PITT STREET NORTH METRO OVER STATION DEVELOPMENT ENVIRONMENTAL IMPACT STATEMENT

25 JUNE 2020
PREPARED FOR PITT STREET DEVELOPER NORTH PTY LTD

URBIS

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	Jacqueline Parker
Associate Director	Jayne Klein
Senior Consultant	Genevieve Beard
Project Code	P0017493
Report Number	*Final 25/6/2020*

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DECLARATION

SUBMISSION OF ENVIRONMENTAL IMPACT STATEMENT

This Environmental Impact Statement has been prepared in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulations 2000*.

Environmental Assessment prepared by:

Name	**Jacqueline Parker (Director)** Master of Urban Development and Design, University of NSW Bachelor of Planning (Hons 1), University of NSW **Jayne Klein (Associate Director)** Master of Resource and Environmental Planning, Massey University Bachelor of Planning, University of Auckland **Genevieve Beard (Senior Consultant)** Bachelor of Science, Sydney University Graduate Diploma of Development Planning, Curtin University
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Applicant and Land Details:

Applicant	Pitt Street Developer North Pty Ltd
Address	Level 19, 126 Phillip Street, Sydney NSW 2000
Land Details	Pitt Street Sydney (Lot 20 DP 1255509)
Project	Detailed State Significant Development Application for a Commercial over station development above the new Sydney Metro Pitt Street North Station.

Declaration:
I/We certify that the contents of the Environmental Impact Statement, to the best of our knowledge, has been prepared as follows:

- In accordance with the requirements of the Environmental Planning and Assessment Act 1979, Environmental Planning and Assessment Regulation 2000, and State Environmental Planning Policy (State and Regional Development) 2011;
- Containing all available information that is relevant to the environmental assessment of the development, activity or infrastructure to which the statement relates; and
- The information contained in this report is true in all material particulars and is not misleading.

Name	**Jacqueline Parker, Director**	**Jayne Klein, Associate Director**	**Genevieve Beard, Senior Consultant**
Signature			
Date	25 June 2020	25 June 2020	25 June 2020

GLOSSARY AND ABBREVIATIONS

Abbreviation	Meaning
AHD	Australian Height Datum
BCA	Building Code of Australia
CIV	Capital Investment Value
CMP	Construction Management Plan
Concept DA	A Concept DA is a staged application often referred to as a 'Stage 1' DA, submitted in accordance with Division 4.4 of the EP&A Act.
Consent	Development Consent
Council	City of Sydney Council
CPTED	Crime Prevention Through Environmental Design
CSMP	Construction and Site Management Plan
CSSI	Critical State Significant Infrastructure
CTMP	Construction Traffic Management Plan
DA	Development Application
DPE	NSW Department of Planning and Environment (title of NSW Department of Planning, Industry and Environment prior to 1 July 2019)
DPIE	NSW Department of Planning, Industry and Environment
DRP	Design Review Panel
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPA	NSW Environment Protection Authority
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Cth)
ESD	Ecologically Sustainable Design
GANSW	NSW Government Architect's Office
GFA	Gross Floor Area
HIS	Heritage Impact Statement

Abbreviation	Meaning
IAP	Interchange Access Plan
LGA	Local Government Area
NCC	National Construction Code
SDCP	*Sydney Development Control Plan 2012*
SLEP	*Sydney Local Environmental Plan 2012*
OSD	Over Station Development
PIR	Preferred Infrastructure Report
RMS	Roads and Maritime Services
SEARs	Secretary's Environmental Assessment Requirements
SDPP	Station Design and Precinct Plan
SEPP	State Environmental Planning Policy
SEPP 55	*State Environmental Planning Policy No.55 – Remediation of Land*
SEPP 64	*State Environmental Planning Policy No. 64 – Advertising and Signage*
SRD SEPP	*State Environmental Planning Policy (State and Regional Development) 2011*
SSD	State Significant Development
Urbis	Urbis Pty Ltd
WSUD	Water Sensitive Urban Design

EXECUTIVE SUMMARY

This Environmental Impact Statement (**EIS**) has been prepared to accompany a detailed State Significant Development (**SSD**) development application (**DA**) for a commercial over station development (**OSD**) above the Sydney Metro Pitt Street North Station.

This EIS should be read in conjunction with the Secretary's Environmental Assessment Requirements (**SEARs**) dated 25 October 2019 and included at **Appendix A**, and the supporting technical documents provided at **Appendix B** – **Appendix GG**.

This EIS has been prepared in accordance with and meets the minimum requirements of clauses 6 and 7 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (**EP&A Regulation**) and contains an assessment of the proposal against the relevant considerations under Section 4.15 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**).

SYDNEY METRO

Sydney Metro is Australia's biggest public transport program. A new standalone railway, this 21st century network will revolutionise the way Sydney travels.

There are four core components:

a) **Sydney Metro Northwest** (formerly the 36km North West Rail Link)

This project is now complete and passenger services commenced in May 2019 between Rouse Hill and Chatswood, with a metro train every four minutes in the peak. The project was delivered on time and $1 billion under budget.

b) **Sydney Metro City & Southwest**

Sydney Metro City & Southwest project includes a new 30km metro line extending metro rail from the end of Metro Northwest at Chatswood, under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the ultimate capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest will deliver new metro stations at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Waterloo and new underground metro platforms at Central Station. In addition, it will upgrade and convert all 11 stations between Sydenham and Bankstown to metro standards.

In 2024, customers will benefit from a new fully air conditioned Sydney Metro train every four minutes in the peak in each direction with lifts, level platforms and platform screen doors for safety, accessibility and increased security.

c) **Sydney Metro West**

Sydney Metro West is a new underground railway connecting Greater Parramatta and the Sydney CBD. This once-in-a-century infrastructure investment will transform Sydney for generations to come, doubling rail capacity between these two areas, linking new communities to rail services and supporting employment growth and housing supply between the two CBDs.

The locations of seven proposed metro stations have been confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock and The Bays.

The NSW Government is assessing an optional station at Pyrmont and further planning is underway to determine the location of a new metro station in the Sydney CBD.

d) **Sydney Metro - Western Sydney Airport**

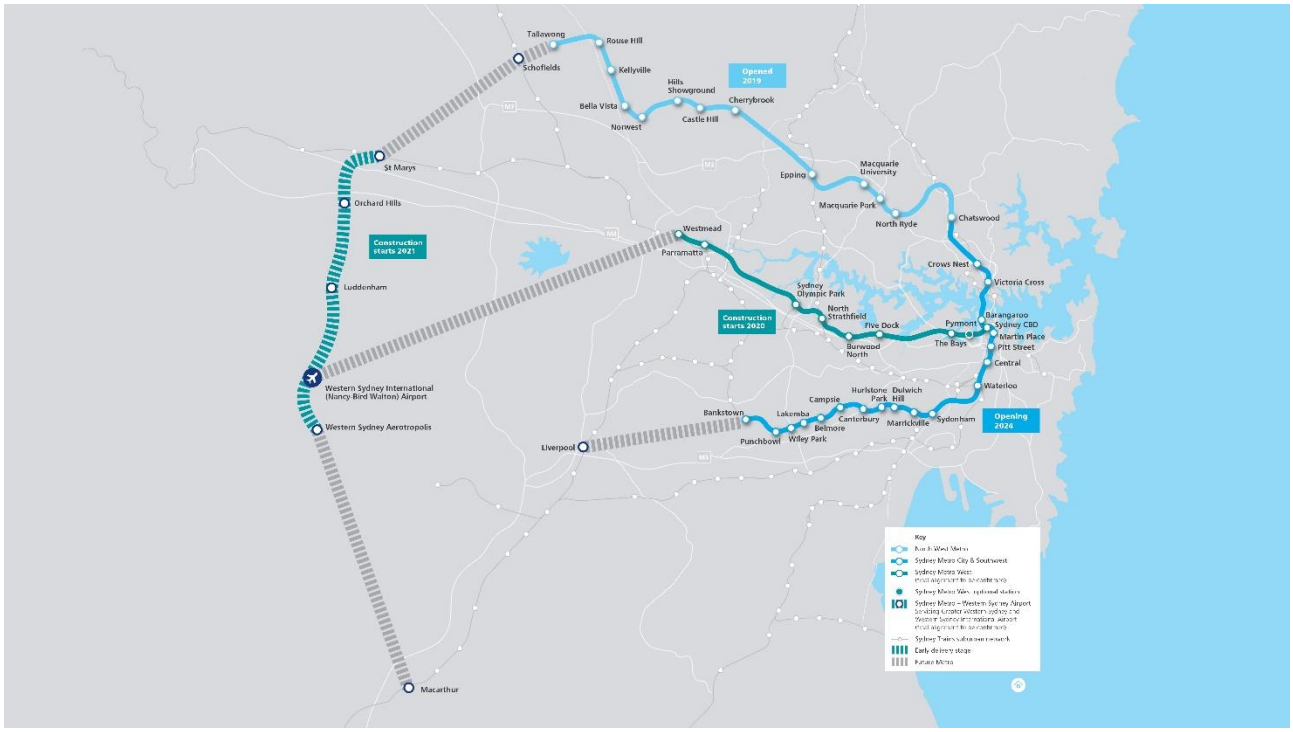
Metro rail will also service Greater Western Sydney and the new Western Sydney International (Nancy Bird Walton) Airport. The new railway line will become the transport spine for the Western Parkland City's growth for generations to come, connecting communities and travellers with the rest of Sydney's public transport system with a fast, safe and easy metro service. The Australian and NSW governments are equal partners in the delivery of this new railway.

Additional information can be obtained from the Sydney Metro website at www.sydneymetro.info. The Sydney Metro project is illustrated in **Figure 1**.

On 9 January 2017, the Minister for Planning approved the Sydney Metro City & Southwest - Chatswood to Sydenham project as a Critical State Significant Infrastructure project (reference SSI 15_7400) (**CSSI approval**). The terms of the CSSI approval includes all works required to construct the Sydney Metro Pitt Street North Station, including the demolition of existing buildings and structures on the sites. The CSSI approval also includes construction of below and above ground improvements associated with the metro station structure within the 'metro box' envelope.

With regards to CSSI related works, any changes to the 'metro box envelope' and public domain will be pursued in satisfaction of the CSSI conditions of approval and do not form part of the scope of this SSD DA for the OSD.

Figure 1 – Sydney Metro Alignment Map



Source: Sydney Metro

THE SITE

The site is legally described as Lot 20 DP1255509 and comprises the southern extent of the Sydney CBD block bounded by Pitt Street, Park Street and Castlereagh Street.

References within the report to the Sydney Metro Pitt Street North Station site relate to the Sydney Metro Pitt Street Station northern site only. This detailed SSD DA does not relate to the Sydney Metro Pitt Street Station southern site located on south-east corner of the Bathurst Street and Pitt Street intersection.

BACKGROUND

CCSI Approval (SSI 15_7400)

On 9 January 2017, the Minister for Planning approved the Sydney Metro City & Southwest – Chatswood to Sydenham project as a Critical State Significant Infrastructure project (reference SSI 15_7400) (**CSSI approval).** The CSSI approval granted consent for:

> *Construction and operation of a metro rail line, approximately 16.5 kilometres long (of which approximately 15.5 kilometres is located in underground rail tunnels) between Chatswood*

and Sydenham, including the construction of a tunnel under Sydney Harbour, links with the existing rail network, seven metro stations, and associated ancillary infrastructure.

The terms of the CSSI approval include all works required to construct each of the Sydney Metro stations, including the Pitt Street Station. Except to the extent described in the EIS or Preferred Infrastructure Report (**PIR**) submitted with the CSSI application, any OSD buildings and uses do not form part of the CSSI approval and are subject to this SSD DA.

Concept SSD DA (SSD-8875)

The Minister for Planning granted development consent to the Concept SSD (SSD-8875) on 25 June 2019. Concept approval was granted for:

- A maximum building envelope, including street wall and setbacks for the over station development;
- A maximum building height of RL 188.74 metres;
- A maximum gross floor area of 50,310m² (including station floor space);
- Podium level car parking for a maximum of 50 parking spaces; and
- Conceptual land use for either one of a mixed-use or commercial scheme (not both).

THE PROPOSAL

This report has been prepared on behalf of Pitt Street Developer North Pty Ltd which is part of the Oxford Properties group of companies, the applicant of the Detailed SSD DA (SSD-10375). Following the completion of a competitive bid process, Sydney Metro appointed Pitt Street Developer North Pty Ltd as the preferred development partner to deliver the Pitt Street North OSD.

The proposal includes construction of a commercial building including retail premises above the Sydney Metro Pitt Street station northern portal – otherwise known as the Pitt Street North OSD.

In summary the Detailed SSD DA (SSD-10375) seeks development consent for:

- The design, construction, and operation of a new commercial tower with a maximum building height of RL 176.8 (39 levels) including ground and plant levels;
- A total of 55,743m² GFA, including station floor space;
- Private landscaped terraces on levels 10 and 11 to support the commercial OSD use;
- Integration with the approved CSSI proposal including though not limited to:
    - Structures, mechanical and electronic systems, and services; and
    - Vertical transfers.
- Use of spaces within the CSSI ‘metro box’ building envelope for the purposes of:
    - Retail tenancies;
    - Commercial lobby and amenities including end of trip facilities;
    - 40 car parking spaces within the podium relating to the OSD commercial use;
    - Loading and service access; and
    - Pedestrian entrances to the OSD from Pitt Street and Castlereagh Street.
- Fit-out of spaces within the podium for OSD purposes, with the exception of the future tenant spaces (office and retail);
- Provision and augmentation of utilities and services (including within basement level 1);
- Provision of signage zones; and
- Stratum subdivision (staged) between metro station and OSD uses.

It is important to identify the delineation between the works included within the CSSI approval and the components sought for approval under the Detailed SSD DA for the OSD. The CSSI approval separately grants consent for the construction of the 'metro box', including the lower levels of the podium and station structures, including all public domain works. These components are included throughout the SSD documentation for information only. No consent is sought for construction of those components which will be constructed pursuant to the CSSI approval for such works.

Figure 2 – Artist's Impression of proposed development (Park Street ground plane, looking north west)

Source: Foster + Partners

Figure 3 – Artist's Impression of proposed development (aerial view, looking east)

Source: Foster + Partners

Proposed Concurrent Modification Application

A Section 4.55(2) modification application to SSD-8875 is concurrently lodged with this Detailed SSD DA to:

- Amend the concept building envelope plans approved on 25 June 2019 by the Minister under application number SSD 8875 to modify the podium envelope
  - at the Castlereagh Street façade to facilitate better built form relationship with the scale of the adjacent Masonic Building;
  - at the Pitt Street and Park Street façades to facilitate better built form relationship with the scale of the adjacent National Building;
- Amend condition A15 and A17 to permit the protrusion beyond the building envelope for the purpose of sunshading elements, planted elements and balustrades;
- Increase in the total GFA across the site to 55,743sqm (including station floorspace); and
- Replace Concept Approval envelope plans to show interrelationship of proposed OSD floor space with station floor space; and
- Make minor amendments to the Design Guidelines in respect to podium heights and tower setbacks.

The proposed design which incorporates the additional GFA, the modified building envelope and sun shading devices has been supported through the design excellence process.

The relevant Section 4.55(2) modification application is lodged concurrently with this Detailed SSD DA for the OSD. The proposed development is consistent with the Concept SSD DA (SSD- 8875) as proposed to be modified by the concurrent Section 4.55(2) modification application.

PROJECT NEEDS AND BENEFITS

Pitt Street metro station is a key new station on the Sydney Metro network. This station will provide a new focal point for the Sydney CBD, extending the rail catchment south within the Sydney CBD. The station will also improve access to Sydney's highly skilled job market and education facilities and improve pedestrian access in the area.

This proposal capitalises on the introduction of Sydney Metro by providing a commercial tower integrated with the future Pitt Street Station. The proposed commercial uses in this location will strengthen Central Sydney's role as a primary office market in the international sphere, and will align with a key action in the *Eastern City District Plan* (2018) by maximising the land use opportunities provided by the new Pitt Street metro station.

The primary objective of the proposal is to provide additional commercial floor space within the Sydney CBD that will leverage from the significant NSW Government investment into Sydney Metro and specifically the new Pitt Street North metro station. In achieving this objective, the proposal also seeks to achieve the following project objectives:

- Deliver a landmark architectural building commensurate with the objectives of Sydney Metro Pitt Street – to leave an enduring legacy with a commitment to enhance the place making for the surrounding precinct;
- Enhance the site and its context through the development of a building that has been endorsed as meeting Sydney Metro Design Excellence Evaluation Panel (**DEEP**) and Sydney Metro Design Review Panel (**DRP**) requirements;
- Comply with the building height control for the site and the height envelope set by the sun access plane for Hyde Park;
- Use materiality, detailing and colours that are sympathetic to the two adjacent heritage buildings and general context of the area;
- Being part of a fully integrated transport system;
- Design a podium which offers retail and commercial opportunities;
- Improve activation and amenity of Central Sydney CBD outside of typical business hours, notably contributing to an active and safe public domain on weekends and in evenings; and
- Integrate seamlessly with station and precinct design delivered under the CSSI approval.

CONSULTATION

To inform the detailed design of the development, consultation has been undertaken with the local community, government agencies including though not limited to City of Sydney, Fire and Rescue NSW, Sydney Metro, NSW Police, and surrounding landowners/occupiers of neighbouring business and residences prior to the lodgement of the detailed SSD DA.

Various strategies were implemented to ensure collaborative community involvement in the project, including emails to stakeholders, stakeholder briefings and phone call sessions.

Feedback received through the consultation process has informed the detailed design of the proposed OSD and has been taken into consideration by the developer as it relates to matters within the scope of the CSSI approval (including, for instance, the site layout, building positioning, Sydney Metro information, and public domain design).

PLANNING FRAMEWORK

As the proposal is for the purposes of a 'commercial premises' associated with railway infrastructure and has a Capital Investment Value of more than $30 million, it is classified as SSD pursuant to clause 19(2), Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011*. The Minister for Planning and Public Spaces, or their delegate, is the consent authority for the SSD DA and the application is lodged with the NSW Department of Planning, Industry and Environment (**DPIE**) for assessment.

The proposal will generate a total of approximately 590-620 full time equivalent (**FTE**) construction jobs. Pitt Street North OSD provides a unique opportunity to deliver a premium office tower above a Sydney Metro station, contributing to Sydney's status as a global city. The intent is to provide an exemplar development with direct connection to Sydney's new high-speed Metro network and proximity to housing and education within Central Sydney.

This EIS has been prepared to accompany the detailed SSD DA which seeks consent for the proposal, in accordance with section 4.4 of the EP&A Act and the concept approval (SSD-8875). A section 4.55(2) modification to SSD-8875 will be concurrently lodged to increase the permissible GFA, modify the building envelope and street wall height along Castlereagh and Pitt Streets and allow minor penetrations to the building envelope.

KEY PLANNING ASSESSMENT

This EIS has addressed the required conditions of the Stage 1 concept approval (SSD-8875), the SEARs issued for the development and includes an assessment against the relevant environmental planning instruments, policies, and guidelines. This EIS demonstrates that the proposed development does not result in any significant departures from applicable controls, or unreasonable environmental effects.

The general and key impacts resulting from the proposed development are outlined in detail within the body of the EIS and accompanying specialist reports. Key impacts resulting from the proposed development include:

- Ensuring the achievement of design excellence through compliance with the approved Design Excellence Strategy and incorporating feedback from the independent Design Review Panel chaired by the NSW Government Architect.
- Delivering an OSD that is integrated fully with the metro station entrance and works being delivered via the CSSI approval.
- The proposed building has been designed to provide an appropriate response to the surrounding context, while also enabling the delivery of a high-quality development at the site. The proposal includes a definitive podium element, which establishes and integrates with the station, and reinforces the established street frontage height surrounding the site.
- The visual impact of the development, in the context of the surrounding skyline, has been assessed from a number of key vantage points around Inner and Central Sydney. In this assessment, the building has been imposed within the existing and forthcoming building form context of the site, in order to confirm the cumulative impact of the development on the Sydney skyline. This assessment has concluded that the visual impact of the development would be low in nature, with the proposed building being well suited to the surrounding context. Pitt Street North OSD also does not interrupt any key public view corridors across the Sydney CBD.
- The maintenance of solar access to Hyde Park and other key public open spaces (Town hall and future Sydney Square) has been a central element in the development of the proposal. The proposed development has been designed to comply with the sun access plane controls of the SLEP 2012, with the specific intention of reducing the solar access impact to Hyde Park above and beyond that required under the SLEP 2012.
- Heritage impacts have been assessed as part of this process, given the site context which comprises a number of heritage items interspersed between newer developments as is common throughout the Sydney CBD. This includes specific analysis of the impacts of the proposal on the National Building and NSW Masonic Club which are both adjacent to the development. The Heritage Impact Statement provided as part of this SSD DA confirms that the proposal has incorporated the series of key recommendations of the Concept DA and Design Guidelines. They relate to the treatment of the proposals façade against the adjacent National Building and NSW Masonic Club, as well as the general heritage character of Castlereagh Street and Pitt Street.
- In regard to traffic generation, by comparison to the development previously located at the site prior to station construction, the proposed development will have an overall reduction in traffic generation. The proposal also makes use of unique vehicular access arrangements, comprising of a managed loading dock at the ground level as well as a car lift to the various car spaces above the ground level. This has been demonstrated to not result in any adverse queueing, if managed appropriately.

A Loading Dock Management Plan will be prepared to manage delivery and service vehicle movements, and construction traffic management to prevent pedestrian conflicts.

- An assessment of pedestrian traffic impacts has been undertaken which determines that the pedestrian flows resulting from the OSD are considered to be minor in the context of the overall integrated station development. Pedestrian management during construction is outlined in the Construction Management Plan and the Green Travel Plan will ensure potential conflicts between pedestrians, cyclists and vehicles are minimised during operation.
- Ensuring the proposed building façade does not cause unreasonable or adverse solar reflectivity to pedestrians and motorists.
- Delivering a safe and secure development that adheres to Crime Prevention through Environmental Design (CPTED) Principles, to be further refined during the detailed design of the proposal and concurrent CSSI approval works.
- Potential acoustic and vibration impacts to and from the development during the construction and operation of the OSD have been identified in this assessment. In regard to noise intrusion into the future OSD, impacts can be sufficiently mitigated and the proposal is capable of achieving compliance with the relevant acoustic criteria having regard to the Central Sydney context of the site, the proposed future land use and the potential for impacts from station operations.
- The achievement of Ecologically Sustainable Development through achievement of the targeted ratings required by the Concept SSD DA. The project is targeting a 6 Star Green Star Design and As-Built v1.3 rating and to exceed NABERS minimum compliance requirements for energy and water, including a 5.5 Star NABERS Energy Base Building rating; and 3.5 Star NABERS Water Whole Building rating with aspirational 4-Star target.
- Minor augmentations required to connect into existing infrastructure services. Including managing stormwater run-off across the site through the detailed design and concurrent CSSI approval works.
- Managing air quality so that it is not unreasonably diminished as a result of construction impacts.
- Delivering appropriate management (and reduction) of waste during the construction and operational phases of the development.
- Ensuring the development complies with the required building standards including those relating to the National Construction Code, accessibility standards and fire safety standards.
- Ensuring the proposed maximum height of the development does not unreasonably or adversely impact protected airspace.
- Signage zones are proposed as part of the SSD application, with examples of signage which could be provided at the site demonstrated at **Appendix E1** within the Architectural Design Report. The signage zones have been integrated into the building design and are typical of the surrounding Central Sydney context.
- Consideration of any cumulative impacts associated with nearby development and existing uses.
- Delivering a socially and economically sound development that is considered in the public interest.

In considering each of the above key planning issues and potential impacts associated with the development, the EIS outlines the proposed mitigation measures to address each of these matters. Following the application of each of the mitigation measures, only three residual risks are identified that have a risk profile of ‘medium’ or greater including:

- Impact on adjoining heritage items.
- Adverse external noise conditions to surrounding development during construction.
- Additional overshadowing of adjoining buildings.

Each of these outstanding impacts have been addressed within this EIS.

Further, whilst adverse noise conditions are anticipated during the construction of the proposed development this impact is to be managed through compliance with the conditions of the Construction Management Plan

and typical construction methodology for mitigation of acoustic and vibration impacts to surrounding development.

CONCLUSION AND JUSTIFICATION

Overall, the proposed development sought within the Detailed SSD DA is considered appropriate for the site and warrants approval for the following reasons:

- The proposal contributes to the achievement of the objectives for development within the Central Sydney CBD as outlined within the relevant strategic plans and policies.
- The proposal results in an orderly and economic use of the land that leverages significant NSW Government investment in public transport to the site, specifically Sydney Metro.
- The proposed supports 54,651m^2 of new **commercial** GFA which is capable of contributing to an estimated 3,500-4,000 new operational FTE jobs which will contribute to the employment targets of the Eastern City District Plan.

The proposal satisfies the applicable State planning policies, and relevant environmental planning instruments that apply to the site:

- The proposed uses are permitted with consent and meet the objectives of the B8 Metropolitan Centre zone in Sydney Local Environmental Plan 2012 (SLEP 2012).
- The proposal does not create a net additional impact to protected public places including Hyde Park zoned RE1 Public Recreation in SLEP 2012.
- The proposal complies with the maximum allowable car parking spaces for the site under the SLEP 2012 and conditions of the Concept SSD DA.
- The proposed development complies with the sun access planes applicable to the site under SLEP 2012.
- The proposal exceeds the ESD targets established for the site under the Concept DA.

The proposal will not have any unacceptable environmental impacts, as follows:

- The proposal has no unacceptable traffic impacts.
- The proposal minimises pedestrian and vehicle conflicts, maximising legibility and accessibility to the Sydney Metro Pitt Street Station northern entrance.
- The proposal is sympathetic to the heritage items in the vicinity of the site, including to the adjacent NSW Masonic Club building and National Building.
- The proposal achieves design excellence as outlined through the Sydney Metro design review and design excellence process.
- The proposal does not result in any unacceptable overshadowing of key public places.
- The proposed detailed design of the OSD has considered and is integrated with, the detailed design of the Sydney Metro Pitt Street North Station and its related works including the public domain surrounding the site and construction of the development up to the transfer slab between levels 4 and 5.
- The proposal addresses and satisfies the conditions of the Concept SSD DA (SSD-8875).
- The proposal satisfies the SEARs as demonstrated in this EIS and accompanying specialist reports.

In view of the above, we submit that the proposal is in the public interest and that the SSD DA should be approved subject to appropriate conditions.

1. INTRODUCTION

This Environmental Impact Statement (**EIS**) has been prepared to accompany a 'Detailed' State Significant Development (**SSD**) development application (**DA**) which seeks consent for a commercial over station development (**OSD**) above the new Sydney Metro Pitt Street North Station.

This report has been prepared by Urbis Pty Ltd on behalf of Pitt Street Developer North Pty Ltd which is part of the Oxford Properties group of companies, the applicant of the Detailed SSD DA (SSD-10375). Following the completion of a competitive bid process, Sydney Metro appointed Pitt Street Developer North Pty Ltd as the preferred development partner to deliver the Pitt Street North Station OSD.

Lodgement of this Detailed SSD DA (SSD-10375) follows the approval of a Concept SSD DA (SSD-8875) granted by the Minister for Planning and Public Spaces on 25 June 2019. In order to achieve the project outcomes a section 4.55(2) modification to the concept approval is concurrently submitted with the Detailed SSD DA. The Section 4.55(2) modification application seeks to modify the building envelope generally above the current podium level, increase the maximum gross floor area (GFA) of the development, and permit minor penetrations of the building envelope for the purposes of architectural features and sun shading elements.

This EIS is submitted to the NSW Department of Planning, Industry and Environment (**DPIE**) pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**). The Minister for Planning and Public Spaces, or their delegate, is the consent authority for the Detailed SSD DA.

This report has been prepared in response to the requirements contained within the Secretary's Environmental Assessment Requirements (**SEARs**) dated 25 October 2019 included within **Appendix A**, and should be read in conjunction with the supporting documents provided at **Appendix B** - **Appendix GG**.

1.1. PROJECT OVERVIEW

The Detailed SSD DA seeks approval for the detailed design, construction and operation of a new 39 level commercial building above the new Sydney Metro Pitt Street northern station entrance. The proposed development also includes floorspace for the provision of retail uses within the lower levels of the development as well as lobby, commercial facilities, bicycle and other storage, plant room etc, and which are to be constructed in accordance with the terms of Sydney Metro project approval (CSSI approval).

The proposed commercial building will provide additional premium office floor space in the Central Sydney CBD, in addition to retail tenancies to enliven the site and surrounds during and outside typical business hours. The proposal will accommodate a commercial building within the Central Sydney CBD and optimise the NSW Government's major investment in public transport infrastructure.

The detailed design of the commercial OSD tower has been the subject of design development, testing and ongoing review from various government and independent parties such as the Design Review Panel (**DRP**) to ensure that it achieves the highest standard in architectural design while providing a functional interface delivered with Sydney Metro.

In summary the Detailed SSD DA (SSD-10375) seeks development consent for:

- The design, construction, and operation of a new commercial tower with a maximum building height of RL 176.8 (39 levels) including ground and plant levels;
- A total of 55,743m² GFA, including station floor space;
- Private landscaped terraces on levels 10 and 11 to support the commercial OSD use;
- Integration with the approved CSSI proposal including though not limited to:
    - Structures, mechanical and electronic systems, and services; and
    - Vertical transfers.
- Use of spaces within the CSSI 'metro box' building envelope for the purposes of:
    - Retail tenancies;
    - Commercial lobby and amenities including end of trip facilities;

- 40 car parking spaces within the podium relating to the OSD commercial use;
- Loading and service access; and
- Pedestrian entrances to the OSD from Pitt Street and Castlereagh Street.

- Fit-out of spaces within the podium for OSD purposes, with the exception of the future tenant spaces (office and retail);
- Provision and augmentation of utilities and services (including within basement level 1);
- Provision of signage zones; and
- Stratum subdivision (staged) between metro station and OSD uses.

Images of the proposed development at Park Street and Pitt Street are included at Figure 4.

Figure 4 – Artist's impressions of proposed development at ground plane

Picture 1 – Sydney Metro Pitt Street North Station entrance, viewed from south-east along Park Street

Picture 2 – Sydney Metro Pitt Street North Station entrance, viewed from west along Park Street

Source: Foster + Partners

1.2. PROJECT OBJECTIVES

The primary objective of the proposal is to deliver on a unique opportunity to develop a new commercial development above a Sydney Metro station, providing new premium office space in the precinct which results in a landmark precedent for the commercial office sector in Australia. The intent is to provide an exemplar development with direct connection to Sydney's new high-speed rail network and proximity to housing and education within Central Sydney. In achieving this objective, the proposal also seeks to achieve the following project specific objectives:

- A landmark architectural building commensurate with the objectives of Sydney Metro Pitt Street - to leave an enduring legacy with a commitment to enhance the place making for the surrounding precinct;
- Enhance the site and its context through the development of a building that has been endorsed as meeting Sydney Metro Design Excellence Evaluation Panel (**DEEP**) and Sydney Metro Design Review Panel (**DRP**) requirements (refer Design Review Panel Endorsement at **Appendix H**);
- Comply with the building height control for the site and the height envelope set by the sun access plane for Hyde Park West;
- Use materiality, detailing and colours that are sympathetic to the two adjacent heritage buildings and general context of the area;
- Be integrated with the metro rail transport system;
- Design a podium which offers retail and commercial opportunities; and
- Improve activation and amenity of Central Sydney CBD outside of typical business hours, notably contributing to an active and safe public domain on weekends and in evenings.

1.3. STRATEGIC NEED

As identified in the *Greater Sydney Region Plan* (2018), Sydney's population is forecast to grow to eight million by 2056. Sydney Metro responds to the transport demand that will accompany this growth with its plan to deliver a new standalone railway with 31 stations and more than 66 kilometres of new rail. Once completed, Sydney Metro, along with other signalling and infrastructure upgrades across the existing networks, will increase the capacity of Sydney's train services from approximately 120 per hour today up to 200 services beyond 2024 – a 60 per cent increase resulting in an extra 100,000 train customers per hour in the peak. The project has been endorsed by the NSW Government as a key component of *Sydney's Rail Future: Modernising Sydney's Trains*.

The NSW Government's *Future Transport Strategy 2056* guides transport over the longer term, delivered through a series of services and infrastructure plans. Pitt Street Station is a key new station on the Sydney Metro network which feeds into the framework for the transport system and customer mobility in NSW. This station will provide a new focal point for the Sydney CBD, extending the rail catchment to the south. The station will also improve access to Central Sydney's highly skilled job market and education facilities and improve pedestrian access in the area.

This proposal capitalises on the introduction of Sydney Metro by providing for a commercial tower integrated with the future Pitt Street North Station. Additional retail uses in this location will strengthen Central Sydney's role as nurturing quality lifestyles through well-designed office spaces close to transport and other infrastructure and will align with a key action in the *Eastern City District Plan* (2018) by maximising the land use opportunities provided by the new Pitt Street Station.

The Detailed SSD DA proposal also responds to the need to provide additional employment capacity and sustainable development, renewal and design. As detailed in *Sustainable Sydney 2030* (2019), the City of Sydney Council is seeking to make the City '*more green, global and connected'*. The Sydney Metro Pitt Street North OSD will deliver sustainable transport options whilst contributing to the supply of commercial office floor space and employment.

The detailed proposal and associated modification application to the concept approval responds positively to this issue by providing the framework for a premium commercial office building in an ideal location directly above future high-frequency public transport. The consistency of the proposal with key strategic plans, strategies and policies is discussed in detail in **Section 6** of this EIS.

1.4. ANALYSIS OF FEASIBLE ALTERNATIVES

This section discusses the consideration of feasible alternatives to the carrying out of the development as per clause 7(1)(c), Part 3, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation). Four options for the proposal could be considered to address the project objectives and site constraints and opportunities, which include:

- **Scenario 1** – 'do nothing';
- **Scenario 2** – alternative land use;
- **Scenario 3** – alternative location; and
- **Scenario 4** – integrated OSD commercial tower (the proposal).

1.4.1. 'Do Nothing' Scenario

The 'do nothing' scenario, involving no OSD above the approved Pitt Street North metro station entrance, is not a feasible development option for the site. OSD forms a key component of the overall Sydney Metro project which Transport for NSW is committed to delivering.

It is also noted that demolition of the existing structures was approved under the CSSI approval and has been completed on the site. Construction works are currently underway on site for the delivery of the Pitt Street Station elements approved under the CSSI approval.

No future OSD development on the site would provide minimal placemaking benefits and result in a net loss of floor space on the site. Ultimately a 'do nothing' scenario constitutes gross under-development of a valuable site within Central Sydney CBD.

In addition, a 'do nothing' scenario could create further issues should the site be developed separately in the future. A separate, future, development would likely result in a less integrated development that does not maximise the opportunities of new transport infrastructure.

1.4.2. Alternative Land Use Scenario

The 'alternative land use' scenario involves proposing an alternative land use or a mix of land uses within the Pitt Street North OSD. A variety of alternative land uses were investigated including residential, retail, student accommodation, tourist and visitor accommodation and a mix of the above.

Each use was tested against a set of key criteria as follows:

- appropriateness of the development within the locational context of the site;
- adequacy of ground floor space for entry and lobby facilities;
- adequacy of car parking and loading provision;
- adequacy of vertical lifting;
- floor plate and size of each land use;
- impact on adjacent properties and the public domain; and
- ability for the development to take advantage of the opportunities afforded by Sydney Metro.

From a development feasibility perspective, the most viable alternative land use, other than a commercial tower as currently proposed, was to develop the site for the purposes of a mixed-use tower with a tourist and visitor accommodation component. This alternative would result in the provision of a building which would comprise substantial ground floor loading spaces, including on street visitor arrival facilities providing activation of the surrounding area through all hours of the day and night, albeit at a generally lower rate than more intensive uses.

Tourist and visitor accommodation is listed as a recommended development type in various strategic documents, including the *Eastern City District Plan* (2018) and *Sydney Metro Planning Study* (2016) and would contribute to growing the capacity of the wider visitor economy and the public profile of Sydney as a major tourist destination as discussed in **Section 6** of this EIS. However, in terms of integration with the Pitt Street North Station, the tourist and visitor accommodation use poses additional challenges and constraints,

in particular impacts on the busy pedestrian and vehicular transport network and amenity impacts on adjoining land uses.

Whilst a mixed-use tower with a tourist and visitor accommodation component would facilitate employment generation and patronage of Sydney Metro infrastructure by both workers and visitors, the benefits of this use would not deliver or outweigh the wider benefits of a large-scale commercial building on the site.

A mixed-use tower with visitor accommodation component would not assist in strengthening the role of Central Sydney as the key centre of business in Australia and a global city. As such, pursuing an alternative land use within the Pitt Street North Station OSD is considered a less preferred alternative form of development for the site. Refer Retail and Commercial Office Strategy at **Appendix FF**.

1.4.3. Alternative Location Scenario

A third option for the proposal involves proposing the development at an alternative location. This would result in the development of a commercial tower that would otherwise not be classified as SSD due to it no longer being associated with a rail corridor. This option would be inconsistent with NSW transport policy and State and local strategic objectives for the site and Sydney CBD.

The alternative location scenario would not include the significant development of a commercial tower being developed above the Sydney Metro Pitt Street North Station entrance, within the commercial core of Sydney CBD. The opportunity cost to the local community and broader metropolitan region would be significant and key economic, transport and social benefits presented by the proposal would not be realised.

1.4.4. Integrated OSD Commercial Tower

The proposed development will provide an integrated station and OSD outcome which aligns with the approved Concept SSD DA (SSD-8875). This solution is considered the most suitable option for the site as it delivers:

A revitalised public realm – The proposal integrates and interacts with the future Sydney Metro Pitt Street Station northern entrance through activated ground floor and podium levels with various retail spaces, and direct pedestrian access to the metro station concourse.

Alignment with strategic intentions – The proposal addresses objectives for the B8 Metropolitan Centre Zone contained within the Sydney Local Environmental Plan 2012 (SLEP) (discussed in detail in **Section 7.11.1**). The proposal provides a wide range of retail uses and commercial office floor space in a highly accessible location to optimise public transport patronage. It also adheres to the strategic vision for the site and surrounds, aligning with various strategic documents such as Sustainable Sydney 2030 and the Sydney Metro Planning Study (2016).

Connected transit orientated development (TOD) – The proposal includes appropriate provision for integration to elements of the Sydney Pitt Street North Station entrance. The proposal contributes towards wider connection to other services of Sydney Metro and improved legibility through the Sydney CBD whilst encouraging active transport modes.

Better customer experience – rationalisation of building entry and service points, allowing clear articulation of building uses, and delivery of better public domain and street activation outcomes for the extensive street frontages of the site compared to separate use schemes.

Only new significant office tower in midtown – providing a vibrant workspace to positively influence the health, wellbeing and productivity of workers.

Locally relevant and resonant – with the existing commercial use of midtown, building on key commercial spaces of Citigroup and ANZ.

Longevity of ownership (institutional owner) – as compared to complex ownership structures in alternative uses (residential).

Consideration of the building form and massing found that a dominant single-use provides a simpler and considered ground plane, providing:

- No compromise to the station entrance.
- The station entrance as the focus on the longest frontage.
- The tower entry along Pitt Street with a second access on Park Street, complementing the ANZ and Citi towers.

- The loading dock and car park entry being retained on Castlereagh Street, providing separation from station and tower entries.
- Activation on the Park Street corners providing additional place making benefits.

1.5. REPORT STRUCTURE

This EIS provides the following:

- A description of the site and surrounding context, including identification of the site, existing development on the site and surrounding development;
- A detailed description of the consultation undertaken with respect to the proposal;
- A detailed description of the proposed development;
- An assessment of the proposed development against the relevant strategic and statutory planning controls;
- An assessment of the key planning considerations and impacts generated by the proposed development; and
- An assessment of environmental risk and mitigation measures.

1.6. SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

A request was made to the Minister for the issuance of SEARs, pursuant to clause 3(1), Part 2, Schedule 2 of the Regulation. SEARs were subsequently issued on 25 October 2019 (**Appendix A**) and have informed the preparation of this EIS and supporting technical documents. **Table 1** provides a summary of the SEARs and identifies the section of this EIS where the relevant requirement is addressed.

Table 1 – Secretary's Environmental Assessment Requirements

Description / Requirement	Reference
GENERAL REQUIREMENTS	
The Environmental Impact Statement (EIS) must be prepared in accordance with and meet the minimum requirements of clauses 6 and 7 of Schedule 2 the Regulation.	Refer to **Statement of Validity** (pg. *i*) and throughout.
Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	**Section 9 – Environmental Risk Assessment**
Where relevant, the assessment of key issues below, and any other significant issues identified in the risk assessment, must include: • adequate baseline data; • consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed); • measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment; and • justification of impacts.	**Section 9 – Environmental Risk Assessment**
The EIS must be accompanied by a report from a qualified quantity surveyor providing: • a detailed calculation of the Capital Investment Value (CIV) of the proposal, including details of all assumptions and components from which the CIV calculation is derived;	A Summary Report is provided at **Appendix B** which includes the estimated cost of works and jobs that will

Description / Requirement	Reference
• a close estimate of the jobs that will be created during the construction and operational phases of the proposed development; and • certification that the information provided is accurate at the date of preparation.	be created by the development.
KEY ISSUES	
1. Statutory and Strategic Context	
The EIS must address the statutory provisions applying to the development contained in all relevant environmental planning instruments, including: • *State Environmental Planning Policy (State & Regional Development) 2011* • *State Environmental Planning Policy (Infrastructure) 2007* • *State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004* • *State Environmental Planning Policy (Urban Renewal) 2010* • *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017* • *State Environmental Planning Policy No. 55 - Remediation of Land (SEPP 55)* • *State Environmental Planning Policy No. 64 - Advertising and Signage (SEPP 64)* • *State Environmental Planning Policy No.65 – Design Quality of Residential Apartment Development and accompanying Apartment Design Guide (SEPP 65)* • *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005* • *Draft State Environmental Planning Policy (Environment) 2017* • *Sydney Local Environmental Plan 2012.* • Any exhibited Planning Proposal or draft State Environmental Planning Policy relating to the land.	**Section 7 – Statutory Planning Context**
The EIS must address the relevant planning provisions, goals and strategic planning objectives in the following: • *NSW State Priorities* • *Greater Sydney Region Plan* • *Eastern City District Plan* • *Future Transport Strategy 2056* • *State Infrastructure Strategy 2018* • *Sustainable Sydney 2030* • *Development Near Rail Corridors and Busy Roads Interim Guideline* • *Guide to Traffic Generating Development (RMS)* • *Heritage Council Guideline on Heritage Curtilages 1996* • *Heritage Council Guideline, Design in Context – guidelines for infill development in the Historic Environment, 2005* • *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW 2011)*	**Section 6 – Strategic Planning Context**

Description / Requirement	Reference
• *Better Placed – an integrated design policy for the built environment of NSW 2017 and relevant policy documents published by the Government Architect NSW* • *Relevant City of Sydney Council policies, codes and guidelines (where required pursuant to relevant Local Environmental Plan).*	
2. Consistency with Stage 1 Concept Approval	
• Demonstrate the proposal is consistent with the concept approval (SSD-8875). • Provide details of consistency with any modification(s) to the concept approval if sought concurrently.	**Section 2.3 – Concept Proposal** **Section 2.4 – Modification to Concept DA**
3. Built Form and Urban Design	
• Demonstrate compliance with the approved Sydney Metro Pitt Street OSD Design Guidelines and Sydney Metro Design Excellence Strategy and submit the required documentation including the Design Integrity Report; • Demonstrate how the orientation, height, bulk, scale, massing, setbacks, articulation, materials, activation and pedestrian connectivity (including through site linkages) of the proposed development will integrate with the context of the site and the existing and future character of the area; • Clearly illustrate how the proposed built forms and detailed design integrates with the streetscape and any street wall elements along the Park, Castlereagh and Pitt streets elevations; • A table and plans identifying the proposed gross floor area, floor space ratio and land uses, for each floor level and within the building, together with the site coverage; • Demonstrate how the landscape design will be integrated into the building design, contributing to design excellence, Ecologically Sustainable Development and building amenity, meeting the recreation needs of residents; and • How design quality of the building material and public realm will address risk associated with terrorism i.e. blast mitigation, hostile vehicle barrier etc.	**Appendix E1, Section 4.6 Built Form and Design, Section 8.1.3 Built Form and Urban Design,** **Appendix BB1 and BB2**
4. Integration with Sydney Metro Infrastructure	
• Identify the extent of the proposal that is State Significant Development (SSD) and how this relates to the approved CSSI approval (CSSI 7400) and any modifications to the CSSI; • Demonstrate how the SSD will integrate with the CSSI infrastructure such as structural design, detailed architectural approach, access, wayfinding and public domain. This must include consideration of pedestrian capacities around the site and pedestrian comfort and safety, for example, consider weather protection where needed and potential conflict points with vehicles; • Address how the development supports the design objectives, principles and standards of the Station Design Precinct Plan and Interchange Access Plan under the CSSI; • Describe the coordination of, timing and implementation of access, landscape and public domain works associated with the CSSI and OSD development;	**Section 4.4.1 Interface Areas, Appendix E1, Appendix E4, Appendix BB1 and Appendix BB2**

Description / Requirement	Reference
• Detail any design approaches or solutions within the SSD proposal that will benefit the amenity of the station below, such as in relation to pedestrian access or solar access; • Identify any modifications or design development to the CSSI which has influenced the SSD design; and • Demonstrate that the following guidelines have been incorporated in the design: - Guidelines for Protecting of Critical Infrastructure from terrorism. - NSW Critical Infrastructure Protection Management Framework. - Guidelines of NSW Police Safe Places A Comprehensive Guide for Owners, Operators and Designers.	
5. Visual and Amenity Impacts	
• Provide a detailed visual / view impact analysis, which considers the impact of the proposed building (compared to the existing situation and the approved envelope) when viewed from the public domain and key vantage points surrounding the site. This is to include a written description of the existing view, the likely impact and justification of the proposal and any required mitigation measures. The view locations and methodology for the analysis must be prepared in consultation with the Department and Council; • Provide a view impact analysis showing the proposed building as viewed by pedestrians when moving along Park, Castlereagh and Pitt streets and where the proposed building is visible from the streets immediately surrounding the site; • Provide a solar access and overshadowing analysis, comparing the overshadowing impacts of the proposal to the existing situation, the SLEP 2012 - Sun Access Planes, and the approved envelopes at hourly intervals in mid-summer, mid-winter, 14 April and 31 August, and having regard to the impact of the proposal on solar access to Hyde Park West; • Provide a reflectivity analysis identifying potential adverse glare conditions affecting motorists, pedestrians and occupants of neighbouring buildings; • Include a wind assessment (based on wind tunnel testing), identifying the impact of the proposal on surrounding wind conditions and any required measures to ameliorate wind impacts at podium level and street level; • Identify any other potential impacts of the proposal on the amenity of surrounding land uses and the public domain (in particular the likely station entrances); and • Provide an acoustic report addressing any required noise mitigation measures.	**Appendix W, Appendix E3, Appendix E4, Appendix O, Appendix N, Appendix U and Sections 8.1.5, 8.1.6, 8.1.11, 8.1.10, 8.1.12**
6. Heritage	
• Include a detailed heritage impact statement (HIS) that identifies, considers and addresses any potential impact of the proposal to heritage items on the site, the site curtilage and surrounding area, including any built and landscape items, conservation areas, views and settings. In particular, the impact of the proposal on the following heritage items should be assessed: - the State listed (former) Sydney Water Building including interiors and lightwell (SHR 016545) - the locally listed Metropolitan fire brigade building including interior and central yard (I1703) and Edinburgh Castle Hotel including interior (I1940).	**Appendix L, Appendix M, and Section 8.1.4**

Description / Requirement	Reference
• Address any endorsed conservation management plans for heritage items on the site and surrounding area • Include a Heritage Interpretation Plan, providing opportunities for the proposal to reflect on the heritage character and significance of the site and surrounding area • Demonstrate how the impacts are mitigated through façade design and treatment, selection of external materials and finishes and signage and public art strategy.	
7. Ecological Sustainable Development	
• Detail how ESD principles (as defined in clause 7(4) Schedule 2 of the EP&A Regulation 2000) will be incorporated in the design, construction and operation of the development; • Include a framework for how the proposed development will reflect national best practice sustainable building principles to improve environmental performance, including energy and water efficient design and technology, use of renewable energy and best practice in waste management strategy including any opportunity for food scraps/composting strategies; • Demonstrate sufficient waste and recycling management facilities storage and holding areas for servicing; and • Sustainability Strategy for the development should be prepared in line with concept approval.	**Appendix K and Section 8.1.7**
8. Traffic, parking and access (operation)	
• Details on the current and likely estimated future mode share for the various users (residents, visitors, etc) accessing the proposed development; • Details of the current and likely estimated future daily and peak hour vehicle, public transport, point to point transport, pedestrian and bicycle movements to/from the site, including an indication of whether it relates to the station or OSD, and any associated impacts and/or mitigation measures required; • Measures to encourage users of the development to make sustainable travel choices, including a green travel plan, walking, cycling, public transport and car sharing, adequate provision of bicycle parking and end of trip facilities and the minimisation of private car trips; • Modelling and analysis of pedestrian and cyclist access to the proposed development in consultation with Transport for NSW, taking into account the existing and planned Sydney Bike Network; • An assessment and details of existing and proposed vehicle access arrangements, including vehicle parking, a Delivery Service Plan detailing loading dock and servicing provision, adequacy and management with consideration of precinct wide shared loading docks and/or remote or off-site loading zone hub facilities, ensuring all servicing and loading occurs on-site and does not rely on kerbside controls; • Details of measures to segregate hostile vehicles from public transport users and areas of people congregation; and	**Appendix V1, Appendix V2 and Section 8.1.8**

Description / Requirement	Reference
• An assessment of pedestrian and cyclist safety with consideration of the relationship with design, access and operation of the station.	
9. Construction Management (including construction traffic)	
• Details of vehicle routes, peak hour and daily truck movements, hours of operation, access arrangements and traffic control measures for all demolition / construction activities; • An assessment of the likely construction traffic impacts, such as required road / lane closures and diversions, impacts on bus and taxi operations, impacts on pedestrian and cycle movement, and taking into account the timing of other construction activities within this part of the CBD precinct; • An assessment of road efficiency and safety at key intersections and any proposed mitigating measures, including a Construction Pedestrian and Traffic Management Plan; • Details of temporary cycling and pedestrian access during construction; and • An assessment of potential impacts of the construction on surrounding buildings and the public domain, including noise and vibration, air quality and odour impacts, dust emissions, water quality, stormwater runoff, groundwater seepage, soil pollution and construction and demolition waste, and proposed measures to mitigate any impacts.	**Appendix X and Section 8.1.19**
10. Biodiversity	
The EIS shall provide an assessment of the proposal's biodiversity impacts in accordance with the *Biodiversity Conservation Act 2016*, including the preparation of a Biodiversity Development Assessment Report where required under the Act.	**Appendix J and Section 7.2**
11. Public Benefit and Contributions	
The EIS shall address the provision of public benefit, services and contributions in consultation with key stakeholders, such as the Department, Council and Transport for NSW, and provide details of any heritage floor space (HFS) allocation or voluntary planning agreement (VPA) or other legally binding instrument agreed between a relevant public authority and the Applicant.	**Section 6.11 – Central Sydney Development Contributions Plan**
12. Utilities	
• Identify and address the existing capacity to service the development proposed and any augmentation requirements for utilities in consultation with relevant agencies; and • Identify any potential impacts of the proposed construction and operation on the existing utility infrastructure and service provider assets, and demonstrate how these will be protected, or impacts mitigated.	**Appendices Y1 and Y2, Appendix X and Section 4.14**
13. Staging	
The EIS shall set out the construction staging of the proposed development, including the relationship with the construction / delivery of the metro station, timing of public domain works and the staging of other relevant works.	**Appendix X and Section 4.15**
14. Pre-submission consultation statement	
The EIS shall include a report describing pre-submission consultation undertaken, including a record of the stakeholders consulted, the issues raised during the consultation and how the proposal responds to those issues.	As described in **Section 5 – Consultation &**

Description / Requirement	Reference
	Stakeholder Engagement and at **Appendix CC**
Plans and Documents	
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Regulation. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following:	
• Site title diagrams and survey plan, showing existing levels, location and height of existing and adjacent structures/buildings;	**Appendix D**
• Site analysis plan;	
• Schedule of proposed gross floor area per land use;	
• Assessment of social and economic impacts (including employment and retail studies);	
• Building envelopes showing the relationship with proposed and existing buildings in the locality;	**Appendix E1**
• Documentation in plan and section of the Sydney Local Environmental Plan 2012 Sun Access Planes as defined in Cl 6.17 (10). The plans and sections should be prepared in consultation with and verified by the City of Sydney Council, and show coordinates X and Y, and horizontal bearing B and vertical angle V;	
• Architectural drawings (to a useable scale at A3), including landscape plan/s and details;	**Appendix D**
• Architectural and urban design statement, including illustrations and justification showing how the buildings will relate the station entrances and enhance the surrounding public domains;	**Appendix E1**
• Virtual models;	
• Visual and view impact analysis and photomontages;	**Appendix W**
• Design guidelines and design excellence strategy;	**Appendix F and G**
• Staging plan and any associated activation and infrastructure delivery strategy;	**Section 8.1.1**
• Solar access analysis report and diagrams: - including existing and proposed SEPP 65 and ADG compliance tables for all affected neighbouring residential flat buildings; and - Hyde Park: half hourly shadow diagrams from 12pm to 3pm for 21st of each month of the year, showing existing and proposed scenarios.	**Appendix E4**
• Wind impact assessment (including a wind tunnel study);	**Appendix O**
• Flood assessment/storm water management plan;	**Appendix S1 and S2**
• Public domain plans defining extent of works (if any proposed);	**Appendix E1**
• Retail/commercial office strategy;	**Appendix FF**
• ESD statement (incorporating a sustainability framework);	**Appendix K**
• Pre-submission consultation statement;	**Appendix CC**
• Heritage interpretation strategy;	**Appendix M**

Description / Requirement	Reference
• Heritage impact assessment;	**Appendix L**
• Access/DDA impact statement;	**Appendix Q**
• Transport traffic and parking assessment;	**Appendix V1**
• Public Transport Accessibility level assessment;	**Appendix V1 and V2**
• Visual and view impact analysis and photomontage;	**Appendix W**
• Physical and 3D digital model (generally in accordance with City of Sydney Council requirements);	**Separate**
• Services and utilities infrastructure report;	**Appendix Y1 and Y2**
• Signage details (if proposed);	**Appendix E2**
• Flight path report;	**Appendix Z**
• Waste strategy;	**Appendix T**
• Materials and finishes	**Appendix D/E1**
• Construction noise and vibration report;	**Appendix U**
• CPTED assessment;	**Appendix BB3**
• Security Risk Assessment (delivered by a suitably qualified and licensed contractor with consideration to the requirements of the NSW Security Industry Act, 1997);	**Appendix BB1**
• Construction management statement addressing how future stages will manage impacts to pedestrians, rail uses, bus services and taxis;	**Appendix X**
• Public art strategy in accordance with City of Sydney's Guidelines;	**Appendix DD**
• Signage strategy (if proposed);	**Appendix E2**
• Operational noise and vibration impact assessment	**Appendix U**
• Preliminary construction management statement	**Appendix X**
• Pre-submission consultation report	**Appendix CC**
Documents to be submitted	
1 hard copy and 1 electronic copy of all the documents and plans for review prior to exhibition. Electronic copies of the documentation on a USB with documents in PDF format with file sizes not exceeding 20Mb, and ideally less than 10Mb, the hard copies should include plans printed in A3.	
Consultation	
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with: • City of Sydney Council • Government Architect NSW • Roads and Maritime Services	As described in **Section 5 – Consultation & Stakeholder Engagement** and at **Appendix CC**

Description / Requirement	Reference
• Sydney Trains • Sydney Metro • Sydney Coordination Office within Transport for NSW • Sydney Airport Corporation Limited and the Civil Aviation Safety Authority • Heritage NSW, Community Engagement Group, Department of Premier and Cabinet • NSW Police • Fire and Rescue NSW • Surrounding residents, businesses and local community groups. The EIS must include a report describing pre-submission consultation undertaken, including a record of the stakeholders consulted, the issues raised during the consultation and how the proposal responds to those issues. Where amendments have not been made to address an issue, a short explanation should be provided.	

1.7. OTHER APPROVALS

In addition to the approvals noted elsewhere in this document, other approvals will be required in the future to permit the construction of the OSD. These approvals may include, but are not limited to, the following:

- Approvals under the *Roads Act 1993* (including Section 138 approvals) may be required. A consent under section 138 of the *Roads Act 1993* cannot be refused if it is necessary for carrying out SSD that is authorised by a development consent and any Roads Act consent must be substantially consistent with the SSD consent.
- An environment protection licence under the *Protection of the Environment Operations Act 1997*. An environment protection licence under Chapter 3 of the Protection of the Environment Operations Act 1997 cannot be refused if it is necessary for carrying out SSD that is authorised by a development consent and any licence must be substantially consistent with the consent.
- A compliance certificate issued under Section 73 of the *Sydney Water Act 1994*.
- The Outer Horizontal Surface of the Obstacle Limitation Surface (**OLS**) across the site is 156m AHD, and therefore, the proposed building envelope (230m AHD) will require approval under the Airports (Protection of Airspace) Regulations. The Detailed SSD DA is accompanied by an Aeronautical Impact Assessment (Flight Path Report) (**Appendix Z**) to address the OLS penetration.

2. BACKGROUND

2.1. SYDNEY METRO

Sydney Metro is Australia's biggest public transport program. A new standalone railway, this 21st century network will revolutionise the way Sydney travels.

There are four core components:

a) Sydney Metro Northwest (formerly the 36km North West Rail Link)

This project is now complete and passenger services commenced in May 2019 between Rouse Hill and Chatswood, with a metro train every four minutes in the peak. The project was delivered on time and $1 billion under budget.

b) Sydney Metro City & Southwest

Sydney Metro City & Southwest project includes a new 30km metro line extending metro rail from the end of Metro Northwest at Chatswood, under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the ultimate capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest will deliver new metro stations at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Waterloo and new underground metro platforms at Central Station. In addition, it will upgrade and convert all 11 stations between Sydenham and Bankstown to metro standards.

In 2024, customers will benefit from a new fully air conditioned Sydney Metro train every four minutes in the peak in each direction with lifts, level platforms and platform screen doors for safety, accessibility and increased security.

c) Sydney Metro West

Sydney Metro West is a new underground railway connecting Greater Parramatta and the Sydney CBD. This once-in-a-century infrastructure investment will transform Sydney for generations to come, doubling rail capacity between these two areas, linking new communities to rail services and supporting employment growth and housing supply between the two CBDs.

The locations of seven proposed metro stations have been confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock and The Bays.

The NSW Government is assessing an optional station at Pyrmont and further planning is underway to determine the location of a new metro station in the Sydney CBD.

d) Sydney Metro - Western Sydney Airport

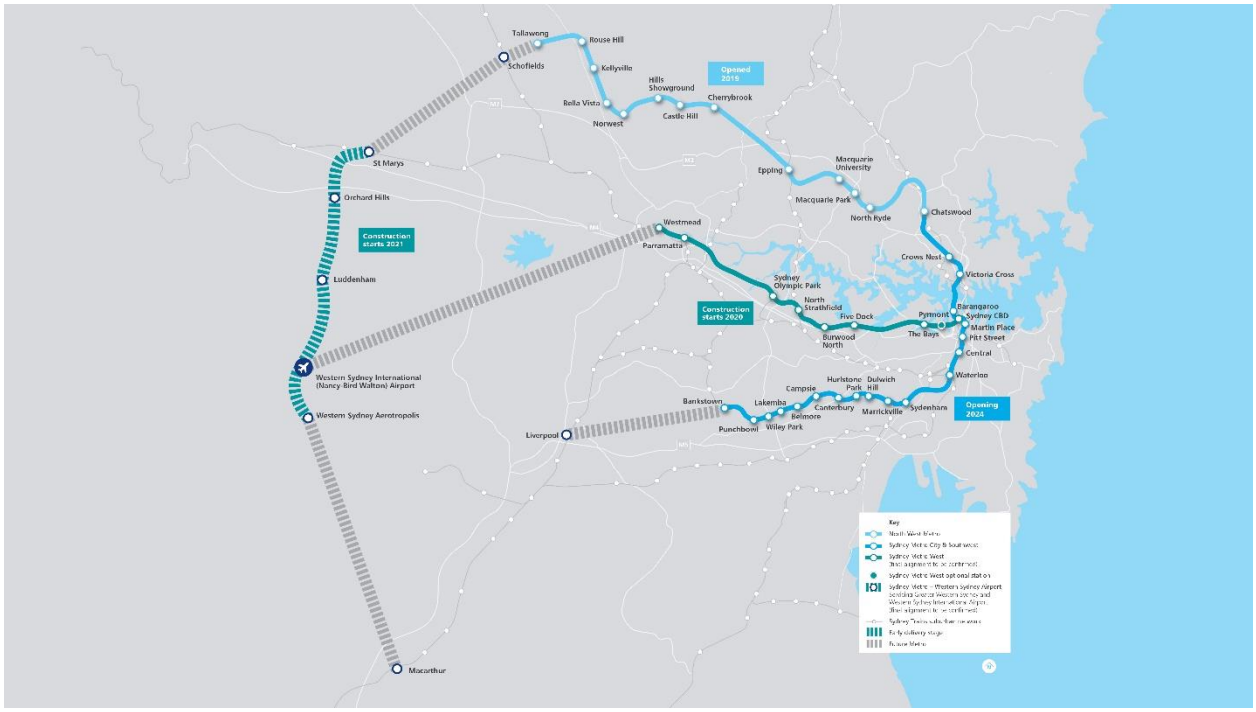
Metro rail will also service Greater Western Sydney and the new Western Sydney International (Nancy Bird Walton) Airport. The new railway line will become the transport spine for the Western Parkland City's growth for generations to come, connecting communities and travellers with the rest of Sydney's public transport system with a fast, safe and easy metro service. The Australian and NSW governments are equal partners in the delivery of this new railway.

Additional information can be obtained from the Sydney Metro website at www.sydneymetro.info. The Sydney Metro project is illustrated in **Figure 1**.

On 9 January 2017, the Minister for Planning approved the Sydney Metro City & Southwest - Chatswood to Sydenham project as a Critical State Significant Infrastructure project (reference SSI 15_7400) (**CSSI approval**). The terms of the CSSI approval includes all works required to construct the Sydney Metro Pitt Street North Station, including the demolition of existing buildings and structures on the sites. The CSSI approval also includes construction of below and above ground improvements associated with the metro station structure within the 'metro box' envelope.

With regards to CSSI related works, any changes to the 'metro box envelope' and public domain will be pursued in satisfaction of the CSSI conditions of approval and do not form part of the scope of this SSD DA for the OSD.

Figure 5 – Sydney Metro Alignment Map



Source: Sydney Metro

2.2. CSSI APPROVAL SYDNEY METRO CITY & SOUTHWEST (SSI 15_7400)

On 9 January 2017, the Minister for Planning approved the Sydney Metro City & Southwest – Chatswood to Sydenham project as a Critical State Significant Infrastructure project (reference SSI 15_7400). The CSSI approval granted consent for:

> *Construction and operation of a metro rail line, approximately 16.5 kilometres long (of which approximately 15.5 kilometres is located in underground rail tunnels) between Chatswood and Sydenham, including the construction of a tunnel under Sydney Harbour, links with the existing rail network, seven metro stations, and associated ancillary infrastructure.*

The terms of the CSSI approval include all works required to construct each of the Sydney Metro stations, including the Pitt Street Station. Except to the extent described in the EIS or Preferred Infrastructure Report (**PIR**) submitted with the CSSI application, any OSD buildings and uses do not form part of the CSSI approval and will be subject to the relevant assessment pathway prescribed by the EP&A Act. Details of the CSSI approval are provided in the following sections.

2.2.1. Demolition

The demolition of all existing buildings across the site was approved under the CSSI approval, as demolition works were required for the construction of the Sydney Metro Pitt Street Station. Therefore, the Detailed SSD DA does not seek consent for any demolition works on the site. At the time of writing this report, all buildings previously on site have been demolished and replaced with a temporary shed structure contained within the site to aid the carrying out of works associated with station construction.

2.2.2. Bulk Earthworks

Bulk earthworks and excavation across the site will be delivered as per the CSSI approval. The extent of the earthworks and excavation methodology to be used is discussed within the EIS and the PIR submitted with the CSSI application. As such, the Detailed SSD DA does not seek consent for bulk earthworks or excavation.

2.2.3. Public Domain Works

In accordance with condition E101 of the CSSI approval, a Station Design and Precinct Plan (**SDPP**) must be prepared that presents an integrated urban and place making outcome for each station. Further, condition E92 requires the proponent to develop an Interchange Access Plan (**IAP**) for each station to inform the final

design of transport and access facilities and services, including footpaths, cycleways, passenger facilities, parking, traffic and road changes, and integration of public domain and transport initiatives around and at each station.

The design and delivery of all public domain works within and surrounding the site will therefore be subject to the satisfaction of conditions of the CSSI approval, in particular through approval of the SDPP and the IAP by the Secretary of the NSW DPIE or their delegate prior to the commencement of any above ground works. Accordingly, the Detailed SSD DA does not seek consent for any public domain works.

While the public domain works form part of a separate planning process, the proposal includes references to the proposed public domain and addresses the interface of the proposed OSD with the ground plane, notably through the architectural design of the podium, use of ground level retail premises, and provision of pedestrian entrances to the OSD from Pitt Street and Castlereagh Street.

2.2.4. Primary Station Works and OSD Structural / Service Provisions

The CSSI approval includes the construction of all below and above ground works required to deliver the Sydney Metro Pitt Street Station. The Sydney Metro CSSI EIS and PIR outline the integration between the future OSD and the Pitt Street Station north entrance. The EIS submitted with the CSSI application states that:

> *"the metro stations would be designed and constructed to take into account, and make physical provision for, any design or other requirements associated with possible future over station development."*

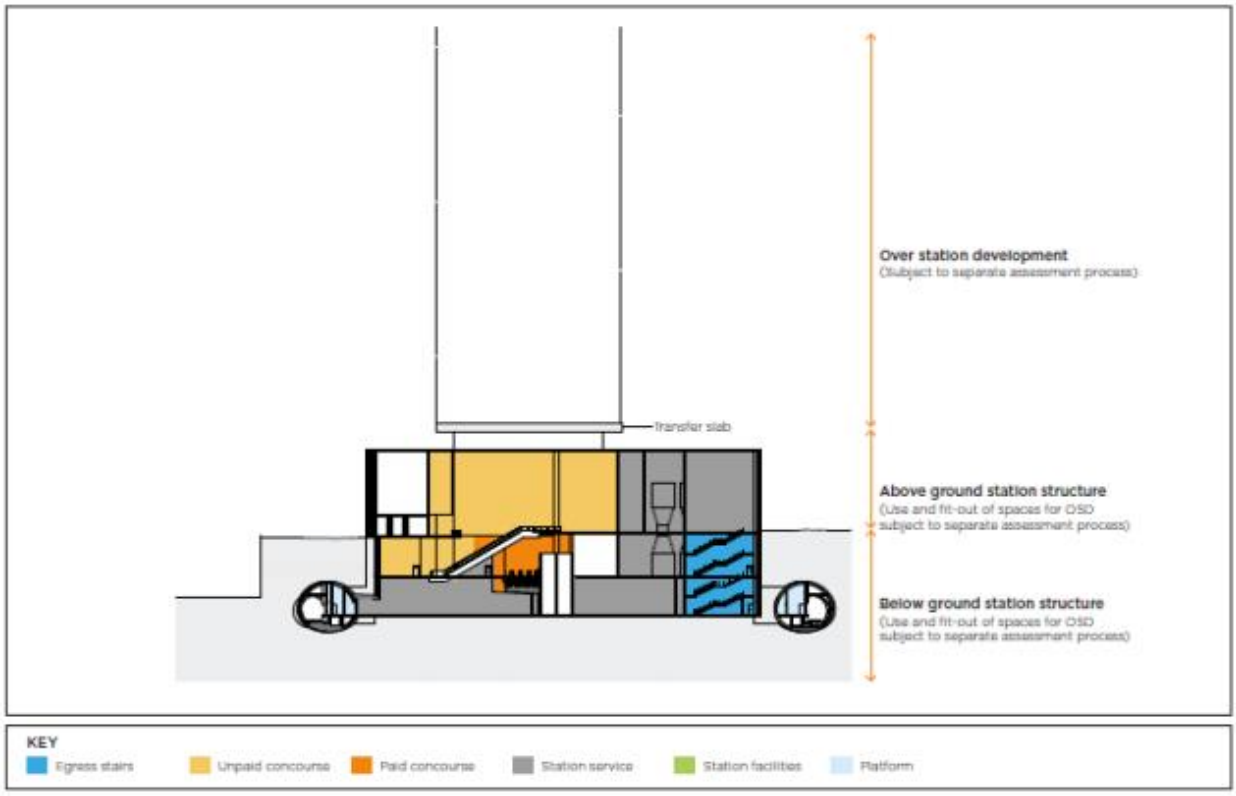
The EIS and PIR clarifies this further by identifying that, subject to detailed design, the Sydney Metro stations will include:

- structural elements (steel and / or concrete), building grids, column loadings and building infrastructure to enable the construction of future OSD; and
- space for future lift cores, access, parking and building services for the future OSD.

The CSSI approval also allows provision for structural and service areas associated with the construction of the OSD, including utility connections. The extent of the approved station works includes up to the 'transfer slab' level above the ground plane, as described on page 139 of the CSSI EIS and page 15 of the PIR, and is illustrated at Figure 6. This makes it clear that the transfer slab is effectively the defining line between the above ground station structure or 'metro box' (the subject of the CSSI approval) and the OSD the subject of this Detailed SSD DA.

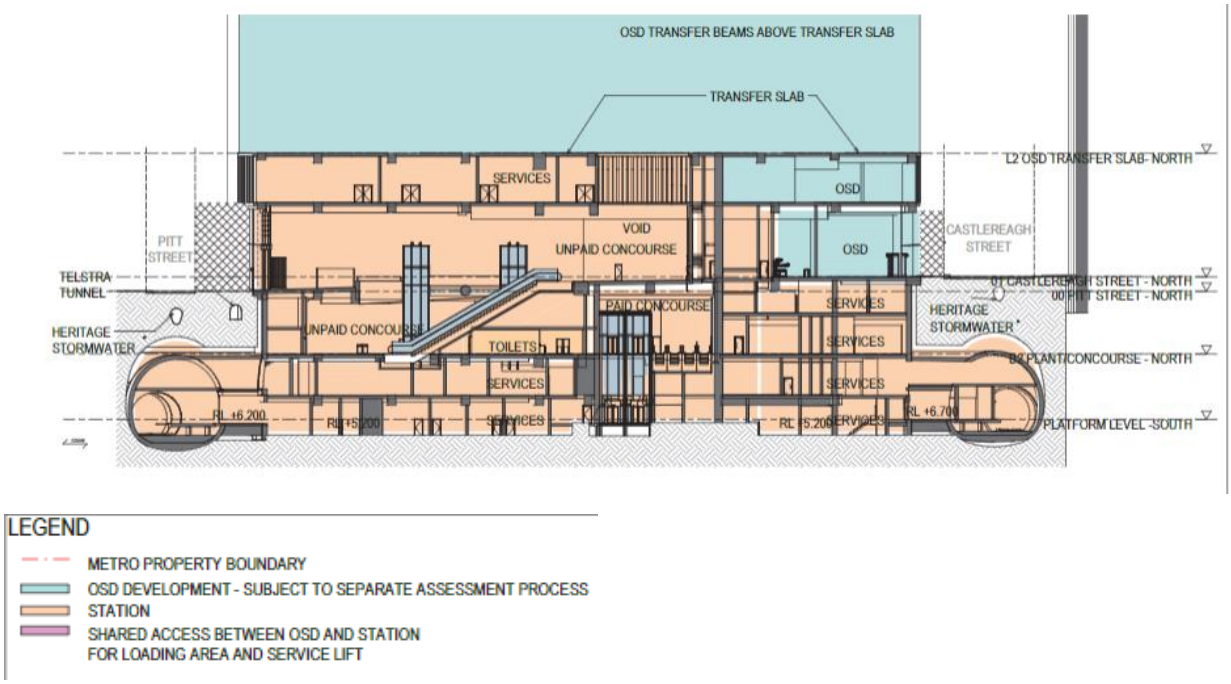
As such the only components of the Sydney Metro Pitt Street North Station OSD that have been approved within the CSSI approval include structural elements to support the OSD, suitable spatial allocation within the 'metro box' envelope for OSD components, and public domain works and embellishment. The construction of each of these elements will be authorised by the CSSI approval conditions and do not form part of the scope of the Detailed SSD DA for the OSD. These items are generally highlighted in orange in **Figure 6** and **Figure 7** below.

Figure 6 – Typical over station development interface



Source: Environmental Assessment Report under Section 115ZA of the EP&A Act, Dec 2016

Figure 7 – Indicative Pitt Street North Station OSD Interface



Source: CSSI Preferred Infrastructure Report (Transport for NSW)

2.3. CONCEPT PROPOSAL (SSD - 8875)

The Minister for Planning granted development consent to SSD 17_8875 for concept approval of either a mixed use or commercial OSD (not both) above the new Sydney Metro Pitt Street North Station on 25 June 2019. This concept development consent includes conceptual approval for:

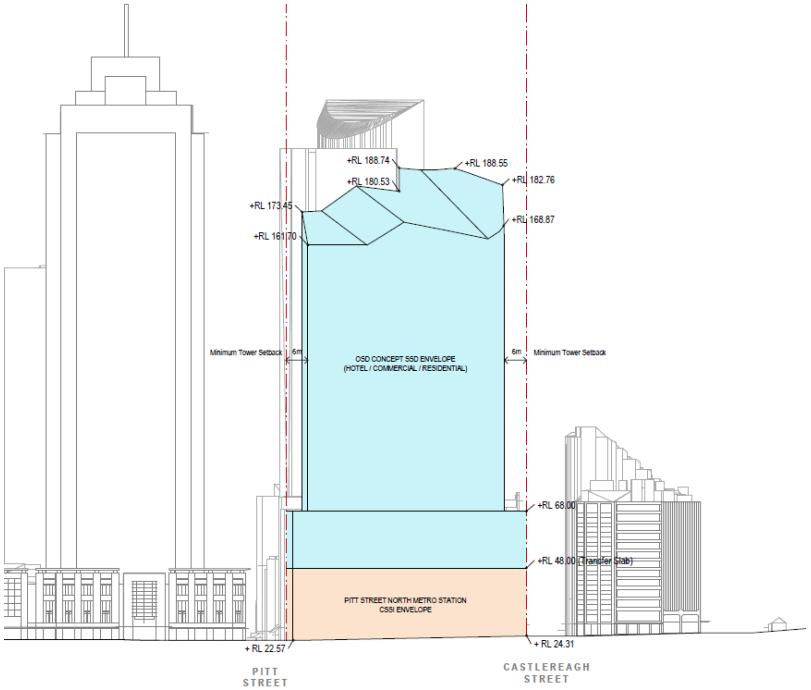
- A maximum building envelope, including street wall and setbacks for the over station development;
- A maximum building height of RL 188.74 metres;
- A maximum gross floor area of 50,310m² (including station floor space);
- Podium level car parking for a maximum of 50 parking spaces; and
- Conceptual land use for either one of a mixed-use or commercial scheme (not both).

The approved concept for the SSD DA building envelope is represented in Figure 8. The Concept SSD DA instrument of approval does not consent to any physical works commencing on site.

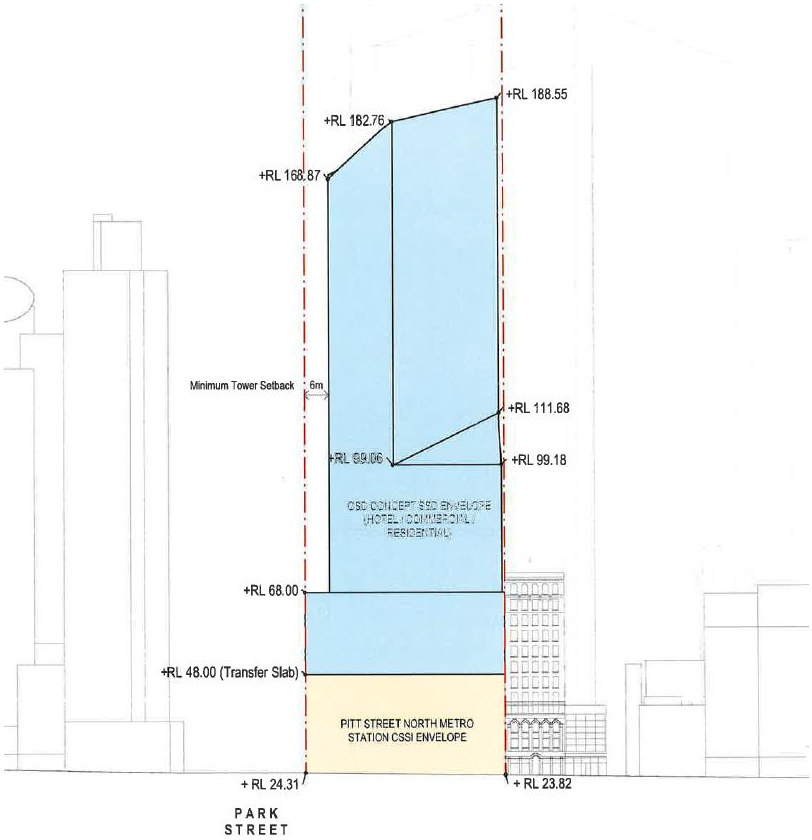
This EIS supports the Detailed SSD DA to physically commence works on-site, in general accordance with the terms and conditions of SSD-8875 (discussed below).

- The Concept SSD DA instrument of approval does not consent to any physical works commencing on site.

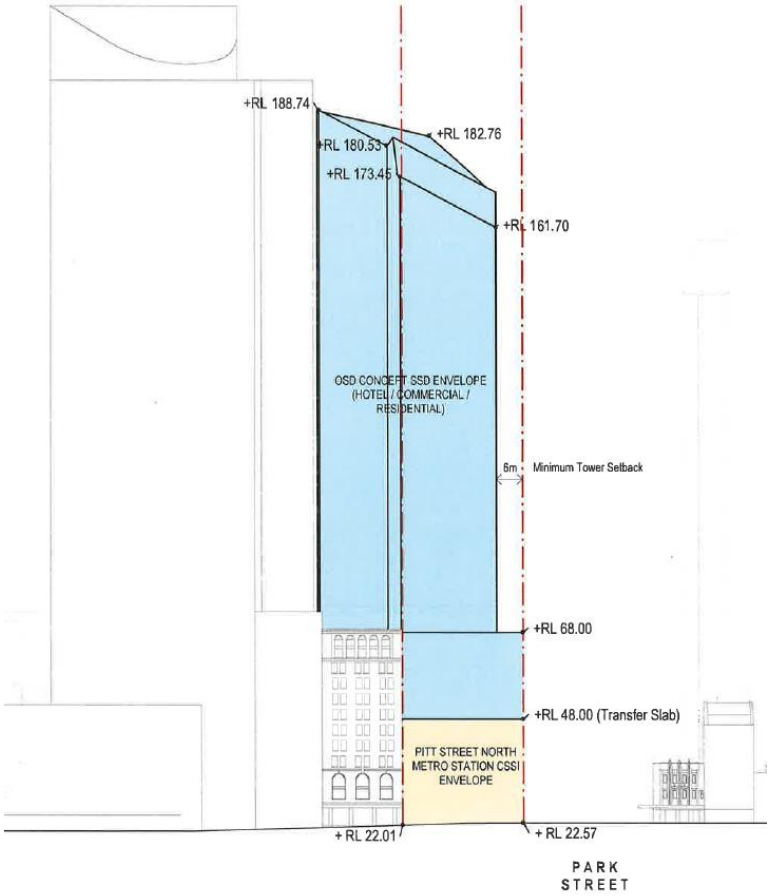
Figure 8 – Approved Concept SSD DA Building Envelope



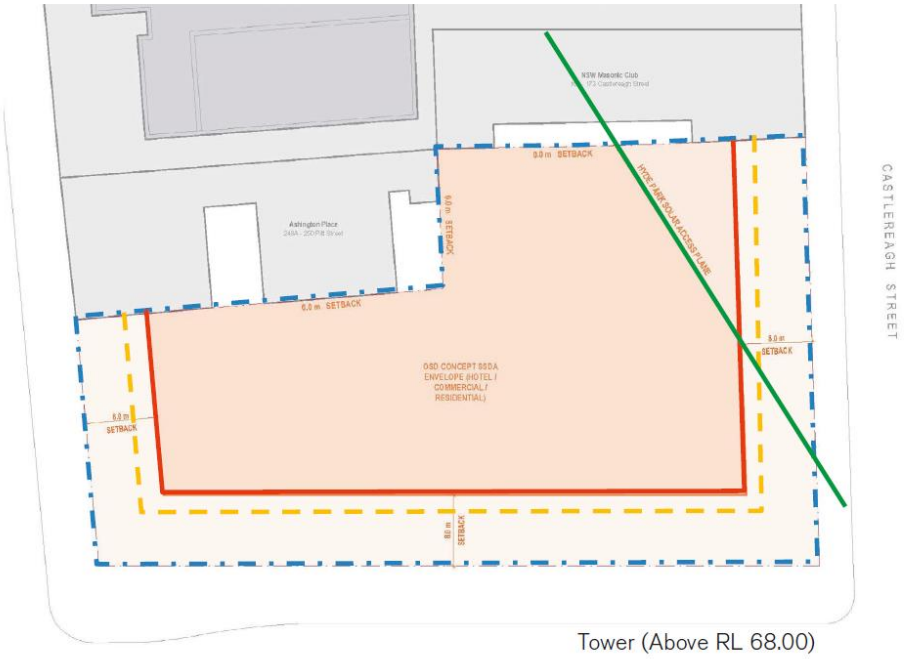
Picture 3 – Approved Building Envelope (Park Street Elevation)



Picture 4 – Approved Building Envelope (Pitt Street Elevation)



Picture 5 – Approved Building Envelope (Castlereagh Street Elevation)



Picture 6 – Approved OSD Tower Setbacks and Building Envelope

Source: Foster + Partners

The Development Consent for application SSD-8875 issued on 25 June 2019 included two components. 'Part A' related to the terms of the consent, whilst 'Part B' included the conditions to be satisfied in future detailed development application(s). **Table 2** below outlines the conditions to be satisfied as identified under Part B of the Concept Development Consent and how they relate to and/or are addressed within this EIS as part of the Detailed SSD DA.

Table 2 – Concept DA SSD-8875 Conditions of Consent to be Satisfied

Condition / Requirement	Document Reference
BUILT FORM AND URBAN DESIGN	
B1. The detailed DA(s) shall address compliance with: a) The Design Guidelines as endorsed by the Planning Secretary pursuant to conditions A23 and A24. b) The Design Excellence Strategy as endorsed by the Planning Secretary pursuant to condition A25, including the advice of the Sydney Metro Design Review Panel, the Pitt Street North Design Excellence Evaluation Panel as contained within the Design Excellence Report and State Government Review Panel (or approved alternative under Condition A25).	**Refer to Appendix F and Appendix G, Section 4.6, Section 8.1.1, Section 8.1.2, Section 8.1.3**
B2. The following elements of the concept development application are not inconsistent with the concept proposal but are subject to further assessment with the relevant detailed DA(s): a) Indicative signage zones, following preparation of a Signage Strategy. b) Conceptual land uses for a mixed-use scheme or a commercial scheme (not both). c) Subdivision	**Refer to Appendix E2 Signage Strategy, Appendix E1 Architectural Design Report, Section 4.3 and Section 4.16**
B3. The detailed DA shall address the following built form considerations: a) For mixed-use scheme, built forms above the podium must have floor plates no greater than 1000m² FA and maximum horizontal dimension of building façade parallel to street frontages is 40m. b) For a commercial scheme, must have floor plates no greater than 1,400m² GFA at a building height above 140m and built forms above the podium must have maximum horizontal dimension of building façade parallel to street frontages of 65m in a single plane. c) Integration with the approved metro station. d) The selection of materials is to be complementary to the existing development context and respectful of heritage items in the site's vicinity. e) For a mixed-use scheme, achieve compliance with the requirements of SEPP 65 – Design Quality of Residential Apartment Development and the accompanying Apartment Design Guide. f) Wind mitigation measures arising from compliance with Condition B11 below.	**Appendix D/E1** **Appendix O**
DESIGN REVIEW PANEL	
B4. Prior to the lodgement of any Detailed Development Application, the Applicant is to submit a Design Integrity Report (DIR), to the satisfaction of the Planning Secretary, that	**Appendix EE**

Condition / Requirement	Document Reference
demonstrates how design excellence and design integrity will be achieved in accordance with: a) the design objectives of the Concept Development Application; b) consistency with the approved Design Guidelines as amended by Condition A23; c) the DEEP's Design Excellence Report; d) the advice of State Design Review Panel (or approved alternative under Condition A25); and e) the conditions of this consent. B5. The Design Integrity Report (DIR) as required by Condition B4 must include a summary of feedback provided by SDRP (or alternative approved in accordance with Condition A25) and responses by the Applicant to this advice. The DIR shall also include how the process will be implemented through to completion of the approved development.	
LAND USE	
B6. Further detailed development application(s) for the over station development must identify the proposed land use scheme being either a mixed-use development or a commercial development (one or the other, not both).	**Section 4.3**
HERITAGE IMPACT ASSESSMENT	
B7. Future detailed development applications must consider: a) the frontages of the podium should incorporate including masonry compared to window glazing and a high degree of architectural modelling and articulation; b) the Pitt Street and Castlereagh Street frontages of the podium should respond to the major horizontal and vertical elements of the heritage buildings along those respective street frontages; and c) the podium should interpret the subdivision pattern established during the late nineteenth and twentieth century, characterised by lot widths of the National Building and NSW Masonic Club. B8. Future detailed development application(s) shall include a detailed Heritage Impact Assessment (HIA) and a Heritage Interpretation Strategy for the proposed works, prepared in consultation with the Heritage Council of NSW and City of Sydney Council. The HIA must address the recommendations of the concept state Heritage Impact Statement dated August 2018 prepared by GML Heritage.	**Appendix L and Appendix M, Section 8.1.4**
ENVIRONMENTAL PERFORMANCE /ESD	
B9. Future detailed development application(s) must demonstrate how the principles of ecologically sustainable development (ESD) have been incorporated into the design, construction and ongoing operation of the proposal. The ESD credentials shall be in accordance with the framework, targets and visions of the ESD Report lodged with the EIS prepared by Sydney Metro (August 2018). B10. Future detailed development application(s) the proposed minimum performance targets for environmental performance are:	**Appendix K, Section 8.1.7**

Condition / Requirement	Document Reference
a) for a commercial/ office use: i. 5 Star NABERS Energy; and ii. 3.5 Star NABERS Water. b) for residential use: i. BASIX 40 Energy; and ii. Exceed minimum compliance with BASIX Water. c) for hotel use: i. 4 Star NABERS Energy; and ii. 3 Star NABERS Water. d) Green Star ratings: i. for residential use, then 5 Star Green Star; or, ii. for office/ commercial use, then 6 Star Green Star; or, iii. for hotel use, then 5 Star Green Star.	
WIND IMPACTS	
B11. Wind Impact Assessment including computer modelling of the detailed building form. Compliance shall be demonstrated with the Lawson wind comfort criteria through the incorporation of mitigation measures within the detailed design.	**Appendix O, Section 8.1.10**
SECURITY AND CRIME ASSESSMENT	
B12. Future detailed development application(s) shall be accompanied by a Security and Crime Risk Assessment prepared in consultation with NSW Police having regard to NSW Police publication "Safe Places" Vehicle Management: A comprehensive guide for owners, operators and designers" and Crime Prevention Through Environmental Design (CPTED) principles. B13. Future detailed development application(s) shall include a detailed Crime Prevention Through Environmental Design (CPTED) Report for the proposed works. The CPTED Report must address the conclusions and recommendations of the concept stage CPTED Report dated August 2018 prepared by Ethos Urban.	**Appendix BB1, Appendix BB2 and Appendix BB3**
FIRE AND RESCUE ASSESSMENT	
B14. Future detailed development application(s) shall be accompanied by a Draft Fire and Rescue Assessment/ Engineering Brief for the OSD prepared in consultation with Fire and Rescue NSW providing relevant details of: a) The various sectors within the Pitt Street North Metro site served by independent fire systems (such as the OSD, the underground and aboveground metro sector, etc). b) Fire engineering analysis of the pedestrian connection interfaces between the sectors and the sectors themselves, having regard to emergency occupant egress, fire and smoke compartmentation, smoke hazard management and fire fighting intervention.	**Appendix R, Section 8.1.17**

Condition / Requirement	Document Reference
c) Adequacy of fire and life safety systems within the Pitt Street North Metro site in relation to the fire hazards of Sydney Metro. d) Design of fire hydrant systems for OSD elements that exceed 135m. e) Future consultation to be undertaken with Fire and Rescue NSW in respect of the final design and construction of the OSD and operational compatibility of the Pitt Street North Metro site's proposed fire and life safety systems.	
CONSTRUCTION IMPACT ASSESSMENT	
B15. Future detailed development application(s) shall provide analysis and assessment of the impacts of construction and include: a) Construction Traffic Management Plan as per condition B18(b); b) Cumulative Construction Impact Assessment (i.e. arising from concurrent construction activity); c) Noise and Vibration Impact Assessment; d) Community Consultation and Engagement plans; e) Construction Waste Management Plan; and f) Air Quality Management Plan. The plans referred to below may be prepared as part of a Construction Environmental Management Plan prepared and implemented under the conditions of any consent granted by future development applications, having regard to the Construction Environmental Management Framework and Construction Noise and Vibration Strategy prepared for the Sydney Metro City & Southwest (CSSI 7400).	**Appendix X, Section, 8.1.19**
NOISE AND VIBRATION	
B16. Demonstrate the following noise and vibration requirements consistent with the construction works at the site approved under CSSI 7400 can be met: a) vibration from construction activities does not exceed the vibration limits set out in the British Standard BS 7385-2:1993 Evaluation and measurement for vibration in buildings. Guide to damage levels from ground borne vibration. b) vibration testing has been conducted before and during vibration generating activities that have the potential to impact on heritage items to identify minimum working distances to prevent cosmetic damage. In the event that the vibration testing and monitoring shows that the preferred values for vibration are likely to be exceeded, the Applicant must review the construction methodology and, if necessary, propose additional mitigation measures. c) advice of a heritage specialist on methods and locations for installing equipment used for vibration, movement and noise monitoring of heritage-listed structures.	**Appendix U, Section 8.1.12**
TRAFFIC, ACCESS AND CAR PARKING	
B17. Future detailed development application(s) shall be accompanied by a Traffic and Transport Impact Assessment.	**Appendix V1 and X, Section 8.1.8**

Condition / Requirement	Document Reference
B18. Future detailed development application(s) must include: a) consideration of responsibilities, timing and commitments to the development of car share parking, motorcycle parking and preparation of travel plans. b) Construction Traffic Management Plan (CTMP) prepared in consultation with the Sydney Coordination Office and the City of Sydney, and to the satisfaction of the relevant roads authorities. The CTMP shall include, but not be limited to: i. haulage movement numbers I routes including contingency routing ii. detailed travel management strategy for construction vehicles including staff movements; iii. maintaining pedestrian and cyclist links I routes iv. independent road safety audits on construction-related traffic measures v. measures to account for any cumulative activities I work zones operating simultaneously. B19. Independent road safety audits are to be undertaken for all stages of detailed design development involving road operations and traffic issues relevant to the OSD. Any issues identified by the audits shall be closed out in consultation with the Sydney Coordination Office and the City of Sydney to the satisfaction of the relevant road authorities.	
UTILITIES	
B20. Future detailed development application(s) shall address the existing capacity and any augmentation requirements of the development for the provision of utilities, including staging of infrastructure through the preparation of an infrastructure / utility management plan in consultation with relevant agencies and services providers.	**Appendix Y1 and Y2, Section 4.14**
NOISE AND VIBRATION	
B21. Future detailed development application(s) shall be accompanied by a Noise and Vibration Impact Assessment that identifies and provides a quantitative assessment of the main noise generating sources and activities during operation and including consideration of noise and vibration impacts associated with commercial development above a train station. Details are to be included outlining any mitigation measures necessary to ensure the amenity of future sensitive land uses on the neighbouring sites is protected during the operation of the development. The Noise and Vibration Impact Assessment must address the conclusions and recommendations of the concept stage Report dated August 2018 prepared by Pulse Acoustic Consultancy.	**Appendix U, Section 8.1.12**
FLOODING AND STORMWATER	
B22. Future detailed development application(s) shall be accompanied by a Flood Impact Assessment addressing the conclusions and recommendations of the concept stage Flooding and Stormwater Management Plan dated August 2018 prepared by Cardno and providing the following: a) Compliance with the City of Sydney's Interim Floodplain Management Policy including detailed reasoning for any non-compliances.	**Appendix S1 and S2, Section 8.1.13, Section 8.1.14**

Condition / Requirement	Document Reference
b) Detailed stormwater and drainage design documentation including overland flow assessment and maintenance.	
REFLECTIVITY	
B23. Future detailed development application(s) shall be accompanied by a Reflectivity Analysis demonstrating that the external treatments, materials and finishes of the development do not cause adverse or excessive glare.	**Appendix N, Section 8.1.11**
JUSTIFICATIONS FOR LAND USES	
B24. Future detailed development application(s) shall include detailed description and analysis for the commercial concept and justifications that the selected option is based on careful consideration of the benefits and potential impacts.	**Appendix FF**

2.4. MODIFICATION TO CONCEPT SSD DA (SSD - 8875)

Following Sydney Metro's appointment of Pitt Street Developer North Pty Ltd as the preferred development partner to deliver the Pitt Street North Station OSD, and ongoing design development, minor modifications to the concept approval are now required to accommodate the detailed design.

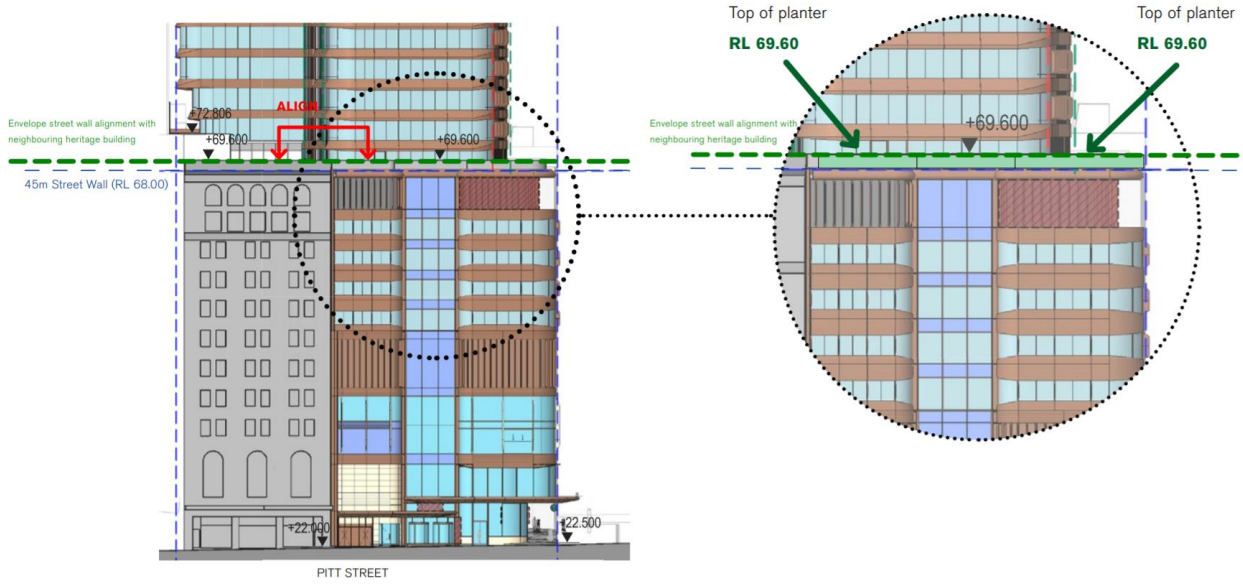
A modification application to the concept approval has therefore been lodged concurrently with the Detailed SSD DA. The section 4.55(2) modification application seeks consent for the following amendments:

- Amend the concept building envelope plans approved on 25 June 2019 by the Minister under application number SSD 8875 to modify the podium envelope
  - at the Castlereagh Street façade to facilitate better built form relationship with the scale of the adjacent Masonic Building;
  - at the Pitt Street and Park Street façades to facilitate better built form relationship with the scale of the adjacent National Building;
- Amend condition A15 and A17 to permit the protrusion beyond the building envelope for the purpose of sunshading elements, planted elements and balustrades;
- Increase in the total GFA across the site to 55,743sqm (including station floorspace); and
- Replace Concept Approval envelope plans to show interrelationship of proposed OSD floor space with station floor space; and
- Make minor amendments to the Design Guidelines in respect to podium heights and tower setbacks.

The Detailed SSD DA is consistent with the Concept DA as proposed to be modified.

The approved concept envelopes as proposed to be modified are illustrated below.

Figure 9 – Envelope Modification – Pitt Street

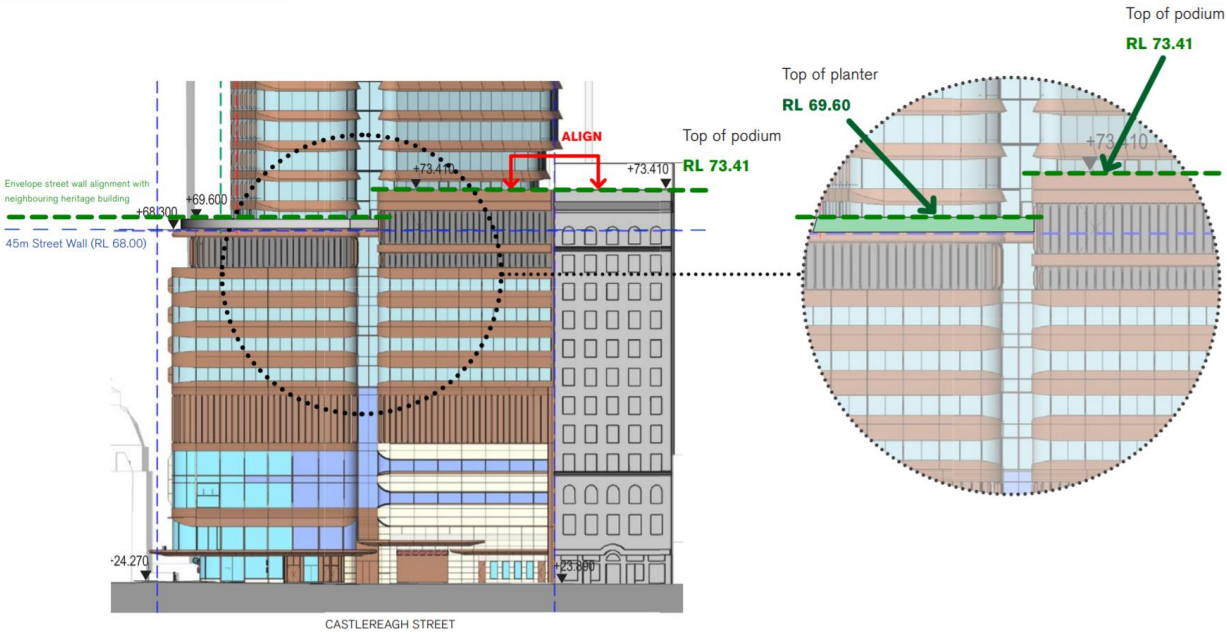


Source: Foster + Partners

The height of the podium will be increased by 1.66m to RL 69.60 intentionally to create direct alignment with the parapet height of the heritage listed National Building on Pitt Street. This podium height is continued along Pitt Street, Park Street and the southern portion of the Castlereagh Street façade for consistency.

As illustrated in **Figure 10** below the height of the podium component to the north-east has been increased by 5.41m to match the height of the adjoining NSW Masonic Club heritage building on Castlereagh Street, with its roof eave at an RL of 73.41. The proposed design introduces a raised upstand along the perimeter of the north-eastern podium roof terrace, aligning to this heritage datum.

Figure 10 – Envelope Modification – Castlereagh Street



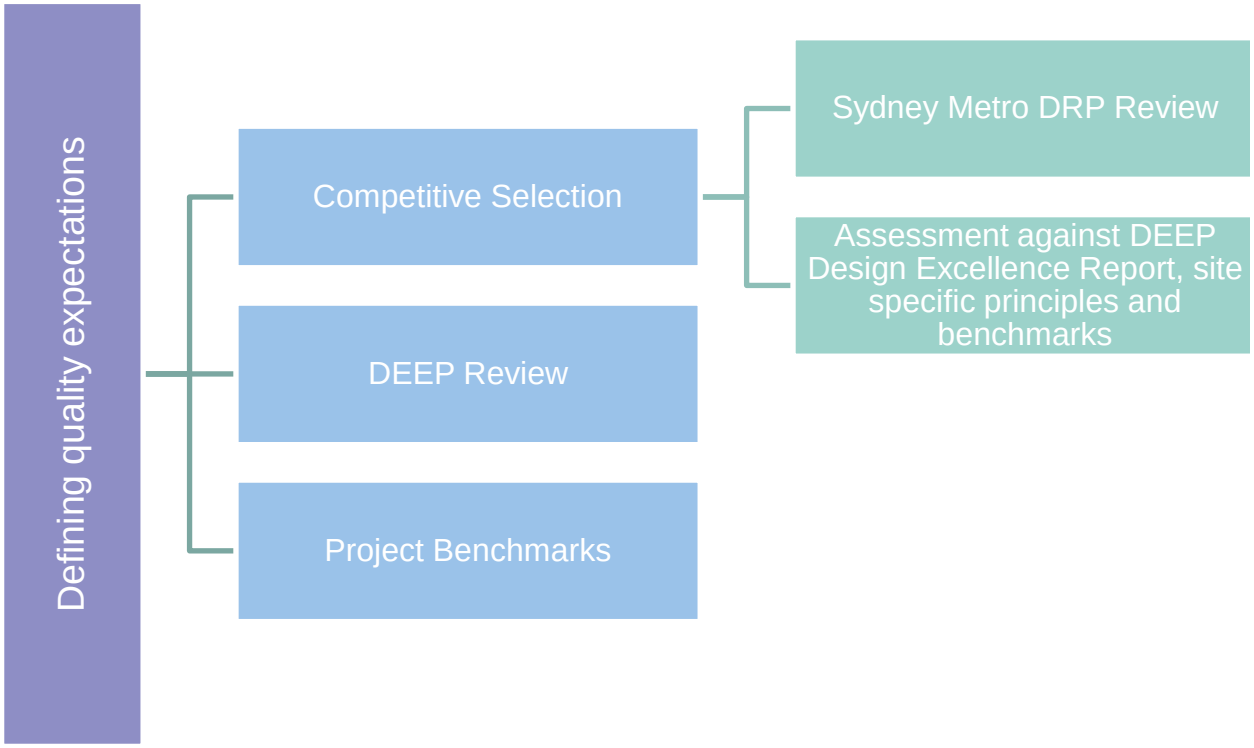
Source: Foster + Partners

2.5. DESIGN DEVELOPMENT & DESIGN EXCELLENCE PROCESS

The Concept SSD DA includes a Design Excellence Strategy for all integrated station developments part of the Sydney Metro City & Southwest project, and a set of specific Design Guidelines for the Pitt Street North Station OSD. These documents were established to guide the detailed design of the future OSD and ensure a high quality of design was achieved for the site and other over station developments.

The endorsed Design Excellence Strategy is included at **Appendix G**. The Design Excellence Strategy comprises a multi-phase process including a competitive selection which involved an *Expression of Interest* (**EOI**) and *Request for Tender* process, benchmarking studies and continued design review by a Design Excellence Evaluation Panel (**DEEP**) and subsequently the Sydney Metro Design Review Panel (**DRP**). A summary of the design excellence process undertaken is illustrated in **Figure 11** below.

Figure 11 – Summary of Design Excellence Process



Source:

A critical objective of the competitive tendering process was to review alternative approaches to the Pitt Street North site and strive for design excellence for the OSD project. Following the approval of the Concept SSD Proposal and completion of the EOI and Request for Tender process, Pitt Street Developer North Pty Ltd and its architect Foster + Partners were chosen as the successful development partner for the Sydney Metro Pitt Street North Station OSD.

Since the selection of Pitt Street Developer North Pty Ltd as the development partner for the Pitt Street North Station OSD, the applicant has presented to the Sydney Metro DRP eight times. Throughout this process the DRP has provided ongoing design review of the proposed Pitt Street North Station OSD proposal to ensure design excellence and integrity have been achieved.

The specific details of the consultation undertaken to achieve design excellence in accordance with the Design Excellence and Design Guidelines is outlined at **Section 5**, with a detailed discussion of the proposal's design excellence included at **Section 8.1.1**.

3. SITE ANALYSIS

3.1. SITE CONTEXT AND LOCATION

The site comprises the southern extent of the Sydney CBD block bounded by Pitt Street, Park Street and Castlereagh Street (**Figure 12**). The site is an irregular L shaped allotment with street frontages of approximately 27.8m to Pitt Street, 81m to Park Street and 48.3m to Castlereagh Street. Internal facing boundaries consist of a north eastern boundary measuring approximately 41.3m, a north western boundary of 41.6m and a northern internal boundary of 15.7m resulting a site area of 3150.1m^2 (refer site survey at **Appendix C1**).

The public domain between the site and the Pitt and Park Street carriageways contain street trees. Various street furniture, streetlights, signage, bicycle racks and parking ticket machines are also located within the public domain areas along all three street frontages.

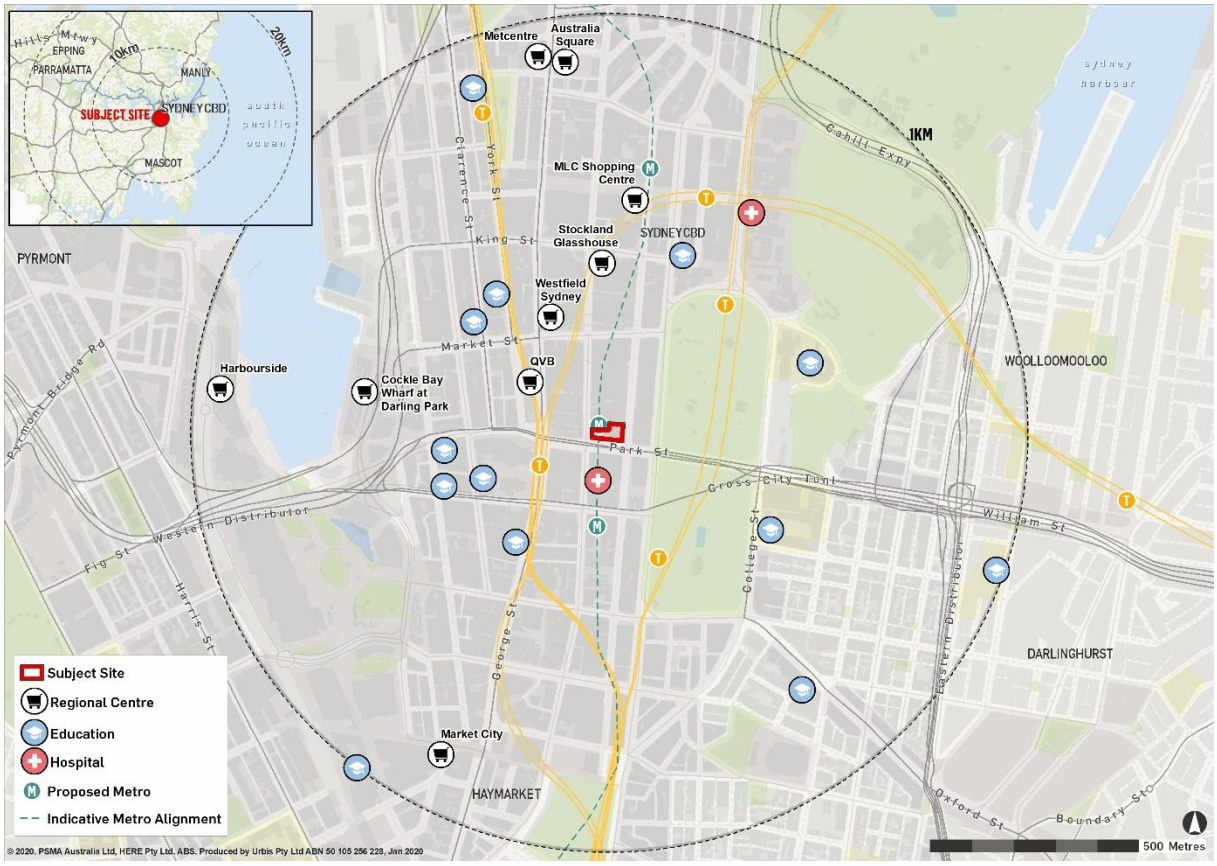
Figure 12 – Site Aerial Photograph

Source: Urbis/ Nearmap

The site is centrally located within the Sydney Central Business District (**CBD**) which forms part of the Sydney City Local Government Area (**LGA**).

The Sydney CBD is identified as the "Harbour CBD" within Sydney's overarching strategic plan, *A Metropolis of Three Cities*. It is Sydney's largest commercial precinct, followed by Parramatta CBD and North Sydney CBD, and is part of the eastern economic corridor from Macquarie Park to Sydney Airport functioning as a fundamental component of the state's Global Economic Corridor. The area is characterised by a consolidated commercial core and metropolitan centre (with key public open spaces), contributing to global financial, professional, education and innovation sectors estimated to provide a skilled labour force of 500,000 jobs by the year 2036 through the Innovation Corridor and supported by surrounding high-amenity residential and mixed-use precincts.

Figure 13 – Context Map



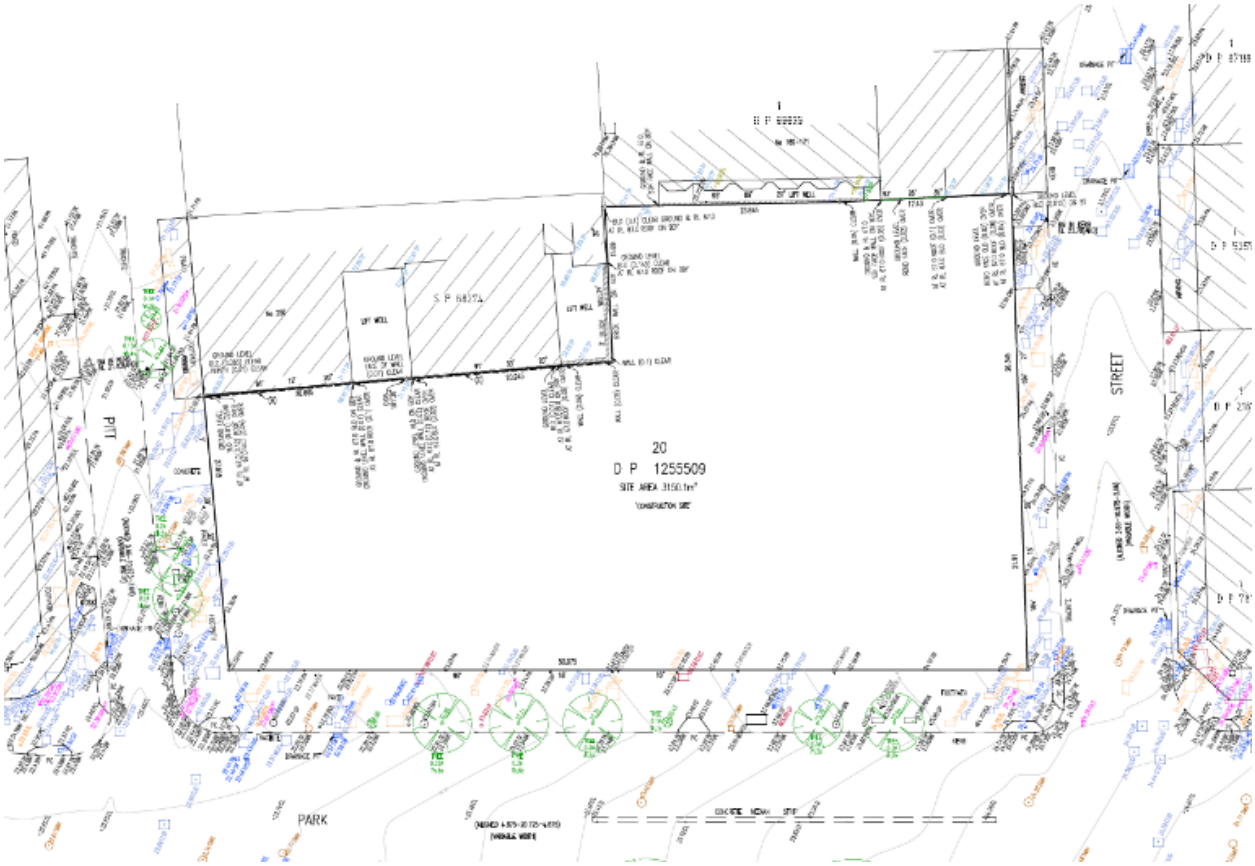
Source: Urbis

3.2. LEGAL DESCRIPTION

The site occupies one allotment and is legally described as Lot 20 in DP 1255509 as shown in **Figure 14**.

The allotment includes a series of easements affecting parts of the land for stormwater drainage and sewer, as outlined within the site survey submitted with the Detailed SSD DA (refer to **Appendix C1**). The existing easements do not, however, impede the construction of the proposed development.

Figure 14 – Site Survey



Source: Veris Australia

3.3. PREVIOUS DEVELOPMENT

Prior to the demolition of all buildings across the site under the terms of CSSI approval, the site was previously occupied by a mix of low-rise retail and mid-rise office developments. These are described further in **Table 3** below.

Table 3 – Former development

Address	Lot and DP	Former Development Description
252-254 Pitt Street	Lot 1 in DP596474	Two adjacent three storey developments on Pitt Street, both containing retail premises at the ground level. A club was formerly located above the development at 252 Pitt Street
256 Pitt Street	Lot 17 in DP1095869	This site was used as a fast food premises and was constructed to a height of four storeys. The building was constructed to the street alignment and abutted the National Building to the north.
40 Park Street	Lot 2 in DP509677	A series of uniform height three storey buildings located adjacent to one another, of a similar architectural design and style. Most buildings comprised ground floor retail uses, with two further storeys located above used for additional retail space. All buildings were built to the front boundary, affording no setback to Park Street
42 Park Street	Lot 2 in DP982663	
46 Park Street	Lot 3 in DP61187	

Address	Lot and DP	Former Development Description
48 Park Street	Lot 1 in DP74367	The Windsor Hotel. This building was six storeys in height, with a slight setback at the topmost floor.
175-183 Castlereagh Street	Lot 3 in DP74952	14 storey mixed use commercial building, featuring business premises at the ground floor and office levels above.
	Lot 2 in DP900055	
	Lot 1 in DP229365	

The previous site conditions displayed a pattern of development with very little consistency in scale, form or alignment. Mid-rise commercial buildings were abutting low-rise retail and food and drink premises.

The surrounding streets are frequently used by pedestrians as a thoroughfare during peak times and are anticipated to support increased pedestrian traffic once the Pitt Street metro station is constructed. The current pathway conditions are encumbered in part due to the presence of construction hoardings, and overall are considered to be a poor but temporary interface for pedestrians traversing the CBD.

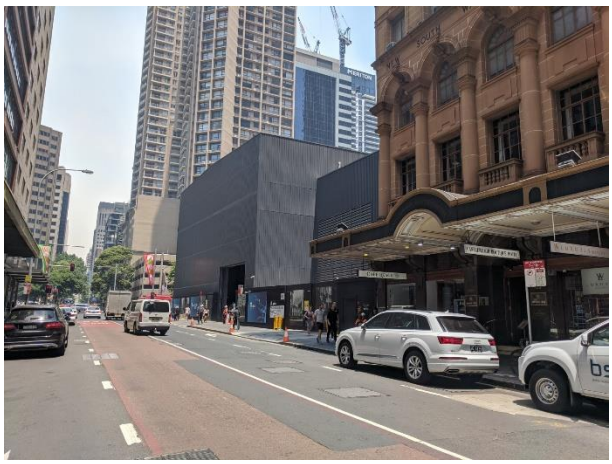
As discussed, all the buildings and structures previously on the site have now been demolished under the CSSI approval for the Pitt Street Station. Construction of the Pitt Street metro station is currently underway, with the site occupied by a large temporary shed structure (see **Figure 15**).

Figure 15 – Site Photos

Picture 7 – View from corner of Park and Pitt Streets

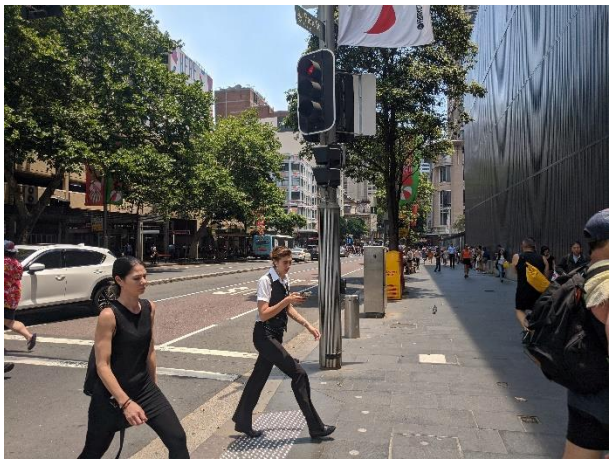
Picture 8 – Looking north along Pitt Street (site on right)

Picture 9 – Looking east along Park Street (site on left)



Picture 10 – Looking south along Castlereagh Street (site on right)

Picture 11 – Looking west along Park Street (site on right)



Picture 12 – Looking west along Park Street (site on right)

Source: Urbis

3.4. SURROUNDING DEVELOPMENT

The surrounding context is characterised predominantly by modern commercial buildings interspersed with commercial heritage buildings.

The immediate site is generally bound as follows:

- **North** – Adjoining the north eastern boundary of the site at 169-173 Castlereagh Street, is the NSW Masonic Club and Castlereagh Boutique Hotel, a 12 storey rendered brick building heritage listed under the Sydney Local Environmental Plan 2012 (SLEP 2012). Adjoining the north western boundary of the site at 250 Pitt Street, is the National Building, an early twentieth century 12 storey brick and concrete commercial building, also heritage listed under SLEP 2012. Further north is ANZ Tower (242 Pitt Street) which consists of a podium with tall tower form of approximately 245m.
- **South** – Abutting the site to the south is Park Street, a key east-west transport corridor through the Sydney CBD. Park Street provides a key role as a pedestrian avenue across the city between Hyde Park and the Town Hall Civic Precinct. Further south, on the opposite side of Park Street at 258-260 Pitt Street, is the Criterion Hotel (4 storeys) heritage listed under SLEP 2012 and the Park Regis building (136m). The Park Regis (27 Park Street) contains hotel rooms up to level 12, with residential apartments above. Victoria Tower (197 Castlereagh Street) is located directly behind the Park Regis building and contains residential apartments.
- **East** – Castlereagh Street abuts the site to the east. To the south east of the site is 201 Elizabeth Street, a 38 storey commercial office tower. The site has approval for redevelopment for a mixed use retail, residential and hotel building envelope, featuring a 45m podium and a 37 storey tower above.
- **West** – Pitt Street abuts the site to the west. To the west of Pitt Street at 275 Pitt Street is the Citigroup Centre building, a commercial office building with podium retail premises with a maximum height of 243m. Key surrounding buildings are shown in **Figure 16** below.

Figure 16 – Surrounding Development – Key Sites

Source: Google Earth

3.5. TOPOGRAPHY

The site is an irregular L shaped allotment with street frontages of approximately 27.8m to Pitt Street, 81m to Park Street and 48.3m to Castlereagh Street. Internal facing boundaries consist of a north eastern boundary measuring approximately 41.3m, a north western boundary of 41.6m and a northern internal boundary of 15.7m resulting in a site area of 3150.1m^2.

The site has an area of approximately 3151.01 m^2 and slopes from a high point of RL24.29 in the south east to a low point of RL22.02 in the north west resulting in a fall of approximately 2.2 metres.

The topography of the site has been a key consideration in the design resolution of the ground plane of the station and OSD, the access arrangement to the site and the pedestrian movement through the site. The ground floor levels for the station and its integration into the surrounding public domain have been resolved under the terms of the CSSI approval and included the preparation of a Station Design Precinct Plan (**SDPP**) and an Interchange Access Plan (**IAP**).

3.6. BUILT HERITAGE

The site is not heritage listed or located within a Heritage Conservation Area under the SLEP 2012. However, the site is located within proximity of a number of Local and State listed heritage items as illustrated at **Figure 17**.

Figure 17 – Heritage Items

Source: SLEP 2012

Heritage items located within the vicinity of the site are summarised in **Table 4**. Potential impacts of the Pitt Street North Station OSD on the surrounding heritage items have been carefully considered in the detailed design of the proposal and specifically the proposed modification to the building envelope to ensure the built form and heritage significance of these items continues to be respected, appreciated and enjoyed.

These potential impacts have been discussed in further detail in **Section 8.1.4** of this EIS and within the Heritage Impact Assessment in **Appendix L** which identifies and describes the heritage significance of items surrounding the site.

Table 4 – Heritage items in the vicinity of the site

Item	Item name and address	Significance	Description
I1699 NSW Heritage Inventory no. 2423976	Community building 'NSW Masonic Club' including interior (167-173 Castlereagh Street)	Local	A fine example of the Inter-war Commercial Palazzo style. It is a 12 storey sandstone building, symmetrical in its massing with three distinct sections that are fundamentally classical in composition.
I1931 NSW Heritage Inventory no. 2424046	'National Building' (248A-250 Pitt Street)	Local	A twelve-storey reinforced concrete commercial building constructed in the Inter-war Commercial Palazzo style and having a prominent position due to its height relative to the streetscape.
I1748 NSW Heritage Inventory no. 2424002	Former 'Manchester Unity' Building including interiors (183-187 Elizabeth Street)	Local	Part of an ongoing tradition of centralised commercial, professional and financial dealings in CBD. The choice and use of the site reflects pre-eminence of the portion of the city for professional and financial institutions on the prestige location adjacent to the park.
I1750 SHR Listing no. 01710	The Great Synagogue including interior (187A Elizabeth Street)	State	The earliest surviving synagogue in NSW still in use, which has represented the centre of Jewish worship and culture in Central Sydney since the 1870s.
I1751 NSW Heritage Inventory no. 2424004	Former 'Australian Consolidated Press' façade (189-197 Elizabeth Street)	Local	A building which has been continuously associated with newspaper publishing since its construction in 1925, representative of an important period of redevelopment in the city.
I1654 SHR Listing no. 01871	Hyde Park (110 - 120 Elizabeth Street)	Local	A principal area of public open space between Elizabeth Street and College Street.
I1933 NSW Heritage Inventory	Criterion Hotel including interior (258-260 Pitt Street)	Local	Hotel constructed in the Inter-War Art Deco style, situated in a prominent location on the corner of Pitt and Park Streets in the inner city Town Hall precinct.

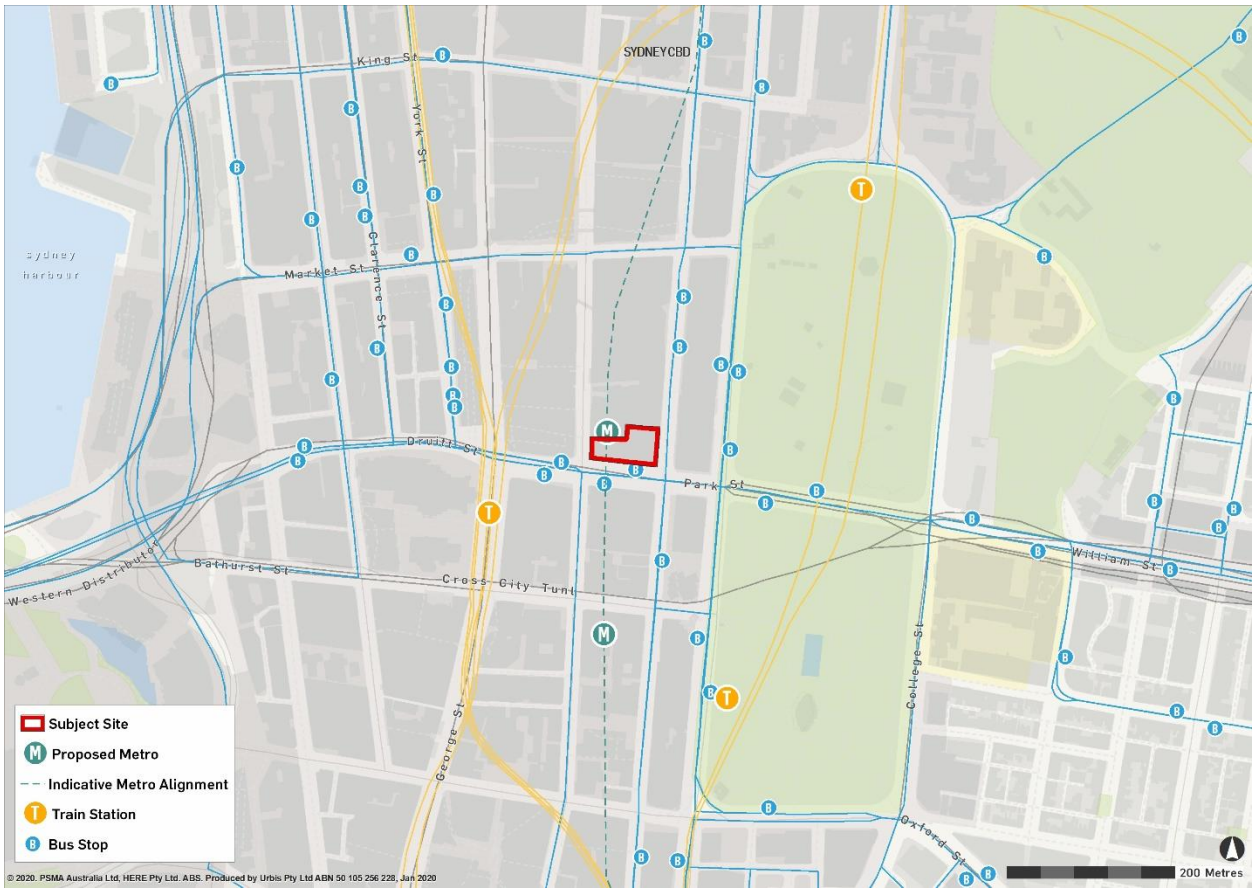
Item	Item name and address	Significance	Description
no. 2424127			Has aesthetic significance for the quality of its exterior detailing.
I1935 NSW Heritage Inventory no. 2424128	'Pilgrim House' including interior (262-264 Pitt Street)	Local	A seven-storey commercial building in the Commercial Palazzo style, which forms part of a varied streetscape within Pitt Street. High historic significance in the history of the Australian Broadcasting Commission.
I1936 SHR Listing no. 00022	Pitt Street Uniting Church including interior (264A Pitt Street)	State	Aesthetically significant as an exceptional example of a church in the Old Colonial Grecian style by John Bibb. Historically and socially significant as a centre of worship and community activity for 150 years.
I1937 NSW Heritage Inventory no. 2424049 SHR Listing no. 00366	Former School of Arts including interiors (275 Pitt Street)	State	A significant work that combines the design of three prominent 19th century architects, Verge, Bibb and Backhouse. It is significant for its historical associations with the School of Arts, the foundation of Technical Education and its association with major Sydney figures.
I1790 NSW Heritage Inventory no. 2424103 SHR Listing no. 01452	Sydney Town Hall including interiors (483 George Street)	State	One of the grandest and most elaborate and largely intact examples of 19th century High Victorian buildings surviving in Australia. A grand civic monument being a landmark feature along George Street, serving as the symbolic centre of the city.

3.7. TRANSPORT & ACCESSIBILITY

3.7.1. Public Transport

The site is proximate to existing public transport links including rail and bus routes as illustrated in **Figure 18**.

Figure 18 – Public Transport Context



Source: Google Earth

Rail

The site currently benefits from proximal access to the Sydney Trains network, being located in a central portion of the Sydney CBD close to a number of major transport nodes. Town Hall Station is located 100 metres to the west of the site, currently providing access to the T1 North Shore, Northern and Western Line, T2 Inner West and Leppington Line, T4 Eastern Suburbs and Illawarra Line, T8 Airport and South Line and the T3 Bankstown Line, with the Bankstown Line ultimately moving to the Sydney Metro network.

St James Station is approximately 280 metres to the north-east of the site. St James Station is served by the T2 Inner West and Leppington Line, the T3 Bankstown Line and the T8 Airport and South Line.

On completion of the Sydney Metro City & Southwest project the site will also be directly connected to stations from Tallawong in the north-west to Bankstown in the south-west, ultimately offering one of the most rail-accessible locations within the Sydney Metropolitan area. The proposed building envelope is located directly above the Pitt Street Station northern portal. Pitt Street is one of seven new Sydney Metro City & Southwest stations. The future OSD will be integrated with the Pitt Street Station and will provide commuters with access to both the Sydney Metro network and a number of other key Sydney Trains lines.

Light Rail

The site benefits from close proximity to the Sydney Light Rail (**SLR**) network, which provides a 12km, 19 stop light rail service through the city, extending from Circular Quay along George Street to Central Station, then through Surry Hills and Moore Park to Kingsford and Randwick. The closest SLR stop is located on George Street in front of Town Hall.

Ferry

The Barangaroo Ferry Wharf is located at approximately 1km to the north-west of the PSN site. There are currently two ferry lines operating at the wharf; the Parramatta River line (F3) and the Cross Harbour line (F4). There is currently no public transport servicing between the proposed site and Barangaroo Ferry Wharf. However, the new Sydney Metro line will have a station at Barangaroo and improves accessibility for the proposed site towards the ferry services from Pitt Street Station. Alternatively, users could access all the ferry services at Circular Quay on the north via the train services (T2, T3 and T8), or the new Town Hall light rail stop for the Sydney CBD and South East Light Rail to reach Circular Quay.

Bus

Bus corridors throughout Central Sydney were recently reorganised in accordance with the Sydney City Centre Access Strategy, which sought to redesign the Sydney CBD bus network to include new and improved services through a number of key corridors.

There are numerous bus services in the vicinity of the site, with the following key bus corridors close to the site:

- **Castlereagh Street** is a key corridor for southbound bus services travelling towards the Inner West and South.
- **Elizabeth Street**, one block east of the site, acts as a major north-south bus route through the CBD. Travelling north, Elizabeth Street provides access to Martin Place and Circular Quay, as well as the Metrobus Network, which provides services to major nodes across Sydney. Travelling south, Elizabeth Street provides access to the Inner South and Eastern Suburbs.
- **Park Street** provides east-west bus access through the CBD, providing access to services across the Anzac Bridge to Victoria Road and the North West, as well as additional access to the Eastern Suburbs.

The site also benefits from proximity to the Queen Victoria Building bus interchange, which provides access to the North Shore, Northern Beaches, Inner West and Hills District.

3.7.2. Road Network

Conditions on the streets bordering the site are as follows:

- **Pitt Street**: A one-way northbound road comprising two general traffic lanes, with paid on-street parking and loading zones on either side.
- **Castlereagh Street**: A one-way southbound road comprising two general traffic lanes and a bus lane, with a further lane for parking, loading and turning at intersections.
- **Park Street**: A two-way arterial road comprising a general traffic lane, a bus lane and a parking / loading / servicing lane eastbound, as well as two general traffic lanes and a bus lane westbound.

There is no available unrestricted parking within 400 metres of the site, reflecting a constrained parking environment associated with the CBD context of the area.

3.7.3. Bicycle Network

The site is accessible to bicycle riders via a network of key on and off-road cycle routes, including a number of current and proposed separated cycleway corridors. There is dispersed on-street bicycle parking located on the streets surrounding the site, this consists mainly of bike stands attached to existing furniture, such as street poles.

The *Sydney City Centre Access Strategy* identifies Park Street and Pitt Street as ‘Direct Routes with Higher Traffic’, although they do not currently have a dedicated cycleway. This route provides access between the site and the strategic Sydney regional cycling route network. Of note is the Kent Street cycleway 300 metres to the west of the site and the Liverpool Street cycleway 400 metres to the south of the site, both of which contribute to the provision of a separated north-south cycling spine through the city centre. These cycleways also provide separated cycling access to Green Square and Sydney Airport, Paddington, the Sydney Harbour Bridge and North Shore, as well as Darling Harbour, Pyrmont and Rozelle.

The *Sydney City Centre Access Strategy* identifies future cycleways to encourage growth in cycling and reduce pressure on the public transport system and road network. Key extensions to the cycling networks include:

- extension of the existing Castlereagh Street cycleway from its current terminus at Liverpool Street to a new future terminus at King Street,
- the extension of the existing King Street cycleway from its current terminus at Clarence Street to a new future terminus at Castlereagh Street to provide a connection between the two cycleways, and
- the provision of a new cycleway along Park Street, between Castlereagh Street and Elizabeth Street.

The future Castlereagh Street and Park Street cycleways are of particular relevance to the development, given that the Castlereagh Street cycleway will extend along the eastern boundary of the site, and the Park Street cycleway will be located immediately to the south-east of the site.

3.7.4. Pedestrian Access

Pedestrians can access the site via dedicated footpaths on all street frontages. The area surrounding the site has a well-established pedestrian network and is characterised by high levels of pedestrian activity in recognition of the site's CBD location and proximity to a number of public transport nodes, as described above.

The primary entrance to the OSD is via Pitt Street, separated from the proposed pedestrian entrance to the Sydney Metro Pitt Street Station on Park Street. This mitigates potential pedestrian movement conflict and disperses pedestrian movement around the site. The separation of pedestrian entrances for the OSD and Metro provides good space activity management and results in clearly visible, unobstructed and easily identifiable entrances from the street.

3.8. OPEN SPACE & SPECIAL AREAS

The site is located in close proximity to three substantial public open space areas, and a future planned area of public open space, as follows:

Hyde Park

The closest substantial area of consolidated open space to the site is Hyde Park, which is located approximately 90 metres to the east. Hyde Park comprises one of the key areas of public open space in the Sydney CBD, and features a network of pathways, open grass areas, mature trees and decorative features. At the south-western corner of Hyde Park is Museum Station. The Anzac Memorial is located at the centre of the southern portion of the park.

The Domain

The Domain is located 500 metres north-east of the site, beyond Hyde Park. The Domain comprises a substantial area of public open space which provides an open space link between Hyde Park and the Royal Botanic Gardens beyond.

Cook and Phillip Park

Cook and Phillip Park is located 500 metres north-east of the site, beyond Hyde Park. Cook and Phillip Park comprises a substantial area of public open space which provides an open space link between Hyde Park and the Domain and the Botanical Gardens beyond.

Tumbalong Park / Cockle Bay

Tumbalong Park is located approximately 650 metres east of the site, within the Darling Harbour Entertainment Precinct. Tumbalong Park comprises a large circular lawn area, as well as a number of passive recreational civic spaces and a children's playground.

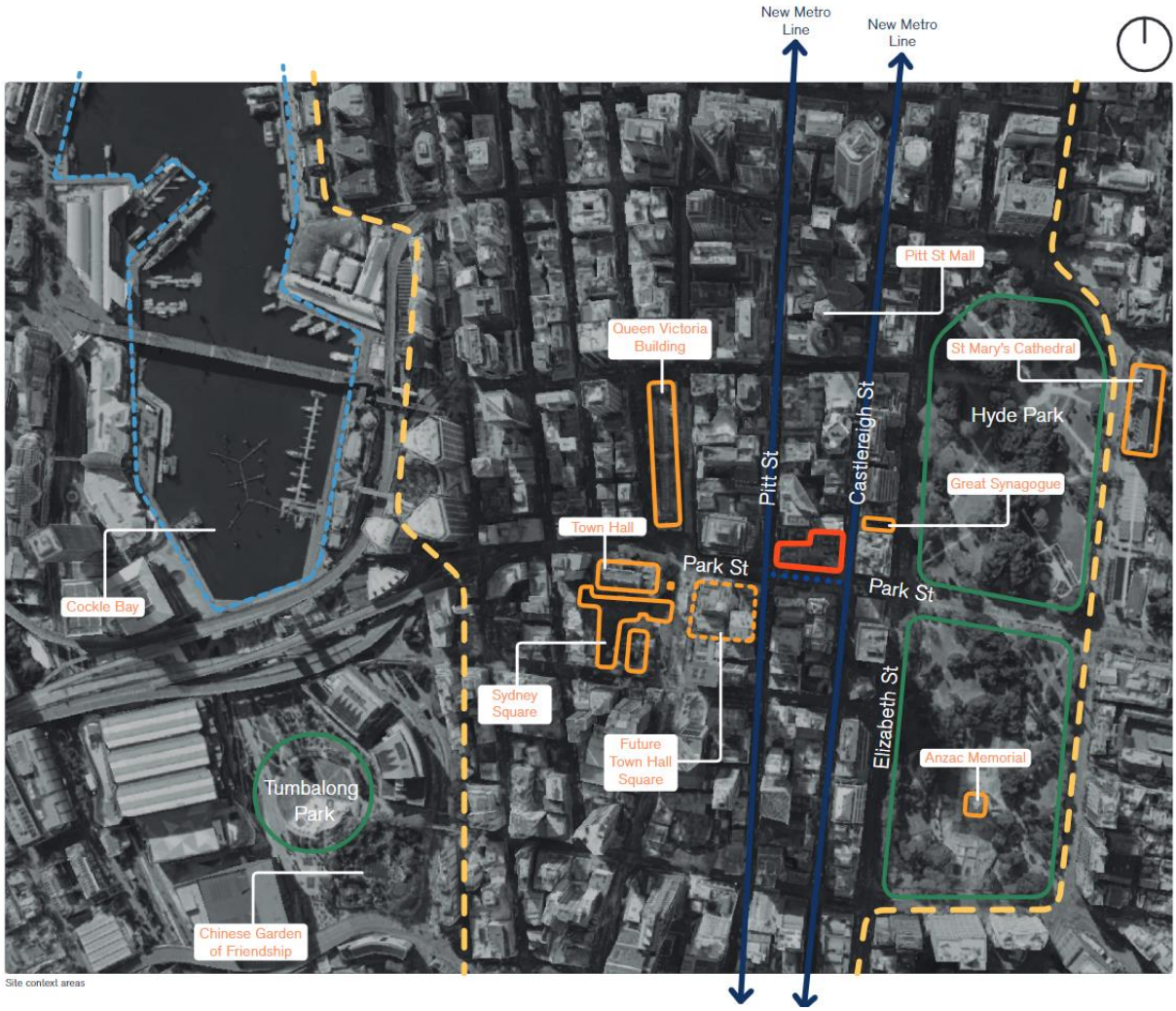
Sydney Square and Pitt Street Mall are two areas of substantial civic open space located in proximity to the site, providing passive recreational opportunities and complementing the natural open space areas outlined above. Town Hall is located within Sydney Square, which is approximately 200m south-west of the site. Pitt Street Mall is approximately 240m north of the site.

Future Planned Open Space

An additional area of substantial civic open space is also proposed at the future Town Hall SLR stop at George Street, approximately 200 metres to the south-west of the site. This comprises the existing Sydney Square, as well as a quantum of future pedestrian space to be delivered on George Street as part of the SLR project. Finally, the northern end of the block bounded by George Street, Park Street and Pitt Street is envisaged to be repurposed for an area of civic space in the future by Council, known as Town Hall Square.

Areas of civic and open space in proximity to the site are depicted at **Figure 19**.

Figure 19 – Open Space in the vicinity of the site



Source: Foster & Partners

3.9. UTILITIES & INFRASTRUCTURE (SERVICES)

The site is located within an established urban area and currently contains all necessary services including electricity, gas, water, communications, drainage and sewerage. Furthermore, future development on the site can be connected to these services when required.

Section 4.14 provides a detailed discussion of the required utility and service infrastructure provisions associated with the detailed design and future use of the OSD. Appropriate utility and service connections will be provided under the CSSI approval to meet the servicing requirements of the Pitt Street North integrated station development.

For further discussion, refer to **Section 4.14** of this EIS and the Infrastructure Services and Utilities Report / Management Plan: Hydraulic at **Appendix Y1** and the Infrastructure Services and Utilities Report / Management Plan: Electrical, Data and Communications at **Appendix Y2**.

4. PROPOSED DEVELOPMENT

4.1. DESCRIPTION OF THE PROPOSAL (SSD-10375)

The Detailed SSD DA seeks approval for the detailed design, construction and operation of a new 39 level commercial building above the new Sydney Metro Pitt Street Station northern entrance. The proposed development also includes the use of floorspace for retail tenancies and supporting commercial facilities and services within the podium of the development which are to be constructed in accordance with the terms of Sydney Metro project approval (CSSI approval).

The Detailed SSD DA specifically seeks development consent for:

- The design, construction, and operation of a new commercial tower with a maximum building height of RL 176.8 (39 levels) including ground, ground floor mezzanine and plant levels.
- A total of 55,743m² GFA, including station floor space.
- Physical integration with the approved Sydney Metro works including:
    - Structures, mechanical and electrical systems, and services; and
    - Vertical transfers.
- Use of spaces within the CSSI 'metro box' building envelope for the following OSD purposes:
    - Basement Level 1: Substation and services.
    - Level 2: Flexible (Commercial office/ retail) floor space with a total area of 1,379m^2, office/ retail storage, amenities, access to commercial tower, 40 car parking spaces and building services.
    - Level 1: End of trip facilities and building services.
    - Ground Level Mezzanine: Building services and Station Management.
    - Ground Level: Four retail tenancies with a total area of 336m^2, retail storage, access to level 2 retail spaces and commercial tower, building services, loading dock with 7 loading spaces, waste room, dock masters office and end of trip lobby.
- Fit-out of spaces within the podium for OSD purposes, with the exception of the future tenant spaces (office and retail);
- Pedestrian entrances to the OSD from Pitt Street (Primary) and Castlereagh Street (secondary to EOT);
- Private landscaped terraces on levels 10 and 11;
- Provision of signage zones; and
- Stratum subdivision (staged) between metro station and OSD uses.

The proposed development provides premium commercial office and retail floor space in a singular tower form to deliver an integrated development where the OSD, future Pitt Street North metro station and the public domain function together. The proposal responds to the key site constraints, such as surrounding heritage built form, visual and view impacts, solar access and overshadowing, to deliver an integrated OSD which exhibits design excellence, as illustrated in the indicative render at Figure 20**.**

A section 4.55(2) modification application is lodged concurrently with the Detailed SSD DA. The section 4.55(2) modification application seeks consent for the following amendments to the Concept DA:

- Amend the concept building envelope plans approved on 25 June 2019 by the Minister under application number SSD 8875 to modify the podium envelope
    - at the Castlereagh Street façade to facilitate better built form relationship with the scale of the adjacent Masonic Building;

- at the Pitt Street and Park Street façades to facilitate better built form relationship with the scale of the adjacent National Building;

- Amend condition A15 and A17 to permit the protrusion beyond the building envelope for the purpose of sunshading elements, planted elements and balustrades;
- Increase in the total GFA across the site to 55,743sqm (including station floorspace); and
- Replace Concept Approval envelope plans to show interrelationship of proposed OSD floor space with station floor space; and
- Make minor amendments to the Design Guidelines in respect to podium heights and tower setbacks.

Figure 20 – Photomontage of proposed development

Source: Foster + Partners

4.2. NUMERIC OVERVIEW

The key numerical aspects of the proposed detailed OSD design are summarised below in **Table 5**.

Table 5 – Detailed SSD DA Numerical Overview

Component	Proposal
Site Area	3,150.1m^2
OSD Gross Floor Area (GFA)	Total GFA on the site: 55,743m^2 including; • Station floor space: 1,092m2 • Commercial OSD: 54,651m2 (including 482m^2 of End of Trip, and 127m^2 of above ground storage) • Flexible Commercial/ Retail premises OSD: 1,379m^2 GFA (**included in above**)
Building Height	• RL 176.8 (approximately 171.6 metres) maximum height of building • 39 levels
Setbacks	• 9.8-12.8 metre street frontage setback from Park Street (southern boundary) • 0 metre podium street frontage setback from Pitt Street (western boundary) • 0 metre podium street frontage setback from Castlereagh Street (eastern boundary) • 0 metre tower setback from adjoining development from RL68.3 up (northern boundary) • Variable 8m weighted average tower setback from street frontages above podium height.
Loading and Parking	• One loading dock accessed via Castlereagh Street catering for 1 Medium Rigid Vehicles; 2 Small Rigid Vehicles; 3 Car bays for couriers / deliveries • 40 OSD car parking spaces • 1 Sydney Metro Parking Space • Retail car parking: 0 spaces • Bicycle parking: 350 bicycle lockers; 200 bicycle racks for OSD

4.3. LAND USE & GROSS FLOOR AREA

The Detailed SSD DA seeks approval for the use of the proposed OSD for a commercial tower including retail premises on the ground plane and flexible retail/ commercial space on level 2.

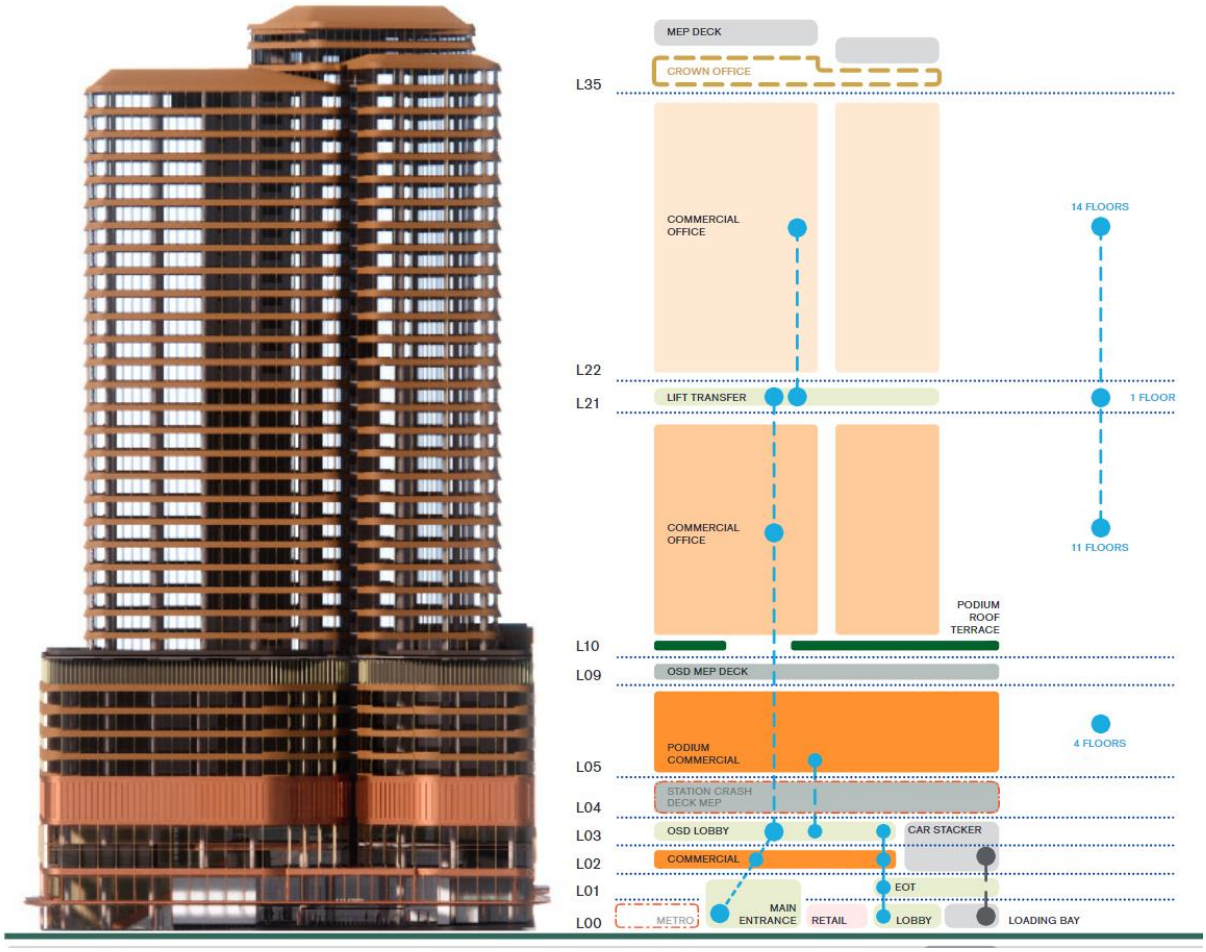
As discussed throughout this EIS, commercial uses for the OSD directly align with strategic objectives and Council's vision for the site which reinforces the appropriateness of the development's location within Central

Sydney's commercial core. Furthermore, this detailed design application also seeks approval for use of the various OSD spaces within the Pitt Street North Station 'metro box' (CSSI approval).

The detailed design of the OSD building envelope yields a total GFA of 55,743m² that specifically relates to the commercial uses within the podium and tower as illustrated in **Figure 21** below. This incorporates the primary use and design of the OSD commercial floor plates, use / fit-out of the OSD lobby space, OSD parking and loading, end-of-trip facilities, services facilities and retail tenancies (it is noted that fitout for office and retail tenancies will be the subject of separate applications).

A floor by floor breakdown of GFA and proposed land uses as required by the SEARs item 3 is contained within the Architectural Design Report at **Appendix E1. Figure 21** below broadly illustrates the land use allocation level by level.

Figure 21 – Land Use allocation



Source: Foster + Partners

4.4. RELATIONSHIP BETWEEN OSD (SSD) & STATION (CSSI) COMPONENTS

Condition A4 of the CSSI approval states that, "*except to the extent described within the CSSI EIS and PIR, any over station development, including associated future uses, does not form part of this CSSI and will be subject to the relevant assessment pathway prescribed by the EP&A Act*".

Accordingly, the Detailed SSD DA for the OSD seeks approval for integration with the approved building structure up to the transfer slab level (including structures, services, lift cores etc.) and the use of the OSD related spaces within the CSSI 'metro box'. This includes use but (not internal fit-out) of retail tenancies, commercial amenities/ end-of-trip facilities, loading facilities, and access to services. The construction of the actual 'metro box' is provided for under the CSSI approval and does not form part of the proposed SSD DA.

4.4.1. Interface Areas

The Architectural Drawings **(Appendix D**) and Architectural Design Report **(Appendix E1)** prepared by Foster + Partners further delineate the integrated elements of the Detailed SSD DA and CSSI with extensive illustrative references. Effectively, the detailed SSD DA seeks consent for the detailed design, construction and use of the OSD tower, as well as the use of OSD areas within the CSSI 'metro box' as outlined below:

CSSI Approval (not the subject of this EIS):

- Demolition of all existing structures and vegetation removal;
- Bulk earthworks and excavation;
- Remediation activities;
- Primary station works, including both structural elements and service provisions below the 'transfer slab' (e.g. lift cores, access, parking etc);
- Public domain works;
- Station retail tenancies; and
- Ancillary facilities relating to the operation of Sydney Metro.

Detailed SSD DA (the subject of this EIS):

- Design, construction and operation of the OSD (i.e. above the 'transfer slab' level) for 'commercial premises' and ancillary uses;
- Use and fit out of areas within the CSSI 'metro box' that support the OSD:
    - OSD commercial tower entrance lobbies, structural elements and lift cores;
    - Podium commercial/ retail spaces (retail fit-out excluded);
    - OSD parking and loading facilities;
    - Commercial end-of-trip facilities and amenities;
    - Bicycle parking and storage; and
    - Services facilities including within basement level 1.

To further clarify the above, the ground floor layout shown at **Figure 22** provides an illustrative breakdown of the location of 'OSD' space and 'station' space. In summary the areas are:

- **Blue shaded area**: OSD tower which is entirely the subject of the Detailed SSD DA.
- **Pink shaded area**: Sydney Metro approved development, the design, construction, and use of which is subject to the terms of the CSSI approval.

In accordance with condition E101 of the CSSI approval, the draft Pitt Street North SDPP has been developed to inform the design and delivery of public domain works surrounding the site. Further, the Pitt Street North SDPP has mandated the detailed built form of the podium up to the transfer level which forms part of the Detailed SSD DA proposal.

The detailed design of the proposed development supports the design objectives, principles and standards of the Pitt Street North SDPP in the following ways:

- The permeability of public spaces around the station entrance on Park Street have been maximised and maintained, through increasing the pedestrian accessible space under the OSD cantilever / awning, and locating the main OSD entrance from Pitt Street with a second access from Park Street.
- Building entrances at Pitt Street, Park Street and Castlereagh Street do not conflict with key Sydney Metro functions and services.
- The loading dock is designed to allow for efficient movement of vehicles to support both the OSD and Sydney Metro functions.

- Retail tenancy locations activate the street frontages to Park Street and provides activation and passive surveillance opportunities proximate to the metro station entrance.
- Community safety, amenity and privacy have been maximised through the incorporation of CPTED principles.
- The local character of the place, including materiality and built form that respects heritage character have been adopted for both the lower podium as well as the OSD components and tower.
- Best practice sustainable design solutions have been adopted throughout the detailed OSD and building podium design to minimise environmental impacts.

We note that within the Architectural Plans at **Appendix D**, some changes have occurred to the ground floor and plant layout within the pink 'metro box' component when compared to the plans approved in the Concept Approval.

Figure 22 – CSSI and OSD Interface Areas within the podium

Picture 13 – Approved delineation of OSD and metro use on the ground plane

Source: Architectus

Picture 14 – Proposed delineation of OSD and metro use on the ground plane

Source: Foster + Partners

The OSD entrance locations are generally consistent with the Concept DA with very minor amendments due to the development of the design. The proposed entrances include:

- The main entrance to the OSD is proposed to be maintained via Pitt Street with a secondary entrance from Park Street, consistent with the composition of adjoining heritage buildings, creating a prominent presence on Pitt Street.
- An additional OSD entry is proposed to a future retail tenancy via Pitt Street.
- Vehicular access is maintained via Castlereagh Street providing direct access to the shared loading dock, OSD car parking spaces (within the car stacker) and station back of house areas.
- A secondary pedestrian entrance, connecting to the end of trip facilities is also located via Castlereagh Street.
- A third OSD entry via Castlereagh Street is proposed to a future retail tenancy.
- An OSD entry via Park Street is maintained.

Updated Concept Plans form part of the modification to SSD 8875 for consistency.

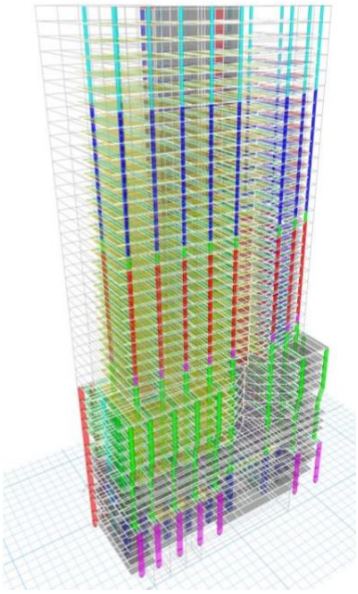
4.4.2. Structural Integration

The structural philosophy of the project is developed around the station shaft forming the base of the OSD tower itself, where the two structures are both designed and constructed as one integrated structure from foundation to rooftop. Although designed as one, the station structure can operate without the OSD being complete.

The structure has been developed with the lateral load-resisting structure as a reinforced concrete braced frame core and shear wall system. This utilises the concrete walls in the east and west podium cores, escalator box walls and low-rise and high-rise lift cores from level 1 and above. The core walls are an interconnected system with header beams that link the walls across major openings in the walls.

The lateral load-resisting system has been designed to resist wind and earthquake loads for both strength and serviceability requirements, as well as to satisfy robustness requirements. Refer Figure 23 below.

Figure 23 – Lateral Analysis Model



Source: Aurecon

The proposed column arrangement considers that there are no tower column transfers through any floor plates with the columns having a direct load path through to the foundation. This has been achieved either through coordination of tower columns through the station box or discontinuation of columns through the podium cores.

The podium columns that support the podium floor plate extent, extend between the interface level 5 and subsequently transfer or continue through to the foundation.

The tower low-rise and high-rise lift core is transferred above the station north escalators and is supported by the perimeter escalator box walls and four lozenge mega-columns. These mega columns penetrate through the station box escalators.

Refer to the Structural Design Statement at **Appendix AA** for a detailed discussion of structural elements.

4.5. OPERATION & FIT-OUT DETAILS

The proposed development seeks to deliver a new commercial development above a Sydney Metro station.

The detailed design of the OSD building envelope yields a total GFA of 55,743m^2 (including station GFA). The design and configuration of the proposed use has been presented to and endorsed by the Sydney Metro Design Review Panel as part of the Design Excellence process.

The total GFA includes the primary use and design of the OSD commercial floor plates, use / fit-out of the OSD lobby space, OSD parking and loading, end-of-trip facilities, services facilities and retail tenancies (it is noted that fit-out of office and retail tenancies will be the subject of separate applications).

The detailed design of the OSD building allows for the delivery of 54,651m^2 of commercial premises across podium and tower floor plates, including 518m^2 of retail spaces on the ground level and 1,382m^2 retail/commercial on level 2 of the podium.

The levels of the OSD contain the following uses:

Level	Use
Ground Floor	Retail tenancies fronting onto Park, Castlereagh and Pitt streets OSD lobby space off Pitt Street Loading dock, car park and end of trip facility entrance off Castlereagh Street
Level 01	Metro station uses End of trip facilities
Level 02	Composite of retail or commercial floor area and escalators to level 3 commercial sky lobby Car stacker
Level 03	Commercial sky lobby Car stacker
Level 04	Sydney Metro plant room
Level 05 – 08	2,462m^2 low rise floor plate for commercial office use
Level 09	OSD plant and commercial office ancillary uses including waste transfer
Level 10	Commercial office floor space with roof level terrace for commercial tenant use and substation
Level 11	Commercial office floor space with roof level terrace for commercial tenant use
Level 12 – 20	Commercial office floor space; the typical tower floorplate includes two banks of lifts in a core located in a central portion of the floor plate
Level 21	Commercial sky lobby and vertical transport and transfer level
Level 22 – 34	High-rise office with floor plates ranging in size from 1600m^2 to 1661m^2
Level 35	Reduced floor plate office and tower roof form
Level 36 – 39	Plant and tower roof forms

It is proposed that the office space be accessed 24 hours a day 7 days a week with core office hours of 7am – 8pm, 7 days a week.

4.6. BUILT FORM & DESIGN

The proposed OSD is detailed in the Architectural Plans (**Appendix D**) and Architectural Design Report (**Appendix E1**) prepared by Foster + Partners. The following sections of the EIS establish the design principles which underpin the detailed design of the OSD and describe the key design elements.

4.6.1. Built Form Design Guidelines

To realise the vision for an integrated station development for the Pitt Street North site, a set of design principles relating to built form, integration, movement and open space have been developed to guide the planning and design of the detailed design of the OSD.

In order to satisfy conditions of the Concept SSD DA, Sydney Metro has revised the Pitt Street North Station OSD Design Guidelines (June 2019) which have assisted in informing the detailed design of the proposed

commercial OSD. The 'Podium and Street Wall' guidelines as well as those relating to 'Built Form above the Podium' to be achieved for the Pitt Street North Station OSD are set out in **Section 8.1.2** of this EIS.

4.6.2. Urban Context Drivers

The building massing and tower articulation were driven by the following urban context design drivers:

- The site has a prominent presence on Park Street, especially when viewed from Hyde Park to the east and from the steps of Town Hall and the future Town Hall Square to the west, albeit substantially lower in height than surrounding buildings such as ANZ and 201 Elizabeth Street.
- The site benefits from spectacular views to Hyde Park and Sydney Harbour to the east and north-east, and to the future Town Hall Square and Town Hall precinct to the west and south-west.
- The site's adjacency to the dominant tower forms of ANZ Tower (242 Pitt Street) and 201 Elizabeth Street.
- The site's adjacency to two heritage buildings immediately to the north which have informed the podium height relationship and materiality.
- The proximity and character of civic heritage buildings in the surrounding area.

The building massing of the tower responds directly to these key contextual drivers. They have helped shape the view opportunities and dictate the proposal's potential skyline profile in the immediate vicinity of the Pitt Street North site.

4.6.3. Massing Development

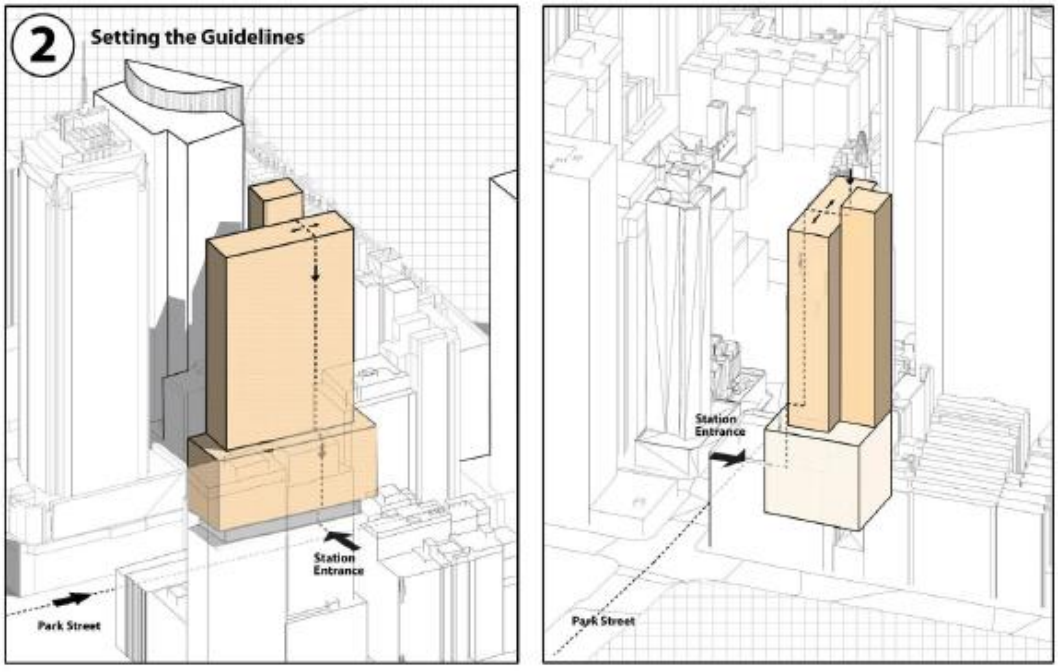
Tower Envelope

The building envelope was approved under the Concept DA and was the starting point for the detailed design. The building core is structurally required to be located on the centre of the station below and as such this was a predetermined parameter. The core location allows a flexible commercial floor plate and also provides for access to the highest reaching point of the Concept DA envelope.

Station Entrance

To visually integrate the OSD with the station the centreline of the station entrance is used to articulate the tower above. The centreline divides the tower and podium into two distinct volumes on Park Street, one inclined to open a view to Hyde Park and one inclined to open a view to Town Hall.

Figure 24 – Massing Development - Station Entrance



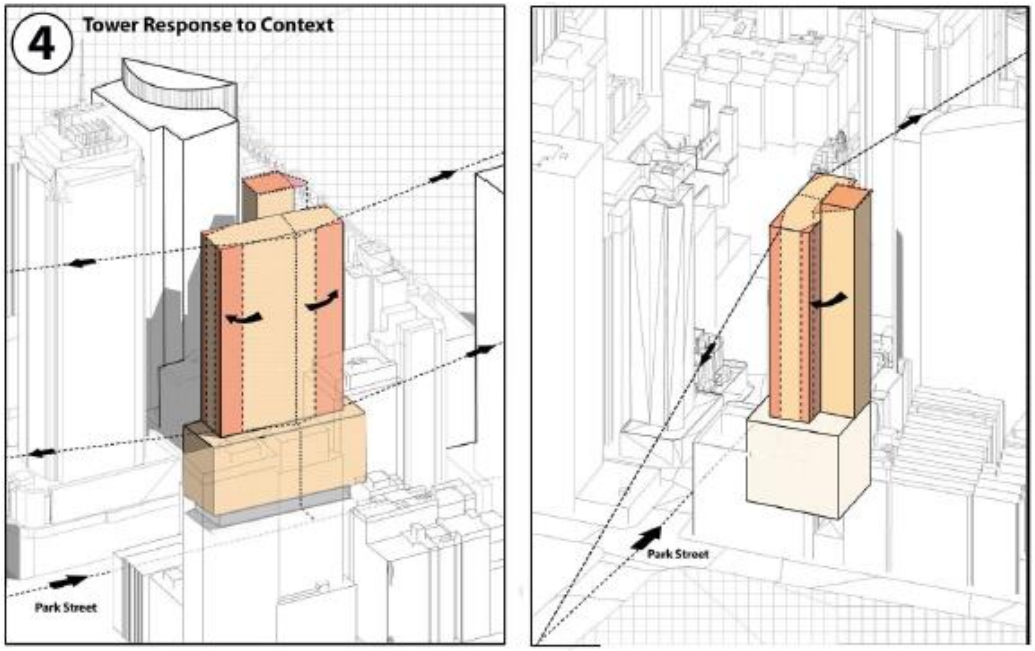
Source: Foster + Partners

Response to Urban Context Design Drivers

In response to the Urban Context Design Drivers the tower massing has been adjusted as illustrated in **Figure 25** and as follows:

- The tower elevations have been angled back away from Park Street to reduce the apparent width of the tower's southern façade.
- The alignment of the tower face on the north has been angled away from the adjacent towers to further reinforce the Hyde Park West solar access plane.

Figure 25 – Massing Development - Response to Context

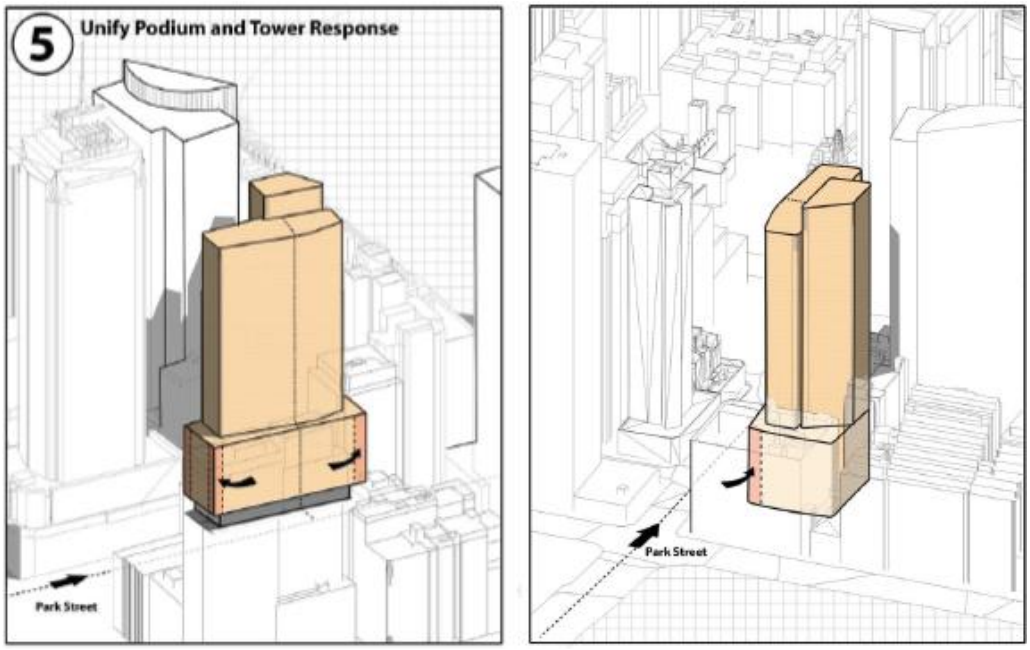


Source: Foster + Partners

Unify Podium and Tower Response

The tower and podium massing were further softened by rounding the corners in conjunction with angling the tower facades on all sides in relation to the street line to open up views where possible.

Figure 26 – Massing Development - Unify Podium and Tower



Source: Foster + Partners

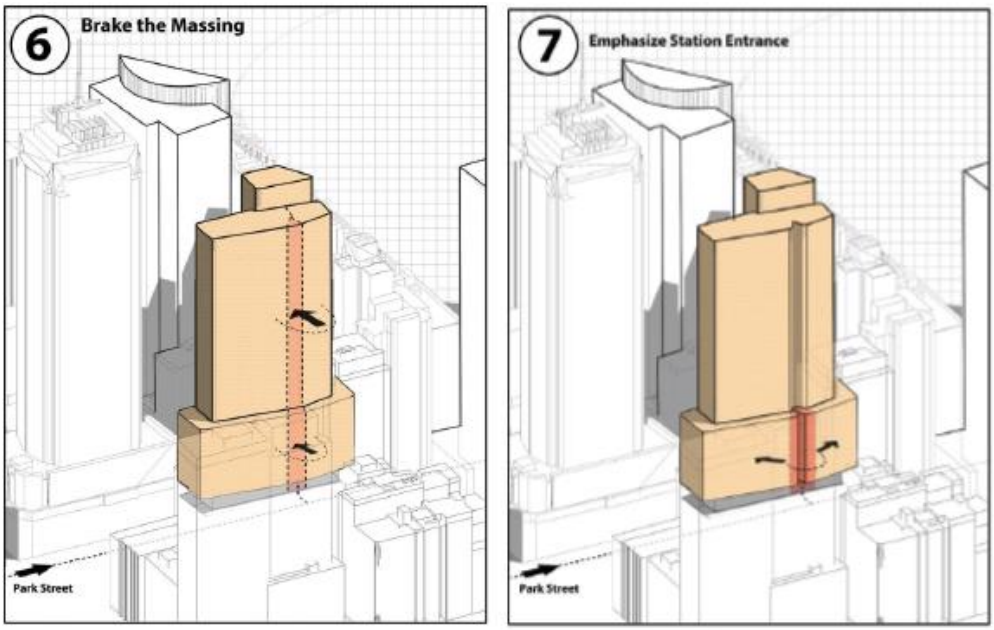
Break the Massing

To reduce visual bulk the station entrance is vertically expressed within the building massing, with its centreline breaking the tower massing into two key volumetric components.

This strategy is also employed on Castlereagh Street (eastern elevation) where the secondary OSD entrance locates another slot further articulating the massing into three forms.

These full height tower and podium slots allow daylight penetration deep into both the station entrance and to the heart of the commercial floorplates in the commercial podium and tower above.

Figure 27 – Building Massing - Breaking the Massing



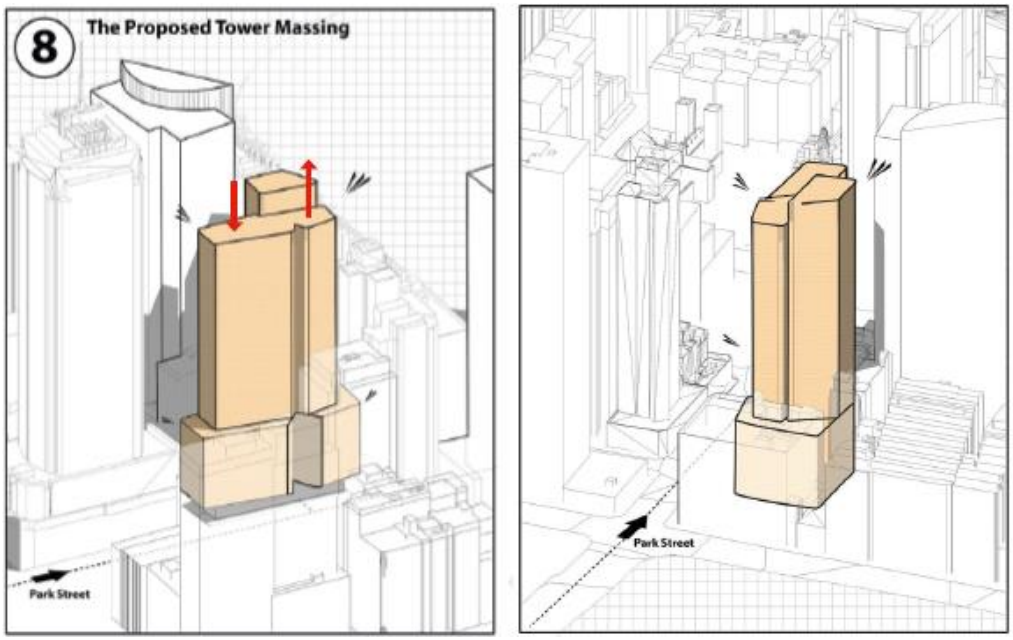
Source: Foster + Partners

Embracing Asymmetry – The Proposed Tower Massing

The asymmetry of the building is emphasized by articulating the height of the three distinct building tower forms. Each tower volume has its own unique orientation and height, with the tower massing responding to the stepped roofs of ANZ Tower (242 Pitt Street), 2 Park Street and the '201 Elizabeth Street' tower.

The proposal employs a unifying language for all facades; creating a simplified and elegant tower form which truly responds to its context and will complement neighbouring civic buildings in terms of façade composition, materials, colour and texture.

Figure 28 – Building Massing - Embrace Asymmetry



Source: Foster + Partners

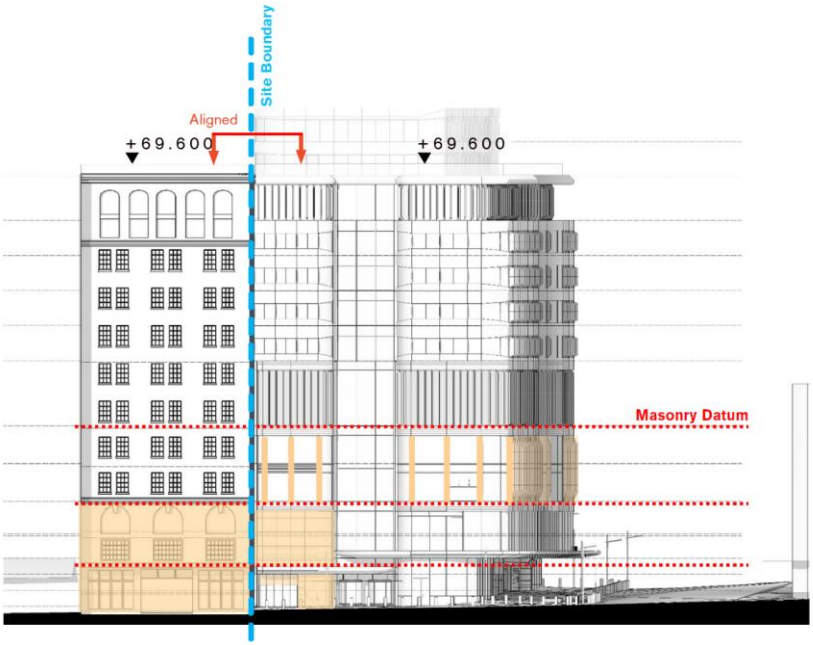
Podium Façade Articulation

The massing and articulation of the podium facades have been designed to integrate with the surrounding urban context and respond directly to the street context and heritage buildings to the north.

The podium massing on Pitt Street has been divided into two vertical components, separated by a distinct full height slot, signalling the main entrance to the tower in a similar way to how the station entrance is announced on Park Street.

This vertical bay-division relates directly to the massing of the adjacent National Building. The detailing around this slot creates a dramatic, clearly defined OSD entrance and sense of arrival to the offices with escalators leading up through a triple-height lobby to the first of two sky lobby levels.

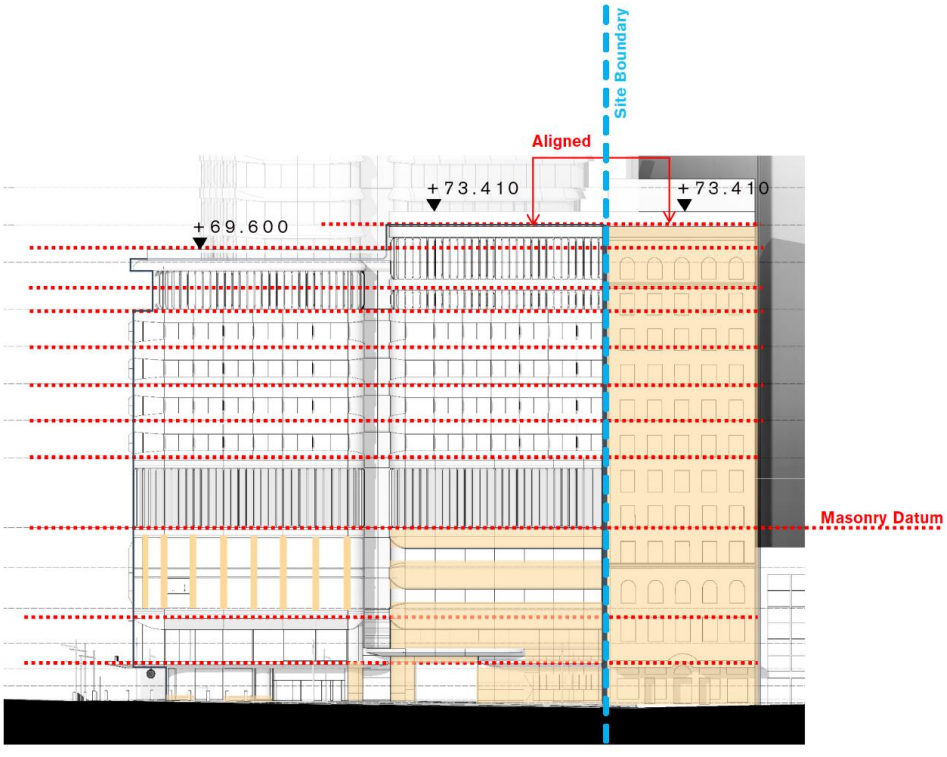
Figure 29 – Podium Massing - Pitt Street



Source: Foster + Partners

The Castlereagh Street facade has also been divided into two volumes and is separated by the slot of the tower coming down to ground. The podium volume adjacent to the NSW Masonic Club has been lifted up to align with the top of this adjacent heritage building, helping to better transition this change in podium height.

Figure 30 – Podium Massing - Castlereagh Street



Source: Foster + Partners

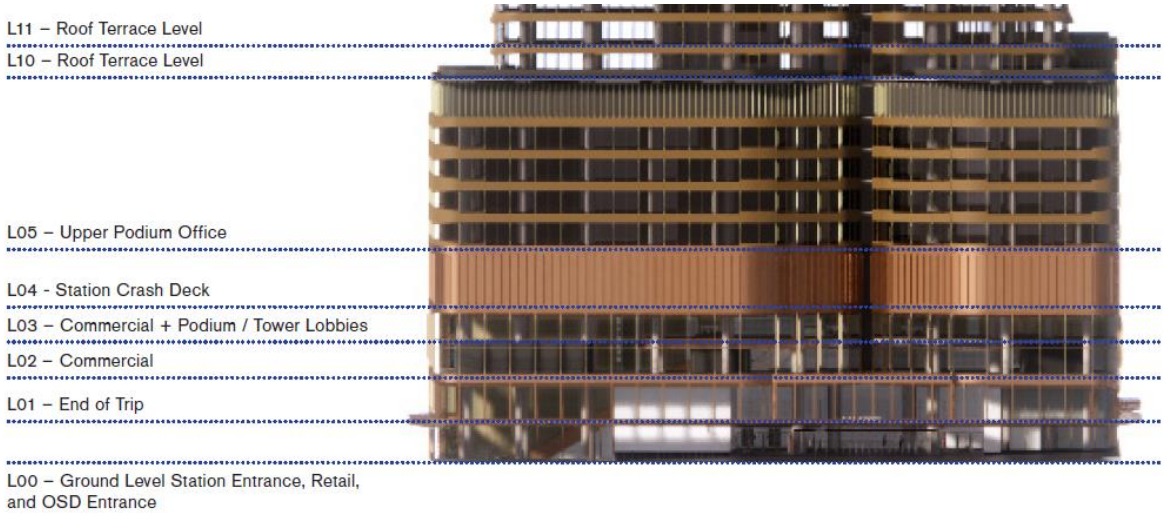
The Park Street facade is focused on the station entrance which has been integrated into the overall podium massing.

4.6.4. Podium

Podium level uses

Under the CSSI approval, the lower podium (Ground to level 4) forms part of the 'metro box' and includes the approval of specific uses as discussed in **Section 0** of this EIS. The upper podium consists of level 5 to level 10 on the southern portion of the building and level 11 on the north western side of the building and is comprised of commercial office levels, plant and services and podium roof terraces (**Figure 31**).

Figure 31 – Podium Levels Uses



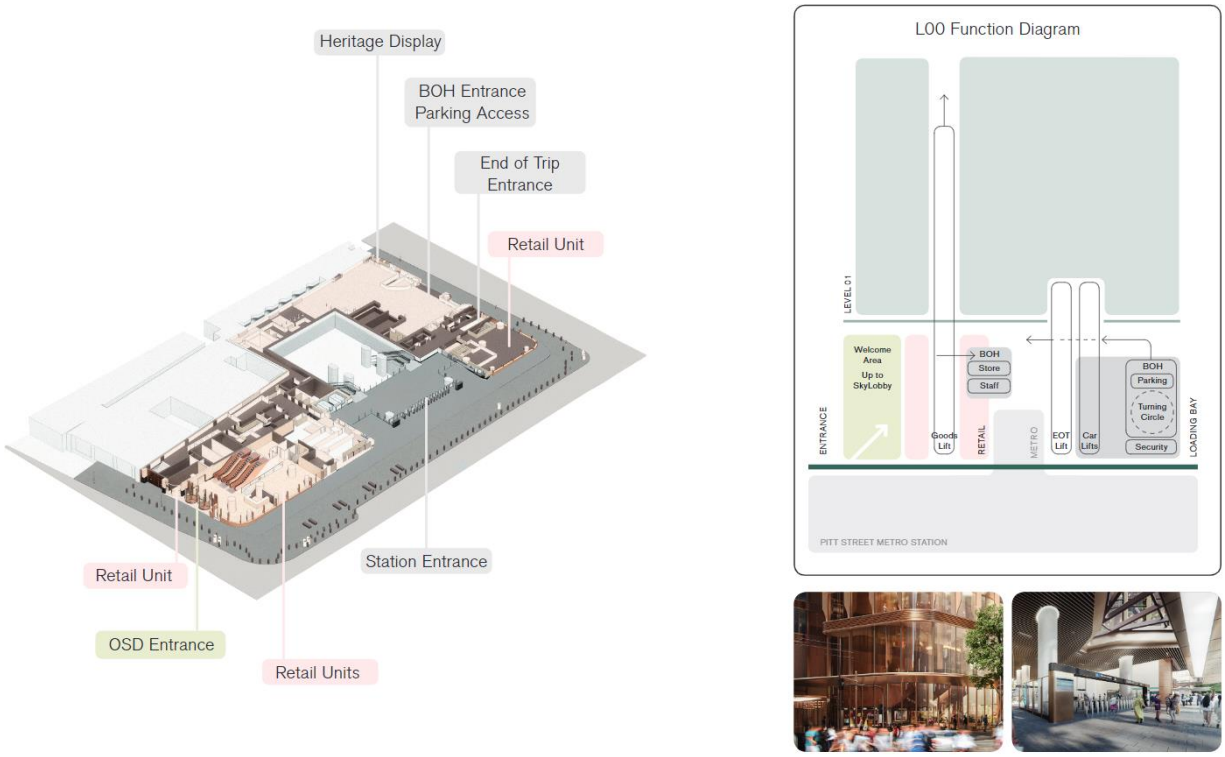
Source: Foster + Partners

L00 – Ground Plane

The Ground Plane as illustrated in **Figure 32** consists of a mix of OSD retail uses, metro station entrance and plaza, back of house servicing and car lift access to vehicular parking, lift access to end of trip facilities (located on level 1) and a heritage display (on the Castlereagh Street frontage).

The main entrance to the tower, located on Pitt Street, creates a dramatic, clearly defined sense of arrival to the offices with escalators leading up through a triple-height lobby to the first of two sky lobby levels located on level 03.

Figure 32 – Ground – General Layout



Source: Foster + Partners

Mezzanine

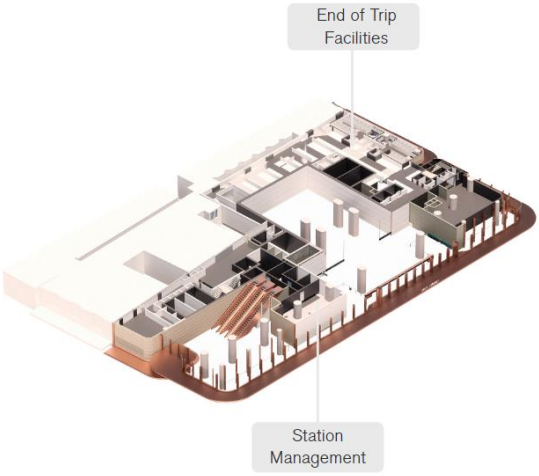
The mezzanine contains metro station uses subject to the CSSI approval.

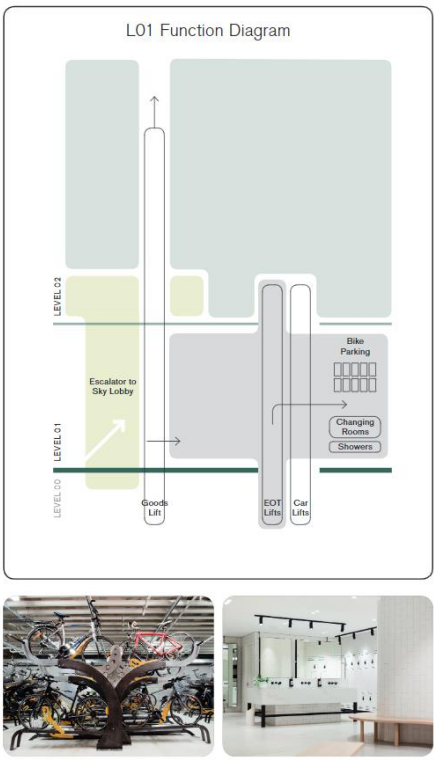
Level 1

Level 1 is comprised of metro station uses and OSD end of trip facilities. End of trip facilities comprise GFA of 482m^2 and include:

- 350 bicycle lockers; 200 bicycle racks.
- Change rooms.
- Showers.

Figure 33 – Level 1 General Layout





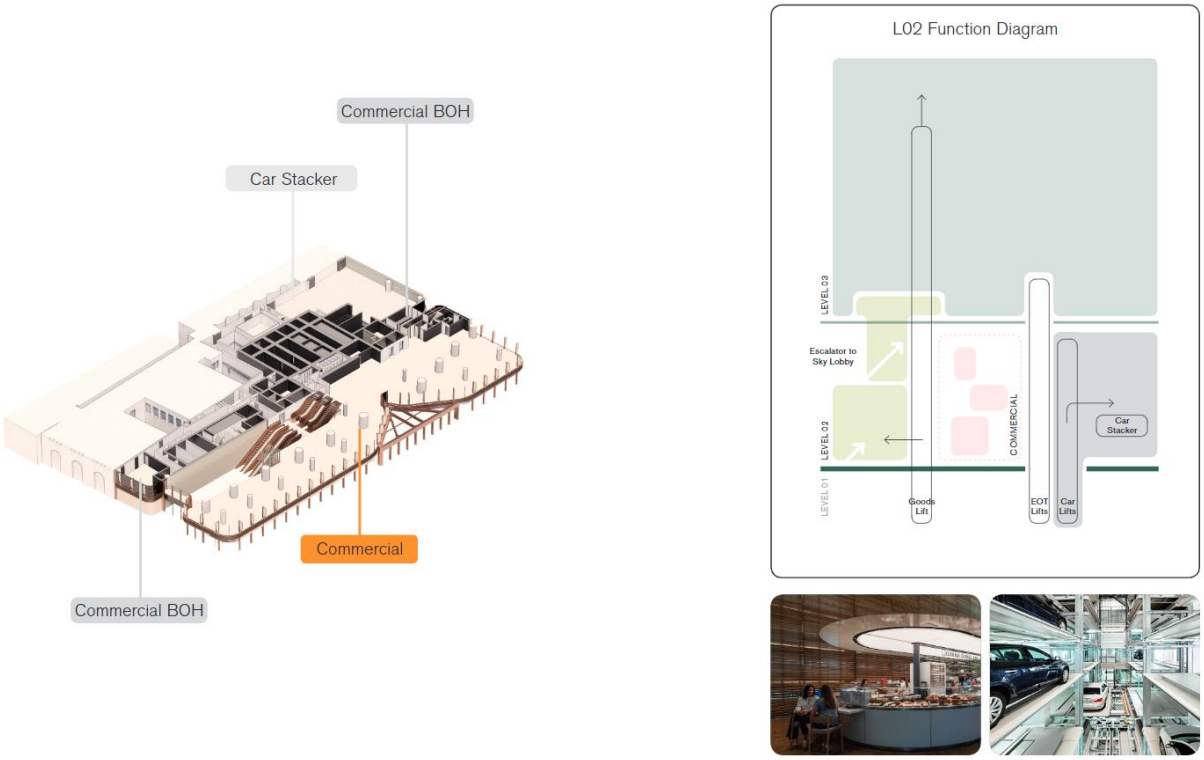
Source: Foster + Partners

Level 2

Level 2 will be comprised of flexible commercial space which will most likely be a mix of retail uses and ancillary commercial office spaces, or from level 2, escalators take tower visitors and workers up to the level 3 commercial sky lobby.

The north eastern portion of levels 2 and 3 contains the car stacker which is accessed via vehicular lifts on the ground level off Castlereagh Street.

Figure 34 – Level 2 General Layout

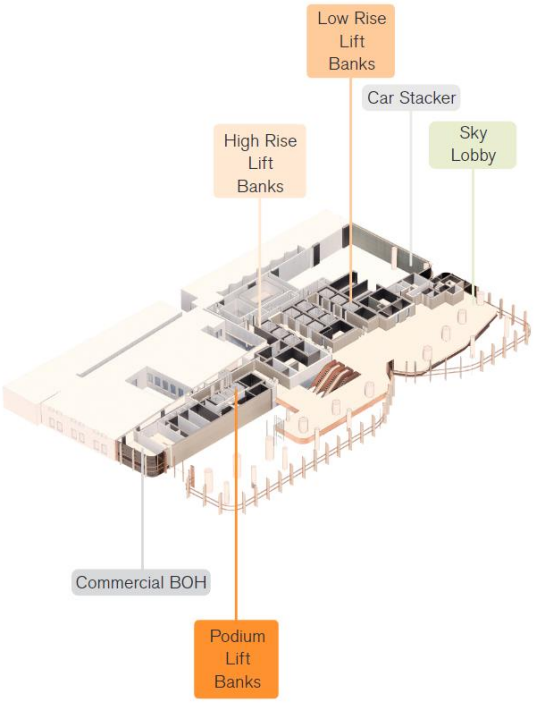


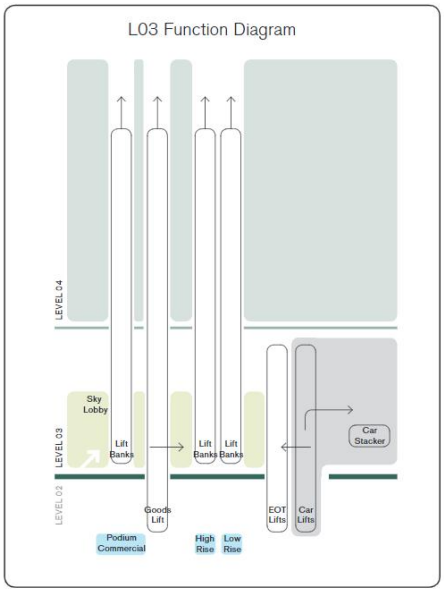
Source: Foster + Partners

Level 3

Access to the upper podium (levels 5 – 8), low rise tower and high rise tower is via lifts originating at the level 3 commercial sky lobby.

Figure 35 – Level 3 General Layout





Source: Foster + Partners

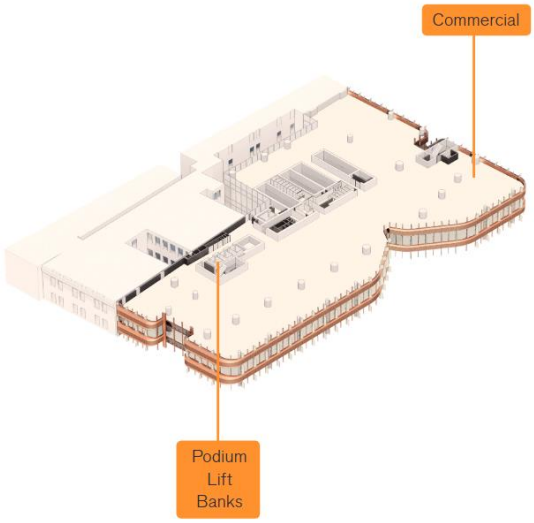
Level 4

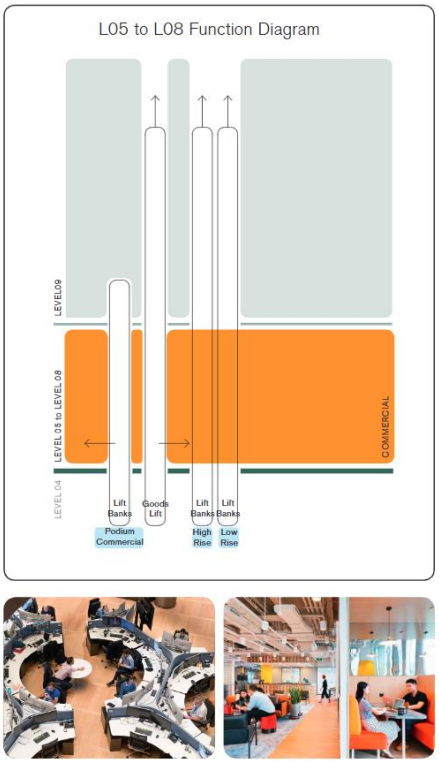
Level 4 contains the Sydney Metro plant room level facilitating air circulation for heating and cooling systems. Use of this level is subject to the CSSI approval.

Level 5 to Level 8

Levels 5 - 8 are accessed via the podium lift lobby on level 3 and consist of commercial office floor space with a GFA of 2,462m² per level.

Figure 36 – Levels 5 to 8 General Layout





Source: Foster + Partners

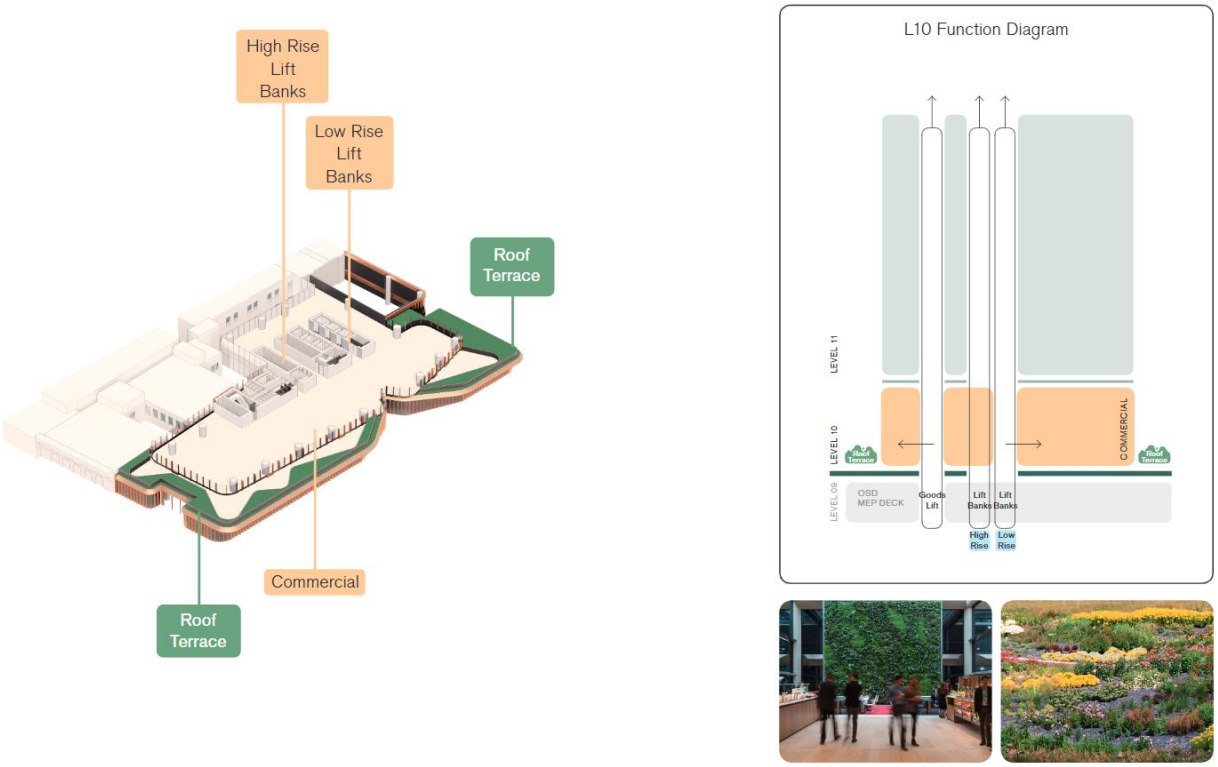
Level 9

OSD plant and commercial office ancillary uses such as waste transfer is located on level 9.

Level 10

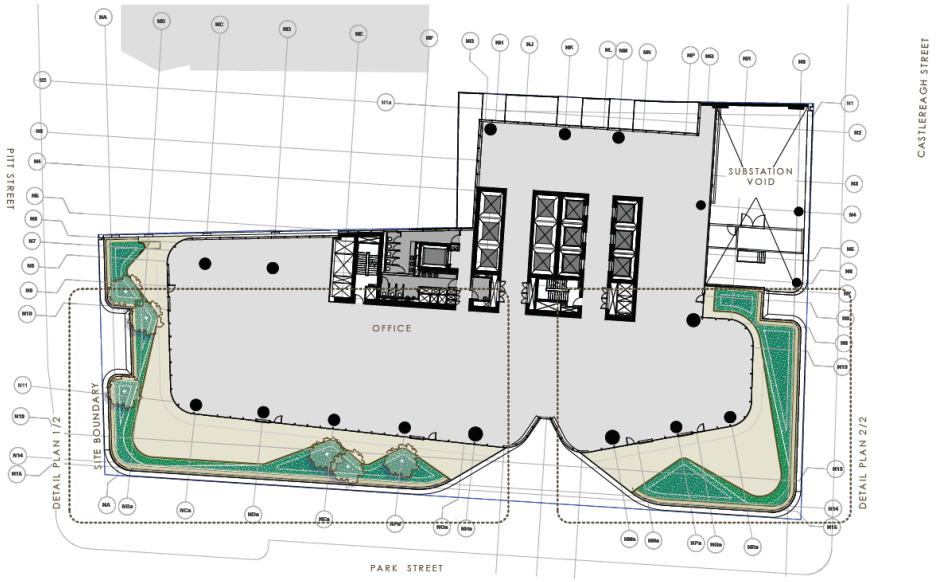
Level 10 consists of commercial office floor space with podium roof level terraces along the Pitt Street, Park Street and southern portion of the Castlereagh Street frontages. A substation is located in the northern portion of the Castlereagh Street frontage on level 10.

Figure 37 – Level 10 General Layout



Source: Foster + Partners

Figure 38 – Level 10

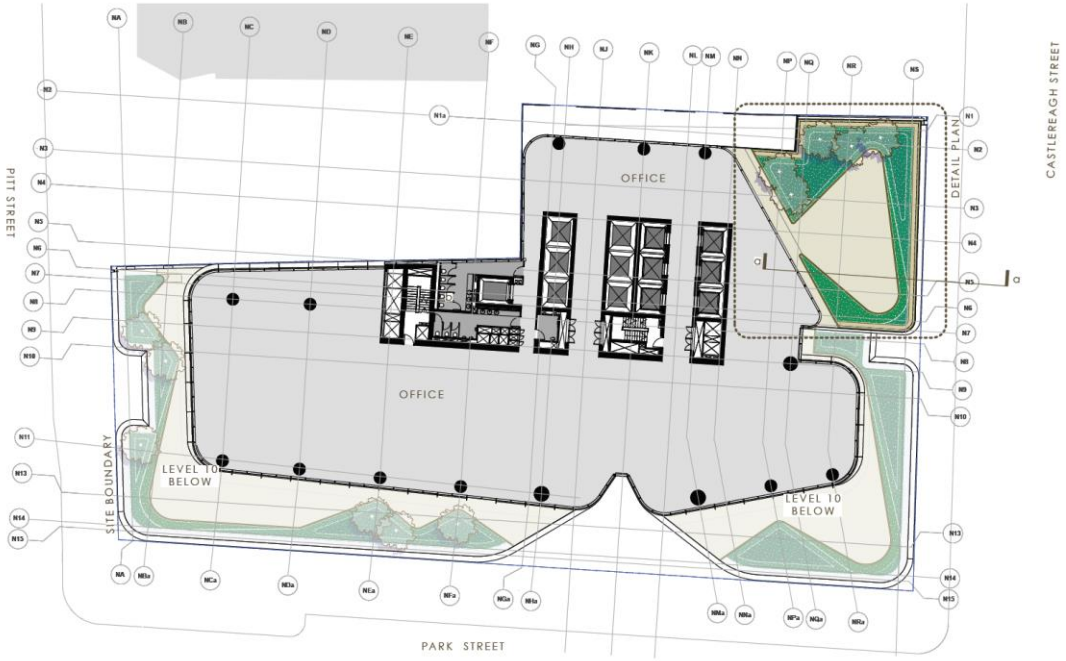


Source: Sue Barnsley Design

Level 11

Level 11 consists of commercial office floor space and landscape podium roof terrace in the northern portion of the Castlereagh Street frontage (above the substation).

Figure 39 – Level 11



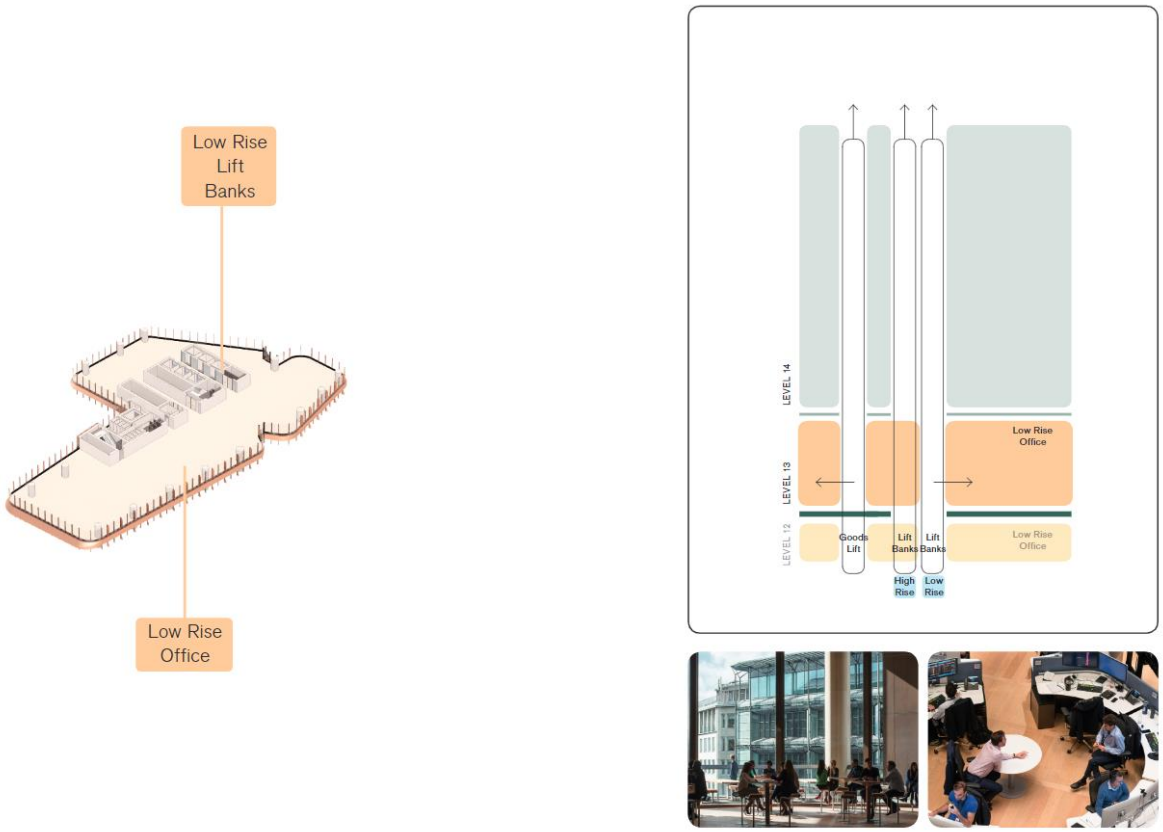
Source: Sue Barnsley Design

4.6.5. Commercial Tower

Levels 12 to 20

As illustrated in **Figure 40** the typical tower floorplate includes two banks of lifts in a core located in a central portion of the floor plate. The core is set back from the street frontages particularly Park Street to maximise views towards Hyde Park and Sydney Harbour. Level 12 has a marginally smaller floorplate than levels 13 – 20. The typical floorplate has been designed to provide flexibility and amenity for future tenants with the ability for future inclusion of interconnecting stairs and voids.

Figure 40 – Levels 13 to 20 Typical Layout

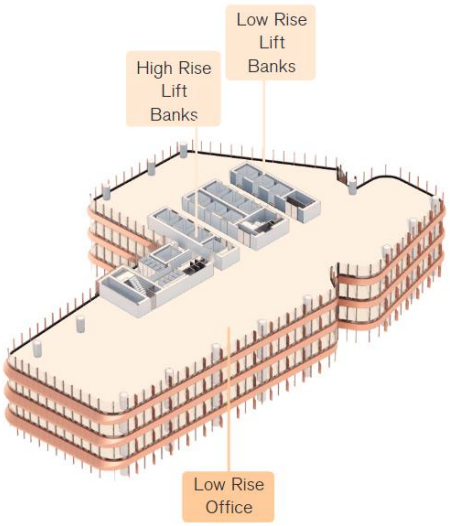


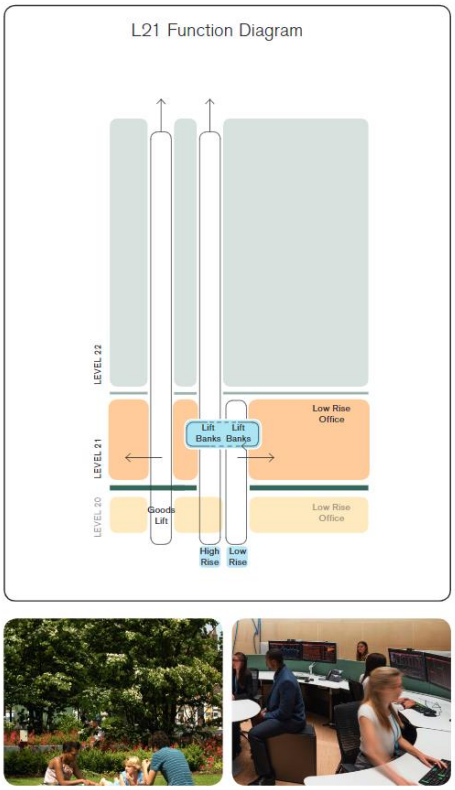
Source: Foster + Partners

Level 21

Level 21 will comprise the second commercial sky lobby and vertical transport and transfer level, the gateway to levels 22 to 35. This level enjoys elevated views of the adjacent streetscape, Hyde Park and harbour views.

Figure 41 – Level 21 General Layout





Source: Foster + Partners

Levels 22 to 34

Levels 22 to 34 consist of the high-rise office with floor plates ranging in size from 1600m² to 1661m². These levels are designed to allow maximum usable space and flexibility for future tenant fitouts with views to Sydney Harbour, Hyde Park and towards Town Hall.

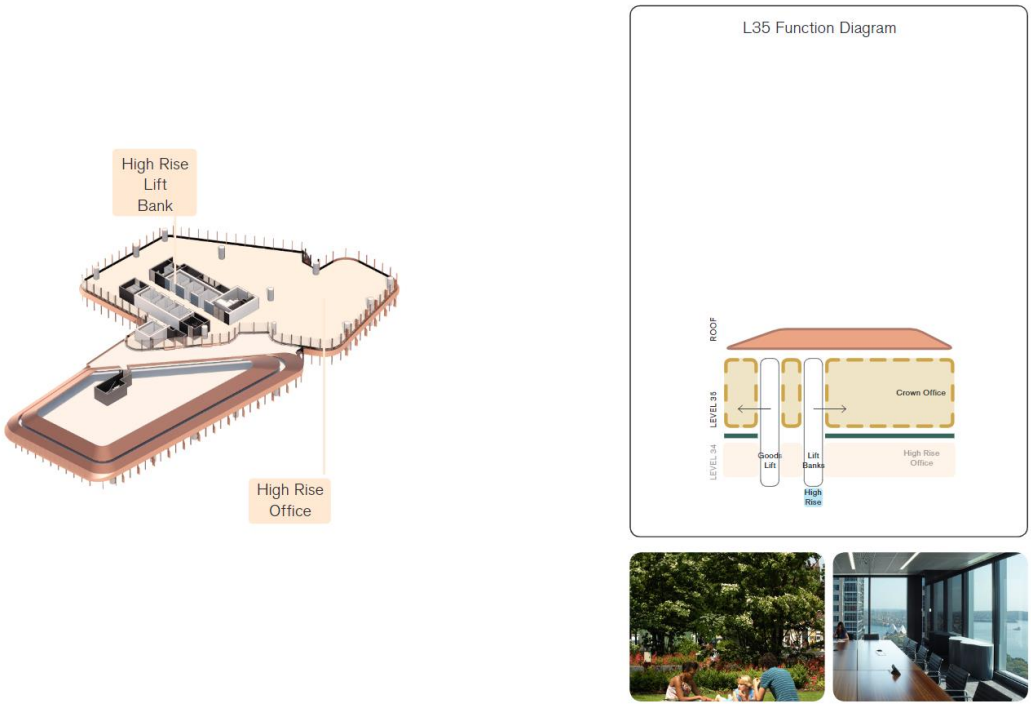
Figure 42 – Levels 22 to 34 General Layout

Source: Foster + Partners

Level 35

Level 35 is a reduced floor plate with the first of the three tower form roofs occurring on the south western corner. The floor plate is 900m² and accessed via the high rise lift bank.

Figure 43 – Level 35



Source: Foster + Partners

Levels 36 – 38

These levels consist of plant room in the northern portion, with the tower form roofs occurring in the south eastern and south western corners of these levels.

Roof level

The roof level consists of the three tower roof forms within potential areas for photovoltaics subject to performance modelling.

4.7. LANDSCAPE

Public domain landscaping on the ground plane will be delivered under the IAP and SDPP approved under the CSSI. OSD landscaping consists of podium roof top terraces on level 10 and level 11 as outlined in the Landscape Plans and Report prepared by (**Appendix I**).

The landscape presence for the development is concentrated at podium level where terrace gardens enhance the interior as well as the experience of being outside within the city landscape. The fluid form of the garden alludes to the harbour and its patterned landscape of points and coves. The concave forms create breakout spaces for workshops, meetings, lunch and office celebrations.

Glimpsed from the streets below, the gardens add to the future transformation of Park Street while amplifying the connection and relationship of this site to Hyde Park. The sandstone facades and bronze detailing of the adjacent heritage buildings inform the materials palette of the development and the planting selection.

Level 10 Podium Roof Terrace

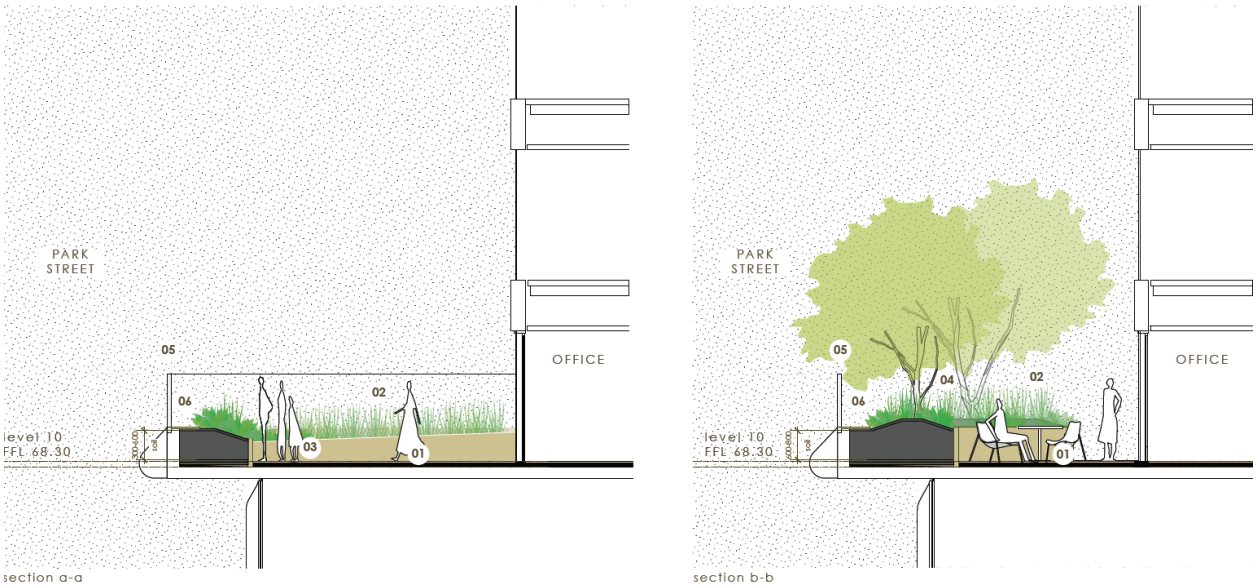
The terrace at level 10 is in two parts. The eastern terrace holds a gathering space for approximately 130 people at the open south-east corner of the podium with vistas to Hyde Park. The space is tempered from extreme north-easterly winds by planting on the east above Castlereagh Street, which also screens neighbouring rooftop services. Planting beds along the western edge locally mediate prevailing winds.

The western terrace is larger, accommodating approximately 260 people at the open south-west corner overlooking Town Hall and the future square. This larger events space is supported by a series of smaller gathering areas. In the north-west, a barbeque has been provisioned for in an area away from air intakes which receives midday sun in winter, making this a favoured place for gathering. Above Park Street an undulating planting bed holds a protected space for more intimate gatherings with an adjoining balcony edge catching vistas to Hyde Park.

Figure 44 – Level 10 Podium Level Landscaping

Source: Sue Barnsley Design

Figure 45 – Level 10 sections

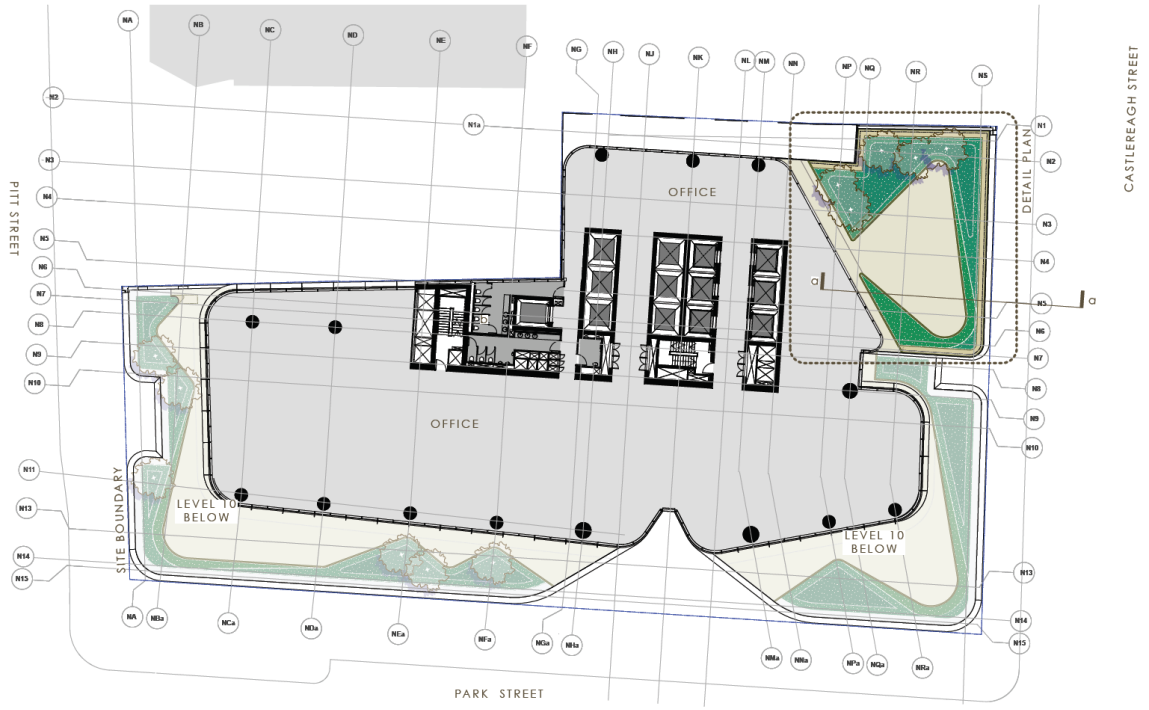


Source: Sue Barnsley Design

Level 11 Podium Roof Terrace

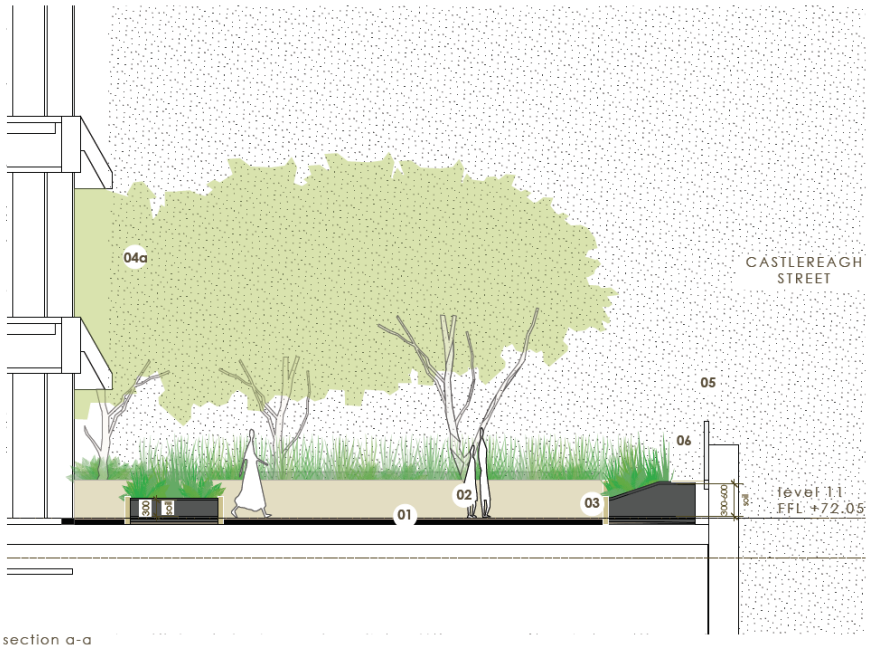
Like level 10, this terrace has the capacity to hold groups of approximately 120 people for cocktail events. The open south-west corner of the terrace with its glazed balcony edge offering vistas to Hyde Park that helps reinforce this city location. The remaining perimeter of the terrace is planted, with trees muting and screening the north-west boundary of the terrace from the NSW Masonic Club and rooftop services on the eastern side of Castlereagh Street. The trees tempering the prevailing north-east winds and building down drafts, to increase outdoor comfort and use.

Figure 46 – Level 11 Podium Level Landscaping



Source: Sue Barnsley Design

Figure 47 – Level 11 section



Source: Sue Barnsley Design

4.8. FAÇADE MATERIALS AND FINISHES

The façade has been designed to respond to the surrounding context including that of the historic sandstone buildings within the Town Hall Precinct and adjoining heritage items whilst also ensuring maximisation of views to Sydney Harbour and Hyde Park and contributing to the ESD performance of the overall building.

Façade Performance

The main tower has three principle types of façade:

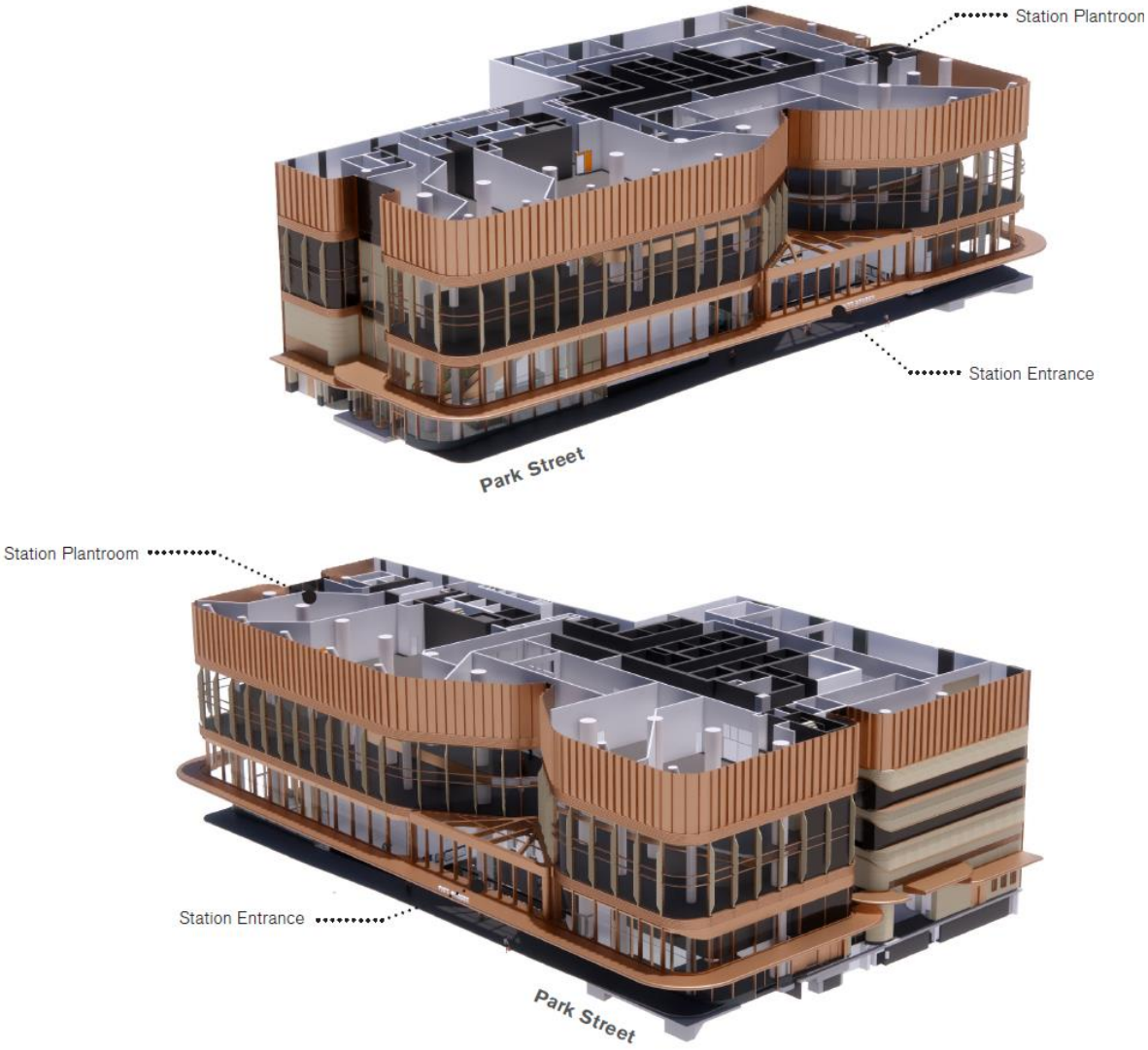
- The east and west facades are designed to deal with the highest solar exposure from the rising and setting sun.
- The north facade is designed to allow daylight into the building from the north, while limiting the solar gain from the high angle north sunlight, and to also open up great view opportunities.
- The south facade has very little solar exposure at all, offering the best opportunity for visual transparency without the associated issues of solar gain.

The podium façade will consist of a mix the following as presented in **Figure 48** and **Figure 49.**

- Glazing with bronze coloured finishes detailing.
- Sandstone cladding panels.
- Bronze coloured metal spandrels for ventilation slots and bronze coloured metal mesh/ louvre/ fin to station plant room.
- Bronze coloured overhead awning along street frontages.
- Dark glass on the northern portion of the Pitt Street frontage (adjacent to car stacker).

Lower Podium

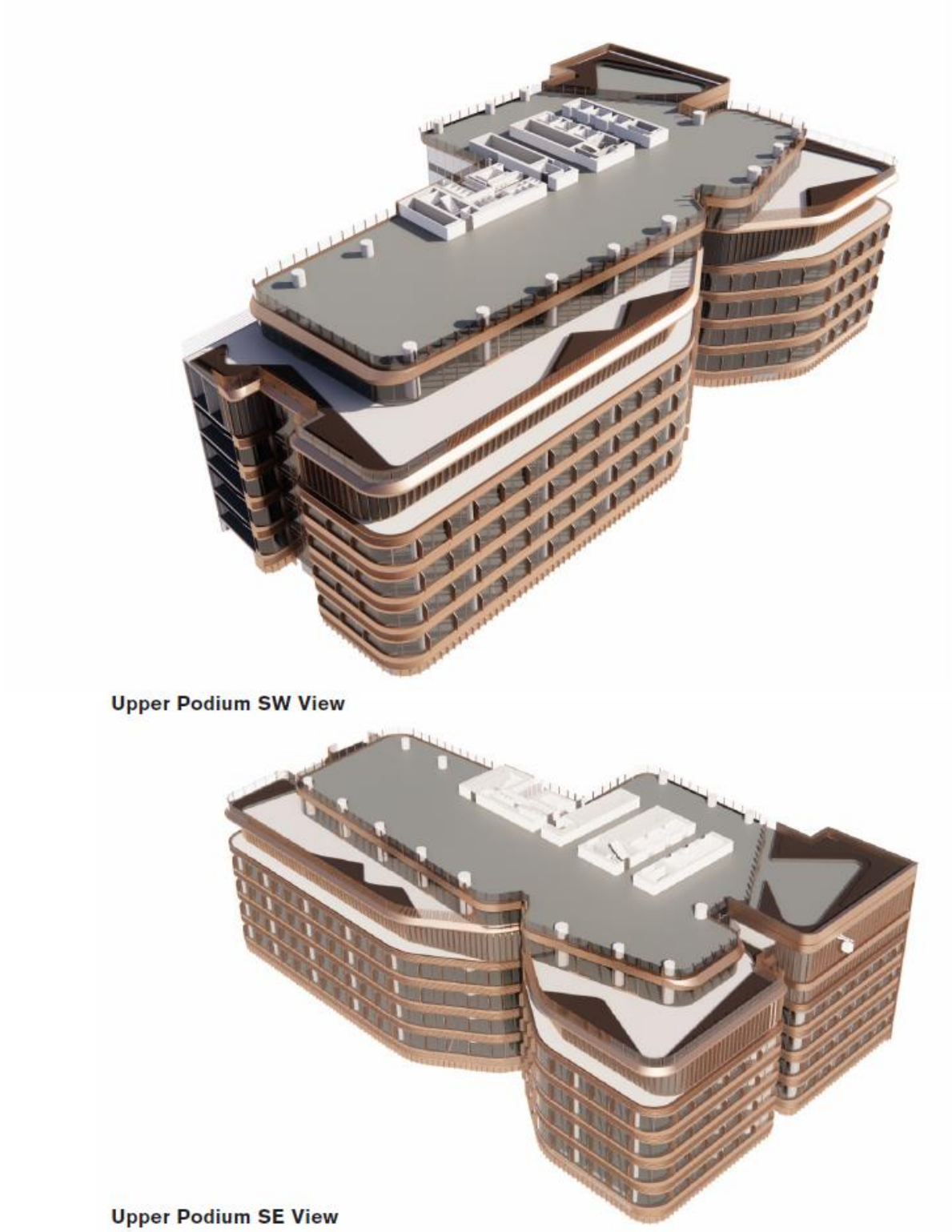
Figure 48 – Lower Podium detailed façade expression



Source: Foster + Partners

Upper Podium

Figure 49 – Upper Podium detailed façade expression



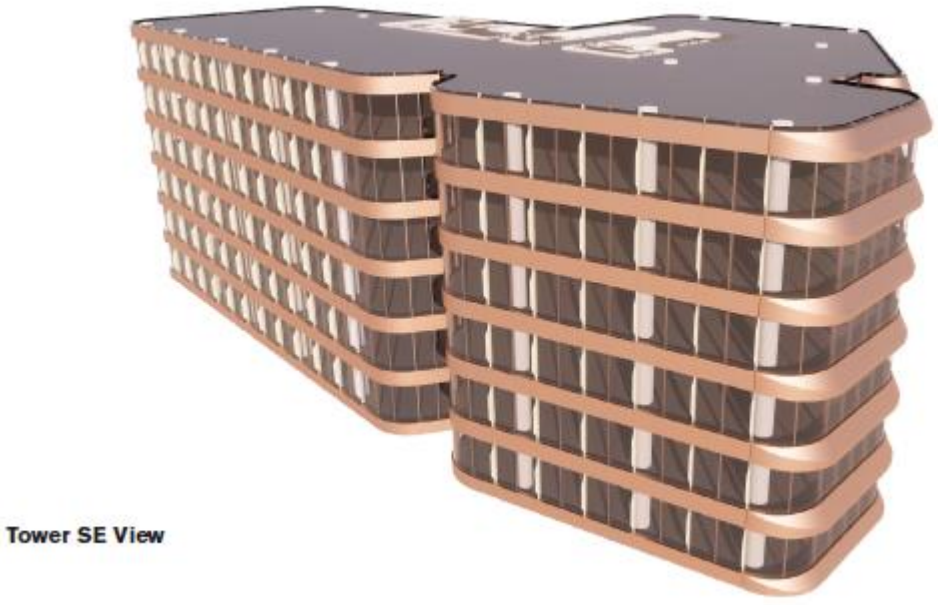
Source: Foster + Partners

Tower Façade

The tower facade directly responds to the environment by adapting the geometry of the spandrel to create a sunshade. The sunshade varies in depth depending on the orientation which reduces the solar gains and glare. This passive design results in a more interesting building design while improving internal occupant comfort. The south elevation also integrates vertical fins in response to the low angle sun in pursuit of an energy efficient and comfortable building.

Figure 50 – Tower façade detailed façade expression

Tower SW View



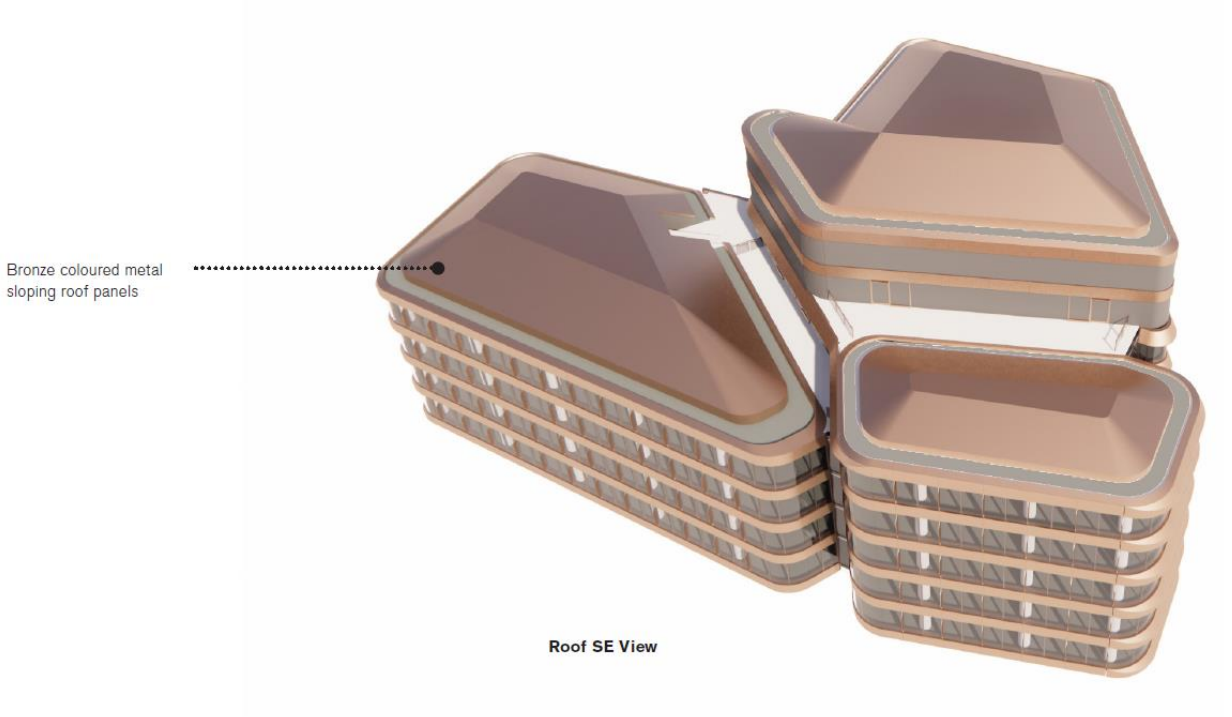
Tower SE View

Source: Foster + Partners

Roof Façade

The 5th elevation follows the bronze colour finish of the tower to contain plant room equipment within an enclosed geometry and also seamlessly integrate the Building Maintenance Unit (BMU).

Figure 51 – Roof detailed façade expression



Source: Foster + Partners

4.9. PUBLIC ART

A Public Art Strategy has been prepared for the development by Barbara Flynn, refer **Appendix DD**.

Two artwork types and locations are preferred and these are:

- grand entry foyer, which provides the opportunity for art to attract people to enter the building and for the public to interact at close range with art; and
- Pitt Street – Castlereagh Street corner façade, a location for public art that is outward facing and visible to all in the vicinity.

An artist selection process will be implemented as described in the Public Art Strategy. The artists considered will be those who are:

- capable of making art that is of excellent quality, relevant, exciting, innovative and original;
- unique to the development and to Sydney; and
- timeless in artistic content and durable (with a lifespan of 25 years, in the case of permanent works).

Public art will be delivered in 2024, which is a time frame that provides adequate time to run a suitable process.

4.10. ACCESS, PARKING & TRANSPORT

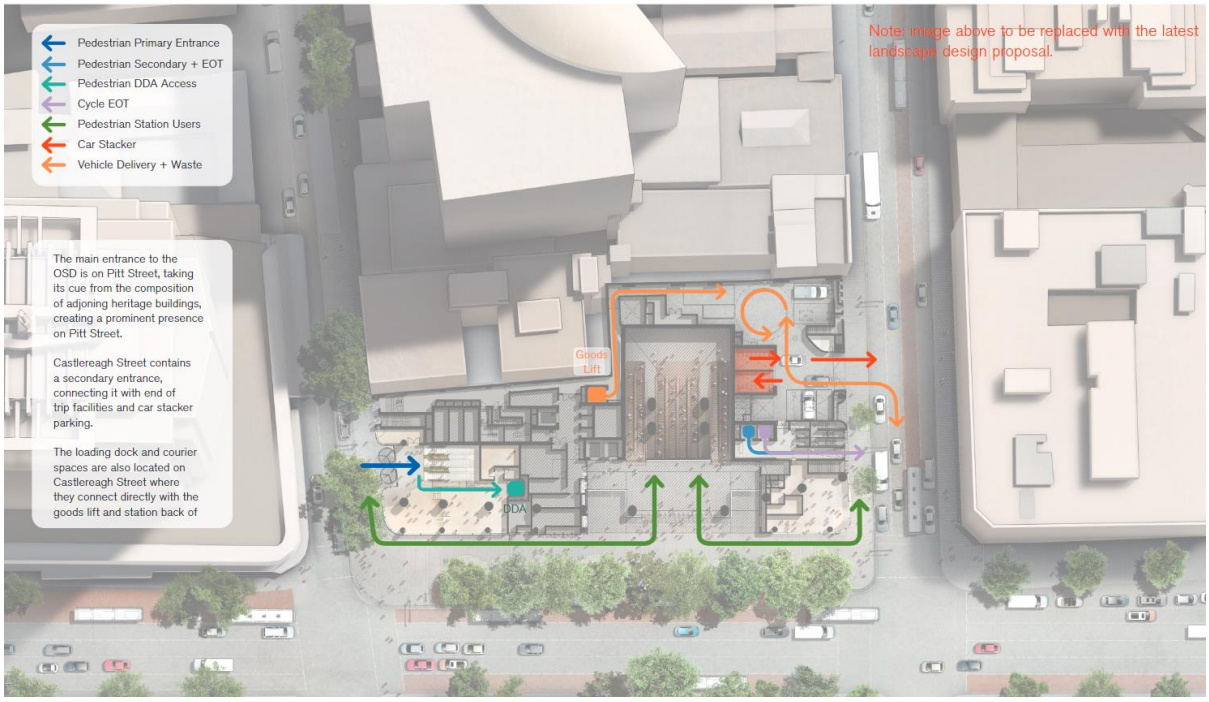
As discussed, the access and parking arrangement for the site form part of the CSSI approval, with this Detailed SSD DA seeking approval for the use of areas within the podium levels. Notwithstanding, the following sections discuss the access, parking and transport arrangements associated with the proposal. The Traffic and Transport Impact Assessment attached at **Appendix V1** provides further clarification of access, parking and transport matters.

4.10.1. Pedestrian Access

The main entrance to the OSD is on Pitt Street, taking its cue from the composition of adjoining heritage buildings, creates a prominent presence on Pitt Street.

Castlereagh Street contains a secondary entrance, connecting it with end of trip facilities and auto car stacker. The proposed lobby entrance on Pitt Street will provide pedestrian access to the commercial tower and podium retail tenancies. Ground floor retail tenancies will be accessed directly via Castlereagh, Park and Pitt streets.

Figure 52 – Pedestrian and Vehicular Access



Source: Foster + Partners

4.10.2. Bicycle Parking and End of Trip Facilities

Cyclists will access the proposed development via a dedicated access along Castlereagh Street to use the End of Trip (EOT) lifts, to access the bicycle parking facilities on level 2.

The recommended bicycle parking provision required for the prosed development is summarised as follows:

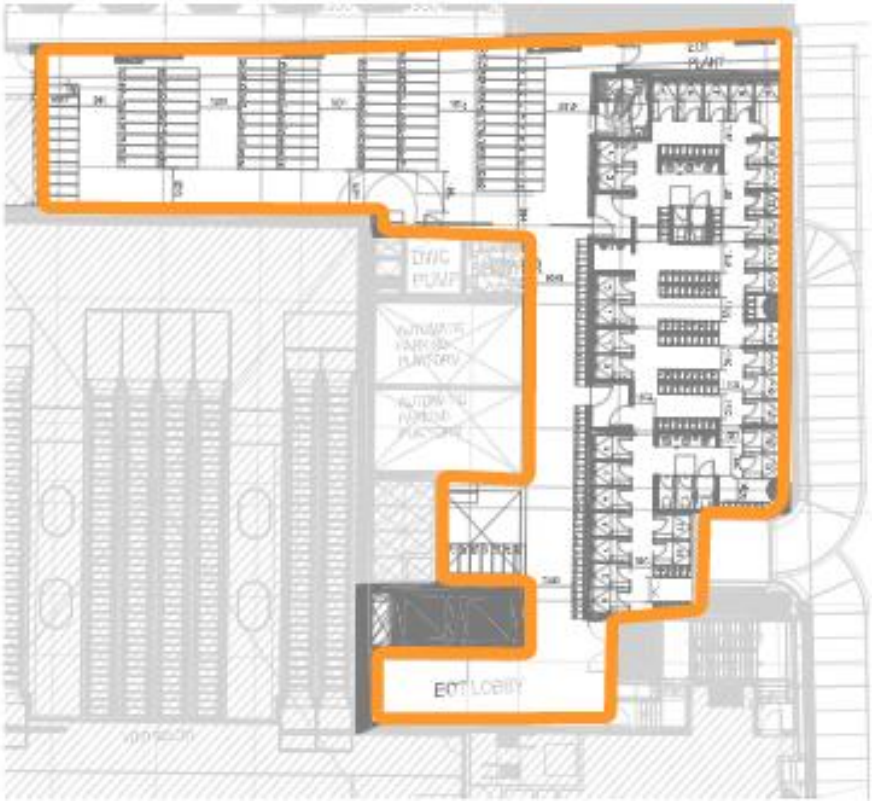
Table 6 – Bicycle parking provision required

Land use	Bicycle parking space rates	Proposed GFA	Minimum bicycle parking provision required
Office premises	Employees – 1 per 150m²	52,951m²	353 spaces
	Visitor – 1 per 400m²		133 spaces
Shop, restaurant or cafe	Employees – 1 per 250m²	1,700m²	7 spaces
	Visitor – 2 plus 1 per 100m²		19 spaces
	Total	**54,651m²**	**512 spaces**

The development proposes to provide 350 bicycle lockers and 200 bicycle racks for the OSD. A staged approach to bicycle parking provision is proposed. Provision for an initial 200 spaces is allocated, with the ability to increase provision to the total requirement of 512 spaces in line with the DCP requirements as demand increases over time.

A lower provision for bicycle parking upon opening of the development is considered appropriate as the North OSD is a Transport Orientated Development (TOD) where a metro station is being developed below the north OSD. Typically, at TOD locations, the walking and cycling (active transport) mode share is higher than average, with walking and cycling as first/last mile options for people using public transport. Given the location of North OSD adjacent to multiple public transport options, for people living near and working at the site, it is likely that these traditionally active transport mode trips could be replaced by public transport (including short trips). Refer Figure 53 for layout of EOT facilities.

Figure 53 – Indicative end of trip facilities layout

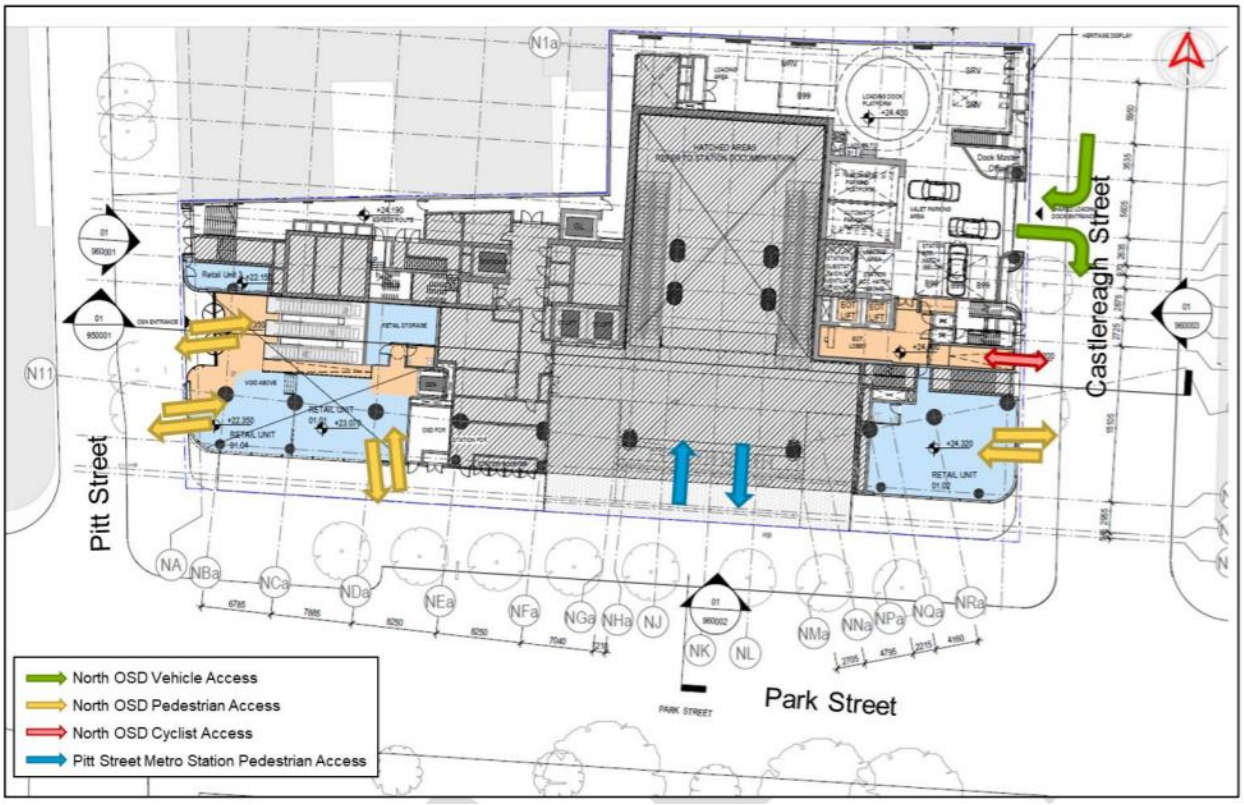


Source: Foster + Partners

4.10.3. Vehicular Access and Parking

Vehicular access is proposed from Castlereagh Street with a right in right out only vehicle access point via a driveway entry to the site. The loading dock and courier spaces are also located on Castlereagh Street where they connect directly with the goods lift and station back of house areas. The proposed vehicular and pedestrian access is outlined in **Figure 54**.

Figure 54 – Indicative Building Access Plan



Source: Aurecon

Parking for 40 cars is proposed for the site, associated with the use of an automated car stacker. As the proposed site is surrounded by numerous multi-modal transport options, private vehicle usage by tenants is estimated to be minimal. The proposed OSD has been designed to integrate with the Pitt Street metro station (with a high frequency service) sitting directly beneath the site. This will significantly improve the accessibility to public transport. It is also expected that employees and visitors to the OSD will utilise sustainable travel options. High levels of public transport usage is anticipated, due to its proximity to various transport options, as well as active transport use. Use of these transport modes will be encouraged through the Green Travel Plan developed for the site.

4.10.4. Loading, Unloading and Servicing

It is proposed to provide a total of seven on-site service vehicle bays with the bays designed to mainly accommodate the vehicle types below:

- 1 x Metro operational bay (B99, 99th percentile of class of cars);
- 3 x light commercial vehicles (B99, 99th percentile of class of cars);
- 2 x Small Rigid Vehicle (SRV);
- 1 x Medium Rigid Vehicle (MRV); and
- 3 x light commercial vehicle bays within the automatic car stacker (B99, 99th percentile size of cars).

The loading dock is estimated to receive the following services via the allocated bays:

- Grocery deliveries (regularly);

- Goods deliveries for retail (weekly);
- Furniture delivery (prior to opening and rarely occurring after opening);
- Waste collection (daily);
- Cleaning and maintenance service (regularly);
- Building maintenance service (occasionally);
- Mail and parcel delivery (irregular and non-manageable); and
- Metro transformer replacement service (emergency).

Swept turning paths have been prepared which illustrate that the proposed loading area can adequately accommodate the designed vehicle movement to service the loading dock. The swept paths show that the vehicles do not require more than three points of turn to manoeuvre in and out from the bays. Loading from the SRV bays is undertaken on the turntable and if bulky loading is required, it will be undertaken from the MRV service bay.

With the preparation and implementation of a Loading Dock Management Plan the above services can be undertaken onsite without any disruption or adverse impacts to the external road network or the pedestrian footpath.

4.11. SUSTAINABILITY INITIATIVES

The Pitt Street North OSD proposal includes a key objective to provide a development which achieves high Ecologically Sustainable Development (**ESD**) targets. The project's commitment to sustainability is demonstrated by targeting the following ratings:

- Achieve 6-Star Green Star rating using Green Star Design and As-Built v1.3 rating tool; and
- For the commercial office spaces:
    - 5 Star NABERS for Office Base Building Energy Rating; and
    - 3.5 Star NABERS for Office Whole Building Water Rating.

An Ecologically Sustainable Development Report has been prepared by Cundall and is included at **Appendix K**. This report provides further detail around how the overall planning and design of the building has incorporated ESD principles as defined in clause 7(4) Schedule 2 of the EP&A Regulation.

The proposal aims to maximise the environmental quality outcomes of the OSD by promoting the use of low environmental impact materials for building and construction, maintaining energy and water efficiency levels, and encouraging the use of public transport and cycling with the provision of bicycle storage and end of trip facilities, while ensuring that the development promotes waste reduction levels by its users, maximum thermal comfort for the tenants and encourages passive solar design for the OSD.

4.12. SIGNAGE ZONES

Signage zones are indicated for the proposed development. The exact location, size and detailed design intent of the signs will be subject to a separate signage DA. The following signage types are proposed:

- Building identification signage at rooftop
- Flat mounted podium wall sign – building identification or business identification sign
- Business identification signage at building entrance
- Tower entrance building address signage
- Loading dock signage

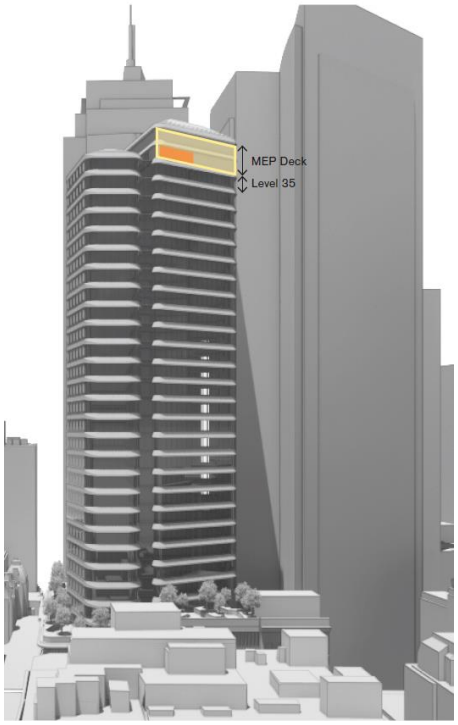
Building identification signage at rooftop

The building identification sign at the top of the building is to be located at the northern and/or north-eastern façade of the largest tower volume, facing Hyde Park and the Sydney Harbour. There are limited opportunities for locating the sign where it will be visible from the development's immediate surroundings due to the number of towers in this part of the CBD.

The proposed locations are appropriate for the main building identification sign for the development, as these enable signage that will protect the significant characteristics of the buildings, streetscapes, vistas and city skyline while also protecting the amenity of residents, workers and visitors, and safety of all road users. The sign will achieve a high degree of integration with the architectural design, materials, finishes and colours of the building and is limited to a maximum vertical height equivalent to one typical floor of the tower within a wider signage zone.

The building identification signage zones are shown in Figure 55.

Figure 55 – Building identification signage zones 1 and 2



Source: Foster & Partners

Source: Foster & Partners

Flat mounted podium wall sign – building identification or business identification sign

As a result of limited view opportunities for the building identification sign at the top of the tower from west, south and south-western directions, consideration is being given to providing integrated podium level signage on level 9 of the development, facing the Town Hall precinct.

Signage in this location could assist in identifying the main building entrance on Pitt Street or the retail usage within the tower podium levels, while ensuring that it does not detract from a high quality pedestrian experience of streets and other public spaces in the immediate surroundings.

The sign is proposed to be located on the west, south and/or south-western corner of the level 9 facade in front of the vertical plant room louvres.

Figure 56 – Podium level sign

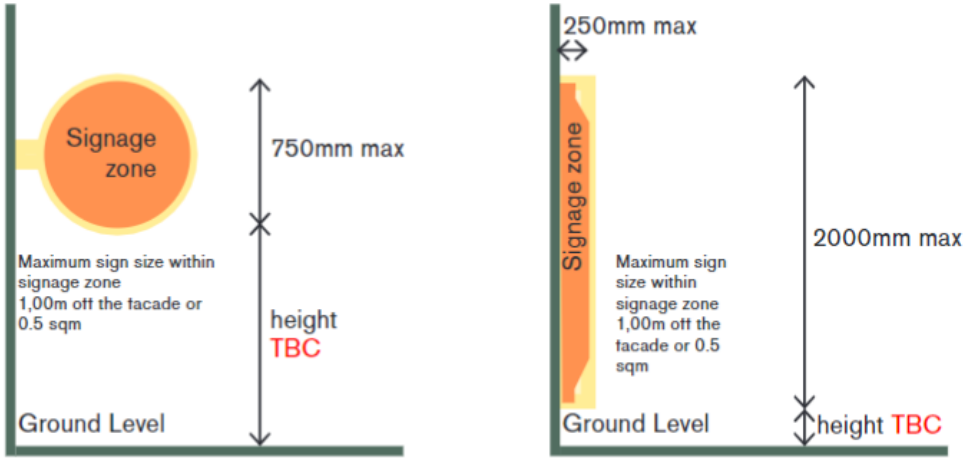
Source: Foster & Partners

Business identification signage at building entrance

A horizontal projecting wall sign to identify shop name and/or retail brand is proposed to be mounted on the full-height mullions of the glazed ground floor facades via discrete brackets, suspended at right angles to the building.

These circular or vertical retail signs will allow the retail tenant to integrate their signage while also maintaining a degree of aesthetic control throughout, ensuring consistency of all signage elements which form part of the wider building façade fabric. The horizontal projecting signage flags will be mounted at a minimum of 3m above the surrounding public domain levels. Refer Figure 57.

Figure 57 – Business identification signage at ground level

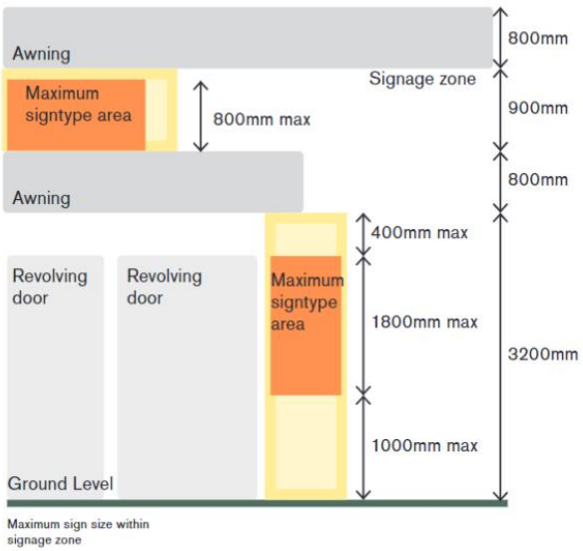


Source: Foster & Partners

Tower entrance building address signage

Signage at the entrance to the OSD on Pitt Street is proposed as illustrated in Figure 58.

Figure 58 – Tower entrance signage



Source: Foster & Partners

Source: Foster & Partners

Loading dock signage

Signage at the entrance to the loading dock is required for the safe and efficient operation of the loading dock. Refer Figure 59.

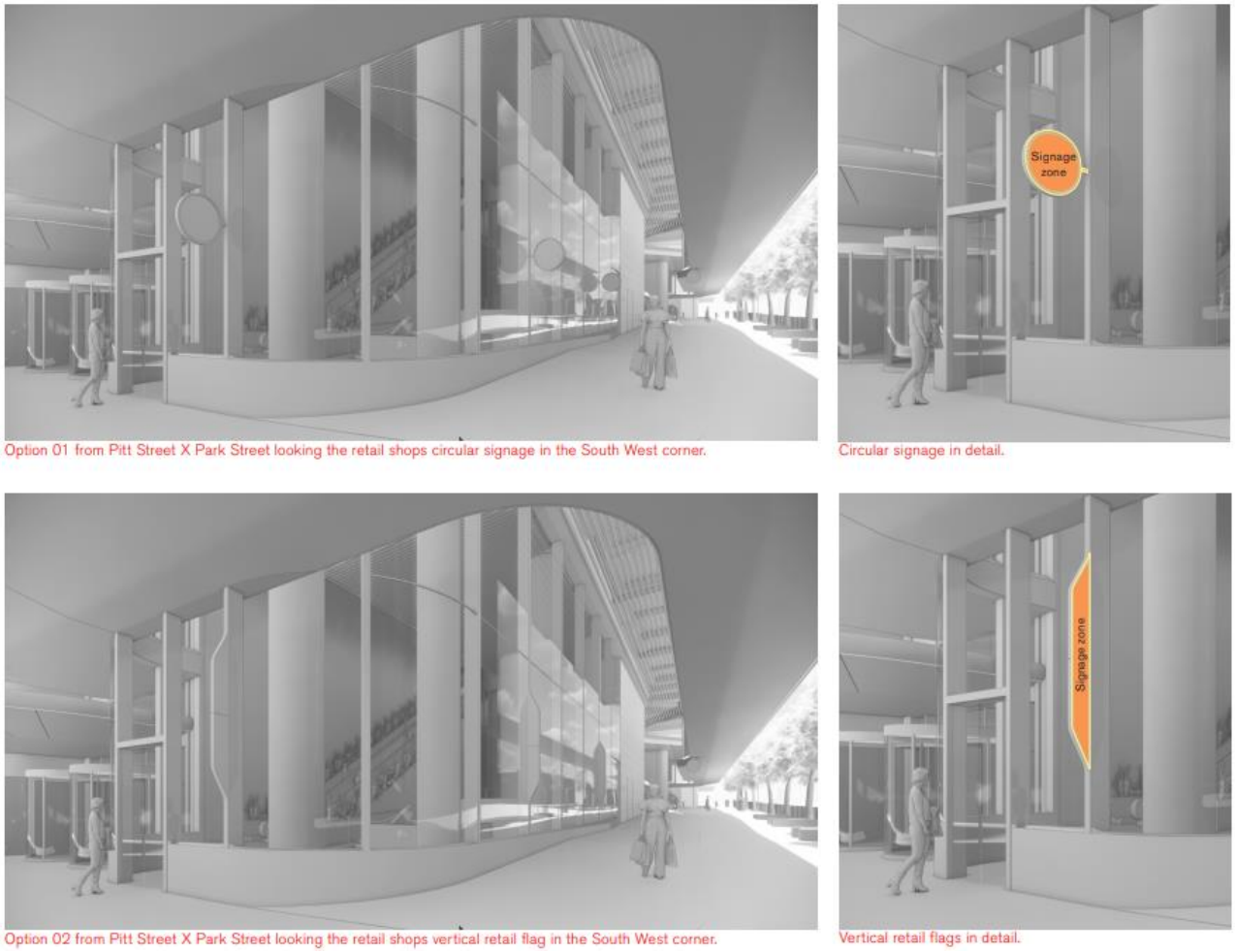
Figure 59 – Loading dock signage

Source: Foster & Partners

Ground level retail signage

Ground level retail signage zones are indicated in the figure below.

Figure 60 – Ground level retail signage zones



Source: Foster & Partners

4.13. WASTE MANAGEMENT

4.13.1. Operational Waste

The storage, management and disposal of waste generated by the operation of the Pitt Street North OSD has been appropriately considered in the Waste Management Plan prepared by TTM at **Appendix T**.

The total number of bins to be presented for collection each day for the OSD are shown in **Table 7**.

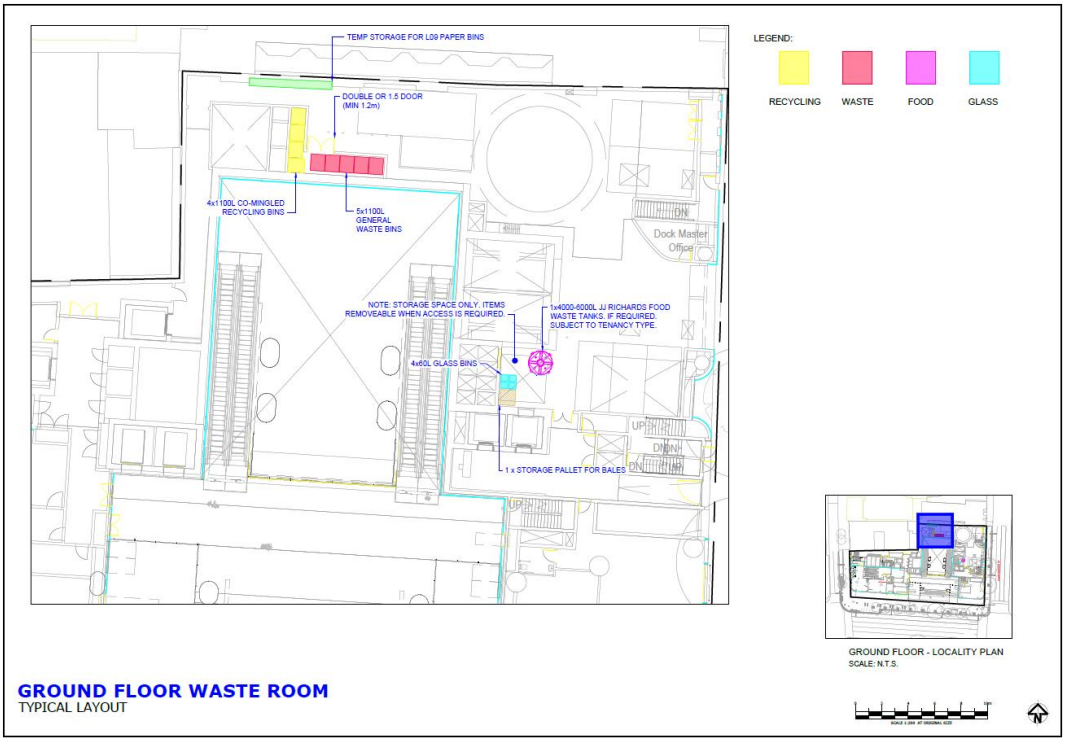
Table 7 – Proposed bin and equipment numbers

Type of waste	Commercial office and retail
General waste	4 x 1100L bins
Food waste	1 x 6000L tank Note: tenancy types to be determined and food waste separation only required for food and beverage outlets if nominated for tenancies.
Co-mingled recycling	4 x 1100L bins
Cardboard	Use of cardboard baler producing 2-3 x 100kg bales per collection

Type of waste	Commercial office and retail
Glass	8 x 60L (assumes separation and crushing of glass)
Recycled office paper	9 x 240L bins (office bins fill at different rates therefore collection cycles vary. The bin numbers nominated are for exchange with bins as they fill and will be presented for service daily to ensure empty bins are available for exchange for each business day).
(Secure) office paper	1 x 240L per office level as required. Security or confidential paper bins are typically collected directly from each level or office by the collecting driver.

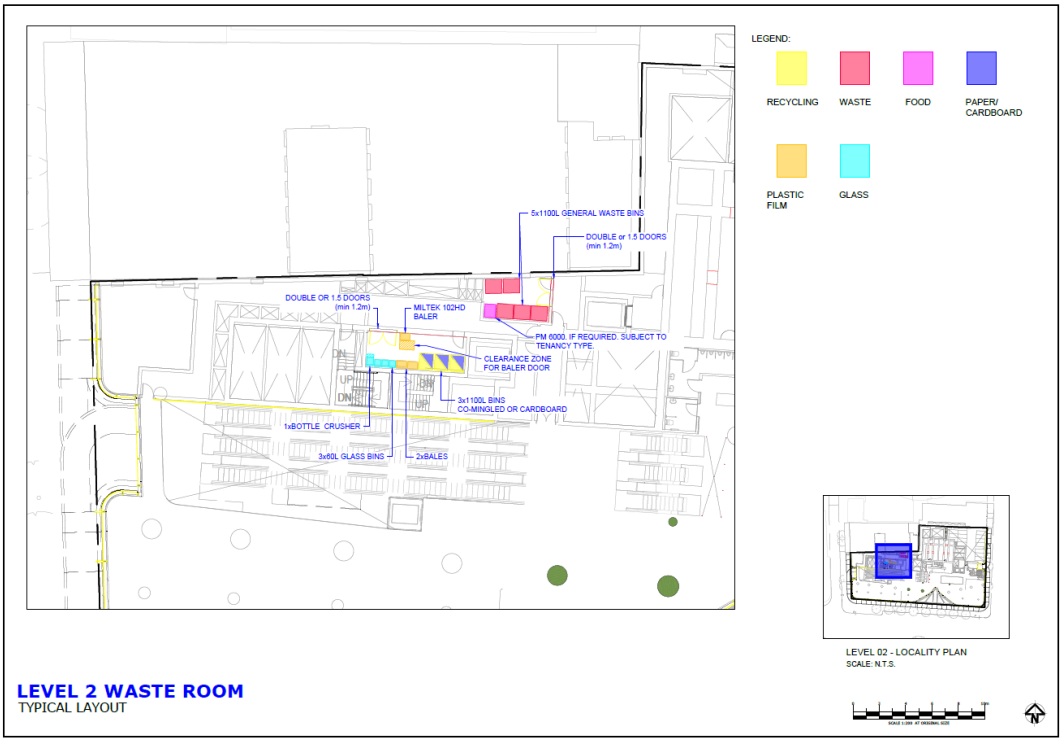
The spatial allocation for the bins (and circulation space) required to service the OSD development is an area of 103.66m^2. This area is accommodated readily within the loading dock or the waste and recycling room on level 9 for the commercial OSD and retail waste rooms on the ground floor and level 2 as shown in **Figure 61**, **Figure 62** and **Figure 63**.

Figure 61 – GF waste room



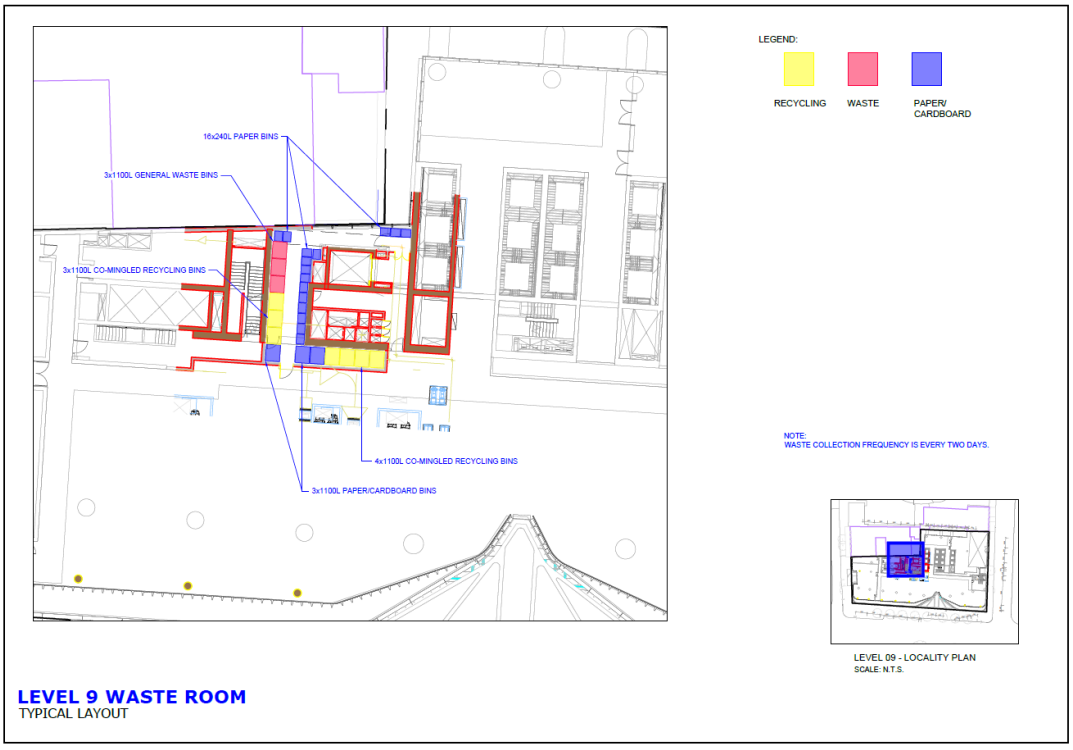
Source: TTM

Figure 62 – Level 2 waste room



Source: TTM

Figure 63 – Level 9 waste room



Source: TTM

Waste will be collected and stored in the dedicated waste storage rooms on the ground floor, level 2 and level 9 before being relocated to the waste room adjacent to the loading bay, which is capable of accommodating the estimated quantity of bins including room for manoeuvring. Tenancy staff, waste contractors or facility managers (as appropriate) will be responsible for moving waste and recycling from tenancies to the central waste storage room, and from the storage room to the area adjacent to the loading dock for collection.

Each office tenancy / occupant will be provided with space within the kitchen or kitchenette areas for placement of bins to dispose of waste recycling and possibly food waste by staff, subject to specific tenant fit out. Retail tenancies will have allowance for placement of bins within the back of house areas for disposal of all waste and recycling streams and this is typically determined by the fit-out design that suites each retail operation.

Collection vehicles will access the loading dock from Castlereagh Street. Typically, collections are 5-7 times a week for the main refuse streams and subject to opening days for the building. Retail waste collection may operate for 6-7 days per week depending on demand.

4.13.2. Construction Waste

The management of waste generated by the construction of the proposal will be the responsibility of the relevant contractor, with regard to materials handling, storage, use and disposal. It is targeted to recycle or reuse at least 90% of the waste (inert and non-hazardous) generated by construction works, with any other waste to be disposed of off-site at an EPA-approved waste management facility following classification. Prior to transporting waste materials to offsite facilities, it will be verified that the transporter and facility is licensed to handle the material it is designated to carry. Regular waste reports will be prepared throughout the construction process.

4.14. SERVICES & UTILITIES

The Detailed SSD DA design further develops the concept design to establish the capacity and augmentation requirements of the utility provisions for the development. The approach has included measures to avoid, protect, augment or relocate/remove utilities within the surrounding area. Connections into the OSD and station include electrical, communications, fire, gas, potable water and sewer services, utilising existing connections where possible.

Services that are common to both the station (and associated areas) and OSD are to be designed and built as part of a combined design and construction. All other services will be built for the tower only. A comparison of the CSSI and OSD works is provided in the Infrastructure Services and Utilities Report / Management Plan: Hydraulic prepared by CJ Arms at **Appendix Y1** and the Infrastructure Services and Utilities Report / Management Plan: Electrical and Communications Report prepared by LCI provided at **Appendix Y2.**

The assessment of the existing infrastructure capabilities identified new connections required to be provided as part of the development as summarised below.

Table 8 – Utilities services augmentation required

Utility	Augmentation required
Electrical	Modifications to the Ausgrid network to bring new electrical supply to serve the overstation development will be required. There will be one Ausgrid Upper level 3 x 1500kVA chamber substation on level 9 (with corresponding high voltage control point located in Basement level 1) and one 3 x 1500kVA basement chamber substation on Basement level 1 will be installed to supply to the development.
Communications	The OSD is to be connected to the NBN network to provide telephone and data services. An application to connect will be lodged once the building preliminary spatials are finalised and the location of the Building Distributor room has been finalised.
Gas	Jemena have advised that there is inadequate capacity within their existing low pressure main in Castlereagh Street. Consequently, a connection must be made to the high pressure main (1050kPa) in Pitt Street.
Sewer	A new 225mm connection to the existing 225mm Sydney Water sewer main on Castlereagh Street is proposed. This existing sewer main will have sufficient

Utility	Augmentation required
	capacity to service the Pitt Street integrated station development including the PSN OSD. The proposed connections above are subject to a Section 73 application to Sydney Water.
Potable water	New connections for potable water and fire services are required. • The 250mm main in Castlereagh Street is proposed to be used for domestic cold water supply to the OSD • The 300mm main in Park Street is proposed to be used for the fire supply to the OSD Sydney Water have advised that the existing 250mm watermain in Castlereagh Street will have sufficient capacity to service the Pitt Street North integrated station development. The proposed connections are subject to a Section 73 application to Sydney Water.
Stormwater	The City of Sydney Council have advised that the heritage culverts on Pitt and Castlereagh streets cannot be utilised by the proposed development and instead a new stormwater connection to an existing pit on the corner of Park and Pitt streets is required. Onsite detention will be provided within the proposed development. See **Section 8.1.13** for further discussion on stormwater and flooding.

The report also includes plans which indicate the proposed locations of services connections to the building from the authority trunk mains in the street. It is noted that these locations have been coordinated with building services design but may be subject to relocation in order to better coordinate with building structure, room locations and services routes throughout the building.

4.15. CONSTRUCTION MANAGEMENT & STAGING

A Construction and Site Management Plan (CSMP) has been prepared by CPB Contractors (**Appendix X**) which details the overall construction methodology for the proposed development. The CSMP also defines the impacts of the proposed construction activities on surrounding areas, and details the construction methodology, sequence and logic mitigating potential construction risks to surrounding developments and stakeholders.

The information included in the CSMP has been prepared to respond to the requirements of the SEARs and Condition B12 of the Concept Proposal (as relevant).

4.15.1. Site Establishment

The demolition and excavation contractors associated with the CSSI have commenced works on site and as such have established the site including the erection of hoardings and gantries around the site and work zones on Castlereagh Street, Park Street and Pitt Street, in accordance with the *Work Health and Safety Act 2011* and associated industry codes of practice.

The requirements for the OSD are detailed within the CSMP and include use of the existing B-Class hoardings. Hoardings will be designed, installed and maintained to ensure segregation of pedestrians, workforce and vehicles. Hoardings will be designed for overhead impact load and will comply with lighting requirements at night.

4.15.2. Construction Hours

Main site working hours will be governed by the final SSD DA consent conditions. For the purposes of initial construction planning, these are anticipated to be:

- Monday to Friday: 7am – 6pm
- Saturday: 7am – 5pm
- Sundays and public holidays: No work

In addition to the above working hours, there will be occasional periods when out of hours works are required as is standard industry practice. Prior to scheduling any out of hours works, the appointed Principal Contractor will agree the process with DPIE / Council and address the approvals and additional measures required. The nature of these works would typically include erection of hoardings, erecting and dismantling tower cranes, works to footpaths, services connections and other works that interface with the surrounding ground plane.

4.15.3. Traffic and Pedestrian Management

Managing the flow of materials and equipment into and out of the construction site, as well as the flow of pedestrians and traffic to surrounding buildings and roads, is key to ensure the continuity of business within the Sydney CBD and overall successful delivery of the project.

The CSMP prepared by CPB Contractors **Appendix X** outlines the traffic and pedestrian management overview for the project in conjunction with the following key strategies to be adopted:

- Engagement of Construction Traffic Management Consultant to compile an overall Traffic Management Plan, specific Traffic Control Plans detailing management of pedestrian, vehicular construction and operational traffic at each construction stage of works; and
- Encouraging staff, consultants and subcontractors to use public transport to and from site.

As shown in **Figure 64**, construction vehicle access is proposed via Park Street and Castlereagh Street.

Figure 64 – Indicative traffic staging plan

Source: CPB

Construction vehicles will enter the site by turning right-in and exit the site by turning right-out. This will ensure no conflicts with the general traffic flow given that both Pitt Street and Castlereagh Street are one-way streets. An on-street work zone is proposed on Park Street for a length of approximately 30m in the kerbside lane, subject to relevant approvals. The proposed work zone is pending approval. Construction

vehicles will enter and exit the Park Street work zone in a forward-in and forward-out manoeuvre in the direction of traffic flow.

A turntable will be located within the site at all access driveways which will permit heavy vehicles to enter the site forward-in and exit the site forward-out.

The road network capacity will not be reduced as the proposed access points are provided close by to traffic signals which will generate sufficient gaps in traffic to enable heavy vehicles to safely exit the site.

A traffic controller will be located on Pitt Street and Castlereagh Street to assist truck egress movements by finding suitable gaps in the traffic stream.

At site access points, visibility towards pedestrians approaching from the north and south directions exceed the 55m desirable sight distance requirement as per AS2890.1:2004. Under any circumstance, pedestrian movements on the footpath across the site access would be managed by traffic controllers and concertina gates.

4.15.4. Construction Staging

Works associated with the CSSI approval, including demolition and excavation, have begun on the north site in order to commence the delivery of the station in time for the opening in 2024.

Accordingly, works associated with the construction of the OSD need to commence to finish in time for the opening of the Sydney Metro City & Southwest line in 2024. On that basis, Pitt Street North OSD works are to be carried out over a duration of approximately 25 months with a planned start date for the North OSD in October 2021 and handover in Q4 of 2023.

4.16. SUBDIVISION

The proposal is seeking consent for stratum subdivision of OSD and retail from Metro areas.

The Preferred Infrastructure Report (PIR) submitted with the CSSI Application clarified that the project also included the subdivision of the station sites (including at Pitt Street) to create separate lots for each station and the airspace for the future OSD. The SSD DA Application seeks approval for the further stratum subdivision of the OSD from the metro box.

Refer draft Stratum Subdivision Plan at **Appendix C2**.

5. CONSULTATION

5.1. COMMUNITY CONSULTATION

Community consultation has been undertaken with the relevant community groups, including the local community and surrounding landowners/occupiers. This has occurred throughout all stages of the development approval process from CSSI to concept SSD DA, through to the subject detailed SSD DA. The Pre-DA Consultation Report is at **Appendix CC**.

Various strategies were implemented to ensure collaborative community involvement in the project, including stakeholder briefings, community newsletters, and community information sessions. Specific community consultation actions undertaken are summarised in Table 9 below.

Table 9 – Summary of Community Consultation Activities

Activity	Content	Date
Email to stakeholders	Offered briefing with project team to discuss integrated station development project update, proposed modifications to the Concept SSD Approval as well as the detailed design of the overall Integrated Station Development.	January 2020
One on one stakeholder briefings	Carried out stakeholder briefings to present a project overview including proposed modifications to the Concept SSD approval as well as the detailed design of the integrated station development. To discuss project status and relevant items coordination as well as to receive feedback on the integrated station development.	October 2019 – May 2020
Planning Overview and Information booklet	The Planning Overview and Information booklet to be provided with information about the integrated station development detailed design, planning approval pathways, planning timelines and project phases as well as how to provide feedback.	July 2020

The community consultation strategy and all content (responses) received throughout the engagement phase are included at **Appendix CC**. A summary of the matters raised by the community during the consultation that relate to the SSD DA and the proposal's response is included in **Table 10**.

Table 10 **–** Summary of Responses to Community Consultation Matters

Matters Raised	Proposals Response / Document Reference
John Holland CPB Ghella (JHCPBG) JV for Sydney Metro City & Southwest offered to assist with any shared contacts/stakeholders if we find it difficult to make initial contact. JHCPBG provided additional recommendations for stakeholders that would like to be kept informed.	Information received from JHCPBG.
Castlereagh Boutique Hotel & NSW Masonic Club (169 Castlereagh Street) requested that: - Sydney Metro consider a chamfered roof on the North face of the station structure with an	Sydney Metro advised the Hotel & Club by email that a chamfered roof would not be possible due to the volumetric requirements of the station with

Matters Raised	Proposals Response / Document Reference
intention to provide for an approximate setback of 3m to the Hotel's dining room. - Masonic queried acoustic treatment to Level 4 and Level 9 plantroom facade due to proximity to adjacent Castlereagh Street hotel rooms. - Pitt Street Developer North Pty Ltd proposed two further presentations before DA lodgement of the North building. One meeting to present materials (including materials addressing reflective requirement adjacent lightwell) and one to present drawings. - Masonic supportive of North OSD 3m setback (above the station structure) and stepped facade above Masonic roof level. - Concerns of construction fatigue and the reduction of natural light coming into the club's dining hall.	respect to both plant room space and passenger escalators. Two further meetings proposed for pre-DA lodgement.
Primus Hotel (339 Pitt Street) and Greenland Executives attended a stakeholder meeting, held on Friday 13th March 2020. Feedback below was primarily focused on the South OSD. - Greenland/Primus raised the issue of timing regarding the sale of apartments in their Greenland building and the Pitt Street North OSD construction, potentially being sensitive to Greenland's sales process. - Request for the Pitt Street Developer North Pty Ltd to send shadow diagrams. - Request for the Pitt Street Developer North Pty Ltd to send dimensions of the loading dock (relative to the street). - The Pitt Street Developer North Pty Ltd to confirm the mix of apartments (threes, twos and ones.) pre lodgement. - Request for the Pitt Street Developer North Pty Ltd to provide the RLs of both OSDs. - KJA to forward Greenland the DPIE site information for stage 1 and 2 publicly listed information. - Greenland/Primus expressed the importance of regular information/notifications.	Information will be provided to Greenland / Primus as requested.
Liberty Place (161 Castlereagh Street) and 2 Park Street representative had an overall positive response and no concerns were expressed. - Second briefing for Liberty Place representatives to be provided at time of public exhibitions. - The Pitt Street Developer North Pty Ltd to provide images of the top of the OSD.	A second briefing will be held at the time of public exhibition. Images and drawings provided as requested.

Matters Raised	Proposals Response / Document Reference
- The Pitt Street Developer North Pty Ltd to provide improved birds-eye drawings/pics of the South entrance (for pedestrian crossing purposes). - The Pitt Street Developer North Pty Ltd to provide amended drawings for the galleries (firewall issues) – F&B entrance corner. - The Pitt Street Developer North Pty Ltd to provide the street furniture diagram. - The Pitt Street Developer North Pty Ltd to provide end of trip facilities diagrams.	
The National Building (250 Pitt Street) showed interest regarding the value of the Ashington Place building, post completion. Discussed the project's improvement to the area (it is expected to boost property values, however no guarantee offered). Questions raised regarding the light corridor on the south facing side of 250 Pitt Street. Pitt Street Developer North Pty Ltd committed to sending updated impressions/graphics that will address questions.	Updated impressions / graphics provided regarding the light corridor.
Princeton Apartments (304/308 Pitt Street) - - Request for the Pitt Street Developer North Pty Ltd to send shadowing diagrams or a link to the submitted SEARS application. - Mostly concerned with solar access and ensuring the building is compliant. - Princeton requested details regarding privacy, shadowing etc. They want to make sure there are appropriate restrictions on ducting etc, although being the CoS, likely be very tight restrictions. - Princeton expressed the importance of regular information/notifications.	Information provided as requested.

5.2. GOVERNMENT AGENCIES & OTHER STAKEHOLDERS

The applicant and its consultants have engaged with the relevant government agencies throughout the preparation of the detailed SSD DA. Relevant comments received from the agencies are outlined in Table **11.**

Table 11 – Summary of Feedback from Government Agencies

Agency / Meeting Details	Matters Raised	Response / Reference
City of Sydney Pitt Street Developer North Pty Ltd has made various presentations to the City of Sydney:	Subject areas included but were not limited to: - Scheme overview - North façade - View locations for Visual Impact Analysis	Comments made by the City of Sydney have been adopted in the preparation of this EIS and the detailed design of the development.

Agency / Meeting Details	Matters Raised	Response / Reference
- 18 October 2019 - 4 December 2019 - 16 January 2020 - 20 February 2020 - 5 March 2020	- Proposed modifications to the concept SSDA - Extent of residential lobby design - Planning timetable - Facade including materiality - Loading dock and driveway - Landscape and public domain - Street furniture - Pedestrian modelling - Facade embellishments - Envelope compliance - Planning timeline	View locations included at **Appendix W** are as agreed with the City of Sydney. Façade materiality, embellishment, and projection of approved envelope are as presented to the City of Sydney.
Sydney Metro Various and continual meetings from 8 October 2019 to 21 May 2020	Representatives from Pitt Street Developer North Pty Ltd and Sydney Metro meet on a fortnightly basis for project updates and to work through any issues/risks. A Sydney Metro representative has been invited to all stakeholder meetings, of which they have attended the majority.	This EIS has been reviewed by Sydney Metro and landowner's consent issued prior to the lodgement of the detailed SSD DA.
NSW Government Architect and her office Friday 17th April 2020	As the Pitt Street Metro OSD is the first metro station to require a Design Integrity Report, the NSW Government Architect requested a copy to potentially be used as a benchmark for the other stations. The NSW Government Architect was focused on the design of the Park Street frontage of the OSD and the quality of the station entrance, gateline and passenger areas on Park Street.Note: The Government Architect has been involved in the design evolution of the ISD being the Chair of the Sydney Metro Design Review Panel.	Refer **Appendix EE** Design Integrity Report.
Transport for NSW (including for Roads and Maritime Services) and Sydney Coordination Office within Transport for NSW Friday 3rd April 2020	Interest about the number of vehicles having access to the off-street parking, and how the car stacker worked, to avoid congestion. There may be a risk in terms of repurposing the off-street parking and lighting spaces (given the commercial demand for deliveries). The Pitt Street Developer North Pty Ltd to provide the modelling to Transport for NSW including the Sydney Coordination Office.	This information. has been provided to Transport for NSW for consideration and assessment as part of the referral of the detailed SSD DA.
Sydney Trains Friday 3rd April 2020 and Wednesday 6th May 2020	- General consensus that the proposed development aligns with the 'Future Sydney Plan' and will ultimately serve to benefit the area.	Refer **Appendix V1** Transport and Accessibility Impact Assessment.

Agency / Meeting Details	Matters Raised	Response / Reference
	- Consideration of the impact the opening will have on pedestrian traffic was raised, particularly regarding how pedestrians are moving between Pitt Street, Town Hall and Martin Place. - It was noted that the station signage used in the presentation were outdated (Pitt Street Developer North Pty Ltd committed to providing new graphics). - Interested in understanding the extent of pressure relieved by development over time, and alternatively what pressure points will arise in relation to Sydney Trains.	
Committee for Sydney Monday 24th April 2020	Supportive of the design and development, particularly: - Recognizing the role of this development in local businesses and the night-time economy. - Adjusting the balance between cars and pedestrians. - Hyde Park being interwoven into the city.	No action required.
Office of the Small Business Commissioner (OSBC) Tuesday 10th March 2020	Overall, the OSBC positively responded to the metro station and both associated OSDs stating that “the development looks great and we would expect the proposal will improve this area of the city.” OSBC offered assistance in navigating any potentially contentious relationships; including that introduced by: - Neighbouring business (by offering face to face engagement) - Government departments (facilitating meetings, acting as a neutral third party) - Any future official rejections - OSBC offered, if necessary, to help with the grace period of potential incentivised rent of retail space. OSBC explained the Business Connect program that may be beneficial to surrounding businesses that are experiencing economic pressure from construction fatigue. OSBC suggested raising this with Sydney Metro for all of their metro stations and OSDs.	Construction management to consider the recommendations of the OSBC during the construction of the proposed development.

Agency / Meeting Details	Matters Raised	Response / Reference
Fire and Rescue NSW Tuesday 5th May 2020	Fire and Rescue NSW was focused on three primary issues: - As the Pitt Street Metro South Metro Station is to be constructed on the east boundary i.e. no setback, the waterproofing of the related boundary wall is important to Fire and Rescue NSW. - Given two of the three buildings occupied by Fire and Rescue NSW are heritage listed, vibration from construction activities is a focus area and they advised that vibration monitors are currently in place for the metro tunnelling activities. - Fire and Rescue NSW emphasised the primary of their activities and described their requirement that any construction traffic must not impede these activities in any way for the full duration of construction activities.	

Under section 4.55(2)(b) of the EP&A Act, the consent authority must consult with the relevant Minister, public authority or approval body in respect of a condition imposed as a requirement of concurrence to the consent. We, therefore, anticipate that the NSW DPIE will further consult with government agencies such as Ausgrid and TfNSW as part of the assessment of the detailed SSD DA.

For further discussion of one-on-one stakeholder briefings, please refer to the Pre-DA Consultation Report at **Appendix CC.**

5.3. SYDNEY METRO DESIGN REVIEW PANEL

To inform the preparation of the Detailed SSD DA for the detailed design of the proposed OSD project, the scheme was presented to the Design Excellence Evaluation Panel (DEEP) prior to award of the developer contract. Since the appointment of Pitt Street Developer North Pty Ltd as the development partner, the scheme has been presented to the Design Review Panel (DRP) nine times, to seek feedback and to confirm design integrity. It is noted that the GANSW supports the Design Excellence Strategy as endorsed by the Secretary of the DPIE in accordance with condition A26 of the Concept SSD DA. The Sydney Metro DRP has given its endorsement that the proposal achieves design excellence and the design is ready for lodgement of the Detailed SSD DA to DPIE.

The matters raised by the DRP that relate to the detailed architecture of the building are outlined below:

1. The honest expression of the plant floors capping the tower should be considered during design development and treatment of the roof plant level to achieve a more appropriate expression. The heights of the central portions of the roof volumes have been adjusted to suit the plant requirements within, the sides to the plantrooms are perforated to allow for supply, return air and other ventilation demands, while complying with restriction related to the Solar Access Plane and Building Envelope.

2. Tree planting is supported with further City of Sydney coordination. Further refinement required including the development of a strong set of principles to ensure a positive outcome. Two new kerbside trees are proposed at street level along Castlereagh Street, continuing the new trees that have been introduced in front of the Liberty Place entrance. Additionally, two new infill trees have been introduced on Park Street at grade. Tree planting has been proposed on the podium roof terraces on levels 10 and 11.

3. Design of the station entry should be refined to reduce the imposition of structural beams on the experience. Reconsider elements that are not critical to achieve a simple, grand entry commensurate with the Park Street location. The structural design of the station entrance skylight has undergone an in-depth review by the structural engineering team. All structural elements have been reduced to their smallest size allowing the maximum amount of daylight access to the station entrance.

4. Light well to the northern boundary to ensure an appropriate relationship to adjoining building to the north and the tower above. The NSW Masonic Club has already sold off any future developable bonus GFA in turn allowing the permissible envelope for the Pitt Street North site to include a 0m setback. Notwithstanding, some consideration of the adjacent heritage building has been provided by observing a minimum setback of 3m, allowing increased daylight penetration into the opaque south-facing windows of the NSW Masonic Club building. The northern facade of the OSD tower provides a set-back between 3 and 3.4m from the site boundary for the length of the Masonic light well above the station transfer level on level 4.

5. Further refinement of the facades: detail and materiality. This includes further attention to the detail of the sandstone at ground level to achieve an appropriate civic response. The Pitt Street North development has interrogated the composition and materiality of adjacent heritage and modern buildings in order to define the appropriate location of stone elements within the podium facades. Key considerations were to increase the solidity of the building without losing the permeability at grade and views towards the activated uses on level 2 and 3 from the street.

6. Further study of the south-east corner to ensure satisfactory space for pedestrian movements. In-depth pedestrian modelling simulations have been produced by the project traffic engineer in order to assess the current and future crowd movement corridors at Pitt Street North in order to establish the functionality of proposed seating and other street furniture elements along the footpath.

7. The ground floor retail façade / shopfront required design options to be presented to the DRP. In order to reduce the linear length of inactive facades on Pitt Street adjacent to Ashington Place, a new retail unit had been proposed during the design development stages on Pitt Street with its entrance north of the main commercial lobby. The DRP's preferred option has been incorporated into the final design proposal.

8. The heritage response on Castlereagh Street also required design options to be presented to the DRP. The project's heritage consultant presented the vision for the Heritage Interpretation Plan. The heritage consultant's preference was to not repeat the heritage display cases that are often done in the city but instead reference the rich horse and carriage history of the site in a more unique way, truly integrating it within the building's fabric. The idea would be to develop a carving or relief in the proposed sandstone façade adjacent to the NSW Masonic Club in a similar fashion to the stone treatment seen in the entrance lobby of the EY Tower at 200 George Street.

9. Wind study for podium landscape and balustrade detail and height required ongoing refinement with the DRP. It was concluded that balustrades, regardless of height, will have negligible impacts on wind conditions for the ground plane.

10. Materiality of façade - bronze finish & sandstone required further refinement. The DRP 'in principle' supported the approach to the current material selection and recommended any future presentation include samples and final finishes be presented along with evidence of sign off by Sydney Metro on sealing and maintenance regimes.

11. Setback/ lightwells to Ashington Place required further refinement with the DRP. The design team concluded there would be no additional benefit to the tenants if a special treatment were to be introduced on the north facing lightwell wall, given the outlook is predominantly in an east-west orientation. Furthermore, the design team felt strongly about replicating the look and treatment to the existing lightwell walls on the north facing wall for consistency and to maintain the overall character of the lightwell and more generally the character of the heritage building itself. The panel members supported the proposed approach to the materiality of all Ashington Place lightwell facades.

6. STRATEGIC PLANNING CONTEXT

6.1. NSW STATE AND PREMIERS PRIORITIES

The NSW Premier's Priorities is the State Government's and Premier's plan to guide policy and decision making across the State. The proposed development is consistent with the relevant key objectives contained within the plan. These include:

- **Creating Jobs:** The NSW Government targeted the creation of 150,000 new jobs in NSW by 2019, whilst this jobs target was achieved in May 2016, the NSW Government is continuing to support key initiatives that assist in the creation of jobs, such as attracting large and international companies to base their headquarters in NSW.
    - The proposal will deliver a new commercial tower in the Central Sydney commercial district that has the potential to accommodate up to 3,500-4,000 FTE employees once operational and will generate approximately 590-620 jobs when under construction.
    - The delivery of a major construction project also relies on the input of a range of industries, with the economic contribution and benefits extending beyond the direct capital expenditure and employment associated with project goods and services, and jobs on-site.
- **Building Infrastructure:** The NSW Government has committed to delivering 10 of the largest and most high-profile infrastructure projects on time and on budget, including the Sydney Metro City & Southwest, planned to open in 2024.
    - The proposal provides a significant development opportunity for the State in conjunction with the new Sydney Metro Project. The Detailed SSD DA supports the delivery of Sydney Metro by facilitating employment growth which is coordinated with the new Pitt Street North Station. The proposed built form includes active ground floor uses and provides clear wayfinding to the Sydney Metro Pitt Street North Station entrance from Park Street.

The proposed development is consistent with the goals and objectives set out within the NSW State Priorities.

6.2. SYDNEY REGION PLAN: 'A METROPOLIS OF THREE CITIES'

A Metropolis of Three Cities is a bold vision for three, integrated and connected cities that will rebalance Greater Sydney – placing housing, jobs, infrastructure and services within greater reach of more residents, no matter where they live. Setting a 40-year vision (to 2056) and establishing a 20-year plan to manage growth and change for Greater Sydney in the context of social, economic and environmental matters.

The vision for the plan is built on these 30-minute cities within Greater Sydney, the Western Parkland City, Central River City and Eastern Harbour City, providing improved access through different modes of transport to various job opportunities, services, entertainment and cultural facilities across the metropolitan area. The Eastern Harbour City is well-established, well-serviced and highly accessibly by its radial rail network, with half a million jobs and the largest office market in the region.

The proposed Pitt Street Station North OSD responds to the Harbour CBD's focus on innovation and global competitiveness to underpin its continued growth, backed up by the significant Sydney Metro City & Southwest project. In accordance with Objective 18, the proposal aligns explicitly with the regional plan by:

- Providing a significant amount of premium office floor space (54,651m^2) which strengthens the Harbour CBD's economy globally and nationally;
- Comprising a commercial tower and activated podium which supports a diversity of uses; and
- Maximises opportunities presented by the Sydney Metro Pitt Street Station to improve business to business connections and support the 30-minute city.

6.3. EASTERN CITY DISTRICT PLAN

The Eastern City District Plan covers the LGAs of Sydney, Woollahra, Waverley, Randwick, Bayside, Inner West, Burwood, Strathfield and Canada Bay. Planning Priorities that directly relate to the proposed Pitt Street North OSD include:

E1 - Planning for a city supported by infrastructure

The proposal aligns land use and infrastructure planning ensuring that infrastructure use is maximised by locating 54,651m^2 of commercial floor space above the Sydney Metro Pitt Street Station. The development facilitated by the Detailed SSD DA aligns with the provision of place-based infrastructure which encourages active transit methods such as walking and cycling and use of the Sydney Metro Pitt Street North Station.

E6 – Creating and renewing great places and local centres and respecting the District's heritage.

The Pitt Street North OSD facilitates the creation of a vibrant and active integrated station development that delivers retail and office space in a highly accessible location. The site is located in close proximity to significant public areas of the CBD including Hyde Park, Pitt Street Mall and Town Hall / Sydney Square.

The proposal respects the surrounding built form and has been carefully designed to respect the heritage values of adjacent heritage buildings.

E7 – Growing a stronger and more competitive Harbour CBD.

The District Plan notes that the Harbour CBD is Australia's financial and business capital, contains the largest proportion of headquarters for multinational and national companies, and contains Australia's most significant finance industry cluster. The concentration of this large and specialised financial cluster attracts global talent and investment but is constrained by the limited capacity for the Sydney CBD to expand and deliver premium office space. Accordingly, the District Plan recommends that commercial development is supported within the CBD to assist in meeting the 45,000-80,000 future jobs that have been forecast for this region.

The proposed development will deliver additional premium office space within the financial and banking heart of Australia. This proposed increase in commercial floor space also recognises the potential to increase economic activity, driven by the catalytic effect of the enhanced rapid transit network, at this economically strategic location. This is consistent with the Planning Priority that seeks to safeguard the competitiveness of Sydney in both a domestic and international context.

E10 – Delivering an integrated land use and transport planning and a 30-minute city.

By providing commercial floor space over the Pitt Street North metro station and thereby improve access to jobs, the proposal contributes to the vision for a 30-minute city. The proposal will facilitate employment growth that is coordinated with and will be delivered at the same time as the new metro station to improve access to jobs and public transport.

E11 – Growing investment, business opportunities and jobs in strategic centres.

The proposal will deliver a new commercial tower in the Central Sydney commercial district that has the potential to accommodate up to 3,500-4,000 FTE employees once operational and will generate 590-620 jobs when under construction. The site is in a highly accessible location within close proximity to a large number of other commercial buildings, thereby strengthening the opportunities for business growth in the CBD.

6.4. FUTURE TRANSPORT STRATEGY 2056

The NSW Government's Future Transport Strategy 2056 sets the 40-year vision, directions and outcomes framework for the transport system and customer mobility in NSW, which are divulged for Regional NSW and Greater Sydney. It will guide transport investment over the longer term delivered through a series of services and infrastructure plans and other supporting plans.

The site benefits from being located directly above the future Pitt Street metro station which forms an important cog in the Sydney Metro City & Southwest project. The strategic location of premium grade commercial floorspace delivers economic benefits for Sydney by enhancing connectivity between businesses and people. The proposal provides an opportunity to boost the city's productivity by allowing

future businesses to access a wider range of works and allowing employees to access jobs faster and more reliably.

The proposal supports public transport patronage, active modes of transport, and achieves best practice ESD targets.

6.5. STATE INFRASTRUCTURE STRATEGY 2018

The NSW State Infrastructure Strategy 2018 - 2038 sets out the NSW Government's vision for infrastructure over the next 20 years, focussing on aligning investment with sustainable growth. For Metropolitan NSW, the primary goal is to provide residents with access to jobs and services within 30 minutes, known as the '30-minute city' model.

The Strategy sets out six directions for infrastructure in NSW, of which the following are relevant:

Better integrating land use and infrastructure

The proposal will deliver additional jobs in coordination with the new metro station beneath, so that capital investment keeps pace with new jobs.

Delivering infrastructure to maximise value for money

The development directly assists in the timely delivery of the new metro station and in achieving the priority to provide infrastructure projects on-time and on-budget. Through the provision of bicycle storage facilities and the provision of minimal car parking, the proposal will assist in promoting the use of the existing walking and cycling network, as well as the heavy and light rail metro network.

Optimising asset management

The proposal has been designed with consideration of the life cycle of the asset so that the integrated station and OSD solution is 'futureproofed', and that the life, availability and use of railway infrastructure on the site are appropriately safeguarded.

Making our infrastructure more resilient

The proposal has been designed with regard to flooding and other environmental considerations, to ensure that the development is not vulnerable to hazards.

Using innovative service delivery models

The proposal brings together the best skills of the private sector in delivering the Pitt Street metro station. It represents an innovative approach that supports the NSW Government in funding the cost of this step-change piece of public transport infrastructure and delivering a range of public benefits.

6.6. DEVELOPMENT NEAR RAIL CORRIDORS & BUSY ROADS – INTERIM GUIDELINE

The Development Near Rail Corridors and Busy Roads guideline assists in the planning, design and assessment of development which is in or adjacent to rail corridors and busy roads. The application of the guideline shares a close relationship with the *State Environmental Planning Policy (Infrastructure) 2007* (**Infrastructure SEPP**), supporting specific rail and road provisions contained within.

The guideline relates to development impacted by rail corridors and busy roads, in terms of noise and vibration and air quality, as well as the potential impact of adjacent development on roads and railways, with regards to safety and design issues and excavation, earthworks and other construction-related issues. The Pitt Street North Station OSD proposal capitalises on concentrating jobs within easy walking distance above the future Sydney Metro station, thus improving access and opportunities for increased rail patronage.

An Acoustic and Vibration Impact Assessment has been prepared by Renzo Tonin & Associates (**Appendix U**) which demonstrates that the proposed design is capable of meeting the requirements of the Guideline.

6.7. GUIDE TO TRAFFIC GENERATING DEVELOPMENT (RMS)

The RMS' Guide to Traffic Generating Development outlines all aspects of traffic generation considerations relating to developments. The guide establishes the grounds for traffic impact assessment in terms of daily traffic volumes and peak traffic volumes for residential and retail land uses.

This Detailed SSD DA is accompanied by a Transport and Accessibility Statement prepared by Aurecon (**Appendix V1**) which considers the strategic context of this guideline and the statutory context of the Infrastructure SEPP as the basis for assessment. Traffic generation impacts are also discussed in further detail in **Section 8.1.8**.

6.8. HERITAGE COUNCIL GUIDELINES

The assessment of heritage impacts within the Heritage Impact Statement prepared by GBA Heritage in **Appendix L** and Heritage Interpretation Plan in **Appendix M** provides a comprehensive assessment of key heritage impacts and establishes the heritage management framework for the development of the site. Heritage impacts are further discussed in **Section 8.1.4**.

6.9. ABORIGINAL CULTURAL HERITAGE IN NSW

We note that the SEARs require consideration of Aboriginal cultural heritage. However, as demolition of structures, landscaping and tree removal and bulk excavation works have already been approved under the CSSI approval, the potential impact on Aboriginal cultural heritage within or adjacent the site has already been assessed and considered appropriate for the OSD.

6.10. BETTER PLACED

Better Placed (2017) is an integrated design policy for the built environment, prepared by the Government Architect of NSW, to create a transparent approach to ensure good design outcomes are achieved to deliver desired architecture, public places and environments throughout NSW (September 2017). The policy includes seven applicable objectives:

- Better fit – contextual, local and of its place
- Better performance – sustainable, adaptable and durable
- Better for the community – inclusive, connected and diverse
- Better for people – safe, comfortable and liveable
- Better working – functional, efficient and fit for purpose
- Better value-creating and adding value
- Better look and feel – engaging, inviting and attractive.

The detailed design has been subject to an extensive design review that involved a collaborative, cyclical and iterative process. The final design outcome will accommodate a built form that is sustainable, functional, sensitive to its context and visually distinctive as encouraged by objectives of Better Placed, in line with the modified Concept SSD DA.

6.11. CITY OF SYDNEY SECTION 61 DEVELOPMENT CONTRIBUTIONS PLAN 2013

The OSD is subject to the City of Sydney Council's contributions requirements under the Central Sydney Development Contributions Plan 2013. The levy aims to assist the funding of public facilities such as facilities, amenities and services required to meet the needs of an increasing workforce population.

The levy is calculated at 1% of the development cost and is sought before obtaining the Construction Certificate.

6.12. SUSTAINABLE SYDNEY 2030

Sustainable Sydney 2030 is a long-term plan prepared by the City of Sydney to achieve a green, global and connected city. It contains ten strategic directions, of which the following are relevant and will be delivered by the proposal:

- A globally competitive and innovative city;
- Integrated transport for a connected city;
- A city for walking and cycling;
- A lively and engaging city centre; and

The proposal will facilitate the delivery of Sydney Metro infrastructure and additional jobs in a highly accessible city centre, encouraging walking and cycling. Specifically, the proposal will address the three key pillars of Sustainable Sydney 2030 as follows:

Green

- *The city's places and spaces will support the community's resilience to social, economic and environmental changes, including changing climate.*
- *Excellence in the design of the city's places, spaces and buildings will attract people, encourage them to stay and make high density places healthy and enjoyable.*

Comment: The Detailed SSD DA and modification application will help to realise the vision for a greener global city that will improve the places, spaces and buildings serving the greater community and the residents that it serves by providing an energy-efficient building, providing additional employment with access to public transport. The location allows employees to walk and cycle to places of interest including Hyde Park and nearby cultural and entertainment hubs.

Global

- *The Council seeks to ensure that "Sydney will remain Australia's most significant global city, home to globally aware people, jobs and businesses and an international gateway with world-class tourism attractions and sustained investment in cultural infrastructure, icons, amenities and public spaces."*
- *In economic orientation and partnerships, an open-minded outlook, and a diverse community.*

Comment: The delivery of Sydney Metro and the OSD development as proposed in the detailed SSD DA and supported by the modification application will help to realise the Council vision, in which the partnership between the NSW Government and private developers, such as Sydney Metro and the Pitt Street Developer North Pty Ltd in collaboration will help to deliver infrastructure and jobs to serve a diverse and growing community.

Connected

The Council vision for connectedness includes:

- *physically by walking, cycling and high-quality public transport, through culture, place and social wellbeing, and to those with interest in the city.*

Comment: The Detailed SSD DA and supporting modification application will help to realise the Council vision for a more connected city with the delivery of high-quality public transport and jobs within one development that will promote the place, social well-being and opportunities to access services, and places by walking or cycling.

6.13. CENTRAL SYDNEY PLANNING STRATEGY

The Central Sydney Planning Strategy is a 20-year growth strategy that builds upon the strategy of Sustainable Sydney 2030 and revises planning controls for Central Sydney. The Strategy outlines 10 key moves, of which the following are relevant:

1. Prioritise employment growth and increase capacity

The proposed development will deliver a significant amount of employment floor space in a highly accessible location, directly contributing to the targeted increase in employment floorspace within the city centre.

In the short term, the proposed development will also facilitate genuine activation at street level and in the lower podium levels with retail tenancies on the ground level and level 2.

2. Ensure development responds to context

The proposed building has been designed to respond to the surrounding context. It complies with all setbacks and design guidelines as required by the Concept SSD DA and Pitt Street North Station Design Guidelines. The centreline of the station entrance is used to divide the OSD tower and podium into two distinct volumes on Park Street, one inclined to open a view to Hyde Park and one inclined to open a view to Town Hall. In addition, the podium volume adjacent to the NSW Masonic Club has been lifted up to align with the top of this adjacent heritage building, helping to better transition this change in podium height.

5. Ensure infrastructure keeps pace with growth

The proposed development will facilitate the delivery of a critical piece of regional infrastructure. The development is also subject to Section 61 development contributions.

6. Move towards a more sustainable city

Ecologically Sustainable Design (**ESD**) principles are being applied in the design, delivery and operation of the project. A Sustainability Report has been prepared by Cundall which supports the sustainability targets of the proposed development which include:

- Achieve 6-Star Green Star rating using Green Star Design and As-Built v1.3 rating tool; and
- For the commercial office spaces:
    - 5 Star NABERS for Office Base Building Energy Rating; and
    - 3.5 Star NABERS for Office Whole Building Water Rating.

ESD is discussed further in Section 8.1.7.

Further, the proposed development includes only very minimum car parking spaces, a significant initiative to move towards a more sustainable city.

7. Protect, enhance and expand Central Sydney's heritage, public places and spaces

The proposed development complies with the Hyde Park West sun access plane requirements and as outlined in Section **8.1.6** positively responds to the character and features of heritage items in the vicinity of the site. The site is not located within a designated Special Character Area.

8. Move people more easily

The proposed development includes only minimal parking spaces as it is in close proximity to numerous multi-modal transport options and includes 350 bicycle lockers and 200 bicycle racks for employees and visitors.

6.14. DRAFT LOCAL STRATEGIC PLANNING STATEMENT – CITY PLAN 2036

City Plan 2036 is the draft Local Strategic Planning Statement (**LSPS**) for the City of Sydney and links the state and local strategic plans with the planning controls to guide future development and the Local Environmental Plan review.

The City Plan sets 13 priorities to achieve the City's Green, Global, Connected vision and guide future changes to the City's planning controls, of which the following are notably relevant:

1. Movement for walkable neighbourhoods and a connected city

The proposed development is co-located with Sydney Metro and will directly facilitate the development of a place-base infrastructure service which encourages active transit methods such as walking and cycling and the Sydney Metro Pitt Street North Station.

By locating additional jobs above the Pitt Street North metro station, the proposal contributes to the vision for a 30-minute city. Further, the proposal is considered sustainable as it increases the proportion of trips by public transport, walking and cycling trips to reduce emissions and heath.

2. Align development and growth with supporting infrastructure

The development directly assists in the timely delivery of the new metro station and in achieving the priority to provide infrastructure projects on-time and on-budget. Through the provision of bicycle storage facilities and the provision of minimal car parking, the proposal will assist in promoting the use of the existing walking and cycling network, as well as the heavy and light rail metro network.

11. Creating better buildings and places to reduce emissions and waste, and use water efficiently

The sustainability framework for the project implements both the Green Star rating scheme and the NABERS rating. Green Star assesses projects based on their performance in the categories of management, indoor environmental quality, energy, transport, water, materials, land use and ecology, emissions and innovation. The development will reflect leading industry practice for commercial development by incorporating the appropriate measures.

6.15. NSW PLANNING GUIDELINES FOR WALKING & CYCLING

These guidelines function to improve the consideration of walking and cycling and their role in the creation of sustainable neighbourhoods and cities. The proposed development will align with these guidelines by improving walkability and bicycle access across Sydney CBD through the provision of new pedestrian routes, end-of-trip facilities and wayfinding signage. This will contribute to a high-quality pedestrian and cycling environment, which is conducive to the use of active transport options by future OSD employees and visitors.

6.16. SYDNEY'S BUS FUTURE 2013

Sydney's Bus Future 2013 outlines the NSW Government's long-term plan to deliver an integrated bus network which is simpler, faster and better within Sydney to meet current and future customer needs. The overarching aim is to provide an integrated bus network which seamlessly connects to other transport services and opportunities.

The proposed development will align with these objectives by locating additional employment capacity within walking distance of various key bus routes within the CBD area.

6.17. SYDNEY'S CYCLING FUTURE 2013

Sydney's Cycling Future (2013) provides a framework for the way cycling is planned and prioritised in Sydney. It aims to grow the number of people cycling for transport by investing in safe, connected networks, making better use of existing infrastructure and fostering the formation of partnerships to develop cycling infrastructure.

Whilst the proposal does not itself alter the existing bicycle network or public domain areas, which are being designed and delivered separately along with the Station entries, it supports the use of bicycles as a mode of transport through providing high quality bicycle parking and end of trip facilities.

6.18. SYDNEY'S WALKING FUTURE 2013

Sydney's Walking Future (2013) aims to promote walking as a means of effective transport within Sydney by encouraging investment in safe, permeable walking networks.

The surrounding road network provides the site and OSD with pedestrian access. Public domain improvements will be included as part of the CSSI approval and will be designed to meet any relevant requirements of that consent and the Pitt Street North Station Design Guidelines.

6.19. OTHER STRATEGIC POLICIES AND GUIDELINES

Other relevant State and metropolitan strategies, policies and guidelines are discussed in **Table 12** below.

Table 12 – Consistency with other strategies, policies and guidelines

Strategy/ Policy/ Guideline	Consistency
Sydney Streets Design Code and Sydney Streets Technical Specification	The *Sydney Streets Design Code (the Code),* sets the guidelines, design coordination and material palettes for public domain works, with the Technical Specifications providing written specifications and standard drawings for constructing street works in the public domain in accordance with the guidelines set out in the Code. It noted that the surrounding public domain will be delivered as part of the CSSI approval.
City of Sydney Competitive Design Policy	One way to achieving design excellence under Sydney LEP 2012 is to undertake a competitive design process. The *Competitive Design Policy* sets out the parameters and processes for undertaking a competitive design process. As detailed in **Section 8.1.1**, an alternative process to achieving design excellence was approved under the Concept Proposal and has been enacted prior to lodging this application.
City of Sydney Waste Minimisation in New Developments 2005	The *Waste Classification Guidelines* have been considered in the Construction and Operational Waste Management Plans (**Appendix T** and **Appendix X**).
Crime Prevention Through Environmental Design principles (CPTED)	CPTED principles are addressed in discussed in 8.2.2 of this EIS.

7. STATUTORY PLANNING CONTEXT

As outlined in the SEARs, the statutory provisions contained in the planning instruments listed below have been addressed for the Detailed SSD DA:

- *Environmental Planning and Assessment Act 1979 (EP&A Act)*
- *NSW Biodiversity Conservation Act 2016*
- *State Environmental Planning Policy (State & Regional Development) 2011*
- *State Environmental Planning Policy (Infrastructure) 2007*
- *State Environmental Planning Policy (Urban Renewal) 2010*
- *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017*
- *State Environmental Planning Policy No. 55 (Remediation of Land)*
- *State Environmental Planning Policy No. 64 (Advertising and Signage)*
- *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*
- *Draft State Environmental Planning Policy (Environment)*
- *Sydney Local Environmental Plan 2012*

The proposals compliance with the relevant statutory provisions is outlined in the following sections.

7.1. ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979 (EP&A ACT)

The EP&A Act establishes the assessment framework for SSD, and in Section 4.36 indicates that a state environmental planning policy may declare a development to be SSD. Under section 4.5(a) of the EP&A Act, the Minister is the consent authority for SSD applications if the Independent Planning Commission has not been declared to be the consent authority for the development by an environmental planning instrument.

The Detailed SSD DA is a staged development application as per Division 4.4 of the EP&A Act. Overall, the detailed SSD DA is consistent with the approved Concept SSD DA which is proposed to be modified concurrently (Refer **Section 2.4**).

Table 13 below provides an assessment of the proposal against the objects contained within Section 1.3 of the EP&A Act 1979.

Table 13 – Objects of the EP&A Act

Object	Comment/ Response
To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources.	The proposal promotes the social and economic welfare of the community and a better environment through the delivery of an integrated transport-oriented development above the Sydney Metro Pitt Street Station site.
To facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about the environmental planning and assessment.	The ESD commitments are consistent with those included within the Concept SSD DA. This detailed proposal is committed to achieving high standards of ecologically sustainable development and is accompanied by a detailed ESD Report (**Appendix K**).

Object	Comment/ Response
To promote the orderly and economic use and development of land.	The proposal promotes the orderly and economic use and development of land through a staged planning process which delivers an integrated design response that responds to the site constraints and complexity of the development. The proposed OSD maximises commercial floor space to be delivered on the site within the overall bulk and massing of the approved building envelope (as modified).
To promote the delivery and maintenance of affordable housing.	N/A
To protect the environment, including the conservation of threatened and other species of native animals and plants, ecologically communities and their habitats.	The OSD is located within an established urban environment. A Biodiversity Development Assessment Report (BDAR) waiver has been issued by the DPIE, which determined the proposal will have no impact on threatened species or their habitats (**Appendix J**).
To promote sustainable management of built and cultural heritage (including Aboriginal cultural heritage).	The proposal respects the significance of surrounding built heritage as outlined in **Section 8.1.4** and the Heritage Impact Assessment (**Appendix L**).
To promote good design and amenity of the built environment.	The detailed design of the OSD exhibits design excellence and mitigates adverse amenity impacts. The endorsed design excellence strategy is attached at **Appendix G** and discussed in further detail in **Section 8.1.1**.
To promote proper construction and maintenance of buildings, including the protection of the health and safety of their occupants.	Construction staging and impact management are discussed in **Section 4.15** and **Section 8.1.18**. A Construction and Site Management Plan is attached at **Appendix X**.
To promote the sharing of responsibility for environmental planning and assessment between different levels of government in the State.	Relevant Government agencies have been consulted throughout the concept and detailed design processes. It is noted that the Minister for Planning & Public Spaces is the consent authority as the development is SSD.
To provide increased opportunity for community participation in environmental planning and assessment.	An inclusive public consultation strategy has been implemented throughout the project design process (refer to **Section 5** and **Appendix CC**).

Overall, the proposed development is consistent with the objects and general terms of the EP&A Act.

7.2. BIODIVERSITY CONSERVATION ACT 2016

The purpose of the *Biodiversity Conservation Act 2016* is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and in the future, consistent with the principles of ecologically sustainable development.' Clause 2 of section 7.9 of the *Biodiversity Conservation Act 2016* requires a DA for SSD to be accompanied by a Biodiversity Development Assessment Report (**BDAR**).

As part of the assessment of the Concept SSD DA, the NSW DPIE granted a waiver on 27 June 2018 under section 7.9(2) of the Biodiversity Conservation Act 2016, concluding that:

- The proposed development is not likely to have any significant impact on biodiversity values; and
- There is no need to submit a BDAR as part of the SSD DA.

A request seeking a waiver for the requirement for a BDAR associated with SSD-10375 was submitted to the NSW DPIE on 5 May 2020. This was accompanied by an assessment of the proposed development against the relevant provisions of the Biodiversity Conservation Act 2016 and the *Biodiversity Conservation Regulation 2017*.

The assessment determined that the site is within an established urban area known as the Sydney CBD and has been cleared of all vegetation, buildings and structures and therefore does not present a habitat that would likely suit the needs of a threatened species. It was identified that there are no endangered populations, threatened species or threatened ecological communities recorded within the site or surrounding locality (NSW ATLAS, 2019). Furthermore, the site and surrounds are not known to connect different areas of habitats for threatened species and thus will not have any likely impact on habitat connectivity.

Overall, the proposal will not have any likely impact on the surrounding natural environment and abundance of species, habitat connectivity, threatened species movement and flight paths of protected animals, nor will it impact upon water quality surrounding the site (sustainability) and the site does not contain abundant vegetation.

Accordingly, a BDAR waiver (**Appendix J**) was issued by the NSW DPIE on 22 May 2020, and it was determined that a BDAR is not required as part of this Detailed SSD DA. Based on this assessment by NSW DPIE and OEH, it is considered that clause 2 of Section 7.9 of the *Biodiversity Conservation Act 2016* has been satisfied.

7.3. STATE ENVIRONMENTAL PLANNING POLICY (STATE AND REGIONAL DEVELOPMENT) 2011

The *State Environmental Planning Policy (State and Regional Development) 2011* (**SRD SEPP**) has the purpose of identifying development that is SSD, state significant infrastructure (**SSI**) (including critical) and regionally significant development.

Pursuant to clause 19(2), Schedule 1 of the SRD SEPP indicates that the following development is SSD:

> *Development within a rail corridor or associated with railway infrastructure that has a capital investment value of more than $30 million for any of the following purposes:*
> *a) commercial premises or residential accommodation,*
> *b) container packing, storage or examination facilities,*
> *c) public transport interchanges.*

As the proposal is for the purposes of a 'commercial premises' associated with railway infrastructure and has a capital investment value of more than $30 million, it is classified as SSD for the purposes of the EP&A Act. The Detailed SSD DA will be assessed under the relevant provisions of Part 4 of the EP&A Act.

It is noted that clause 11 of SRD SEPP states that Development Control Plans (DCPs) do not apply to SSD applications.

7.4. STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

The aim of *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP) is to facilitate the effective delivery of infrastructure across NSW by identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure such as classified roads and prescribing consultation requirements for certain development.

The relevant provisions of the Infrastructure SEPP in relation to the proposed development are considered in the following table.

Table 14 – Relevant Provisions of the ISEPP

Clause	Response	Referral Agency
Part 3, Division 5 Electricity transmission or distribution, Subdivision 2 Development likely to affect an electricity transmission or distribution networks	The application is subject to clause 45 of the Infrastructure SEPP as the development is expected to affect an electrical transmission or distribution network. Existing Ausgrid infrastructure has been confirmed to be sufficient to accommodate supply for the new substations for the OSD, however additional connections will be required. Early consultation has occurred between the applicant and Ausgrid to determine an appropriate location as described in **Appendix Y2**.	Ausgrid
Part 3, Division 15 Railways, Subdivision 2 Development in Rail corridors	The proposed development is on land adjacent to a rail corridor, and as such pursuant to clause 85 of the Infrastructure SEPP, the DPIE will refer this application to the relevant rail authority for the rail corridor. As the proposal relates to the Sydney Metro City & Southwest corridor, it will be referred to Transport for NSW for comment.	Transport for NSW
Part 3, Division 17 Roads and traffic, Subdivision 2 Development in or adjacent to road corridors and road reservations Clause 104 Traffic-Generating development	Pursuant to clause 104 (Traffic Generating Development) and Schedule 3 of the Infrastructure SEPP, the Detailed SSD DA also triggers consultation with the RMS [now Transport for NSW], as the commercial GFA is greater than 10,000m^2. Accordingly, this EIS is accompanied by a Transport and Accessibility Impact Assessment (**Appendix V1**) which further discusses the consideration of matters contained within the Infrastructure SEPP and relevant authority comments.	Transport for NSW

7.5. STATE ENVIRONMENTAL PLANNING POLICY (URBAN RENEWAL) 2010

The *State Environmental Planning Policy (Urban Renewal) 2010* (Urban Renewal SEPP) establishes the process for assessing and identifying sites as urban renewal precincts with the intention of facilitating orderly and economic development and redevelopment of sites in and around urban renewal precincts.

The Urban Renewal SEPP currently only applies to two potential precincts, the Redfern-Waterloo Potential Precinct and the Granville Potential Precinct Map.

Notwithstanding being referenced in the SEARs for the project, the Sydney CBD and Pitt Street North OSD are not within an identified potential precinct and are not subject to the provisions of the Urban Renewal SEPP.

7.6. STATE ENVIRONMENTAL PLANNING POLICY (VEGETATION IN NON-RURAL AREAS) 2017

The *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017* (**Vegetation SEPP**) works together with the Biodiversity Conservation Act 2016 and the Local Land Services Amendment Act 2016 to create a framework for the regulation of clearing of native vegetation in NSW. The Vegetation SEPP applies to the Sydney metropolitan areas and land zoned for urban purposes.

The Pitt Street North OSD site is within an established urban area and has been cleared of all vegetation, buildings and structures under a separate CSSI approval. As such no further consideration of the Vegetation SEPP is required.

7.7. STATE ENVIRONMENTAL PLANNING POLICY NO.55 – REMEDIATION OF LAND (SEPP 55)

State Environmental Planning Policy No.55 – Remediation of Land (**SEPP 55**) provides a State-wide approach to the remediation of contaminated land, and primarily promotes the remediation of contaminated land for the purpose of reducing risk of harm to human health.

As all demolition and excavation will be completed as part of the Sydney Metro Pitt Street Station works, SEPP 55 and potential site contaminants will be addressed in accordance with the relevant conditions of the CSSI approval. Therefore, the provisions of SEPP 55 have been wholly addressed through that approval and are not relevant to the SSD DA.

7.8. STATE ENVIRONMENTAL PLANNING POLICY NO.64 – ADVERTISING AND SIGNAGE

The *State Environmental Planning Policy No.64 – Advertising and Signage* (SEPP 64) aims to ensure that signage is compatible with the desired amenity and visual character of an area, provides effective communication in suitable locations, and is of high-quality design and finish.

The scope of the detailed SSD DA seeks consent for indicative signage zones. Clause 13 of SEPP 64 indicates that a consent authority must not grant consent to display signage unless it is consistent with the objectives of the policy and complies with the assessment criteria contained within Schedule 1. An assessment of the indicative signage zones included as part of the SSD DA against the beforementioned provisions is provided below.

Table 15 – SEPP 64 Compliance Table

CONTROL	PROPOSAL	COMPLIANCE
3 – POLICY AIMS AND OBJECTIVES		
Clause 3(1)(a) – to ensure that signage: • Is compatible with the desired amenity and visual character of an area; • Provides effective communication in suitable locations; and • Is of high-quality design and finish.	The signage zones are compatible with the central CBD amenity and visual character. The signage will provide effective communication of building identity, business identity and wayfinding. The signage will be of a high-quality design and finish.	YES
SCHEDULE 1 – ASSESSMENT CRITERIA		

CONTROL	PROPOSAL	COMPLIANCE
1 – Character of the Area		
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	The signage zone is consistent with other developments within the Sydney CBD area.	TBC
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	No advertising is proposed as part of the development.	N/A
2 – Special Areas		
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The proposed signage zones consider the architecture of the building, and respond to the scale and character of adjacent heritage items.	YES
3 – Views and Vistas		
Does the proposal obscure or compromise important views?	The proposed signage is contained wholly within the Concept Building Envelope and the building façade. As such, the proposed signage will not adversely impact important views or view corridors.	YES
Does the proposal dominate the skyline and reduce the quality of vistas?	The proposed signage is contained wholly on the building façade and therefore will not dominate the skyline or reduce the quality of vistas.	YES
Does the proposal respect the viewing rights of other advertisers?	Not applicable.	N/A
4 – Streetscape, Setting or Landscape		
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The proposed signage is contained wholly within the Concept Building Envelope and the building façade.	YES
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	The proposed signage zones contribute to the visual interest of the streetscape and skyline.	YES
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	Not applicable.	N/A
Does the proposal screen unsightliness?	Not applicable.	N/A

CONTROL	PROPOSAL	COMPLIANCE
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The proposed signage is contained wholly on the building façade and does not protrude above the building or structures.	YES
Does the proposal require ongoing vegetation management?	No	YES
5 – Site and Building		
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The proposed signage has been nominated by the design architect of the proposed building.	YES
Does the proposal respect important features of the site or building, or both?	The proportion of the proposed signage aligns with the height of façade articulation of the development.	YES
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The proposed signage has been considered in the context of the building, achieving design excellence and its role in identifying the site as the location of the Sydney Metro Pitt Street Station.	YES
8 – Safety		
Would the proposal reduce the safety for any public road?	The proposed signage zones will have a limited impact on the public road, pedestrians, or cyclists.	YES
Would the proposal reduce the safety for pedestrians or bicyclists?		
Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?		

7.9. SYDNEY REGIONAL ENVIRONMENTAL PLAN (SYDNEY HARBOUR CATCHMENT) 2005

The *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005* (SREP) is a regional planning instrument that aims to ensure the catchment, foreshores, waterways and islands of Sydney Harbour are recognised, protected, enhanced and maintained as a natural and public asset of national significance.

The site is located within the Sydney Harbour Catchment area but not within the Foreshores and Waterways area. Therefore, clause 26 of the SREP is a relevant consideration for the proposed development with regards to the maintenance, protection and enhancement of views. Matters to be taken into consideration in relation to clause 26 include:

- Development should maintain, protect and enhance views (including night views) to and from Sydney Harbour;
- Development should minimise any adverse impacts on views and vistas to and from public places, landmarks and heritage items; and

- The cumulative impact of development on views should be minimised.

A View and Visual Impact Analysis Report (**Appendix W**) has been prepared to assess the proposal impacts on key views, including views to and from Hyde Park and Sydney Harbour. Visual and view impacts are discussed in further detail in **Section 8.1.5** of this EIS. In summary, the proposal does not pose additional view and visual impacts above what has been considered as part of the Concept SSD DA approval and the subsequent modification application.

7.10. DRAFT STATE ENVIRONMENTAL PLANNING POLICY (ENVIRONMENT)

In October 2017, the NSW DPIE released an Explanation of Intended Effect (EIE) for the proposed *Draft State Environmental Planning Policy (Environment SEPP) 2017*. The overarching aim of the Draft Environment SEPP is to combine seven existing SEPPs into a simple, modern and accessible instrument which promotes the protection and improvement of key environmental assets for their intrinsic value and social and economic benefits.

In summary, the new Environment SEPP will repeal and replace the following seven existing SEPPs:

- *State Environmental Planning Policy No. 19—Bushland in Urban Areas*
- *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011*
- *State Environmental Planning Policy No. 50—Canal Estate Development*
- *Greater Metropolitan Regional Environmental Plan No. 2—Georges River Catchment*
- *Sydney Regional Environmental Plan No. 20—Hawkesbury-Nepean River (No.2-1997)*
- *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*
- *Willandra Lakes Regional Environmental Plan No. 1—World Heritage Property.*

The proposed new Environment SEPP will set out provisions under four parts including bushland, catchments, protected areas and waterways.

Of relevance to this proposal are changes proposed to the SREP as the subject site is located within this catchment area. In summary, the draft policy aims to improve protections for Sydney Harbour by:

- *reaffirming the vision for Sydney Harbour as an outstanding natural, public asset of national and international significance to be maintained and enhanced for current and future generations*
- *maintaining the current principles for the Foreshores and Waterways Area, such that:*
    - *the Harbour is to be recognised as a public resource, owned by the public, to be protected for the public good*
    - *the public good has precedence over the private good whenever and whatever change is proposed for Sydney Harbour or its foreshores*
    - *protection of the natural assets of Sydney Harbour has precedence over all other interests*
    - *better reflecting the current uses, needs and future of Sydney Harbour in the aims of the new SEPP by providing a framework for appropriate uses that are consistent with the vision for the Harbour*
    - *better aligning waterway zones with the Standard Instrument Local Environmental Plan*
    - *removing inconsistencies in the current instrument in regard to boat storage facilities*
    - *refining heads of consideration for consent authorities when assessing Development Applications in the Foreshores and Waterways Area*
    - *updating critical habitat provisions to be consistent with the Biodiversity Act 2016*.

The proposal is consistent with the objectives contained within the Draft Environment SEPP pertaining to the *Sydney Harbour* catchment area. Specifically, the proposal maintains the significance of Sydney Harbour by providing a landmark vantage point which enhances the asset for future employment uses without impacting upon key existing vistas. It is noted that the site is not located within the *Foreshores and Waterways Area*.

7.11. SYDNEY LOCAL ENVIRONMENTAL PLAN 2012 (SLEP 2012)

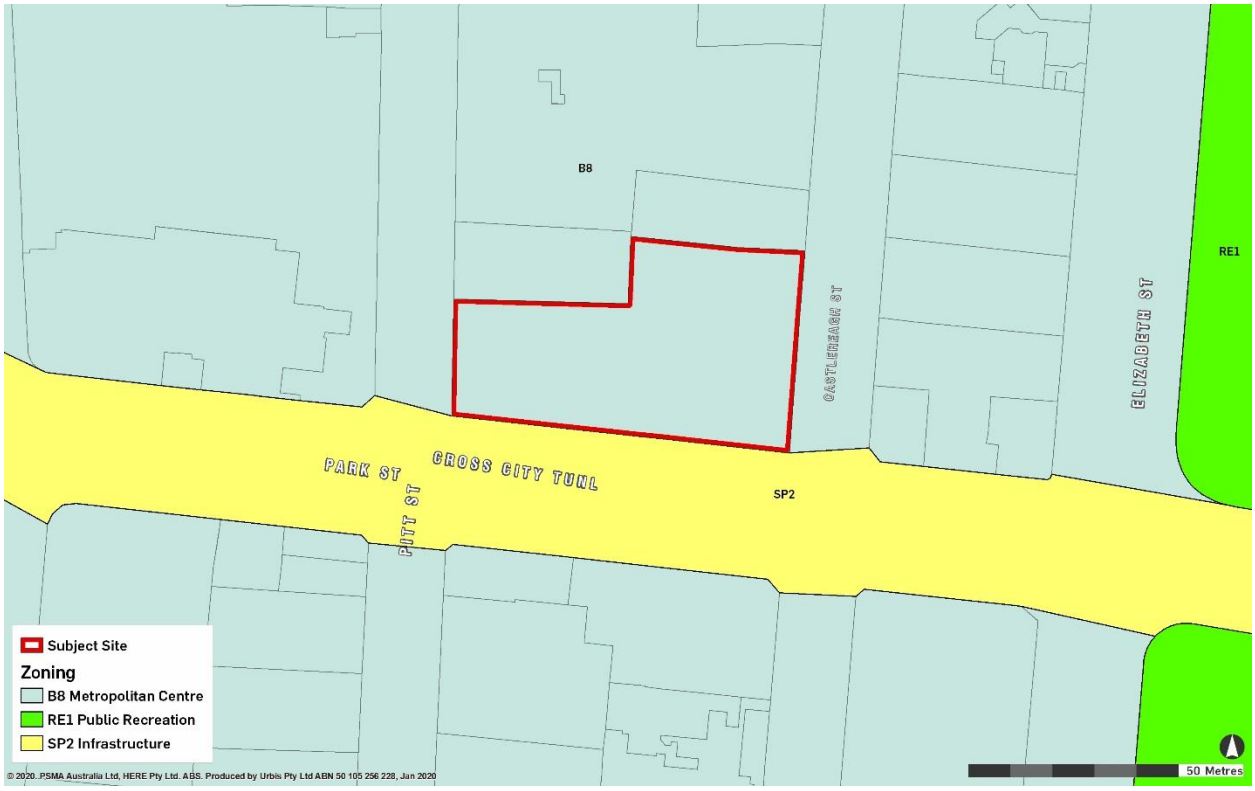
The *Sydney Local Environmental Plan 2012* (SLEP) is the principal local planning instrument applying to the site, establishing the permissible land uses, key development standards, setbacks, visual impacts, views and heritage conservation requirements.

7.11.1. Zoning and Permissibility

The site is located within the B8 Metropolitan Centre zone under SLEP 2012 (refer **Figure 65**). The objectives of the zone are:

- *To recognise and provide for the pre-eminent role of business, office, retail, entertainment and tourist premises in Australia's participation in the global economy.*
- *To provide opportunities for an intensity of land uses commensurate with Sydney's global status.*
- *To permit a diversity of compatible land uses characteristic of Sydney's global status and that serve the workforce, visitors and wider community.*
- *To encourage the use of alternatives to private motor vehicles, such as public transport, walking or cycling.*
- *To promote uses with active street frontages on main streets and on streets in which buildings are used primarily (at street level) for the purposes of retail premises.*

Figure 65 – SLEP 2012 Land Zoning Map



Source: SLEP 2012

The Detailed SSD DA seeks consent for a commercial development which is permissible with consent in the B8 Metropolitan Centre zone. The Detailed SSD DA proposal remains consistent with the zone objectives as it:

- Serves the needs of the local and wider community by providing an increase in commercial floor space including retail premises and office premises within the commercial core of the Sydney CBD.
- Encourages employment in a highly accessible location immediately above the approved metro station and within proximity to Town Hall Station, bus routes, taxis and active transport networks for walking and cycling.

- Promotes public transport use and encourages active transport use through minimising private car parking provision on site and enabling users of the OSD to efficiently access the new metro station and surrounding public transport and active transport options.
- Makes efficient use of the site to contribute to Sydney's role as a global city through a high-density building envelope, commensurate with a Central Sydney location, benefiting from excellent access to transit, goods, services and open space.
- Contributes to the overall diversity of land uses in Sydney, providing for additional out of hours activation at the site including active frontages along Pitt Street, Park Street and Castlereagh Street.

7.11.2. Key Development Standards

The proposed development has been assessed against the relevant development standards contained within the SLEP 2012 as discussed in **Table 16** below.

Table 16 – SLEP 2012 Compliance with Development Standards

Clause	Compliance Discussion
Clause 2.3 – Zone objectives and Land Use Table	The proposed OSD is defined as 'Commercial Premises' under the SLEP 2012 and the inclusion of 'retail premises' within the podium as defined under the SLEP 2012 are permissible uses under the B8 Metropolitan Centre zone.
Clause 4.3 – Height of Buildings	Under the SLEP 2012, the site is located entirely within 'Area 3' on the Height of Buildings Map. On this basis, the maximum height at the site is determined in accordance with the relevant sun access plane provided for in clause 6.17 of the SLEP 2012, and the relevant exceptions provided for at clause 6.18. Refer to discussion below.
Clause 4.4 – Floor Space Ratio (and associated clauses)	**Mapped FSR** The site has a mapped FSR of 8:1. **Accommodation Floor Space** The development is eligible for an additional quantum of floor space in line with the accommodation floor space provisions contained at clause 6.4 of the SLEP 2012. Located in 'Area 2', the site is eligible for the following additional floor space: *a) Area 2, office premises, business premises or retail premises—4.5:1,* Where development is proposed for a mix of uses, the accommodation floor space bonus is applied proportionately pending the percentage of development used for that incentivised land use. 54,651m^2 of the total 55,743 m^2 GFA is eligible for the accommodation floor space bonus equating to 98% of the GFA. **Design Excellence** The development has demonstrated design excellence through an alternative design excellence process outlined within the Endorsed Design Excellence Strategy (**Appendix G**). This is discussed in further detail in **Section 8.1.1**. A 10% bonus (of the Mapped FSR and Accommodation Floor Space) which would otherwise be available pursuant to clause 6.21 of the SLEP, has been included in the FSR calculations.

Clause	Compliance Discussion
	End of Journey Floor Space A bonus of up to 0.3:1 FSR is available to the site to offset above ground End of Trip (EOT) floor space (up to the equivalent within the development). On the basis of the above, with a site area of 3,150m^2 and EOT facilities with a GFA of 482m^2, the site is able to utilise 0.15:1 end of journey floor space bonus. **Permissible FSR** Base FSR = 8:1 Accommodation Floor Space Bonus 4.5:1 x 98% = 4.41:1 Design Excellence Bonus 10% of base FSR + Accommodation Floor Space (8 + 4.41) = 1.24:1 End of Journey Bonus = 0.15:1 Total = 13.8:1 The Concept DA (SSD 17_8875) approved a maximum GFA of 50,310m^2 (including station floor space) which equates to an FSR of 15.97:1. The Detailed DA proposes a GFA of 55,743m^2 (including station floor space) which equates to an FSR of 17.70:1 which exceeds the maximum FSR for the site as set by SLEP 2012 and also the approved GFA under SSD 17_8875. A Clause 4.6 Variation Request is included at **Appendix GG** seeking a variation to the maximum FSR development standard. A modification to the Concept DA has been concurrently lodged with this application which, amongst other things seeks to vary the approved maximum GFA.
Clause 4.6 – Variation to Development Standards	A Clause 4.6 Variation Request (**Appendix GG**) is submitted with this SSD DA seeking a variation to the maximum FSR development standard. As discussed above the proposed FSR of 17.70:1 exceeds the permissible FSR of 13.8:1. A variety of factors have contributed to the FSR exceedance. All GFA included in the maximum site calculation for the proposed development must also include station floor space approved or allocated for delivery under CSSI (SSI 15_7400). Station GFA equating to 1,092sqm is contained within the podium / basement of the development. The proposed GFA of the OSD component, excluding station floor space, is 54,651sqm. The necessity of including station floor space in the total FSR calculation reduces the maximum amount of floor space which can be provided as part of the OSD. This is despite the station floor space being for a public use of substantial benefit to the wider public. It is also noted that the station floor space was approved via a CSSI pathway where consideration of LEP controls, including FSR provisions, is not required.

Clause	Compliance Discussion
	Additionally, as a result of the integrated metro use of the site, necessary elements of the development such as retail storage and garbage areas are unable to be provided in a basement, meaning that these storage and garbage areas must be counted towards the overall GFA figures at the site. Elements of the OSD which would not be included in GFA, if the station was not located within the basement, include: • Above ground storage: 127sqm • Garbage areas: 104sqm These areas total 231sqm. These elements constitute 0.4% of the proposed 54,651sqm commercial GFA on the site.
Clause 5.6 – Architectural roof features	The proposed development does not seek to rely upon clause 5.6, which permits additional architectural roof features above the height of building development standard. The proposed roof of the OSD does not exceed the height limits detailed in SLEP or as approved under the Concept SSD DA and will not adversely impact or affect the amenity of neighbouring properties.
Clause 5.10 – Heritage Conservation	The site is located within close proximity to a number of Local and State heritage items listed under the SLEP 2012 as listed in **Section 3.6**. The proposed SSD DA will not have any adverse impacts on the surrounding heritage items. The proposed building's relationship with nearby heritage buildings is discussed further in **Section 8.1.4**, the Heritage Impact Statement (**Appendix L**) and the Heritage Interpretation Plan (**Appendix M**).
6.10 Heritage Floor Space	The proposed development will be the subject of heritage floor space requirements, subject to the Alternate Scheme heritage floor space having a legal means of operation when City of Sydney is not the consent authority.
6.16 Erection of tall buildings in Central Sydney	The proposal is consistent with the objectives for erecting tall buildings in Central Sydney as: • the design is capable of providing a high level of amenity for occupants and would not result in an adverse amenity outcome to residents in existing buildings near the site. • the proposed built form does not result in any adverse amenity impacts on surrounding public spaces, including Hyde Park, Sydney Square, and the future Town Hall Square. • the development is well suited to the surrounding CBD context, being a key feature of a transformative precinct in the Sydney CBD led by the provision of substantial new transport infrastructure at the site. • the proposal provides the potential for good solar access to be provided to future residents.

Clause	Compliance Discussion
	• the proposal would ensure that air is able to move freely around buildings, being substantially separated from other building masses in the upper reaches of the development from all sides. • the proposal complements the active frontages of the Pitt Street Station northern portal.
6.17 Sun access planes	The site is affected by the Hyde Park West Sun Access Plane, which in most cases would reduce the height limit at the site to approximately 156 metres AHD. However, in this case the site is subject to the provisions of clause 6.18 'Exceptions to sun access planes' such that the proposed development may exceed the sun access plane provided by this clause in certain circumstances. This has been discussed further below.
6.18 Exceptions to sun access planes	Clause 6.18 of the SLEP 2012 enables the provision of a building envelope which protrudes above the Sun Access Plane, so long as it matches the height of the existing development at 201 Elizabeth Street (approximately RL 198 or 175 metres). Clause 6.18(1) of the SLEP 2012 states the following: *"(1) Development consent may be granted to development that will result in a building on land projecting higher than a sun access plane that is taken by this Part to extend over the land if any one or more of the following apply:* *…* *b. the parts of the building that project higher than the sun access plane are on category B land that adjoins category A land and will not exceed the height of an existing building on the category A land."* As demonstrated in the image below, most of the site is located within category B land on the Sun Access Protection Map, meaning that clause 6.18(1)(b) is applicable to the development and an exception to the relevant sun access plane applies to the proposed development.  On this basis, the development falls largely within the category B land, located to the north-west of 201 Elizabeth Street, and must be no higher than the height of the existing building on the site. The Pitt Street North approved

Clause	Compliance Discussion
	envelope has a maximum height of RL189, which is shorter than 201 Elizabeth Street. On this basis, the proposal complies with the relevant provisions. Site areas outside of the category B land are compliant with the Hyde Park West Sun Access Plane. This is discussed further in **Section 8.1.6**.
6.19 Overshadowing of certain public spaces	The proposal does not overshadow any of the nominated public spaces during any of the specified time periods. This is discussed further in **Section 8.1.6**.
6.21 Design excellence	The proposed development has been designed in accordance with a project specific design excellence strategy (**Appendix G)**. This has included reviews by the Design Excellence Evaluation Panel (DEEP) during the bid phase, after which the proposal was subject to an iterative design review process throughout the pre-DA phase via a site-specific Design Review Panel. This process was endorsed by City of Sydney as part of the Concept SSD DA and has been consistently applied across Sydney Metro OSD projects, including Martin Place North and South, Crows Nest and Victoria Cross. The Sydney Metro City & Southwest Design Excellence Strategy was endorsed by GANSW and DPIE. The proposed development is considered to exhibit design excellence, delivering the highest standard of architectural, urban and landscape design. Refer to the discussion in **Section 8.1.1** for further details on how the proposal responds to the relevant matters the consent authority must consider in deciding whether design excellence is exhibited.
7.1 Car parking not to exceed maximum set out in this division	A maximum of 50 car parking spaces for OSD uses, was approved within the Concept DA. The proposed development includes 40 car parking spaces, this provision is less than the 75 maximum allowable car parking spaces under Clause 6.3 of the SLEP 2012.
7.14 Acid Sulfate Soils	The site is classified as ‘Class 5’ on the relevant Acid Sulfate Soils Map, which comprises the lowest class of risk for acid sulfate soils. Acid sulfate soil risk at the site was previously assessed as part of the CSSI approval, which comprised the subsurface works required to deliver the metro station at the site. The proposed development does not involve any excavation or soil disturbance.
7.15 Flood Planning	The public domain and floor levels have been assessed and approved as part of the CSSI approval. Flooding considerations, including runoff from the site, have been discussed further in **Section 8.1.13**. A Stormwater Management and Flood Impact Assessment Flood has been prepared as part of this application and is provided at **Appendix S**.

Clause	Compliance Discussion
	On the basis of the submitted assessment, it can be concluded that the proposed development appropriately responds to flood considerations.
7.16 Airspace operations	The applicable OLS to the Sydney CBD is 156 metres AHD, through which the proposed built form penetrates. The Concept SSD Application SSD_8875 was granted airspace height approval in accordance with the *Airports Act* from the Commonwealth Department of Infrastructure and Regional Development, as discussed in **Section 8.1.20**. An Aeronautical Impact Assessment (Flight Path Report) has been provided as part of this application at **Appendix Z**. Pursuant to this clause, the consent authority must consult with the relevant Commonwealth body responsible for development decisions relating to Sydney Airport prior to determining the application.
7.20 Development requiring or authorising preparation of a development control plan	In accordance with clause 7.20(2) of the SLEP 2012, a site-specific DCP is required to be prepared for development over 55 metres in height in Central Sydney. In accordance with section 4.23 of the EP&A Act, a Concept DA may be undertaken in lieu of a site specific DCP, and accordingly a Concept SSD Application SSD_8875 has been approved which fulfils the requirements of clause 7.20(2). **Section 2.2.4** of this EIS provides further discussion on the Concept SSD DA. A modification to the Concept SSD is sought to increase the permissible GFA within the approved building envelope and to address other matters as discussed in **Section 2.4** of this EIS.

7.11.3. Clause 4.6 Variation to FSR

A Clause 4.6 Variation request is submitted alongside the Detailed SSD DA (refer **Appendix GG**) to vary the FSR development standard prescribed for the site under clause 4.4 of SLEP. It is noted that the approved Concept DA SSD 17_8875 already varies the floor space ratio development standard as it applies to the site.

The site is subject to a base FSR of 8:1 as illustrated within the Floor Space Ratio Map (defined by the SLEP). An additional quantum of floor space is applicable to the development in line with the accommodation floor space and the end of journey floor space provisions of the SLEP (clauses 6.4 and 6.6 respectively).

A total of FSR of 15.97:1 (in comparison to the permissible SLEP FSR of 13.80:1) has been approved by the Concept SSD DA, therefore this variation request seeks an additional amount of FSR in addition to that already approved for the site.

A s4.55(2) modification to SSD 17_8875 is lodged concurrently with this SSD DA which, amongst other things, seeks to increase the total maximum FSR on the site to 17.70:1. If the proposed modification to the Concept SSD DA is approved, the proposed Detailed SSD DA will be consistent with the approved GFA (as modified) and no further clause 4.6 variation to the floor space ratio standard will be necessary. However, the clause 4.6 variation is submitted with the Detailed SSD DA for abundant caution and as a matter of good practice for planning assessment.

As stated in *Initial Action Pty Ltd v Woollahra Municipal Council [2018] NSWLEC 118* (**Initial Action**) at [25], SLEP 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. This request does that, and therefore the consent authority is open to be satisfied that subclause 4.6(3) has been met.

The proposed variation to the development standard is justified on the grounds that:

- there is an unreasonable floor space penalty over the site resulting from the provision of metro infrastructure;
- there are a variety of unique circumstances at the site which warrant the provision of a higher FSR;
- the proposed building form does not result in any significant adverse impacts and achieves a good urban development outcome for the site, in addition to meeting the key amenity criteria of the LEP, DCP, Concept Approval and Design Guidelines;
- all GFA is contained wholly within the approved Concept Envelope, and takes up only 84% of that volume, demonstrating a restrained design with efficient floorplate layouts;
- the proposed height of RL176.8 is substantially below the RL188.74 approved in the Concept DA;
- the design has achieved a 'building in the round', addressing the three street frontages and expressing the building on all three sides through visually interesting façades;
- the proposal has achieved design excellence through an extensive DRP process and demonstrates consistency with the approved site-specific Design Excellence Strategy; and
- the proposal contributes a significant legacy to Sydney as part of the broader Sydney Metro project.

This variation request is made pursuant to clause 4.6 of the SLEP. For a request to meet the requirements of clause 4.6(3) of SLEP, it must:

- adequately demonstrate that compliance with the FSR standard is unreasonable or unnecessary in the circumstances of the project on the site; and
- adequately demonstrate that there are sufficient environmental planning grounds to justify contravening the FSR standard.
- This request contains justified reasoning supporting conclusions in respect of the above two matters, specifically that:
- Compliance with the FSR standards is unreasonable and unnecessary in the circumstances of the proposed development.
- There are sufficient environmental planning grounds to justify the contravention, which results in a better planning outcome than a strictly compliant development in the circumstances of this particular case.
- There are unique circumstances arising from the relationship between the OSD component and broader Sydney Metro integrated station development approach and the provision of an appropriate design excellence process for Sydney Metro projects.
- There is an absence of any environmental impacts arising from the proposed variation.
- The proposal, notwithstanding the non-compliance, is consistent with the objectives of the FSR standard and the B8 Metropolitan Centre zone.
- The proposed non-compliance with the FSR standard will not result in any matter of significance for State or regional environmental planning, but rather would result in development which achieves the strategic objectives of the NSW State Government.

In view of the above, we submit that the proposal is in the public interest and that the proposed clause 4.6 variation request to vary the FSR development standard prescribed by clause 4.4 of SLEP should be supported.

7.12. DRAFT SYDNEY LOCAL ENVIRONMENTAL PLAN 2020

The Central Sydney Planning Strategy 2016-2036 (**CSPS**) is the City of Sydney's 20-year strategy to manage the growth of Central Sydney (i.e. Sydney CBD). The strategy seeks to prioritise employment capacity, implement genuine mixed-use development controls, support additional density in some locations, and introduce additional requirements for ESD initiatives and affordable housing contributions. The 10 key moves and their associated 'actions' were categorised in order of stages: short-term (1-2 years), medium-term (2017 to 2036) and ongoing.

The CSPS was originally released by the City of Sydney in 2016. On 6 December 2019, the Minister for Planning and Public Spaces issued 'in principle' agreement for the CSPS and associated Planning Proposal (Central Sydney 2020), with three key changes to the exhibited package.

On 10 February 2020, the amended CSPS and associated Planning Proposal were endorsed by the City of Sydney for submission for Gateway Determination. Gateway Determination was finalised for the Central Sydney 2020 Planning Proposal on 11 March 2020 and it was placed on public exhibition on 5 May 2020.

The changes to the SLEP 2012 proposed to be introduced by the Central Sydney 2020 Planning Proposal are:

Zoning

The Planning Proposal includes an amendment to the B8 Metropolitan Zone objectives to reinforce the important role that employment floor space plays in the city. A key change includes an objective to promote the primary role of the zone as a centre for employment and permit residential and serviced apartment accommodation where they complement employment generating uses.

The proposed commercial land use is appropriate for the site as outlined within the concept SSD DA, and is supported by the proposed amendments to the B8 Metropolitan Zone within the Central Sydney 2020 Planning Proposal.

Land Use and FSR

To strengthen employment-generating land uses, an amendment to the existing accommodation floor space provisions are proposed to encourage more commercial, hotel and cultural space and disincentivise residential floor space.

The proposal relies upon accommodation floor space incentives as outlined and established as appropriate within the concept SSD DA.

Tower Clusters

The amendment to the CSPS includes a design excellence bonus pathway for development in four tower clusters (near Barangaroo, Circular Quay, Central and Town Hall) for sites that demonstrate design excellence and meet a series of prescribed conditions.

Under the new pathway, sites within the four mapped tower clusters can benefit from up to 50% additional floor space and additional height under a new design excellence pathway, which introduces more stringent provisions for design excellence competitions.

The site is not located within a tower cluster and as such will not benefit from these draft provisions.

Height

The CSPS proposes a refinement of the Sun Access Planes to ensure the diagrams relevant to each protected park are accurate. The proposed development has been designed to comply with the Hyde Park West sun access plane.

7.13. SYDNEY DEVELOPMENT CONTROL PLAN 2012

In accordance with Section 4.22 of the EP&A Act, a Concept DA can be made to establish the concept proposal for the development of a site to which separate and future detailed proposals (i.e. this Detailed SSD DA) must adhere. A Concept Proposal may also be undertaken in lieu of the preparation of a site-specific DCP in accordance with Section 4.23 of the EP&A Act.

The Concept Proposal and the associated Pitt Street North OSD Design Guidelines set the parameters for the subject site and act as a site-specific DCP. Together, they establish the parameters for future development in the form of building envelopes and apply detailed objectives and design principles to shape the design development of buildings.

Clause 11 of the SRD SEPP states that DCPs do not apply to state significant development. Notwithstanding, the Sydney Development Control Plan 2012 (SDCP) has been considered as a reference point for the detailed design including local design considerations such as local character, waste management, access, loading and parking and transport considerations.

A summary of key SDCP provisions relevant to the development is discussed in **Table 17**. The proposal is consistent with the intent of the DCP controls as outlined below.

Table 17 – Consistency of the Proposed Development with Key Provisions of the SDCP

Section	Response
2. Locality Statements	The site is not located within any Special Character Area contained with the SDCP.
3.1 Public Domain Elements	Public domain elements are covered by the CSSI approval, and do not form part of this application. Where relevant, sections have been addressed below.
3.1.5 Public Art	Public art provision has been further discussed in **Section 4.9**, and a Public Art Strategy has been provided to this effect as part of **Appendix DD**.
3.2.1 Sunlight to Publicly Accessible Spaces	Overshadowing has been further discussed in **Section 8.1.6**.
3.2.1.2 Public Views	A View and Visual Impact Analysis (**Appendix W**) has been prepared and provides an assessment of impacts views resulting in the proposed OSD, as discussed in **Section 8.1.5**.
3.2.2 Addressing the Street and Public Domain	The proposal has been designed to ensure that the OSD appropriately addresses the surrounding street frontages. Noting that the predominant land use at the ground level is the future Pitt Street Station, the proposed OSD includes the provision of ground floor entries from Pitt Street, Park Street and Castlereagh Street, in a manner which complements the station portal frontage to Park Street. Car parking has been proposed within the currently approved podium space provided under the CSSI approval. An assessment of the proposed development with respect to addressing the street frontages of the adjoining heritage items located within proximity of the site has been provided in the Heritage Impact Statement **(Appendix L**), and Heritage Interpretation Plan **(Appendix M)**. A further assessment is provided in the Architectural Design Report in **Appendix E1**.
3.2.3 Active Frontages	Noting that the majority of the ground floor plane is covered by the CSSI approval, the proposal comprises the provision of pedestrian portals for the various OSD uses from all frontages.

Section	Response
	The Pitt Street frontage will consist of a large pedestrian entrance to the OSD. Retail tenancies are located along Pitt Street, and Castlereagh Street including at the corners of Park Street. Vehicular loading will be from an entrance on Castlereagh Street alongside a pedestrian entrance to the EOT facilities. The level of activity and design of the frontages has been considered acceptable as discussed in **Section 8.1.3** of the EIS.
3.2.6 Wind Effects	A Wind Impact Assessment report has been prepared and provides an assessment of wind impact at the pedestrian level of the proposed development at **Appendix O,** as outlined in **Section 8.1.11**.
3.2.7 Reflectivity	A reflectivity report has been prepared and provides an assessment of the impacts of reflectivity from the OSD, as discussed in **Section 8.1.12**.
3.3 Design Excellence and Competitive Design process	The proposal has been informed by the completion of a Design Excellence Process as described in **Section 5.3**, **Section 8.1.1**, **Appendix G**, and **Appendix EE**.
3.6 Ecologically Sustainable Design	An ESD report has been prepared and provides an assessment of the NABERS and Green Star ratings of the proposed development at **Appendix K**. Based on the assessment the proposed OSD meets the commitments of water, energy and thermal as discussed further in **Section 8.1.7**.
3.7 Water and Flood Management	The management of water and potential flooding impacts have been addressed with the preparation of a stormwater management plan report which is provided in **Appendix S** demonstrating that with appropriate management measures, the site can suitably be addressed through stormwater management practices. **Section 8.1.13** of the EIS provides a detailed assessment of the stormwater and flooding management proposed for the site.
3.9.1 Heritage Impact Statement	A Heritage Impact Statement (**HIS**) has been prepared and is provided at **Appendix L**. The HIS identifies the existing heritage items within proximity of the site and the potential impacts of the OSD proposal on the local and state heritage items. **Section 8.1.4** of the EIS provides a detailed assessment of the heritage impacts of the OSD.
3.9.5 Heritage Items	A number of heritage items exist within proximity of the site which are discussed within **Section 3.6** of this EIS. A detailed assessment of the heritage considerations of existing items and the proposed development is discussed in **Section 8.1.4** of this EIS. The assessment reveals that the proposed development is sympathetic to the character of the buildings within the vicinity and will have negligible impacts on the existing significant views to and from any heritage item.
3.11 Transport and Parking	The proposed development seeks to provide 40 parking spaces for the OSD and 7 loading spaces. No parking spaces have been provided for retail tenancies. Given the proximity to the proposed Sydney Metro Pitt Street North Station, the proposed OSD will directly benefit from the ease of access to Sydney Metro. Further assessment of the transport and parking is undertaken in **Section 8.1.8** of this EIS.

Section	Response
3.12 Accessible Design	The OSD has been assessed against the relevant accessibility requirements of the National Construction Code, Disability Discrimination Act 1992 and the assessment reveals that the proposed design generally meets the requirements of the applicable legislation, where strict compliance has not been achieved a deemed to satisfy solution has been proposed. A detailed assessment of the accessible design is provided in **Section 8.1.16** of this EIS.
3.13.1 Crime Prevention Through Environmental Design	A detailed CPTED assessment of the proposed development has been undertaken. The report in **Appendix BB3** concludes that the proposed design of the OSD exhibits good CPTED principles and is considered to meet the requirements of CPTED with the implementation of readily achievable recommendations provided in Section 6 of that report. Further discussion and assessment of the proposed development against CPTED principles is undertaken in **Section 8.2.2** of this EIS.
3.14 Waste	The assessment of the waste generation and minimisation initiatives have been addressed in the accompanying Waste Management Plan at **Appendix T**. The proposal satisfactorily addresses the requirements of the SDCP 2012.
3.16 Signs and Advertisements	A signage strategy has been prepared by Foster and Partners at **Appendix D** which indicates signage zones for the following anticipated signage: • Building identification signage at rooftop • Flat mounted podium wall sign – building identification or business identification sign • Business identification signage at building entrance • Tower entrance building address signage • Loading dock signage • Ground level retail signage The exact location, size and detailed design intent of the signs will be subject to a separate signage DA.
4.2.1.2 Floor to Ceiling Heights and Floor to Floor Heights	The proposal exceeds the minimum floor to floor height requirements of 4.5m for the ground floor and 3.6m for commercial floors above ground, as shown in the accompanying architectural plans at **Appendix D**.
4.2.3 Amenity	Amenity impacts have been discussed throughout this EIS. The proposal has been designed to ensure solar access is maintained to the existing lightwell of the NSW Masonic Club building and National Building as discussed within **Section 8.1.3.** Design features to manage solar impacts within the OSD include fixed fins and sun shading elements as discussed further in **Section 8.1.7**. Landscape Plans have been prepared by Sue Barnsley Design which outline the landscape treatment proposed for the level 10 and 11 terraces.
4.2.6 Waste Minimisation	The assessment of the waste generation and minimisation initiatives has been addressed in the accompanying Waste Management Plan at **Appendix T**. The

Section	Response
	proposal satisfactorily addresses the requirements of the SDCP 2012. Further impacts of the waste generated and management practices are discussed in **Section 8.1.18** of this EIS.
5.1.1 Street Frontage Height	The podium street frontage height responds to the varied scale of adjacent existing buildings including the NSW Masonic Club which includes the Castlereagh Boutique Hotel on Castlereagh Street and the National Building on Pitt Street. The proposal provides a 46.6 metre street frontage height, which has been considered appropriate in the context of the surrounding buildings, as well as the predominant nature of the site in a Central Sydney context. The site's location spanning the Park Street block between Pitt and Castlereagh Streets adjacent to the very wide Park Street ensures the proposed street wall height does not create an overbearing sense of enclosure. Street frontage height is further discussed in **Section 8.1.3**.
5.1.2 Building Setbacks	The tower has a weighted average setback of 8m with no part of the building setback less than 6m. A 3m setback has been provided between the adjoining development to the north. Building Setbacks are further discussed in **Section 8.1.3**.
5.1.5 Building Bulk	Commercial buildings • Above a height of 120m high, as measured from the ground level of the footpath, the size of the floor plate of commercial offices must not exceed 1,400 m^2 GFA, or 25% of the site area, whichever is greater. • Above a height of 45m high, the maximum horizontal dimension of any commercial building facade must not exceed 65m. The proposal is not strictly compliant with the above DCP control rather has been demonstrated as compliant with the equivalent control within the Concept DA conditions of consent which at B3(b) state: *for a commercial scheme, must have floor plates no greater than 1,400m² GFA at a building height above 140m and built forms above the podium must have horizontal dimension of building façade parallel to street frontages of 65m in a single plane.* This is discussed further within the Architectural Design Report at **Appendix E1**.
5.1.6 Building Exteriors	The materials and finishes proposed for the OSD have been selected to ensure the predominant sandstone and bronze materiality is reflected in the local heritage items situated within proximity of the development. In doing this, the proposed development will allow the unique character of the area to be enhanced without detracting from the existing heritage significance of the heritage items. As noted in the Heritage Impact Statement in **Appendix L**, the scale and solid to void ratio of the podium level has been designed to ensure

Section	Response
	visual sympathy with the adjoining NSW Masonic Club and National Building. A detailed assessment is provided in **Section 8.1.4** of this EIS.
5.1.9 Award and Allocation of Heritage Floor Space	The site does not contain any existing heritage items but is subject to the Heritage Floor Space provisions of the SLEP and the DCP.
5.1.10 Sun Access Planes	The proposal complies with the relevant Hyde Park West Sun Access Plane provisions (including the exceptions to sun access planes provisions in clause 6.18 of SLEP), as discussed in **Section 7.11.2** and **Section 8.1.6** of the EIS.

8. KEY IMPACTS ASSESSMENT

This EIS is required to consider and assess impacts from the proposal pertaining to the natural and built environment and the social and economic landscape while determining the suitability of the site and the overall public interest associated with the proposal. These aspects are assessed accordingly in the following components of this EIS.

8.1. NATURAL & BUILT ENVIRONMENT

The following sections of the EIS provide an assessment of the key natural and built environment impacts associated with the Detailed SSD DA proposal. Where appropriate, technical consultant inputs and reports are discussed by summarising key components of the applicable methodology, existing environment, assessment and mitigation measures associated with a specific impact.

8.1.1. Design Excellence

As part of the Concept SSD DA, a Design Excellence Strategy for the project was approved by the Minister for Planning. The endorsed Design Excellence Strategy included in **Appendix G** establishes the rigorous process undertaken to ensure that the future detailed design of the OSD achieves design excellence. It is noted that the GANSW supports the Design Excellence Strategy as endorsed by the Secretary of the DPIE in accordance with condition A26 of the Concept SSD DA.

The approved design excellence process, which has been applied to this subsequent Detailed SSD DA, involved:

- The establishment of the Sydney Metro Design Review Panel (DRP) to define design quality expectations and benchmarks for the proposed development.
- The establishment of a Design Excellence Evaluation Panel (DEEP) for the tender design stage, comprising members of the Sydney Metro DRP (including the chair) a member nominated by the Government Architect NSW, and a member nominated by the City of Sydney.
- Following contract award, the Sydney Metro DRP was reconvened for the design integrity process, whereby the DRP reviewed and provided advice on the detailed building design to ensure the achievement of design excellence, having regard to the Sydney Metro Pitt Street North Station Design Guidelines.
- The applicant was required to obtain Sydney Metro DRP advice and endorsement of the scheme prior to the lodgement of the Detailed Development Application (refer to the Design Integrity Report at **Appendix EE**) and throughout the assessment and post-approval stages.

The DRP was established in accordance with the terms of the Concept SSD DA, and included an independent local council nominee, a State DRP member and Sydney Metro DRP members as endorsed by the Government Architect NSW.

The applicant presented to the Sydney Metro DRP nine times prior to the lodgement of the Detailed SSD DA. A summary of how the advice and feedback from the DRP has been incorporated into the proposal is provided at **Section 5.3**.

Further, in satisfying Condition B4 of the Concept SSD DA, the proposed development for the Pitt Street North OSD must also be consistent with the approved Pitt Street North Station Design Quality Guidelines, included at **Appendix F**. The proposed design for the OSD is consistent with the approved Pitt Street North Station Design Quality Guidelines as outlined in **Section 8.1.2**.

As a result of incorporating this feedback, the Sydney Metro DRP has given its endorsement that the proposal achieves design excellence as outlined within the Design Integrity Report (DIR) included at **Appendix EE** and is ready for lodgement of the Detailed SSD DA to DPIE.

The consent authority may therefore be satisfied that the proposal demonstrates design excellence in accordance with the Design Excellence Strategy as endorsed by the Secretary of the DPIE pursuant to conditions A26 and A27 of the Concept SSD DA.

8.1.2. Pitt Street North Station Design Guidelines

To reflect condition requirements of the Concept SSD DA, Sydney Metro has revised the Pitt Street North Station OSD Design Guidelines (June 2019) which have guided the detailed design of the proposed commercial OSD.

An assessment of how the proposed development is consistent with the Pitt Street North Station Design Guidelines is set out in the following table.

Table 18 – Pitt Street North Design Guidelines

Design Guideline	Detailed SSD DA Design Response
Podium and Street Wall	
Podium form & articulation should demonstrate strong heritage & contextual sensitivity, with scale and massing that relates well at the human scale, whilst acknowledging the evolving nature of this area of Central Sydney. This is to be achieved through:	Refer to notes below and to Architectural Design Report Sections 1.10, 1.11, 1.12, 2.2, 3.9, 3.10, 3.12, 3.13, 3.17 and 4.2 3.
1. Recognising the surrounding streetscape scale and providing an enhanced interface with adjacent heritage buildings, with direct reference to the height and articulation of these buildings, including:	The proposed built form of the OSD has been designed to ensure the massing, scale, solid to void ratio, materiality and colour scheme of the proposed podium is visually sympathetic to the adjoining heritage items. The street wall height matches that of the adjacent heritage buildings with the podium articulated to reflect the surrounding scale.
a) Treatment of the podium/street wall to incorporate a high proportion of masonry compared to window glazing, strong visual depth, a high degree of architectural modelling, articulation and detail, and high-quality materials that reflect the building composition of heritage items in the vicinity. Window glazing to be deeply recessed.	The masonry datum, used to identify the height to which sandstone finishes are implemented into the design of the podium facades, has a direct relationship to dominant features within the heritage Queen Victoria Building (QVB) and Town Hall building facades. The application of stone has been carefully considered with the expression of the facades governed by the height and composition of the adjoining NSW Masonic Club and the National Building (Ashington Place). The principle of gradual transition from the stone-clad heritage facade to the predominantly glass and bronze detailing of the proposed Park Street facade has been implemented by introducing a significant amount of stone cladding to the lower podium levels near the heritage buildings on Pitt and Castlereagh streets, which gradually feathers out in the form of stone upstands and deep vertical stone fins protruding in front of the glazed Park Street retail facades, giving the impression of recessed glass. Stone cladding has also been incorporated in and around the Pitt Street Station entrance on Park

	Street, framing its opening in a civic way, a gesture which is in keeping with the expression around the entrances of adjacent heritage listed buildings. Refer to Architectural Design Report Sections 3.9, 3.10, 3.12 and 3.13.
b) The Park Street frontage of the podium responding to the scale of Sydney Town Hall, ensuring that the out of scale podium of the Galleries Victoria is not used as a direct scale reference.	The massing and articulation of the tower and podium facades are designed to integrate with the surrounding urban context of midtown Sydney. The design approach creates a podium that responds directly to the street context and the heritage buildings north of the site, while closely following the Stage 1 defined envelope. The overall height of the Pitt Street North OSD podium has a direct relationship to the height of adjacent heritage buildings, such as the top of the Town Hall building and the dome of the QVB on Park Street. The masonry datum, used to identify the height to which sandstone finishes are implemented into the design of the podium facades, also has a direct relationship to dominant features within these heritage facades. Refer to Architectural Design Report Sections 1.12, 3.9, 3.10 and 3.12.
c) The Pitt Street frontage of the podium responding to major horizontal and vertical elements of the National Building and the Criterion Hotel, including the second-floor and upper cornices of the National Building. (See Figure 6: Podium and Street Wall - Indicative Elevation – Pitt Street).	The design and expression of the Pitt Street facade is governed by elements of the adjoining National Building facade, illustrated by the relationship of the proposed podium massing on Pitt Street which aligns with the eave height of the adjoining heritage building while also being divided into two vertical components, separated by a distinct full height slot, signalling the main entrance to the tower in a similar way to how the station entrance is announced on Park Street. This vertical bay division relates directly to the massing of the adjacent heritage building, reflecting the height and traditional lot width of the National Building. Refer to Architectural Design Report Sections 1.10, 1.11, 1.12, 2.2 and 3.12.
d) The Castlereagh Street frontage of the podium responding to major horizontal and vertical elements of the NSW Masonic Club, including the second and third floor cornices of the former NSW Masonic Club as well as upper	The design and expression of the Castlereagh Street facade is governed by elements of the adjoining National Building facade, illustrated by the relationship of the proposed podium massing on Pitt Street which aligns with the eave height of

	cornices. (See Figure 6: Podium and Street Wall - Indicative Elevation – Castlereagh Street).	the adjoining heritage building. The Castlereagh Street facade has also been divided into two volumes and is separated by the slot of the tower coming down to ground. The podium volume adjacent to the NSW Masonic Club has been lifted up to align with the top of this adjoining heritage building, which has assisted in further breaking up the long Castlereagh Street facade into two significantly different volumes, more in keeping with the overall Castlereagh Street elevations. Refer to Architectural Design Report Sections 1.10, 1.11, 1.12, 2.2 and 3.12.
e)	The form of the podium interpreting the subdivision pattern established during the late-nineteenth and early twentieth century through the modulation and articulation of the street frontages, noting the particular significance of the National Building and the NSW Masonic Club.	The design and expression of the podium facades is governed by elements of the adjoining National Building and NSW Masonic Club facades, illustrated by being divided into two vertical components, separated by a distinct full height slot, signalling the main and secondary entrance to the commercial tower. This vertical bay division relates directly to the massing of the adjacent heritage building, reflecting the height and traditional lot width of the National Building and NSW Masonic Club. Refer to Design Report Sections 1.10, 1.11, 1.12, 2.2 and 3.12.
f)	A 45m street wall podium height, referencing Ashington Place (National Building) (284A-250 Pitt Street) and NSW Masonic Club (169-173 Castlereagh Street). (See Figure 6: Street Wall Height and Streetscape References)	The proposed modification to the Stage 1 envelope for the Pitt Street North OSD (subject to a concurrent modification application) intentionally aligns with the adjoining heritage buildings, both of which are slightly higher than the DCP suggested street wall height of 45m. This approach is supported by the heritage consultant, GBA, and alignment with the neighbouring heritage buildings is considered to deliver the best design aesthetic for the street. The height of the podium component to the west and south aligns with that of the adjoining twelve-storey heritage building to the north of the site: the National Building on the Pitt Street side, with a top of facade RL of 69.60. The height of the podium component to the north-east matches that of the adjoining NSW Masonic Club on the Castlereagh Street side, with a top of facade RL of 71.41.

	Refer to Design Report Sections 1.11, 1.12, 2.2, 3.12 and most importantly 4.2.
g) Dividing the podium into distinct forms along Park Street, with further articulation through the introduction of vertical reliefs along Pitt and Castlereagh Street. (See Figure 6: Podium and Street Wall - Indicative Elevation).	The division of the Park Street façade correlates directly to the location of the station entrance at the ground floor of the development. In a bid to provide both as much daylight into the station entrance, as well as into the large commercial floorplates above, a continuous and full height vertical slot was introduced within the southern façade of the development. This design decision has also resulted in further breaking up the visual presence of this southern facade along Park Street. Refer to points c/d/e above for introduction of vertical reliefs on Pitt and Castlereagh Street. Refer to Design Report Sections 1.10, 1.11, 1.12, 2.2 and 3.12.
h) 0m setbacks to the rear boundary in response to the adjoining sites heritage significance and inability to develop any higher.	The NSW Masonic Club and the National Building have already sold off any future developable bonus GFA in turn allowing the permissible envelope for the Pitt Street North site to include a 0m setback. Notwithstanding this, the design has considered how to best support the ingress of natural daylight into the existing lightwells present within the southern facades of both heritage buildings, benefiting the commercial National Building and NSW Masonic Club tenants and other guests who are facing this lightwell. Refer to Architectural Design Report Sections 3.17 and 4.2.
2. Alignment of over station development with established building alignments at lower levels, with lobbies provided from secondary street frontages.	Refer to point 1c/d/e/f above for relationship of podium heights with established building alignments. Refer to Architectural Design Report Sections 1.10, 1.11, 1.12, 2.2 and 3.12 The main commercial entrance is located along Pitt Street and the secondary entrance to the development is located on Castlereagh Street, therefore they will not conflict with the main station entrance on Park Street. Refer to Design Report Sections 2.4 and 2.9.
3. Provision of landscaping throughout the podium design, laying spaces of relief & activation and referencing landscaping carried through from Hyde Park.	Within the design of the commercial tower, the landscape presence is concentrated and layered, accompanying people from the station plaza and street into the building to the podium, where the

	landscape reaches its full expression on the podium roof terraces on level 10 and level 11. Greenery is amplified with infill street trees along Park Street and new kerbside street trees on Castlereagh Street leading up to a street canopy. Underplanting of existing street trees on Pitt Street, and the provision of new planter beds on Park Street, lend the tower a green entry, separating seating from the kerb and bus stop to enhance the quality of waiting spaces. Refer to Architectural Design Report Section 2.12 and Landscape Report and Plans at **Appendix I**.
Built Form above the Podium	
1. Recognition of the contextual relationship with the surrounding heritage listed items.	Refer to points within Podium and Street Wall section, items 1 c/d/e/f/g/h above.
2. Compliance with City of Sydney LEP 2012 street setbacks of 8m to Pitt, Castlereagh and Park Street, with potential to provide an averaged setback along Park Street to align with the station structure.	The proposed built form for the Pitt Street North OSD is contained fully within the proposed modified Concept DA Envelope massing except for architectural features, landscaping elements, balustrades and embellishments provided these do not breach the solar access plane. Overall, across the entire tower volume a total area of 2,157.5 sqm has been located outside of the weighted average setback line, and approximately 3,066.3 sqm of the allowable volume which has not been utilised by the proposed built form. The overall massing of the building has remained in line with the principles listed within the OSD North Design parameters, which were established during the RFT phases of the project. Refer to Architectural Design Report Sections 4.2, 4.4 and 4.5.
3. Appropriate setbacks to protect light access to adjoining light wells of Ashington Place (National Building) (284A-250 Pitt Street) and NSW Masonic Club (169-173 Castlereagh Street) and use of reflective or light coloured materials to encourage light penetration.	Notwithstanding the allowable 0m setback allowance to the northern boundary with the adjoining heritage buildings, the design has considered how to best support the ingress of natural daylight into the existing lightwells present within the southern facades of both heritage buildings, benefiting the commercial National Building and NSW Masonic Club tenants and other guests who are facing this lightwell. Refer to Architectural Design Report Section 3.17.

4. Modulation of the design to minimise the overall scale of the development relative to ANZ/Liberty Place & CitiGroup, considering tower crowding as perceived particularly from Hyde Park & Town Hall. (See Figure 8: Indicative Built Form above the Podium).	The massing and articulation of the tower and podium facades fully integrate with the surrounding urban context of midtown Sydney. The development has a prominent presence on Park Street, especially when viewed from Hyde Park to the east or from the steps of Town Hall and the future Town Hall Square to the west. The building massing of the tower responds directly to these key contextual drivers, shaping the view opportunities and dictating the proposal's potential skyline profile in the immediate vicinity of the Pitt Street site. The design uses the centreline of the station entrance to divide and articulate the tower and podium into two distinct volumes on Park Street – one inclined to open a view to Hyde Park and one inclined to open a view to Town Hall, thereby responding to and seeking to reinforce the urban character of the Town Hall precinct. Refer to Architectural Design Report Section 2.2.
5. Avoiding the continuation of the diagonal NW plane façade alignment otherwise established by the proposed 201 Elizabeth Street & ANZ/Liberty Place.	The tower elevations have been angled back away from Park Street to reduce the apparent width of the tower's southern facade. The alignment of the tower face on the north side has been angled away from the adjacent towers to avoid a further reinforcing of the Hyde Park solar access plane while still securing unobstructed views to the east. The tower and podium massing have been softened by rounding the corners, further enhancing the unobstructed views to the park and harbour beyond. Refer to Architectural Design Report Section 2.2.
6. Maximise solar access to the public domain, through:	
a) Design and articulation to ensure no additional overshadowing to Hyde Park on June 21st, between 12pm and 2pm (required by SLEP 2012 Sun Access Plane controls).	The built form is wholly located within the building envelope and site boundary, with the exception of some minor architectural features, horizontal and vertical sunshades and other architectural embellishments. Notwithstanding the above, the external face of the facade is located wholly within the Hyde Park solar access plane.

	As a result of the design of the top of the building, improved daylight access to Hyde Park will be secured in comparison to the previously approved Stage 1 DA envelope. Refer to Architectural Design Report Section 4.1 and Solar Analysis Report at **Appendix E4** for detailed response.
b) Responding to the reduced shadow cast by the redevelopment of 201 Elizabeth Street on Hyde Park on June 21st, between 12pm and 2pm - Sydney Metro preliminary design work propose an angled offset of the north eastern corner of 4.1m to achieve this outcome.	The proposed built form is entirely located within the solar access plane on the top and north-east corner of the site. Furthermore, the additional area allowed to be built within the lower tower levels on the north-east corner has not been taken up by the development to maintain a simpler tower volume which sits directly on top of the proposed podium built form. Refer to Architectural Design Report Sections 4.1, 4.2 and 4.4 and Shadow Analysis Report for detailed response.
c) Creation of opportunities to increase solar access to the proposed Town Hall Square.	The development has a prominent presence on Park Street, especially when viewed from Hyde Park to the east or from the steps of Town Hall and the future Town Hall Square to the west. The design uses the centreline of the station entrance to divide and articulate the tower and podium into two distinct volumes on Park Street – one inclined to open a view to Hyde Park and one inclined to open a view to Town Hall thereby responding to and seeking to reinforce the urban character of the Town Hall precinct. By angling the most eastern volume away from the parallel setback line on Park Street, additional sunlight access to the future Town Hall square will be achieved at specific times throughout the year. In addition to this, the proposed built form is not fully maximising the solar access plane on the top of the building, which will also provide additional daylight access to the future Town Hall Square. Refer to Architectural Design Report Sections 4.1, 4.2 and 4.4 and Shadow Analysis Report for detailed response.
d) The design and articulation of roof forms to minimise additional shadow impacts to Hyde Park between 12 noon and 2pm throughout the year.	The three stepped roof volumes at the top of the Pitt Street North OSD are wholly contained within the building envelope which is governed by the Solar Access Plane as outlined in Sydney LEP Sun Access Protection Map 15, with the site governed

	specifically by the Hyde Park West 3 sun access plane. The lowest roof has an RL of 166.050, the intermediate roof has an RL of 167.800 and the highest roof of the built form has an RL of 176.800, all are located below the Solar Access Plane, which will result in providing additional daylight access to the future Town Hall Square at specific times throughout the year. Refer to Architectural Design Report Sections 4.1, 4.2 and 4.8 and Shadow Analysis Report for detailed response.
7. Use of materials that reflect the function of the over station development, distinguishing them from the surrounding context and providing a simpler design resolution within the city skyline.	Less noticeable at first glance is the presence of a significant number of bronze cast and clad architectural details within the surrounding heritage facades such as intricate handrails and balusters, signage elements, memorial plaques, etc. Bronze clad and coloured finishes have a dominant role within the materiality palette of the proposed commercial development. Specific detailing to the base of the building and elements that can be seen up close or touched by the public, will be bronze clad and cast elements, such as door handles, lift details, and so on, whereas elements further up in the building will have a special coated finish to mimic the look, effect and lustre of bronze, while ensuring project warranties, buildability, environmental impacts and project budgets can be met. This selected materiality, although present within the immediate surroundings in small quantities, will create a distinct and unique tower design within the Town Hall precinct and wider Sydney skyline. Refer to Architectural Design Report sections 3.11, 3.15 and 3.16.
8. Provision of landscaping throughout the design, laying spaces of relief and referencing landscaping carried through from Hyde Park.	Within the design of the commercial tower the landscape presence is concentrated and layered, accompanying people from the station plaza and street into the building to the podium, where the landscape reaches its full expression on the podium roof terraces on level 10 and level 11. Greenery is amplified with infill street trees along Park Street and new kerbside street trees on Castlereagh Street leading up to a street canopy.

	Under planting of existing street trees on Pitt Street, and the provision of new planter beds on Park Street, lend the tower a green entry, separating seating from the kerb and bus stop to enhance the quality of waiting spaces. Refer to Architectural Design Report Sections 2.12 and Landscape Report and Plans at **Appendix I**.
9. Achievement of SEPP65 & ADG requirements and must:	SEPP 65 and the ADG are not applicable to the proposed commercial scheme.
a) Provide appropriate building separation to maintain a reasonable level of residential privacy.	The proposed building is within the envelope approved by the Concept DA, with the exception of minor sunshading elements and architectural embellishments which extend slightly outside the envelope. The proposed development ensures an appropriate level of amenity is provided to the adjoining NSW Masonic Club hotel rooms by the incorporation of a lightwell on the shared boundary and use of light enhancing materials on the adjacent northern façade.
b) Maximise solar access to residential apartments within the development with consideration to: (i) the number of apartments or development density; and (ii) limiting the number of single aspect/south facing apartments.	There are no residential apartments within the development.
c) Minimise overshadowing impacts to surrounding residences, including private residences at 27 Park Street (Park Regis).	There has a 3.8% improvement in impacts between 9am-3pm of the proposed development on the Park Regis in comparison to the approved concept envelope and a 13.7% improvement from 8am-4pm.
10. Provide articulation of the tower to present as multiple forms, when viewed from both Town Hall and Hyde Park, with vertical expression along Park Street incorporating continuous elements of relief for the full height of the building above the podium to reduce the mass and scale of the future built form and ensure the built form better responds to the massing and scale of surrounding buildings.	The tower section of the building is articulated into three towers. Only the two shortest facades, the west facade of the west tower (fronting Park and Pitt Streets) and the east facade of the east tower (fronting Park and Castlereagh Streets), are parallel to the street - all other street facades are angled away from the street in response to considerations of solar access, views and, importantly, apparent bulk. Each tower is of a different height, emphasising their legibility as separate, smaller, more vertical masses.
11. Incorporate building articulations, building modulations and facade treatments to provide distinctive visual breaks along the Park Street frontage of the site, respecting the surrounding	The Park Street frontage has a distinctive separation in the façade in the mid-point of this frontage. The design of the building incorporates other visual breaks along Park Street through the

subdivision and built forms patterns. The distinctive visual breaks shall be proportional to the overall building height and length of the street frontage.	use of façade treatment including materiality and colours.
Integration and Legacy	
1. Delivering a high standard of design and finish that promotes longevity and adaptability over time.	The proposed development has interrogated the composition and materiality of adjacent heritage and modern buildings in order to define the appropriate location of stone elements within the podium facades. Key considerations were to increase the solidity of the building without losing the permeability at grade and views towards the activated uses on level 2 and 3 from the street. For the external and internal building facades, and lower podium sunshades, a local sandstone will be selected. 'Piles Creek Cream' stone panels will be used. The sandstone panels will be applied with grouted, sealed joints colour-matched to the stone panels. The locally sourced sandstone reinforces the building's sense of place within the Sydney Town Hall precinct. The use of bronze clad and coloured finishes has a dominant role within the materiality palette of the building as discussed above. Refer to Architectural Design Report Sections 3.9, 3.10, 3.11 and 3.12.
2. Functional integration of the various permissible uses with the Sydney Metro component should be seamless, simplifying the vertical division and coordination of services wherever possible.	Up to podium level, the building contains certain areas which are solely dedicated to the Pitt Street metro station. These areas are subject to a separate development approval though the total GFA of these station spaces are included within the overall area calculations of this SSD DA application. There is a clear separation between the commercial OSD functions and station areas and services reticulation, though there are a few shared facilities between both uses; such as the building's loading dock, maintenance access hatch areas, some above ground back of house egress stairs and ground floor fire isolated passages. Refer to Architectural Design Report Section 4.3.
a) Permissible uses should be functionally separated as much as possible at ground level to assist in pedestrian circulation and serviceability.	The main entrance to the commercial OSD is on Pitt Street, taking its cue from the composition of adjoining heritage buildings, creating a prominent presence on Pitt Street.

	Castlereagh Street contains a secondary entrance, connecting it with end of trip facilities and the car stacker parking. The loading dock and courier spaces are also located on Castlereagh Street where they connect directly with the OSD goods lift and station back of house. In between the above entrances, there are individual retail unit access points on Pitt, Park and Castlereagh streets. Refer to Architectural Design Report Sections 2.1, 2.9 and 2.10.
b) Back of house operations and services should be consolidated wherever possible while maintaining any required separation between OSD and Sydney Metro.	The shared loading dock and courier spaces are located on Castlereagh Street where they connect directly with the OSD goods lift and station back of house. There is also a waste holding area in the loading dock, which is shared between the station and OSD. Otherwise station and OSD uses are clearly separated from each other. Refer to Architectural Design Report Sections 2.9 and 2.10.
c) Consider and allow for flexible future use of functional spaces and services coordination.	Both for the commercial and retail uses, ample flexibility has been built into the design to allow for future changes and fit-out proposals the commercial and retail tenants might want to develop and adopt in the future. Refer to Architectural Design Report Section 2.10.
3. Delivering an over-station development that:	
a) Does not have any adverse impact on the design and/ or operation of the Sydney Metro Station;	By clearly separating OSD and station uses and minimising shared areas, adverse effects from the OSD on the operation of the Sydney Metro station are minimised. Additionally, the station services and level 4 station plant room have been carefully integrated into the design of the OSD facades, resulting in a truly integrated station development. Refer to Architectural Design Report Sections 2.1, 2.9 and 2.10.
b) Is capable of complete demolition and reconstruction, or major maintenance or modification, without significant interference to the operation of the Sydney Metro station;	The OSD areas below the station level 4 plant room are almost entirely self-sufficient, with their plant rooms and intake/exhaust louvres located below the station plant room on level 4, with a few

	minor services penetrating through the station plant on level 4. The OSD plant room which serves the commercial podium and tower levels, is located well above the level 4 station plant room therefore allowing future flexibility in its use and size. Refer to Architectural Design Report Sections 2.1, 2.5, 2.9 and 2.10.
c) Will allow independent access, servicing and maintenance from normal station activities and operation;	Refer responses at point 2 of Integration and Legacy above.
d) Integrates efficiently with station structure;	Finding the most efficient location for the OSD tower and podium core led to a solution that optimised and utilised key structural elements within the station lobby, such as structural partition walls and the central columns within the station escalator void, to balance the floating tower core. This arrangement has resulted in the need for escalators to connect the ground floor OSD entrance on Pitt Street with the commercial sky lobby on level 3. The introduction of escalators and a raised commercial sky lobby has further resulted in a ground floor layout which maximises retail activation along Park Street, adjacent to the metro entrance. Refer to Architectural Design Report Section 2.6 and Structural Statement at **Appendix AA**.
e) Achieves unity in design through connecting the station entry, podium and built form above the podium, as a single readable piece of architecture including to provide continuity and well considered transitions of bulk and scale between the station box and the over station development design;	The design intent has been to visually integrate the station with the OSD. The design team developed an aesthetic concept where the centreline of the station entrance is used to articulate the tower above. This evolved design uses the centreline to divide the tower and podium into two distinct volumes on Park Street – one inclined to open a view to Hyde Park and one inclined to open a view to Town Hall thereby responding to and seeking to reinforce the urban character of the Town Hall precinct. The station entrance is vertically expressed within the building massing, as its centreline breaks the tower massing into two key volumetric components. This strategy is also employed on the east elevation to Castlereagh Street where the secondary OSD entrance locates a slot further articulating the massing into three forms. These full

	height tower and podium slots allow daylight penetration deep into both the station entrance and to the heart of the commercial floorplates in the commercial podium and tower above. Refer to Architectural Design Report Sections 2.2, 2.11 and 3.8.
f) Provides visual connectivity between the OSD lobby and public domain.	The need for escalators to connect the ground floor OSD entrance on Pitt Street with the raised commercial sky lobby on level 3, has further resulted in a ground floor layout which maximises transparency and allows for retail activation along Park Street. In addition to this, the OSD lobby stretches from the ground floor to the underside of the level 4 station plant room, which together with a permeable façade along Park street allows for a high level of visibility between the public domain and the commercial OSD lobby. Refer to Architectural Design Report Sections 2.4, 2.6 and 3.12.

In summary, the proposed built form of this Detailed SSD DA will achieve the design guidelines by:

- Providing a new commercial development above a metro station located within the Sydney CBD that exhibits design excellence and which has been supported through the design excellence process;
- Ensuring a built form that has been sensitively designed to be sympathetic to the adjacent heritage items and adjoining development, including not maximising the approved building envelope;
- Providing façade features and embellishments that enhance the design excellence and visual appeal of the development, support sustainable development and uniquely contribute to the Sydney CBD skyline;
- Ensuring the development proposes a podium that will be activated by the retail and commercial uses supporting the station development; and
- Integrating the architecture of the OSD with the station entrance and 'metro box' design to deliver a seamless integrated station development that is highly legible, distinguishable, and functional.

As such, the proposed OSD built form demonstrates consistency with the Pitt Street North Station OSD Design Guidelines.

8.1.3. Built Form and Urban Design

The proposed OSD is detailed in the Architectural Plans (**Appendix D**) and Architectural Design Report (**Appendix E1**) prepared by Foster + Partners. In conjunction with the Concept proposal, the ongoing detailed design development has established a vision for the site to be the new thriving hub in the Sydney CBD through the delivery of a landmark, commercial development which seamlessly interacts with Sydney Metro public infrastructure.

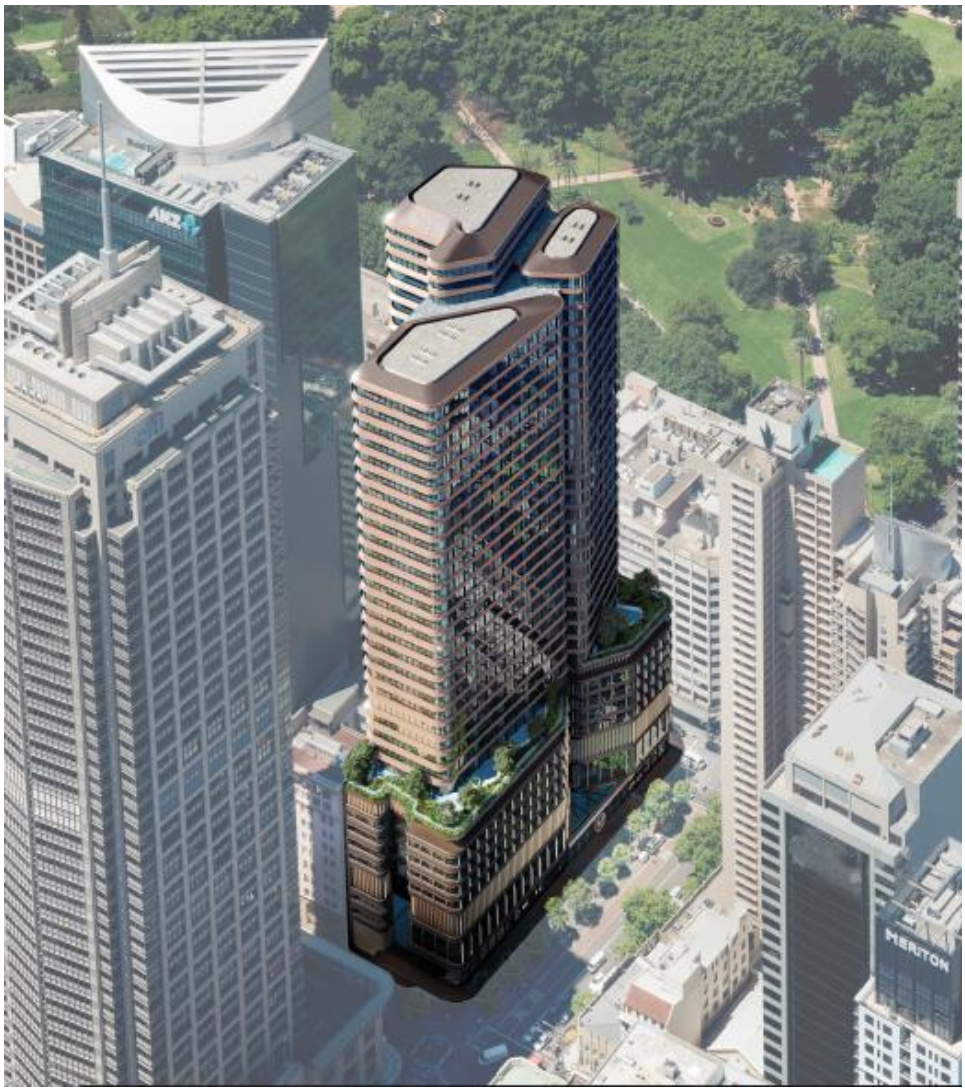
This project offers a rare opportunity to create a unified public transport and OSD proposal where a commercial tower is seamlessly integrated.

The North OSD has been designed to provide Sydney with a new premium office tower, with a floorplate configuration that maximises views, aesthetics and responds to specific site constraints and its wider context. Drawing upon the global experience of Foster + Partners, the building has been conceived to respond to key trends in major office tower projects across the world and creates a new gateway to the Sydney CBD.

The flexible, large-span floorplate aids visual connectivity across office floors, with a design that includes a truly unique and dynamic entrance experience that takes visitors through a series of spaces that includes a sky lobby and potential commercial retail offering - this 'Third Space' environment seeks to ease the transition between the public and private worlds. The tower is designed with future flexibility in mind and offers the opportunity for vertical connectivity between tenant floors on each level.

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 Sydney CBD. Further, the design of the OSD responds to the site-specific constraints and opportunities of the site and features of the surrounding area, which are evolving over time. Key impacts associated with the built form are discussed in further detail in the following sections.

Figure 66 – Pitt Street North OSD



Source: Foster & Partners

Urban Design Drivers

The building massing and tower articulation were driven by the following urban context design drivers:

- The site has a prominent presence on Park Street, especially when viewed from Hyde Park to the east and from the steps of Town Hall and the future Town Hall Square to the west.
- The site benefits from spectacular views to Hyde Park and Sydney Harbour to the east and north-east, and to the future Town Hall Square and Town Hall precinct to the west and south-west.
- The site's adjacency to the dominant tower forms of ANZ Tower (242 Pitt Street) and 201 Elizabeth Street.
- The area in the vicinity is densely built up around a grid of relatively narrow urban streets, and features an eclectic mixture of buildings of widely varying construction periods, scales, heights and styles, reflecting most of the stages of the city's development history.

The building massing of the tower responds directly to these key contextual drivers. They have helped shape the view opportunities and dictate the proposal's potential skyline profile in the immediate vicinity of the Pitt Street North site.

Design Statement

The tower massing maintains a continuous floorplate and a core located on the centre of the station, within the highest reaching portion of the SSD DA envelope.

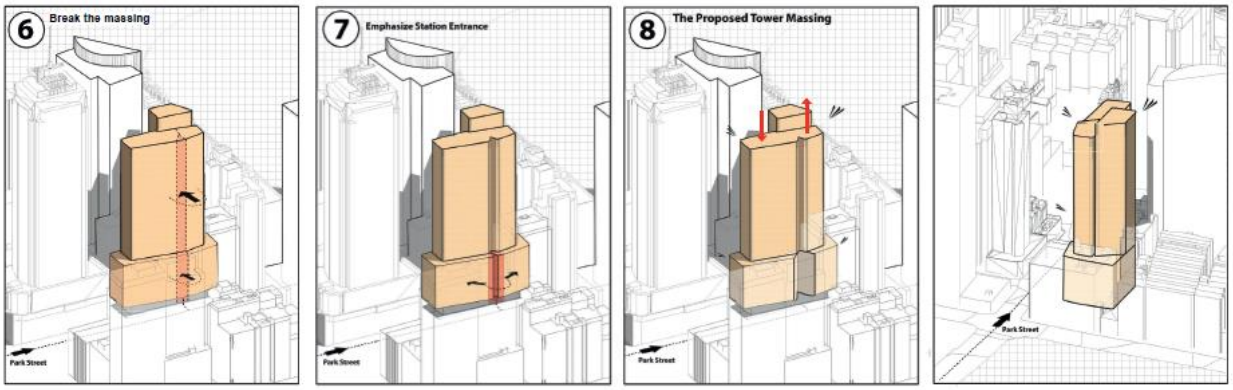
The podium massing is aligned to the site boundaries and building envelope so as to visually integrate the station with the OSD. The centreline of the station entrance is used to articulate the tower above. The design uses the centreline to divide the tower and podium into two distinct volumes on Park Street – one inclined to open a view to Hyde Park and one inclined to open a view to Town Hall thereby responding to and seeking to reinforce the urban character of the Town Hall precinct.

The massing and articulation of the tower and podium facades fully integrate with the surrounding urban context of midtown Sydney. The development has a prominent presence on Park Street, especially when viewed from Hyde Park to the East or from the steps of Town Hall and the future Town Hall Square to the West. The building massing of the tower responds directly to these key contextual drivers, shaping the view opportunities and dictating the proposal's potential skyline profile in the immediate vicinity of the Pitt Street site.

The tower elevations have been angled back away from Park Street to reduce the apparent width of the tower's southern facade. Additionally, the alignment of the tower face on the north has been angled away from the adjacent towers while still securing unobstructed views to the east. The tower and podium massing have been softened by rounding the corners, further enhancing the unobstructed views to the park and harbour beyond.

On the east elevation to Castlereagh Street, the secondary OSD entrance locates full height tower and podium slots, articulating the massing into three forms. These allow daylight penetration deep into both the station entrance and to the heart of the commercial floorplates in the commercial podium and tower above.

Figure 67 – Built form massing



Source: Foster & Partners

The building's asymmetry is enhanced by further articulating the height of the tower building roofs. In order to fully enclose and integrate the plant rooms at the top of the towers, three distinct and unique rooftops have been formed, each with a different height.

The resulting rooftop massing complements the existing skyline and enhances the transition between this new development and the stepped roofs of the ANZ building, 2 Park Street, and the 201 Elizabeth Street tower massing. The proposed roof top massing will allow more late morning sun access to the future 'Town Hall Square' in comparison to the stage 1 envelope.

Even though each tower has its own unique orientation and height, the proposal uses a unifying language for all facades, creating a simplified and elegant tower form which truly responds to its context and will complement neighbouring civic buildings in terms of façade composition, materials, colour and texture.

8.1.4. Heritage

A Heritage Impact Statement (**HIS**) has been prepared by GBA Heritage and is attached at **Appendix L**. The HIS identifies and assesses the potential impacts associated with the detailed design of the Pitt Street North Station OSD on the significant characteristics of neighbouring heritage items, their context and setting.

The HIS provides a comprehensive assessment of key heritage impacts and establishes the heritage management framework for the development of the site. The assessment of heritage impacts has been prepared in accordance with Condition B7 of the Concept SSD DA, the SEARs and the relevant provisions of the applicable planning instruments. In particular, the assessment provides a discussion of the potential impacts of the development on the adjoining NSW Masonic Club and the National Building regarding their setting and streetscape presence.

Assessment

As noted previously (**Section 3.6**), the site is located within the vicinity of a number of locally listed heritage items under SLEP 2012.

The HIS has been prepared in accordance with the guidelines outlined in the *Australia ICOMOS Charter for Places of Cultural Significance,* 2013 (known as The Burra Charter), and the NSW Heritage Manual (NSW Heritage Office, now Heritage division of the NSW Department of Premier and Cabinet) as a methodology for assessing heritage impacts.

A Heritage Interpretation Plan (**Appendix M**) has been prepared separately in fulfilment of condition E21 of the CSSI approval and in accordance with the terms of condition B8 of the concept approval.

National Building (Ashington Place)

The National Building located to the north of the site at 248A-250 Pitt Street is identified as a local heritage item (I1931) under SLEP 2012.

Consisting of a 12 storey concrete Inter-War building in the Commercial Palazzo style (two buildings separated by a deep light well and joined by the lift and stair lobby) the building has historic significance as a reflection of the history of building societies and other investment institutions in the commercial life of Sydney. It is also considered an important building in the professional work of the architectural firm of Joseland & Gilling.

The building has a high aesthetic significance as a fine and largely intact example of the style and includes many of the identifying elements such as the arched windows, antique cornice and terrazzo plasterwork. The primary (Pitt Street) facade features ground level retail tenancies below a box awning with rusticated stone cladding on the first and second floors divided into three vertical sections. Window pairs feature on most levels and cornices at the tenth floor and parapet complete the Classical motif.

Following the demolition of existing buildings on the site as part of the CSSI approval, partial views to the blank southern façade of the National Building have been made available. As outlined in the HIS, this façade is considered to have little historical or aesthetic significance.

The potential impact of the proposed development on the heritage significance of the National Building includes views explicitly to the item, physical connections or underground excavation and construction adjacent to the site, and potential visual 'domination' of the item. In addressing these impacts, the proposed design has responded as follows:

- The tower form has been set back from the street boundary, separating the tower visually from the primary facade of the National Building;
- The podium height of the Pitt Street frontage has been designed to match the top of the National Building parapet;
- The podium has been articulated to reflect the traditional lot width by emphasizing the OSD entry recess.
- The north western façade of the OSD (from level 5 – level 10) steps away from the National Building to ensure continued light penetration to the existing lightwell. The facade will be clad in reflective light coloured solid materials (as required by the Pitt Street North Design Guidelines) to maximise daylight access into the National Building commercial offices surrounding the lightwell.
- The northern façade adjacent to the National Building is built to the boundary. Level 1 to level 9 will be clad in reflective light coloured solid materials (as required by the Pitt Street North Design Guidelines) to maximise daylight access into the commercial offices surrounding the lightwell, with clear glazing proposed from level 10 upwards (above the height of the National Building).
- The expressed floor levels of the podium match those of the adjacent heritage buildings and the arched windows are referenced in the proposed building's use of curves and organic forms.

NSW Masonic Club

The NSW Masonic Club located to the north of the site at 169-173 Castlereagh Street is identified as a local heritage item (I1699) under SLEP 2012.

The NSW Masonic Club consists of a 12-storey sandstone building and is considered to be significant as a fine example of the Inter-war Commercial Palazzo style. Designed and built by the Masonic Lodge in 1925, it is socially and historically significant for its continued associations with this nationally influential social organisation.

The sandstone façade is an important contributor to the streetscape and reflects an important period of Sydney's urban growth during the 1920s. It is symmetrical in its massing with three distinct sections that are fundamentally classical in composition. The ground level consists of original shopfronts under an elaborate box awning. Above this are two-storey Classical columns supporting arched windows and defining a piano nobile (main reception area) above the ground floor. Simple rectangular windows give much of the façade a contemporary appearance but a projecting cornice above the tenth floor completes the Classical motif.

The building's interiors are also identified within the HIS as aesthetically and historically significant. A recessed lightwell along the southern façade of the NSW Masonic Club building provides light to the dining room on level 4 and hotel rooms located between level 5 to level 10. The southern windows of the lower levels of the building (utilised as a conference facility) are blacked out and infilled with display cabinets.

The potential impact of the proposed development on the heritage significance of the NSW Masonic Club includes views explicitly to the item, solar access, physical connections, construction adjacent to the site, and potential visual 'domination' of the item. In addressing these impacts, the proposed design has responded as follows:

- The tower form is set back from the street boundary, separating the tower visually from the primary heritage facade of the NSW Masonic Club.
- The podium height on Castlereagh Street has been raised to respond to the height of the adjoining the NSW Masonic Club.
- The podium reflects the traditional lot width by incorporating a recess above the EOT OSD entrance.
- The north façade of the OSD (above the station transfer slab on level 4) steps away from the southern extent of the NSW Masonic Club to ensure continued light penetration to the south facing windows.
- The north facade from level 5 to 11 utilises a mix of reflective clear glazing and reflective light coloured solid materials to maximise daylight access into the NSW Masonic Club.
- The expressed floor levels of the podium match those of the adjacent heritage buildings and the arched windows are referenced in the proposed building's use of curves and organic forms.

Other heritage items in the vicinity

As identified in **Section 3.6**, there are a number of other individually listed heritage items in the vicinity of the site. Further, the site is in proximity to the College Street / Hyde Park Special Character Area identified in the SLEP 2012.

GBA Heritage has worked closely with the Architects to ensure that the bulk, materiality and colours of the proposed building respond sympathetically to its heritage context. This has been achieved by reducing the apparent bulk and mass of the building by splitting the tower section into three components, generally splayed away from the street in order not to create a high 'street wall', differing tower heights emphasise their verticality and separation, and rounded corners soften the tower silhouettes and sympathise with the curved elements, such as arches, of nearby heritage items.

The materiality and colour scheme of the proposed building is sympathetic to the heritage items (and other buildings) in the vicinity, in particular the use of sandstone and bronze detailing, which is common across historic buildings within the locality as illustrated below in **Figure 68**.

Figure 68 – Heritage context external colour scheme (sandstone and bronze detailing)

Source: Foster + Partners

The proposed building incorporates sandstone elements in such a way as to transition gradually from sandstone to glass and old to new, and to create a contemporary building that speaks to and respects its historical neighbours.

The HIS notes that no existing views to or from any significant listed heritage buildings (including the Sydney School of Arts; Pitt Street Uniting Church; The Great Synagogue; Criterion Hotel; Pilgrim House and (former) Australian Consolidated Press façade) will be obstructed or adversely altered by the proposed development.

Further, the HIS concludes that through the façade articulation and design, the proposed building will not 'dominate' any nearby heritage buildings in the sense of disempowering them or reducing public ability to appreciate these items.

Heritage Interpretation Plan

Based on the findings and recommendations of the Heritage Impact Statement, a Heritage Interpretation Plan has been prepared by GBA Heritage at **Appendix M**. The Heritage Interpretation Plan is designed to facilitate a creative approach to communicating the history of the site to future audiences and encourage the innovative expression of past narratives.

It also provides an assessment of the suitable locations for heritage interpretation devices, the type of content that would be suited and the target audience that the device would engage with.

The plan investigated six publicly accessible spaces within the OSD spaces of the podium with the following four spaces identified as suitable for the display of heritage interpretation material:

1. From Horses to Metro

Located on the 'Heritage Display Wall' on the ground floor wall fronting Castlereagh Street

2. The Barley Mow Hotel

Located in the proposed ground floor retail tenancy at the corner of Park and Castlereagh Streets

3. Notable local photographer – Sam Hood

Located in the level 2 retail and transit space

4. Victoria Hall Picture Theatre

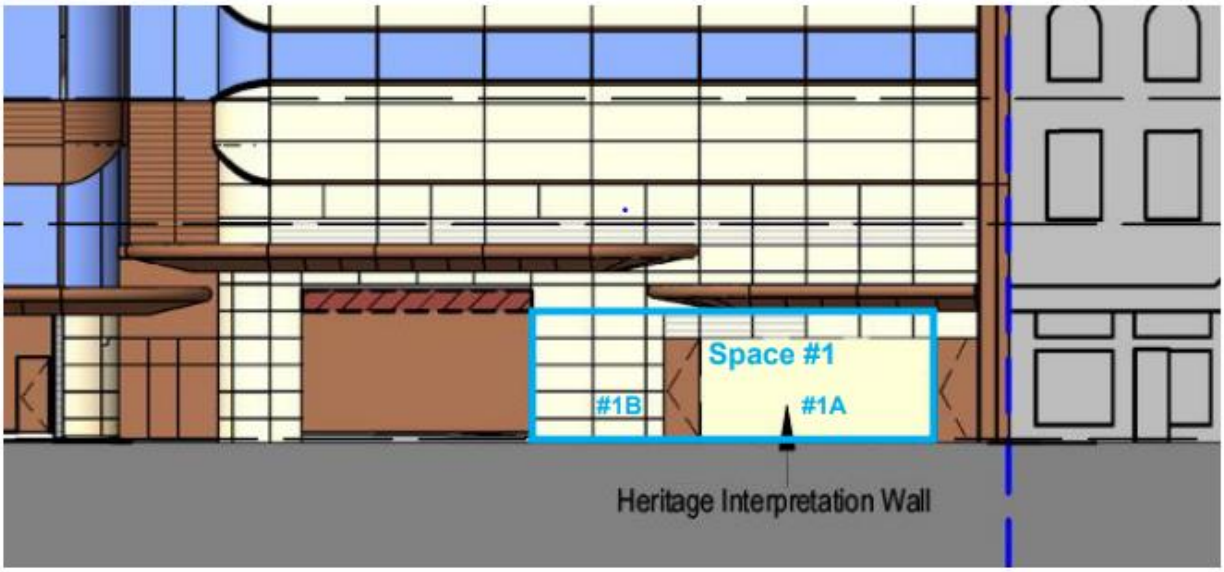
Located in the external pavement to the Pitt Street entrance

Interpretive Concept #1

'From Horses to Metro', an interpretation of the historic identity of the subject urban block located in the centre of Sydney's horse related commerce and the site's continuing link to transportation. The plan recommends that life-size horses and carriages/ buggies should be illustrated on the ground floor external Castlereagh Street wall (space #1A) presenting characters as if they were participating in the daily life of Castlereagh Street circa 1870. Consideration should be given to carving the scene into the sandstone cladding proposed for the heritage wall. Refer **Figure 69.**

Space #1B could be considered for additional interpretation space for this concept, provided use of this space is practical, would not disrupt the placement of required building features, and would have a design that is sympathetic with the surrounding building elevation.

Figure 69 – Heritage display east elevation



Source: Foster + Partners

Interpretive Concept #2

The Barley Mow Hotel was constructed in circa 1830 by Catherine McLeod, a former convict who pleaded guilty to housebreaking and theft. At the time, the Barley Mow was the stand out structure of the area. A 'barley mow' is a stack (or 'mow') of barley and is the name of a once popular folk song of the British Isles. The hotel was demolished in 1894 and rebuilt to three full storeys in a more contemporary style. Between 1923-25, Resch's Ltd undertook extensive alterations and additions to the hotel that were designed by Robertson and Marks.

This concept is optional only and might be adopted if it is consistent with and/or enhances the proposed tenancy. If the tenancy is occupied by a wine bar or similar, then this proposed concept may be suitable. Consideration should be given to re-printing a number of historic photographs of the Barley Mow to show its evolution over time. Consideration should also be given to reprinting the lyrics to the once popular folk song 'The Barley Mow'.

Interpretative Concept #3

'Notable local photographer – Sam Hood', a celebration of the photographer Sam Hood who operated out of a studio within 'Young's Chambers' on the subject site in the early 1900's. Sam Hood is regarded as a trailblazer in photo journalism "adept at capturing the sensational, trivial and in particular sporting moments with his camera". This strategy involves reprinting a number of Sam Hood's photographs and his 1953 portrait and displaying them in either the level 2 retail and transit space.

Interpretive Concept #4

'Victoria Hall Picture Theatre' was a three storey brick structure built at what was then 182 Pitt Street between circa 1840 and 1845. Over the following decades, the structure was used as a shop, soda water and lemonade manufactory, warehouse, leather manufactory, and auction house, furniture warehouse and photo gallery. In 1907, the structure was converted to a cinema, capable of holding between 700 and 1,000 patrons and featuring an 8,000-candle power machine. The venue was named Victoria Hall or the Victoria Hall Picture Theatre. The interpretive concept is for the footprint of the former theatre to be outlined in its original Pitt Street location in the external pavement outside the Pitt Street lobby, within the property boundary.

The heritage interpretation and proposed interpretive devices have been considered in the broader context of the integrated station development, including the Pitt Street metro station (including both above ground station entrances and the below-ground station elements), the Pitt Street South OSD, and the archaeological remains uncovered during archaeological investigations of the Pitt Street Metro site, as well as the design language adopted in the wider Sydney Metro line, as relevant.

Conclusion

The detailed design of the OSD is sympathetic to the heritage fabric of significant heritage items within the vicinity of the site. Notably, the proposal implements various design strategies, including:

- Visually dividing the tower and podium into multiple elements, reducing street-wall length and reducing apparent bulk.
- Matching the podium height to the adjacent heritage items and ensuring the podium facade reflects the stratification of heritage items in the vicinity.
- Setting the towers back from the podium façades and generally splaying the facades away from the street in order to reduce the 'street wall' effect and further reduce apparent bulk.
- Designing the building to ensure the design is sympathetic to the character of buildings in the vicinity, including appropriately setting the building away from lightwells and windows on the adjoining heritage items.
- Well-considered siting of heritage interpretation devices, particularly on the Castlereagh Street façade adjoining the NSW Masonic Club and within either level 2 or level 3.
- The materiality and colours of the facade reflect the palette of the heritage items in the vicinity. In particular stone cladding, is incorporated into the segments of the podium meeting the adjoining stone-clad heritage buildings and is used in the sun shading 'blades' of the third storey, providing a gradual transition from opacity to transparency, and historical to contemporary (as illustrated in **Figure 70**).

Figure 70 – Heritage Facade Interface - Use of Stone

Source: Foster + Partners

As such, the proposed development has an acceptable impact on the heritage context of the site and nearby heritage items.

8.1.5. View and Visual Impact

The SSD DA is accompanied by an independent Visual Impact Assessment (**VIA**) prepared by Urbis (**Appendix W**). In accordance with Item 5 of the SEARs, the VIA assesses the visual and view impacts of the development, including the proposed modifications to the envelope and protrusions for sun shading devices.

Specifically, the VIA responds to the SEARs requirement that the EIS shall:

- provide a detailed visual / view impact analysis, which considers the impact of the proposed building (compared to the existing situation and the approved envelope) when viewed from the public domain and key vantage points surrounding the site. This is to include a written description of the existing view, the likely impact and justification of the proposal and any required mitigation measures. The

view locations and methodology for the analysis must be prepared in consultation with the Department and Council.

- provide a view impact analysis showing the proposed building as viewed by pedestrians when moving along Park, Castlereagh and Pitt Streets and where the proposed building is visible from the streets immediately surrounding the site.

The methodology used for the visual impact assessment follows a combination of objective methods for assessment of visual impacts formulated by Dr Richard Lamb of Richard Lamb and Associates and the *Guideline for landscape character and visual impact assessment: Environmental Impact Assessment practice note EIA -NO4* prepared by RMS (December 2018).

Visual Context

The VIA contains a baseline visual analysis of the site in terms of its catchment and character, scenic quality, view place sensitivity, and viewer sensitivity. A summary of the site's visual context is below as follows.

- The site is located within Sydney CBD. It has separate street frontages to Pitt Street to the west, Park Street to the south, and Castlereagh Street to the east. The surrounding area predominantly comprises high-density commercial buildings, several residential buildings, fine grain uses, and heritage buildings.
- The site occupies is a visually prominent location, including street frontages to the southern end of the CBD north of Haymarket and west of Hyde Park. The topography is relatively flat; however a slight cross-fall from east to west results in the slight elevation of Castlereagh Street and Hyde Park above the site.
- Public domain visual catchment is limited by virtue of nearby tall towers and closely spaced built forms of similar and greater height and by the surrounding street grid where views are constrained to roads.
- Due to the underlying street-grid arrangement, relatively uniform topography, and road alignments, direct views to the site are limited to close views (within 100 metres) and medium distant views (between 100-500 metres). External visibility to the site beyond the immediate views to the west, south and north is limited; however there are some isolated views available along roads corridors. Visibility site is limited from more distant locations by intervening buildings, including tall towers to the south and south-west.

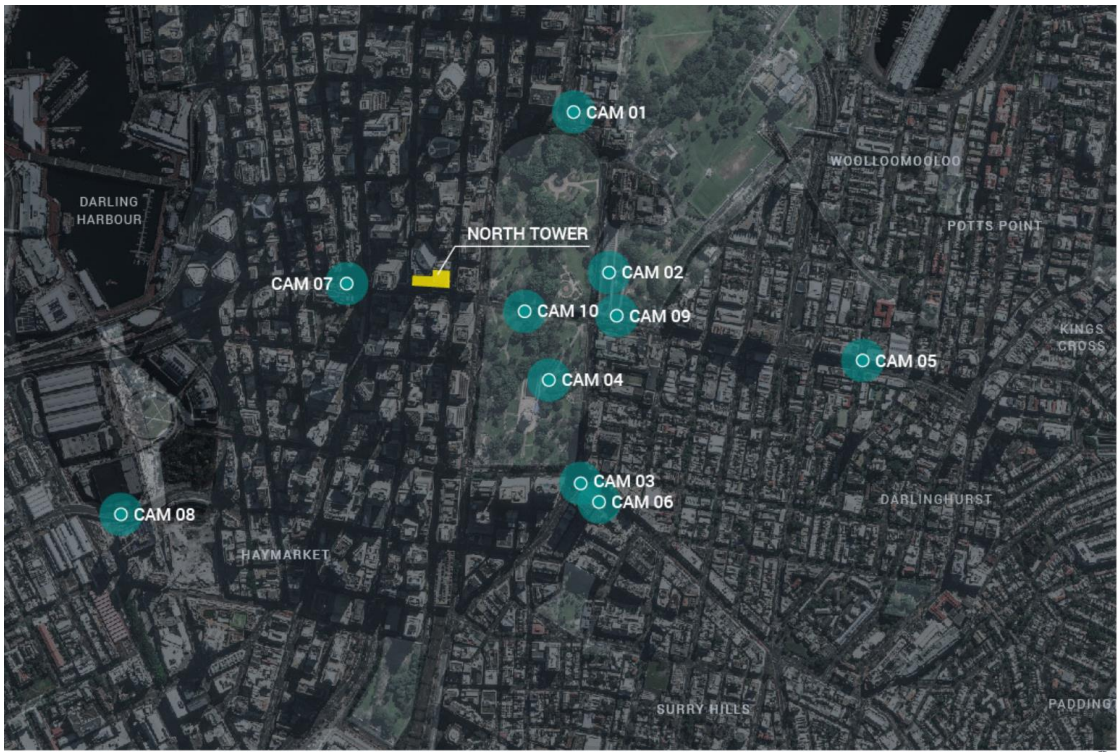
Public Domain View Analysis

The VIA provides a detailed public domain view analysis of the proposal from ten selected viewpoints around the CBD and from more distant vantage points (refer view locations at Figure 71). A summary of the public domain analysis is provided below.

- The selected viewpoints are the same as those used in the concept approval. The nature and level of visual impacts caused by the concept approval have been accepted as reasonable by the Department.
- The form, height and floor plate of the development does not significantly change or add to the extent of public domain visual impacts in comparison to the concept approval. In all public domain views, the proposal creates a similar or a lesser extent of visual effects when compared to the concept approval.
- From the closest views, the level of visual effects on the existing visual context are 'minor' to 'moderate'. From all other views, the visual impacts are minor or 'negligible', or the development is not visible.
- A viewpoint perspective from Hyde Park was the only location rated as a location of 'high sensitivity'. However, notwithstanding its importance as a public open space, the visual impacts of the proposal from this location are assessed as 'minor' in quantum and not easily discernible, and therefore rated as 'minor.
- The overall level of visual impacts on all public domain view locations is considered to be low.
- In accordance with the requirements of the SEARs, the visual impacts of the proposed built form from close views, for instance from a pedestrian perspective along Park Street, Castlereagh Street, and Pitt Street, have been assessed. The VIA concludes that the significance of the visual impacts

of the development for all public domain views are low. This was largely due to the proposal's high compatibility with urban features and with the concept approval and the site's high absorption capacity.

Figure 71 – View locations



Source: Unsigned Studio / Urbis

Private Domain View Analysis

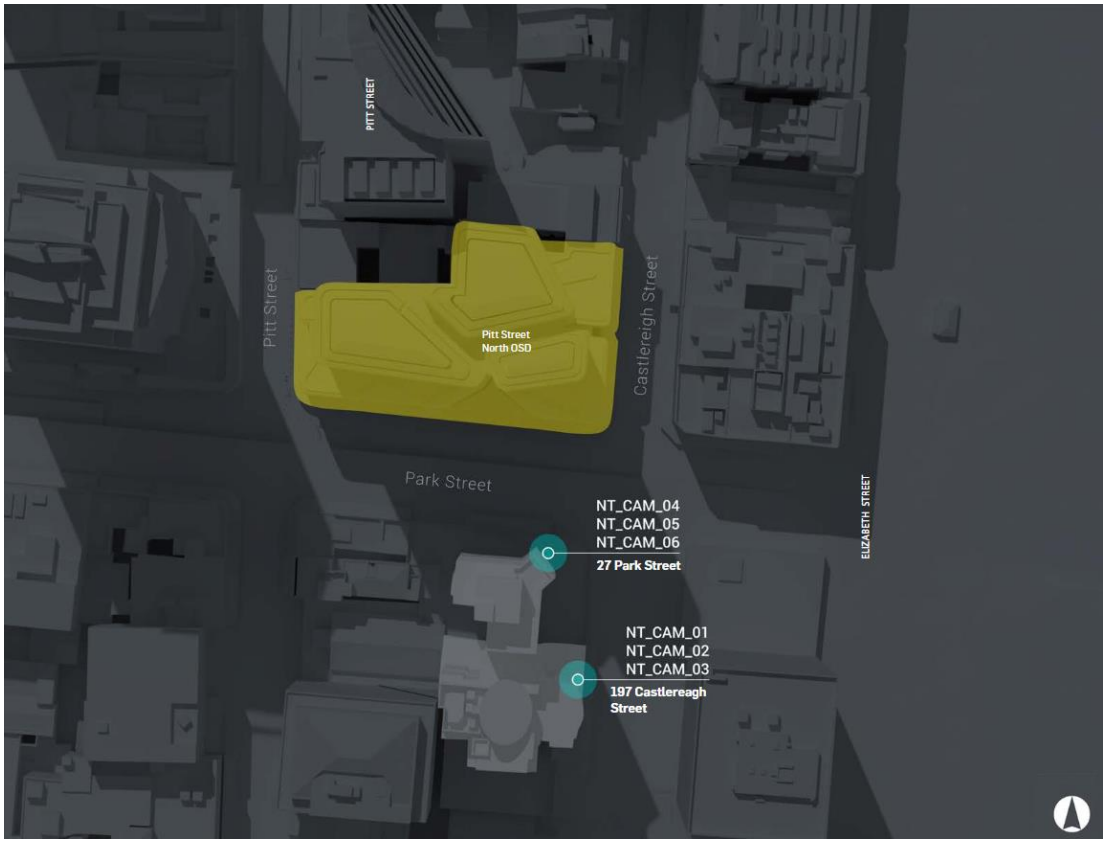
The VIA provides a private domain view analysis based on private domain views modelled in Computer Generated Images (**CGIs**) prepared by Unsigned Studios. The adopted view locations are taken from neighbouring residential buildings, including low, mid and high-rise heights from apartment buildings at No 197 Castlereagh Street and No 27 Park Street. These are the same locations used in the Stage 1 SSDA.

The following provides a summary of the private domain view analysis:

- Private domain view loss assessed as part of the concept approval were accepted as reasonable by the Department. In the analysis of viewer sensitivity, it was concluded unlikely that private domain views would be significantly affected by the proposed development.
- The height, form and floor plate of the proposed development identified in the CGIs complies with the concept approval and reduces the comparable extent of visual effects and view loss.
- In relation to all views modelled in the CGIs, the likely private domain view sharing outcome will be slightly improved as a result of the lower, stepped height of the roof form proposed and narrower tower form in all private domain views.
- Given the extent of visual effects caused by the development in all views, the VIA concludes that an assessment against the view sharing principles of *Tenacity Consulting v Warringah [2004] NSWLEC 140* (**Tenacity**) is not required. The visual effects of the development do not meet the threshold criteria to apply Step 1 of Tenacity, other than potentially for the high-rise view from No 197 Castlereagh Street. The extent of view loss is anticipated in the concept approval and is neither qualitatively nor quantitatively substantial. If the proposal was assessed in isolation and without knowledge of the extent of visual effects and visual impacts anticipated in the concept approval, a Tenacity assessment would be likely to find that view loss from the high-rise location at No197 Castlereagh Street would be minor.

It is concluded that private view sharing outcomes are reasonable and acceptable in the circumstances.

Figure 72 – Private Domain View Locations



Source: Unsigned Studio / Urbis

Visual Impact Assessment

The VIA concludes that the proposal would not result in significant change to the site's visual character, scenic quality, sensitivity of the view place, or viewer sensitivity. There would be low to medium visual exposure to most view locations, with the exception of some close views associated with higher sensitivity and higher levels of visual effects (for instance from Park Street, Castlereagh Street, and Hyde Park). However, weighed against the additional factors of visual absorption capacity, compatibility with the concept approval, and the site's urban characteristics, the resultant visual impacts of the proposed development are considered to decrease in significance and rated as 'low' for all locations modelled and analysed.

The overall visual impacts of proposal were found to be low and acceptable. The level of visual impacts caused by the proposal compared to the concept approval on the closest or most sensitive views was assessed as an appropriate outcome. The VIA concludes that a similar level of visual effects and impacts on close, sensitive views have been anticipated and approved by the concept approval.

Overall, the potential visual impacts of the proposed development on the public and private domain are considered to be reasonable and acceptable.

8.1.6. Solar Access and Overshadowing

A Solar Analysis Report has been prepared by Walsh2 Analysis and is at **Appendix E4**. The Solar Analysis Report has considered the overshadowing impact of the proposed building on the residential apartment building at 27 Park Street (Park Regis) and on Hyde Park.

Park Regis

The overshowing impact of the proposal reduces the number of units receiving two hours of solar access to their living room between 9am – 3pm from 122/182 units (67.0%) down to 61/182 (33.5%). It is noted, however, that this is an improvement from the approved concept envelope which resulted in a reduced solar compliance to 54/182 (29.7%).

Therefore, the projected solar access impacts from the proposed building result in seven additional units receiving complying solar access over and above those which would otherwise be shadowed by the approved concept envelope.

If the hours of compliance were to be expanded to 8am – 4pm, the overshadowing impact of the proposal reduces the amount of units receiving two hours of solar access to their living rooms from 175/182 (96.2%) down to 154/182 (84.6%). This calculation is compliant with Objective 3B-2 of the ADG which states *"Overshadowing of neighbouring properties is minimised during mid winter"*. It is also compliant with design guidance for that objective, which states that where an adjoining property does not currently receive the required hours of solar access, it should be ensured that solar access is not reduced by more than 20%.

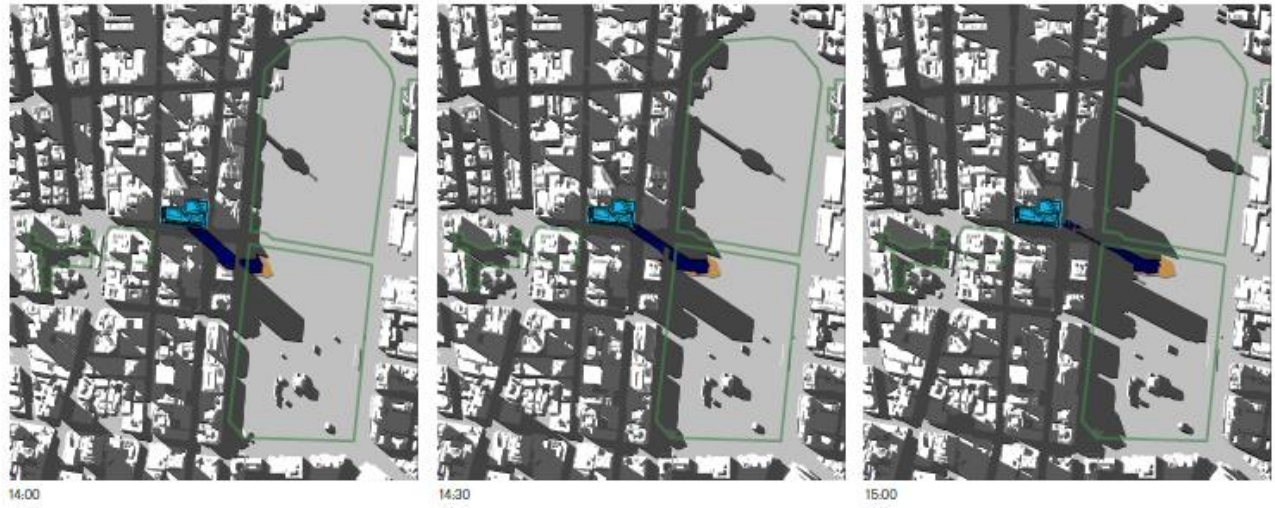
The impacts upon the Park Regis are an improvement on the Stage 1 concept approval which reduced the 8am – 4pm compliance down to 70.9% (129/182), therefore the projected solar access for the proposed building results in an additional 25 units (13.7%) receiving complying solar access.

Hyde Park

In all cases, the proposed Stage 2 building reduces the amount of overshadowing onto Hyde Park in comparison to the Stage 1 approved envelope.

On September 21, there is no overshadowing of Hyde Park until after 1.30pm. From 1.30 – 3pm there is additional overshadowing, however the amount of overshadowing is less than that of the Stage 1 envelope. Refer Figure 73.

Figure 73 – Overshadowing of Hyde Park, 21 September



During June 21, the proposed building does not overshadow Hyde Park at any time between 12pm – 3pm.

8.1.7. Ecologically Sustainable Development

An Ecologically Sustainable Development (ESD) Report has been prepared by Cundall in accordance with SEARs item 7 and is provided at **Appendix K**. The report demonstrates that the proposed commercial development is committed to achieving the following ESD targets at a minimum:

- 6 Star Green Star Design and As-Built v1.3 rating;
- NABERS minimum compliance requirements for energy and water, including:
    - 5 Star NABERS Energy Base Building rating; and
    - 3.5 Star NABERS Water Whole Building rating target.

In accordance with the SEARs, an analysis of the proposal against the principles of ecologically sustainable development set out in the clause 7(4), Schedule 2 of the EP&A Regulation is provided within the ESD Report at **Appendix K**.

The sustainability framework for the project implements both the Green Star rating scheme and the NABERS rating. Green Star assesses projects based on their performance in the categories of management, indoor environmental quality, energy, transport, water, materials, land use and ecology, emissions and innovation. The following sustainability initiatives are currently being considered throughout design development of the project:

- Efficient building services, systems, equipment and controls incorporating sub-metering for improved tracking of operational performance.
- Passive design principles to improve thermal comfort and reduce air-conditioning energy through a high-performance facade with energy-efficient glazing, insulation and fixed shading.
- Lifts with best-in-class energy efficiency performance.
- Rainwater capture and reuse for landscape irrigation.
- Close proximity to public transport and amenities.
- Sustainable timber and concrete specification.
- Low-Volatile organic compounds (VOC) paints, carpets, sealants and adhesives and low formaldehyde engineered wood products.
- Diversion of construction waste from landfill and on-site operational waste management facilities.
- A climate risk and adaptation assessment to identify practical actions to be taken to manage risks from climate impacts and make the building more resilient.

Mitigation Measures

Performance against all the relevant requirements will be tracked and implemented throughout construction and delivery of the Pitt Street North OSD development.

Overall, the development will reflect leading industry practice for commercial development by incorporating the measures documented above.

8.1.8. Access, Parking and Traffic

Aurecon has prepared a Traffic and Transport Impact Assessment (TTIA) in accordance with SEARs Item 8 and the conditions of consent for the Concept SSD DA, which is included at **Appendix V1**. A Green Travel Plan has been prepared and is at **Appendix V2**.

This report provides an assessment of the surrounding traffic and transport network following the introduction of the proposed development, provides a preliminary plan for managing service vehicles within the loading dock and summarises the framework for the management of pedestrians and traffic during the construction of the proposed development (in conjunction with the CSMP at **Appendix X**).

The report also includes a delivery service plan, swept path analysis and a Green Travel Plan (GTP).

Mode Share

Census 2016 Journey to Work data has been used to assess the current commuter travel behaviour in the proposed development area whereas the future mode share for the site has been estimated based on existing and predicted future travel patterns. The 2016 Census data confirmed that a considerably high proportion of commuters (88%) who live within Sydney are using sustainable transport to travel to work, which includes bus (11%), train (25%), tram (1%), ferry (<1%), walk (50%) and bicycle (1%). While the remaining 12% of commuters travel to work via private vehicle or taxi.

Despite the City of Sydney target for the number of bicycle trips made in the City of Sydney, as a percentage of total trips, to be 10% by 2030, we note that only 1% of commuter trips within Sydney are by bicycle. Notwithstanding, sustainable transport options remain the dominant travel mode for commuters within Sydney.

Given its proximity to the proposed Sydney Metro Pitt Street Station, the proposed OSD will directly benefit from ease of access to Sydney Metro. Together with the existing public transport network, it is anticipated that the public transport mode share to the site will increase in line with places such as Martin Place and Victoria Cross. The proposed mode share targets for the project are discussed below in the Green Travel Plan section of this EIS. However, the assessment reveals that the travel mode share for train and metro and bicycle will increase significantly given:

- The location of the new metro station beneath the commercial development;
- Limited vehicle parking spaces made available on site.

In summary, mode share to the site post development is anticipated to result in increased active and public transit methods from the already high existing situation with a decrease in private vehicle usage is expected.

Green Travel Plan

The GTP focuses on promoting strategies and providing recommendations that are relevant, feasible and likely to be effective in encouraging safe, healthy and sustainable travel choices for the future building tenants. The GTP aims to increase the proportion of building tenants using active or public transport for journey to work over time. The mode share split targeted through implementation of the GTP initiatives are as follows:

Table 19 - Target Mode Share Split

Mode	Existing Mode Share (2016 Census)	Target Mode Share %	No. of Tenant Staff	Difference
Bus	21	18	871	-3%
Train	54	35	1691	-19%
Metro	0	25	1224	+25%
Tram / Light Rail	0	4	190	+4%
Ferry	2	2	97	-
Walk	6	7	330	+1%
Bicycle	1	4	200	+3%
Car as passenger	2	3	145	+1%
Car as driver	12	1	40	-11%
Taxi	1	-	-	NA
Motorbike / scooter	1	1	46	-

The strategies identified to achieve this mode split include

- Strategy 1 – Limited on-site vehicle parking provision to 40 bays
- Strategy 2 – Provision of Facilities (wayfinding signage, security systems, EOT facilities)
- Strategy 3 – Provision of Information (weather, events, road closures, welcome package for new tenants)
- Strategy 4 – Provision of Support (sustainable travel coordinator, communal bike repair kits, partnerships with bike businesses and car share)
- Strategy 5 – Promotion of social activities and events (public walking & cycling events)
- Strategy 6 – Responsibility and Monitoring (actively monitor travel mode share)

Monitoring the use of bicycle parking and the sustainable travel mode share for the development during its operation will be crucial in understanding the effectiveness of the adopted GTP. The following initiatives are identified:

- Travel Surveys – undertake bi-annually to compare evolving trends against baseline or precedent travel mods shares. Use results to understand travel mode shifts and evaluate success of initiatives implemented.

- Monitoring of Bike Parking Utilisation – utilisation survey undertaken on a monthly basis for the first year after opening, and quarterly thereafter. Survey facility users to understand barriers and areas for improvement. Once the facility reaches 'capacity' (i.e. 85% utilisation), detailed counting of bike parking to be undertaken on a daily basis for a fortnight. If capacity is being reached on a regular (and non-exceptional) basis, this will trigger the need to investigate expansion of the bike parking facility through reallocation of car parking spaces for this use.

The GTP implementation will be managed by the building management team, who will be responsible for ensuring that the aspects that require ongoing operation and activities are carried out as recommended in the GTP. The Building management team will also manage the day to day updates as part of the GTP recommendations to continually support sustainable travel.

OSD Access Arrangements

The North OSD is proposed to have only one vehicle access to be shared between the commercial tenants and the service vehicles. This access will be located on Castlereagh Street with only right-in and right-out movements on the east side of the proposed site as shown in **Figure 74** below.

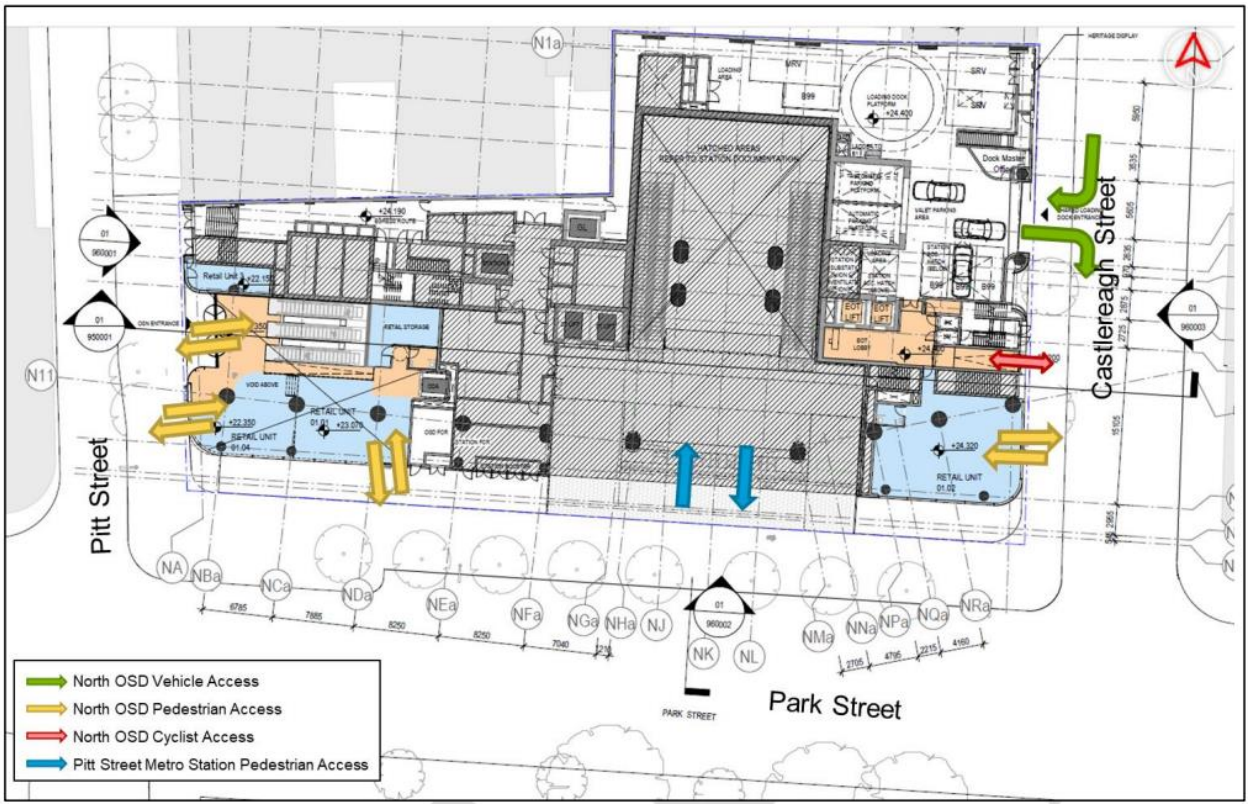
The proposed lobby entrance on Pitt Street will provide pedestrian access for OSD tenants and visitors. Retail access to various retail tenancies is available via Pitt Street, Park Street, and Castlereagh Street.

The access to the Pitt Street metro station is on Park Street. The Pitt Street metro station is anticipated to generate and attract a large volume of pedestrians that will use the access. The OSD access points are located away from the Station entrance to enhance wayfinding and reduce pedestrian and vehicular conflict.

Cyclists will access the proposed development via a dedicated access adjacent to the vehicle access to use the End of Trip (EOT) lifts to access the bicycle parking facilities on level 2.

As the pedestrian and cyclist access is proposed to be located close to the vehicle access to the south, the users are exposed to some safety risks, particularly the on-street cyclists who travel in a southbound direction will ride across the vehicle access crossover from Castlereagh Street to access the proposed development. It is recommended that awareness improvements be implemented in the area to minimise the risks, such as a warning system and convex mirrors mounted onto street poles.

Figure 74 – Proposed access locations



Source: Aurecon

Vehicular Parking Provision

The maximum car parking provision allowed for the proposed OSD development as per the Sydney LEP 2012 is outlined in **Table 20** below. The proposed OSD includes 40 vehicular parking spaces for tenants.

Table 20 – Parking Calculations

Land Use	Maximum parking rate as per SLEP2012	Proposed GFA	Maximum parking provision allowed
Office	[Land use area (GFA) x Site Area (3,150m²)] / [50 x Total GFA]	52,951m²	63 spaces
Retail	1 spaces per 90m²	1,700m²	19 spaces
	Total	**54,651m²**	**82 spaces**

The OSD has been designed to integrate with the Pitt Street metro station (with high frequency service, every 3 minutes) sitting directly beneath the site, which will significantly improve the accessibility to public transport, and private vehicle usage by tenants is estimated to be minimal. Furthermore, the OSD is expecting employees and visitors to utilise sustainable travel options (public transport and active transport) as their primary transport mode by restricting the total amount of available parking to 40 bays.

Car Lift

The automatic car lift arrangement includes two lifts accessing 40 car parking bays over two levels. To assess the potential vehicle queue that may occur at the automatic car lift, each individual stage of the vehicle journey has been considered to estimate the service rate of the automatic car park lift. The assumptions applied to the assessment of the automatic car lift are summarised in **Table 21**.

Table 21 – Car lift assumptions

Item	Assumption
Average time taken for drivers to exit/ enter the lift	30 seconds
Average time taken for the vehicle handover process	30 seconds
Average time taken for the car to be moved from the waiting area	30 seconds
Lift service rate for a single lift	21 vehicles per hour

Any queuing of cars will be managed by the loading dock manager. With two automatic car lifts in operation, the service rate is assumed to double with the use of both lifts. As OSD North is a commercial site, it is assumed that the AM peak usage of the lifts will be for inbound flow, and conversely the PM peak usage of the lifts will be predominantly for outbound flow.

Based on the queueing theory outlined in *Austroads Guide to Traffic Management Part 2: Traffic Theory*, the following summarises queueing probabilities as estimated for two lifts for the peak inbound AM Peak demand of 13 vehicles/ hour (as summarised in Table 3-4).

- 0 vehicle in queue – 69%
- 1 vehicle in queue – 21%
- 2 vehicles in queue – 7%
- More than 2 vehicles in queue – 3%

The available queuing space for B99 vehicles within the OSD North loading dock on approach to the automatic car lift is estimated for up to 4 vehicles and does not include the two vehicles already using the automatic car lift. As such, the automatic car lift is not estimated to have a significant regular impact on the adjacent corridor, road network or access to the loading dock via Castlereagh Street including the pedestrian footpath. The probability of more than two vehicles arriving at the same time is 3% which, over the hour equates to 2 minutes which is likely to clear up before the arrival of the successive vehicle to use the loading dock.

While the estimated queue that may result from the automatic car lift is kept within the development, a Loading Dock Management Plan will be prepared to outline operational measures put in place to minimise any disruption and dwell times.

Traffic Generation and Road Network Impact

Proposed peak traffic generation rates specific to the OSD (i.e. reflective of vehicles parking at the development site) have been estimated based on surveys of sites which share a similarly high accessibility to public transport. The estimated rates outlined in **Table 22** have been adopted to assess expected traffic generation associated with the development.

Table 22 – Estimated trip generation

Peak Period	Parking Provision	Trip rate (vehicles/ bay)	Proposed development trip generation
AM Peak	40 bays	0.32	13 vehicles
PM Peak		0.33	14 vehicles

The previous land use at the site included 160-170 parking bays, which was estimated to generate approximately 55 trips during both the AM and PM peak hours. The proposed development is estimated to generate a maximum of approximately 14 vehicle trips during the peak periods.

Therefore, the proposed development is likely to improve the conditions on the existing road network.

Construction phase traffic impact is addressed in Section 8.1.19 Construction Management.

Loading and Servicing

It is proposed to provide a total of seven on-site service vehicle bays designed to mainly accommodate the vehicle types below:

- 1 x Metro operational bay (B99, 99th percentile of class of cars);
- 3 x light commercial vehicles (B99, 99th percentile of class of cars);
- 2 x Small Rigid Vehicle (SRV);
- 1 x Medium Rigid Vehicle (MRV); and
- 3 x light commercial vehicle bays within the automatic car stacker (B99, 99th percentile size of cars).

No specification for service vehicle parking provision is outlined in the Sydney LEP 2012, and as such the recommendation of the Sydney DCP 2012 has been adopted. This states the objective for developments is to ensure the potential demand can be adequately accommodated on site and / or without any adverse implication external to the site.

From the forecast loading dock activity profiles prepared for the Concept DA, an indicative total maximum of 13 bays were recommended for commercial and retail land uses on the site without any management measures adopted. However, in line with the concept approval, with operational management measures in place a minimum of 6 bays are required to ensure efficient operation.

The proposed OSD incorporates 7 loading dock bays which is more than the minimum requirement. Management measures will be incorporated within the future Loading Dock Management Plan including an on-site dock manager.

The loading dock is estimated to receive the following services via the allocated bays:

- Grocery deliveries (regularly);
- Goods deliveries for retail (weekly);
- Furniture delivery (prior to opening and rarely occurring after opening);
- Waste collection (daily);
- Cleaning and maintenance service (regularly);
- Building maintenance service (occasionally);
- Mail and parcel delivery (daily); and
- Metro transformer replacement service (emergency).

Swept turning paths have been prepared which illustrate that the proposed loading area can adequately accommodate the designed vehicle movement to service the loading dock. The swept paths show that the vehicles do not require more than three points of turn to manoeuvre in and out from the bays. Loading from the SRV bays may be undertaken on the turntable and if bulky loading is required, it will be undertaken with from the MRV service bay.

With the preparation and implementation of a Loading Dock Management Plan / Delivery Service Plan the above services can be undertaken onsite without any disruption or adverse impacts to the external road network. A high-level assessment has been undertaken in this regard to understand if there will be any issues with the proposed loading dock. This has identified primary guiding principles to be integrated into the Delivery Service Plan, to minimise the overlap of the commercial tenant access and loading dock operation.

- Arrival of commercial tenants during a dedicated time period where no loading dock bookings are available (except for access to the Sydney Metro Bay) – which will be confirmed via a survey taken during the automatic car lift induction process. During the dedicated time period, the arrival of loading dock users will need to be reduced and actively managed

- Outside of this time period the loading dock will operate based on a booking system to manage loading dock arrivals and departures.

- As there may be some overlap in operational and access requirements between the northern and southern segments of the loading dock, it is recommended that loading dock arrivals are staggered such that the arrival of two consecutive northern segment vehicles (or southern segment vehicle) do not arrive to the loading dock in less than 10 minute intervals.

- A time limit is recommended to be imposed for vehicles using the loading dock which will need to be defined at the time of booking. This is assumed to be a minimum 30 minute allocation per loading bay. Based on this a total of 12 loading vehicles are able to use the loading dock per hour.

- Depending on the loading requirements including the particular priorities for delivery each day, the day to day loading strategy may change, however various scenarios have been tested to understand potential loading dock capacity. Over an 8 hour day

    - A 30 minute time allocation for loading for all vehicles will be equivalent to 96 vehicles accessing the loading dock

    - A 45 minute time allocation for loading for all vehicles will be equivalent to 72 vehicles accessing the loading dock, and

    - A 60 minute time allocation for loading for all vehicles will be equivalent to 48 vehicles accessing the loading dock

- Increasing the loading dock operating hours allows for additional vehicles to access the loading dock, which may be required to manage peak periods of operation or during times where bays are potentially unavailable due to the Metro loading requirements. To accommodate the provision of loading dock vehicles which require longer dwell times, access to three B99 bays has been allowed for within the automatic car stacker and access to these will also be booked via the loading dock booking system.

- Various contingency measures have also been considered to respond to possible incidents which may limit the operation of the loading dock or automatic car stacker.

Pedestrian Access and Movements

The proposed site is surrounded by approximately 3.3m wide footpaths along its frontages, with signalised pedestrian crossings available to the south-west at the Park Street / Pitt Street intersection and south-east at the Park Street / Castlereagh Street intersection. Footpaths of similar widths are also available along the surrounding corridors with pedestrian signal protection at signalised intersections, and at the mid blocks of corridors that have high pedestrian volumes.

The Sydney CBD has high levels of pedestrian density and demand due to the concentration of businesses in the precinct. During peak periods, the pedestrian crossings on the road network can become congested as a result of limited space provided. For the footpaths on the surrounding network of the site, there is significant pedestrian demand, including along the frontages on Park Street, Pitt Street and Castlereagh Street. Both the signalised intersections on Park Street at Pitt Street and Castlereagh Street have designated signalised pedestrian crossings on all approaches.

It is anticipated that with the ongoing implementation of the Sydney City Centre Access Strategy, as well as the future operation of a new Pitt Street metro station, there is likely to be substantial growth in pedestrian volumes on the surrounding footpaths.

The City of Sydney Council and Transport for NSW have been developing strategies to assist with prioritising pedestrians and their movements such as allocating sufficient space to support the current levels of demand, as well the estimated growth in numbers in the CBD.

The recently completed Sydney CBD and South East Light Rail includes pedestrianisation of George Street that will deliver a significant shift in the priority of spatial allocation towards pedestrians, by providing more space for people to walk between Hunter Street and Bathurst Street.

A pedestrian modelling assessment has been undertaken including a review of the footpath capacity of the network within the vicinity of the Pitt Street metro station. This includes the pedestrian entry / exit points within the proposed OSD development on Park Street and Pitt Street. The analysis adopted a 2036 peak hour scenario with 0.85% annual background growth forecast from 2015 existing demands.

The impact and operation conditions of the footpaths are measured as Fruin Pedestrian Level of Service (LoS) Criteria in two aspects; walkway and queueing. The outputs were assessed against the design requirement of a minimum performance of LoS C.

From the AM and PM peak queueing analysis, it identified that pedestrians experience up to a Queueing LoS D and the highest level occurs at the Pitt Street / Park Street intersections. The report has suggested that the high densities could be reduced by modifying the signal cycle times and changing the signal phasing/timings to favour pedestrians.

From the AM and PM peak queueing analysis, it identified that pedestrians experience up to a Queueing LoS D and this highest level occurs at the Pitt Street / Park Street intersection. The report has suggested that the high densities could be reduced by modifying the signal cycle times and changing the signal phasing/timings to favour pedestrians, noting that the Park Street / Pitt Street intersection is being widened to 10.0m as part of the Station Precinct Development.

For the AM and PM peak walkway analysis, the footpaths along the corridors are observed to generally experience Walkways LoS A to LoS C, while at some isolated areas, the pedestrians experience drops to a LoS D. Overall the pedestrian performance is considered satisfactory and the North OSD development entries along Pitt Street, Park Street and Castlereagh Street are not estimated to affect general footpath operations in the immediate surrounds, or the Pitt Street North Metro Station operations.

Cycle Access and Parking

The site is situated within the centre of Sydney CBD which presently has some cycling infrastructure, which will be further enhanced following construction of the planned cycling infrastructure, with the most notable of these the cycleway along Castlereagh Street. A Green Travel Plan has been prepared to encourage the use of alternative transport options that are available within the vicinity of the site.

The recommended bicycle parking provision required for the proposed OSD development as per the Sydney DCP 2012 is summarised in **Table 23** below.

Table 23 – Bicycle parking requirements

Land use	Bicycle parking space rates	Proposed GFA	Minimum bicycle parking provision required
Office premises	Employees – 1 per 150m²	52,951m²	353 spaces
	Visitor – 1 per 400m²		133 spaces
Shop, restaurant or cafe	Employees – 1 per 250m²	1,700m²	7 spaces
	Visitor – 2 plus 1 per 100m²		19 spaces
	Total	**54,651m²**	**512 spaces**

The North OSD has proposed to provide a staged approach to bicycle parking provision. Provision for an initial 200 spaces is allocated, with the ability to increase provision to the total requirement of 512 spaces in line with the DCP requirements as demand increases over time.

A designated area has been allocated to increase the number of bike parking spaces and EOT facilities to accommodate future demand as required. As required, the area allocated to automatic car parking will be

repurposed to provide bike parking facilities to provide increased capacity. This is proposed to be undertaken based on bike parking demand which will be regularly monitored and reported.

A lower provision for bicycle parking upon opening of the development is considered appropriate. The North OSD is a Transport Orientated Development (TOD) where a metro station is being developed below the North OSD. Typically, at TOD locations, the walking and cycling (active transport) mode share is higher than average, with walking and cycling as first/last mile options for people using public transport. Given the location of North OSD adjacent to multiple public transport options, for people living near and working at the site, it is likely that these traditionally active transport mode trips could be replaced by public transport (including short trips). This trend has been identified in the 2016 Census date which shows that 1.4% of those who work in the Sydney CBD area travel by bicycle to work, whereas a total of 77% use public transport.

It is noted that the Sydney Cycle Strategy and Action Plan 2018-2030 (City of Sydney 2018) includes a bike mode share target of 10% for the City of Sydney LGA by 2030 with interim targets in 2021 Linear interpretation of the baseline target figures equates to a target bike mode share of 4.0% in 2024. The provision for 200 bicycle spaces upon the building's opening corresponds to a mode share of 4.0% for cycling based on the estimated number of staff with the fully occupied development. In line with the above the development is targeting a significant shift in mode share for cycling, with the provision of sufficient bicycle parking to effect this change.

Furthermore, with the potential increased uptake in shared bikes in the future, these would be parked on-street surrounding the development, reducing the demand for bike parking within the development.

Mitigation Measures

Implement the Green Travel Plan as part of the ongoing building operation and management procedures, to target travel mode shift towards active and public transport modes.

While the estimated queue that may result from the automatic car lift will be kept within the development, a Loading Dock Management Plan will be prepared to outline operational measures put in place to minimise any disruption. This will also detail the measures to manage commercial tenancy vehicle and loading dock vehicle access and conflict and will stipulate management measures to avoid loading dock access conflict.

The preparation and implementation of a Loading Dock Management Plan will ensure loading and servicing can be undertaken onsite without any disruption or adverse impacts to the external road network.

To provide for increased bicycle parking demand over time, car parking spaces accessed via the car stacker can be converted to bicycle spaces as required.

To minimise pedestrian / cycle / vehicle conflict along Castlereagh Street at the loading dock entrance, It is recommended that awareness improvements be implemented in the area to minimise the risks, such as a warning system and convex mirrors mounted onto street poles.

The ground floor of the building is set back from the Park Street boundary along this frontage to increase the width of the available footpath.

8.1.9. Structural Engineering

A Structural Design Statement has been prepared by Aurecon (**Appendix AA**) outlining the key structural elements of the PSN OSD, coordination of structural and services requirements and coordination of the PSN OSD and Pitt Street metro station structure.

The new Pitt Street Station is a 'binocular' cavern station located beneath Pitt and Castlereagh Streets between Park and Bathurst Streets.

Aurecon have identified that all structures will achieve compliance with the following design criteria:

- All current relevant Australian Standards (including in relation to design loads, wind loads, earthquake loads, floor deflection and building movement)
- National Construction Code 2019;
- A fire rating level (FRL) of 120/120/120;
- The station (including OSD tower structure running through the station box) is designed to have a 100-year design life; and

- The OSD (level 5 and above), is designed to have a 50-year design life.

Structural Design

The Pitt Street North OSD is a reinforced concrete braced frame structure that is consistent with the structural philosophy of the Pitt Street Station. The interface between the Pitt Street Station and the OSD occurs at level 5. However, there is an overlap of function between the station and the office tower between the Basement level 1 through to level 5 that includes a substation, tower lobby, loading dock, car stacker and goods lift.

The proposed structural solution ensures that there are no tower column transfers through any floor plates with the columns having a direct load path through to the foundation. This has been achieved either through coordination of tower columns through the station box or discontinuation of columns through the podium cores. This approach has ensured that there is no adverse impact of deep transfer beam members affecting space planning of the station. The podium columns that support the podium floor plate extent, extend between the interface level 5 and subsequently transfer or continue through to the foundation. The columns have been considered to use conventional methods of construction using prefabricated formwork (form-a-tube).

The lateral load-resisting system has been designed to resist wind and earthquake loads for both strength and serviceability requirements, as well as to satisfy robustness requirements.

The tower low-rise and high-rise lift core is transferred above the station north escalators and is supported by the perimeter escalator box walls and four lozenge mega-columns. These mega-columns penetrate through the station box escalators. The core transfer consists of a grillage of transfer walls that form the low-rise and high-rise lift pits and subsequent tower core. The core transfer structure has provided ultimate flexibility to the Pitt Street North OSD allowing improved spatial planning. The construction of the transfer wall grillage is complex and requires a unique construction solution.

In summary, the proposed development has been endorsed for its structural integrity and merit in design including efficient spatial planning, taking into account the new metro station to be constructed below (designed and approved under the CSSI approval).

Mitigation Measures

Compliance with all relevant Australian Standards and NCC 2019.

8.1.10. Wind Assessment (Pedestrian Safety and Comfort)

A Wind Impact Assessment has been prepared by RWDI Anemos Ltd **(RWDI**) and is provided at **Appendix O**. The report includes wind tunnel testing which was undertaken to determine the potential wind impacts on the pedestrian wind environment and assesses pedestrian wind safety, comfort and amenity in and around the development site. In particular, the assessment related to footpaths, entrances (building and metro), plazas and the podium terraces.

The report has been prepared in accordance with SEARs requirement which required a wind assessment based on wind tunnel testing to identify potential impacts and required measures to ameliorate these impacts at the ground and podium levels. Similarly, the assessment adopts the Lawson Comfort Criteria as per the requirements of Condition B11 of the Concept SSD DA. The wind comfort criteria utilised for the proposal is based on the conditions of different site users and the intended uses, surrounding built form elements and similar project examples in the context of the Sydney CBD.

The key findings and conclusions from the wind tunnel testing are outlined below.

Ground level

Wind conditions within and around the subject development are predicted to be calm with wind speeds at most locations assessed, including the main building entrances, expected to meet the criteria for Pedestrian Sitting or Pedestrian Standing in the summer and winter months. Wind speeds at one location across Park Street, south of the project, are predicted to meet the criteria for Pedestrian Walking in the summer. Wind conditions at all locations assessed meet the recommended criteria for Pedestrian Safety.

Level 10 and 11 Terraces

The wind conditions at most locations on the Levels 10 and 11 terraces areas (on the eastern, southern and western aspects) are predicted to meet the criteria for Pedestrian Sitting or Pedestrian Standing, and therefore, are acceptable for the passive occupant use throughout the year.

The southeast corner of the Level 10 terrace is predicted to meet the criteria for Pedestrian Walking or Business Walking during the summer period, however it may exceed the prescribed safety threshold for limited periods. The conditions in this location are however predicted to be calm during the winter period.

The summer conditions may affect the comfort of users of this area of the terrace, which is only accessible by the tenants of that floor. Impacts to tenants will be mitigated through management measures with the tenant. The planter and landscaping details were not modelled for the wind study, in order to assess the worst-case wind conditions. The trees and landscaping which are detailed in the Stage 2 design, located at the north end of Level 11 and the east and southeast portions of Level 10, are expected to reduce the wind speeds and improve conditions on the terraces including the southeast corner of Level 10.

8.1.11. Reflectivity

Inhabit have prepared a Reflectivity Report (**Appendix N**) to assess the potential impact of reflected glare on traffic and pedestrians surrounding the proposed OSD development.

The proposed development has been modelled in 3D modelling software Rhino, along with buildings surrounding the site, to assess the potential impact of reflected glare on traffic and pedestrians travelling along the following key road networks:

- Pitt Street;
- Park Street; and
- Castlereagh Street.

The Holladay formula was used to determine the risk of glare due to light reflections from the proposed building. A veiling luminance (LVL) of 500 candelas per square metre (Cd/m²) was used as the limit.

The assessment assumes specular type reflective façade surfaces, where the reflected ray angle is equal to the incident solar ray angle. It assumes that the equivalent veiling luminance is only calculated for periods of the day when the sun's azimuth is either +/- 90˚ of the various aspects of the proposed development i.e. it cannot be calculated when the sun is behind the façade.

A sunny clear sky condition has been used in the glare analysis, which represents a conservative scenario for the risk of glare. An overcast (or polluted) sky will reduce the intensity of direct solar reflections thereby reducing the risk of glare. The assessment has been based on a maximum external reflectance of 16%.

Assessment has been carried out for hours 5am to 7pm, on the 21st day of each month of the year. The 21st has been considered to account for the summer and winter solstices. All months have been assessed to account for differences in façade orientations and sun location. This time resolution provides an adequate representation on the impact of glare across the year.

Reflected glare impacts (veiling luminance results) on motorists and pedestrians based on the orientation of travel are summarised in Table 24.

Table 24 – Summary of reflectance by proposed OSD

Travel Direction	User Type	% Total Hours per Year Above Practical Limit	Maximum Veiling Luminance (Cd/m^2)
Pitt Street, Travelling North	Drivers and pedestrians	0%	≤ 500
Pitt Street, Travelling South	Pedestrians only	0%	≤ 500
Park Street, Travelling West	Drivers and Pedestrians	-0.5% (0% based on reflectance ≤3.2%)	≤ 500 based on reflectance <3.2%
Park Street, Travelling East	Drivers and pedestrians	0%	≤ 500
Castlereagh Street, Travelling South	Drivers and pedestrians	0%	≤ 500
Castlereagh Street, Travelling North	Pedestrians only	-0.4%	≤ 500

The analysis has shown that no glare risk is predicted based on the preliminary intent for the various façade materials.

8.1.12. Noise and Vibration

An Acoustic and Vibration Impact Assessment has been prepared by Renzo Tonin & Associates and is included at **Appendix U**. The report presents an assessment of noise and vibration intrusion into, and operational noise from, the proposed commercial OSD.

The existing and proposed conditions were assessed against the Council's Development Control Plan, *State Environmental Planning Policy (Infrastructure)* 2007 and Australian Standards.

The study examines the effects of external noise intrusion on the proposed development from nearby ambient noise such as traffic noise and noise from the surrounding premises including both residential and commercial properties.

Rail (Metro) vibration was assessed against the Department of Planning publication *"Development Near Rail Corridors & Busy Roads – Interim Guideline"*. The isolation of noise and vibration from Sydney Metro will occur at the source (under the CSSI), not within future OSD, and would adequately attenuate structure-borne rail-induced noise and vibration in the OSD to acceptable levels.

Measuring noise and vibration

Extensive long-term noise monitoring was undertaken and correlated with short term noise monitoring to determine the existing noise situation. Noise loggers were located at specific locations to measure the external traffic noise levels and determine the sound insulation rating requirements for the external building elements in accordance with the acoustic criteria nominated for the development.

The assessment identified the following potential acoustic items as affectations:

- Existing traffic and urban noise from Pitt, Castlereagh and Park streets intruding into the development;
- Future vibration and ground borne noise associated with the operation of Sydney Metro;
- Noise associated with surrounding other commercial premises intruding into the development;

- Mechanical services noise emission from the proposed commercial building; and
- Noise and vibration emission from construction activities and equipment.

Based on the proposed uses and spaces of the development, the assessment has revealed measures to be adopted as outlined in the following sections.

Control of external noise

Given that the development is a commercial office premise, the acoustic performance of the glazing is based on general office areas. The following table presents the recommended glazing acoustic performances for the proposed development (assuming windows closed).

Table 25 – Recommended acoustic performance of glazing assembly

Commercial Facade	Levels	Occupancy	Required Acoustic Rating of Glazing Assembly, Rw
Pitt Street Façade (west)	Level 1 and above	General office areas	Rw 34
Park Street Façade (south)	Level 1 and above	General office areas	Rw 34
Castlereagh Street Façade (east)	Level 1 and above	General office areas	Rw 34
Northern Façade (not fronting a street)	Level 1 and above	General office areas	Rw 31

Wherever laminated glass is recommended the design should also include special acoustic grade seals installed on windows and perimeter doors exposed to road traffic noise.

Control of noise emission

The project amenity noise levels for different time periods of a day are determined in accordance with the Noise Policy for Industry (NPfI). The NPfI recommends amenity noise levels (LAeq, period) for various receivers including residential, commercial, industrial receivers and sensitive receivers such as schools, hotels, hospitals, churches and parks. These “recommended amenity noise levels” represent the objective for total industrial noise (including commercial and retail use) experienced at a receiver location. However, when assessing a single development and its impact on an area, “project amenity noise levels” apply.

To ensure that the total industrial noise level (existing plus new) remains within the recommended amenity noise levels for an area, the project amenity noise level that applies for each new industrial noise source is determined by various criteria.

The following table (**Table 26**) presents the site-specific noise production criteria from industrial noise sources, namely mechanical plant from the commercial component of the development.

Table 26 – Project noise trigger level

Time of Day	Rating Background Level (RBL)	Intrusiveness Trigger Level (RBL + 5)	Recommended Amenity Noise Level (RANL)	Project Amenity Noise Level (PANL) RANL-5	Measured existing noise levels	Traffic noise exceed the RANL by more than 10dB?	Project Noise Trigger Level
Day (7am- 6pm)	59	64	60	55	63	No	55
Evening (6pm- 10pm)	57	62	50	45	60	No	45
Night (10pm- 7am)	53	58	45	40	57	Yes	40

Where necessary, noise amelioration treatment will be incorporated in the design to ensure that noise levels comply with the recommended NPfI noise emission criteria noted above.

Mechanical Plant

As details of mechanical plant have not been finalised, acoustic assessment of mechanical services equipment will be undertaken during the detail design phase of the development to ensure that they shall not either singularly or in total emit noise levels which exceed the noise limits in NPfI and Council's requirements.

Mechanical plant noise emission can be controllable by appropriate mechanical system design and implementation of common engineering methods that may include any of the following:

- procurement of 'quiet' plant;
- strategic positioning of plant away from sensitive neighbouring premises, maximising the intervening shielding between the plant and sensitive neighbouring premises;
- commercially available silencers or acoustic attenuators for air discharge and air intakes of plant;
- acoustically lined and lagged ductwork;
- acoustic screens and barriers between plant and sensitive neighbouring premises and/or partially-enclosed or fully-enclosed acoustic enclosures over plant;
- Mechanical plant shall have their noise specifications and their proposed locations checked prior to their installation on site; and
- Fans shall be mounted on vibration isolators and balanced in accordance with Australian Standard 2625 "Rotating and Reciprocating Machinery – Mechanical Vibration".

Construction

A detailed Demolition, Excavation and Construction Noise Management Plan is to be prepared for the site prior to the issue of a Construction Certificate to comply with Condition B15 and detailing the site specific plant and equipment to be used, expected periods of construction, and noise and vibration management treatments and procedures to be implemented.

Construction noise is to comply with the City of Sydney Council's Code of Practice 1992 *"Construction Hours/ Noise within the Central Business District"* including the 1997 Erratum.

All construction undertaken outside of normal working hours (Monday to Friday, 7.00am to 7.00pm and Saturday, 7.00am to 5.00pm) shall be carried out in accordance with the requirements outlined in Council's Code of Practice.

If extended hours of construction are sought, then the construction noise will be required to conform to the noise criteria, as described in the Code. The Code requires that the average maximum noise level (LA av max) emitted from activities at the construction site and measured over any 15 minute period at any potentially affected location, must not exceed the background noise level by more than the level specified.

Where all control measures have been implemented and the resultant noise levels at any noise sensitive receiver are still in exceedance with the council's noise criteria stated in the Construction Hours/Noise Code 1992 and are giving rise to sustained complaints then the contractor must provide regular, appropriate and sustained periods of respite.

Construction noise is also to comply with the EPA *Interim Construction Noise Guideline* (ICNG) in 2009 which sets out construction noise management levels and how they are to be applied. The guideline intends to provide respite for residents exposed to excessive construction noise outside the recommended standard hours whilst allowing construction during the recommended standard hours without undue constraints. The EPA recommended standard hours are Monday to Friday 7 am to 6 pm, Saturday 8 am to 1 pm and no work on Sundays or public holidays.

Mitigation Measures

- An assessment of noise emission from mechanical plant equipment servicing the building is to be undertaken during the detailed design and equipment selection stage and appropriate acoustic treatments incorporated to ensure noise emission complies with:
    - Standard Conditions of Development Consent from the City of Sydney Council
    - Adherence to 'Project specific noise trigger levels' as determined in accordance with the NSW EPA Noise Policy for Industry (NPfI)
- Supervision of the construction/ installation of mechanical plant and equipment acoustic treatment by an acoustic engineer.
- Compliance testing by an acoustic engineer following the installation of the plant is to be undertaken.
- Noise associated with the operation of a licensed premises (restaurants, wine bars or the like) should be assessed in accordance with the requirements of the Liquor and Gaming NSW (L&GNSW) standard noise condition.
- A detailed Demolition, Excavation and Construction Noise Management Plan is to be prepared for the site prior to the issue of Construction Certificate. The plan will include the following:
    - site specific plant and equipment to be used
    - expected periods of construction,
    - noise and vibration management treatments and procedures to be implemented.
- Construction noise is to comply with the City of Sydney Council's Code of Practice 1992 "Construction Hours/ Noise within the Central Business District" including the 1997 Erratum and the EPA's Interim Construction Noise Guideline (ICNG) 2009.
- The Pitt, Park and Castlereagh streets facades shall provide acoustic glazing to meet RW34. The northern façade is to provide acoustic glazing to meet RW31 as it does not front onto a street.
- Acoustic grade seals should be installed on office windows and perimeter doors exposed to road traffic noise.

8.1.13. Stormwater Management

CJ Arms have prepared a Stormwater Management Plan attached at **Appendix S2** which sets out the stormwater management works associated with the proposed Pitt Street North OSD.

Key components of the proposed OSD Stormwater Management Plan are outlined as follows:

- As part of the OSD works, the new legal point of discharge is to a new 900 x 900mm City of Sydney (CoS) stormwater pit on Park Street. The new pit is to connect to an existing CoS stormwater pit on the corner of Pitt Street and Park Street at a location yet to be finalised, and is to be designed to CoS requirements and specifications.

- All existing kerb and gutter connections serving the site are no longer being used and are to be made redundant once their associated drainage has been disconnected during the demolition process.
- Site stormwater storage is driven by Sydney Water requirements for Permissible Site Discharge to not exceed 116L/s for up to a 1 in 100 year event. In order to meet this requirement, an On-Site Detention System is needed to capture, store and controllably discharge the difference between the Q100 flow (206L/s) and the Permissible Site Discharge (116L/s). Therefore, the following is required:
    - On-site detention volume of 49kL, which is located on level 9.
    - All flows beyond the 1 in 100-year event are to be via a piped overflow to discharge to the atmosphere at high level in the loading dock. These flows then drain on to Park Street and into the culvert to the west of the site on Pitt Street.
- Stormwater Treatment Train including:
    - Roof water capture, which is reused for toilet flushing in public amenities and landscape irrigation.
    - Banks of media filter cartridges (Ocean Protect Stormfilter ™).

Mitigation Measures

As part of the site's WSUD strategy, regular maintenance will need to be undertaken to ensure the system's continued operations.

8.1.14. Flooding

A Flood Impact Assessment Report has been prepared by Aurecon and is at **Appendix S1**. The design of all station, OSD, retail and critical room entry points takes into account the flood protection requirements of relevant industry documents as set out in the report.

All pavement modifications associated with the station are addressed via the CSSI DA and the RMS Works Authorisation Deed.

The design addresses compliance with the City of Sydney's Interim Floodplain Management Policy and the level of the Pitt Street North OSD ground floor entries have been designed as a minimum to sit above the 1% Annual Exceedance Probability (AEP) flood event.

The updated flood model has been run for both the existing pavement levels as well as the proposed design pavement levels. These have been compared to determine the impact of the proposed pavement changes on local flooding in the area during the 1% AEP event. The impact has been assessed as acceptable and within guidelines.

All pavement modifications associated with the Sydney Metro Pitt Street Station are addressed via the Critical State Significant Infrastructure (CSSI) DA and the RMS Works Authorisation Deed (WAD).

8.1.15. Building Code of Australia (BCA)

Philip Chun has undertaken an assessment of the proposed OSD against the Deemed-to-Satisfy (DTS) provisions of the relevant sections of the Building Code of Australia (BCA) and applicable Building Regulations (**Appendix P**).

The assessment identifies a number of matters which are considered "compliance readily achievable" with a recommendation of what is required to achieve compliance. The alternative solutions will be assessed against the performance requirements of the BCA by a suitably qualified person at the relevant subsequent Construction Certificate stage.

Overall, the OSD detailed design is capable of complying with the relevant requirements of the EP&A Act, the Regulation and the BCA through a combination of deemed-to-satisfy provisions and performance-based solutions. Compliance is subject to resolution with the recommendations provided by Philip Chun and further detailed regulatory reviews which will be undertaken throughout the design development stage. These matters do not preclude issuing of Construction Certificate as they will be resolved prior to construction.

8.1.16. Accessibility (DDA Compliance)

Philip Chun has assessed the proposed OSD with regards to accessibility objectives under the BCA, *Disability (Access to Premises – Buildings) Standards 2010* (Premises Standards), and the relevant Australian Standards as they relate to access to premises and the spirit and intent of the *Disability Discrimination Act 1992 (Cth)* (Refer to **Appendix Q**).

The assessment provides advice and strategies to maximise reasonable provisions of access for people with disabilities to ensure the development achieves DDA compliance as part of the detailed design phase. In many instances, the report provides recommendations, indicating that the current design is readily available to provide compliance with the relevant DDA requirements subject to ongoing refinement through the design development stages.

Accessible carparking, designed and constructed in accordance with AS 2890.6 (2009), is required to be provided at the ratio of one space per every 100 car parking spaces or part thereof. A car stacker system is proposed. Philip Chun Accessibility will explore the possibility of accepting the car stacker system under a performance solution during subsequent detailed design development stages.

In conclusion, the detailed design of the proposed OSD will be capable of complying with the applicable accessibility requirements of the DDA Access to Premises Standards 2010, relevant Australian Standards and requirements of the BCA pertaining to residential units, retail tenancies, building access, common area access and sanitary facilities.

8.1.17. Fire Safety

Warrington Fire have undertaken a Fire Engineering Review which analyses the operational compatibility of the fire and safety systems for the proposed OSD and uses within the CSSI 'metro box' (**Appendix R**). Fire systems between the OSD and Sydney Metro are required to be independent. The OSD North Tower will be separated from the station building by a combination of vertical and horizontal fire and smoke rated construction instead of vertical fire walls. The station and OSD towers will be treated as separate buildings for the purposes of approvals.

The Fire Engineering Review outlines an extensive list of fire safety measures for the detailed design of the both the OSD and CSSI 'metro box' to achieve compliance with the relevant performance requirements of the National Construction Code (**NCC**). The requirements of the fire safety measures will be further reviewed and developed following the completion of a detailed fire safety engineering assessment and further consultation with Fire and Rescue NSW to determine whether additional measures are required.

Where relevant deemed to satisfy (**DTS**) provisions of the NCC are not suitable, and compliance cannot be satisfied, alternative performance solutions have been developed to demonstrate an acceptable level of fire safety can be achieved.

As concluded within the Fire Engineering Review, it is possible to develop performance solutions for the issues identified to demonstrate compliance with the relevant performance requirements of the NCC without significant changes to the proposed OSD design. The details of the proposed performance solutions are subject to the outcome of the fire engineering brief and analysis, which will be carried out generally in accordance with the International Fire Engineering Guidelines.

The performance solutions for the building will be developed as part of the ongoing design and development process and documented in a format suitable for submission to the relevant approval authorities. Overall, the Fire Engineering Review addresses the relevant SEARs items and the Conditions of Consent (B13) of the Concept Plan approval.

Mitigation Measures

Consultation with Fire and Rescue NSW will be ongoing and will be incorporated as part of the construction issue documentation. This includes finalisation of the separation of fire services between the station and OSD tower which are to be treated as different buildings.

Compliance with 2018 NCC and all relevant Australian Standards.

The zoning and cascading of the station and OSD North emergency warning intercom system (EWIS) will be developed in consultation with Sydney Metro to mitigate adverse impact on the train operations in the event of a fire alarm in the OSD North tower.

8.1.18. Waste Management

An Operational Waste Management Plan (WMP) has been prepared by TTM (**Appendix T**) and a summary of construction waste management principles has been prepared by CPB within the Construction and Site Management Plan at **Appendix X**. Together these outline the operational and construction waste management principles associated with the Pitt Street North Station OSD.

These reports outline estimated waste generation/volumes (including recyclables) and are intended to guide management, minimisation and storage requirements which reflect best-practice requirements and promote strong sustainability initiatives.

Operational Waste

The primary waste streams expected to be generated by the ongoing operation of the total development are summarised in **Table 27**.

Refuse bins will need to be transferred for collection by either the building manager or a refuse collection vehicle operator. This will be outlined within a future Operational Management Plan or as a condition of development consent.

A (goods) lift for bin transfer is provided, connecting the refuse rooms with the loading dock. Refuse will be collected by private refuse collection contractors using MRVs as per the maximum demand frequency noted in **Table 27** below. The final number of collections per week will depend on the actual waste generation and will also be subject to final design.

Table 27 – Summary of operational waste generation and management requirements

Type of waste	Retail L/week	Retail L/week	Total bins for collection	Collection Frequency
General Waste	6,866	8,768	4 x 1100L	5-7 per week
Co-mingled recycling	8,425	23,381	4 x 1100L	5-7 per week
Cardboard Recycled Office Paper	13,869	11,691	Cardboard baler producing 2-3 x 100Kg bales 9 x 240L	3 per week
Glass	4,050	-	8 x 60L	3 per week
Secure Office Paper			1 x 240L per office level (as required)	As required
Food Waste	3,821	3,507	1 x 6000L tank (using food waste system)	1 per week

Generally, the refuse rooms provided are suitably sized to accommodate the waste generated within a 24 hour period with the number of bins and waste management equipment proposed based on a combination of standard and volume minimisation, storage and collection methods.

Two rooms are located on level 2 for storage of retail waste and recycling streams. The northernmost room has been configured to hold standard 1100L general waste bins and placement of a food waste macerator (or similar). The southernmost room is dedicated as a centralised recycling minimisation and storage area, and includes 1100L co-mingled bins, a cardboard baler for cardboard, soft plastics baling and a glass crusher.

The total space provided also accounts for storage of full bins for crushed glass and bale storage on pallets at ground level (no stacking). Storage of infrequently generated waste such as bulky items and electronic waste will be undertaken within the offices of retail tenancies and moved to the loading bay for collection in coordination with the building management.

The fit out of retail tenancies is not included within this SSD DA and will be subject to individual tenant fit outs. Each office tenancy will typically include space for 240L secure recycling bins in proximity to printers and potentially small recycling bins adjacent to individual desks. General waste bins will typically be located within kitchen or kitchenette areas.

Retail tenancies will have allowance for placement of bins within the back of house areas for disposal of all waste and recycling streams. This will be finalised within the fit-out design for each retail operation.

Waste will be transferred from each floor to the level 9 (office paper waste) or level 2 (general waste) waste rooms as required by building cleaning staff. Food waste will be stored and processed within the level 2 storage room.

Waste from the level 2 and level 9 waste storage rooms will be transferred to the ground level waste storeroom adjacent to the loading dock. The ground level waste storeroom includes space for the temporary storage of processed waste (cardboard bales, glass (crushed) and food waste (storage tank, bags or bales to be determined). Station refuse will be transferred from the basement level 4 waste room to be temporarily stored in the ground level waste storeroom prior to collection.

All refuse will be collected on-site from the MRV bay within the loading dock on the ground level of the building accessed via Castlereagh Street. Waste storerooms have been configured to hold waste generated over a 24 hour period and for collection 5-7 days a week depending the waste stream and operation of the building.

In conclusion, the operational WMP indicates that the detailed design of the OSD has sufficient space within the allocated waste storage rooms to accommodate the estimated waste generated by the future use and development across the site.

Construction Waste

In order to minimise construction and demolition waste the following waste management initiatives are proposed for this development:

- Rubbish bins will be provided to all work areas and will be regularly removed to the central skip bin location by the subcontractors for collection and transport from the site to the waste recycling facility. Bins will be moved via the man and materials hoists or by the crane, dependant on the where they are being loaded from, and the waste material being removed from the site. Crane lifted steel bins will be used to service the top floors where structure trades are working, and large Otto bins will service the lower levels where fit-out and service trades are working. The site skips will be centrally located at loading dock zones to ensure an easier pick up by our bin contractor.
- The rubbish will be separated at an approved waste management centre. Auditable records will be kept of quantities of all materials both recycled and disposed to landfill. Records will be monitored to ensure that recycling targets are achieved.

Waste management initiatives extend to the on-site office, including:

- Paper, bottle, plastic (co-mingle) and printer cartridge recycling.
- 80% recycled paper for photocopiers with default B&W, double-sided printing.
- Reusable cups, utensils and plates to eliminate plastic and paper kitchen supplies.

CPB Contractors will continue to develop the Construction Waste Management Plan as part of the detailed design phase to provide the ongoing maintenance of a clean, clear and safe working environment.

Mitigation Measures

The Operational Waste Management Plan will be updated through the detailed design and construction phases to refine detailed operation al waste practices for the building.

The Construction Waste Management Plan will be refined during the detailed design phase to reflect proposed construction staging and operations.

8.1.19. Construction Management

A Construction and Site Management Plan (CSMP) has been prepared by CPB Contractors (**Appendix X**) which details the procedures and processes associated with the construction methodology for the proposed development.

For the purposes of a cumulative and contextual assessment, the CSMP addresses the integrated station development across the site. Where items fall outside of the SSD DA scope and are regulated through the CSSI approval, it is noted in the report that the item is outside the scope of the OSD application.

CPB Contractors have been engaged to construct the station works, which are approved under the CSSI Application and the OSD works (subject to this SSD DA) to enable the seamless interface between the two construction programs. As such the construction management of the OSD will be in alignment with and will not conflict with construction work required for Sydney Metro and the Pitt Street Station.

It is intended that the OSD works will be carried out over a duration of approximately 25 months, with a planned start date of October 2021.

All construction works will be undertaken from within the site, with site hoarding erected to enclose and secure the site from public access and for site safety. Works zones will be sought at the site frontages as required. The planning of the scaffolding and perimeter screens has taken into consideration the surrounding buildings and in particular the works required alongside the National Building and NSW Masonic Club. Where the scaffolding or perimeter screens overhang the site boundary, arrangements will be entered into for site access.

The CSMP will be expanded upon and refined during the detailed design and construction preparation phase.

Construction Pedestrian and Traffic Management Plan (Preliminary CPTMP)

As part of the CMP, CPB Contractors have prepared a preliminary Construction Pedestrian and Traffic Management Plan which details the likely traffic movements and routes during the construction of the development, and proposed management for:

- construction vehicles including staff movements;
- the maintenance of pedestrian links and routes around the site;
- road safety audits; and
- any cumulative activities / work zones operating simultaneously.

Construction vehicles will enter the site by turning right-in and exit the site by turning right-out from both Pitt and Castlereagh Street driveway access points. This will ensure no conflicts with the general traffic flow given that both Pitt Street and Castlereagh Street are one-way streets. An on-street work zone is proposed on Park Street for a length of approximately 30m in the kerbside lane. Construction vehicles will enter and exit the Park Street work zone in a forward-in and forward-out manoeuvre in the direction of traffic flow.

A turntable will be located within the site at all access driveways which will permit heavy vehicles to enter the site forward-in and exit the site forward-out.

The road network capacity will not be reduced as the proposed access points are provided close by to traffic signals which will generate sufficient gaps in traffic to enable heavy vehicles to safely exit the site.

A traffic controller will be located on Pitt Street and Castlereagh Street to assist truck egress movements by finding suitable gaps in the traffic stream.

At site access points, visibility towards pedestrians approaching from the north and south directions exceed the 55m desirable sight distance requirement as per AS2890.1:2004. Under all circumstances, pedestrian movements on the footpath across the site access would be managed by traffic controllers and concertina gates. No permanent sight obstruction is located within this sight distance. Therefore, it is deemed as satisfactory.

The largest construction vehicle to enter the site would be a rigid heavy vehicle (concrete mixer) with an overall length up to 8.7m. The largest vehicles to access the on-street work zones would be a 22m semi-trailer and 150-tonne mobile crane. Articulated vehicles (including semitrailers) are not permitted in the CBD unless accepted under a separate approval sought by a Temporary Works Application. A Temporary Works

Application would be submitted to the City of Sydney a minimum of 48 hours (2 working days excluding weekends and public holidays) prior to the proposed start date of works.

Traffic management and control will be established for each road and interface area across the project site. Control and mitigation measures include traffic controllers, warning lights and pedestrian boom gates at all site access/egress and construction zones to ensure:

- Segregation of the public from truck movements;
- Segregation of construction worker access from construction vehicle access;
- Materials and deliveries do not impede public roadways or footpaths; and
- Coordination of truck movements to and from the site.

Pedestrian and vehicle movement control proposed around the site is illustrated below.

Figure 75 – Indicative Pedestrian and Vehicle Movement Control

Source: CPB

As there is no parking available on site, subcontractor and construction worker access to the site will be encouraged through the use of existing public transport networks as part of the GTP.

The preliminary Construction Pedestrian and Traffic Management Plan is currently under iterative development in conjunction with the relevant authorities to identify, document and implement the strategy for managing pedestrian vehicular traffic construction movements for the precinct. This document will be updated accordingly, as required.

Impacts on Adjacent Development

During construction, CPB Contractors will be required to establish ambient background noise levels based on existing noise sources, or where not feasible conduct baseline noise monitoring prior to construction work commencing to enable ongoing monitoring of construction noise levels during the construction of the proposed development.

CPB Contractors commit to routine inspections of plant and equipment to ensure performance relative to compliance requirements. When planning for construction work that will likely result in vibration, all practical efforts to protect vibration sensitive buildings, including the amenity of adjoining heritage buildings, must be considered and mitigation measures must be carried out such as screening or enclosures and consultation with affected residents.

Temporary construction-phase site screens and hoardings will be installed at the site perimeter adjacent to the National Building and NSW Masonic Building which will protect those buildings from construction works impacts.

Impacts on Surrounding Area and Public Domain

During construction of the OSD, hoardings will be managed by CPB Contractors. B Class hoardings will be erected to the Pitt Street and Bathurst Street frontages. As stated in the CSMP, all hoardings will be designed, installed and maintained to ensure segregation of the general public from truck movements, and segregation of construction worker and construction vehicular access. The site perimeter will be secure at all times with no unauthorised access permitted.

On-site parking would not be made available for employees working on the project. Staff would be encouraged to use public transport when travelling to/from the site, hence minimising traffic impacts on the surrounding road network. Utilisation of on street parking by construction workers will not be permitted.

Impacts on Surrounding Road Network

During construction, the site is expected to generate up to 12 heavy vehicles per hour. Traffic generation associated with the project during the peak periods and middle of the day would be as follows:

- AM peak period (7am-10am) – One heavy vehicle per hour.
- Middle of the day (10am-4pm) – Up to 12 heavy vehicles per hour.
- PM peak period (4pm-6pm) – One heavy vehicle per hour

Haulage routes to and from the site are described below.

Pitt Street site access – Arrival Routes

- From north: from Harbour Bridge, continue onto Western Distributor, take Bathurst Street exit, left onto Bathurst Street, left onto Pitt Street and right into the site.
- From East: from William Street, continue onto Park Street, turn right onto Pitt Street and right into the site.
- From South head north of Pitt Street and turn right into the site.
- From West: from the Western Distributor, take Bathurst Street exit, head east on Bathurst Street, turn left into Pitt Street and right into the site.

Pitt Street site access – Departure Routes

- To North: turn right out of the site, left onto Market Steet, right onto Clarence Street, north onto Western Distributor and continue towards Harbour Bridge.
- To East: turn right out of the site, left onto Market Street, left onto Sussex Street, left onto Bathurst Street, right onto Elizabeth Street and left onto Liverpool Street.
- To South: turn right out of the site, turn left onto Market Street, head west onto the Western Distributor, take the Harris Street exit and continue south on Harris Street,
- To West: turn right out of the site, turn left onto Market Street, and head west onto the Western Distributor.

Castlereagh Street site access – Arrival Routes

- From North: from the Harbour Bridge continue onto Cahill Expressway, turn left onto Macquarie Street, turn right at St James Road, turn left onto Market Street, turn left onto Castlereagh Street and turn right into the site.
- To East: from William Street continue onto Park Street, turn right onto Elizabeth Street, turn left onto Market Street, turn left onto Castlereagh Street and turn right into the site.
- From South: head north on Elizabeth Street, turn left onto Market Street, turn left onto Castlereagh Street and turn right into the site.
- From West: from the Western Distributor, take King Street exit, head east on King Street, turn right onto Castlereagh Street and turn right into the site.

Castlereagh Street site access – Departure Routes

- To North: turn right out of the site onto Castlereagh Street, turn left onto Park Street/ William Street, turn left onto Palmer Street, turn right onto Sir John Young Crescent and continue north onto M1 Motorway.
- To East: turn right out of the site onto Castlereagh Street, turn left onto Park Street and continue east on William Street.
- To South: turn right out of the site onto Castlereagh Street and continue southbound.
- To West: turn right out of the site onto Castlereagh Street, turn right onto Park Street, head west on Druitt Street and continue west onto the Western Distributor.

The proposed haulage routes are different from those presented within the Sydney Metro Concept Application EIS, however the proposed haulage routes originate and destinate to northern, southern, eastern and western areas of Sydney metropolitan area which is required for the supply of materials for the proposed construction and fitout.

The impact caused by the proposed haulage routes has been assessed quantitatively and is deemed to be minor. The greatest number of heavy vehicles anticipated to pass through any intersection along the haulage routes would be 36 vehicles, being at the intersection of Pitt Street and Bathurst Street. On average this would equate to one vehicle every 1-2 minutes. At present this intersection currently operates at a Level of Service B in the AM and PM peak periods and an additional vehicle movement every 1 to 2 minutes would not be expected to impact the intersection Level of Service.

Truck movements to and from the site would be scheduled to minimise traffic disruption on the surrounding road network. This would comprise the following measures:

- Heavy vehicles equipped with systems to improve vehicle safety, visibility and the detection of vulnerable road users.
- Oversized vehicles would be transported to/from the site in strict accordance with Roads and Maritime guidelines and City of Sydney requirements, subject to one-off approval, to minimise traffic disruption during normal business hours.
- Haulage routes would be designated and communicated to all truck drivers to ensure truck movements to/from the site are as efficient as possible.
- The loading and unloading of trucks would be planned to ensure each individual truck haulage capacity is fully utilised reducing the number of truck movements.

CPB is aware of the City if Sydney's online development tracker and the DPIE's major projects website. Prior to construction, CPB will undertake a cumulative assessment of surrounding construction projects to ensure levels of service will not be impact as a result of the proposed OSD construction works.

Stakeholder Management

CPB's approach to managing enquiries is to create a consistent and transparent guide to engaging stakeholders throughout both the initial project engagement and Delivery Phase.

The key Stakeholder Management principles include:

- Maintaining a proactive approach to all potential stakeholder related issues and engagement;
- Establish and maintain transparent and consistent communication channels; and
- Respect, involve and engage stakeholders to ensure their needs are recognised and considered.

CPB will coordinate with key stakeholders regarding third party events occurring within Pitt Street during the construction phase to prevent potential conflicts. It is expected that the majority of events will occur outside of the nominated work hours, either being held at night or on weekends.

Construction Waste

Construction waste is addressed in **Section 8.1.18** Waste Management.

Mitigation Measures

- Use of control and mitigation measures include traffic controllers, warning lights and pedestrian boom gates at all site access/egress and construction zones.
- Monitoring of noise generation during construction works.
- Pre-emptive planning for vibration inducing works and mitigation measures must be carried out such as screening or enclosures and consultation with affected residents.
- Installation of temporary construction-phase site screens and hoardings at the site perimeter including adjacent to the National Building and NSW Masonic Building which will protect the public domain and adjacent buildings from construction works impacts.
- Ongoing stakeholder engagement throughout the construction phase to ensure clear communication and complaints registration / action.

8.1.20. Aeronautical Airspace

An Aeronautical Impact Assessment (AIA) has been prepared by Avlaw Consulting (**Appendix Z**) to support the Detailed SSD DA and also supplement future applications to Sydney Airport Corporation Limited (SACL) for controlled activity approvals. The AIA determines if any aeronautical surfaces relative will be adversely affected by the proposed OSD.

The prescribed airspace assessment includes a review of all protected airspace in the vicinity of the site including to Sydney (Kingsford Smith) Airport and helipad operations. Avlaw Consulting has identified the Obstacle Limitation Surfaces (OLS), PANS-OPS, and Combined Radar Departure Assessment Surfaces and Radar Terrain Clearance Chart (RTCC) as relevant for the site and require further assessment.

Due to the significant distance (approximately 8.4km from Sydney Airport), Avlaw Consulting concludes that the Navigation Aids Protected Surfaces, High-Intensity Light Protected Surfaces and Precision Approach Path Indicator system protection surfaces are not relevant for the subject site and proposal.

Assessment

The site is situated within the 156m AHD Outer Horizontal Surface of the OLS for Sydney Airport. As the OSD will penetrate the OLS by 20.8m and temporary crane activity will penetrate the OLS by up to 85m, both are considered controlled activities and require aeronautical assessment. The proposed maximum building height of RL 176.8m AHD (to top of roof) inclusive of all plant and ancillary features, and temporary crane activity to a maximum height of 241m AHD, do not exceed the PANS-OPS surfaces level for instrument flight procedures of 340 metres AHD. Further, the proposal does not penetrate above the RTCC surface of 335.28 metres AHD or the Combined Radar Departure Assessment Surfaces of Sydney Airport.

Table 28 – Sydney Airport Airspace Surfaces

Airspace Surface	Height	Building (176.8m AHD) Clearance (-) / Penetration (+)	Crane (241m AHD) Clearance (-) / Penetration (+)
OHS OLS	156m AHD	+20.8m	+ 85m
PANS-OPS	340m AHD	- 163.2m	- 99m
RTCC	335.28m AHD	- 158.48m	- 94.28m

Avlaw consulting concluded that the proposed development will pose no increased safety risk to helicopter operations that already exist due to other obstacles in the area. Notably, the nearest hospital with a helipad to the site is the Royal Prince Alfred Hospital, which is beyond the lateral limit within which protection of airspace is provided.

The AIA concludes that the proposed height of the OSD and the temporary crane activity is clear of all aircraft operational surfaces and the controlled activities will not adversely affect safety, efficiency or regularity of operations of aircraft at Sydney Airport. The proposed development at the site will involve penetration of the Sydney Airport OLS which in this case Avlaw considers as not being problematic as the

Pitt Street North OSD is in close proximity to existing taller buildings in the CBD and will therefore not introduce additional risks to those already assessed in the approval of those structures.

Mitigation Measures

SACL Controlled Activity approval required for construction crane and permanent infringement of the OLS by the building.

8.2. SOCIAL AND ECONOMIC IMPACTS

8.2.1. Social Impact

Methodology

The assessment of social impacts can be approached in several ways. The International Association for Impact Assessment (IAIA) highlights a risk assessment methodology, whereby the significance of potential impacts is assessed by comparing the consequence of an impact against the likelihood of the impact occurring. This approach is also used in the DPIE Social Impact Assessment Guidelines for State Significant mining, petroleum production and extractive industry development (2017).

This risk assessment methodology is outlined below and has been used in this SIA.

			Consequence level				
			1	2	3	4	5
			Minimal	Minor	Moderate	Major	Extreme
Likelihood	A	Very likely	A1	A2	A3	A4	A5
	B	Likely	B1	B2	B3	B4	B5
	C	Possible	C1	C2	C3	C4	C5
	D	Unlikely	D1	D2	D3	D4	D5
	E	Rare	E1	E2	E3	E4	E5

Low		Moderate		High		Very high	

Consequence level

Using the DPIE SIA Guidelines as a starting point, adapted to apply to a wider range of land uses, the consequence level of impact considers:

- who is expected to be impacted, including the volume of people affected and the level of concern they feel about the matter;
- when the potential impact will occur and the frequency of potential impacts;
- the scale or degree of change from the existing condition as a result of the impact; and
- the extent to which people or an environment can adapt to or mitigate the impact.

Management measures

Social impacts are assessed before and after the implementation of management measures. Management measures are designed to reduce negative impacts and enhance positive impacts. These measures can take different forms and may be incorporated in the planning, construction or operational stage of the proposal.

Potentially impacted communities

A social baseline identifies the demographic and social characteristics of the existing community. It is an important tool in understanding how a community currently lives and that community's potential capacity to adapt to changes arising from a proposal.

A community profile has been developed for Sydney suburb based on demographic data from the Australian Bureau of Statistics (ABS Census 2016). The demographic characteristics of City of Sydney LGA and Greater Sydney have been used for comparison purposes.

Community Profile

- Young adults with no children
    - In 2016, Sydney (suburb) had a population of 17,252 people.
    - The median age in Sydney is 30 years and two-thirds of the population are aged between 20-39 years. Most families (66%) do not have children.
- Culturally & linguistically diverse
    - 83% of residents were born overseas and three quarters of the population speak a language other than English at home.
- Well educated population
    - The majority of the population (53%) are tertiary educated (diploma degree or higher). Professionals were identified as the most common occupation.
- High transient worker population
    - There are 498,384 people who work in the City of Sydney LGA. Three quarters (84.8%) live outside the City of Sydney.
- Population growth
    - The City of Sydney LGA's population is expected to grow by 28.9% between 2016 and 2041.
    - Increases in the 0-14 age group and decreases in the 15-24 years age group are also expected, however the LGA will continue to have a predominately young population.

Impacted communities

Based on the local context and community profile, the following individuals and communities are likely to be impacted by the proposal:

- Potential nearby sensitive receivers
- Local businesses
- Existing CBD community (residents, workers and visitors)
- Residents in nearby residential developments including 27 Park Street

Impact assessment

A proposal may cause a range of direct and indirect social impacts which can have a positive, negative or neutral impact on the existing environment and the community. A SIA assesses the impacts which are considered to have the most significant impacts on the community and identified stakeholder groups.

The table below outlines the social impacts which were considered as part of this SIA. These social impacts have been informed by the contextual information presented above.

The social impacts in the table below were assessed against the SIA criteria contained in Section 1, with and without any proposed management measures.

Recommendations to help further manage and improve the potential impacts are provided in the following section.

Potential impacts	Potentially impacted communities	Assessment
Improved activation and amenity of Park, Pitt and Castlereagh Streets	Existing CBD community Nearby residents	The proposal includes retail tenancies at the ground floor level fronting Park, Pitt and Castlereagh Streets. The design of the built form at the ground floor level enhances pedestrian activation and movement with the following design considerations: • Rounded corners on Park Street with dual frontage retail • 30m setback on Park Street including the footpaths to enhance pedestrian experience • Public domain elements including bench seats and bike racks to encourage active use of this space • Continuous canopy of trees along Park Street. The public plaza proposed fronting Park Street with the inclusion of retail tenancies will aid the movement of people walking along Park Street, tenants of the commercial spaces and retail users. The design of this space at the ground floor level will have a positive impact on the existing CBD community and nearby residents, as well as future users of the building.
Potential noise impacts from terraces on level 10 and 11	The Great Synagogue Existing CBD community Residents in nearby residential developments	The proposal includes two balcony terraces at levels 10 and 11 associated with the office uses. The balcony at level 10 predominately faces Park Street and wraps around to both Pitt and Castlereagh Streets. The balcony at levels 11 is setback from Park Street and faces Castlereagh Street. The level 11 balcony is significantly set back from the hotel uses on the opposite side of Park Street. There is a smaller setback from the balcony to the commercial buildings on the opposite side of Pitt and Castlereagh Streets. The commercial building doesn't contain sensitive receptors and there are no visible balconies that may be impacted by noise.

Potential impacts	Potentially impacted communities	Assessment
		The level 11 balcony is located at the northern boundary with the NSW Masonic Club. To the east on the opposite side of Castlereagh Street is the rear part of The Great Synagogue building. There is a 19 metre setback between the proposal and the buildings on the opposite side of Castlereagh Street. Landscaping is proposed for both balconies which will provide some privacy and help mitigate against potential noise impacts. Landscaping includes high raised planter edges to the back of the terraces against an approximately 1.8m high balustrade. The planter edges allow for 800m soil depth and tree planting. An Acoustic Report has been prepared by Renzo Tonin & Associates. It establishes criteria for noise emission from the site and provides in-principle guidance. The report concludes that the site is capable of complying with all relevant codes and criteria through acoustic planning and treatments during the detailed design stages. The proposal includes planters and balustrades at the balcony edges, large setbacks and is able to comply with relevant codes and criteria through acoustic treatments. It is also noted that the proposal is located in a CBD environment which is a noisy environment. It is likely the potential noise impacts can be mitigated adequately and will have a low impact on the community.
Access to high quality commercial and retail uses	Existing CBD community	The proposal will contribute to the commercial core of Sydney CBD by providing a new premium office space in the precinct. The proposal will also provide additional retail premises at the ground floor level, contributing to the Sydney CBD retail sector. The OSD development will be the only new significant office tower in the midtown area, providing a vibrant workspace to positively influence the health, wellbeing and productivity of workers.
Traffic and parking demand	Nearby residents Local businesses	The proposal includes a total of 40 parking bays for commercial tenants and seven service vehicle

Potential impacts	Potentially impacted communities	Assessment
		bays. In addition, 200 bike parking spaces are proposed to service the commercial tenants. A Traffic and Parking Assessment prepared by Aurecon makes an assessment of the proposed vehicle parking provision on the surrounding network. It states that the proposed development is estimated to generate a maximum of approximately 14 vehicle trips during the peak periods. The previous land use at the site included 160-170 parking bays, estimated to generate approximately 55 trips during both the AM and PM peak hours. The assessment concludes that the number of car parking spaces will improve the local road network, in comparison to the prevous uses. The traffic and carparking demand generated by the proposal is therefore likely to have a neutral impact on the community.
Improved streetscape visual quality and development of a landmark building	Local businesses Existing CBD community	The architecture of the proposal reflects the surrounding context by incorporating the use of sandstone to align with neighbouring heritage buildings. The architecturally designed building includes a range of materials and façade treatments including large glass floor to ceiling veils to create visual interest from the streetscape. Landscaping at the ground floor and at the balconies on levels 10 and 11 will also enhance the visual quality of the building from the streetscape. The intention is for the building to be a landmark commercial tower above the Pitt Street metro station. The contribution of good quality building design to the CBD will continue to enhance Sydney as a global city. Therefore, it is considered that the improved visual quality and development of a new landmark CBD commercial building will have a positive impact on the existing CBD community and local businesses.

Potential impacts	Potentially impacted communities	Assessment
Implementation of sustainable building design	Existing CBD community Nearby residents Local businesses	The proposal is committed to providing market leading sustainability practices by targeting reputable ratings as part of the design including: • 6 Star Green Design & As Built v1.3 • 5 Star NABERS Energy and 3.5 Star NABERS Water As outlined in the Architectural Design Report, prepared by Foster + Partners the tower is proposed to have a performance façade and highly efficient mechanical systems. The design will also incorporate external shading, passive chilled beams and on-site renewables to reduce the carbon footprint of the building's operation. It is also planned that during the construction process efforts will be made to reduce embodied energy through the use of responsibly sourced materials including timber and concrete. There are social benefits to sustainable design on both building occupants and the wider community. Social benefits include improved health, comfort and satisfaction, improved air quality and reduced health risks from pollutants associated with building energy use[1]. The proposal also provides limited parking spaces (40) and will benefit from its location above the metro station. This will encourage active transport as the most desirable transport option for future users of the building. Based on this, it is considered that the incorporation of sustainable building design will have a positive impact on nearby residents, the existing CBD environment and local businesses.
Disruption during construction	Local businesses Nearby residents	During construction of the building there will be some noise impacts and disruption to pedestrian and car movements around the site. While this is more common for CBD environments, there is still potential to create negative impacts for nearby residents, sensitive receivers and local businesses. At this stage, works are proposed to

[1] Office of Energy Efficiency & Renewable Energy, The Social Benefits of Sustainable Design,

Potential impacts	Potentially impacted communities	Assessment
		be carried out over a period of approximately 25 months, or until late 2023/2024. A Preliminary Construction Management Plan has been prepared by CPB Contractors. This includes measures to mitigate potential impacts on the surrounding community including traffic and pedestrian management and stakeholder management. This includes engagement of a specialist Construction Traffic Management Consultant to prepare an overall Traffic Management Plan. This plan should provide specific details of pedestrian, vehicular construction and operational traffic at each construction stage of works. With the management measures provided in the Preliminary Construction Management Plan and the preparation of a specialist Construction Traffic Management Consultant, construction of the building is likely to have a low impact on the community.

Conclusion and Recommendations

The SIA analysis has been undertaken to assess high-level potential social impacts arising from the proposed development of the commercial tower at the Sydney Metro Pitt Street North site.

As discussed in Section 3, the proposal will create a number of potential impacts, all of which are likely to be positive, neutral or low short-term negative impacts.

A range of management and mitigation measures are proposed to reduce the potential negative impacts created by the proposal. These measures include:

- Use of landscaping and balustrades at all balconies to manage potential noise impacts
- Reduction in number of car parking spaces from the previous land use
- Preparation and implementation of a preliminary Construction Management Plan
- Future engagement of a specialist Construction Traffic Management Consultant to manage detailed pedestrian and vehicular operations during the construction process.
- Additional recommendations as a result of this SIA analysis is to:
- Continue to have a high-level of communication with adjoining sensitive receivers throughout the detailed design and construction of the commercial tower including with 200-250 local businesses and residents.
- Provide ongoing monitoring of the public domain and interface between potential conflict areas during the operational phase.

These recommendations will help maximise the positive social impacts of the proposal and reduce disruption and uncertainty during construction of the commercial tower.

Based on this assessment and the recommendations provided, overall the proposal is likely to create a positive community impact.

8.2.2. Crime and Safety

A Crime Prevention Through Environmental Design Report (CPTED) has been prepared by Integral (**Appendix BB3**). A CPTED assessment is a specialist study undertaken to help reduce opportunities for crime by using design and place management principles. The CPTED assessment has been delivered by a suitably qualified and licensed contractor (David Novak) with consideration of the requirements of the *NSW Security Industry Act 1997*.

The site itself and plans of the proposed development have been assessed in accordance with CPTED principles and the appropriate regulations adopted as recommended by Sydney Metro, NSW Police and NSW development application recommendations. Areas that require specific attention to ensure maximum safety within the proposed development have been identified and mitigation measures proposed.

The four CPTED principles which are used in the assessment of development applications are:

- natural surveillance,
- access control,
- territorial reinforcement, and
- space management.

It should be noted that design is only one component to ensure a safe and secure environment. The level of actual or perceived crime is determined through the combination of design principles and ongoing management of the development, involving future tenant and visitor involvement. The design should support and accommodate good management practices.

The CPTED assessment been assessed against the CPTED principles, relevant crime and safety controls in the Sydney DCP 2012 and Foster + Partners architectural plans, design briefs and drawings.

Overall, it is considered that the proposal is capable of complying with CPTED principles and demonstrates god implementation of CPTED principles in its design. The plans include good opportunities for passive surveillance in tenant areas, good legibility and a high standard of amenity for a diverse demographic that will access and use the development.

There are a number of key recommendations in the CPTED assessment to assist in design development. These recommendations should be considered and implemented where possible in the final architectural plans and as part of the overall security management of the proposed development.

Mitigation measures

The following mitigation measures have been included or are already seen as mitigating measures:

These include:

- signage to show separation of public and private areas and assist with legibility of the site given mixed use nature;
- concierge management;
- clear site lines around between Pitt and Park streets including Castlereagh Street parking entrance;
- clear site lines around Park, Castlereagh and Pitt streets building entrance
- good coverage of CCTV;
- City of Sydney “Street Safe Cameras” installed on the corner Park and Pitt Streets as well as Park and Castlereagh streets, which is monitored 24 hours a day as part of a wider camera network for the City of Sydney; and
- lighting to entrances, lift lobbies and stairwells;

8.2.3. Security

Blast Vulnerability

A Blast Vulnerability Assessment (BVA) has been prepared by Karagozian & Case and is attached at **Appendix BB2**.

The BVA provides an overview of the threat context to the development, identifies specific structural and façade vulnerabilities and key protective design considerations incorporated in the design of the OSD which are primarily provided to respond to the requirements for the station.

The BVA considers that the OSD is primarily of a higher risk category (relative to other similar commercial developments) due to its interface with the station below and the design generally provides a balanced risk mitigation strategy. This is essentially a combination of reducing the likelihood of the hazard through strategic operational and physical security treatments (as outlined within the CPTED report and Security Risk Assessment), in addition to reducing the consequence of the potential hazard through addressing the structural response to reduce the risk and extent of collapse. Additionally, the strategy includes minimising hazardous fragmentation exposure and improving post event evacuation, and emergency services response.

The BVA demonstrates that the terrorism risk associated with blast and hostile vehicle threats is appropriately mitigated by providing a design that achieves a level of protection consistent with the established project performance criteria, one example being an enforceable vehicular perimeter.

Security Risk Assessment

The Security Risk Assessment (SRA) is provided at **Appendix BB1**. As with the CPTED assessment it has been prepared by Integral**.**

The SRA has adopted the methodology based on the AS/NZS ISO 31000:2009 Risk Management – Principles and Guidelines and developed by Integral for the assessment of security risks. Generally, the methodology applied was to:

- identify the organisation's resources (i.e. people, information, physical assets),
- identify the risks (e.g. violence, terrorism, natural disaster, disorder, etc),
- analyse the risks (i.e. likelihood and consequence),
- recommend appropriate protective security measures (e.g. electronic security provisions, physical security provisions etc) and then,
- determine the effects upon the OSD.

Of the risks identified in the detailed security risk matrix in Appendix A of the SRA, the greater and more significant risks relate to events involving criminal groups and politically/issue motivated or ideologically motivated groups at the site. There are a number of issues at risk, however if any one component is compromised either deliberately or accidentally, the entire site and the environment may be put at risk.

Therefore, the risks detailed in this assessment should be considered in the overall context of the operation of the site, and not in isolation. Those risks rated very high relate to terrorism threats and have been assessment as rare, therefore some measures should only be implemented where practical.

The risk treatment measure strategies listed in the SRA can help reduce the risk profile for the precinct. These recommendations will be used to help guide the detailed security services designs during the design phases of the project.

It is important to note that there is a concurrent Security Risk Assessment running in line with this development via the Pitt Street station design by CPB.

The Pitt Street Over Station Development is predominantly a medium risk site that has some significant risks and threats existing. These require definitive and robust risk management, especially given the fragile nature of the overall process, and the location of the tower above an active Sydney Metro station. The design gives full consideration to the planning criteria.

8.2.4. Economic Impacts of Commercial Strategy

A new commercial office building above Pitt Street Station North is considered an opportunity to enhance a strong commercial precinct within the Sydney CBD. The building will provide tenants and visitors easy access to the plethora of amenity that the midtown area has to offer, including retail, heritage listed buildings and parks, and a range of food and beverage options.

The proposed commercial use aligns with the City of Sydney's 10-year economic development strategy which recognises Sydney as a globally innovative city and premier place to work and live. The provision of high-quality, sustainably designed and operated commercial floor space assists in the City's goals of being globally competitive, and creating employment opportunities within the City.

The objectives of the B8 Metropolitan Centre zone of the SLEP 2012 include to recognise and provide for the pre-eminent role of business, office, retail, entertainment and tourist premises in Australia's participation in the global economy. The zone also has as an objective to provide opportunities for an intensity of land uses commensurate with Sydney's global status. The proposed OSD supports the objectives of the SLEP for the B8 zone through provision of high quality commercial floor plates and Premium grade office space which will attract global businesses.

The surrounding neighbourhood has a well-established retail precinct and everyday needs and services are well catered for in the immediate one block vicinity.

The building is just one block from Westfield Sydney and the QVB. The detailed design provides a measured amount of retail space so as to not compete with either precinct, but instead builds upon the site's location within one block of successful retail precincts. The proposal will focus on providing great food and dining options to match the expectations of a premium building tenant and office worker population.

The provision of retail offerings at both corners of the Park Street frontage provides for enhanced placemaking of the Pitt Street Station, consistent with Sydney Metro's objectives, and improves the amenity for building occupants, metro customers and the public.

Commercial office lobbies, although not private, often deter outside visitors from using their facilities. The detailed design of the OSD intends for the Level 2 retail/commercial spaces to be genuinely accessible and inviting for workers and visitors – providing a generous space with quality food and beverage offers.

8.2.5. Employment Generation

It is estimated that there will be approximately 590-620 FTE construction jobs and 3,500-4,000 FTE operational jobs created as a result of the proposed development.

The City of Sydney's City Plan 2036 (Draft Local Strategic Planning Statement) lists as a priority "Growing a stronger, more competitive Central Sydney". A key action to achieve this priority is to:

- *Prioritise and increase capacity for economic and employment growth in Central Sydney to contribute towards achieving the jobs target for the Harbour CBD.*

An additional 101,800 jobs by 2036 are required to meet the baseline District Plan jobs targets for the Harbour CBD. The additional jobs created by the proposed OSD will be a significant boost to Central Sydney in seeking to meet this jobs target.

8.3. SUITABILITY OF THE SITE

Suitability of the site for the development of a commercial tower was primarily established as part of the Concept SSD DA. Overall, the Detailed SSD DA proposal is considered suitable for the site for the following reasons:

- The project is consistent with the NSW Government and City of Sydney Council policies for the site and surrounding area including the Greater Sydney Region Plan, the East District Plan and local development controls.
- The proposal comprises a prime opportunity to take advantage of the approved Sydney Metro project, with the airspace created as part of the Pitt Street North site proposed to be developed for the purposes of OSD.
- The site provides for three street frontages, allowing separation of the Pitt Street Station and OSD entries to assist in clear wayfinding.

- The proposal is permissible in the B8 Metropolitan Centre zone pursuant to the SLEP 2012 and delivers new commercial floor space within the Sydney CBD to encourage activation of the CBD outside of business hours and to maximise the use of future transport infrastructure.
- The detailed design of the proposal supports an activated public domain at both day and night with separated pedestrian entrances for each land use and access to new retail opportunities fronting Pitt Street, Castlereagh Street and Park Street on both Ground and level 2.
- The proposal contributes to the vibrancy of the Sydney CBD by providing a landmark development which supports the commercial core.
- The separation of the site from other buildings provides sufficient space to allow commercial development to be proposed on the site while maintaining high levels of amenity in terms of solar access and privacy to adjoining land uses.
- The OSD tower is compatible with the scale of the surrounding existing and future built form typology which currently comprises a mix of medium to high rise residential and commercial office buildings.
- The proposal adheres to the Hyde Park sun access plane and does not adversely impact the visual amenity of and views from the public domain.
- The proposed façade and exterior colour scheme have been designed to be sympathetic to the surrounding context, including heritage items in the vicinity of the site which feature significant masonry elements and bronze features.
- The proposed OSD can be successfully integrated with the station below to allow optimal use of the public domain, increased pedestrian capacity and not impeding future station uses.

The proposal is considered suitable for the site as it delivers a world-class integrated public transport and commercial development which aligns with relevant strategic and statutory planning policies and significant NSW Government investment in public infrastructure.

8.4. PUBLIC INTEREST

Overall, the Detailed SSD DA proposal is considered to be in the public interest for the following reasons:

- The project supports the concept of the ‘30 minute’ city envisioned within State and Regional strategic planning policy by locating a commercial premise proximate to public transport infrastructure.
- The proposal maintains solar access to Hyde Park and the surrounding significant public domain.
- The detailed design respectfully integrates with adjacent significant local heritage items such as the National Building and NSW Masonic Building.
- The detailed design provides an activated podium and public domain which affords increased natural surveillance to ensure minimised anti-social and criminal behaviour within the locality.
- The proposal includes high sustainability initiatives, including reduced provision of parking spaces, and exceeding the mandatory Greenstar requirements.
- The proposal would result in the delivery of 590-620 jobs during the construction phase. Additional economic benefits would be provided by future tenants using surrounding services following the completion of the development.

The proposal is in the public interest as it provides significant public benefits for the local and wider community by creating an exceptional experience for future site users and a landmark destination for public transport patrons.

9. ENVIRONMENTAL RISK ASSESSMENT

9.1. RISK ASSESSMENT

The SEARs require an environmental risk analysis to identify potential environmental impacts associated with the proposal.

This analysis comprises a qualitative assessment consistent with the methodology used for the Concept SSD DA and the *Australian Standard AS4369:1999 Risk Management and Environmental Risk Tools*. The level of risk was assessed by considering the potential impacts of the proposed development prior to application of any mitigation or management measures.

The significance of the impact is assigned a value between 1 and 5 based on:

- The sensitivity of the environment receiving the impact
- The level of understanding of the type and extent of the impact
- The likely response to the environmental consequence of the project.
- The manageability of the impact is assigned a value between 1 and 5 based on:
- The complexity of mitigation measures
- The known level of performance of the mitigation measures proposed
- The opportunity for adaptive management
- The sum of the significance and manageability values provides an indicative ranking (between 1 and 10) of the potential residual impacts after the mitigation measures are implemented. The risk levels for likely and potential impacts were, therefore derived using the following risk matrix.

Table 29 – Risk Matrix

		MANAGEABILITY OF IMPACT				
		A – COMPLEX	B – SUBSTANTIAL	C – ELEMENTARY	D – STANDARD	E – SIMPLE
SIGNIFICANCE	5	High	High	Medium	Low	Very Low
	4	High	High	Medium	Low	Very Low
	3	Medium	Medium	Medium	Low	Very Low
	2	Low	Low	Low	Low	Very Low
	1	Very Low	Very Low	Very Low	Very Low	Very Low

The results of the environmental risk assessment for the Detailed SSD DA are presented in **Table 30**.

Following the application of each of the mitigation measures, only one residual risk is identified that has a risk profile of 'medium' or greater, including:

- Adverse external noise conditions to surrounding development (construction).

This outstanding impact has been addressed within this EIS.

Construction noise impacts are to be managed through compliance with the conditions of the Construction Management Plan and typical construction methodology for mitigation of acoustic and vibration impacts to surrounding development.

Table 30 – Risk Assessment

Aspect	Potential Impact	Significance	Manageability	Risk Level
Design excellence	The development does not achieve design excellence	2	D	Low
Visual and views	Visual/ view impacts from public places	3	D	Low
Overshadowing	Increase in shadowing to surrounding public domain, including Hyde Park	2	D	Low
	Increase in shadowing to surrounding properties	3	B	Low
Privacy	Adverse impact on visual and acoustic privacy of surrounding properties	2	C	Low
Heritage	Impact on heritage items in the vicinity	3	C/ B	Low
Traffic and Transport	Increased traffic on local roads (Operational).	2	D	Low
	Increased traffic on local roads (Construction).	3	D	Low
	Additional demand for on-street car parking spaces (Operational and Construction)	3	D	Low
Pedestrian Management	Conflict with pedestrian and cycle/vehicle operations (Operational)	3	D	Low
	Conflict with pedestrian and cycle/vehicle operations (Construction)	3	D	Low
Pedestrian Amenity	Adverse impact on the pedestrian wind environment of surrounding streets.	3	D	Low
	Pedestrian volumes and footpath/public domain capacity.	2	C	Low
Wind Impact	Adverse wind environment to outdoor areas in the OSD, including to private balconies and communal areas	3	C	Low
Reflectivity	Adverse impact on reflectivity of the proposed buildings on public domain, pedestrians and motorists.	3	C	Low
Safety and Security	Adverse impact on the safety and security of local community	2	D	Low
Acoustic Impacts	Adverse noise conditions within the OSD from Sydney Metro infrastructure	2	C	Low
	Adverse external noise conditions to surrounding development (Construction)	3	C	Medium

Aspect	Potential Impact	Significance	Manageability	Risk Level
	Adverse external noise conditions to surrounding development (Operation)	3	D	Low
ESD	Irreversible increase in energy usage.	2	D	Low
Infrastructure Provision	Adequate connection to infrastructure and utilities and adequate infrastructure capacity	2	D	Low
Stormwater and drainage	Potential flooding of aspects of the CSSI 'metro box' including the public domain.	3	D	Low
	Adverse impact on the quality of stormwater runoff (Operation)	2	D	Low
	Adverse impact on the quality of stormwater runoff (Construction)	2	D	Low
Flood	Potential flooding and stormwater impacts	2	D	Low
Air Quality	Dust associated and emissions associated with construction vehicles (Construction)	3	D	Low
Biodiversity	Impacts on street trees	1	D	Low
Waste	Waste production (Operation)	2	D	Low
Building Standards	Adequate access for people with a disability	2	D	Low
Airspace	Impact on prescribed and protected airspace	2	D	Low
Social Impact	General disruption to community associated with large scale construction	2	D	Low
	Antisocial and criminal behaviour	2	D	Low
Cumulative Impacts	Cumulative impacts (traffic, noise, dust, etc.) associated with concurrent construction of station and OSD, and other development in the area.	2	C	Low
	Cumulative impacts (traffic, noise emissions, etc.) during concurrent operation of station and OSD, and other development in the area	2	D	Low

9.2. MITIGATION MEASURES

A consolidated set of mitigation measures required for each of the environmental and social impacts is detailed in Table 31 below.

Table 31 – Mitigation Measures

Item	Potential Impact	Mitigation Measure
Design excellence	The development does not achieve design excellence	The process outlined in the endorsed Design Excellence Strategy will be implemented, including maintenance of the 'Design Architect' through the detailed design of the proposed development.
Overshadowing	Increase in shadowing to surrounding public domain, including Hyde Park	Compliance with the sun access plane control for Hyde Park and compliance with Pitt Street tower setbacks as per the Concept SSD DA.
	Increase in shadowing to surrounding residential properties	Compliance with the approved Concept SSD DA building envelope, and the assessment of the proposed façade features and embellishments to ensure no further adverse impacts result.
Heritage	Impact on heritage items in the vicinity	Implementation of recommendations in the HIS and Heritage Interpretation Plan.
Traffic and Transport	Increased traffic on local roads (Operational)	The provision of less than the maximum allowable car parking spaces on the site. Implementing a Loading Dock Management Plan to schedule services and deliveries to mitigate traffic movements from and to the site. Implementation of initiatives detailed in the Green Travel Plan to encourage travel mode shift to active and public transport. Conversion of on-site car parking spaces to bicycle parking spaces as bicycle space demand increases with time.
	Increased traffic on local roads (Construction)	The provision of zero parking spaces on site during construction for workers. Implementation of a Green Travel Plan.
	Vehicular and Traffic conflict (Construction)	Use of control and mitigation measures include traffic controllers, warning lights and pedestrian boom gates at all site access/egress and construction zones.
	Additional demand for on-street car parking spaces (Operational and Construction)	Implementation of a Green Travel Plan. It is further noted that the City of Sydney restricts on-street car parking to limited times, to discourage long-term parking.

Item	Potential Impact	Mitigation Measure
Pedestrian Management	Conflict with pedestrian and cycle/vehicle operations (Operational)	The provision of less than the maximum allowable car parking spaces on the site. Implementing a Loading Dock Management Plan to schedule services and deliveries to mitigate traffic movements from and to the site. Inclusion of warning system, signage and mirrors adjacent the loading dock crossover to increase visibility of cyclists and pedestrians to vehicles in this location.
	Conflict with pedestrian and cycle/vehicle operations (Construction)	Consistency with the Construction Traffic and Pedestrian Management Plan.
Pedestrian Amenity	Adverse impact on the pedestrian wind environment of surrounding streets	Proposed development has been designed to ensure built form can comply with the relevant standards for the intended use of each tested area. Landscaping and podium awning design to be delivered in the CSSI approval must address the requirements of the wind assessment.
	Pedestrian volumes and footpath/public domain capacity	Additional footpath width is proposed as part of the CSSI approval. The OSD has sought to further mitigate pedestrian volumes by proposing the primary pedestrian entrance to the development on Pitt Street, away from the Pitt Street North Metro entrance.
Wind	Adverse impact on the safety of building tenants	Management measures will be agreed between building management and the tenant for times when wind conditions on part of the Level 10 terrace potentially exceed safety thresholds.
Structural	Structural failures	Compliance with all relevant Australian Standards and NCC 2019.
Reflectivity	Adverse impact on reflectivity of the proposed buildings on public domain, pedestrians and motorists	Exterior façade elements used throughout the development are to limit light reflectivity to 20% or less.
Safety and Security	Adverse impact on the safety and security of local community	Detailed design to include additional surveillance devices, mechanised access controls, and clear way-finding signage. Implementation of camera surveillance, public domain furniture design, anti-graffiti façade protections and the location of a high visibility security office.
Acoustic Impacts	Adverse noise conditions within the OSD	Inclusion of the recommended window glazing specifications.

Item	Potential Impact	Mitigation Measure
	Adverse external noise impacts to surrounding development (Construction)	Compliance with maximum construction hours, noise monitoring, complaints management, mitigation measures including where required screening and rest periods. Compliance with Standard Conditions of Development Consent from the City of Sydney Council. Adherence to 'Project specific noise trigger levels' as determined in accordance with the NSW EPA Noise Policy for Industry (NPfI). Supervision of the construction/ installation of mechanical plant and equipment acoustic treatment by an acoustic engineer. Compliance testing by an acoustic engineer following the installation of the plan. Noise associated with the operation of a licensed premises (restaurants, wine bars or the like) to be assessed in accordance with the requirements of the Liquor and Gaming NSW (L&GNSW) standard noise condition. A detailed Demolition, Excavation and Construction Noise Management Plan is to be prepared for the site prior to the issue of Construction Certificate. Construction noise is to comply with the City of Sydney Council's Code of Practice 1992 "Construction Hours/ Noise within the Central Business District" including the 1997 Erratum and the EPA's Interim Construction Noise Guideline (ICNG) 2009. Acoustic grade seals should be installed on office windows and perimeter doors exposed to road traffic noise.
ESD	Irreversible increase in energy usage	Achievement of a 6 Star Green Star Design. Performance against all the relevant requirements will be tracked and implemented throughout construction and delivery of the development.
Infrastructure Provision	Adequate connection to infrastructure and utilities and adequate infrastructure capacity	The applicant will undertake detailed enquiries and arrange for final connections and any associated approvals based on the final design where these final connections cannot reasonably be provided as part of the station works under the CSSI approval.
Water, Drainage, Stormwater and Groundwater	Potential flooding of the OSD	The proposed OSD is positioned higher than the relevant flood planning levels. It is noted that the primary pedestrian and vehicle entrance to the site is from Pitt

Item	Potential Impact	Mitigation Measure
		Street, which at the location of the site is not flood affected. As part of the site's WSUD strategy, regular maintenance will need to be undertaken to ensure the system's continued operations.
	Adverse impact on the quality of stormwater runoff (Operation)	Compliance with the recommendations of the Stormwater Management Plan, including new connections to existing stormwater assets.
	Adverse impact on the quality of stormwater runoff (Construction)	Adoption of a Sediment and Erosion Management Plan as part of the Construction Certificate requirements. It is noted that the ground level of the construction of the development is subject to the terms of the CSSI approval.
Flood	Potential flooding and stormwater impacts	Preliminary assessment indicates the pavement modifications associated with the OSD will not have any impact on local area flooding.
Fire Safety	Risks to occupants and assets from fire threat	Ongoing consultation with Fire and Rescue NSW and to be incorporated as part of the construction issue documentation. Compliance with 2018 NCC and all relevant Australian Standards. The zoning and cascading of the station and OSD North emergency warning intercom system (EWIS) will be developed in consultation with Sydney Metro.
Air Quality	Dust associated and emissions associated with construction vehicles (Construction)	Dust suppressions and air monitoring shall be implemented at various stages of the project.
Biodiversity	Impacts on street trees	Demolition is approved as per the terms of the CSSI approval. Proposed new public domain landscaping illustrated at **Appendix D** is to be provided within the terms of the CSSI approval.
Waste	Waste production (Operation)	Implementation of the Operational Waste Management Plan. Refinement of the Construction Waste Management Plan during the detailed design phase to reflect proposed construction staging and operations.
Building Standards	Adequate access for people with a disability	Complying with the applicable accessibility requirements of the DDA Access to Premises Standards 2010, relevant Australian Standards and requirements of the BCA

Item	Potential Impact	Mitigation Measure
		pertaining to external site linkages, building access, common area access and sanitary facilities.
Construction management	Adverse impacts from construction activities	Use of control and mitigation measures including traffic controllers, warning lights and pedestrian boom gates at all site access/egress and construction zones. Monitoring of noise generation during construction works. Pre-emptive planning for vibration inducing works and mitigation measures such as screening or enclosures and consultation with affected residents. Installation of temporary construction-phase site screens and hoardings at the site perimeter including adjacent to the National Building and NSW Masonic Building. Ongoing stakeholder engagement throughout the construction phase to ensure clear communication and complaints registration / action.
Airspace	Impact on prescribed and protected airspace	Maintaining proposed maximum building height and crane operation below PANS-OPS surfaces level for instrument flight procedures and receipt of approval under the *Airports (Protection of Airspace) Regulations*. SACL Controlled Activity approval required for construction crane and permanent infringement of the OLS by the building.
Social Impact	General disruption to community associated with large scale construction	Consistency with the recommendations of the Construction Management Plan including notably ongoing engagement and consultation with the surrounding landowners and occupants during the construction period, including a complaints register.
	Potential anti-social behaviour associated with ground plane or residential tenants	Adoption of the recommendations of the CPTED assessment.
Cumulative Impacts	Cumulative impacts (traffic, noise, dust, etc.) associated with concurrent construction and operation of the station OSD, and other development in the area	Implementation and finalisation of the Construction and Site Management Plan (CSMP).

10. EVALUATION & CONCLUSION

This EIS has been prepared to accompany a detailed SSD DA which seeks consent for a commercial development above the new Sydney Metro Pitt Street Station northern site. This EIS has comprehensively addressed the general and key issues relating to the proposed development and has included the plans and document requirements identified in the SEARs and in Schedule 2 of the EP&A Regulation. This EIS is submitted to the NSW DPIE pursuant to Part 4 of the EP&A Act. The Minister for Planning and Public Spaces, or their delegate, is the consent authority for the detailed SSD DA.

The lodgement of the detailed SSD DA (SSD-10375) follows the approval of a Concept SSD DA (SSD 17_8875) granted by the Minister for Planning on 25 June 2019. A section 4.55(2) modification application which seeks minor amendments to the approved concept plan to increase the podium height and permit minor façade projections for the purposes of sun-shading elements, architectural features and embellishments is lodged concurrently with the detailed SSD DA.

The detailed SSD DA seeks approval for the detailed design, construction and operation of a new 39 level commercial building to be constructed above the new Sydney Metro Pitt Street North Station entrance. The proposed development also includes the use of floorspace within the lower podium and services within basement level 1 of the development which is to be constructed in accordance with the terms of Sydney Metro project approval (CSSI approval).

The detailed design of the proposed OSD tower has been the subject of design development and testing and ongoing review from various government and independent parties to ensure that it achieves the highest standard in architectural design, while ensuring a functional interface is delivered with Sydney Metro.

The proposed development is a 'shovel-ready' project which will provide a significant public benefit through its landmark status within the CBD and the large number of jobs that it will create in close proximity to public transport. It aligns with the State government aim of fast-tracking the approval of key DAs to stimulate the economy during and after the COVID-19 period.

Overall, the proposed development sought within the detailed SSD DA is considered appropriate for the site and warrants approval from the Minister for Planning and Public Spaces for the following reasons:

- The proposal contributes to the achievement of the objectives for development within the Central Sydney CBD as outlined within the relevant strategic plans and policies.
- The proposal results in an orderly and economic use of the land that leverages significant NSW Government investment in public transport to the site, specifically Sydney Metro.
- The proposal is consistent with the Concept SSD DA 17_8875, as proposed to be modified, and addresses the relevant conditions of that consent.
- The proposed supports 54,651m^2 of new **commercial** office GFA which is capable of contributing to an estimated 3,500-4,000 FTE jobs which will contribute to the jobs targets of the Eastern City District Plan.
- The proposal achieves design excellence, having been subject to detailed design review processes, and addresses the project specific Design Guidelines.

The proposal satisfies the applicable State planning policies, and relevant environmental planning instruments that apply to the site:

- The proposed uses are permitted with consent and meet the objectives of the B8 Metropolitan Centre zone in SLEP 2012.
- The proposal does not create a net additional impact to protected public places including Hyde Park zoned RE1 Public Recreation in SLEP 2012.
- The proposal complies with the maximum allowable car parking spaces for the site under the SLEP 2012 and conditions of the Concept SSD DA.
- The proposed development generally complies with the overall building envelope established under the planning controls within the Concept SSD DA (noting a concurrent modification to the building envelope is proposed).

The proposal will not have any unacceptable environmental impacts, as follows:

- The proposal has no unacceptable traffic impacts.
- The proposal minimises pedestrian and vehicle conflicts, and maximises legibility and accessibility to the Sydney Metro Pitt Street Station northern entrance.
- The proposal is sympathetic to the heritage items in the vicinity of the site, including to the adjacent National Building at 248A-250 Pitt Street and the NSW Masonic Club at 169-173 Castlereagh Street.
- The proposal achieves design excellence as outlined through the Sydney Metro design review and design excellence process.
- The proposal minimises impacts on neighbouring residential development, in particular through maximising solar access and mitigating privacy impacts to the hotel component of the NSW Masonic Club.
- The proposed detailed design of the OSD has considered and is integrated with, the detailed design of the Sydney Metro Pitt Street North Station and its related works including the construction of the development up to the transfer slab and the public domain.

The proposal satisfies the SEARs as demonstrated in this EIS and accompanying specialist reports.

In view of the above, we submit that the proposal is in the public interest and that the detailed SSD DA should be approved subject to appropriate conditions.

DISCLAIMER

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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 SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

APPENDIX B QUANTITY SURVEYORS REPORT

APPENDIX C SITE SURVEY / DRAFT SUBDIVISION PLAN

Appendix C1 Site Survey

Appendix C2 Draft Subdivision Plan

APPENDIX D ARCHITECTURAL PLANS

APPENDIX E ARCHITECTURAL DESIGN REPORT

Appendix E1 Architectural Design Report

Appendix E2 Signage Strategy

Appendix E3 Shadowing Analysis

Appendix E4 Solar Analysis Report

APPENDIX F PITT STREET NORTH DESIGN GUIDELINES

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APPENDIX I LANDSCAPE PLANS AND REPORT

APPENDIX J BIODIVERSITY DEVELOPMENT ASSESSMENT REPORT WAIVER

APPENDIX K ECOLOGICALLY SUSTAINABLE DEVELOPMENT REPORT AND SUSTAINABILITY STRATEGY

APPENDIX L HERITAGE IMPACT STATEMENT

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APPENDIX N REFLECTIVITY ASSESSMENT

APPENDIX O WIND IMPACT ASSESSMENT

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APPENDIX Q DDA ACCESSIBILITY REPORT

APPENDIX R FIRE ENGINEERING REVIEW/ DRAFT FIRE AND RESCUE ASSESSMENT

APPENDIX S FLOOD IMPACT ASSESSMENT AND STORMWATER MANAGEMENT PLAN

Appendix S1 Flood Impact Assessment

Appendix S2 Stormwater Management Plan

APPENDIX T WASTE MANAGEMENT PLAN

APPENDIX U ACOUSTIC AND VIBRATION IMPACT ASSESSMENT

APPENDIX V TRANSPORT AND ACCESSIBILITY IMPACT ASSESSMENT AND GREEN TRAVEL PLAN

Appendix V1 Transport and Accessibility Impact Assessment

Appendix V2 Green Travel Plan

APPENDIX W VIEW AND VISUAL IMPACT ASSESSMENT

APPENDIX X CONSTRUCTION AND SITE MANAGEMENT PLAN

APPENDIX Y INFRASTRUCTURE SERVICES AND UTILITIES REPORT

Appendix Y1 Infrastructure Services and Utilities Report / Management Plan: Hydraulic

Appendix Y2 Infrastructure Services and Utilities Report / Management Plan: Electrical, Data and Communications

APPENDIX Z FLIGHT PATH REPORT (AERONAUTICAL IMPACT ASSESSMENT)

APPENDIX AA STRUCTURAL STATEMENT

APPENDIX BB SECURITY AND CRIME RISK ASSESSMENT/ CPTED REPORT

Appendix BB1 Security Risk Assessment

Appendix BB2 Blast Vulnerability Report

Appendix BB3 CPTED Report

APPENDIX CC PRE-DA CONSULTATION REPORT

APPENDIX DD PUBLIC ART STRATEGY

APPENDIX EE DESIGN INTEGRITY REPORT

APPENDIX FF RETAIL / COMMERCIAL OFFICE STRATEGY

APPENDIX GG SYDNEY LOCAL ENVIRONMENTAL PLAN 2012 CLAUSE 4.6 VARIATION TO FSR

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