complies with the assessment criteria contained within Schedule 1 of SEPP 64. An assessment of the proposed signage against Schedule 1 is provided in the EIS submitted with the application. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Central Precinct SSD
State Environmental Planning Policy No. 65 (Design Quality Residential Apartment and Apartment Design Guide. (SEPP 65)	*State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development* (***SEPP 65***) applies to development for the purposes of a building that comprises three or more storeys and four or more self-contained dwellings. The EIS assesses the proposed residential units against the requirements of SEPP 65 and the ADG. An updated Design Verification Statement has been provided by Hassell Architecture, which confirms that the proposal can meet the objectives of Parts 3 and 4 of the ADG (refer to Appendix B). Including justification for solar access non-compliance as discussed in Section 3.5.3 of the RtS and natural cross ventilation details.

Consideration	Response
	The assessment and conclusions in the EIS are unaffected by the proposed changes to the Central Precinct SSD.
State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 and Child Care Planning Guidelines 2017	The *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* (**SEPP Education**) aims to ensure that early education and care facilities are established effectively and consistently. It incorporates standardised planning provisions relating to childcare centres, schools, universities and TAFEs. Under SEPP Education, a consent authority must take into consideration the DPIE Child Care Planning Guideline 2017 (the Childcare Guideline) when assessing a DA for a childcare facility. Under SEPP Education and Child Care, a consent authority must take into consideration the DPIE Child Care Planning Guideline 2017 **(the Childcare Guideline**) when assessing a DA for a childcare facility. Part 3 of the Childcare Guideline includes matters which must be considered by the consent authority when assessing a DA for a childcare facility. Part 4 of the Childcare Guidelines provides the requirements for internal and external areas of Childcare facilities as per the National Quality Framework (**NQF**). Given this SSDA is only seeking consent for the use and general location childcare centre, detailed assessment against Part 3 and Part 4 of the Childcare Guidelines will be undertaken as part of the future childcare fit-out DA. High level compliance check has been undertaken and by Dr Brenda Abbey - a childcare specialist to demonstrate that the childcare centre is able to comply with the Guideline (attached at Appendix RR of the EIS). Supplementary assessment has also been undertaken by Dr Brenda Abbey and is attached at Appendix U. The supplementary assessment confirm that the floorplate of the childcare centre supports the grouping of children into separate play spaces within compliant indoors and outdoors play spaces, with provision of required amenity and supervision. Further, the size and capacity of the service areas and amenities support the demands of the day-to-day operations of a compliant and functional childcare centre. Furthermore, it is noted that given that the proposal relies on the use of simulated outdoor play space, the future fitout DA is required to seek a waiver from strict compliance with Section 108 of the Childcare Regulation under Clause 22(1)(b) of the SEPP Education. Concurrence with Regulatory Authority is required for a proposal that does not strictly meet the outdoor unencumbered space requirements of Section 108 of the Regulation. Based on preliminary assessment by Dr Brenda Abbey, the podium and the floorplate are well designed to support the future simulated outdoor space and assist the space to achieve good level of amenity as recommended by the Childcare Guideline. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Central Precinct SSD.

Consideration	Response
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005	The WMQ is located outside the Sydney Harbour Catchment, as indicated on the Sydney Harbour Catchment Map published in Gazette No 38 of 7 April 1989 at page 1841. Therefore, the SREP does not apply to the site and the SSDA.
Draft State Environmental Planning Policy (Environment)	The site is not subject to any of the changes proposed within the draft SEPPs, nor it is identified as being attributed to any catchments, waterways, bushland or protected areas.
Sydney Local Environmental Plan 2012	The *Sydney Local Environmental Plan 2012* (**SLEP 2012**) is the principal environmental planning instrument governing development at the Site. An assessment against the relevant controls of the SLEP 2012 is provided in the EIS. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Central Precinct SSD.
Design Guidelines / DCP	In accordance with Clause 11 of the *State and Regional Development SEPP,* the provisions of *Sydney Development Control Plan 2012* (**SDCP 2012**) do not apply to this development. Sydney Metro has revised the WMQ Design Guidelines (attached at Appendix G), which have guided the detailed design of the proposed residential tower and OSD project. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Central Precinct SSD.
Environmental impacts	As outlined throughout this RtS and as annexed, the applicant has received additional technical information to address questions and community concerns regarding environmental impacts. The additional information provided relates to: ▪ Landscaping and public domain; ▪ Wind; ▪ Natural ventilation; ▪ Solar access and overshadowing; ▪ Visual impact; ▪ Environmental Performance/ESD ▪ Traffic and parking; ▪ Waste; and ▪ Flooding.
Social and Economic	The proposal promotes the social and economic welfare of the community and a better environment through the delivery of an integrated transport oriented development above the Waterloo metro station. The potential for anti-social and criminal behaviour within the public domain footprint and more broadly, throughout the entire detailed OSD design has been

Consideration	Response
	addressed in the Crime Prevention Through Environmental Design (**CPTED**) Report prepared by Connley Walker Pty Ltd and submitted with the EIS. A Social and Economic Assessment has also been prepared by Urbis (refer to Appendix AA of the EIS). In summary, the development will contribute to the ongoing economic activity of the New South Wales workforce and support employment generation in the local area consistent with the objectives of the Sydney Region Plan and the Eastern District Plan.
Public Interest	The proposed development is in the public interest for the following reasons: ▪ The proposed modification will minimise flood impact and activate the Botany Road public domain. By raising the floor level to comply with flood planning level and provide large shopfront glazing to enhance predominance on the street. ▪ The proposed use is permissible with consent and consistent with the objectives of the zone. ▪ The proposed development has had regard to relevant applicable statutory planning policies and complies with the objectives of the development controls for the site. ▪ The proposal provides additional affordable housing and market residential apartments, which aids in the diversity of residential tenure available within Sydney to suit the diverse and evolving needs of the population. ▪ The provision of community facilities, including the community hub and the Childcare Centre, will enhance advancement of education to the benefit of the public and will support the need of workers and residents within the WMQ site. ▪ The proposal will not have any unacceptable impacts on adjoining or surrounding properties or the public domain in terms of traffic, noise and environmental impacts.
Site Suitability	The proposed development remains suitable for the site for the reasons stated in the original approval of SSD 9393.

6.2. SUMMARY OF MITIGATION MEASURES (AS AMENDED)

The following section provides update mitigation measures that have resulted from the amended design response to the submissions. For clarification purposes, any new additions are marked as '**bold**' and any changes no longer relevant have been struck through.

Table 8 Updated Mitigation Measures

Item	Potential Impact	Mitigation Measure
~~Aboriginal Heritage~~	Potential impacts on ~~Aboriginal~~ **historical (non-**	The updated Archaeological Method Statement (AMS) prepared by AMBS (dated July 2020) must be adhered to

Item	Potential Impact	Mitigation Measure
Archaeology and Non-Aboriginal Heritage	**Aboriginal)** ~~places of~~ significance (Construction).	for the full extent of excavation and construction outside of the envelope of Sydney Metro. *This AMS outlines the proposed excavation methodology for the subject site to manage archaeological significance and impacts. The recommendations of the Archaeological Method Statement are to be adhered to under the CSSI approval for the completion of the Waterloo Metro Quarter site*
Wind Impact	Adverse wind environment to outdoor areas in the OSD, including to private balconies, communal areas and public domain area. Potential for general and localised wind effects.	Maintain awnings detailed on the architectural drawings and tree planting outlined in the landscape design **prepared by Aspect.** To enable the ground plane areas and **elevated areas, including rooftop communal area** to satisfy the required wind comfort conditions for the Central Precinct and the surrounding public open space areas and laneway.
Flooding	Potential flooding of the OSD.	**Comply with the recommendations and mitigation measures contained within the Stormwater and Flood Impact Assessment prepared by WSP dated 30 September 2020 (Appendix O) and technical memo prepared by WSP dated 3 and 4 March 2021 (Appendix S).** **Adopt the permissible minimum building floor levels and below ground development flood planning levels for the WMQ site as defined within the Stage 1 concept DA Water Quality, Flooding and Stormwater Report (October 2018).** ▪ Flood warning and evacuation plan will be produced to inform the residents and managers of the building on the procedures to adopt to in case of an emergency associated to flood risk. ▪ ~~Emergency response for Area 11 should be provided by evacuating these areas towards a safe refuge located at higher ground levels (i.e. above the PMF and 100 year + 500 mm flood event).~~ ▪ Details on evacuation and emergency procedures (e.g. emergency flood alarms, sign to evacuate the retail areas, etc.) need to be include in the Evacuation Plan to be implemented at a flood event.

7. CONCLUSION

This RtS has been prepared to address the matters raised by government agencies, the public and community organisation groups during public exhibition of the proposed Waterloo Metro Quarter over station development State Significant Development applications, specifically the Central Precinct.

This RtS also responds to the preliminary assessment provided by DPIE on 14 December 2020. As outlined throughout this report, the proposed development as sought within the detailed SSD DA is in the public interest and should be approved subject to appropriate conditions. As such, the proposal in its current form is considered appropriate for the location and should be supported by the Minister for Planning and Public Space as the consent authority.

8. DISCLAIMER

This report is dated 30 March 2021 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd **(Urbis)** opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of WL Developer Pty Ltd **(Instructing Party)** for the purpose of Response to Submissions **(Purpose)** and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A AMENDED ARCHITECTURAL PLANS

APPENDIX B SUPPLEMENTARY ARCHITECTURAL DESIGN REPORT

APPENDIX C RESPONSE TO SUBMISSION LANDSCAPE RESPONSE LETTER

APPENDIX D AMENDED LANDSCAPE PLANS

APPENDIX E SUPPLEMENTARY LANDSCAPE REPORT

APPENDIX F AMENDED DESIGN INTEGRITY REPORT

APPENDIX G AMENDED WMQ DESIGN GUIDELINES

APPENDIX H PEDESTRIAN WIND ENVIRONMENT ASSESSMENT

APPENDIX I TECHNICAL MEMO ON NATURAL VENTILATION

APPENDIX J TECHNICAL MEMO ON ACOUSTIC

APPENDIX K TECHNICAL MEMO IN RESPONSE TO CITY OF SYDNEY COUNCIL FLUX CONSULTANTS PEER REVIEW

APPENDIX L PUBLIC BENEFIT ADVICE

APPENDIX M SUPPLEMENTARY SOLAR ACCESS ASSESSMENT

APPENDIX N SUPPLEMENTARY OVERSHADOWING ASSESSMENT

APPENDIX O ESD TECHNICAL MEMO (SHADING DEVICES, SUSTAINABILITY STRATEGY RESPONSES)

APPENDIX P SUPPLEMENTARY TRAFFIC AND PARKING ASSESSMENT

APPENDIX Q TECHNICAL MEMO ADDRESSING CHANGES TO BOTANY ROAD PUBLIC DOMAIN

APPENDIX R TECHNICAL MEMO ON WASTE MANAGEMENT REQUIREMENTS

APPENDIX S TECHNICAL MEMO ON FLOOD RISK MANAGEMENT PLAN

APPENDIX T CHILDCARE LIFT DESIGN MEMO

APPENDIX U SUPPLEMENTARY CHILDCARE CENTRE DESIGN MEMO

APPENDIX V TECHNICAL MEMO ON ROOFTOP COMMUNAL OPEN SPACE WIND CONDITION

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