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WATERLOO METRO QUARTER OVER STATION DEVELOPMENT

Response to Submissions -
Northern Precinct SSD-10440

Prepared for
WL DEVELOPER PTY LTD
9 April 2021

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CONTENTS

1.	Introduction	1
1.1.	Overview	1
2.	Summary of Submissions	3
2.1.	Northern Precinct SSD DA	3
2.2.	Actions Completed Following Exhibition	4
3.	Amendments to the Proposed Development	5
4.	Response to DPIE Assessment	6
4.1.	Public Benefits	6
4.2.	Design Integrity Reports	7
4.3.	Wind Impact Assessment	7
4.4.	Active Street Frontages	8
4.5.	Northern Precinct SSD DA – Precinct Specific Comments	8
4.5.1.	Design Guidelines	8
4.5.2.	Visual Bulk and Scale	8
5.	Response to Public Authority Submissions	12
5.1.	State Public Authority Comments	12
5.2.	City of Sydney Comments	25
6.	Response to Community and Organisation Submissions.....	50
7.	Revised Planning Assessment	60
7.1.	Assessment of Proposed Modifications	60
7.2.	Summary of Mitigation Measures (As Amended)	64
8.	Conclusion	65
9.	Disclaimer	66

Appendix A	Amended Architectural Plans
Appendix B	Supplementary Architectural Design Report
Appendix C	Amended Landscape Plans
Appendix D	Amended Landscape Design Report
Appendix E	Revised Design Integrity Report
Appendix F	Amended Design Guidelines
Appendix G	Pedestrian Wind Environment Assessment
Appendix H	Public Benefit Offer Letter
Appendix I	Solar Access and Overshadowing Assessment
Appendix J	Amended Visual Impact Assessment
Appendix K	ESD Technical Memo (Shading Devices, Sustainability Strategy responses)
Appendix L	Façade Detailing Technical Memo (Building 1 Glazing)
Appendix M	Supplementary Traffic and Transport Assessment
Appendix N	Pedestrian Modelling Memo
Appendix O	Revised Waste Management Report
Appendix P	Flooding Technical Memo
Appendix Q	Clause 4.6 Variation Request – Active Street Frontages

FIGURES

Figure 1 Built Form Massing Evolution and Final Detailed Design	9
Figure 2 Building articulation in relation to the surrounding context.....	10
Figure 3 Podium Design and Streetscape Relationship	11

PICTURES

Picture 1 Stage 1 Approved Envelope.....	9
Picture 2 Proposed Envelope	9
Picture 3 Original DA Scheme	9
Picture 4 Proposed Amended Scheme	9
Picture 5 Built form relationship across the WMQ site	10
Picture 6 Built form relationship with the streetscape.....	10
Picture 7 Botany Road Podium Alignment	11
Picture 8 Raglan Street Podium Alignment	11
Picture 9 Podium Design and Botany Road Streetscape Relationship.....	11

TABLES

Table 1 Northern Precinct Detailed SSD DA Submissions Received by Respondent Type	3
Table 2 Response to Public Authority Submissions – Northern Precinct SSD DA	12
Table 3 Response to City of Sydney Submission – Northern Precinct SSD DA.....	25
Table 4 Response to Public Submissions	50
Table 5 Response to Organisation Submissions	55
Table 6 Assessment of amended proposal against relevant statutory planning framework.....	60
Table 7 Updated Mitigation Measures.....	64

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 Over Station Development (**OSD**) State Significant Development (**SSD**) applications. Specifically, this RtS relates to the Northern Precinct SSD-1440 development application (**DA**).

The Department of Planning, Industry and Environment (**DPIE**) issued a letter to the applicant on 14 December 2020, requesting a response to the comments raised during the public exhibition period for both the amending concept DA (SSD-10441) and the four detailed SSD DA's (SSD-10437), (SSD-10440), (SSD-10439), and (SSD-10438).

Where applicable, this RtS provides consolidated responses to the submissions received which are relevant to multiple applications. Conversely, separate responses are provided for the Northern Precinct SSD-1440 where the submissions received are specific to this application.

1.1. OVERVIEW

All five applications were on public exhibition from 04 November 2020 to 02 December 2020. During this period (and beyond), submissions were received from NSW government agencies, the local Council and other key public authorities. The submissions received from public authorities for the Northern Precinct SSD included those from:

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

In addition, submissions were received from neighbouring property owners and residents, the broader community, and organisation groups. The key matters raised in the agency and public submissions relevant to the Northern Precinct SSD include:

- Adequate provision of community facilities;
- Suitability and demand for commercial uses;
- Traffic generation and traffic impacts;
- Overshadowing, privacy, and visual impacts to neighbouring residences;
- Achievement of sustainability objectives for the proposed development;
- Overshadowing and amenity of existing and proposed public open space;
- Wind conditions on the site;
- 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 minor design changes are also proposed to the development resulting from design development and 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 prepared by Woods Bagot (**Appendix A**)
- Supplementary Architectural Design Report prepared by Woods Bagot (**Appendix B**)
- Amended Landscape Plans prepared by Aspect (**Appendix C**)
- Amended Landscape Design Report and Memo prepared by Aspect (**Appendix D**)
- Amended Design Integrity Report (**Appendix E**)
- Amended Design and Amenity Guidelines (**Appendix F**)
- Revised Pedestrian Wind Environment Assessment prepared by RWDI (**Appendix G**)
- Public Benefit Offer Advice prepared by Urbis (**Appendix H**)
- Supplementary Overshadowing Analysis prepared by RWDI (**Appendix I**)
- Visual Impact Technical Memo prepared by Cardno (**Appendix J**)
- ESD Technical Memo (CoS comments 15d, 41, 65, 66 and 67) prepared by Cundall (**Appendix K**)
- Façade Technical Memo prepared by Apex (**Appendix L**)
- Supplementary Traffic and Transport Assessment prepared by ptc (**Appendix M**)
- Pedestrian Modelling Technical Memo prepared by WSP (**Appendix N**)
- Waste Management Technical Memo prepared by Elephants Foot (**Appendix O**)
- Flooding Technical Memo prepared by WSP (**Appendix P**)
- Clause 4.6 Variation Request prepared by Urbis (**Appendix Q**)

2. SUMMARY OF SUBMISSIONS

2.1. NORTHERN PRECINCT SSD DA

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

Table 1 Northern 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
Transport for New South Wales (TfNSW)	Comment	1
City of Sydney	Object	1
Sydney Metro Corridor Protection	Comment	1
Sydney Water	Comment	1
NSW Health – SLHD	Comment	1
Sydney Airport Corporation	Comment	1
Civil Aviation Safety Authority (CASA)	Comment	1
SUBTOTAL		9
Community and Organisations		
General public	Object	7
Organisation	Object	3
Organisation	Comment	1
SUBTOTAL		11
TOTAL		20

2.2. 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.
- Meeting with City of Sydney 16 February 2021 to illustrate the design amendments made to the proposal and discuss the design response to the key issues raised in their submission for the Northern Precinct with regards to visual bulk and scale, architectural character and materiality, and façade performance.
- The proposed development was re-presented to the Design Review Panel (**DRP**) on 28 January 2021, 18 February 2021 and 19 March 2021 in accordance with the Design Excellence Strategy endorsed under the concept approval. The DRP provided the below feedback on the previously “open” items following the final presentation which took place on 19 March 2021:

Built Form

- *The Panel accepts the design team’s recommendation regarding location of recessed plant level, however, believes the second option has a more successful proportional outcome aligning to the initial design.*
- *The Panel notes that whilst thermal comfort levels may be achieved with the reduced façade projection, it is disappointing to rely wholly on glazing specifications, which may result in darker and more reflective glass than would have been the case if a brisesoleil with greater depth had been pursued. The Panel accepts that this is the project team’s chosen solution, and requests that samples of the specified glass be provided during the next phase of design development for review by the Panel, along with built example precedents in Sydney that utilise this same product.*

The DRP resolved to close-out all previously open items. Minutes of these meetings and subsequent resolution of all items are documented in the Amended Design Integrity Report (**Appendix E**).

3. AMENDMENTS TO THE PROPOSED DEVELOPMENT

Since lodgement and public exhibition of the detailed Northern Precinct SSD DA (SSD-10440), the applicant has further developed the design of the proposed development and made some minor amendments to Building 1.

Minor changes have been made to Northern Precinct OSD primarily in response to the comments received from DPIE and the City of Sydney, as well as the feedback closing out all open items received from the Sydney Metro DRP. Some additional updates have also been made as a result of ongoing design development and refinement of the scheme since lodgement.

In summary, the changes relate primarily to improving the visual bulk and scale of the proposal and include:

- Removal of the level 14 office space. Redistribution of the floor space throughout the floor plates whereby the southern and western facades from level 9 to 13 have shifted out 450mm (still wholly contained within the building envelope).
 - This equates in a minor increase in total GFA for Building 1 from 34,680.5sqm to 34,734.4sqm (the total maximum GFA of 68,750sqm across the WMQ site remains consistent).
- Amalgamation of the two previous atriums above Raglan Walk into one 24-metre-wide atrium which enables greater solar penetration into Raglan Walk.
- Lobby and lift core access to the commercial office building has been brought down to the ground floor from the previous mezzanine level. This has resulted in the rationalisation and reconfiguration of the loading dock arrangement.
- External fire stair internalised for bottom two levels on Raglan Walk to improve activation of the retail laneway and ensure the pedestrian thoroughfare is not unnecessarily encumbered.
- Upper level egress fire stair from level 9 to 13 has been removed.
- The level 3 north-west terrace and level 9 south-east terrace have now been made accessible.
- Re-design of the level 13 terrace.
- Core services risers have been rationalised across all floors.
- Fenestration has been added to the western core wall providing natural light into the amenity's areas.
- An additional brick layer has been incorporated into the podium levels of the core wall.

The amendments proposed to Building 1 are illustrated in the amended Architectural Drawings (**Appendix A**) and Architectural Design Report (**Appendix B**) prepared by Woods Bagot. The changes are outlined in red bubble on the Architectural Drawings and a summary list of the changes to each respective drawing are noted in the right-hand column.

4. 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-10440.

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 key matters that the DPIE have raised concern with relate to four of the applications (excluding the Basement SSD DA). Concerns raised 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 as they relate to the Northern Precinct SSD DA.

4.1. PUBLIC BENEFITS

Condition A12 of the concept approval SSD-9393 requires that the following is provided across the Waterloo Metro Quarter 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. The specific mechanisms of satisfying Condition A12 of SSD 9393 and the SLEP 2012 requirements are outlined within the letter provided at **Appendix H**. In summary it is noted that the proposed WMQ OSD will deliver the required public benefits as follows:

- A minimum of 5% of the residential gross floor area proposed to be delivered across the Waterloo Metro Quarter site (including the floor space to be used for student housing in the Southern Precinct SSD-10437) is to be delivered as affordable housing. This affordable housing is nominated on the architectural plans and in the Environmental Impact Statement (**EIS**) submitted with the Central Precinct SSD DA (SSD-10439).
- 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.
- 70 social housing dwellings are proposed to be delivered within 'Building 4' included within the Southern Precinct of the Waterloo Metro Quarter. The social housing dwellings have been designed to satisfy the design and functional requirements of the NSW Land and Housing Corporation and are nominated in the architectural plans and in the EIS submitted with the Southern Precinct SSD DA.
- 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 2,200m² of publicly accessible open space is proposed to be delivered by the applicant and Sydney Metro across the WMQ. This area generally comprises Raglan Plaza (684m²) documented on the landscape plans submitted with the Northern Precinct SSD-10440, the subject of this RtS, and the Cope Street Plaza (1,675m²), including areas for future licensed outdoor dining, as documented on the landscape plans submitted with the Southern Precinct 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.
- It is noted that additional publicly accessible open space is proposed to be provided within the various over station development SSD DAs in the form of through-site links, widened footpaths, a shared way, and open space at Church Yard and Church Square. While these areas are proposed to be publicly accessible, they are not proposed or required to be delivered under Condition A12 of SSD-9393.
- A tenancy within Level 1 and Level 2 of the podium of Building 2 (Central Precinct) is nominated to be used as a community facility, in accordance with the definition provided within the SLEP 2012, on the architectural plans and in the EIS submitted with the Central Precinct SSD DA. The minimum gross floor area of this tenancy is 2,000m². 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.

For further information please refer to the advice provided at **Appendix H** of this RtS.

4.2. DESIGN INTEGRITY REPORTS

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

- Advice letters from each DRP review session as endorsed by Panel Chair,
- A log of advice from the above letters, including a comprehensive matrix of how DRP comments have been responded to,
- The project team's response to DRP advice on building mass and façade articulation in *Appendix C* of the Design Integrity Report, and

The revised Design Integrity Report also includes two minor "open" items that relate to the proposed design development of the Northern Precinct SSD-10440. It is anticipated that the timeline for resolution of these "open" items is at the next DRP meeting scheduled for 19 March 2021.

4.3. WIND IMPACT ASSESSMENT

The DPIE requested the applicant demonstrate the proposed development's compliance with the requirements of Condition B14 of the concept approval 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 G**.

The key waiting areas around the site include the bus stop zone along Botany Road, adjacent to Building 2 (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 satisfy 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. This is outlined in the revised Pedestrian Wind Environment Assessment at **Appendix G**.

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 within **Appendix G** 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.

4.4. ACTIVE STREET FRONTAGES

A Clause 4.6 Variation Request has been prepared by Urbis on behalf of the Applicant to support the detailed SSDA for the construction and operation of a mixed-use OSD and public domain works located at the Northern Precinct of the Waterloo Metro Quarter site, and is included at **Appendix Q**.

The request seeks to vary the strict application of clause 7.27 of the SLEP 2012 as it relates to active street frontages, namely that the proposal must comply with the Active Street Frontages Map as it applies to the site. While the proposal has sought to maximise activation of all frontages through business and retail uses, the site's operational requirements which have been designed to be consistent with the concept approval have resulted in small portions of frontages being required for critical building services.

As stated in *Initial Action Pty Ltd v Woollahra Municipal Council [2018] NSWLEC 118 (Initial Action)* at [25], clause 4.6(3) does not require the consent authority to form its own opinion of satisfaction regarding the matters identified in clause 4.6(3)(a) and (b), but only indirectly must be satisfied that the applicant's written request has adequately addressed those matters. The request does that, and therefore the consent authority is open to be satisfied that subclause 4.6(3) has been met.

This request contains justified reasoning for the proposed variation to the active street frontages development standard, and demonstrates that:

- The objectives of the development standard will be achieved, notwithstanding that the development standard not being achieved in entirety, and in doing so, establishes that compliance with the standard is unreasonable or unnecessary (Initial Action at [17]).
- The proposal is consistent with the objectives of the zone in which the proposed development is proposed to be carried out, being the B4 Mixed Use Zone.
- Whilst strict application of the development standard is not achieved, there are sufficient environmental planning grounds to support the proposed development.

Please refer to **Appendix Q** for further justification.

4.5. NORTHERN PRECINCT SSD DA – PRECINCT SPECIFIC COMMENTS

4.5.1. Design Guidelines

The DPIE requested updated design guidelines be provided in line with the changes to the concept approval proposed under the Amending DA. As such, updated Waterloo Metro Quarter (**WMQ**) Design and Amenity Guidelines are provided at **Appendix F**.

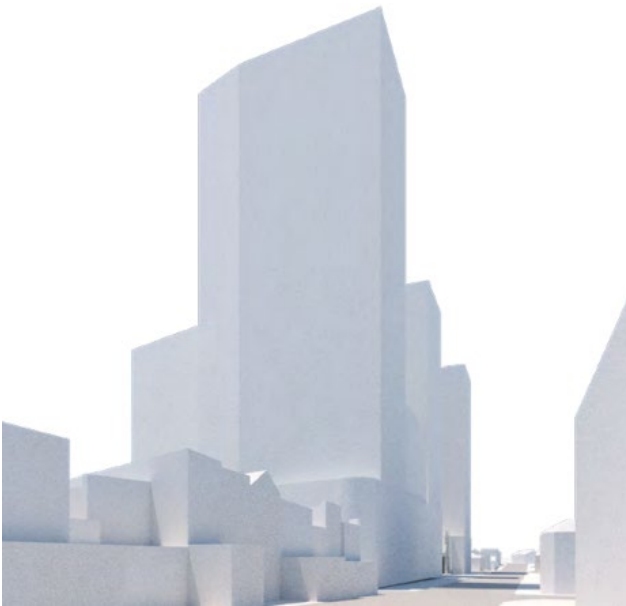
4.5.2. Visual Bulk and Scale

The DPIE requested further consideration of mitigating the visual bulk of the building, particularly when viewed from the north-west, south-west and west. This includes consideration of the proportion and distribution of building mass, as well as the composition of the façade and building articulation. Further, the applicant was requested to illustrate the designs compatibility with the evolving streetscape and other future built form in the context of the surrounds.

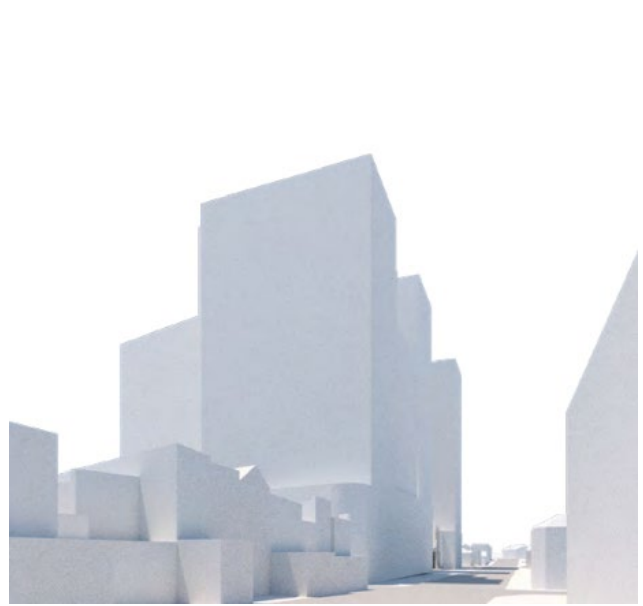
The visual bulk and scale of the project has been carefully considered since inception. The progressive evolution of the overall massing approach has minimised the visual impacts and sought to respond to the surrounding context. This is evident by the lowering of the built form by 24 metres when compared to the approved Stage 1 envelope under SSD-9393.

As outlined in Section 3, throughout the ongoing detailed design refinement phase and in response to submissions received, it is proposed to reduce the maximum height by a further 5.3 metres in the north-west portion and one (1) metre for the remainder of the building footprint, resulting in the removal of one floor. This change does not impact on the typology and messaging of the overall massing proportions.

Figure 1 Built Form Massing Evolution and Final Detailed Design



Picture 1 Stage 1 Approved Envelope



Picture 2 Proposed Envelope



Picture 3 Original DA Scheme

Source: Woods Bagot



Picture 4 Proposed Amended Scheme

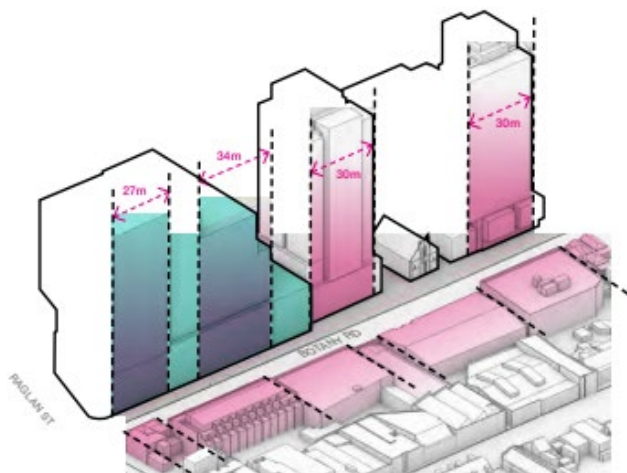
Source: Woods Bagot

The massing strategy articulates the building by de-scaling the built form in response to the surrounding context. The building's overall composition considers the two opposing scales being the streetscape of Botany Road and built form of the future development across the WMQ site and wider surrounds (such as the Waterloo Estate SSP). While maintaining the tower form as the primary reading, the articulated sub-datums break down the buildings' scale and form a relationship with the surrounding context.

The massing form is broken into four quadrants to create scalable 'communities' which support a flexible commercial floorplate. The building also incorporates a through-site link and atria which cuts through the building horizontally and vertically to allow visual interactions between these 'communities' and the public realm.

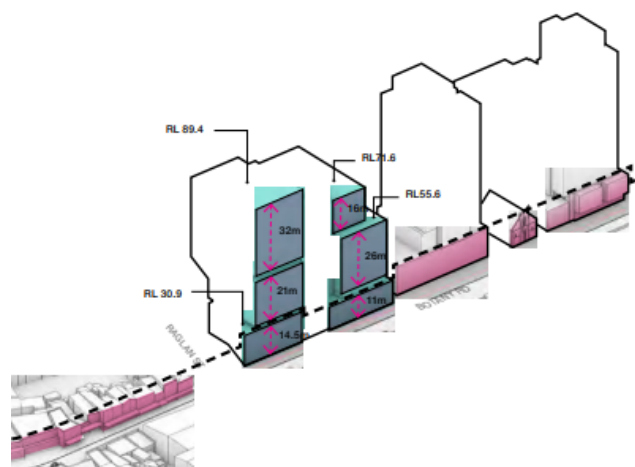
As illustrated in the figure below, the design comprises two vertical massing elements which are 27 and 34 metres wide respectively as they present to the Botany Road frontage from north to south. This creates a coherent relationship with the Central and Southern precincts which both feature approximate 30 metre wide built form frontages to Botany Road. The built form is further articulated by a series of horizontal masses, the longest of which is only 32 metres from the nearest break in the built form.

Figure 2 Building articulation in relation to the surrounding context



Picture 5 Built form relationship across the WMQ site

Source: Woods Bagot

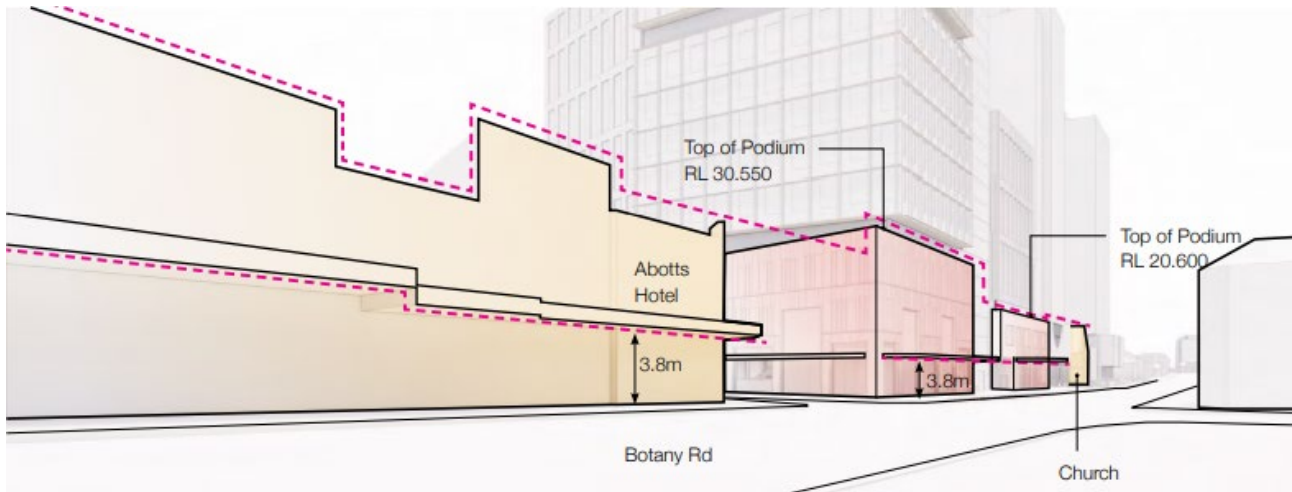


Picture 6 Built form relationship with the streetscape

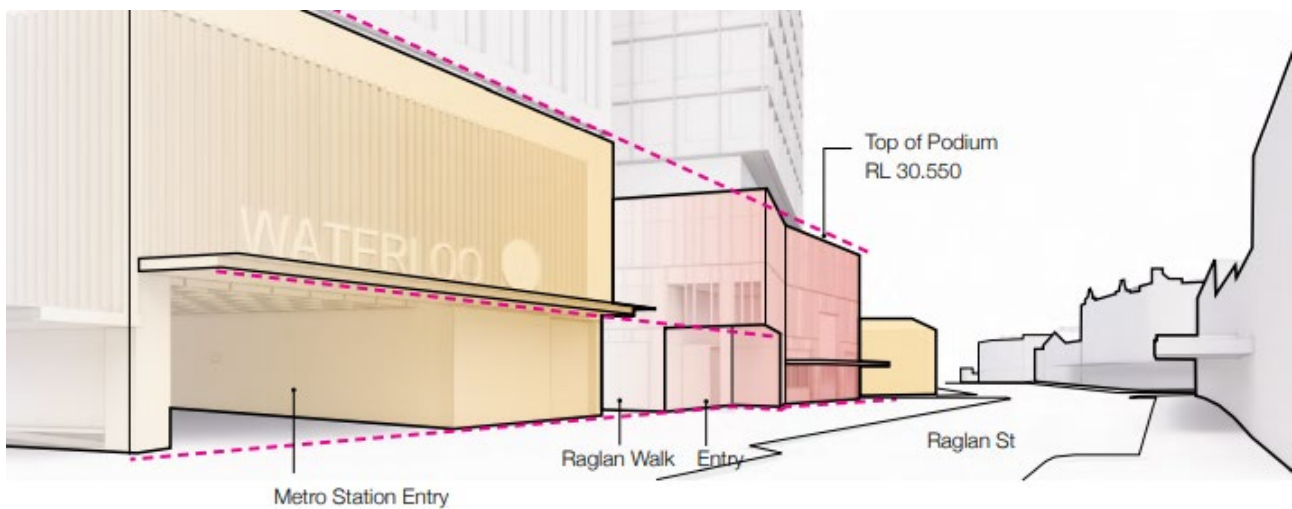
Source: Woods Bagot

The podium design incorporates two massing elements ranging from 11 to 14.5 metres in height to create a human scale which relates to the podium of the WMQ site along Botany Road and the adjoining streetscape. Specifically, the design and alignment of the podium layer is consistent with both the Botany Road and Raglan Street streetscapes with regards to their scale, datum, articulation and character. The fine-grain embellishment of the podium facade further reinforces the existing human-scale street character of Botany Road. The detailed design incorporates an awning that sits approximately 3.8 metres above the ground which corresponds with the streetscape further to the north.

Figure 3 Podium Design and Streetscape Relationship



Picture 7 Botany Road Podium Alignment



Picture 8 Raglan Street Podium Alignment



Botany Rd Elevation



Plan diagram of Facade Articulation



Plan diagram of Facade Articulation

Picture 9 Podium Design and Botany Road Streetscape Relationship

Source: Woods Bagot

Overall, the proposal appropriately mitigates the visual bulk and scale of the Northern Precinct, particularly when viewed along Botany Road from the north-west, south-west and west. The massing strategy adopts a compatible built form that is both vertically and horizontally articulated to create a relationship with the opposing scales of the adjoining streetscape and future built form across the WMQ site and wider area of Waterloo.

5. RESPONSE TO PUBLIC AUTHORITY SUBMISSIONS

5.1. STATE PUBLIC AUTHORITY COMMENTS

A response to the matters raised by government agencies and other public authorities in relation to the Northern Precinct SSD DA is provided in Table 2 below.

Table 2 Response to Public Authority Submissions – Northern Precinct SSD DA

Comment	Response
Environmental Protection Authority	
<p>No comment.</p> <p>As an advisory note, the development will be located in the vicinity of tunnels containing operational rail lines, for which the EPA has a regulatory responsibility. The consent should include acceptable vibration and ground borne noise limits for spaces within the development drawn from the EPA's Rail Infrastructure Noise Guideline (EPA, 2013) and Assessing Vibration: A Technical Guideline (DECC, 2006).</p>	This comment is noted.
Biodiversity and Conservation Division	
<p>Biodiversity</p> <p>A Biodiversity Development Assessment Report (BDAR) Waiver was approved on 24 July 2020.</p>	This comment is noted.
<p>Floodplain risk management</p> <p>The reports have not included flood level mapping for any scenarios, except the 1% AEP flood event plus climate change. 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.</p>	<p>As detailed in the technical response provided by WSP at Appendix P, maximum flood levels for the 1%, 1% + Climate Change (CC) and PMF flood events were included in the Flood Impact Assessment submitted with the EIS at Appendix O. The flood levels represent the maximum water levels for the 1%AEP, 1% AEP+CC and PMF flood events in correspondence to relevant building areas. These levels are now superseded by those detailed in Appendix P.</p> <p>Flood levels for the 5% AEP flood event were not included in the flood impact assessment report as WSP have advised they are not relevant in the determination of flood planning levels. Flood planning levels have been informed by the 1% AEP, 1% AEP+CC and PMF maximum flood levels.</p> <p>Notwithstanding, water level contour maps (with a 50 mm contour interval) have been prepared and included in Appendix P for the 5%, 1% AEP and PMF flood events as requested within this submission. The technical response also confirms</p>

Comment	Response
	the finished floor levels of the ingress points to the Building 1.
<p><i>Flood impacts of the proposed development</i></p> <p>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.</p> <p>An acceptable tolerance for flood level increase would be 10mm. Appears road works were not included in concept stage modelling in Concept Water Quality, Flooding and Stormwater Report of 2018.</p> <p>Require mitigation measures to ameliorate the flood impacts to be finalised and submitted for review by EES before a recommendation for approval can be made.</p>	<p>As agreed within this submission, we note the construction of the OSD buildings (and basement) are not expected to cause any flood impacts.</p> <p>Concern is raised in this submission regarding the acceptable tolerance for flood level increases within the surrounding road network and neighbouring properties resulting from road works.</p> <p>The scope of works proposed within this Northern Precinct SSD (SSD-10440) does not impact the extent of localised flooding surrounding the Waterloo Metro Quarter site (refer to Appendix P).</p>
<p><i>Flood risk for the development – Flood Planning Levels</i></p> <p>Generally, floor levels are above the 1% AEP flood level and generally above the PMF level. Where required at entries to basements, 500 mm freeboard to the 1% AEP flood level appears to have been provided. However, the report has not adequately documented all the proposed finished floor levels (FFLs) to enable their comparison to the proposed FPLs.</p> <p>As a minimum, the FFLs need to be provided in Table 4 alongside the FPLs.</p> <p>Area 10 FFLs are not visible on the plan provided at Appendix 15.</p> <p>It appears that there are discrepancies and errors in report e.g. the 1% AEP plus climate change flood at Area 10 is quoted as 0.5m higher than the 1% AEP flood level without climate change, which is vastly inconsistent with the other levels and would require careful reconsideration of FPL level and FFL if that is the case. Consequently, it is recommended that all the flood levels should be checked to ensure no further errors are present.</p>	<p>We understand that criteria used to define FPLs has been accepted. We confirm that the following guidelines and policies have been reviewed to inform the FPLs:</p> <ul style="list-style-type: none"> ▪ Interim Floodplain Management Policy, City of Sydney; and, ▪ 2) Waterloo Metro Quarter (WMQ)– Design and Amenity Guidelines, 2020 New South Wales Government – Sydney Metro. <p>Consultation with Council flood engineer has also been held to confirm project requirements.</p> <p>The finished floor levels (FFLs) and flood planning levels (FPLs) have been updated to address discrepancies and errors. Please refer to Appendix P for further details (including a mark-up plan with the revised levels).</p>
<p><i>Flood risk for the development – Residual Risk and Emergency Management</i></p>	<p>It is considered that proposed finished floor levels for the Northern Precinct provide adequate flood protection in case of a flood emergency.</p>

Comment	Response
<p>Need to demonstrate "Safe refuge can be provided within the proposed development." Issues regarding residual risk that need to be addressed and require amendments to the design.</p> <p>Recommended a suitably qualified and experienced professional is engaged to develop an appropriate strategy for flood emergency management.</p>	<p>Area 1 (retail area): proposed floor level is at 16.790 m AHD which is 176 mm above the 1%AEP flood level. In an extreme flood event (i.e. PMF) water depth in Area 1 would be 2 cm. Thus, flood risk is considered low. Although evacuation from Area 1 is not considered necessary, occupants of Area 1 can internally access Area 2 which has a floor level above PMF and the 1%AEP+500mm freeboard flood event.</p> <p>Area 1b (lobby): Area 1b is not affected by flooding in the 1%AEP and 1%AEP+CC flood events. Proposed floor level is at 16.75 m AHD which is 7 cm below the PMF flood level. Occupants of Area 1b can access Area 2 which has a floor level above the PMF and 1%AEP+500 mm freeboard flood event.</p> <p>Area 2 (lobby): proposed floor level for area 2 is above PMF and 1%AEP+500 mm freeboard flood event. Thus, no evacuation is necessary for occupants of Area 2 in case of a flood emergency.</p> <p>Area 3 (loading dock): proposed floor level for area 3 is above the PMF flood level. Thus, no evacuation is necessary for occupants of area 3 in case of a flood emergency.</p> <p>Area 4 (substation): proposed floor level for Area 4 is above PMF flood level. No evacuation is necessary for occupants of area 4 in case of a flood emergency.</p> <p>Area 5 and 5b (community area): proposed floor level for area 5 is above the 1%AEP flood level. Proposed floor level for area 5b is above the PMF flood level. Occupants of Area 5 can access area 5b (within the building) in case of a flood emergency. Area 5b can be used as shelter.</p> <p>Area 6 (retail area) proposed floor level for area 6 is above the PMF flood level. Thus, no evacuation is necessary for occupants of area 6 in case of a flood emergency.</p> <p>Area 7 (retail area): area 7 is not affected by flooding up to and including the PMF flood event. Proposed floor level for area 7 is above the nearest PMF flood level. Thus, no evacuation is necessary for occupants of area 7 in case of a flood emergency.</p>

Comment	Response
	<p>Area 8 (egress from basement): egress level is proposed above PMF and 100 ARI+ 500 mm to protect the basement from flooding.</p> <p>Area 9 (fire control room): proposed floor level is above PMF. Occupants of area 9 can easily access Area 3 (above PMF flood level).</p> <p>Area 11 and Area 10 (egress from upper floors): Area 11 and Area 10 are stairs that provide access to the upper floors.</p>
<p>Discussion regarding timing of flooding in relation to evacuation has not demonstrated an understanding of the principles involved and is not consistent with current available guidelines.</p> <p>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.</p> <p>Detailed information on the timing/duration of extreme events should be considered and presented.</p> <p>Shorter and longer durations should be considered for emergency planning, not only the duration that generates the peak flood level.</p>	<p>A flood emergency management plan will be provided at a later stage prior to occupation of the building.</p> <p>Different storm durations have been considered for the 1% AEP, 1%AEP+CC and PMF events to determine the critical storm durations that were used to define appropriate finish floor levels. This is as per the accepted standard industry approach.</p> <p>As indicated within the flood study report, storm durations tested are the same as those considered in the Alexandra Canal Catchment flood model which is currently adopted by City of Sydney. An additional storm duration of 90 minutes was also considered for the 1% AEP flood event.</p> <p>The site area is located at the top of the catchment and only events with short duration and high intensity rainfall are relevant in terms of flood protection/flood emergency</p>
<p>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. Any persons in external licenced seating areas, must be accounted for in emergency planning</p>	<p>Emergency management procedures are not included in the flood study. Flood emergency management procedures will be provided at a later stage, prior to occupation of the building.</p> <p>Seating areas are not affected by flooding up to and including the PMF flood event.</p>
<p>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.</p>	<p>Occupants of the basement are protected by flooding as access to the basement are above PMF and 1%AEP + 500 mm freeboard flood level. Furthermore, egress from the basement is provided via the southern core to Cope St Plaza.</p>
<p>Emergency response planning must consider human behaviour.</p>	<p>Emergency management procedures are not included in the flood study. Flood emergency</p>

Comment	Response
Consideration should be given to possible medical evacuations necessary during an extreme flood event.	<p>management procedures will be provided at a later stage, prior to occupation of the building.</p> <p>There are no longer small meter rooms where workers would remain in a flood event.</p>
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.	As previously indicated, all areas in the Northern Precinct can provide adequate flood protection in case of a flood emergency. The applicant has been coordinating with the CoS development engineers.
Consistent with the City of Sydney policy and the concept report, a raised area above the PMF level has been provided in the community area, which is otherwise below the PMF level. This area also provides internal access to other areas of the building. This is consistent with previous reporting and provides an outcome that is sensitive to needs of both urban design and flood emergency response.	Noted.
All the retail tenancies are above the PMF and have internal access, which appears to be able to be used to reach upper levels in extreme flood events. The proponent needs to confirm the suitability of the shelter in place provisions.	<p>As previously indicated, all areas in the Northern Precinct can provide adequate flood protection in case of a flood emergency.</p> <p>It is not necessary to reach upper levels for shelter in an extreme flood event as all areas at ground floor can provide adequate flood protection. Refer to Appendix P (including further details on the FFLs and flood levels).</p>
Section 6 states that the Northern Precinct includes external licenced seating areas, but these are not discussed and not visible on the attached plans. Confirmation is required. The persons in this area must be accounted for in emergency planning.	<p>Licensed seating areas in Raglan Walk are not affected by flooding up to and including the PMF flood event.</p> <p>Emergency management procedures are not included in the flood study. Flood emergency management procedures will be provided at a later stage, prior to occupation of the building</p>
Transport for NSW	
<p>Active Transport</p> <p>Recommend locating bicycle facilities in secure, convenient, accessible areas close to the main entries, incorporating adequate lighting and passive</p>	Commercial, retail and residential bicycle parking and EOTF for the Northern and Central precincts is provided within the basement Level P1. These are secured parking / storage facilities that are easily accessible directly from the adjacent Building 1 and

Comment	Response
<p>surveillance and in accordance with Austroads guidelines.</p>	<p>2 lift cores near to the respective building entries or via the dedicated basement access points from public domain areas at ground level for Buildings 1 and 2, as well as the driveway access off Church Square. The layout, design and security of the proposed bicycle parking facilities will be in accordance with <i>AS2890.3:2015 Parking facilities – Bicycle Parking</i>.</p> <p>The proposal will ensure adequate lighting and clear wayfinding signage is provided to ensure workers, residents and visitors with clear paths of travel. CCTV surveillance will be provided throughout the basement to maintain safe travel for active transport users as well as motorists returning to their vehicles. Prior to operation of the WMQ, bicycle way-finding signage will be installed throughout the site to direct cyclists from footpaths to designated bicycle parking areas in the basement.</p> <p>The above provisions can be secured through the incorporation of appropriate standard conditions on any consent issued prior to occupation of the site.</p>
<p>Recommend the applicant undertake annual staff travel surveys for the entire Waterloo Metro Quarter (WMQ) and allocate bicycle parking and End of Trip facilities for residents, staff and bicycle couriers based on the results of the travel surveys during the operation of the development.</p>	<p>The applicant will undertake annual staff travel surveys for the site and allocate bicycle and EOTF accordingly during operation of the WMQ. An appropriate condition of consent can be included on any consent issued to ensure these matters are addressed and appropriate bicycle and EOTF are provided, to the following effect:</p> <p><i>“The applicant shall:</i></p> <ul style="list-style-type: none"> ▪ <i>Undertake annual staff travel surveys for the Waterloo Metro Quarter (WMQ) to identify bicycle parking demand and the requirements of End of Trip (EoT) facilities; and</i> ▪ <i>Provide adequate bicycle parking and End of Trip (EoT) facilities for residents, staff, visitors and bicycle couriers based on the results of the annual staff surveys during the operation of the development.”</i>
<p>Safety Assessment of the Proposed Development</p> <p>Requested a Stage 2 (Concept Plan) Road Safety Audit for the proposed access arrangements to the</p>	<p>A Stage 2 (concept plan) Road Safety Audit (RSA) of the OSD has been undertaken by DC Traffic Engineering (an independent TfNSW accredited road safety auditor). The recommendations provided within the RSA are currently being</p>

Comment	Response
<p>loading docks in accordance relevant Austroads guidelines.</p> <p>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.</p>	<p>reviewed and will be incorporated throughout the detailed design phase where appropriate (refer Appendix M).</p> <p>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. Addressing this request throughout the construction stage does not compromise the implementation of design measures to address potential pedestrian or road safety (if required).</p> <p>In accordance with design criteria 3P of the Waterloo Metro Quarter Design and Amenity Guidelines (WMQ Design Guidelines), both the Northern loading dock includes a mechanical turntable to ensure service and refuse collection vehicles can enter and exit in a forward motion.</p> <p>In addition, the loading dock will be managed and coordinated through the implementation of a Freight and Servicing Management Plan (FSMP). The various loading docks and service bays (within the basement car park) will be pre-booked prior to arrival to manage deliveries and servicing maintenance. Both these measures will minimise potential pedestrian and vehicle conflicts throughout the site.</p>
<p>Green Travel Plan</p> <p>Request 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.</p>	<p>A Green Travel Plan (GTP) was prepared by ptc as part of the application (refer Appendix I of the EIS). The applicant is committed to updating the GTP in consultation with TfNSW prior to the occupation of the site and implementing / updating it annually thereafter, in response to the requested condition from TfNSW.</p>
<p>Transport Access Guide</p> <p>Requested that the applicant be conditioned to update the Transport Access Guide (TAG), in consultation with TfNSW, prior to the issue of the Occupation Certificate.</p>	<p>A GTP was prepared by ptc as part of the application and included a Transport Access Guide (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 matter.</p> <p>The TAG will include information such as:</p> <ul style="list-style-type: none"> Information regarding lack of off-street car parking and passenger pick-up and set-down areas at the development site;

Comment	Response
	<ul style="list-style-type: none"> ▪ 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 ▪ Suitable nearby Taxi Zones.
<p>Construction Pedestrian and Traffic Management</p> <p>Request condition to prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with TfNSW.</p>	<p>A Preliminary Construction Pedestrian and Traffic Management Plan (CPTMP) was prepared by ptc. and submitted at Appendix J of the EIS for SSD-10440. 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.</p>
<p>Freight and Servicing Management</p> <p>Request further details in relation to the management of service bays for the whole of WMQ.</p> <p>All new developments should not rely on on-street parking or loading zones.</p> <p>Resolve inconsistencies for the development applications in relation to the management of service bays for the whole of Waterloo Metro Quarter (WMQ) in particular in the documents prepared for the Southern Precinct SSDA.</p> <p>Freight and Servicing Management Plan to be updated in consultation with TfNSW, prior to the issue of any Construction Certificate.</p>	<p>Ptc prepared a Freight and Servicing Management Plan (FSMP) (which was appended to 'Appendix I – Traffic and Parking Impact Assessment') to manage processes and procedures for vehicles accessing the loading docks.</p> <p>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.</p> <p>As outlined in the supplementary Traffic and Parking Assessment memo prepared by ptc (Appendix M), 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.</p> <p>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.</p> <p>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</p>

Comment	Response
	<p>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.</p> <p>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.</p>
<p>Vehicle Cross Over on Botany Road</p> <p>Concurrence under Section 138 of the Roads Act 1993 needs to be obtained from TfNSW for any vehicle crossover and associated works on Botany Road and the design plans are to be provided to TfNSW.</p>	<p>Concurrence will be sought and obtained as required throughout the design development stage, pursuant to Section 138 of the <i>Roads Act 1993</i>. The design plans will also be submitted to TfNSW for approval prior to the issue of a Construction Certificate.</p>
Sydney Metro Corridor Protection	
No comments.	No response required.
Sydney Water	
<p><u>Water Servicing</u></p> <p>Potable water servicing should be available via a 150mm CICL watermain (laid in 1897) on Botany Road.</p> <p>Amplifications or alterations to the potable water network may be required complying with the Water Services Association of Australia (WSAA) code – Sydney Water edition.</p>	<p>As outlined in the Services and Infrastructure Report provided at Appendix T of the EIS, connection for the Northern Precinct is proposed to connect to the network on Botany Road.</p> <p>Direct connection to 150CICL Water Authority Main reticulated along Raglan Street, is proposed via a DN150 reticulated from building Water meter room.</p> <p>Requirements for amplifications and/or diversions will be confirmed as part of the Section 73 NoR from Sydney Water.</p>
<p><u>Recycled Water Servicing</u></p> <p>While there is no existing Sydney Water recycled water supply to this area, Sydney Water is open to working in partnership with developers to consider potential decentralised recycled water servicing solutions that may offset 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.</p>	<p>The ESD Reports accompanying the Northern Precinct SSD DA outlined the sustainable water targets and initiatives for building 1.</p> <p>It is noted that building 1 is targeting a 4.5 star NABERS water rating and includes initiatives such as:</p> <ul style="list-style-type: none"> 4 star WELS rated taps, toilets and showers in the EOTF, landscaping design and plant selection to minimise irrigation demand, rainwater collection, best-practice cooling tower water treatment and management systems,

Comment	Response
	<p>water sub-metering of major water uses and Water Sensitive Urban Design.</p> <p>The abovementioned sustainability initiatives will be further developed throughout the detailed design phase of the project.</p>
<p><u>Wastewater Servicing</u></p> <p>Wastewater servicing should be available via a 400 VC wastewater main (laid in 1891) within the property boundary.</p> <p>Amplifications or alterations to the wastewater network may be required complying with the Water Services Association of Australia (WSAA) code – Sydney Water edition.</p>	<p>As outlined in the Services and Infrastructure Report provided at Appendix T of the EIS, direct connection to DN225 Sewer Authority Main reticulated along Botany Road, is proposed via a DN225 reticulated from building 1 Sewer networks.</p> <p>Requirements for amplifications and/or diversions will be confirmed as part of the Section 73 NoR from Sydney Water.</p>
<p><u>Stormwater</u></p> <p>Our available records indicate that a major Sydney Water stormwater channel located on the western side of Cope Street. As per current Sydney Water's policy and guidelines for building over and adjacent to stormwater assets requirements, no buildings or permanent structures are to be proposed over the stormwater channel / pipe or within 1m from the outside wall of the stormwater asset or within Sydney Water easement whichever is larger. This clearance requirement would apply for unlimited depth and height.</p> <p>The proponent would be required to submit the elevation drawings with the stormwater channel/ pipe, to ensure that the proposed buildings and permanent structures are 1m away from the outside face of the stormwater channel.</p> <p>Detailed requirements, including any potential extensions or amplifications, will be provided once the development is referred to Sydney Water for a Section 73 application.</p>	<p>As outlined in the Services and Infrastructure Report provided at Appendix T of the EIS, stormwater drainage for the site is proposed to comply with the City of Sydney A4 Drainage Design Guidelines and City of Sydney – Interim Floodplain Management Policy.</p> <p>Direct connection to DN900 Authority Main, reticulating along Botany Road is proposed via a DN300 reticulated from building 1 Onsite Detention tank.</p> <p>The potential connection to the Sydney Water asset along Cope St will be further evaluated during the detail design phase post DA submission.</p> <p>Requirements for amplifications and/or diversions to the City of Sydney and Sydney Water assets will be confirmed as part of the detailed design phase post DA submission. It is not currently anticipated that amplifications will be required to the existing Botany Road DN900 Pipe.</p>
NSW Health	
<p><u>Cumulative Impacts</u></p> <p>Consider cumulative impacts and mitigation measures beyond those normally employed for isolated impacts.</p>	<p>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</p>

Comment	Response
	measures will be considered and implemented when required.
<p><u>Noise Impacts</u></p> <p>Support the amended plans resulting in fewer residences experiencing traffic noise exceedances than were expected from earlier plans.</p> <p>All reasonable and feasible mitigation measures should be undertaken to further minimise traffic noise exceedances to residences requiring alternative sources of ventilation.</p> <p>All reasonable and feasible best practice noise mitigation measures should be undertaken to minimise exceeding noise management levels, including mitigating noise generated by truck movements as well as engaging an acoustics consultant given the size of the overall development.</p>	<p>This comment is noted.</p> <p>Whilst not directly related to the Northern Precinct SSD, to date, all reasonable and feasible acoustic mitigation measures have been considered and implemented into the detailed design of the residential buildings within the Central and Southern precincts.</p> <p>As outlined in the Noise and Vibration Impact Assessment submitted with SSD-10440 (<i>Appendix K</i>), the operational and construction noise and vibration generated from the proposal will comply with the relevant noise criteria subject to the implementation of the established mitigation measures.</p>
<p><u>Public/active transport incentives</u></p> <p>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.</p>	<p>The basement car park accommodates vehicle parking for several uses including commercial, residential, car share, social housing, Church and metro. In addition, the basement facilitates provisions for commercial and retail 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.</p> <p>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 Building 2), 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, SDGP 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.</p> <p>All parking areas are easily accessible via the respective lift cores for Buildings 1 and 2, as well as off Church Square.</p>

Comment	Response
<p><u>Water recycling/rainwater</u></p> <p>Support water recycling however public health risks from using recycled water will need to be managed appropriately, including approval by the appropriate regulatory authorities.</p>	<p>This comment is noted.</p> <p>The proposal will ensure potential public health risks from using recycled water will be managed appropriately.</p>
<p><u>Contamination</u></p> <p>Recommend remediation of western portion of the site in accordance with the Contamination Strategy as prepared by Douglas Partners (SSD-10437 - Southern Precinct EIS Appendix 00).</p>	<p>Remediation does not form part of the Northern Precinct SSD. Notwithstanding, remediation of the site will be carried out in accordance with the Contaminated Sites Strategy prepared by Douglas Partners (dated 24 July 2020) for the Southern Precinct (SSD-10437) and Basement Car Park (SSD-10438) proposals. It is anticipated that a condition of consent will be included on any consent issued for remediation to be carried out accordingly.</p>
<p>Recommend using SLHD guidelines Building Better Health.</p>	<p>As outlined in Section 8.14 of the EIS, various environmental and health issues have been considered and addressed in relation to matters such as built form, amenity, air quality, traffic and parking, construction, infrastructure, stormwater and water recycling, accessibility, fire safety, social and economic impacts and crime and safety.</p> <p>It is noted that the EIS was accompanied by an ESD Report which included health and well-being objectives, a Construction Environmental Management Plan (CEMP) to address construction impacts, a Stormwater Management Strategy to ensure appropriate treatment of runoff and a Transportation Air Quality Management Plan which confirmed the proposal will not be impacted by adverse air quality. In addition, the design incorporated CPTED principles and security risks to mitigate potential health risks associated with anti-social and criminal behaviour.</p> <p>Overall, the proposal will not result in any unacceptable local and regional health impacts, and includes appropriate mitigation measures to further mitigate potential environmental impacts and health risks.</p>
<p>Sydney Airport Corporation</p>	
<p>The original design was approved by the Federal department to a maximum height of 116.9m AHD. The design now appears to have been reduced to a maximum height of 71.6m AHD. The overall design</p>	<p>This comment is noted.</p>

Comment	Response
appears to have been reduced in height by approx. 45 metres. Sydney Airport has no issues with the current design.	
Civil Aviation Safety Authority (CASA)	
CASA has no issues with the Approval that was issued by the Department of Infrastructure on 20 February 2019. It appears that the documentation linked in your email below does not affect the height of the development (or the configuration to any significant extent). At this stage, CASA has no further comment.	This comment is noted.

5.2. CITY OF SYDNEY COMMENTS

Table 3 Response to City of Sydney Submission – Northern Precinct SSD DA

Comment	Response
Social Planning and community land uses	
Affordable housing - The development must be held to provide the affordable housing in perpetuity as previously promised and in accordance with the statutory provisions (Clause 6.45 (2)) applicable to the Metro Quarter.	Not applicable to this SSD DA. However, it is noted that the affordable housing proposed to be located within the Central Precinct (SSD-10439) will be dedicated to a community housing operator to be utilised as affordable housing in perpetuity.
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.	Not applicable to this SSD DA. However, it is noted that to avoid duplication of infrastructure and community uses, a 'whole of precinct' approach has been adopted in the development of the Waterloo Metro Quarter OSD. It is understood that future community infrastructure within the Waterloo Estate will be required to consider approved community infrastructure uses within the Waterloo Metro Quarter.
Engaging with the community - The development must imbed commitments to culturally appropriate design and community consultation in future contracts and tenders.	<p>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 multi-cultural and social diversity of the area.</p> <p>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.</p>
Centre-based childcare	Not applicable to this SSD DA. Refer to the Central SSD-10439 RtS.
Social enterprise café	Not applicable to this SSD DA. Refer to the Central SSD-10439 RtS.
Makerspace	Not applicable to this SSD DA. Refer to the Southern SSD-10437 RtS.
Place Manager - Further information regarding the role of a place manager to coordinate activities on site.	<p>A place manager will be appointed by the Precinct Leadership Group to administer activation and place making activities.</p> <p>This role will be filled prior to Occupation Certificate and will be the point of contact for the community on all (non metro) issues related to the development.</p>

Comment	Response
	<p>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.</p> <p>They will be available to meet with the future Waterloo North redevelopment team as appropriate.</p>
<p>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.</p>	<p>A Voluntary Planning Agreement is not proposed to be entered into order to satisfy condition A12 of the concept approval (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 the EIS for SSD-10439 (Central Precinct) and at Appendix H of this RtS.</p>
<p>Non-compliance with development standards</p>	
<p>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.</p>	<p>The Botany Road frontage contains three small portions of façade which are not considered activated through business premises or retail premises. These portions of Building 1 and Building 3 contain an entrance to end of trip facilities, a fire stair exit, substation, fire control room, switch room and other critical building services. Additionally, the Wellington Street frontage contains two substations, a fire control room and two stairs accessing the mezzanine level above.</p> <p>A detailed Clause 4.6 Variation request has been prepared and is included at Appendix Q. The request concludes that the minor variations to the development standard are justified in the circumstances of the case, as:</p> <ul style="list-style-type: none"> ▪ The objectives of the development standard are still achieved. ▪ Additional internal activation ensures precinct wide activation is achieved. ▪ There are sufficient planning grounds to support the proposed development.

Comment	Response
<p>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.</p>	<p>This comment is noted.</p> <p>Service vehicle entry points have been located as envisaged under the Concept SSD DA to ensure the overall site operations and functionality of both the metro station and commercial aspect of the remaining development.</p>
<p>Clause 4.6 - The applicant must provide a statement addressing Clause 4.6 of the SLEP to overcome non-compliance with Clause 7.27.</p>	<p>Noted. A detailed Clause 4.6 Variation Request has been included at Appendix Q accordingly.</p>
<p>Design Excellence</p>	
<p>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.</p>	<p>An amended Wind Impact Assessment has been prepared by RWDI and is submitted at Appendix G. Key findings from the assessment in relation to Council's comments raised and relevant to the Northern Precinct are outlined below. Cope Street Plaza wind conditions are addressed under the Southern Precinct RtS. It is noted that RWDI have confirmed the design amendments proposed do not impact upon the wind conditions previously assessed.</p> <p>Raglan Street</p> <p>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 north-easterly 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. As such, the majority of the Raglan Street area will satisfy the standing criteria.</p> <p>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 during the summer months (94% of the time satisfying the criteria).</p>

Comment	Response
	<p>It is noted that as the tree planting along Raglan Street matures, the conditions will further improve, with a large number of locations satisfying the sitting criteria, especially during the cooler winter months.</p> <p>Laneways – areas surrounding retail tenancies</p> <p><u>Raglan Walk</u></p> <p>Wind conditions within Raglan Walk (linking Raglan Street to Cope Street Plaza) are able to benefit from the alignment of the laneway in the north-south direction and self-shielding by the development. The northern end of the laneway is exposed to the north-easterly winds causing a pressure driven flow through the laneway which will generally occur during the summer months of the year when these winds are more prevalent.</p> <p>Conditions within the laneway are more favourable during the winter period, with shielding from the westerly winds. As such, conditions equivalent to standing and sitting will be provided for patrons. These conditions are generally unchanged as the landscaping matures, given their location outside of this area.</p> <p><u>Grit Lane</u></p> <p>Grit Lane (linking Botany Road and Cope Street Plaza between Buildings 1 and 2) is exposed to the westerly winds, primarily during the winter months, which has been noted during the concept design phase. This is due to the funnelling of these winds and pressure differing between the western and eastern ends of the laneway.</p> <p>During the summer months, the southerly winds are more influential, hence the inclusion of the noted awnings on Building 1 and landscape plan in Cope Street Plaza and along Botany Road will enhance conditions within the laneway providing standing conditions for pedestrians.</p> <p>During the winter months, conditions are noted to be marginally uncomfortable (satisfying walking conditions 94% of the time). The inclusion of the awnings along Building 2 and tree planting at the Botany Road end of the laneway are noted to enable walking conditions at the western end of the laneway, reducing to standing conditions further to</p>

Comment	Response
	<p>the east within the laneway. These conditions are generally unchanged as the landscaping matures, given their location outside of this area.</p> <p>Section 3G</p> <p>The inclusion of awning elements in the building design and street tree planting noted in the landscape design 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 and Amenity Guidelines. Furthermore, areas for the bus stop waiting zone will also satisfy the sitting criteria conditions.</p>
<p>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.</p>	<p>As outlined in the EIS submitted with SSD-10440 and the supplementary Design Report 3 metre continuous awnings are proposed along Raglan Street and Botany Road (excluding the loading dock entrance) and a 3.5m continuous awning over Grit Lane. The built form of Building 1 overhangs the lobby entrance at ground level to create an awning for pedestrians. All awnings general sit between 3.2 to 4.2 metres above finished ground levels aside from along Grit Lane as a result of the level change.</p> <p>The design of all awnings for Building 1 are generally consistent with Council's design parameters. Refer to Appendix B.</p>
Building 1 – Amending Application	
<p>Clause 6.45(2)(d) requires consideration of the Waterloo Metro Design and Amenity Guidelines prior to determining the application.</p>	<p>Noted.</p> <p>Minor amendments are proposed to the WMQ Design and Amenity Guidelines which are provided at Appendix F.</p>
<p>The analysis provided does not demonstrate that Design Criteria 4 of Design Guideline 3M is met and does not respond to the specificity of the criteria, which requires analysis of both 'at grade' areas and living rooms windows (living rooms windows are not addressed).</p> <p>The analysis does not acknowledge that properties to the south of the site are impacted to an extent which exceeds the criteria.</p> <p>The overshadowing analysis indicates a very minor reduction only in overshadowing to Alexandria Park</p>	<p>This does not relate to the Northern Precinct SSD-10440. Notwithstanding this, the following is noted.</p> <p>As a result of the Amending Concept DA, the analysis of the solar impact for the amended envelope was focused to those areas where the impact previously assessed under SSD-9393 had changed.</p> <p>The RtS for the Amending Concept DA demonstrates that overall, potential overshadowing to surrounding residential dwellings has been</p>

Comment	Response
<p>between 9am and 10am. The application therefore does not achieve the improvements anticipated in the Guidelines to improve solar access to Alexandria Park through detailed design by reducing the northern tower only, which is not responsible for the non-compliant overshadowing of Alexandria Park.</p>	<p>reduced throughout the day as a direct result of the amendments to the concept application.</p> <p>As outlined in Section 3 of this RtS, the built form massing and detailed design has progressively evolved with further reductions to the overall height of Building 1. An addendum Overshadowing Analysis has been prepared by RWDI to assess the changes. This notes that there are minor improvements to overshadowing from Building 1 and no changes to the conclusions previously presented (refer Appendix I).</p>
Building 1 (Northern Precinct)	
<p>External fire stair – Raglan Walk is encumbered by the proposed external fire stair. The application does not justify why this cannot be fully enclosed within the building line. Recommended the stair is re-designed to fall within the footprint of the building, without reducing the width of Raglan Street and removing active frontage to the adjacent retail tenancy. Should the stair need to be external at higher levels, a more expressive and high design quality form should be considered.</p>	<p>The external fire stair has been internalised for the first two levels to Raglan Walk to further activate the laneway and improve pedestrian movement. A vestibule has been created to act as an independent entry to the podium levels. The stair then moves to the outside on level 2 to create a break-out balcony and continues outside to level 9 and is recessed.</p> <p>At the upper levels the egress stair has been removed and the upper massing forms a single volume.</p> <p>Refer to Appendix B for further description of the changes.</p>
<p>Building Expression – proposed design lacks ‘Warehouse conversions’ “character” in response to local context. The proposed design could have utilised a larger solid to void ratio in the elevations.</p> <p>The proposed substantially glazed, aluminium clad curtain wall facades do not adequately address the orientation of the building. On this elevation, a very minor (say 150mm) projection is proposed at a height equivalent to ceiling height. A similar vertical projection is provided to protect a 1.5 metre width of glazing. At summer afternoon, the altitude of the sun is low, and at one point, perpendicular to the west facade. These minor projections will have no perceptible shading impact</p>	<p>As presented to Council on 16 February 2021 and demonstrated in the supplementary Design Report, the proposal draws its inspiration from the rich and resilient history of Waterloo. The layering of history, local character and local texture is evident in the overall design which is expressed through architectural detailing and materials choices. The materiality and massing strategy allow for a variety of experiences at different scales which directly respond to the surrounding local character (refer Appendix B).</p> <p>The façade includes a large portion of insulated solid panels with approximately 40% window to wall ratio for all elevations. This improves the buildings thermal performance which exceeds the BCA ‘Section J requirements’.</p> <p>As demonstrated by the solar gain analysis in the Supplementary Design Report, the façade design incorporates a 200mm projection which provides</p>

Comment	Response
	substantial shading throughout the day in Summer and Winter months (refer Appendix B).
<p>c. Active frontages – Almost 50% of the Botany Road frontage is occupied by non-active uses.</p>	<p>To support minor variations to clause 7.27 of the SLEP 2012, a detailed Clause 4.6 Variation Request has been prepared and is included at Appendix Q.</p> <p>It is noted that while portions of the site nominated on the Active Street Frontages Map have not been activated, clause 7.27(4)(c) of the SLEP 2012 notes that active frontage is not required for any part of the building to be used for vehicular access, building entries/lobbies or access to fire services.</p>
<p>d. Sun-Shading and Urban Heat - passive shading is not delivered. Best practice design should target the achievement of 100% shading through operable devices. The development is inconsistent with the Waterloo Metro Design and Amenity Guideline Section 3R Sustainability – Objective 3.</p>	<p>Cundall have prepared a Technical Memo which is included at Appendix K. Based on the Memo and design works completed during the concept phase, it is shown the project is compliant with the Waterloo Metro Design and Amenity Guideline Section 3R Sustainability Objective 3, in addition to the overall project sustainability guidelines and targets. Refer to Appendix K for further discussion.</p>
<p>e. Glazing – Further clarity required on the proposed glazing regarding tint, reflectivity or urban heat issues. Clear glazing is always preferred.</p>	<p>A Technical Memo regarding clarity on proposed glazing has been provided at Appendix L.</p> <p>The proposed vision glazing specification is consistent with the Architectural and ESD Reports, which is clear double-glazing with a low-e performance coating to surface number 2 of the double-glazed unit. Glass performance parameters have been tuned to maximise transparency/visual light transmission while delivering suitable solar control and keeping external reflectivity beneath 20%.</p> <p>It is noted that potential introduction of additional façade shading is unlikely to affect the target performance materially enough such that a new glass SHGC/VT performance range would be considered.</p> <p>As such, an Urban Heat Island issue is not envisioned since the currently proposed glass performance would be adopted in either case.</p>
<p>f. Materials – do not support prefinished fibre cement panel on the blank frontage to Botany Road. Request a view from the south west to the southern elevation to demonstrate acceptable</p>	<p>As presented in the supplementary Design Report and discussed with Council in a meeting on 16 February 2021, improvement to the core cladding on Botany Road is proposed with additional</p>

Comment	Response
visual appearance in views from the south along Botany Road.	<p>textured brickwork to the podium levels enhancing the masonry character of the streetscape as well as providing robustness. Fenestration has been incorporated into the core wall providing light and views to the amenities. The revised design of the core wall on Botany Road utilises a dry-pressed dark grey colour brickwork at street level and dark grey equitone linea or similar above.</p> <p>Additional views from the south-west have been provided to illustrate the visual appearance of the streetscape along the Botany Road frontage. The design and materiality respond to the surrounding local character and creates a human scale along the streetscape.</p>
Require more detail of proposed materials. Materials must be described by a product or manufacturer's details.	<p>The materials concept creates an 'eclectic mixture' of the material inspired by the diversity of local character. As requested, further description of the materials was presented to Council on 16 February 2021 and includes:</p> <ul style="list-style-type: none"> ▪ North-west tower – PVDF or metallic powder coated aluminium with a natural copper finish. ▪ North west podium – glazed ceramic cladding in turquoise finish. ▪ North-east tower – Equitone tectiva or similar in a light beige finish. ▪ South-west tower – PVDF or metallic powder coat aluminium in a green copper finish. ▪ South-west podium – dry-pressed brickwork in light beige finish. ▪ Core – dry-pressed brickwork and equitone linea or similar in dark grey finish. <p>Refer to Appendix B for further discussion.</p>
Building 2 (Central Precinct)	Not relevant to SSD-10440.
Buildings 3 and 4 (Southern Precinct)	Not relevant to SSD-10440.
Amenity – Central Residential Building	Not relevant to SSD-10440.
Amenity – Students	Not relevant to SSD-10440.
Amenity – Social Housing	Not relevant to SSD-10440.
Natural ventilation and noise	Not relevant to SSD-10440.

Comment	Response
Landscaping	
Landscape drawings lack some critical information required to confirm the detail and viability of the proposals.	Additional detail is provided within the amended Landscape Plans and Design Report / Memo prepared by Aspect (refer Appendix C and Appendix D).
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.
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 buildings.
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 this three metre 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 now only include soil areas with a minimum width 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 bridging this space and permeable surfacing to the cantilevered ramp. The deep soil area allocated to the site now measures 10.4% (refer to page 15 of Appendix D).
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.	It is noted the bollards are required for Hostile Vehicle Mitigation (HVM) and 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. Should a more generous spacing be agreed by Sydney Metro then this can be accommodated during design development.
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 roofs can be safely maintained from maintenance paths around the planters away from the edge of the building.
Level 13 roof terrace of Building 1 includes an accessible area that has been indicatively designed and an expanse of gravel roof with photovoltaics.	Cundall have prepared a technical memo in response to this comment provided from Council (refer Appendix K). The current design, which

Comment	Response
Studies show that co-locating photovoltaics and green roofs can greatly improve the performance of the PVs, whilst supporting habitat and biodiversity. This should be considered for this roof.	comprises separate green roofs and PV areas on the roof, is the preferred approach and maximises the benefits of both elements. The green roof can be enjoyed and maintained without the clutter of PV panels, and the PV system is installed, operated, and maintained efficiently.
No landscape information has been provided for the (presumably inaccessible) green roofs to levels 2, 3, 4 & 9 of building 1. This is required.	<p>The proposal includes the following roof terraces:</p> <ul style="list-style-type: none"> ▪ Inaccessible landscape terraces on Levels 2 and 4; and ▪ Accessible landscape terraces at levels 3, 9 and 13. <p>An Amended Landscape Design Report and Amended Landscape Plans are attached to this RtS. This includes necessary information on the landscaping design and details of the various accessible and inaccessible terraces.</p>
Tree Protection	
City does not support the high number of trees and existing canopy coverage proposed for removal.	<p>There are 13 trees in total located around the site. These include:</p> <ul style="list-style-type: none"> ▪ Wellington Street – 3 trees ▪ Botany Road – 8 trees ▪ Raglan Street – 2 trees <p>Under the CSSI consent, approval was granted for the removal of 8 trees. Whilst not part of this proposal, consent is sought as part of the Southern Precinct SSD-10438 for the removal of the remaining five trees located on Wellington Street and Botany Road.</p> <p>As part of the wider public domain proposal, a continuous canopy of street trees is proposed along Botany Road, Wellington, Cope and Raglan streets. This significantly improves upon the existing canopy coverage currently provided on site, creating larger areas of shade and urban greening. Kerbside understorey planting and raingardens encircle the site and provide lush planted areas to the footpaths and road edges. The proposed replacement planting will result in an improved streetscape outcome when compared to the existing tree arrangement.</p>

Comment	Response
<p>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.</p>	<p>The proposal is consistent with relevant NSW Government policy and seeks to provide an increase in canopy coverage and urban greening as outlined above. The public domain proposals provide an increase in tree numbers and ground floor garden beds, creating habitat and improved amenity such as shading for pedestrians and residents.</p>
<p>Existing street trees and trees with medium-high retention values must be retained and protected.</p>	<p>The Northern Precinct SSD-10440 does not seek consent for removal of any existing street trees.</p>
<p>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.</p>	<p>Despite not being the subject of this SSD-10440, there are no existing trees located on Cope Street where the driveway to the basement is proposed.</p>
<p>All trees to be retained must be in accordance with <i>AS 4970-2009 Protection of Trees on Development Sites</i>, a Project Arborist must be engaged to assist with tree management advice during the various stages of the design and construction process.</p> <p>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 trench (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.</p>	<p>The Northern Precinct SSD-10440 does not seek consent for removal of any existing street trees.</p>
<p>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.</p>	<p>As previously outlined, the Northern Precinct SSD-10440 does not seek consent for removal of any existing street trees.</p>
<p>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.</p>	<p>As discussed above, the Northern Precinct SSD-10440 does not seek consent for removal of any existing street trees.</p>

Comment	Response
<p>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.</p> <p>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.</p>	<p>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.</p>
<p>Newly planted trees must meet Australian Standard 2303: Tree Stock for Landscape Use (2015).</p>	<p>This comment is noted. All newly planted street trees will adhere to relevant Australian Standards.</p>
Heritage	
<p>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.</p>	<p>This SSD-10440 does not seek consent for any bulk excavation works adjacent the Church.</p> <p>Notwithstanding, it is noted the CEMP developed by John Holland dated 30 September 2020 and included at Appendix Q 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.</p>
<p>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.</p>	<p>This comment is noted, and it is anticipated that this requirement will inform a condition on any development consent issued for the WMQ OSD.</p>
<p>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.</p>	<p>This comment is noted, and it is anticipated that this requirement will inform a condition on any development consent issued for the WMQ OSD.</p>
<p>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.</p>	<p>This comment is noted, and it is anticipated that this requirement will inform a condition on any development consent issued for the WMQ OSD.</p>
<p>Detailed material, colours and finishes schedule and sample boards to be provided for all the buildings.</p>	<p>Additional details regarding the proposed materials and finishes has been discussed earlier in this RtS Report and is provided at Appendix A and Appendix B.</p>

Comment	Response
<p>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.</p>	<p>This comment is noted, and it is anticipated that this requirement will inform a condition on any development consent issued for the WMQ OSD.</p>
<p>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.</p>	<p>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.</p>
Transport	
<p>Walking access</p> <p>(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.</p> <p>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.</p>	<p>Although not part of this SSD, the Supplementary Traffic and Parking memo prepared by ptc (Appendix M) reiterates that the projected peak hour trip generation for the WMQ basement car park is approximately 57 trips, representing a net reduction of 41 trips in comparison to the Concept Approval (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.</p> <p>With reference to TTD 2016/001, '<i>Design and implementation of shared zones including provision for parking</i>', the following is noted:</p> <ul style="list-style-type: none"> ▪ 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. <p>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</p>

Comment	Response
	<p>further reduces potential pedestrian-vehicle conflicts (refer to Appendix N).</p> <p>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.</p>
<p>(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.</p>	<p>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.</p> <p>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.</p> <p>As per the <i>MQD Design Parameters</i>, which were adopted as the minimum footpath requirements for the project, a minimum clearance width (free of retail frontages or furniture) of 3.5m for key connections has been provided. 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.</p> <p>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 the design, and a LoS C or better is achieved based on the peak pedestrians per hour.</p> <p>Other internal connections can be treated as Type 2 or 3 footpaths due to their proximity and comparatively lower patronage. In this regard the following is noted:</p>

Comment	Response
	<ul style="list-style-type: none"> ▪ Cope Street Plaza & 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. <p>Overall WSP have confirmed that pedestrian movement throughout the Waterloo Metro Quarter OSD satisfies the Walking Space Guide requirements.</p>
<p>Vehicle parking</p> <p>(a) The vehicle parking proposed for residential and commercial use is excessive for a transit-oriented development and should be minimised.</p>	<p>Parking to support the Northern Precinct (Building 1) is provided for within the basement proposal.</p> <p>The Waterloo Metro Quarter has site-specific parking controls set out through the WMQ Design Guidelines, Concept SSD 9393 conditions of consent and the SDCP 2012 which contemplated the proposed parking provisions for the site and future development.</p> <p>The basement incorporates 63 commercial parking spaces which is below the maximum permissible 78 spaces under the SLEP. The proposed commercial office parking provisions for Building 1 therefore represents 80% of the maximum SLEP provision and is appropriate to service the estimate occupancy of over 3,000 commercial workers.</p> <p>Overall, the proposed parking provisions are consistent with the controls applying to the site and suitable to support the commercial uses. The proposal has struck a balance between providing parking below the maximum permissible rates to reduce private vehicle dependency and encourage active/sustainable transport (supported by the delivery of compliant bicycle parking provisions and EOTF), whilst also alleviating on-street parking pressures within the surrounds.</p> <p>Refer to the Supplementary Traffic and Parking Assessment prepared by ptc for further detailed discussion (Appendix M).</p>

Comment	Response
<p>(b) The amount of parking directly impacts the overall objective of the new metro line which aims to reduce reliance on cars.</p> <p>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.</p>	<p>As previously outlined, the basement provides commercial vehicle parking at approximately 80% of that which the maximum permissible controls allow, and as such, the proposal seeks to reduce reliance on private car ownership and encourages the use of active and sustainable transport.</p> <p>In addition, the EIS was accompanied by a Green Travel Plan (GTP) (Appendix I of the EIS) which sets future mode share targets including 40% by train, 25% by walking, 10% by bus and 5% for cycling. These targets are directly aimed at shifting transport usage towards active and public transport methods.</p>
<p>(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.</p>	<p>Comments provided from TfNSW have been addressed in Section 5.1. It is noted that no specific comments were provided requiring nil parking provisions.</p> <p>The maximum commercial parking controls for the WMQ site are consistent with those applicable to other highly accessible areas such as the Sydney CBD. The SLEP 2012, SDCP 2012 and Concept SSD 9393 conditions of consent clearly establish a framework that has contemplated the maximum parking provisions that is suitable.</p> <p>As discussed above, commercial vehicle parking is provided at 80% of the maximum permissible rate. This clearly demonstrates the proposal is consistent with the planning objectives and controls with regards to parking. Further, the proposal seeks to reduce the reliance of automobile dependency and encourages active and sustainable transport to support strategic visions for a '30- minute city'.</p>
<p>(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.</p>	<p>The Basement SSD-10438 accommodates two (2) DDA compliant accessible parking bays for commercial uses associated with Building 1.</p> <p>Ptc have indicated that the proposed number of accessible spaces is consistent with the relevant Australian Standards as outlined by Moris Goding Access Consultants (refer to DDA Assessment - Appendix S of the subject SSD DA EIS).</p>
<p>(e) Parking for loading and servicing should be prioritised over general vehicle parking. Given the rate of vehicle parking provided the site should</p>	<p>The revised design for Building 1 maintains a ground floor loading dock accessed off Botany Road which provides two SRV and two MRV</p>

Comment	Response
provide for the required amount of loading and servicing.	<p>parking spaces together with a mechanical turntable to accommodate all service vehicles.</p> <p>As previously mentioned in response to TfNSW comments, the proposed loading docks and service bays across the precinct will be managed in accordance with the FSMP. This will allow for each bay to be pre-booked prior to arrival to ensure that there are spaces available for servicing. Ptc deems the proposed service bay provisions to be suitable to service the precinct (refer to Appendix M).</p>
<p>Traffic modelling</p> <p>(a) It is unclear from the submitted documentation if the traffic modelling includes the cumulative traffic generation from adjacent developments plus the projected traffic generation for the subject proposal.</p>	<p>The traffic modelling does not currently include defined traffic generation from adjacent developments as this information is not currently 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 the design year. Ptc have indicated that this is general industry practice in order to account for the increase in traffic activity for developments within Greater Sydney, given it is not possible to account for individual developments.</p>
(b) The zero trip generation rates for student housing are unrealistic.	Note relevant to this SSD-10440.
(c) The traffic modelling should include changes to the street network and intersections proposed as part of the Metro development.	<p>The future road network improvements associated with the Sydney Metro Waterloo Station have been included in the updated traffic modelling and findings. This is provided at Appendix M.</p>
<p>Bike parking</p> <p>(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.</p>	<p>This comment is noted. The basement proposal will deliver bicycle parking and end of trip facilities to support Building 1 and encourage sustainable modes of transport to maximise patronage of Sydney Metro. As outlined in the EIS submitted with SSD-14038, 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.</p>
<p>Loading and servicing</p> <p>(a) The proposal presents a shortfall of loading and servicing and should be provided as per the SDCP 2012 rates.</p>	<p>If the loading dock requirements are calculated separately for each land use type within the development, this results in a shortfall in service vehicle parking. However, this approach ignores the ability to accommodate more than one vehicle,</p>

Comment	Response
	<p>per day, in each dock and dismisses the efficiencies created by grouping land uses.</p> <p>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.</p> <p>An additional B99 service vehicle space has also been provided within the Southern Loading Dock.</p>
(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 loading dock is provided with an access and egress driveway which is 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 sign posted accordingly so as to be used solely for general service/loading vehicles (such as maintenance contractors including plumbers, electricians etc).
(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 M), the loading docks have been designed to accommodate entry and egress of a 9.25m Council waste vehicle.
Sustainable development	
<p>General – consider advancing sustainable outcomes.</p> <p>Green star – encourages the Applicant and DPIE to move to the new Green Star Buildings tool.</p>	We note that Council has recognised that the proposed WMQ development has made many important commitments to best practice in sustainable developments. The development is consistent with SEARs requirement and is committed to achieving a 5 Star Green Star v1.3

Comment	Response
	<p>rating, exceeding minimum targets in some instances and incorporating many other key targets to reflect current best practice for sustainable building design.</p> <p>The development team is currently engaged in a process of reviewing design and construction pathway impacts of achieving either a 6 star Green Star Design and As-Built v1.3 rating or a 5 star Green Star Buildings tool.</p> <p>These commitments will be further developed throughout the ongoing detailed design, construction and operation phases of the project.</p> <p>As there are multiple design and construction impacts to increasing the current commitment, sufficient due diligence is needed to ensure the pathway impacts are accommodated. This due diligence is intended to be undertaken post approval in line with the design and construction activities.</p> <p>It is noted that projects can register with the current Green Star Buildings tool until 31 December 2021.</p>
<p>SSD10440</p> <p>Rating tools:</p> <p>As the developer has committed to off-site renewable electricity for the base building, the City requests that the proponent commit to 5.5 Star NABERS Energy via on site initiatives (as they have already done) and NABERS 6 Star achieved via offsite renewable energy power purchase commitment</p> <p>Energy efficiency:</p> <p>The minimum 99kW PV system is supported in addition to all other energy efficiency measures indicated in the relevant report</p> <p>Potable water savings:</p> <p>All water efficiency measures are supported</p>	<p>The development team is committed to achieving a 5.5 NABERS Energy rating through the use of energy efficiency and on-site renewable energy, with a commitment agreement to be entered into accordingly.</p> <p>Off-site renewable energy will be utilised for the remaining power needs however due to the ruling around the types of recognised renewable energy a 6 star rating may not be achievable. The NABERS rules only allow for GreenPower to contribute to the NABERS rating. However, the development team or operator may utilise a Power Purchase Agreement (PPA) (or similar) to deliver off-site renewable energy, which would not be recognised under NABERS.</p> <p>The comments on energy efficiency and potable water savings are noted.</p> <p>Refer to Appendix K for further discussion.</p>
Public Art	
<p>It is not clear from the strategy that the artists will have access to the material budgets for the project</p>	<p>The expectation is that the \$4M budget allocated for the Public Artwork Strategy will include the cost</p>

Comment	Response
<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>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.</p>
Waste	
<p>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.</p>	<p>Elephants Foot have prepared a response to Items 72 and 74 which is provided at Appendix O. The Waste Management Plan (WMP) submitted with the EIS and the updated WMP have been prepared in accordance with Council's <i>Guidelines for Waste Management in New Developments 2018</i>.</p> <p>Elephants Foot have also considered Council's waste calculator to ensure the development provides sufficient waste storage. However, it is noted that the waste calculator will not be entirely accurate as it does not account for / consider waste management equipment for separate streams, such as linear track systems, cardboard baler/pallets and glass crushers. As such, there are some inconsistencies in the two spatial requirements.</p> <p>A comparison summary of spatial advice derived from the waste calculator and actual waste room</p>

Comment	Response
	<p>sizes for each waste area is provided below for clarity.</p> <p><u>Residential chute discharge room (basement):</u></p> <ul style="list-style-type: none"> ▪ Calculator – 18.4sqm ▪ Area provided – 41.5sqm <p><u>Residential bulky storage waste room (ground):</u></p> <ul style="list-style-type: none"> ▪ Calculator – 16sqm ▪ Area provided – 16.2sqm <p><u>Residential bin holding room (ground):</u></p> <ul style="list-style-type: none"> ▪ Calculator – 40sqm ▪ Area provided – 67sqm <p><u>Commercial/retail bulky waste storage room:</u></p> <ul style="list-style-type: none"> ▪ Calculator – 27sqm ▪ Area provided – 16sqm <p><u>Commercial/retail waste room (ground):</u></p> <ul style="list-style-type: none"> ▪ Calculator – 86sqm ▪ Area provided 76sqm (including waste room & compactor) <p>These minor inconsistencies are considered acceptable as the WMP has separated waste and recycling streams further than what the waste calculator allows for, including cardboard, mixed recycling and glass.</p> <p>The 12m³ portable compactor provided for general waste has the capacity to compact waste at a ratio of 5:1. Therefore, it can store approximately 50 x 11000L bins per week. Allocated staff will monitor the capacity of the compactor in accordance with scheduled collections.</p> <p>The cardboard baler and glass crusher also have the capability to compact and significantly reduce the volume of cardboard and glass. Waste service providers will collect a minimum of 4 x cardboard balers with collections likely 2-3 times weekly.</p> <p>Due to the high putrescible nature of food waste, 120L food waste bins are serviced daily to maintain a high standard of cleanliness in the facility.</p>

Comment	Response
	<p>The 1100L mixed recycling bins are collected 5 x weekly. The traffic consultant has confirmed that the proposed number of collections will have no impact on the loading dock operation nor any perceptible impact upon the modelling or traffic analysis. The waste collection for the commercial uses will be undertaken by a private waste contract and collections can be coordinated outside peak periods to minimise any potential impact on the surrounding road network (refer to Appendix M).</p>
<p>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 of the Waterloo Metro Design and Amenity Guidelines.</p>	<p>The turntable has been designed in co-ordination with the Traffic Consultant to accommodate the 9.25m City of Sydney Refuse Collection Vehicle - the largest expected vehicle.</p> <p>Ptc notes that this requirement refers to the minimum turning radius of the waste vehicles accessing the service area and does not relate to the diameter of the turntable. As outlined previously, the Northern and Southern Precincts loading docks have been designed to accommodate 9.25m waste collection vehicles and their turning circles with a minimum 300mm clearance. The turntable clearance satisfies the requirements of AS 2890.2.</p>
<p>It is noted that the development does not currently provide for separate food waste collection, contrary to the guidelines. 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.</p>	<p>The revised design of the Northern Precinct loading dock provides a food waste bin area for the retail, commercial and childcare uses which is separate to the residential bin store. This provides space to accommodate a total of 15 x 120L bins. The revised WMP 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 as and when required.</p>
Signage	
<p>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.</p>	<p>As outlined in Section 4.9 of the EIS for SSD-10440, the proposal seeks consent for the provision of three top-of-building (north, east and west elevations) and four podium signage zones. These signage zones will provide for building and business identification for key anchor and retail tenants and are of an appropriate size and scale in the context of the development. The size, siting and illumination details of the signage zones are outlined in the amended Architectural Plans</p>

Comment	Response
	<p>(Appendix A) supplementary Design Report (Appendix B).</p> <p>The detailed design of future signage will be confined to these zones and pursued as part of future separate DA's to be submitted by prospective tenants. Given the nature of the signs and total number of signage zones proposed (i.e. three top-of-building and three podium zones), a Signage Strategy for is considered unnecessary.</p>
<p>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 <i>State Environmental Planning Policy 64 – Advertising and Signage</i> 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.</p>	<p>An assessment of the proposals compliance with the Schedule 1 Assessment Criteria under <i>State Environmental Planning Policy 64 – Advertising and Signage</i> was provided in Section 6.6. of the EIS submitted with the application.</p> <p>Whilst the SDCP 2012 does not permit top of building signs in B4 zones, in accordance with Clause 11 of the State and Regional Development SEPP, the SDCP 2012 does not apply to an SSD.</p>
<p>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.</p>	<p>Notwithstanding this, the proposed signage zones are considered generally consistent with the SDCP for the reasons outlined below:</p> <ul style="list-style-type: none"> ▪ The proposal is consistent with the theme for top of building signage in the surrounding area. The site is located within approximately 500m of the Australian Technology Park which comprises several buildings with top of building signs. ▪ The City Plan 2036 identifies the 'Botany Road Corridor' as an opportunity to increase non-residential capacity linked to the future Waterloo Metro Station. This business and innovation corridor will support future commercial and technology-based uses accompanied by associated building identification signage. As such, the proposed signage zones will be compatible with the future signage character of the Botany Road Corridor. ▪ The location of the proposed signage zones are well integrated with, and subservient to, the design of buildings and the public domain so as not to detract from the heritage of the Waterloo Congregational Church and nearby items.

Comment	Response
	<ul style="list-style-type: none"> ▪ The proposed signs will be affixed to the façade of Building 1 and therefore not visible above the roofline. ▪ The proposed signs seek to create an effective and appropriate signage system that fulfils the requirements of building/business identification whilst integrating with the built form. ▪ The proposed signage is scaled appropriately for the building and broader WMQ site. ▪ The proposed signage is compatible with the amenity and visual character of the area. It will allow for signage that will effectively communicate the building tenant when approaching from the north, south and west. ▪ The proposed signage has been confined to the podium and top of building and integrated into the architectural design. Accordingly, the proposed signage is simple and well positioned to identify the key commercial tenant(s). <p>The detailed design and content of the signage zones are subject to future separate DA's which would need to demonstrate further consistency with the SDCP 2012.</p>
Public domain	
<p>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.</p>	<p>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.</p> <p>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 precinct.</p>
<p>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</p>	<p>It is noted that this submission notes that the proposed flood planning levels for the Northern Precinct comply with the Council's Interim flood plain management policy. Comments regarding the</p>

Comment	Response
<p>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.</p>	<p>Central Precinct are addressed within that separate SSD DA.</p>
<p>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.</p>	<p>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.</p>

6. RESPONSE TO COMMUNITY AND ORGANISATION SUBMISSIONS

Table 4 provides a detailed response to the public submissions and **Table 5** provides a detailed response to the organisation submissions received during the public exhibition period as they relate to the Northern SSD DA.

Table 4 Response to Public Submissions

Comment	Response
Adequate provision of social and affordable housing	
<ul style="list-style-type: none"> Inadequate provision of social housing. Reduction of affordable housing units in comparison to the concept approval. Over provision of other types of uses, e.g. commercial and student housing. Should reconsider the provision of commercial spaces from the change in office demand due to COVID 19. 	<p>Not Relevant – the Northern Precinct SSD-10440 does not include social housing or affordable housing components.</p> <p>However, it is noted the WMQ development as a whole will provide a total of 70 social housing dwellings, which is consistent with the concept DA conditions of consent. In addition, 24 affordable housing dwellings are proposed (approx. 11%), which exceeds 5% of the total residential GFA within the WMQ as required under clause 6.45 of the SLEP 2012 and concept DA conditions of consent.</p> <p>Overall, the proposed WMQ development is anticipated to create a vibrant mixed-use precinct on the fringe of the Sydney CBD. The proposed mix of uses are supported by the market assessment identifying demand for the proposed uses.</p> <p>The proposed commercial use will deliver more readily available employment opportunities by integrating new commercial floor space with high frequency public transport network connecting to Sydney CBD and other strategic centres across the city.</p>
Suitability of the childcare centre use	
<ul style="list-style-type: none"> 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. 	<p>Childcare is not relevant to SSD-10440. Notwithstanding, Section 4.1 of this RtS demonstrates the suitability of the childcare centre as a community facility (refer to Appendix H for further discussion).</p> <p>The proposed childcare facility will operate in accordance with the following hours of operation:</p> <ol style="list-style-type: none"> Monday to Friday: from 7am to 7pm. Saturdays: from 9am to 3pm <p>The proposed hour of operation is consistent with the recommended hours in the DPIE <i>Child Care Planning Guideline 2017</i> (the Childcare Guideline).</p>

Comment	Response
Adequate provision of community facilities	
<ul style="list-style-type: none"> 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, 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. 	<p>Publicly accessible community space is provided on the ground floor of the Northern Precinct building and a community retail area is supported in the south-west corner adjacent Grit Lane.</p> <p>A minimum total of 2,000sqm GFA is to be provided for the purposes of community facilities within Building 2. The community facility will be used for the purposes of not-for-profit, community centre-based childcare.</p> <p>Furthermore, it is noted that an additional 630sqm of ground level GFA is proposed to be used for a variety of community uses, including for instance a medical/health centre, enterprise café, Makerspace, community hub etc, however with the specific uses to be determined at future stages.</p> <p>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 approval SSD-9393.</p>
Provision of car parking	
<ul style="list-style-type: none"> 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 	<p>The proposed WMQ development provides car share parking for the residential and commercial land uses in accordance with the guidelines and concept DA (SSD 9393) conditions of consent. The basement incorporates 4 car share parking bays, two each for buildings 1 and 2.</p> <p>Overall, the development provides a maximum of 155 car parking spaces, which is less than what is permitted under the concept DA (SSD 9393) conditions of consent. The proposal seeks to strike a balance to support a reduction in the reliance of private vehicle ownership across the Waterloo Metro Quarter site and encourage active / sustainable modes of transport, whilst alleviating on-street parking pressures within the surrounding area.</p> <p>The basement proposal which supports the Northern Precinct will install electrical vehicle trickle charging to nominated car parking spaces as required to meet total demand. The basement has made allowances for future vehicle charging to 100% of spaces (if/when required). The car park is fitted with sufficient overhead cable trays which will be used to support the electrical distribution, with charging stations to be fitted to structural columns.</p>

Comment	Response
Traffic generation and traffic impacts	
<ul style="list-style-type: none"> Consider widening 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 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. 	<ul style="list-style-type: none"> 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 Northern Precinct. 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 Freight and Servicing Management Plan (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 operates at a level of service less than the concept approval (SSD 9393), and therefore, the development is not considered to have a detrimental impact on the operation of the road network.
Increased pedestrian movement	
<ul style="list-style-type: none"> Future increased pedestrian movement across Botany Rd and Wyndham St should be considered. Adequate provision of pedestrian crossing should be considered for safety. 	<p>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 for the Northern Precinct SSD-10440).</p> <p>An additional Pedestrian Movement Technical Memo has been prepared by WSP to address the concerns raised by</p>

Comment	Response
	<p>CoS and TfNSW (Appendix N). This assesses the likely pedestrian movements throughout and around the site.</p> <p>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, as well as the Botany Road bus stops. All internal footpaths and those adjacent to the WMQ operate at 'levels of service' consistent with the TfNSW '<i>Walking Space Guide</i>'.</p> <p>A new pedestrian crossing on Botany Road will provide direct connection to the proposed Grit Lane and metro station entrances, providing safe pedestrian connection into the site.</p>
Overshadowing and amenity of existing and proposed public open space and conservation area	
<ul style="list-style-type: none"> ▪ Height of the Northern Precinct building should be reduced to increase solar to the proposed public open space and Alexandra Park. ▪ 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 <ul style="list-style-type: none"> – 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. ▪ The student housing building overshadows Cauliflower Hotel, the Wellington Street Victorian terraces, and Wellington Street footpath. Greater setback from Wellington Street should be incorporated. 	<p>An Addendum Overshadowing Analysis has been prepared by RWDI and is included at Appendix I.</p> <p>As previously outlined, the revised design reduces the overall height of Building 1 by removing one storey. The Overshadowing Analysis demonstrates that this does not result in additional overshadowing impacts to neighbouring properties.</p>

Comment	Response
To encourage more tree planting	
<ul style="list-style-type: none"> Should incorporate more trees to block wind and provide shade. 	<p>Street trees and additional planting are proposed along the street boundaries, the proposed laneway and around Cope Street Plaza.</p> <p>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 Waterloo Design Amenity Guidelines.</p> <p>The proposed street trees and planting contributes to the landscape of the WMQ site, mitigate wind impact and provide shade in public domain areas.</p>
Commentary on overall architectural quality of the proposed designs	
<ul style="list-style-type: none"> 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 Northern Precinct is a cultural and visual clash with the three 19th century heritage buildings at the intersection of Botany Road/Ragland St/Henderson Rd. The Northern Precinct should have a similar scale and height to the central and northern precincts. The student housing building is inconsistent with the scale of the surrounding context. 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. 	<p>Building height is lower than what is permitted in the approved concept DA and the height has been further reduced from the previous submission of the Northern Precinct SSD-10440.</p> <p>All buildings have been developed to the same level of design resolution with consideration of the existing streetscape and the future development context across the site and wider surrounds.</p> <p>Buildings and public domain have benefited from an extensive DRP process and the team has focused on developing highly distinctive buildings while also ensuring the precinct remains cohesive.</p> <p>A diverse palette of building materials and finishes have been employed to provide visual interest with a focus on highly detailed podium structures.</p> <p>Specifically, the visual bulk and scale of the Northern Precinct has progressively evolved to minimise the visual impacts on the surroundings. The built-form has been lowered by 24 metres from the Concept SSD 9393 approval. The maximum height has been reduced again by up to 5.3 metres across the northern portion of the building envelope.</p> <p>The design acknowledges the diversity of built-forms in the surrounding context. The massing is carefully carved and articulated to de-scale the building creating a coherent relationship to the adjacent built-forms. The materials concept creates a mixture of the material inspired by the local palette's diversity.</p>

Comment	Response
	<p>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.</p> <p>Refer to the Architectural Design Report at Appendix B for further discussion.</p>
Public open space	
<ul style="list-style-type: none"> 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. 	<p>All proposed public domain space, including Cope Street Plaza are publicly accessible.</p> <p>The overall WMQ site achieves 10.8% deep soil coverage, exceeding the DCP and ADG guidelines.</p> <p>The proposed Cope Street Plaza provides 1,325m² of public open space. Raglan Street plaza provides 875m² of open space. The combined area of new public domain is 2,680m², which exceeds the required 2,200m² under the Waterloo Design Amenity Guidelines and is able to achieve the best public domain outcome for the site.</p>

Table 5 Response to Organisation Submissions

Comments	Response
Counterpoint Community Services Inc	
<p>Community consultation concerns:</p> <p>The pre-lodgement consultations were significantly disadvantaged by Covid19 restrictions and the effectiveness of which questionable.</p>	<p>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. Whilst opportunities to conduct face-to-face engagement were limited, the applicant hosted a series of online events from May to July 2020 for the surrounding community and key stakeholders to respond to emerging ideas and designs for the over station development. Various strategies were implemented to ensure collaborative community involvement in the project.</p> <p>The abovementioned events were notified by:</p> <ul style="list-style-type: none"> Emails to approximately 1700 subscribers. Flyers distributed to 5000 properties within 500 metres of the site, incorporating residents, landowners, businesses and community groups. Invitations to community-based groups and organisations.

Comments	Response
<p>General comment on amended proposed plans:</p> <ul style="list-style-type: none"> 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. 	<p>Key environmental and health issues have been addressed in detail through the EIS report prepared for the SSDAs.</p> <p>The height of the building is governed by the approved plans and the approved Concept DA, any future increase in height limit will need to be sought via a Section 4.55 Variation request to both Concept DA and detailed SSD.</p> <p>The Eastern City District Plan includes planning Priorities that directly relates to employment targets for the area. The proposal directly responds to these objectives.</p>
<p>Placemaking /management:</p> <ul style="list-style-type: none"> 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. 	<p>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 visitors of the Waterloo area.</p> <p>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.</p> <p>Comments on diversity and social identity 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.</p>
<p>Traffic and pedestrian safety:</p> <ul style="list-style-type: none"> Concern over Pedestrian traffic across Botany road to South Eveleigh. There needs to be adequate pedestrian and bike paths around the Metro Quarter 	<p>The Pedestrian Movement Memo prepared by WSP (Appendix N) confirms that all internal walkways, external footpaths and intersection queues achieve a LoS C or higher in accordance with TfNSW <i>Walking Space Guide</i>.</p> <p>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.</p> <p>Bike paths are provided around the WMQ site, which link directly into the regional cycle network via the bike path on Wellington Street.</p>
<p>Northern Precinct:</p> <ul style="list-style-type: none"> Possible light pollution from the office building at night Our view is that there is inadequate provision of parking for workers and customers evidenced by lack of current 	<p>Appropriate conditions can be included on any consent issued to ensure that any light emitted from the commercial office is compliant with relevant Australian Standards, and thus, the operation will not result in light spill impacts.</p> <p>The basement accommodates vehicle parking to support the Northern Precinct in accordance with the concept DA conditions of consent (SSD 9393) and relevant SDCP 2012</p>

Comments	Response
<p>parking before any increase in density. The assumption that all stakeholders utilising the space regularly will use the metro system is flawed.</p> <ul style="list-style-type: none"> No guarantee that commercial aspect will have balanced affordable, space for start-ups or reduced or rent-free space for community providers. 	<p>controls. This strikes a balance between providing car parking below the maximum permissible rates to reduce reliance on private car ownership whilst being appropriate to support the operation of the Waterloo Metro Quarter OSD and alleviate on-street parking pressures within the surrounding area.</p> <p>The proposal does not preclude the use of commercial space for start-ups or community providers.</p> <p>The Proponent will enter into a private agreement for the use of the 'community' retail space. This is likely to be a requirement of the conditions of consent should an approval be issued.</p>
Waterloo Public Housing Action Group	
<p>The total commercial floor space proposed in the Northern Precinct will take up 50% of total floor space across the precinct. Together with the Student Housing floor space in the Southern Precinct, 67% of total floor space will be used for commercial purposes. This is completely out of line with the community's vision for the project established during the consultation period for a predominantly residential development.</p>	<p>The proposed Northern Precinct development is consistent with the Concept SSD-9393 approval which approved a mixed use development including a minimum of 12,000 sqm of non-residential floor space.</p> <p>The proposal will support employment generation in proximity to planned transport opportunities in the local area which is consistent with the objectives of the strategic planning framework. The Greater Sydney Commission is targeting an additional 165,100-235,100 jobs by 2036 co-located with transport networks and housing.</p> <p>As outlined in the Social and Economic Impact Assessment submitted with the EIS, the proposal supports a vibrant mixed-use precinct on the fringe of the Sydney CBD. The mix of commercial uses from office, housing (diverse mix of market, affordable, social and student housing), retail, food and beverage and gym are supported with the market assessment identifying demand for these uses.</p>
Inner Sydney Voice	
<p><u>Northern Precinct</u></p> <ul style="list-style-type: none"> Too much commercial GFA. Such an increase in commercial space will initiate an economic transformation of the neighbourhood. Changes in the types of businesses currently available will likely impact the affordability of, and access to, key services — including medical care, 	<p>As previously discussed, the proposal is in accordance with the Concept SSD 9393 which contemplated the provision of commercial and retail floor space across the WMQ site.</p> <p>The proposal aligns with the strategic policy context and provides employment generating and retail floorspace in proximity to future planned transport and the provision of diverse residential housing stock.</p> <p>The large proposed office development will diversify the Inner Sydney office market, complement nearby office precincts and help drive economic growth to further stimulate the local economy.</p>

Comments	Response
mental healthcare, and pharmaceuticals.	Further, the retail floorspace envisages the provision of a health and medical centre, along with other retail typologies to support the community.
<p><u>General concerns</u></p> <ul style="list-style-type: none"> Increased foot and vehicle traffic across Botany Road to South Eveleigh. The development should provide adequate pedestrian and cycling infrastructure. 	<p>The Pedestrian Movement Memo prepared by WSP (Appendix N) confirms that all internal walkways, external footpaths and intersection ques achieve a LoS C or higher in accordance with TfNSW Walking Space Guide.</p> <p>A new zebra crossing is being provided across Botany Road as part of the Waterloo metro station project. This can be accessed via Grit Lane and Church Square (shared zone), as well as pathways around the site.</p> <p>Bike paths are provided around the WMQ site on the surrounding road network which link directly into the regional cycle network via the bike path on Wellington Street. The basement accommodates bicycle parking and EOTF for the commercial office building to support pedestrians and cyclists accessing the site and utilising the metro.</p>
REDWatch	
The scale and density of the development will have a major impact on the surrounding community with no adequate infrastructure support.	<p>The WMQ development is a transit orientated development supported by planned metro infrastructure.</p> <p>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.</p>
<p>Cumulative impact from this development, and the lack of integration of proposed nearby developments.</p> <p>Impacts on possible open space and the development to the east is not assessed.</p>	<p>Cumulative impacts (traffic, noise, dust, etc.) associated with concurrent construction and operation of station and OSD, and other developments in the area have been considered throughout the EIS and technical report submitted to each SSD. Mitigation measures are also recommended to minimise impact.</p> <p>The site is located in close proximity to a number of public open space areas that will be able to accommodate the existing and 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.</p>
Need for affordable retail.	The proposal does not preclude “affordable retail”. The provision of retail floor space across the Northern Precinct and wider WMQ site envisages uses including a convenience grocer, health and medical centre, a social

Comments	Response
	enterprise café and multiple food and beverage and other convenience tenancies.
<p>Northern Precinct:</p> <ul style="list-style-type: none"> ▪ Overshadowing of public plaza and the lack of any winter sunlight after 1pm. ▪ Concerns about congestion of pedestrians on the corner of Raglan/Botany Roads. ▪ Façade of the commercial building has little / no relation to the surrounding heritage area. It is out of scale, and inconsistent with the character and heritage of the area. This is especially the case for the North West corner of the northern precinct building. 	<ul style="list-style-type: none"> ▪ The proposal originally submitted allowed for 57.3% of Cope Street Plaza receiving at least 2 hours of direct sunlight between 9am and 3pm on 21 June in accordance with the WMQ Design and Amenity Guidelines. The design has since been amended reducing the height by a further 5.3 metres in the north-west portion and 1 metre for the remainder. This does not result in any additional overshadowing impacts. ▪ A Pedestrian Modelling Memo has been prepared which indicates all internal footpaths and those adjacent to the WMQ site operate at an acceptable level of service in accordance with the TfNSW <i>Walking Space Guide</i> (refer Appendix N). ▪ The built form design and façade composition has been specifically designed to reference the palette of the local character and to create a relationship with the adjoining streetscape along Botany Road, as well as the future built form context across the WMQ site and wider surrounds.

7. REVISED PLANNING ASSESSMENT

7.1. 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 6 Assessment of amended proposal against relevant statutory planning framework

Consideration	Response
Strategic Planning Context	<p>The minor design changes proposed to the Northern Precinct remain consistent with the strategic planning framework as outlined in the EIS previously submitted with SSD-10440.</p> <p>The proposal will deliver in excess of 34,000sqm of commercial employment generating floor space in proximity to high frequency public transport, supporting a 30-minute city.</p>
Acts	
<i>Environmental Planning and Assessment Act 1979</i>	The proposed development remains consistent with the objects and general terms of the EP&A Act as outlined in the EIS submitted with SSD-10440.
<i>Biodiversity Conservation Act 2016</i>	The assessment provided in the EIS for SSD-10440 remains applicable and it is noted a BDAR waiver was issued by DPIE and OEH on 28 July 2020. Additional biodiversity and conservation matters raised by Environment, Energy and Science Group (EES) within DPIE have been addressed in Section 5.1 of this report.
SEPPs	
<i>State Environmental Planning Policy (State and Regional Development)</i>	The proposal remains SSD in accordance with clause 12 of the SRD SEPP as a subsequent DA under the concept DA (SSD 9393).
<i>State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)</i>	In accordance with clause 85 and 104 of the Infrastructure SEPP, the application was referred to Sydney Metro and TfNSW for comment. Comments received from TfNSW have been addressed in Section 5.1 of this report. It is anticipated that relevant conditions will be included on any consent issued for key traffic and parking documentation to be updated in consultation with the Sydney Coordination Office of TfNSW.
<i>State Environmental Planning Policy (Building Sustainability Index: Basix) 2004</i>	Not applicable to this SSD DA.
<i>State Environmental Planning Policy</i>	The proposal does not seek approval to remove any existing street tree vegetation. The site is within an established urban area and has been cleared of

Consideration	Response
<i>(Vegetation in Non-Rural Areas) 2017</i>	all vegetation, buildings and structures under a separate CSSI approval. As such, no further consideration of the Vegetation SEPP is required.
<i>State Environmental Planning Policy No.55 – Remediation of Land (SEPP 55)</i>	Not applicable to this SSD DA. Notwithstanding, it is noted that no changes are proposed to the Contaminated Sites Strategy prepared and submitted as part of the Basement and Southern Precinct SSD DA's.
<i>State Environmental Planning Policy No. 64 (Advertising and Signage) (SEPP 64)</i>	<p>As outlined in the EIS, the proposed signage zones are consistent with the policy aims and objectives, as well as the assessment criteria contained within Schedule 1 of SEPP 64. Additional detail has been provided in response to Council's comments and the proposals consistency with SEPP 64 is reiterated and summarised below.</p> <p>The proposed signage is positioned on the podium and roof top areas of the commercial building and will enable a building marker above the metro station, signalling a key location with the Waterloo locality. Botany Road is a predominantly commercial corridor within the Innovation Corridor and City Fringe employment areas. The proposed signage for commercial office tenants is appropriate within this site context and considered compatible with the existing (Australian Technology Park) and future signage character (Botany Road Corridor).</p> <p>The proposed signages have been located to ensure they integrate with and subservient to the architectural design of the building. The signage will not impact on any key view corridors or detract from the architectural integrity of the built form.</p> <p>The detailed design of the signs within the signage zones will be subject of future applications.</p>
<i>State Environmental Planning Policy No. 65 (Design Quality Residential Apartment and Apartment Design Guide. (SEPP 65)</i>	Not applicable to this SSD DA.
<i>Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005</i>	<p>Cardno have prepared an addendum Visual Impact Analysis memo for the amended design which is provided at Appendix J. The VIA notes that the proposal as originally submitted was lower than the approved building envelope. The proposed amendments to the Building 1 (reducing the higher points of the building by 1 to 5.3 metres) will provide even less of an impact to close, medium and distant viewpoints established in the original assessment.</p> <p>Overall, the assessment outcomes, justification, mitigation measures and conclusions of the VIA submitted previously with SSD-10440 remains valid and the proposed amendments warrant support for a view perspective.</p>

Consideration	Response
	In addition, the proposal does not pose any impacts to the views from Sydney Harbour and other considerations noted in the SREP Sydney Harbour.
<i>Draft State Environmental Planning Policy (Environment)</i>	The assessment provided within the EIS remains applicable. The site continues to be defined within the Sydney Harbour Catchment and continues to not be located in any specific zones contemplated by the SREP. On this basis, the previous assessment of the general principles of the SREP remain relevant.
<i>Sydney Local Environmental Plan 2012</i>	The <i>Sydney Local Environmental Plan 2012 (SLEP 2012)</i> 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 Northern Precinct SSD.
WMQ Design and Amenity Guidelines (Revised)	Sydney Metro has revised the WMQ Design and Amenity Guidelines, in line with the Amended Concept SSD DA, which have guided the design of Building 1. The assessment and conclusions in the EIS remain unaffected by the proposed changes to the Northern Precinct SSD.
<i>Sydney Development Control Plan 2012</i>	<p>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.</p> <p>Notwithstanding this, an assessment of the proposed building/business identification signage zones and how they respond to the key objectives of the SDCP 2012 (Section 3.16) and the future character of the area is provided in Table 3. This assessment has been provided in response to the City of Sydney's comments with regards to the proposed top-of-building and podium signage zones.</p>
Environmental impacts	<p>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:</p> <ul style="list-style-type: none"> ▪ Wind, ▪ Solar access and overshadowing, ▪ Visual impact, ▪ Traffic and parking, ▪ Pedestrian movement ▪ Waste management, and ▪ Flooding. <p>Overall, the proposal does not result in any unacceptable impacts on adjoining / surrounding properties or the public domain with regards to the abovementioned matters.</p>
Social and Economic	The proposed amendments to the development primarily relate to the built form and massing design. As such, they do not compromise the assessment of social

Consideration	Response
	<p>and economic impacts provided within the EIS submitted with SSD-10440 and the accompanying CPTED Report prepared by Connely Walker (refer Appendix N of the EIS). In particular it is noted that the revised design provides improved 'access control' to the Raglan Walk fire stairs which are now internalised at ground level.</p> <p>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.</p>
Public Interest	<p>As outlined in the EIS submitted with SSD-10440 and further detailed in this RtS, the proposal remains in the public interest for the following reasons:</p> <ul style="list-style-type: none"> ▪ The proposal provides a large quantum of high-quality employment generating floor space above a metro station, encouraging public transport patronage and usability. ▪ The amended design further mitigates the perceived visual bulk and scale of the built form by further reducing the height and providing a more resolved design which improves view impacts and remains compatible with the character of both the streetscape and future development across the WMQ site and broader surrounds. ▪ The proposed use is permissible with consent and consistent with the objectives of the zoning provisions. ▪ The proposed development is consistent with the relevant applicable statutory planning policies and complies with the key objectives of the development controls for the site. ▪ The proposal will not result in any unacceptable environmental impacts on adjoining / surrounding properties or the public domain as detailed throughout this RtS and supporting documentation.
Site Suitability	<p>The proposed development remains suitable for the site for the reasons stated in the original concept approval SSD-9393.</p>

7.2. SUMMARY OF MITIGATION MEASURES (AS AMENDED)

The following section provides updated 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. For the most part, the mitigation measures previously outlined in the EIS for SSD-10440 remain relevant.

Table 7 Updated Mitigation Measures

Item	Potential Impact	Mitigation Measure
Wind Impact	<p>Adverse wind environment to outdoor areas in the OSD, including to private balconies, communal area and Cope Street Plaza.</p> <p>Potential for general and localised wind effects.</p>	<p>Maintain awnings detailed on the architectural drawings and tree planting outlined in the landscape design prepared by Aspect.</p> <p>Recommendation has therefore been made for the screening along the western and southern aspects of this terrace space to be increased in height to 2.5m above the terrace floor level. The inclusion of landscaping in the form of dense hedges adjacent to the glass line at this corner location will further enhance conditions for patrons. Installation of screening through the through site links to mitigate wind tunnel effects.</p>
Flooding	Potential flooding of the OSD.	<p>Comply with the recommendations and mitigation measures contained within the <i>Stormwater Management Strategy and Flood Impact Assessment</i> prepared by WSP dated 30 September 2020 (<i>Appendix O</i>) and <i>Flooding Technical Memo</i> prepared by WSP dated 15 February 2021 (<i>Appendix P</i>).</p> <ul style="list-style-type: none"> ▪ Comply with the minimum flood planning levels (i.e. above the PMF and 100 year + 500 mm flood event). ▪ Use flood compatible (waterproof) materials for the building at ground floor to avoid water infiltration to underground levels or lower areas. ▪ Prepare and implement a flood warning and evacuation plan to inform the residents and managers of the building on the procedures to adopt to in case of an emergency associated with flood risk.

8. 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 Northern 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 as the consent authority.

9. DISCLAIMER

This report is dated 9 April 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

AMENDED LANDSCAPE PLANS

APPENDIX D

AMENDED LANDSCAPE DESIGN REPORT

APPENDIX E

REVISED DESIGN INTEGRITY REPORT

APPENDIX F

AMENDED DESIGN GUIDELINES

APPENDIX G

PEDESTRIAN WIND ENVIRONMENT ASSESSMENT

APPENDIX H

PUBLIC BENEFIT OFFER LETTER

APPENDIX I

SOLAR ACCESS AND OVERSHADOWING ASSESSMENT

APPENDIX J

AMENDED VISUAL IMPACT ASSESSMENT

APPENDIX K

ESD TECHNICAL MEMO (SHADING DEVICES, SUSTAINABILITY STRATEGY RESPONSES)

APPENDIX L

FAÇADE DETAILING TECHNICAL MEMO (BUILDING 1 GLAZING)

APPENDIX M

SUPPLEMENTARY TRAFFIC AND TRANSPORT ASSESSMENT

APPENDIX N

PEDESTRIAN MODELLING MEMO

APPENDIX O

REVISED WASTE MANAGEMENT REPORT

APPENDIX P

FLOODING TECHNICAL MEMO

APPENDIX Q

CLAUSE 4.6 VARIATION REQUEST – ACTIVE STREET FRONTAGES

