ETHOS URBAN

Environmental Impact Statement
State Significant Development Application

South Site Stage 2 - Sydney Metro Martin Place integrated station development (SSD 18_9326)

Submitted to Department of Planning and Environment
On behalf of Macquarie Corporate Holdings Pty Ltd

Document Reference:
CSWSMP-MAC-SMA-PL-REP-000120

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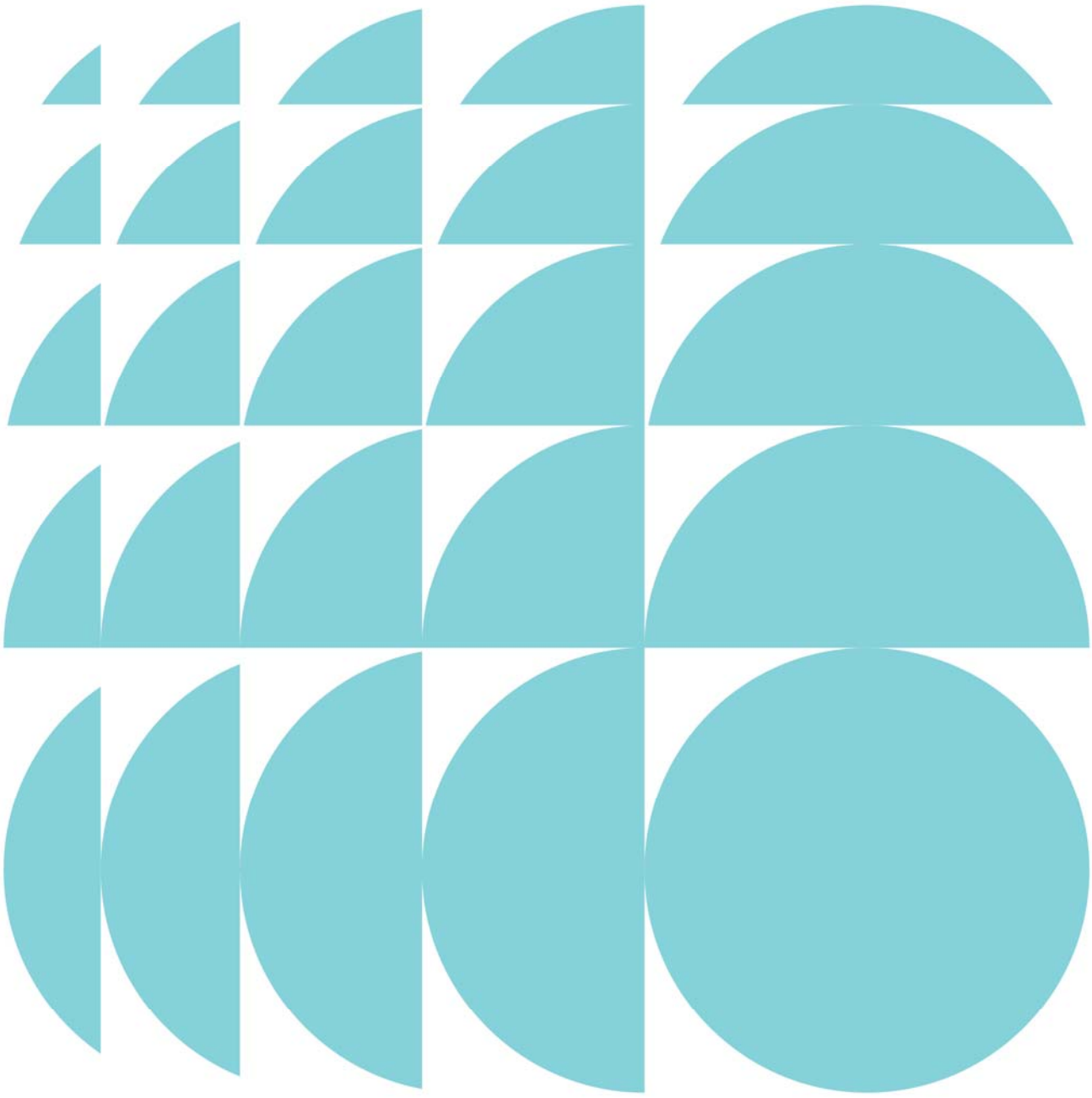

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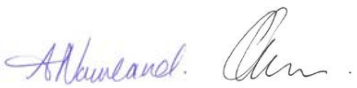

Anna Nowland / Chris Ferreira 03/10/2018

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NOTE: all images contained in this document are for illustrative purposes only. Reference should be made to the appended documentation where appropriate.

Statement of Validity

Development Application Details	
Applicant name	Macquarie Corporate Holdings Pty Ltd
Applicant address	50 Martin Place, Sydney
Land to be developed	South Site – 39-49 Martin Place, Sydney
Proposed development	Sydney Metro Martin Place Station Over Station Development
Prepared by	
Name	Anna Nowland / Chris Ferreira
Qualifications	BPlan(Hons) / BPlan (Hons)
Address	173 Sussex Street, Sydney
In respect of	Stage 2 State Significant Development - Development Application
Certification	
	I certify that I have prepared the content of this EIS and to the best of my knowledge: • it is in accordance with Schedule 2 of the Environmental Planning and Assessment Regulation 2000; • all available information that is relevant to the environmental assessment of the development to which the statement relates; and • the information contained in the statement is neither false nor misleading.
Signature	
Name	Anna Nowland / Chris Ferreira
Date	3/10/2018

Executive Summary

This Environmental Impact Statement (EIS) relates to a State Significant Development (SSD) Development Application (DA), being a detailed 'Stage 2' proposal for the construction and operation of an Over Station Development[1] (OSD) commercial tower, located above and integrated with the southern entry of the Sydney Martin Place Metro Station. This Stage 2 SSD DA follows:

- Approval granted by the Minister for Planning on 9 January 2017 to the Sydney Metro Stage 2 (Chatswood to Sydenham) application lodged by Sydney Metro) as Critical State Significant Infrastructure (CSSI), (reference SSI 15_7400), hereafter referred to as the CSSI Approval. This approval was later modified (reference SSI 15_7400 MOD 3) (hereafter referred to as the CSSI Mod 3), which involved changes to the Sydney Metro Martin Place Station to align with the Unsolicited Proposal by Macquarie Corporate Holdings (Macquarie) for the development of the station Precinct. The key aspects of the proposed modification involved a larger, reconfigured station layout, and provision of a new unpaid concourse link. This modification application was approved on 22 March 2018.
- Approval granted by the Minister for Planning on 22 March 2018 for a Concept Proposal for the Sydney Metro Martin Place Station Precinct (the Precinct) involving two OSD commercial towers above the northern and southern entrances of the future Martin Place Metro Station (SSD 17_8351). This Concept Proposal relates to a Stage 1 (or Concept) SSD DA and confirmed the maximum building envelopes, Gross Floor Areas (GFA), land uses and Consolidated Design Guidelines, with which the detailed design of the OSD buildings must be consistent.
- Gazettal on 4 May 2018 of site-specific amendments to the *Sydney Local Environmental Plan 2012* (Planning Proposal reference: PP_2017_SYDNE_007_00) (the 'Planning Proposal') permitting greater building height over a portion of the South Site and additional floor space (over both the North and South Sites). This is hereafter referred to as the LEP Amendment.
- A concurrent Concept Proposal SSD DA, referred to as the Stage 1 Amending DA, that seeks to amend the approved Concept Proposal for the Precinct (17_8351) to align the building envelope and FSR for the South Site with the new planning controls approved under the LEP Amendment. Whilst the new Stage 1 Amending DA encompasses the entire Precinct, it principally relates to amending the Concept Proposal's building envelope for the South Site.

As this 'Stage 2' SSD DA is pursuant to Division 4.4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), it has been prepared to be consistent with the Stage 1 Concept Proposal (as proposed to be amended by the Stage 1 Amending DA).

The Site

The Concept Proposal in effect divided the Precinct into a series of sites relating to the following properties:

- North Site – 50 Martin Place; 9-19 Elizabeth Street; 8-12 Castlereagh Street; 5 Elizabeth Street; 7 Elizabeth Street; and 55 Hunter Street.
- South Site – 39-49 Martin Place (**the subject of this application**).
- Martin Place – being that part bound by Elizabeth Street and Castlereagh Street (this land was specifically excluded from the Concept Proposal.

This application principally applies to the land comprising the South Site within the greater Precinct. It is noted that a Precinct-wide approach has been adopted for bicycle parking and end of trip facilities, and as such certain facilities are proposed to be located on the North Site.

[1] Also known as 'integrated station development'

Consultation

Key stakeholders including surrounding landowners and tenants, government agencies, public authorities, the City of Sydney Council, and the general public have been consulted during the preparation of this EIS. The feedback received during this consultation process has been considered during the preparation of the SSD DA, where relevant. Government agencies have been closely consulted during the development of the proposal with multiple opportunities to feed into and comment on the proposal.

Overall, the process has demonstrated that the community is not actively concerned or engaged in the project. The minimal feedback received can be predominantly characterised as general questions, expressions of interest, or general support for Macquarie's vision for the Precinct. Few examples of concerns raised during the consultation process have related to the management of disruption during the construction process, or the detailed design of the buildings on the site. These comments have informed the documentation prepared for the Stage 2 SSD DA.

Details of this consultation are provided at **Section 3.0** of this EIS.

Proposed Development

In summary, the Stage 2 SSD DA for the South Site seeks approval for the following:

- The design, construction and operation of a new 28 storey (plus rooftop plant) commercial OSD tower consistent with the building envelope on the South Site established under the Concept Proposal (as proposed to be amended), including office space and retail tenancies.
- Vehicle loading partially within the basement of the South Tower and shared with vehicle loading areas located on the North Site.
- Bicycle parking and end of trip facilities located on the North Site, for the use of the South Tower.
- Works relating to the provision of services, management of drainage and flooding, and the mitigation of construction noise and vibration.
- Provision of rooftop building identification signage zones.
- The detailed design and delivery of 'interface areas' within the approved Station envelope that contain OSD-exclusive elements, office entries, office space, retail areas, and plant not associated with the rail infrastructure.

A photomontage of the South Tower is included at **Figure 1** on the following page (page 11 of this EIS).

Planning Context

As the project is within a rail corridor and is associated with rail infrastructure, involves commercial premises, and has a capital investment value of more than $30 million, it is SSD for the purposes of the EP&A Act. Accordingly, this Stage 2 SSD DA is lodged under Section 4.38 of the EP&A Act. **Section 5.0** of the EIS considers all applicable legislation in detail. Overall, it has been determined that the proposal complies, is capable of complying, or is warranted in varying specific controls.

Figure 1 Photomontage of the South Tower

Source: Tzannes

Environmental Impacts

The EIS provides an assessment of the environmental impacts of the project in accordance with the Secretary's Environmental Assessment Requirements (SEARs) and sets out the undertakings made by Macquarie to manage and minimise potential impacts arising from the development (refer to **Section 5.0**). Key potential impacts identified include, amongst others:

- impacts on items of heritage significance;
- urban design, built form, and the design excellence;
- visual and view impacts;
- solar access and overshadowing;
- pedestrian and traffic management;
- operational and construction noise, and construction management;
- sustainability;
- impacts and integration with the new Metro Station and existing Martin Place Rail Station; and
- crime and safety.

All identified impacts are addressed in this EIS and are capable of being ameliorated through the implementation of appropriate mitigation measures as outlined in **Sections 6.0** and **7.0**.

Conclusion

With the construction of the Sydney Metro (Australia's biggest public transport project, which will shape generations to come) there is a fundamental responsibility and fundamental expectation for the development to respond to the important opportunity and unique circumstances of the Precinct, and capitalise on the unparalleled access to public transport in the heart of the Sydney CBD.

As the new Martin Place Station is built underground, the integrated station development will be able to be built above the station at the same time. This helps reduce community impacts and allows for the buildings to be completed close to when Sydney Metro City & Southwest services start in 2024.

The need for this development further stems from, and is consistent with, a range of government strategic studies that support accommodating additional jobs in Sydney and the coordinated delivery of increased capacity with infrastructure investment. At their highest level these planning policy documents are necessarily about enabling the evolution of a growing metropolitan area with sufficient flexibility and resilience to transcend change in the longer term.

The South Site OSD is born from a comprehensive design development process that has been shaped by the Concept Proposal, the recent LEP Amendment and site-specific clause in the Sydney LEP 2012, the establishment of a Design Review Panel and the adoption of site-specific design guidelines and heritage conservation principles, which together have informed the high-quality development.

The compilation of mitigation measures has been prepared to inform the ongoing design and management of the Stage 2 SSD DA throughout the detailed design, construction phase and operational phase. This EIS fulfils the requirements of the EP&A Act and addresses the project specific SEARs, and demonstrates that the impacts of the Stage 2 SSD DA for the South Site can be satisfactorily managed. In light of the above, and the significant benefits of the proposed development, we therefore recommend that the proposed development be approved.

1.0 Introduction

This EIS is submitted to the Department of Planning and Environment (the Department) pursuant to Part 4 of the EP&A Act in support of a SSD DA, being a detailed 'Stage 2' proposal. It relates to the construction and operation of an OSD commercial tower, located above and integrated with the southern entry of the Metro Martin Place Station (part of the NSW Government's approved Sydney Metro project). The site of the southern entry to Metro Martin Place station and OSD above (referred to as the South Site) is located at 39-49 Martin Place, Sydney.

The DA follows the approval of a Concept Proposal in March 2018 for two OSD commercial towers above the northern (North Site) and southern (South Site) entrances of Metro Martin Place station (SSD 17_8351). Lodged concurrently with this Stage 2 DA for the South Site, is a Stage 2 DA for the North Site[2] OSD (SSD 18_9270) and a Stage 1 Amending DA (SSD 18_9347).

This EIS has been prepared by Ethos Urban for Macquarie Corporate Holdings Pty Ltd (Macquarie) and relates to land acquired by Sydney Metro to deliver the Metro project, in particular for part of the Martin Place Metro Station. It follows the determination of a number of applications that have shaped the built form outcome on the site (see **Section 1.2** below).

As this 'Stage 2' SSD DA is pursuant to Division 4.4 of the EP&A Act, it has been prepared to be consistent with the Stage 1 Concept Proposal (as proposed to be amended) – see **Section 1.2.3** and **1.2.5**.

This EIS has been prepared in accordance with the requirements of Part 4 of the EP&A Act, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), and the SEARs for the preparation of the EIS, which are included at **Appendix B.** This EIS is based on the on the Architectural Drawings prepared by Tzannes and Grimshaw, and should be read in conjunction with the supporting information and other plans appended to and accompanying this EIS (see Table of Contents).

1.1 Overview of the Proposed Development

This SSD DA seeks approval for the detailed design and delivery of the South Site OSD within the Sydney Metro Martin Place Station Precinct. The DA primarily relates to the South Site[3] and proposes to construct and operate an OSD commercial tower that is fully integrated with the Station beneath, and which will be built and delivered as one development in-time for the opening of the Sydney Metro line in 2024.

The project realises the vision for the site that was established under Macquarie's Unsolicited Proposal (USP) bid for the delivery of both the station and OSD at Martin Place. The application will deliver one part of the envisaged world class transport and employment precinct, it will generate employment growth in connection with the Government's major investment in public transport infrastructure, and will contribute to a stronger and better-connected Sydney. It will improve the functionality of the new Metro Station at Martin Place and provide a new environmentally sustainable development that strengthens 'Global Sydney' as a centre for economic and cultural activity. It represents a step-change project in the evolution of Sydney as Australia's pre-eminent centre for business.

The detailed design of the South Site commercial OSD tower (South Site Tower) has been the subject of rigorous and ongoing testing, review, and development and has achieved the highest standard in architectural design.

The application specifically seeks consent for the following:

- The design, construction and operation of a new 28 storey (plus rooftop plant) commercial OSD tower consistent with the building envelope on the South Site established under the Concept Proposal (as proposed to be amended), including office space and retail tenancies.
- Vehicle loading partially within the basement of the South Tower and shared with vehicle loading areas located on the North Site.
- Bicycle parking and end of trip facilities located on the North Site, for the use of the South Tower.

[2] 50 Martin Place, 9 – 19 Elizabeth Street, 8 – 12 Castlereagh Street, 5 Elizabeth Street, 7 Elizabeth Street, and 55 Hunter Street.
[3] With the exception of bicycle parking, loading and end of trip facilities that are integrated with the wider Precinct and largely accommodated in the North Tower basement.

- Works relating to the provision of services, management of drainage and flooding, and the mitigation of construction noise and vibration.
- Provision of rooftop building identification signage zones.
- The detailed design and delivery of 'interface areas' within the approved Station envelope that contain OSD-exclusive elements, office entries, office space, retail areas, and plant not associated with the rail infrastructure.

1.2 Background to the Development

This Stage 2 SSD DA has been developed with consideration of a suite of applications that are required for the design coordination and delivery of the envisaged integrated station and OSD solution for the Sydney Metro Martin Place Station Precinct (Precinct), as outlined in **Sections 1.2.1** to **1.2.5** below.

1.2.1 Sydney Metro City & Southwest – Chatswood to Sydenham Critical State Significant Infrastructure

The New South Wales (NSW) Government is implementing *Future Transport 2056* (Transport for NSW, 2017), which superseded *Sydney's Rail Future* (Transport for NSW, 2012), and includes measures to transform and modernise Sydney's rail network so that it can grow with the city's population and meet the needs of customers well into the future.

Sydney Metro is a new standalone rail network identified in *Future Transport 2056*. The Sydney Metro network consists of Sydney Metro Northwest (sometimes referred to as Stage 1) and Sydney Metro City & Southwest (sometimes referred to as Stage 2) – refer to **Figure 2**.

Figure 2 The route of Sydney Metro Stages 1 and 2

Source: Sydney Metro

Stage 2 of the Metro entails the construction and operation of a new Metro rail line from Chatswood, under Sydney Harbour through Sydney's CBD to Sydenham and eventually onto Bankstown through the conversion of the existing line to Metro standards. The project also involves the delivery of six (6) new Metro stations, including Martin Place. This step-change piece of public transport infrastructure, once completed, will rapid transit through the CBD in each direction, catering for an extra 100,000 customers per hour across the Sydney CBD rail lines.

The objectives of the Sydney Metro project are to:

- Improve the quality of the transport experience for customers
- Provide a transport system that is able to satisfy long-term demand
- Grow public transport patronage and mode share
- Support the productivity of the Global Economic Corridor
- Serve and stimulate urban development
- Improve the resilience of the transport network
- Improve the efficiency and cost effectiveness of the public transport system
- Implement a feasible solution recognising impacts, constraints and delivery risk

On 9 January 2017, the Minister for Planning approved the Stage 2 (Chatswood to Sydenham) Metro application lodged by Sydney Metro as a Critical State Significant Infrastructure project (reference SSI 15_7400), being the CSSI Approval.

The CSSI Approval, through the associated CSSI EIS and Preferred Infrastructure and Submissions Report (PIR) that are called up as part of the approval, contemplated the indicative design and layout of a future Metro station at Martin Place, with a northern entrance fronting Hunter Street and a southern entrance to Martin Place, and a below ground interchange connection to the existing Martin Place Station on the T4 Eastern Suburbs heavy rail line.

The CSSI EIS describes how the new Sydney Metro Martin Place integrated station development would integrate with the existing Martin Place Railway Station and describes the closure of existing train station access portals to Martin Place to the west of Elizabeth Street. An underground pedestrian connection to 33 Bligh Street and eventually onto O'Connell Street is also approved in principle (subject to the development of that site).

The Conditions of Approval for the CSSI Consent require the proponent, Sydney Metro, to prepare a Station Design and Precinct Plan (**SDPP**) for each of the approved Metro stations, including the Martin Place Station, as well as an Interchange (Station) Access Plan for Martin Place.

Importantly, the CSSI Approval includes approval for the construction of below and above ground structural and other components of the future OSD, although the fit-out and use of such areas are noted as requiring separate planning approval. It is the OSD for the Martin Place Station that the Concept Proposal relates to, with this application constituting the detailed proposal for the South Site.

The rationale for this delivery approach, as identified within the application for the Sydney Metro project, is to enable OSD to be more efficiently built and appropriately integrated into the Metro station structures. It also allows for an integrated construction and contemporaneous delivery of the Station and South Site OSD in time for the opening of the Metro line in 2024.

CSSI MOD 3

Modification 3 to the Sydney Metro approval enabled the inclusion of Macquarie-owned land at 50 Martin Place and 9-19 Elizabeth Street within the Martin Place Station footprint, and other associated changes (including a new pedestrian concourse link under 50 Martin Place). This modification was approved on 22 March 2018.

1.2.2 Macquarie's Unsolicited Proposal

Through the early planning phase for Stage 2 of Sydney Metro, Macquarie identified a unique opportunity given its strategic landholdings above/adjoining the new Sydney Metro Martin Place Station. An Unsolicited Proposal (USP) was accordingly submitted by Macquarie to the NSW Government, for the delivery of a single fully integrated Martin Place Station/OSD solution.

Macquarie's proposal centres on delivering Martin Place Station in its entirety as part of the Sydney Metro Project through an integrated civic, retail and commercial development, that expands the Martin Place Metro site to include Macquarie's land at 50 Martin Place and 9-19 Elizabeth Street. Macquarie's proposal seeks to achieve a single integrated development outcome, delivering efficiencies gained from combining the land holdings and releasing associated constraints on the otherwise complex site configuration and development approach. Macquarie's proposed proposal optimises the functionality of the development opportunity, the connectivity between Station entrances, public spaces and the OSD, including passenger and civic areas and office lobbies, with leading commercial office design.

Macquarie's proposal entered Stage 3 of the USP process in March 2017 [4], commencing the planning approvals process, with the NSW Government accepting Macquarie's Final Binding Offer in September 2018. This entrusts Macquarie with the construction of the Martin Place Metro Station and Integrated Station Development on behalf of the NSW Government, and enables the lodgement of this Stage 2 SSD DA.

The below images reflect artistic renderings of Macquarie's vision for the Precinct, noting that the images are subject to design development.

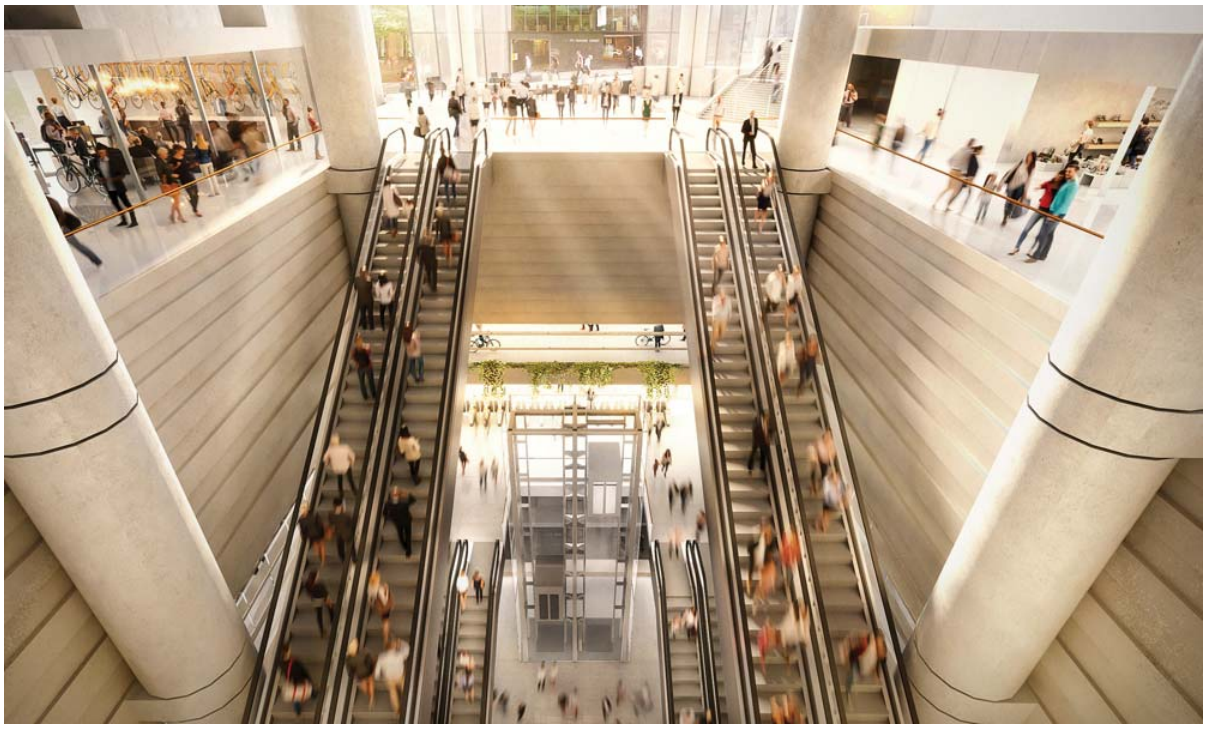


Figure 3 Artist's impression of the Martin Place Metro Station (North Site) and access to natural light at platform level

Source: Macquarie

[4] https://www.nsw.gov.au/contact-us/unsolicited-proposals/#currentcompleted-proposals

Figure 4 Artist's impression of the view from the concourse tunnel (under 50 Martin Place)

Source: Macquarie

1.2.3 Stage 1 Concept Proposal (SSD 17_8531)

On 22 March 2018, the Minister for Planning approved, subject to conditions, a Concept Proposal (SSD 17_8351), relating to the Sydney Metro Martin Place Station Precinct. That approved Concept Proposal represented the first stage in the delivery of the Martin Place Metro Station and integrated OSD, in accordance with the vision established under the *Sydney Metro City & Southwest – Chatswood to Sydenham* (the Metro) CSSI project. It established the planning and development framework that currently applies to this subsequent Stage 2 DA, but is proposed to be amended by the Stage 1 Amending DA, discussed further in **Section 1.2.5** below.

The approved Concept Proposal specifically encompassed:

- building envelopes for OSD towers on the North Site and South Site (see **Figure 5** below) comprising:
  - 28+ storey building on the South Site, with a tower set back 25m from Martin Place, and a podium height of 55m, as well as a 40+ storey building on the North Site.
  - Concept approval to integrate the North Site with the existing/retained 50 Martin Place building (the former Government Savings Bank of NSW).
- Predominantly commercial land uses on both sites, which would accommodate office, business and retail premises;
- A maximum total GFA of 125,437m^2 for the future development, as follows:
  - 104,270m^2 maximum GFA for the North Site (incorporating the floor space within the existing building at 50 Martin Place); and
  - 21,167m^2 maximum GFA for the South Site.
- Consolidated Design Guidelines to guide the built form and design of the future development.
- A framework for achieving design excellence.
- Strategies for utilities and services provision, managing drainage and flooding, and achieving ecological sustainable development.
- Conceptual OSD areas in the approved Martin Place Metro Station 'boxes', above and below ground level[5].

[5] *Refers to those components within the Metro CSSI approved station envelope that will contain the OSD elements not approved in the CSSI consent. Those elements include the end of trip facilities, office entries, office space and retail areas not associated with the rail infrastructure along with other office/retail plant and back of house etc requirements.*

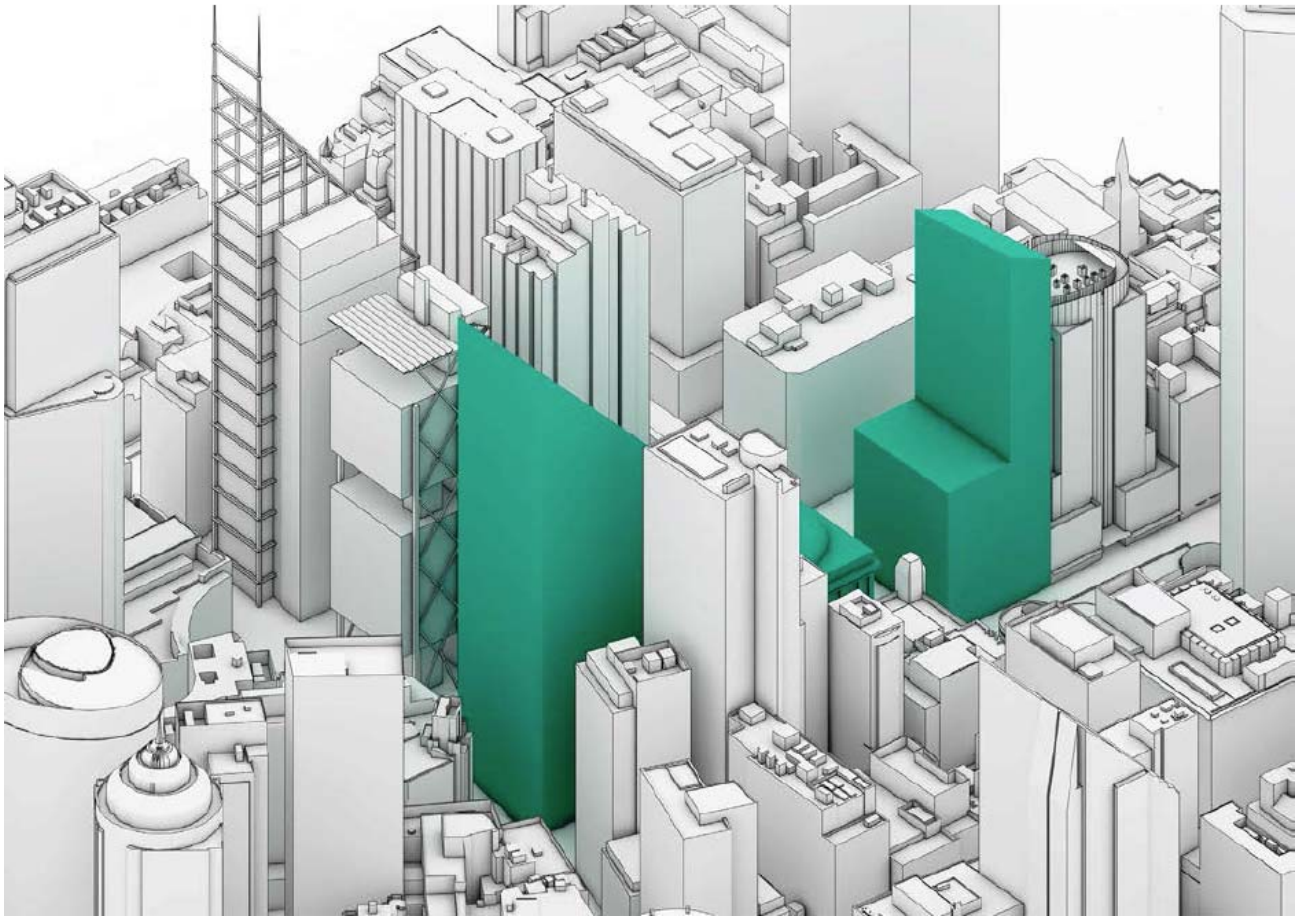


Figure 5 North Site and South Site approved OSD Building Envelopes (SSD 17_8351)

Source: Grimshaw

1.2.4 Planning Proposal

Following the determination of the Concept Proposal discussed above, a site specific amendment to the *Sydney Local Environment Plan 2012* (Sydney LEP 2012) relating to the North Site and South Site of Metro Martin Place Station Precinct was gazetted in June 2018. The new site specific provisions that apply under the Sydney LEP 2012 allow for a larger South Site tower envelope to be set back 8 metres from the Martin Place alignment up to as high as the Hyde Park North Sun Access Plane. It also permits an FSR of 22:1 on the South Site. **Figure 5** illustrates the envelope achievable under the Planning Proposal.

The Stage 1 Concept DA was lodged prior to the exhibition and gazettal of the Planning Proposal and was developed based on the development standards that applied to the South Site at that time. As a result, the Concept Proposal allows for a tower on the South Site that is now inconsistent with the site-specific development standards applying under the Sydney LEP 2012 (as amended). The Concept Proposal is, therefore, required to be amended before a Stage 2 DA for a larger tower on the South Site can be approved.

Figure 6 North Site and South Site Sydney LEP 2012 Envelopes

Source: Grimshaw

1.2.5 Stage 1 Amending DA (SSD 18_9347)

In light of the above, approval is being sought through a separate (but concurrent) application for an amended Concept Proposal for the Sydney Metro Martin Place Station Precinct. The DA, also known as the Stage 1 Amending DA, seeks approval for an amended concept for the Precinct that takes into account the larger OSD building envelope and Gross Floor Area (GFA) for the South Site than was considered under the Planning Proposal and is now enshrined within Sydney 2012.

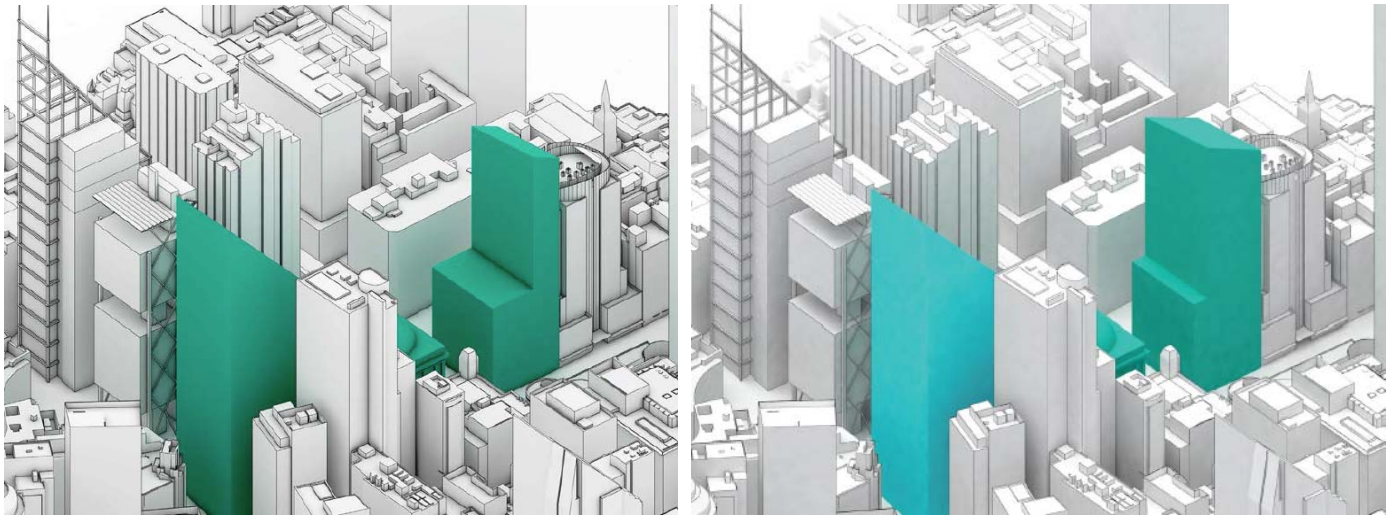
The submission of the Stage 1 Amending DA is on the basis that it will (subject to approval) modify the approved Concept Proposal (SSD 17_8351) under the provisions and procedures outlined within Section 4.17(1)(b) of the EP&A Act and Clause 97 of the *Environment Planning and Assessment Regulation 2000* (EP&A Regulation). A condition of consent on any approval granted for the Stage 1 Amending DA would accordingly address any inconsistency between the original Concept Proposal and the amended concept (and any subsequent detailed consents, such as the Stage 2 DA for the South Site).

Accordingly, this application for the detailed design of the South Tower cannot be determined prior to the approval of the Stage 1 Amending DA.

The amended South Tower envelope is shown in **Figure 7** below and aligns with the new controls applying to the South Site. It is proposed to amend the South Tower building envelope, through:

- a tower setback to Martin Place of 8m above the 55m podium height (reduced from the 25m setback created by the previous height limit and approved under the Concept Proposal);
- a tower height that remains consistent with the Hyde Park North Sun Access Plane; and
- an increase in GFA (and FSR) for the South Site from 21,167m^2 (12.5:1) to approximately 41,734m^2 (22:1), inclusive of all CSSI Station components.

Whilst the application will relate to the whole Precinct, no change is proposed to the Concept Proposal as it relates to the North Site, and no physical works are proposed as part of the application.



Approved *Amended*

Figure 7 Approved and amended building envelopes applying to the Precinct and Stage 2 DAs

Source: Grimshaw

1.3 Planning Context

This EIS has been prepared in accordance with the requirements of Part 4 of the EP&A Act, Schedule 2 of the EP&A Regulation, and the SEARs issued for the project and included at **Appendix B**.

Pursuant to Item 19 of Schedule 1, of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP), the development the subject of this Stage 2 DA is classified as SSD. More specifically the proposal is declared to be SSD because the site is located '*within a railway corridor or associated with railway infrastructure'*, the proposal has a Capital Investment Value (CIV) of more than $30 million, and it involves the development of commercial premises.

This SSD DA is also a staged application in the meaning of Section 4.22 of the EP&A Act. It has been made pursuant to Section 4.24 of the EP&A Act, which states that whilst a Concept Proposal remains in-force, any further detailed application in respect to the site cannot be inconsistent with the Concept Proposal. This detailed Stage 2 SSD DA has been made with reference to the concurrent Stage 1 Amending DA (SSD 18_9347) and is consistent with and pursuant to the Stage 1 Amending DA.

This report describes the site, its environs and the proposed development, and provides an assessment of the proposal in terms of the matters for consideration under Section 4.15(1) of the EP&A Act.

1.4 Objectives of the Development

This Stage 2 SSD DA forms part of a broader planning process necessary to realise the project objectives and vision for the Metro Martin Place Precinct. Those objectives are to:

- Create a fully functional, compliant and inspiring Metro station that delivers a world class public transport experience for its customers.
- Maximise integration of the new Metro station and office buildings with existing public transport and pedestrian routes in and around Martin Place, and improve connections for the whole community visiting or working in the area.
- Build on the City Council's 2030 Strategy for Sydney, to enhance Martin Place as Sydney's premier civic space and create a lively, activated city neighbourhood at the heart of the Sydney CBD.
- Celebrate 50 Martin Place as one of Sydney's most significant heritage buildings with an ongoing relevance as Macquarie's global headquarters.

- Use the above ground development to create the next generation workplace environment that realises the opportunities that are emerging in future work practice, wellbeing and sustainability, communication and digital technologies, security and mixed-use development.

Key development objectives which underpin this application include:

- Establishing a building that provides a strong visual address and threshold to Martin Place.
- Providing a positive relationship and contribution to the significance and setting of 50 Martin Place.
- Creating a new civic building typology for Sydney that crosses the divide between active public transport, sustainability and employment.
- Include a range of ground level uses and experiences that contribute to activity within, and the evolving character of, Martin Place.
- Provide a high quality built form which sits harmoniously within the heritage and significance of Martin Place.
- Delivering a building that achieves world leading environmental sustainability outcomes.

1.5 Analysis of Alternatives

1.5.1 Strategic Need for the Proposal

The NSW Government has identified Sydney as Australia's finance and economic capital, containing half of Australia's globally competitive service sector jobs. It accounts for approximately 70 per cent of total NSW's economic output and over 20 per cent of Australia's gross domestic product (SGS Economics, 2014)[6]. It has also identified that Sydney's suburban rail network is the backbone of the city's public transport system, which connects the city's skilled workforce with high value employment land located throughout the Global Economic Corridor.

The Metro was proposed to address the current and future demand for rail services within Sydney and connect Sydney's citizens with not only the high value employment land within the Global Economic Corridor, but also with the major education and health precincts, retail and commercial areas and the centre's cultural facilities and open spaces. One of the preferred locations for a Metro Station was Martin Place, to service the core of Sydney's commercial district, the Macquarie Street ceremonial and governmental axis, the George Street, Pitt Street, and Castlereagh Street retail precinct, connection to George Street Light Rail and allow direct transfers between the Metro line and the existing heavy rail network at an existing train Station.

The CSSI EIS notes that the station strategy for Martin Place would:

- Reflect the significance of Martin Place and flagship status of the station by designing clear, legible, iconic, integrated entries;
- Provide generous space for customers in a busy pedestrian environment by extending the public domain into station entries;
- Provide an efficient interchange in the centre of the Sydney CBD through convenient, direct connections to the T4 Eastern Suburbs and Illawarra line platforms; and
- Integrate with the public domain and transport access improvements currently planned.

The following was noted in the Concept Proposal DA's Assessment Report prepared by the Department with regard to the strategic significance of the project:

- *"The development contributes to business investment through the delivery of significant new employment floorspace and new jobs, some of which will be used by Macquarie Bank. The proposal will help to position NSW as Australia's prime location for business growth and investment.*
- *The development supports the strategic goals, directions and actions of the Metropolitan Plan by contributing to a competitive economy by significantly increasing new employment opportunities within the Sydney CBD, with excellent access to public transport being integrated with the Sydney Metro station.*

[6] Reference from CSSI Project Application Report, pg. 21

- *The development is consistent with the objectives of the Eastern City District Plan, as it will contribute to a stronger and more competitive Harbour CBD, deliver integrated land use and transport planning and a '30-minute city' and grow investment, business opportunities and jobs within the Harbour CBD.*
- *The development will contribute to several strategic directions in Sustainable Sydney 2030, as it will deliver significant job growth to contribute to a globally competitive and innovative city and benefit from public transport improvements through the Sydney Metro to deliver integrated transport for a connected city."*

The proposed DA seeks to capitalise on the significant investment in the Sydney Metro, the increased capacity of the arising public transport system and the strategic positioning of the proposed Martin Place Metro Station in the commercial core of the CBD. This will provide high levels of access to a range of employment opportunities in the financial, professional services and IT district in and around Martin Place.

1.5.2 Analysis of Alternatives

Three options are available in responding to the identified need for the proposed development.

Do nothing

The 'do nothing' option (i.e. no OSD above the Sydney Metro Martin Place Station) is not a feasible option. The Sydney Metro project is fully committed and advanced in its planning and delivery, with OSD a key component to the overall project. In addition to place making and contributing towards the stimulation of urban development (consistent with the objectives for the Sydney Metro project) the OSD strategy by Sydney Metro supports the NSW Government in funding the cost of this step change piece of public transport infrastructure.

Further, as demolition was approved under the Sydney Metro Stage 2 CSSI (SSI 15_7400) (as modified) and has already substantially commenced on the site for the delivery of the Station and tunnel beneath, the 'do nothing' option would result in a vacant or wholly underutilised site with just the station entrances. This would also create significant challenges if seeking to develop the site at a later stage, and would result in a less integrated and unresolved outcome.

The significant capacity of the South Site aligns with the significant change in public transport and accessibility circumstances associated with the new Martin Place Metro Station. The Sydney Metro is a major public investment in infrastructure that had not been contemplated when the current Sydney LEP 2012 was adopted. Since 2012, the Department has reviewed and increased its population growth forecasts for the Metropolitan area, including Sydney City.

Alternative Option – Reduced South Tower

There is the potential to develop the South Tower in accordance with the current approved Concept Proposal (SSD 17_8531), and forego realising the site-specific development standards that apply to the South Site under the Sydney LEP 2012. This would result in a tower that is smaller than what is permissible under the amended building envelope, and would represent an underdevelopment of the land and a lost opportunity to realise the strategic opportunity the site represents.

Figure 8 below illustrates the approved building envelope under SSD 8351, which does not consider the site-specific development standards applying to the South Site, as compared to the amended building envelope at **Figure 9**. These figures illustrate that the reduced South Tower, which does not realise the capacity of the site in accordance with the new site-specific development standards under Sydney LEP 2012, would create an unsatisfactory outcome that:

- is a significant underdevelopment of land given the site specific planning controls applying to the site;
- fails to capitalise on the substantial increase in capacity that will be delivered as part of the Sydney Metro project;
- represents a lost opportunity to create a threshold condition that reinforces the Precinct as a public transport gateway for the Sydney CBD, and the greater environmental performance and sustainability of genuinely transit oriented development;
- is a lost opportunity to reinforce and reinvigorate the historic financial heart of the Sydney CBD;
- is a lost opportunity to maximise employment opportunities on the site;

- would result in a floor plate for the South Site that would not be desirable for commercial uses;
- would create an unsatisfactory urban design outcome; and
- represents an unsatisfactory relationship with surrounding buildings.

Ultimately, the best means to achieve the many stated objectives and intended outcomes for integrated land use and transport planning is reliant on developing a building that fully realises its site-specific merit. If the smaller, inefficient and non-optimised floor plate was to be developed, the proposal would be unlikely to achieve a pre-commitment from large multi floor tenant(s) who venture into the market two to four years prior to the commencement of a development project to secure occupancy. These tenants are crucial to Sydney being a global economic powerhouse and leader in attracting new talent. In other words, to attract premium global businesses, larger floor plates are needed. A tower setback greater than 8m from Martin Place compromises market opportunities for these premium tenants and this is considered to contrary to the public interest, and stated planning objectives.

On this basis, the reduced tower is the less desirable option from an urban design, transit-oriented development, sustainability and employment generating perspective. It is also less desirable from a commercial feasibility perspective having regard to the potential difficulty of retaining tenants with the desire to grow their businesses in a tower with reduced floor plates. Whilst such a narrow tower floor plate may work for residential uses, residential uses would undermine the original intent of Council to extend Martin Place through to Macquarie Street with a precinct of high-status commercial buildings, and residential uses are not encouraged by Council's recent *Central Sydney Planning Strategy 2016-2036*.

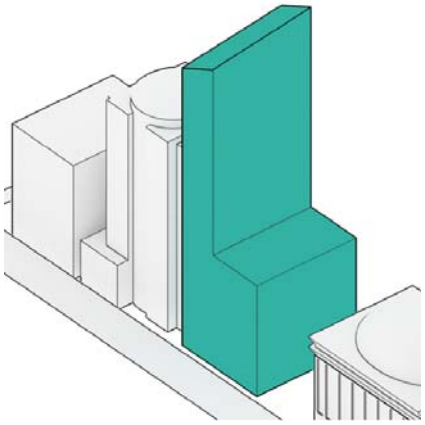


Figure 8 Approved building envelope

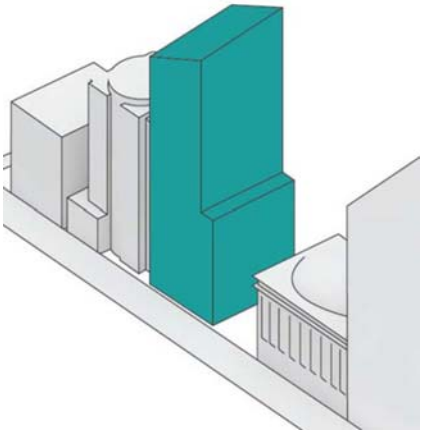


Figure 9 Amended building envelope that applies the site-specific LEP controls, to which this application is pursuant

Alternative Option – Non-employment generating OSD

Exploring alternative uses for development above the new Station is another option, with other land uses being permissible on the South Site under the Sydney LEP 2012. The main alternative land uses from an economic point of view would be residential or hotel uses.

However, these alternative land uses are inconsistent with the Concept Proposal and the site-specific development standards under Clause 6.38 of the Sydney LEP 2012, and with the long-term strategic vision for the South Site in the context of the broader Precinct. Such a development would clearly be at odds with the local (e.g. the draft Central Sydney Planning Strategy) and state planning objectives, where there is a clear priority to increase employment growth and increase office floor space capacity within the Sydney CBD, as the primary place for business. Non-commercial land uses at this particular location could undermine or compromise the prosperity and growth of the significant income-producing financial, professional and IT services sectors that are located there and need more room to grow.

There also continues to be a significant amount of activity with respect to tourist and visitor accommodation development within central Sydney, with the City of Sydney Council approving over 60 hotel proposals since 2014, representing over 4,600 new hotel rooms (80% of which were in Central Sydney)[7]. Given this considerable supply and the higher order strategic planning objectives focussed around employment, there is further reason for discounting this option.

The complexities of accommodating Metro stations at both the North and South Sites also places overwhelming constraints and limitations on the ground plane in terms of OSD space and servicing requirements (particularly the South Site). By their function, hotels (especially of the higher end / upscale type one would expect to be sited on Martin Place) typically require grand and spacious lobbies, porte cocheres, bar/guest amenities and the like, all on the ground floor along with extensive servicing/loading requirements. Such essential functional requirements could not be accommodated harmoniously with the station on the South Site and the would be problematic to maintaining traffic flow in Elizabeth and Castlereagh Streets, and further challenges the potential to achieve retail street activation.

Alternative Option – The Macquarie proposal

The preferred option is to provide a fully integrated station and OSD solution on the South Site, consistent with and pursuant to the Stage 1 Amending DA. The proposal in this instance is considered the preferred option for the following reasons:

- **Realised Strategic Merit** – the proposal realises the strategic merit afforded by the site-specific development standards under the Sydney LEP 2012. It will enable the development of a building that maximises employment opportunities and capitalises on direct access to a high-speed rail network, and results in an improved urban design outcome. With the construction of the Sydney Metro (a step-change piece of transport infrastructure) there is a responsibility and reasonable planning expectation for the development capacity of the site to be realised, and to maximise public benefits.
- **Timing and Delivery** – pursuing the next stage in the delivery of the vision that was established under the Concept Proposal, is essential to the timely construction and operation of the integrated Station and OSD development at Martin Place. There is a firm time limit on the delivery of the critical state infrastructure and the associated OSD, which are intended to be constructed concurrently and will be open together at the commencement of operations on the Sydney Metro line in 2024. Any major divergence from the planning applications undertaken to date could threaten both the NSW Government's and Macquarie's commitment to open an integrated station and over station development as scheduled.
- **Single, fully integrated commercial and transport proposal** – The Macquarie proposal will facilitate the creation of significant commercial space in Central Sydney through an integrated design, resulting in maximum employment floor space return on investment in public transport infrastructure
- **A better-connected rail interchange than originally envisaged** – The proposed development connects the Sydney Metro and Sydney Trains (T4 Eastern Suburbs Illawarra line) and the local customer catchment. The public unpaid 'all weather' pedestrian concourse connection between the northern and southern Station entrances, significantly improves the connectivity for customers and non-customers of the Stations and across the Precinct.
- **A grand central transport hub** – the fully integrated nature of the proposal will allow, as demonstrated in the plans at **Appendix A**, exceptional station entrances and customer experiences both for the northern and southern Metro entry Sites, connected through the shared concourse under 50 Martin Place. The integrated nature of the proposal will allow for a more holistic design solution which will maximise the benefit to public transport users, the commercial tenants in the OSD towers and the travelling public generally.
- **Enhanced economic and civic value** – the landmark, fully integrated OSD solution for the precinct, will contribute to Sydney's competitive edge and reinforce its status as a global city, in-line with the NSW Government's and Council's aspirations for the CBD.
- **A revitalised public realm** – the integrated nature of the proposal will provide significant public domain renewal and enhancement opportunities, below ground and at ground level, particularly in Martin Place and the surrounding streets.

[7] Page 161. Draft Central Sydney Planning Strategy

On balance, the development of a fully integrated station and OSD office solution for the South Site that is consistent with the site-specific planning controls, is considered to be the most appropriate option given the significant benefits to the future of the Precinct and external benefits more broadly for the city. It will ensure the project proceeds in a logical and timely manner, and will realise the vision for the South Site established under the Concept Proposal (as proposed to be amended).

1.6 Secretary's Requirements

In accordance with Item 3 of Schedule 2 of the EP&A Regulation, the delegate of the Secretary of the Department has issued requirements for the preparation of this EIS. A copy of the SEARs is included in **Appendix B**. The SEARs were finalised following input from agencies and Council (refer to **Section 3.0** for further details regarding the pre-lodgement consultation and engagement undertaken for the project).

The EIS must include the documents listed in Schedule 1 of the EP&A Regulation and must meet the requirements of Schedule 2 of the EP&A Regulation, specifically the form specifications in Clause 6 and the content specifications in Clause 7. Several stakeholders were identified with whom consultation must occur during the preparation of the EIS.

Table 1 provides a detailed summary of the individual matters listed in the SEARs and identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

Table 1 Secretary's Environmental Assessment Requirements

Requirement	**Location in Environmental Assessment**	
	EIS	**Technical Study**
General		
The Environmental Impact Statement (EIS) must address the *Environmental Planning and Assessment Act 1979* and meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 the Environmental Planning and Assessment Regulation 2000.	Environmental Impact Statement	-
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 6	-
Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include: • Justification of impacts • consideration of potential cumulative impacts due to other development in the vicinity • measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.	Environmental Impact Statement	-
The EIS must be accompanied by a report from a qualified quantity surveyor providing: ▪ a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the EP&A Regulation 2000) of the proposal, including details of all assumptions and components from which the CIV calculation is derived;	Section 1	-
• an estimate of the jobs that will be created by the future development during the construction and operational phases of the development; and	Section 5.30	QS CIV Letter (submitted under separate cover)
• certification that the information provided is accurate at the date of preparation.	Statement of Validity	-
Key Issues		
1. Statutory and strategic context The EIS shall: • address the relevant statutory provisions applying to the site contained in all relevant EPIs, including: o State Environmental Planning Policy (Infrastructure) 2007;	Section 5.4	Appendix M, Appendix I
o State Environmental Planning Policy (State and Regional Development) 2011	Section 5.4	QS CIV Letter (submitted under separate cover)

Requirement	Location in Environmental Assessment	
	EIS	**Technical Study**
o State Environmental Planning Policy No. 64 – Advertising and Signage (if signage proposed)	Section 5.4	Appendix BB
o State Environmental Planning Policy 55 - Remediation of Land	Section 5.4	-
o Draft State Environmental Planning Policy (Environment) 2017	Section 5.4	-
o Sydney Local Environmental Plan 2012 (and any planning proposals once exhibited).	Section 5.4	-
• address the relevant planning provisions, goals and strategic planning objectives in the following: o A Metropolis of Three Cities	Section 5.3.2	-
o NSW State and Premier Priorities	Section 5.3.1	-
o Eastern City District Plan	Section 5.3.3	-
o Future Transport 2056	Section 5.3.5	Appendix M
o State Infrastructure Strategy 2018	Section 5.3.4	Appendix M
o Development Near Rail Corridors and Busy Roads - Interim Guideline	Section 5.3.7	Appendix M
o Sydney City Centre Access Strategy	Section 5.3.7	-
o NSW Bicycle Guidelines	Section 5.3.7	Appendix M
o Sydney's Rail Future 2013	Section 5.3.7	Appendix M
o Sydney's Cycling Future 2013	Section 5.3.7	Appendix M
o Heritage Council Guideline on Heritage Curtilages 1996	Section 5.3.7	Appendix D
o Heritage Council Guideline, Design in Context – guidelines for infill development in the Historic Environment, 2005	Section 5.3.7	Appendix D
o Better Placed – an integrated design policy for the built environment of NSW 2017	Section 5.3.7	-
o Draft Greener Places Policy	Section 5.3.7	-
o Interim Construction Noise Guidelines	Section 5.3.7	Appendix P
o Noise Policy for Industry	Section 5.3.7	Appendix P
o Relevant City of Sydney policies, codes and guidelines (where required pursuant to relevant Local Environmental Plan policies)	Section 5.3.7	-
2. Consistency with the Stage 1 concept approval The EIS shall demonstrate that the proposal is consistent with the consent for the concept proposals for the development of the site, Martin Place Station precinct, including Stage 1 Concept Approval SSD 8351 and any applicable amending Concept Approvals.	Section 5.5	Appendix CC
3. Design excellence and built form The EIS shall: • demonstrate that the detailed building design exhibits design excellence: o consistent with the Sydney Metro Martin Place Station Precinct Consolidated Design Guidelines o consistent with the advice of the design review panel (DRP), providing the DRP minutes and the Applicant's response to the DRP advice. • 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 Castlereagh and Elizabeth Street elevations.	Section 5.6	Appendix DD
4. Integration with Sydney Metro station infrastructure The EIS shall: • clearly distinguish the extent of the proposal that is State significant development (SSD) from the infrastructure approval components of the station (CSSI 7400), while noting any relationships and interdependencies.	Section 4.1 Section 4.6	Appendix A Appendix A

Requirement	Location in Environmental Assessment	
	EIS	Technical Study
• show how the proposed over station development (OSD) will integrate in design terms and structurally with the Sydney Metro station infrastructure, and identify any specific requirements of the CSSI 7400 approval that has influenced the design of the OSD. • detail any design approaches / solutions within the proposed building that will benefit the amenity of the station below	Section 4.4 and 5.7	Appendix A
5. Visual and amenity impacts 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.	Section 5.9	Appendix W
• provide a view impact analysis showing the proposed building as viewed by pedestrians when moving both east and west along Martin Place and where the proposed building is visible from the streets immediately surrounding the site.	Section 5.9	Appendix W
• 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 particular regard to the impact of the proposal on solar access to Martin Place, Hyde Park and Pitt Street Mall.	Section 5.10	Appendix K
• provide a reflectivity analysis identifying potential adverse glare conditions affecting motorists, pedestrians and occupants of neighbouring buildings.	Section 5.18	Appendix J
• identify any other potential impacts of the proposal on the amenity of surrounding land uses and the public domain (and in particular Martin Place and the likely station entrances).	Throughout Section 5	-
6. Heritage The EIS shall: • 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, and in particular, heritage items at 38-46 Martin Place, 50 Martin Place, Martin Place Railway Station, Martin Place, Chifley Square and Richard Johnston Square. • 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, including Martin Place.	Section 5.8	Appendix D
7. Ecologically Sustainable Development The EIS shall: • detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the EP&A Regulation 2000) will be incorporated in the design, construction and ongoing operation of the development. • demonstrate the proposed development will reflect leading industry practice in sustainable building principles to improve environmental performance, including energy and water efficient design and technology, and use of renewable energy.	Section 5.31 Section 5.12	Appendix T Appendix T
8. Traffic, parking and access (operation) The EIS shall include a traffic, parking and access assessment providing: • details on the current and likely estimated future mode share resulting from the proposed development, including a comparison against the travel mode share model assessed in the Stage 1 SSD • details of the current and likely estimated future daily and peak hour vehicle, public transport, pedestrian and bicycle movements from the site, including an	Section 5.13	Appendix M Appendix N

Requirement	Location in Environmental Assessment	
	EIS	Technical Study
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 minimise private car trips • modelling and analysis of pedestrian and cyclist access to the proposed development in consultation with TfNSW • details of existing and proposed vehicle access arrangements, including parking, loading dock and servicing 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. • 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) The EIS shall include a Construction Management Plan providing: • 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, such as this station (south site) • 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	Section 5.23	Appendix M Appendix O
• an assessment of potential impacts of the construction on surrounding buildings and the public domain, including: o noise and vibration, o air quality and odour impacts, dust emissions, o water quality, stormwater runoff, groundwater seepage, o soil pollution and construction waste, and o proposed measures to mitigate any impacts.	o Section 5.17 o Section 5.25 o Section 5.20 o Section 5.23 o Section 7	o Appendix P o Appendix Y o Appendix H o Appendix U -
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 (BDAR) where required under the Act, except where a waiver for preparation of a BDAR has been granted.	Section 5.4	Appendix AA
11. Public benefits, contributions and / or voluntary planning agreement The EIS shall address the provision of public benefit, services and contributions in consultation with key stakeholders, such as the Department, Council and TfNSW, 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 5.32	-
12. Utilities The EIS shall: • identify and address the existing capacity to service the development proposed and any augmentation requirements for utilities in consultation with relevant agencies • 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.	Section 5.19	Appendix E
13. Staging The EIS shall set out the construction staging of the proposed development, including the relationship with the construction / delivery of the Sydney Metro stations, timing of public domain works and the staging of other relevant works and events within Martin Place.	Section 4.14.5	Appendix O

Requirement	Location in Environmental Assessment	
	EIS	Technical Study
14. Pre-submission consultation statement 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. In particular, an agreed schedule of consultation with the Heritage Council of NSW must be included in the EIS.	Section 3	Appendix F
Consultation		
During the preparation of the EIS, you are required to consult with the relevant local, State or Commonwealth Government authorities, service providers, and the local community. In particular, early consultation is required through meeting(s) with the Government Architect NSW, RMS, TfNSW (including Sydney Metro, Sydney Trains and Sydney Light Rail), Heritage Council of NSW, Fire and Rescue NSW, State Emergency Services and City of Sydney Council. The EIS must describe the pre-submission consultation process, issues raised and how the proposed development has responded to these issues. A short explanation should be provided where amendments have not been made to address an issue.	Section 3	Appendix F
Plans and Documents		
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the *EP&A Regulation 2000*. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following: • site survey plan, showing existing levels, location and height of existing and adjacent structures/buildings	Section 2.3	Appendix C
• site and context analysis plan	Section 2	Appendix A
• plans and schedules showing compliance with the Stage 1 concept approval	Section 5.5	Appendix A Appendix CC
• schedule of proposed gross floor area, per level and allocation according to the SSD or CSSI	Section 4.2	Appendix A
• architectural drawings (to a usable scale at A3), clearly identifying where approval is sought as SSD and those components of the development that are CSSI	Section 4.1 Section 4.6	Appendix A
• architectural and urban design statement, including illustrations and justification showing how the buildings will relate to the station entrances and enhance the amenity of the surrounding public domain	Section 4.4 Section 5.7	Appendix A
• visual and view impact analysis and photomontages, and skyview analysis	Section 5.9 Section 5.11	Appendix W Appendix X
• shadow / solar access report and diagrams, and verification	Section 5.10	Appendix K
• physical and 3D digital model (in accordance with the City of Sydney specifications)	-	Submitted under separate cover.
• wind assessment (including a wind tunnel study)	Section 5.16	Appendix L
• flood assessment / stormwater management plan (where relevant)	Section 5.21	Appendix H
• contaminated land assessment (where relevant)	Section 5.4	-
• ESD statement (incorporating a sustainability framework)	Section 5.12	Appendix T
• pre-submission consultation statement	Section 3	Appendix F
• heritage impact statement, including heritage interpretation strategy	Section 5.8	Appendix D
• an archaeological assessment (where relevant)	Section 5.24	Appendix D
• access / DDA impact statement	Section 5.29	Appendix Q
• transport, traffic and parking assessment and draft green travel plan	Section 5.13	Appendix M
• draft loading dock management plan	Section 5.13.7	Appendix N
• construction management plan	Section 5.23	Appendix O
• noise and vibration report (operation)	Section 5.17	Appendix P

Requirement	Location in Environmental Assessment	
	EIS	Technical Study
• air quality assessment	Section 5.25	Appendix Y
• services and utilities infrastructure report	Section 5.19	Appendix E
• Structural statement	Section 5.15	Appendix G
• Preliminary building assessment report	Section 5.28	Appendix V
• Rail corridor impact report	Section 5.14	Appendix I
• Reflectivity analysis	Section 5.18	Appendix J
• Signage details (if proposed)	Section 5.4	Appendix BB
• Waste management plan	Section 5.22	Appendix U
• CPTED assessment (including safety and security assessment)	Section 5.27	Appendix S

1.7 Other Approvals

In addition to the approvals noted elsewhere in this document, additional approvals will be required in order to permit the proposed development to occur.

These approvals may include, but are not limited to:

- *Roads Act 1993* (including Section 138 approvals);
- *Protection of the Environment Operations Act 1997* (including environmental protection licences);
- *Sydney Water Act 1994* (including Section 73 compliance certificates).
- Approval for OLS Protrusion under the *Airports (Protection of Airspace) Regulations 1996.*

These additional approvals, and any others that may be required, will be sought at the appropriate time. It is also noted that some of these approvals cannot be refused where required for SSD in accordance with Section 4.42 of the EP&A Act.

2.0 Site Analysis

2.1 Precinct Location and Context

The Metro Martin Precinct is located in the Sydney CBD in the City of Sydney Local Government Area (LGA) (refer to **Figure 10** below). The Precinct bridges a portion of the eastern end of Martin Place, which is a pedestrianised plaza running east-west through the centre of Sydney's CBD, and links significant government and cultural buildings on the eastern built edge of the city with the commercial heart of the CBD. Martin Place is recognised as being one of Central Sydney's great public and commemorative spaces, and was once considered to be the heart of the finance and banking sector in Sydney. This area has since attracted a diverse range of other professional industries and supporting uses, to create a lively working and entertainment precinct.

Whilst characterised by a range of architectural styles and treatments, Martin Place continues to be an area that is defined by buildings of a perceptively high quality, and has retained its character as one of Sydney's most important urban spaces. Martin Place and a large number of buildings that front it, or are in close proximity to it, are identified as heritage items of either National, State or Local significance, as discussed further in **Section 2.6**.

2.2 Precinct Description

The Sydney Metro Martin Place Station Precinct refers to the entire city-block bounded by Hunter Street, Elizabeth Street, Martin Place and Castlereagh Street, that portion of Martin Place located between Elizabeth Street and Castlereagh Street, and the northernmost property in the block bounded by Martin Place, Elizabeth Street, King Street and Castlereagh Street. Together, these areas constitute a site area of 7,919m^2. The Precinct (including Martin Place) has a dimension from north to south of approximately 206 metres and from east to west of approximately 45 metres.

The Concept Proposal in effect divided the Sydney Metro Martin Place Station Precinct into a series of sites relating to the following properties:

- North Site – 50 Martin Place; 9-19 Elizabeth Street; 8-12 Castlereagh Street; 5 Elizabeth Street; 7 Elizabeth Street; and 55 Hunter Street.
- South Site – 39-49 Martin Place **(the subject of this application)**.
- Martin Place – being that part bound by Elizabeth Street and Castlereagh Street (this land was specifically excluded from the Concept Proposal.

This application applies to the land comprising the South Site within the greater Precinct. It is noted that a Precinct-wide approach has been adopted for bicycle parking and end of trip facilities, and as such certain facilities are proposed to be located on the North Site.

A locational map is included at **Figure 10**, and an aerial photo of the site is included at **Figure 11** below.

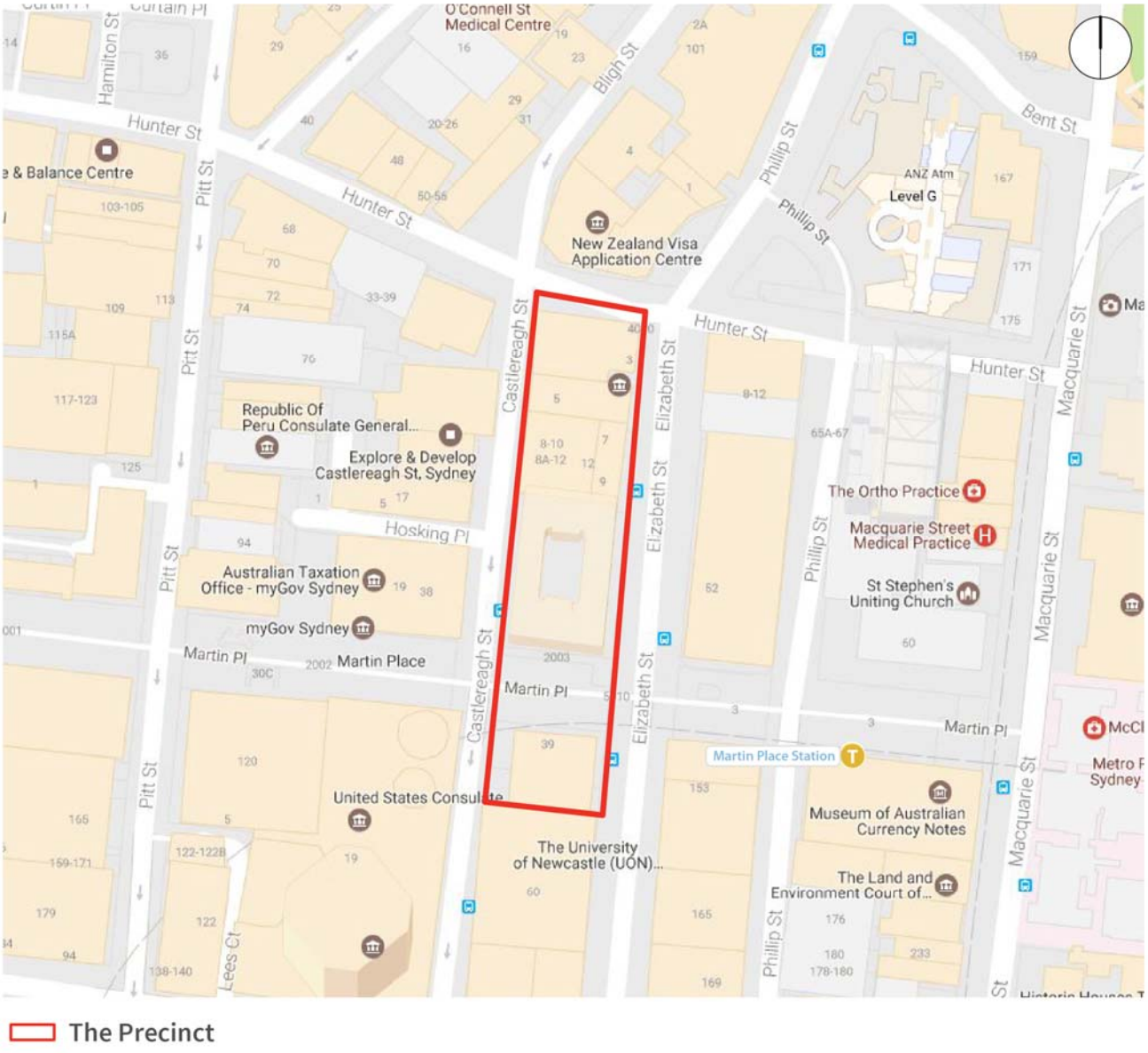


Figure 10 Location map of the Precinct

Source: Google maps & Ethos Urban

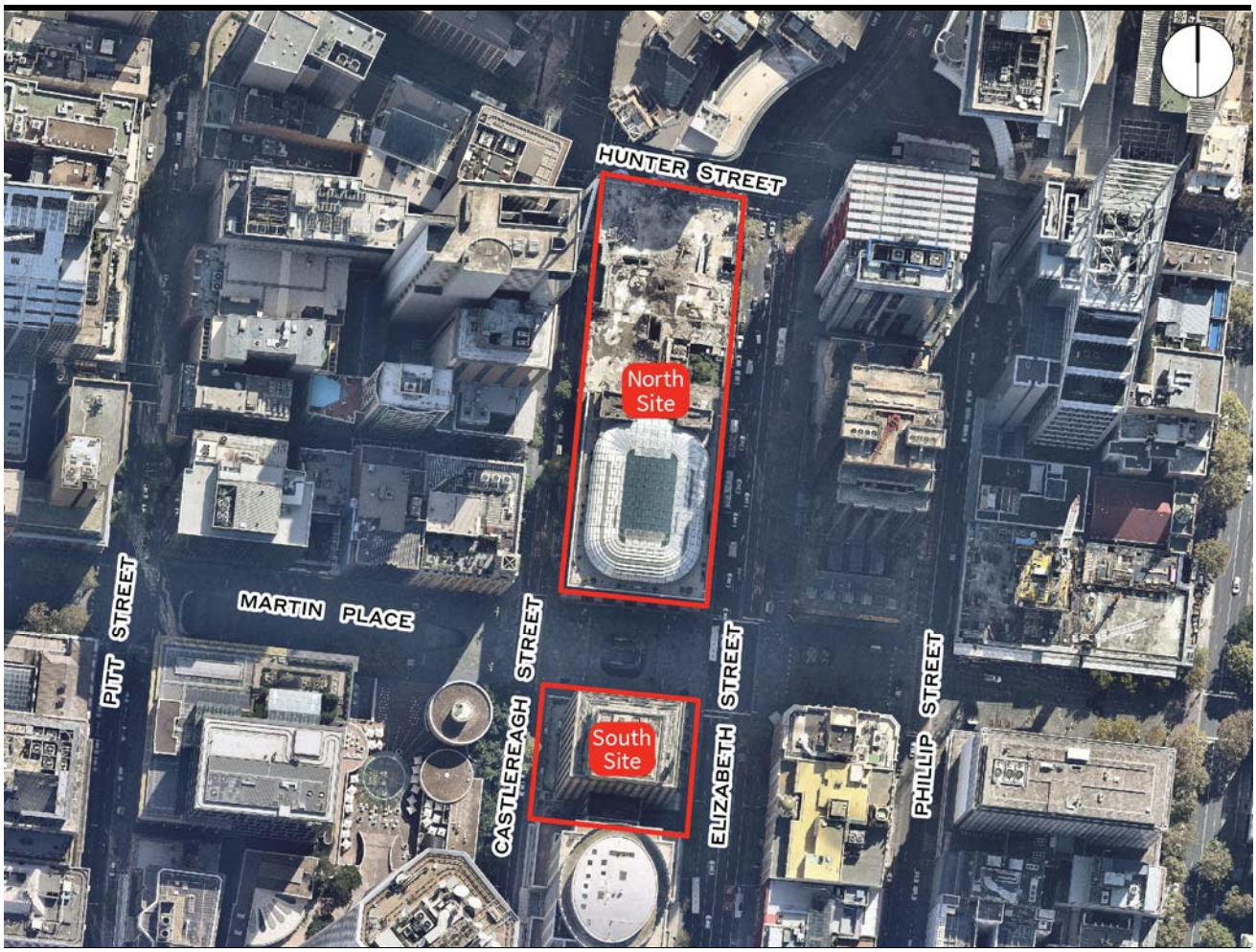


Figure 11 Aerial photo of the North and South Site (May 2018)

Source: Nearmap & Ethos Urban

2.2.1 Legal Description of the Development Precinct

Whilst the larger Precinct encompasses land partly owned by Macquarie, land acquired for the Sydney Metro Martin Place Station, and land owned by Council, the subject SSD DA strictly applies to the lot comprising the South Site, and the lots comprising the North Site to the extent that certain bicycle parking and loading facilities are proposed to be located in the basement of the North Tower (see **Section 4** for further discussion).

Table 2 below details the legal description and ownership of the South Site and North Site.

A Survey Plan is located at **Appendix C**.

Table 2 Legal description and ownership of the land subject to this DA

Address	Lot and DP	Owner	Area
South Site			
39-49 Martin Place	Lot 1 in DP 1103195	Sydney Metro	1,897m^2
	Lot 2 in DP 1103195	Sydney Metro	
North Site			
50 Martin Place	Lot 1 in DP 182023	Macquarie	6,022m^2
9-19 Elizabeth Street	Lot 1 in DP 526161	Sydney Metro *	
8-12 Castlereagh Street	Lot 2 in DP 929277	Sydney Metro	
	Lot 1 in DP 929277	Sydney Metro	
	Lot 1 in DP 173027	Sydney Metro	
7 Elizabeth Street	SP 13171	Sydney Metro	
5 Elizabeth Street	Lot 2 in DP 548142	Sydney Metro	
55 Hunter Street	Lot 1 in DP 222356	Sydney Metro	

** transfer of land is in the process of being registered with Land Registry Services*

2.3 Built Form

The South Site comprises an office building that is the process of being demolished in accordance with the approval for the Sydney Metro Stage 2 CSSI (SSI 15_7400) (as modified), enabling excavation works to commence on the rail tunnel beneath the site. As shown in **Figure 12** below, the demolition works have substantially commenced.

The building occupied most of the South Site and had frontages to Martin Place, Elizabeth Street, and Castlereagh Street. It comprised B-Grade office space with ground floor retail. The building was setback (by approximately 5 metres) from all street frontages at ground level and for its full height of 22 storeys (plus rooftop plant) with no podium. The first two levels of the building were defined by a variation in materials and finishes, creating a false 'base' that accentuated the east to west slope of Martin Place, and accommodated the retail uses. Within the Martin Place setback the building transitioned the level change via a series of steps and terraces.

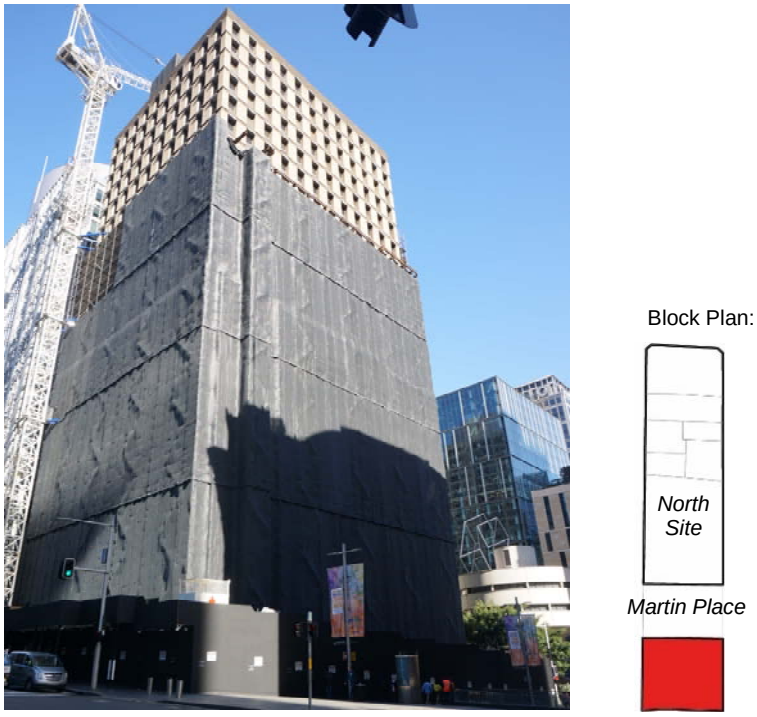


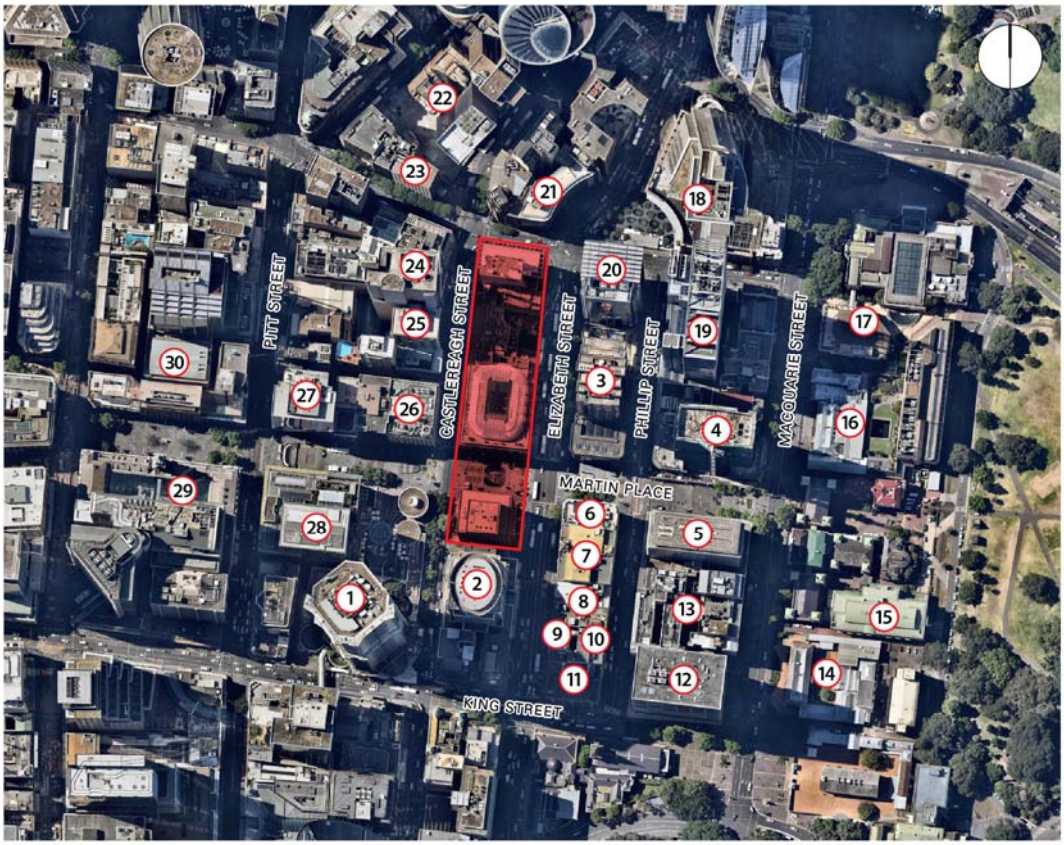
Figure 12 Demolition works occurring on site, as viewed from Elizabeth Street (July 2018)

2.4 Surrounding Development

The Precinct in relation to surrounding development is considered in the context map at **Figure 13** below. This context map highlights the broader adjacent structures and land uses surrounding the Precinct, as discussed further in the following sections.

The surrounding area is characterised by a variety of built forms and architectural styles, with many of the buildings having undergone contemporary refurbishment works or additions. There have been several redevelopment and refurbishment proposals in recent years along Martin Place to improve existing assets and recapture the premium commercial status of various sites (e.g. 5 Martin Place, 50 Martin Place, 20 Martin Place, upgrades of the MLC Centre, and 60 Martin Place). The Council has also identified a need to more broadly reinvigorate Martin Place and capitalise on this investment and is proposing to upgrade the public domain in Martin Place.

In terms of land use, the surrounding area is characterised by a predominance of office uses, with some ground floor retailing, cafés, or restaurants and hotels (most notably the Westin and the Wentworth) to support its primary business centre function.



1. MLC Centre
2. 60 Castlereagh Street
3. 52 Martin Place
4. 58-60 Martin Place (under construction)
5. Reserve Bank of Australia
6. Former Australian Provincial Assurance Building, 53-63 Martin Place
7. Former GIO Building, 60-70 Elizabeth Street
8. 165 Phillip Street
9. 82 Elizabeth Street
10. 169-171 Phillip Street
11. 148-160 King Street
12. Supreme Court of NSW
13. Land and Environment Court of NSW
14. Historic Houses Trust, 10 Macquarie Street
15. 8 Macquarie Street
16. Parliament of NSW
17. State Library of NSW
18. Chifley Tower
19. Deutsche Bank Place
20. 8-12 Chifley Square
21. 1 Chifley Square
22. Ashington House, 16 O'Connell Street
23. 50-56 Hunter Street
24. Capita Centre, 9 Castlereagh St
25. 15 Castlereagh Street
26. Former MLC Building
27. 20 Martin Place
28. 5 Martin Place
29. 1 Martin Place
30. City Recital Hall, 2 Angel Place

Figure 13 Surrounding development context map

Martin Place

Of significance to the proposed development is Martin Place that forms the northern boundary of the South Site and splits the North Site from the South Site in the form of a pedestrianised east-west plaza between Elizabeth Street and Castlereagh Street. Martin Place is recognised as being one of Sydney's most important public and civic urban spaces, and has evolved as a premier address for public institutions and commercial enterprise. Its granite paving connects George Street (the high street) to Macquarie Street (the ceremonial and governmental axis), and includes The Cenotaph memorial and various sculptures, fountains and seating that complete this valued public space. Refer to **Figure 14** and **Figure 15**.

The portion of Martin Place fronting the North and South Site is occupied by an entry to the underground Martin Place Shopping Circle that leads into the Martin Place Railway Station. This station portal is being removed as part of the upgrades to the Precinct under the CSSI. Refer to **Figure 16** below.

Figure 14 Martin Place looking west

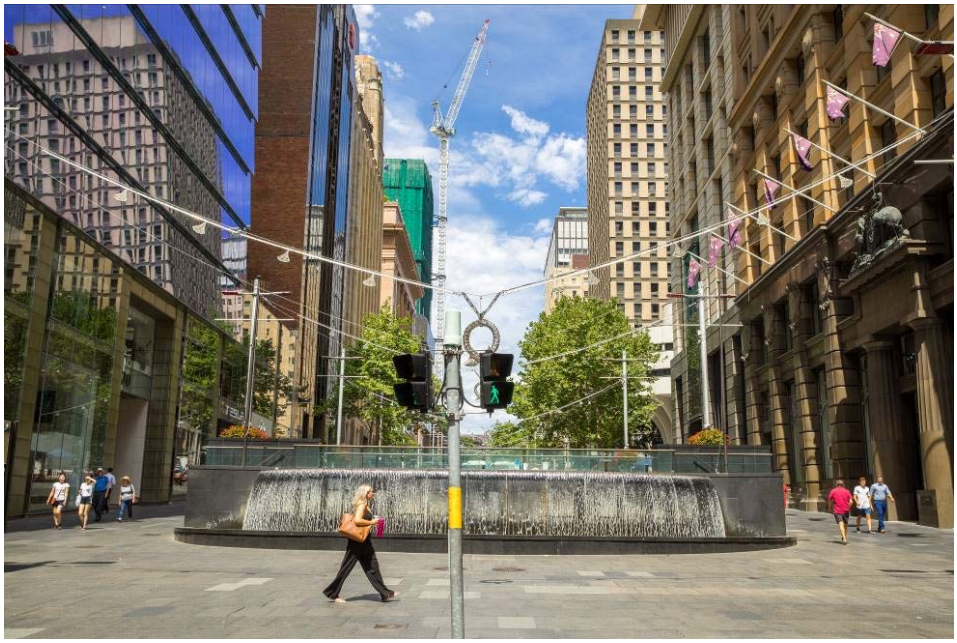


Figure 15 Martin Place looking east

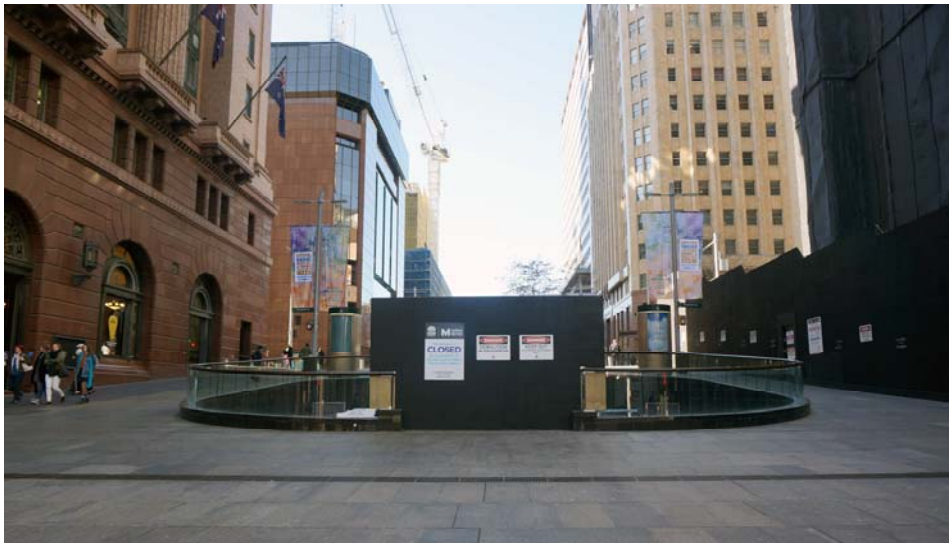


Figure 16 Closed entry into the Martin Place Shopping Circle and Railway Station between the North Site (left) and South Site (right)

To the North

The South Site is surrounded by the following developments to the north:

- Directly to the north is 50 Martin Place, which is the global headquarters of the Macquarie Group and will retained and integrated with the North Tower that is the subject of a separate application. This building is ten-storeys and was constructed for the Former Government Savings Bank of NSW in the 1920s. The building façade is characterised by large iconic columns, detailed relief panels, and other neoclassical wall and roof details. It is primarily clad in terracotta and pink coloured granite. A refurbishment of the building and a contemporary glass rooftop extension was completed by Macquarie in 2014. Photographs of the existing building are provided at **Figure 17** to **Figure 19** below.
- To the north east, on the eastern side of Elizabeth Street, is 52 Martin Place also known as the 'Colonial Centre'. This is a contemporary podium and tower style building that reaches a height of 46 storeys. It includes the city studios of Channel 7. This building is shown in **Figure 20** below.
- To the north west, on the western side of Castlereagh Street, is 38-46 Martin Place also known as the 'former MLC Building'. This building has frontages to Martin Place, Castlereagh Street, and Hosking Place and is constructed from honed granite at the ground floor and sandstone cladding on the upper floors, reaching 11 storeys in height with no podium. This building is shown in **Figure 21** below.

Figure 17 50 Martin Place, as viewed from Martin Place and Elizabeth Street

Figure 18 50 Martin Place as viewed from Martin Place and Castlereagh Street

Figure 19 50 Martin Place, as viewed from 39-49 Martin Place

Figure 20 52 Martin Place, as viewed from Martin Place

Figure 21 38-46 Martin Place, as viewed from Martin Place

To the East

The South Site is adjacent to the following developments to the east:

- Directly to the east, on the eastern side of Elizabeth Street, is the heritage building at 53-63 Martin Place as known as the 'former Provincial Australian Assurance Association Building' or 'APA Building'. This commercial building is 14 storeys in height with no podium and is clad in granite and terracotta. Refer to **Figure 22** below.
- Abutting this building to the south, is 60-70 Elizabeth Street also known as the 'former GIO Building'. This 11 storey gothic building has facades to both Elizabeth Street and Phillip Street and includes feature double-storey pointed arched windows, a gothic inspired lantern and rooftop metal globe, and no building podium. This building is shown in **Figure 23** below.

Figure 22 53-63 Martin Place, as viewed from Martin Place

Figure 23 60-70 Elizabeth Street, as viewed from Elizabeth Street

To the South

Directly south of the South Site is 60 Castlereagh Street, which is a contemporary office building comprising of a five storey podium and 17 storey (plus rooftop plant) tower. This building adjoins the existing building on the South Site for the first 11 storeys. This building is shown in **Figure 24** and **Figure 25**.

Figure 24 60 Castlereagh Street, as viewed from Elizabeth Street

Figure 25 the former South Site building adjoined to 60 Castlereagh Street

To the West

Directly west of the South Site, on the opposite side of Castlereagh Street, is the MLC Centre and forecourt (19 Martin Place). The MLC Centre building itself is significantly set back from Martin Place, addressing King Street, and reaches up to 250 metres (67 storeys) in height. The tower has a relatively small octagonal floor plate, is constructed from reinforced concrete, and houses a shopping centre within the podium. This building is shown in **Figure 26** below.

Figure 26 MLC Centre building as viewed from Martin Place

2.5 Topography

The South Site constitutes an east to west slope. The site falls westwards from Elizabeth Street (RL 27.02 to RL 25.48) to Castlereagh Street (RL 22.45 to RL 21.95), resulting in a change of approximately one commercial floor level between Elizabeth Street and Castlereagh Street.

A detail survey has been prepared by Veris (formerly Linker Surveying) and is included in **Appendix C**.

2.6 Heritage Context

A Statement of Heritage Impact (SHI) has been prepared by TKD Architects (**Appendix D**). This report identifies those heritage items that are within the greater Precinct and within the vicinity of the South Site, as illustrated in the heritage context map in **Figure 27.** It is evident that the Precinct is largely defined by the numerous heritage items, including Martin Place, which are identified as either items of National, State or Local heritage significance.

Parts of the Precinct are also captured under Special Character Areas (Martin Place and Chifley Square), as identified and mapped within the Sydney LEP 2012. Martin Place itself is also classified as an Urban Conservation Area under the Register of the National Estate.

Heritage impacts have therefore been an important consideration in the design of the proposed development. Specifically, the heritage items on, or in the vicinity of, the Precinct include:

Table 3 Heritage items surrounding and within the Precinct

Heritage Item	Commonwealth Listing	State Heritage Register	Sydney LEP 2012 Listing
Reserve Bank | 65 Martin Place*	105456		I1897
APA Building | 53-63 Martin Place*		00682	I1896
Former Government Savings Bank of NSW | 48-50 Martin Place*		01427	I1895
MLC Building | 38-46 Martin Place*		00597	I1894
Martin Place Station		01187	I1891
Martin Place			I1889
GIO Building I 60-70 Elizabeth Street*		00683	I1738
7 Elizabeth Street *Note: This item has been demolished under the terms of the CSSI Consent, however remains listed*			I1737
City Mutual Building I 60-66 Hunter Street*		00585	I1675
Qantas House I 68-96 Hunter Street*		01512	I1811
Richard Johnson Square			I1673
Chifley Square			I1708
Challis House | 4-10 Martin Place		00666	I1892
ANZ Bank (former) | 354–360 George Street		00085	I1772
Former General Post Office Building | 1 Martin Place		00763	I1890
Former "Millions Club" | 122–122B Pitt Street		00583	I1920
St James Church | 173 King Street		01703	I1847
Former "Bank of NSW" | 155–159 King Street			I1846
Parliament House | 6 Macquarie Street		01615	I1864
Former Colonial Mutual Life Building | 10A-16 Martin Place			I1893
Sydney Hospital group | 8 Macquarie Street			I1865
Rowe Street			I1948
Former Metropolitan "Usher's" Hotel | 64–68 Castlereagh Street			I1693
Former "Culwulla Chambers" | 65–71 Castlereagh Street			I1694
"Beanbah Chambers" | 235 Macquarie Street			I1881
Queens Square			I1882
Former Surry Hotel | 153 King Street			I1845

** represents those items where conservation management plans have been prepared.*

Figure 27 Key heritage items surrounding the Precinct

Note: 7 Elizabeth Street has been demolished under the terms of the CSSI Consent, however remains listed

Source: Sydney LEP 2012 and Ethos Urban

2.7 Access

The South Site is recognised as having some of the highest public transport accessibility in Sydney, being located within 800m of major rail and ferry nodes in addition to other existing and future connections for light rail and a substantial pedestrian and cycle network. This is discussed in the following sections.

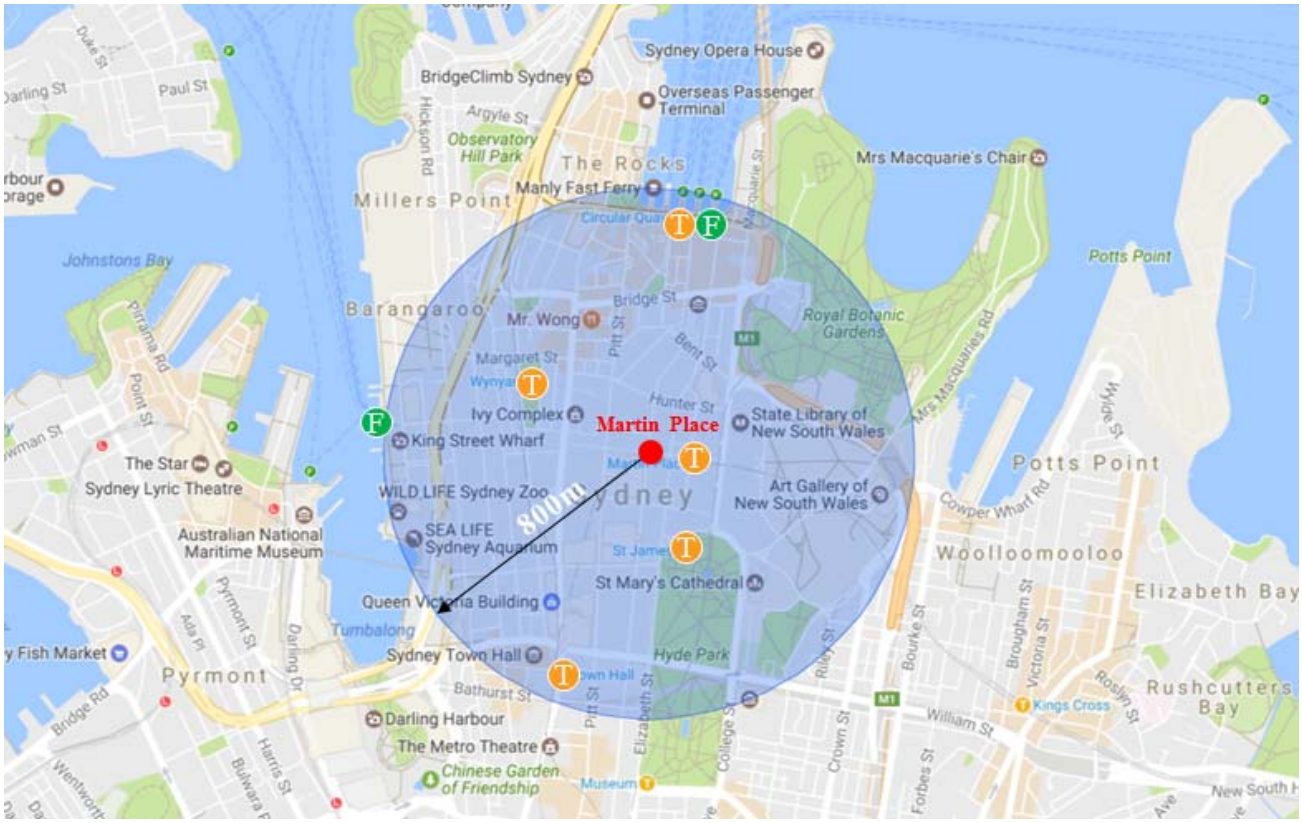


Figure 28 Proximity to major rail and ferry stations

Source: Arup

2.7.1 Rail

The Precinct presently benefits from Martin Place Railway Station on the T4 Eastern Suburbs Illawarra line connecting it with the surrounding Sydney CBD, Bondi Junction, and South Sydney. The Precinct is also conveniently located 450 metres north of St James Station, 650 metres east of Wynyard Station, and 900 metres north of Town Hall Station, which are all key stations in the Sydney Trains network with excellent connectivity to the wider network.

The Precinct will also benefit from planned improvements to Sydney's rail network being undertaken as the Sydney Metro City and Southwest project. This significant infrastructure upgrade entails the construction and operation of a new metro rail line from Chatswood under Sydney Harbour and through Sydney's CBD to Sydenham (and eventually onto Bankstown following the conversion of the line to Metro standards). The project also involves the delivery of seven (7) new metro stations, including Martin Place. As discussed in **Sections 4** and **5** of this EIS, the objective of the project is to align itself with the rail upgrades occurring as part of the Sydney Metro City and Southwest project.

The new Martin Place Metro Station was envisaged to serve the high-end commercial and financial precinct within the Sydney CBD, whilst also providing a new connection to the civic spaces and institutions including the State Library, Sydney Hospital, Domain and the Royal Botanic Gardens. It will also provide access to the events held in or near Martin Place during the off-peak period, such as, ANZAC Day, the Council's Christmas tree lighting, Vivid Sydney and the Sydney Festival.

2.7.2 Light Rail

The Precinct will benefit from ongoing improvements in Sydney's light rail network. Specifically, the CBD and South East Light Rail (CSELR) is a new light rail line for Sydney, currently under construction. The 12km route will feature 19 stops, extending from Circular Quay, along George Street to Central Station, through Surry Hills to Moore Park, and then to Kensington and Kingsford via Anzac Parade and Randwick via Alison Road and High Street. Construction is earmarked for completion in 2019 and with services commencing in 2020. **Figure 29** below contains an extract of the CSELR light rail network in relation to the Precinct.

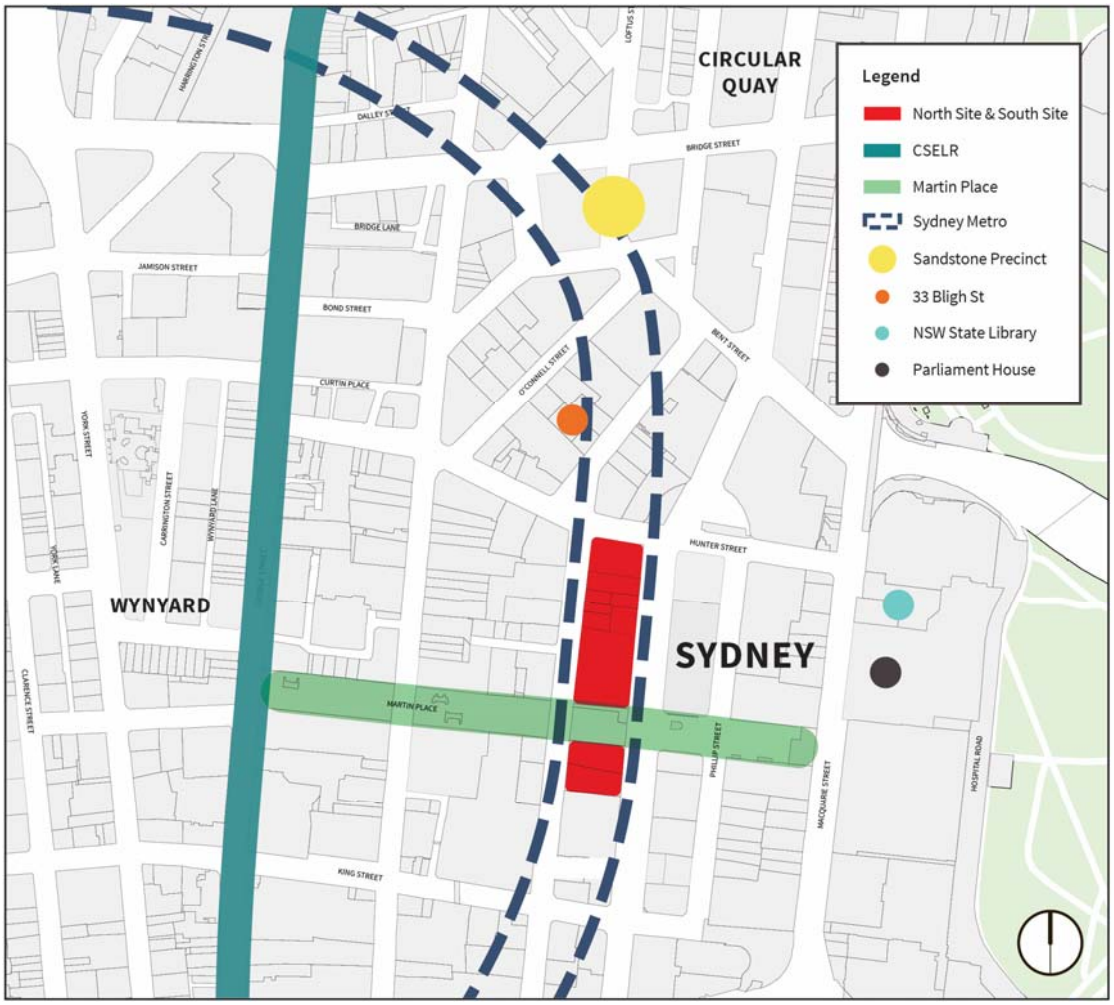


Figure 29 City shaping and nearby government development

2.7.3 Buses

There are numerous bus services operating in the vicinity of the Precinct. The closest bus stops are located on Elizabeth Street and Castlereagh Street, bordering the Precinct, which are serviced by various routes that primarily connect to the Eastern Suburbs of Sydney. These existing bus stops are identified in the Sydney Metro Stage 2 CSSI as being retained.

There are also major bus connections at Wynyard and Town Hall Railway Stations and Hyde Park, which service a variety of routes connecting the CBD with the greater metropolitan area of Sydney.

2.7.4 Ferries

Ferry wharves at Circular Quay are located approximately 850 metres north of the Precinct. These wharves connect the Precinct to various locations including Manly, Taronga Zoo, Parramatta, Darling Harbour, Neutral Bay, Mosman Bay and the Eastern Suburbs.

2.7.5 Vehicular Access and Parking

The Precinct is presently bordered by roads to the north, east and west, being:

- Hunter Street – bearing two-way traffic consisting of two traffic lanes in each direction.
- Elizabeth Street – bearing two-way traffic consisting of one bus lane and one traffic lane southbound from Hunter Street, and two traffic lanes northbound. There are also parking lanes on both sides of the road used as loading bays or bus zones or on-street parking on the weekends.
- Castlereagh Street – bearing one way southbound traffic, including one bus lane and one traffic lane, and parking lanes on either side of the road used for loading bays, bus zones or parking on the weekends.

The commercial building that previously occupied the South Site, accommodated basement parking for 68 vehicles, which were accessed via a driveway crossing on the Castlereagh Street frontage of the site (refer to **Figure 30** below).

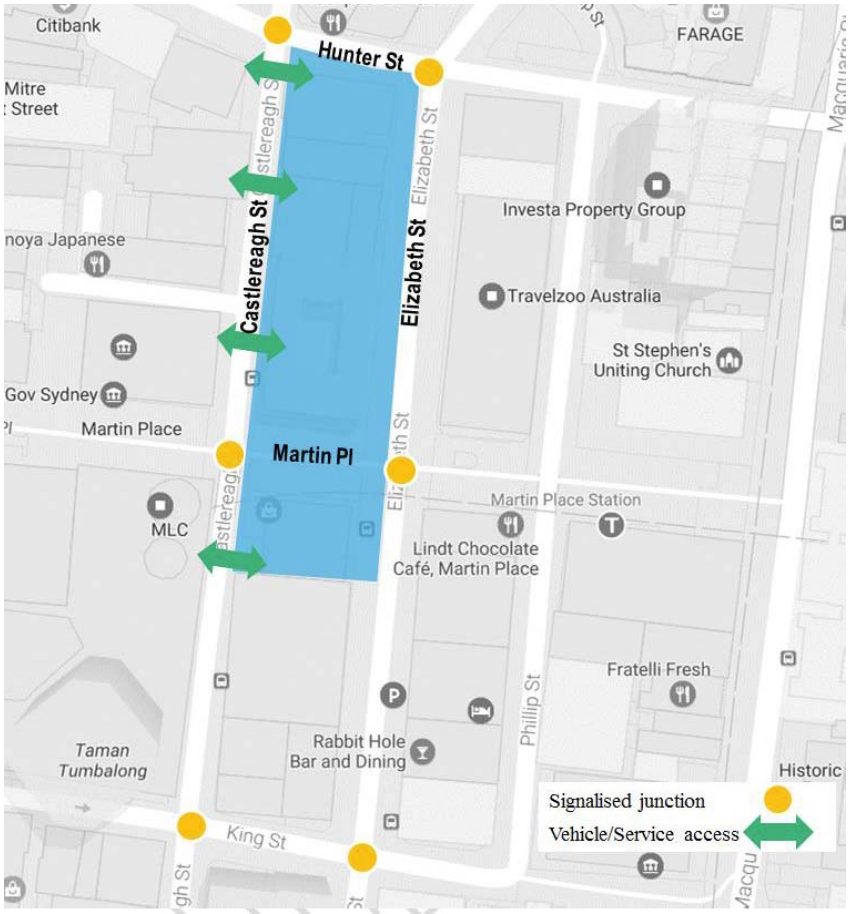


Figure 30 Existing vehicle access points

Source: Arup

2.7.6 Pedestrian Access

Pedestrians can access the South Site from the surrounding road network via dedicated footpaths or from Martin Place. Martin Place is the main pedestrian connection between the Precinct and the surrounding CBD, supporting east-west pedestrian movements which link significant government and cultural buildings on the eastern built edge of the city with the commercial heart of the CBD and major transport connections.

The area surrounding the Precinct has a well-established pedestrian network and is characterised by high levels of pedestrian activity in recognition of the Precinct's CBD location and proximity to the unique pedestrianised street that is Martin Place. A pedestrian survey undertaken by Sydney Metro during the planning of the Sydney Metro Stage 2 CSSI project confirmed that around 44,300 and 33,900 pedestrians were utilising Castlereagh Street and Elizabeth Street (respectively) over the course of a day.

2.7.7 Bicycle Access and Parking

The Precinct is accessible to cyclists via a network of cycle friendly roads through segregated and integrated dedicated cycleways. The road network directly bordering the Precinct is predominantly identified as cycle friendly, but does not benefit from a dedicated pathway. These routes feed into the dedicated pathways along Kent Street used to access the Harbour Bridge, and along Bourke Street connecting with the Inner West and Eastern Suburbs of Sydney, as illustrated in **Figure 31** below.

The *Sydney City Centre Access Strategy* also identifies future cycleways to encourage growth in cycling and reduce pressure on the public transport system. The future city centre cycle network is shown in **Figure 32** and includes:

- extending the Kent Street cycleway south to Liverpool Street;
- construction of a bi-directional cycleway on Liverpool Street;
- construction of a bi-directional cycleway on Castlereagh Street and Pitt Street, providing a new north-south connection through the CBD;
- extending the existing King Street cycleway to Castlereagh Street; and
- extending the east-west cycleway along Park Street to Castlereagh Street.

There is also a small amount of on-street bicycle parking (c.15 stands) located along the streets surrounding the Precinct. Most of the stands are attached to street furniture, with three dedicated stands located at the corner of Castlereagh Street and Martin Place. See **Figure 33** below.

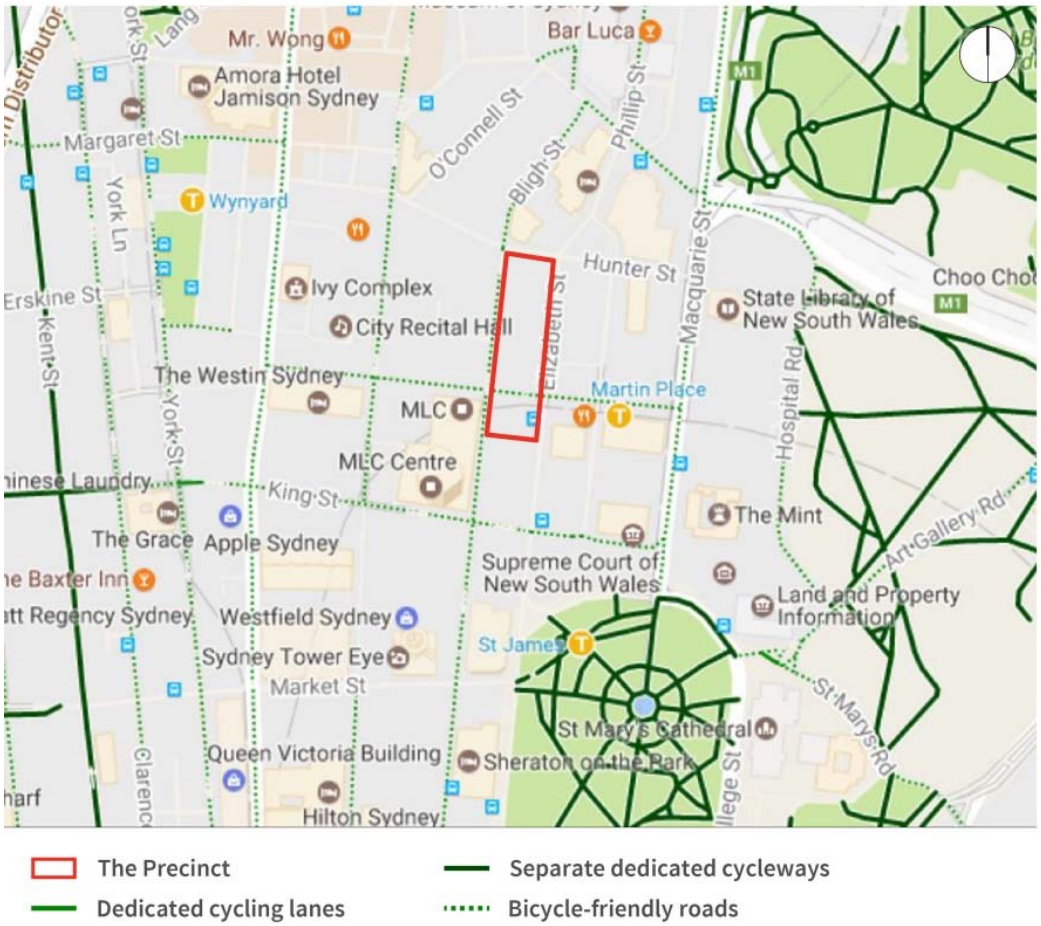


Figure 31 Existing cycle network

Source: Sydney Cycleways

Figure 32 Future cycle network

Source: City of Sydney Council & Arup

Figure 33 Local bicycle parking facilities

Source: Arup

2.7.8 Water Cycle Management

Stormwater

There are no known Sydney Water or Council-owned drainage pipes below the existing building footprints in the Precinct, however, it is likely that there are existing development drains serving the existing buildings and connecting into the extensive stormwater infrastructure in the streets immediately surrounding the Precinct. The stormwater infrastructure in the streets surrounding the Precinct owned by Sydney Water and the Council include existing stormwater pits and pipes on Castlereagh Street, Elizabeth Street, Phillip Street and Bligh Streets, and within the public domain area of Martin Place. This is described further in **Section 2.7.9** below.

Flooding

The Council City Area Catchment Flood Study, May 2016 provides information and flood maps which indicate that some areas of the proposed development Precinct are impacted by flooding. Generally deeper flooding is isolated to Hunter Street with some minor flooding (isolated to the road corridor) along both Elizabeth Street and Castlereagh Street (North Site).

Refer to **Section 5.21** for further details regarding the management of flood impacts.

2.7.9 Utilities and Infrastructure

A Utility Services Infrastructure Assessment has been prepared by Arup and accompanies this report in **Appendix E**, detailing the existing utilities in the vicinity of the Precinct. These utilities are also illustrated in the Survey in **Appendix C**, where relevant. The utilities and infrastructure identified below have been found to have existing connections to structures on the Precinct or in the vicinity of the Precinct.

Stormwater

The proposed development has both Sydney Water and Council drains in the vicinity of the Precinct. These comprise of:

- a 710 x 1070mm brick oviform drain that is heritage listed (s.170 register) as part of the Bennelong stormwater channel network in the middle of the street, on both Castlereagh and Elizabeth Streets;
- a 400mm vitrified clay pipe on Hunter Street; and
- a 250mm cast iron cement lined pipe on Bligh Street near Richard Johnson Square.

Sewer

The proposed development has Sydney Water sewer infrastructure in the vicinity of the Precinct, including:

- a 711 x 1066mm and 914 x 1371mm concrete main on Castlereagh Street;
- a 300mm vitrified clay, concrete encased, main on Elizabeth Street;
- a 225mm vitrified clay, concrete encased, main on Hunter Street; and
- a 711 x 1066mm concrete main on Bligh Street near Richard Johnson Square.

Potable Water

The proposed development has Sydney Water potable water infrastructure in the vicinity of the Precinct, including:

- a 250mm diameter cast iron cement lined main on Castlereagh Street, Hunter Street and Bligh Street near Richard Johnson Square; and
- a 450mm diameter cast iron cement lined main on Elizabeth Street.

Telecommunications

A number of service providers have telecommunication and optic fibre cables in vicinity of the Precinct including AAPT/ PowerTel, AARNet, NBN Co., Nextgen, Optus, Pipe Networks, Primus Telecom, Soul Communications, Telstra, Uecomm, Vocus Communications and Verizon. Of these service providers, a number of the cables run across Martin Place, Hunter Street or Richard Johnson Square, and have connections to the existing commercial buildings in the Precinct.

Gas Infrastructure

Jemena gas infrastructure is located within the vicinity of the North Site and South Site, including 2 x mains along Castlereagh Street, 2 x mains along Hunter Street, 1 x main at Elizabeth Street and 1 x main at Bligh Street (near Richard Johnson Square).

Electrical Infrastructure

Ausgrid has extensive electrical infrastructure running along Castlereagh Street, Elizabeth Street, Hunter Street, Bligh Street, and through Martin Place.

3.0 Consultation

Consultation is recognised as being an important part of the successful delivery of the Sydney Martin Place Station Precinct Project. Macquarie has been consulting with the NSW Government, key agencies, Council and neighbouring landowners and tenants as well as members of the general public since the initial inception of the project. This dedication to consultation has continued throughout the initial Concept Proposal stage to inform the design development of Macquarie's preferred proposal, and the overall content of this Stage 2 DA and the concurrent Stage 2 DA for the North Site and Stage 1 Amending DA.

A Stakeholder and Community Engagement Summary Report (**Appendix F**) has been prepared by Ethos Urban and draws on the consultation program undertaken prior to the lodgement of this Stage 2 SSD DA. More specifically, the report describes:

- the relevant stakeholders and current community context;
- the range of engagement/consultation programs held and the outcomes of these programs; and
- the proponent's response to issues raised to date.

The level of consultation undertaken up to the lodgement of this DA is commensurate with that completed for the Concept Proposal and exceeds that required by the SEARs.

3.1 Pre-Lodgement Consultation

Macquarie has commenced engagement with stakeholders, adjoining landowners, community groups and the broader community. The feedback provided during the consultation has informed the concept and design process.

Broad ranging consultation has been undertaken to date. Various engagement methods and tools (summarised in **Table 4** below) were used to consult and engage with stakeholders and the community prior to lodgement of the SSD DA, provide accessible information on the proposal, create opportunities for feedback and provide opportunities for the design to address concerns where possible. The pre-lodgement engagement process included:

- Accessible information on the proposal via the project website, launched in January 2017 and which has been regularly updated regarding the status and details of the proposal. It also informs visitors on how to provide feedback.
- Accessible and well publicised contact channels in the form of a project 1800 phone line and email address.
- Face to face meetings with government agencies and neighbouring property owners/tenants and directly affected stakeholders.
- A dedicated briefing and drop in session for nearby businesses and property owners/tenants.
- Three 'drop-in' public information sessions that allowed the public to view the proposal, and provide feedback directly to the project team. These sessions were notified to the public via an advert in local media, the project website, and an invitation letter.

Table 4 Key consultation and communication methods

Method	Content
Stakeholder Meetings	Key stakeholders (including agencies, Council and the local community) were identified, and meetings were held on the proposal to gain early feedback. A summary of the meetings is provided in the Stakeholder and Community Engagement Report at **Appendix F**.
1800 Community Information Phone Number	A project specific 1800 Community Information Line (1800 005 047) was established.
Project email address	A project specific email address (enquiries@metromartinplace.com) was established.
Project website	A project website (http://www.metromartinplace.com/) was established at the commencement of planning for this Precinct, and updated as the project progressed.

Method	Content
Letterbox Drops	Approximately 4,000 invitation letters were delivered to all properties and businesses within 500m of the Precinct, and on a second occasion to those in close proximity of the site, which notified them of the project, invited them to the information sessions and provided contact details for more information.
Newspaper Advertisements	Public notices were also published in the Central Sydney, Sydney Morning Herald and Daily Telegraph newspapers on 26 April 2018 and 31 May 2018 to advertise the community information sessions and to provide the phone and email contact details for more information.

Macquarie has engaged extensively and openly with a wide range of stakeholders including government agencies, neighbouring properties, businesses and the broader community. A range of accessible communication channels and materials have been used to enable the wider community to participate in the process.

Macquarie has therefore taken all reasonable steps to keep stakeholders including the local community, existing retail and office tenants, adjoining landowners and government authorities, as up to date as possible. Macquarie will continue to engage with the stakeholders and the community during the exhibition of the Stage 2 DA as well as during future stages of the planning, development and construction process.

3.2 Agency Stakeholder Engagement

A number of government agencies and departments were identified for early consultation, including:

- Department of Planning and Environment;
- Office of Environment and Heritage;
- Heritage Council NSW;
- NSW Government Architect;
- Greater Sydney Commission;
- City of Sydney Council;
- Transport for NSW's (TfNSW) Sydney Coordination Office;
- Road and Maritime Service's Sydney CBD Coordination Office;
- Sydney Trains;
- Sydney Metro;
- Sydney Light Rail;
- Service providers including Ausgrid, Telstra, Jemena, Sydney Water;
- Fire and Rescue NSW;
- NSW Police; and
- NSW Ambulance.

Industry groups including the Committee for Sydney and Sydney Business Chamber were also consulted with.

A record of the meeting held with these key stakeholders, the issues discussed, and any responses as required is provided in the Summary Report at **Appendix F**.

An invitation letter was also hand delivered to all properties and businesses in the immediate vicinity of the site and emailed to managing agents, building managers and neighbouring tenant businesses in the same area between 1 and 4 May 2018. A total of three (3) people attended this session, and no feedback forms were received.

In addition to this open session, meetings were held with key surrounding landowners to discuss the proposal and answer any preliminary questions and receive feedback. These meetings were completed in June and July and included those properties adjoining the Precinct to the north, east, south and west.

3.3 Community Engagement

Three (3) public information sessions were held on the project to ensure the community had ample opportunity to view the plans, discuss concerns with the project team and provide feedback. All three sessions provided information on the interconnected applications applying to the Precinct including the CSSI, Concept Proposal, and upcoming applications (i.e.: Stage 2 DAs and the Stage 1 Amending DA), and provided the community with the opportunity to ask questions any of these applications, however, the first two sessions held in May were specifically targeted and advertised to discuss the Stage 2 DAs for the South Site and North Site. Information on all of the relevant applications and representatives of the project team were made available at each of the three sessions.

The sessions were held as follows:

- Session 1 – Tuesday, 15 May, between 11am and 2pm;
- Session 2 – Wednesday, 16 May, between 4pm and 7pm; and
- Session 3 – Wednesday, 6 June, between 4pm and 7pm.

The Stage 2 DA for the South Site, and information on the other relevant applications, were presented via a series of A0 exhibition boards, a scale model and a rolling presentation of key features on a large screen. Representatives of the project team held small group discussions with participants to explain key aspects of the proposal and answer questions.

The sessions were attended by members of the Martin Place Metro Project Team and community engagement representatives from Sydney Metro's project team. A total of 17 people attended the three community information sessions: six (6) at Session 1, one (1) at Session 2 and ten (10) at Session 3.

Participants were invited to register their contact details to subscribe to the project mailing list, ask questions of the team and provide comments directly to team members or by completing the feedback forms provided. One feedback form was received during these sessions.

To date, a total of ten (10) emails have been received, and no phone calls, as part of the community engagement program. Both the phone line and email address were advertised across all platforms including the letters, flyers, newspaper advertisements, and website. They have been included in all communication and correspondence materials with the public and stakeholders, and provided at the information sessions.

3.4 Outcomes from Consultation

The feedback received during the consultation activities has been considered during the preparation of the SSD DA. Government agencies have been closely engaged during the development of the proposed development, with multiple opportunities to feed into and comment on the process.

Public engagement and consultation with non-government stakeholders has also provided significant opportunities for input into the SSD DA. This has identified a number of themes and issues relating to Macquarie's wider intentions for the Precinct including elements relating to the CSSI. Feedback received in relation to the proposal can be summarised as:

- unrelated project information, such as unsolicited offers to provide public art and the website;
- inquiries relating to the management and timing of construction activities;
- the detailed design and materiality of buildings within the Precinct;
- the detailed design of the Metro Station and associated areas subject to the separate CSSI approval; and
- inquiries on the project generally, including questions on how to stay informed, and how to be involved.

Overall, feedback received by the community and stakeholders indicated a receptiveness to the ideas and opportunities presented. The process has demonstrated that there is no notable concern with the project, with the limited feedback received being characterised as either general questions about the project and process, expressions of interest, or general support for Macquarie's vision for the Precinct. Concerns raised by the general public during the consultation process have primarily related to the management of disruption during the

construction process, the design of the Metro Station that is the subject of separate approval, and the detailed design of buildings within the Precinct. In each of these instances, a response was issued as to how feedback has been incorporated, would be addressed, or had been addressed as part of the staged and multi-tiered planning process for the delivery of the integrated station and OSD development.

Specific advice and comments have been issued by stakeholders during this early consultation process and have been addressed and/or incorporated into the SSD DA where relevant. On this basis, the consultation has not presented any significant rationale for reconsidering the proposed building development as set out in the SSD DA.

Macquarie intends to continue conversations with all stakeholders including the local community to achieve the best urban design outcomes for the South Site. Current communications channels including the website, phone line and email address will remain active during future stages of the project.

4.0 Description of the State Significant Development

This chapter of the report provides a detailed description of the proposed development. The application seeks approval for the following:

- The design, construction and operation of a new 28 storey (plus rooftop plant) commercial OSD tower consistent with the building envelope on the South Site established under the Concept Proposal (as proposed to be amended), including office space and retail tenancies.
- Vehicle loading partially within the basement of the South Tower and shared with vehicle loading areas located on the North Site.
- Bicycle parking and end of trip facilities located on the North Site, for the use of the South Tower.
- Works relating to the provision of services, management of drainage and flooding, and the mitigation of construction noise and vibration.
- Provision of rooftop building identification signage zones.
- The detailed design and delivery of 'interface areas' within the approved Station envelope that contain OSD-exclusive elements, office entries, office space, retail areas, and plant not associated with the rail infrastructure.

The development is located entirely within the Stage 1 Concept Proposal Envelope (as proposed to be amended by SSD 18_9347) and has a maximum height of RL 152.44 and a GFA of 37,553m^2 (attributed to the OSD).

Design Principles

The Design Principles for the South Site OSD were established by the Concept Proposal (as proposed to be amended), and more specifically captured within the Sydney Metro Martin Place Station Precinct Consolidated Design Guidelines dated July 2018.

The key design principles underpinning the Concept Proposal that have informed the SSD DA include:

- Conforming to the Sydney LEP 2012 Sun Access Plane for Hyde Park.
- Improving the ground plane amenity on Martin Place, Elizabeth Street and Castlereagh Street.
- Ensuring the building does not result in additional overshadowing of Hyde Park between the hours of 12 and 2 pm at mid-winter (21 June), when compared to the shadow cast by existing buildings, approved buildings and the DCP/LEP compliant envelope set out in the Shadow Analysis prepared by Grimshaw dated July 2018 (submitted with SSD 9347).
- Retaining and enhancing Martin Place as one of the City's grand civic and ceremonial spaces through the retention and enhancement of its urban character, scale and strong linear enclosure.
- Reinforcing the streetwall and the distinctive attributes of this block on Martin Place, with the height of the South Site podium to relate to 50 Martin Place.
- Establishing defining thresholds to the Martin Place Station Precinct.
- A balanced and contextual response to development potential and density, ensuring that the maximisation of Gross Floor Area within the building envelope is balanced with the creation of a building form that is proportionally elegant and that exhibits appropriate facade articulation.
- Creating distinctive architectural designs, with the scale of buildings responding to the character of the area and the building form and articulation reinforcing the key features of the locality, such as the street wall height and relationship to 50 Martin Place.
- Retaining and enhancing the setting and streetscape presence of neighbouring heritage buildings.
- Clearly differentiating between podium and tower forms through a pronounced recess between the tower and the podium and setback from the Martin Place alignment.
- Ensuring the expression of the podium relates to the historic buildings of Martin Place by emphasising mass and solidity, through the use of complementary facade materials and through the composition of its façade.
- Establishing a cohesive, distinctive precinct with the North Site tower.

The illustrative renders of the development shown in **Figure 34** and **Figure 35** demonstrate how Tzannes has applied a number of the above principles to the proposed detailed design**.**

The proposed architectural drawings and a Design Report prepared by Tzannes which provides greater detail around the design response by Tzannes to the Design Guidelines is included in **Appendix A**.

Figure 34 View of Martin Place and South Site Podium

Source: Tzannes

Figure 35 Proposed South Site as viewed from Elizabeth Street

Source: Tzannes

Design Review Panel

As discussed in more detail in **Section 5.6**, a Design Review Panel has been established to review and provide independent and expert advice on the design of the proposed development, as required by the conditions of the approved Stage 1 Concept Proposal. The Design Review Panel established for the project has met 6 times (prior to submission) with Macquarie and its design team, and issued formal advice on the design of the development on each occasion. The DRP's advice has been important in improving the design of the development, ensuring the development exhibits design excellence and ensuring the Consolidated Design Guidelines for the project have been addressed by the design.

4.1 Relationship of Proposal to the Sydney Metro Stage 2 Critical State Significant Infrastructure Approval

The Stage 1 Concept Proposal (as proposed to be amended), recognised the unique nature integrated proposal (design and delivery) for the combined Metro Station and OSD at Martin Place. Notwithstanding this, it is essential that there is clear delineation between the scope of this Stage 2 SSD DA with regards to the SSD components sought for approval, and those elements already approved as part of the Metro's CSSI Approval.

Any development falling within the scope of the CSSI cannot constitute SSD pursuant to Section 5.12(7) (previously Section 115U(7)) of the EP&A Act, which states:

> *(7) If, but for this subsection, development is both State significant infrastructure because of a declaration under subsection (4) and State significant development, it is not State significant development despite any declaration under Division 4.1 of Part 4.*

The sections below outline the relationship between this Stage 2 SSD DA and the Metro's CSSI Approval, highlighting the key components of the integrated project, and identifying those that fall within the scope of the CSSI, or vice versa. Reference is also made to the demarcation plans prepared by Grimshaw at **Appendix A**.

Demolition

The demolition of all existing buildings in the Precinct (other than 50 Martin Place that is to be retained) is subject to the separate approvals process for CSSI classified development as demolition is required to construct the Metro Martin Place Station. No consent is sought for demolition as part of the application. At the time of writing, the existing building on the South Site is in the process of being demolished.

Bulk Earthworks

Bulk earthworks and excavation on the South Site will be delivered as per the Metro CSSI Approval. The extent of spoil generated by this excavation and the methodology to be used is addressed within the Metro CSSI EIS and Preferred Infrastructure Report (PIR). Additional earthworks required to facilitate the Macquarie proposal have been assessed and approved as part of the CSSI modification (SSI 15_7400 MOD 3).

Over Station Development

In the Metro CSSI Conditions of Approval, Condition A4 provides 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".* 'Over Station Development' is defined in the CSSI Approval as follows:

> *"Includes non-rail related development that may occupy land or airspace above, within or in the immediate vicinity of the CSSI but excluding spaces and interface works such as structural elements may be constructed as part of the CSSI to make provision for future developments".*

This application therefore remains consistent with Condition A4, in seeking to deliver an OSD tower that is located above the approved Martin Place Metro Station.

Integration Between OSD and Martin Place Metro Station

The Metro CSSI EIS and PIR discuss the integration between future OSD and the Martin Place Metro Station. The Metro CSSI Approval requires, as one if its key reporting requirements to the Department's Secretary, that a Station Design and Precinct Plan (SDPP) is prepared by Sydney Metro for each of the approved stations across Stage 2 of the Sydney Metro.

As part of the SDPP process, the stations are required to be designed to ensure that future OSD can be built efficiently and effectively. Namely, the CSSI EIS prescribes that *"the metro stations would be designed to take into account, and make physical provision for, any design or other requirements associated with possible future over station development"* (CSSI EIS, pp. 138). The CSSI EIS clarifies this further by identifying that, subject to detailed design, the metro stations will include the following:

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

In other words, the CSSI provides approval for all structural elements to support future OSD, and space to accommodate various OSD elements within the station building footprints presented and assessed as part of the CSSI EIS.

The precise design of these elements is therefore to be finalised as part of the detailed design of the Metro station (and included in the SDPP process), with the OSD buildings to be the subject of separate approvals under the SSD process set out in Part 4 of the EP&A Act (i.e. this application for the South Site). As noted in the CSSI PIR, the resolution of the location of these elements may result in changes or clarifications to the indicative diagrams contained in the CSSI PIR. The CSSI PIR states:

> *"The Environmental Impact Statement further indicates that over station development above the transfer slab would be subject to a separate assessment process. For clarity, the specific use and fit-out of the spaces below the transfer slab (above ground level, at ground level and below ground level – refer Figure 2-3) does not form part of the project and would be subject to a separate assessment process."* (CSSI PIR, s. 2.4)

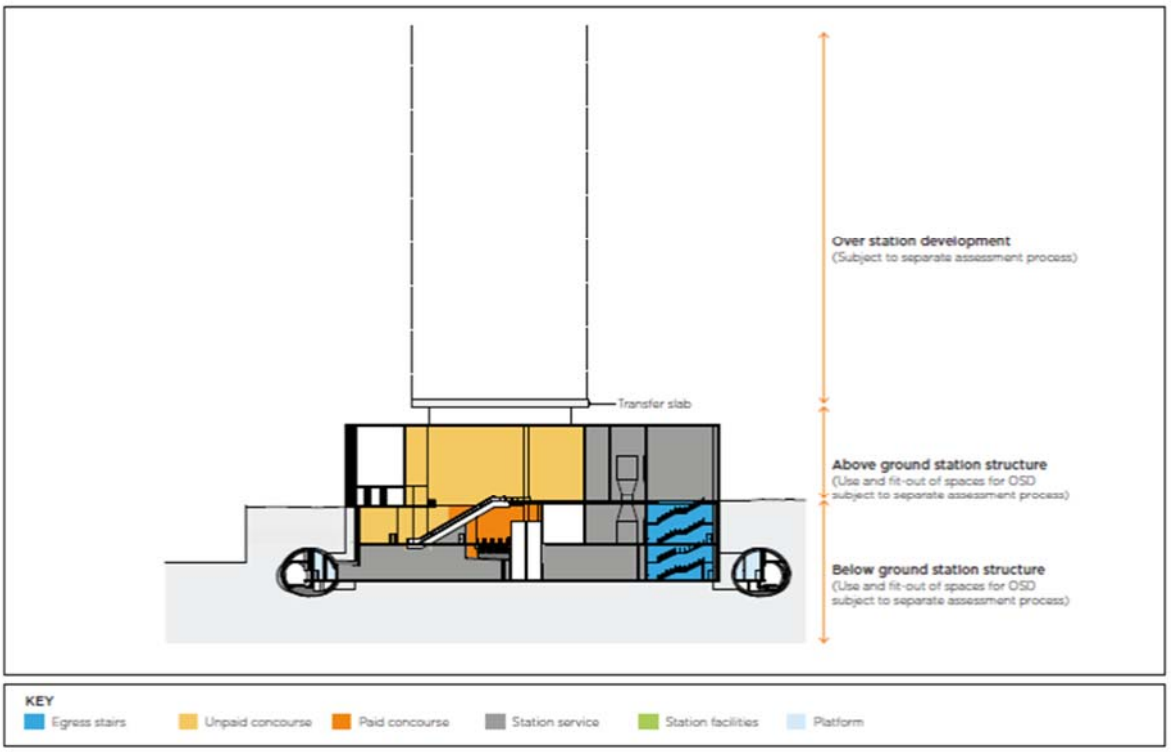


Figure 36 Conceptual illustration of relationship between Sydney Metro and OSD

Source: TfNSW

In summary, therefore:

- This SSD DA does not, and cannot seek approval for those elements that form part of the approved Station, and which necessarily and specifically, includes the following:
  - *"structural elements (steel and / or concrete), building grids, column loadings and building infrastructure to enable the construction of future over station development; and*
  - *space for future lift cores, access, parking and building services for the future over station development."*
- The inclusion of the above elements in the Metro CSSI has been necessary to enable the design of the Metro to proceed and construction contracts to be let, prior to the granting of an approval for this application and the carrying out of works associated with the OSD.
- This DA, however, seeks approval for the detailed design of the nominated ***interface areas***. These areas are located within the approved station envelope but contain other OSD elements, such as the office entries, office space and retail areas that are not associated with the rail infrastructure. Plans showing the differentiation of the CSSI component and the SSD components of the South Site are included in the Design Report in **Appendix A**. These plans detail the location and extent (at the current stage of the design process) of what is SSD and what is CSSI within the interface areas inside the station envelope. For the South Site, the extent of the station extends to Level 6 of the podium, with the top of Level 6 representing the transfer level between the station (with integrated OSD areas) and pure OSD – refer to **Figure 37**. These interface areas are described further in **Section 4.7** below.

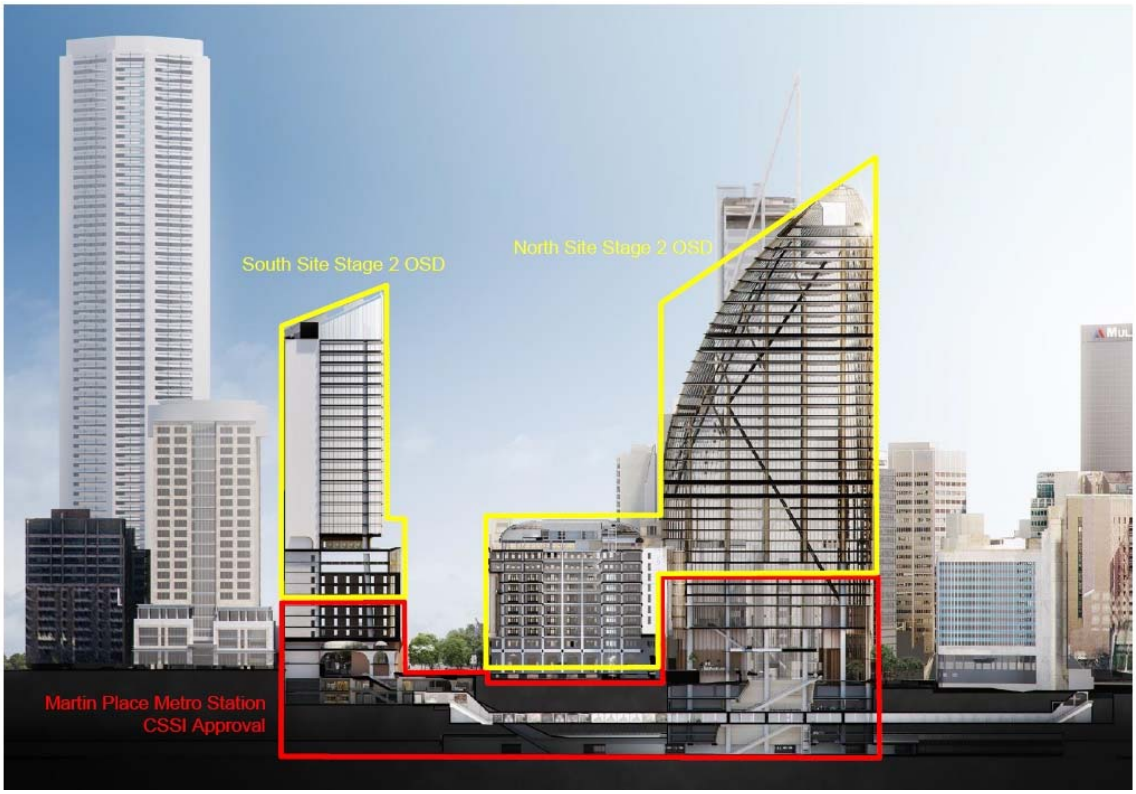


Figure 37 Illustration of the Metro Martin Place Station and OSD Extent

Note: Please refer to the detailed 'demarcation plans' included in Appendix A for the exact extent of OSD within the station 'box'.

Public Domain Works

The public domain works within and surrounding the station Precinct are part of the design and delivery package for the Martin Place Metro Station and are identified in the Metro CSSI Approval as part of that project scope. The public domain strategy for the Martin Place Station Precinct will be resolved through the CSSI approval process, in particular through the preparation of the Station Design and Precinct Plan (SDPP) and Interchange (Station) Access Plan that is to be prepared by the proponent of the CSSI. Whilst forming part of a separate process, a holistic approach to the integration of CSSI/Station and OSD at the ground plane is an important consideration and has been embodied in the site-specific Urban Design Framework established under the Concept Proposal that applies to both the Station and OSD.

Utilities and Services

All enabling work associated with the Martin Place Metro Station is informed by the CSSI consent and public domain works and does not form part of this application. The works include:

- the lowering/ protection of services for vehicular crossings;
- the alteration/lowering/realignment of services due to adjusted footpath levels for pedestrian accessibility, proposed bollards, street trees, street poles and street furniture being completed as part of the public domain works; and
- connections into the Station including for substations, stormwater, sewer, water and communications (determined by Metro) from existing street mains or pits (utilising existing connection where possible) that are subject to discussions with asset/ authority owners.

4.2 Numerical Overview

The key numerical information concerning the proposed development is summarised in **Table 5** below.

Table 5 Numerical overview

Component	Proposal
Site Area	1,897m^2
OSD GFA	37,553m^2 comprising: • 1,222m^2 of retail; and • 36,331m^2 of commercial.
FSR	21.06:1 (inclusive of CSSI GFA, for which consent is not sought under this DA)
Maximum Height	• RL 152.440 (approximately 129.79m) maximum for the South Tower • 28 storeys plus rooftop plant
Street Wall	Built to boundary
Street Wall Height	45.04m – 40.79m
Setbacks	• North (Martin Place): 8m above RL 67.69 (44.84m). • South (60 Castlereagh Street): zero • West (Castlereagh Street): zero • East (Elizabeth Street): zero
Parking	• Loading spaces: 1 (redundancy is to be provided by the North Site) • Car parking spaces: zero • Bicycle parking spaces: 230 (located on the North Site)

4.3 Land Use and Gross Floor Area

The South Tower will be used for commercial purposes, including the following land uses:

- offices;
- retail; and
- food and drink premises.

The detailed design of the South Tower yields a total GFA of 37,553m^2, that exclusively relates to the South Tower OSD and for which consent is sought under this application. When combined with the GFA being developed as part of the Metro Station and associated areas that are subject to the CSSI Approval, the total GFA for the South Site is in the order of 39,951m^2. There is expected to be some fluctuation in the GFA attributed to the Station not subject to this Stage 2 SSD DA, and as such in the total GFA on the South Site, given the ongoing and complex design coordination process involved with delivering the integrated Martin Place Station and OSD.

4.4 Built Form

The proposed development is detailed in the Design Report and Architectural Plans prepared by Tzannes and included at **Appendix A**, and discussed in the sections below.

4.4.1 Podium

The podium for the South Tower has been designed to be a contemporary interpretation of the Former Government Savings Bank of NSW at 50 Martin Place, responding to the height, materiality and façade articulation of this State significant heritage building that forms a key part of the South Site's context. The podium is the key formal element that defines the distinctive architectural character of the project. As an architectural element it employs both materiality and geometry as techniques to respond and express a monumental character to Martin Place and reflect the importance of its place in the city. The key features of the design of the podium are discussed below.

- Zero setbacks to all site frontages, to create a defined street edge and a consistent street wall along Martin Place.

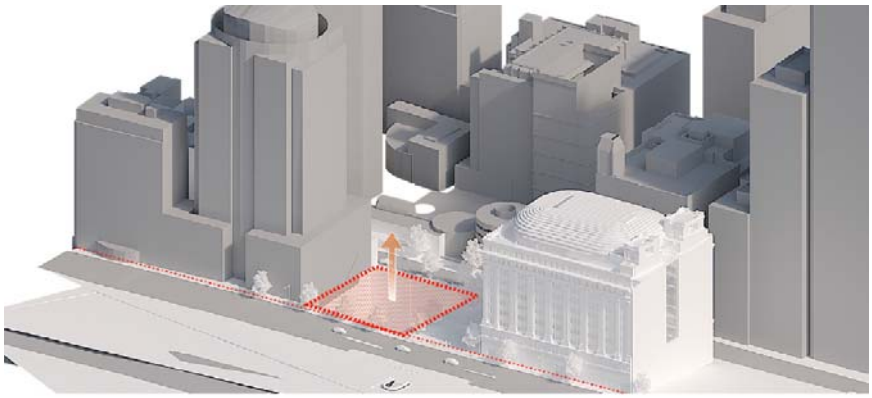


Figure 38 Podium to occupy the full site for spatial definition

Source: Tzannes

- A parapet height of RL 67.690, or approximately 44m, that corresponds to the existing parapet height of 50 Martin Place.

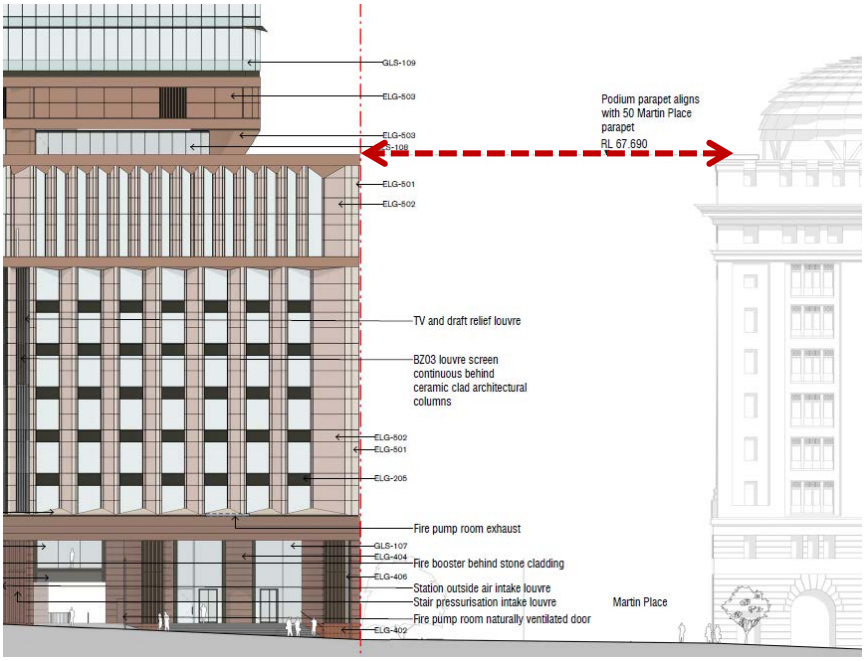


Figure 39 Consistent parapet height

Source: Tzannes

- A primarily masonry base that is two storeys on Elizabeth Street and three storeys on Castlereagh Street, that grounds the podium and mirrors the granite base of 50 Martin Place.

Figure 40 Masonry base of the podium

Source: Tzannes

- Curved ceramic and glass bays on the northern façade of the upper podium mirrors the columns on 50 Martin Place and provides elements of vertical expression.
- The eastern and western facades have been designed with deep masonry blades, in place of the bays, creating a hierarchy in the facades.
- The upper podium is bisected by a strong horizontal band that breaks-up the podium massing and reflects the entablature of the 50 Martin Place building.

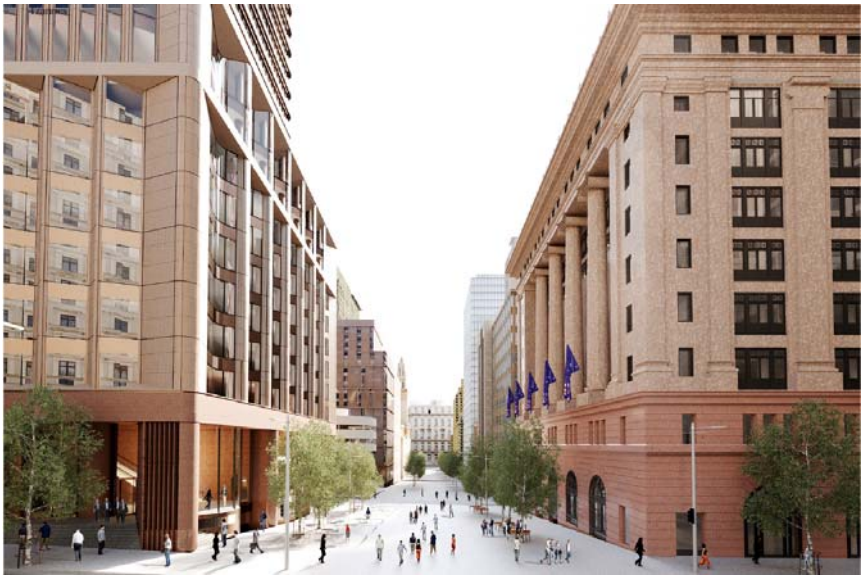


Figure 41 Relationship between the upper podium and 50 Martin Place

Source: Tzannes

4.4.2 Commercial Tower

The commercial tower has been designed as a distinct architectural element from the podium beneath, which is in keeping with the interface between 50 Martin Place and the future North Tower that forms the other half of the Precinct. The building will have a maximum height of RL 152.440 (approximately 129.79m). The proposed built form of the South Site has been established in response to various contextual influences, architectural objectives and appropriate commercial requirements. The tower form is set back 8m from the northern site boundary, distinguishing it from, and giving prominence to, the podium when viewed from Martin Place.

The key features of the design of the commercial tower are detailed below.

- A deep recess between the roof of the podium and the tower above creates a clear break between these two components of the building, and ensures the podium parapet is legible. The recess, termed the 'interstitial space', provides the opportunity for an outdoor terrace for future commercial tenants.
- The interstitial space marks the commencement of the tower, which is setback 8m from Martin Place, with a zero setback to Elizabeth and Castlereagh Streets, as well as the southern boundary.

Figure 42 Interstitial space including a podium terrace

Source: Tzannes

- The southern façade of the building is constructed to the boundary, and as such does not incorporate windows or openings (party wall).
- It will be constructed from ceramic panels with patterns, textures and finishes along the edges to visually wrap-around the eastern and western facades. The attention and design focus on this party wall has been influenced by comments provided by the Design Review Panel.
- It is articulated at its edge through a fine bull nose profile.

Figure 43 Southern façade of the tower

Source: Tzannes

- The eastern and western facades present as flush glass curtainwalls, and aluminium frames create strong horizontal bands in the façade.
- The northern façade also presents as a flush glass curtainwall, but with cantilevered sunshades continuing the strong horizontal bands. These sunshades provide solar protection to the interior.

Figure 44 Flush glass curtainwalls and cantilevered sunshades

Source: Tzannes

- The rooftop forms the 'crown' of the building and adopts a tapered profile. Its overall form is moulded by the Hyde Park North Sun Access Plane and the Condition B2 of the Concept Proposal approval which limits overshadowing of Hyde Park. The solar access requirements result in varied façade profiles to the east and west while the north façade's profile remains horizontal.
- The eastern, western and northern profiles of the roof screen the rooftop plant, are varied for visual interest and create an identifiable roof form in the city skyline.

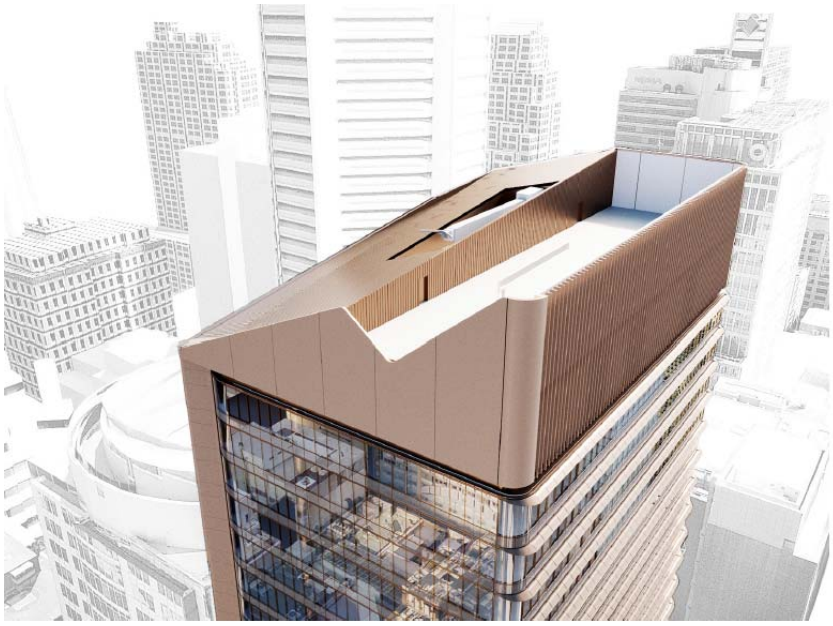


Figure 45 The 'crown' of the South Tower

Source: Tzannes

4.4.3 Ground Plane

The ground plane of the South Tower has been designed to maximise permeability and accessibility, and provide separate and recognisable entrances for the offices, retail tenancies, and Metro Station. The ground plane (in its totality, being CSSI and SSD) is illustrated in Figure 47**Figure 46** to **Figure 48** below and comprises:

- A new publicly accessible pedestrian connection through the block. This connection links the primary pedestrian entrance to the building on Castlereagh Street, and a secondary entrance on Elizabeth Street that is accessed via a stair and lift arrangement.
- The primary entrance to the office levels above is via a separate lobby fronting the corner of Elizabeth Street and Martin Place. It has been designed as a two storey space at the corner with escalators and lifts used to access the main raised reception area on the mezzanine level above.
- Retail tenancies are provided fronting Martin Place and Castlereagh Street over the Lower Ground, Ground and Mezzanine Levels. Some of the tenancies have been designed to be leased as individual spaces, whilst others incorporate intertenancy connections allowing for larger/multistorey tenancies. These spaces are provided with individual entrances off Martin Place and Castlereagh Street, and from the through-site connection. The fit out and operation of the proposed retail tenancies will be the subject of separate and future applications.

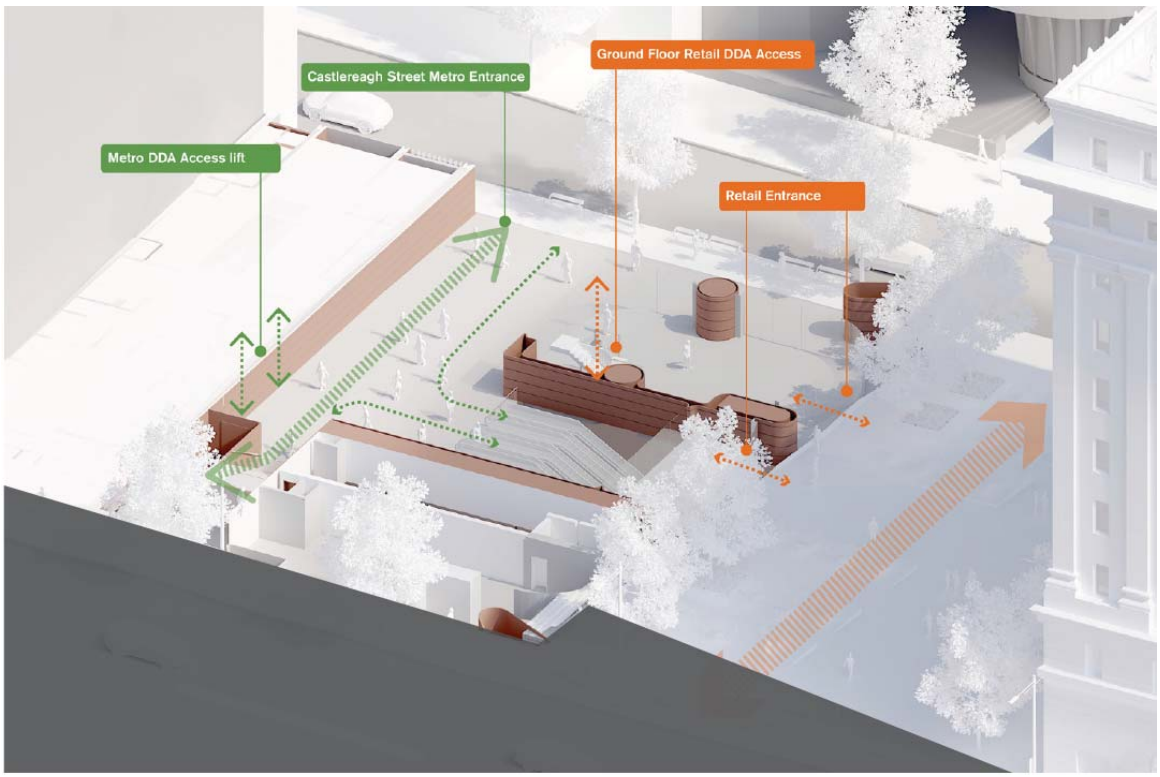


Figure 46 Pedestrian access and circulation at the Lower Ground Floor (Castlereagh Street level)

Note: Orange components relate to SSD, green components relate to CSSI
Source: Tzannes

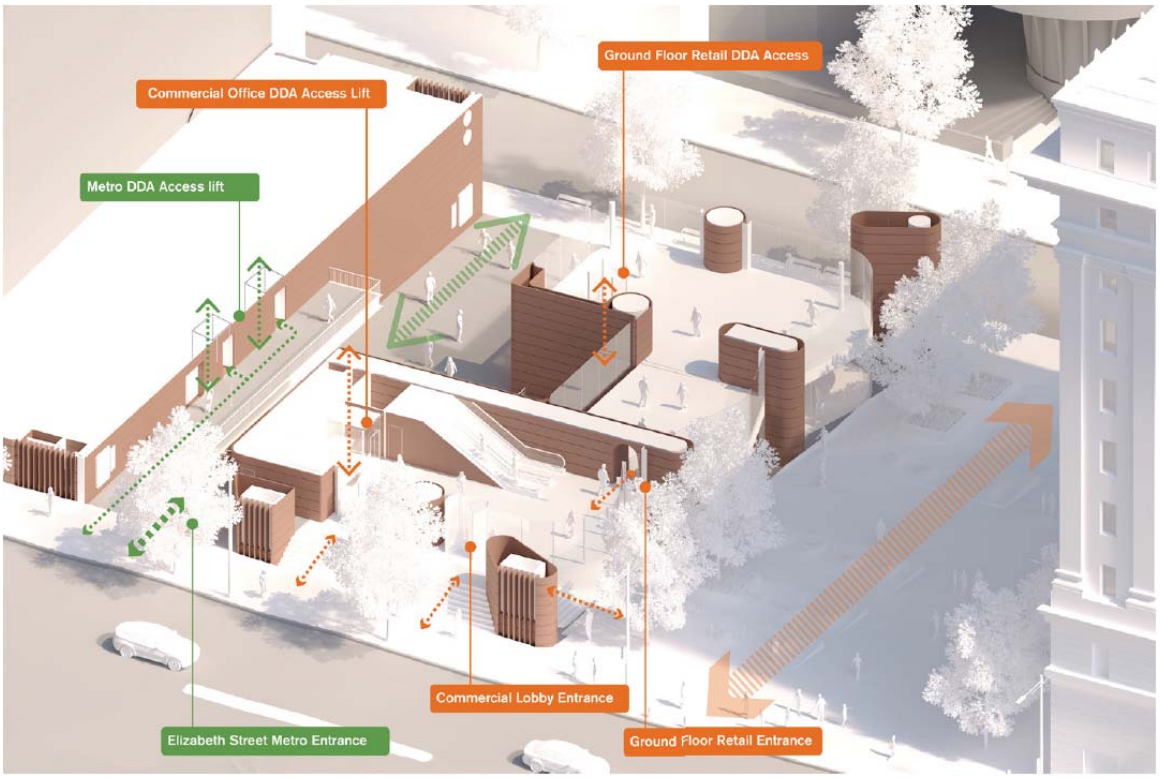


Figure 47 Pedestrian access and circulation at Ground Floor (Elizabeth Street level)

Note: Orange components relate to SSD, green components relate to CSSI
Source: Tzannes

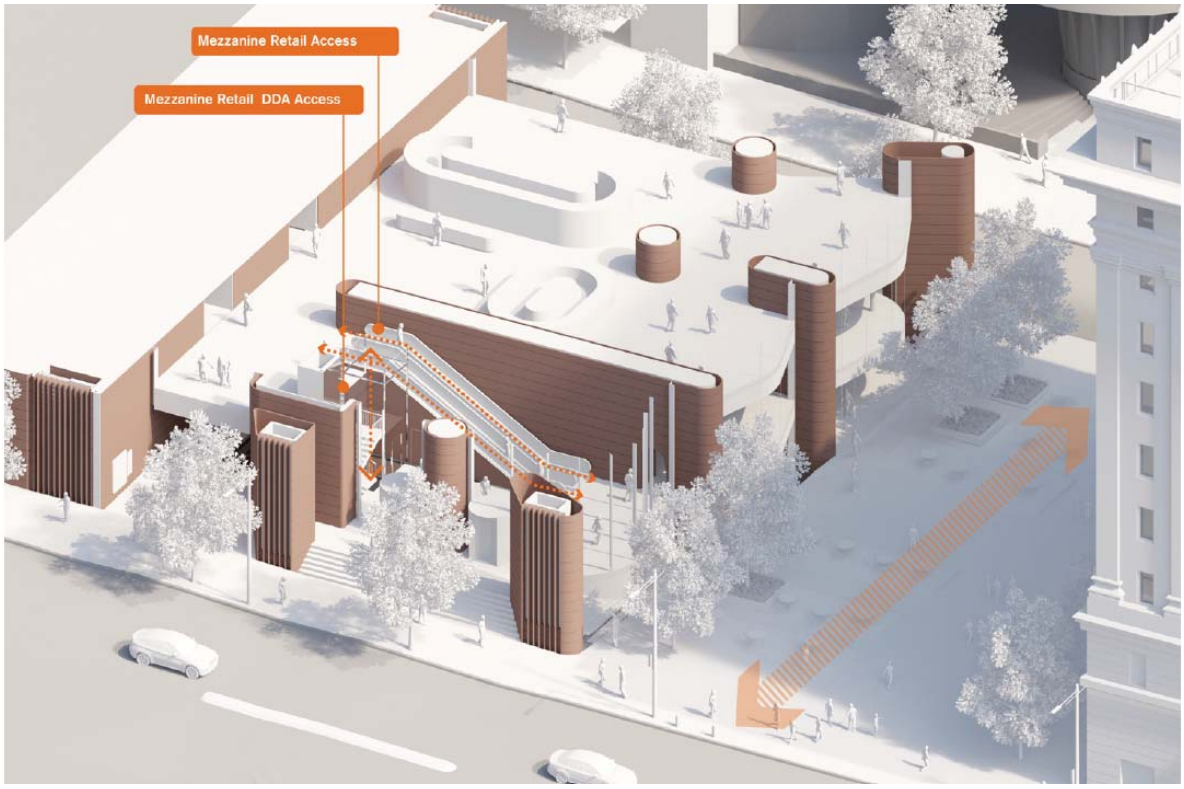


Figure 48 Pedestrian access and circulation at the Mezzanine Level

Note: Orange components relate to SSD, green components relate to CSSI
Source: Tzannes

4.4.4 Office Design

The South Tower accommodates 26 levels of commercial office space, which will be subject to future detailed design and fit-outs as tenants are confirmed. The floorplates have been designed for an open plan workplace that create maximum flexibility for future tenants and optimise access to natural light. As established in the Planning Proposal and Stage 1 Amending DA, the proposed floor plate of ~1,000m^2 is targeted which is widely considered to be the minimum acceptable to the knowledge, finance, and IT other professional services industries, who are targeting 1,200m^2 floor plates. The core has been designed as a narrow band against the southern party wall.

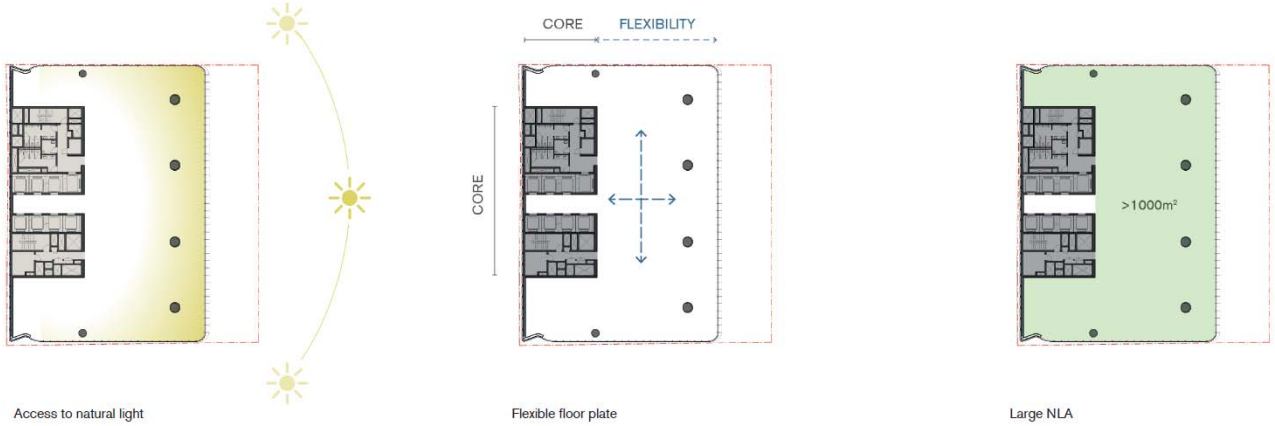


Figure 49 Tower office floorplate design

Source: Tzannes

4.4.5 Materiality

The materials and finishes for the South Tower have been developed in response to the existing materials and historical context of buildings along Martin Place, the most important reference being that of 50 Martin Place.

Podium materiality

The primary and secondary facade materials proposed for the podium are stone, ceramic, glass and bronze coloured metalwork. These respond directly to the materiality and arrangement of these materials in 50 Martin Place. The base element of the podium is proposed as primarily masonry material. The masonry reflects the predominate character of existing significant buildings on Martin Place, in particular that of 50 Martin Place (as shown in **Figure 50** below).

The design of the upper part of the podium is a considered response to 50 Martin Place. It contains commercial office space of relatively deep floor plates. The materiality of this part of the building follows cues set by 50 Martin Place. Ceramic, glass and bronzed coloured aluminium are used within a unitised facade system, responding to the original buildings of the area in a modern construction technique. Extensive mechanical fenestration, required by the separate Metro services, is integrated through both ceramic and bronze coloured louvres.

Legend

1.Ceramic panel cladding - glazed matt finish (colour to match 50 Martin place)

2.Ceramic panel cladding - glazed gloss finish (colour to match 50 Martin Place)

3.Bronze powder coated alumunium

4.Neutral clear glass and colour backed glass spandrels

5.Large format stone cladding to match the base of 50 Martin place

6.City of Sydney stone paving - Austral Verde

Figure 50 Podium materiality

Source: Tzannes

Tower materiality

The materiality of the tower element is designed to be both integrated and consistent with the overall form however subtly defined from the podium. It extends the materiality of the podium, using ceramic cladding, bronze coloured metalwork and glass while manipulating the proportion of these elements to make the podium and tower distinct. This proportion of glass to ceramic is increased throughout the tower. The tower is composed of three elements; the predominately solid ceramic facade of the level 10 plant room, a glass and aluminium curtainwall system, with a ceramic clad rooftop plant room.

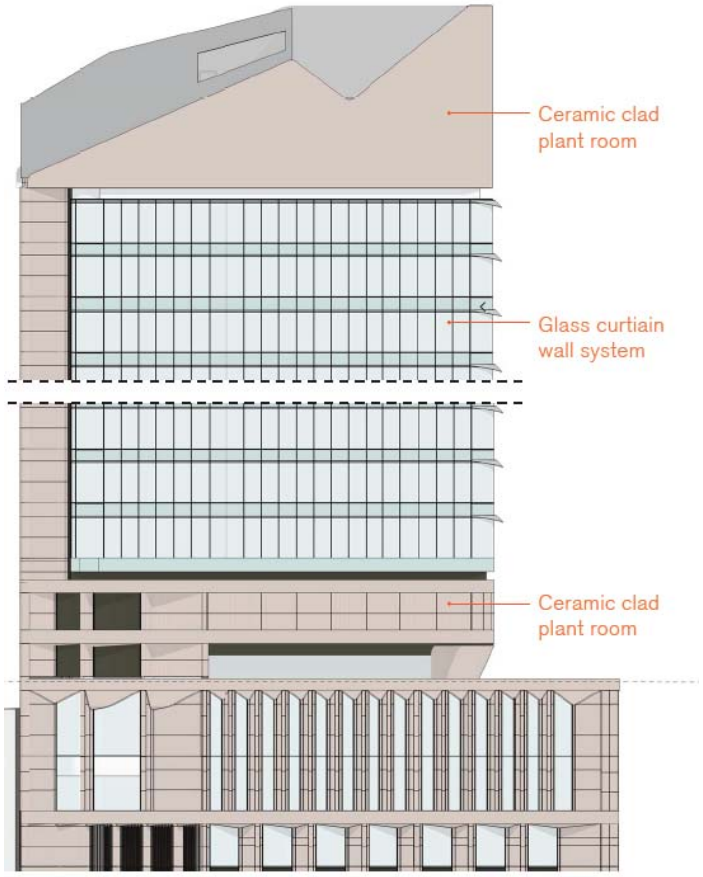


Figure 51 Tower materiality

Source: Tzannes

4.5 Landscaping

The proposed design of the commercial tower enables opportunities for a podium terrace at Level 9. The terrace incorporates areas for low scale planters, working within the proposed paving areas. Wind conditions have been determined as favourable for outdoor use of the Level 9 terrace.

4.6 Integration of the OSD and Metro Station

The CSSI documentation and approval (SSI 15_7400) anticipates that the design of Metro Stations will make provision for OSD within the 'Station box' or built envelope. Such provision would include for building foyers and entrances, lift wells and service cores, end of trip facilities, loading areas and so on. The Macquarie proposal also seeks further integration to provide cohesive structural engineering, services, building facades, and pedestrian flow through the Station and OSD, as detailed in **Figure 52** to **Figure 55** below and **Appendix A**.

The station integration can be broadly categorised into four main components:

- **Structural integration:** Column location through to provide optimum floor plates; coordination with the existing Eastern Suburbs Rail tunnels below, which impose considerable constraints on pile foundations and footing locations.

- **Services integration:** Large tunnel ventilation shafts extend through the podium on the east and west facades; South Tower station services are located at the rear of the South Site to minimise impact on the station entrances and Martin Place; majority of station plant has been located below ground, freeing up the ground plane and improving public amenity; OSD plant is located at upper levels.
- **Façade integration:** Above ground station services are carefully concealed and integrated into the South Tower facades with intakes and discharges vertically stacked at the southern corners of the building, minimising any impact on the architecture and public domain.
- **Pedestrian flow integration:** A clear separation of circulation is possible through integrated planning of the ground plane and vertical circulation systems throughout the Precinct:
  - The southern station entrance is located on the northwest corner, with the OSD entrance located on the northeast corner, addressing Martin Place.
  - A through-site connection improves connectivity and provides equitable access between Elizabeth Street and Castlereagh Street.

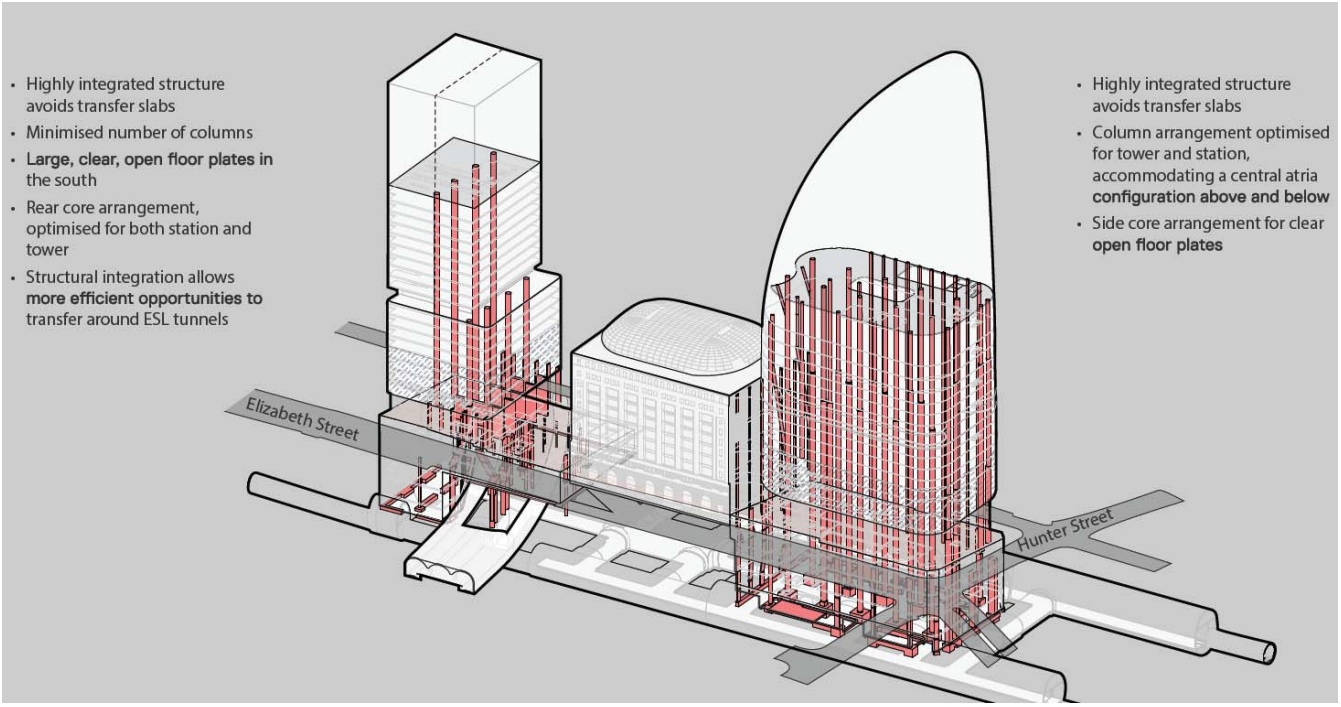


Figure 52 Structural integration of the OSD and Metro Station

Source: Grimshaw

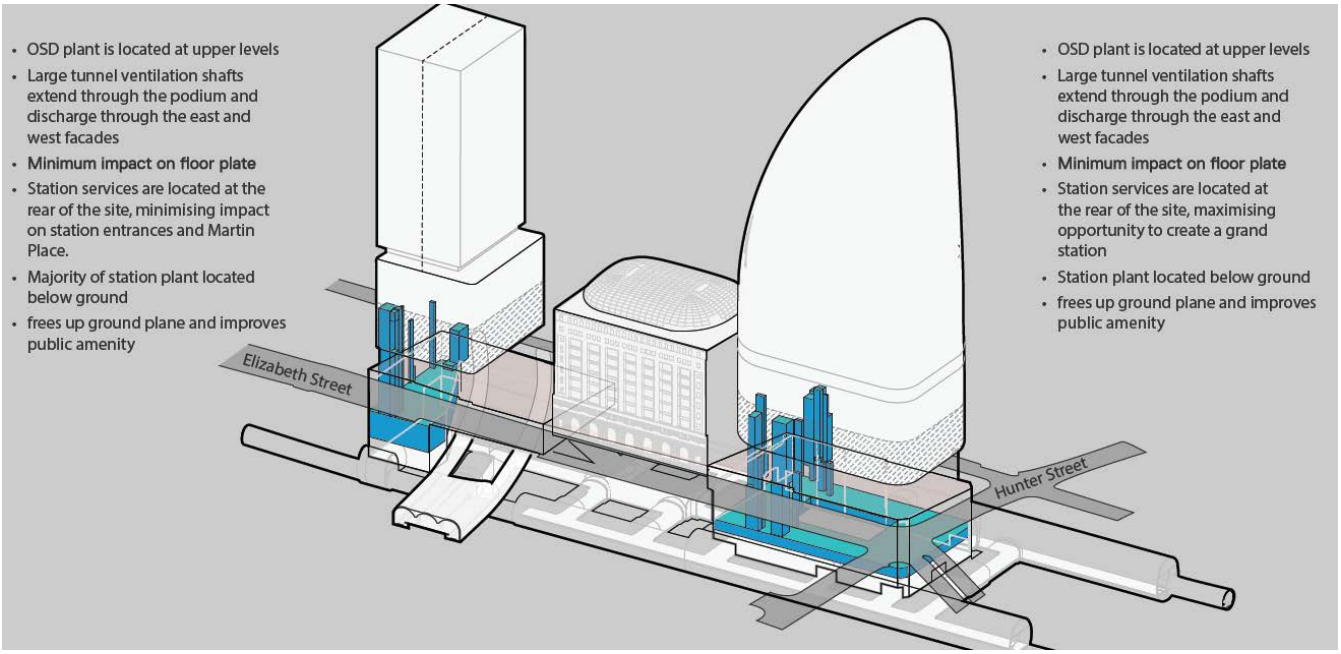


Figure 53 Service integration of the OSD and Metro Station

Source: Grimshaw

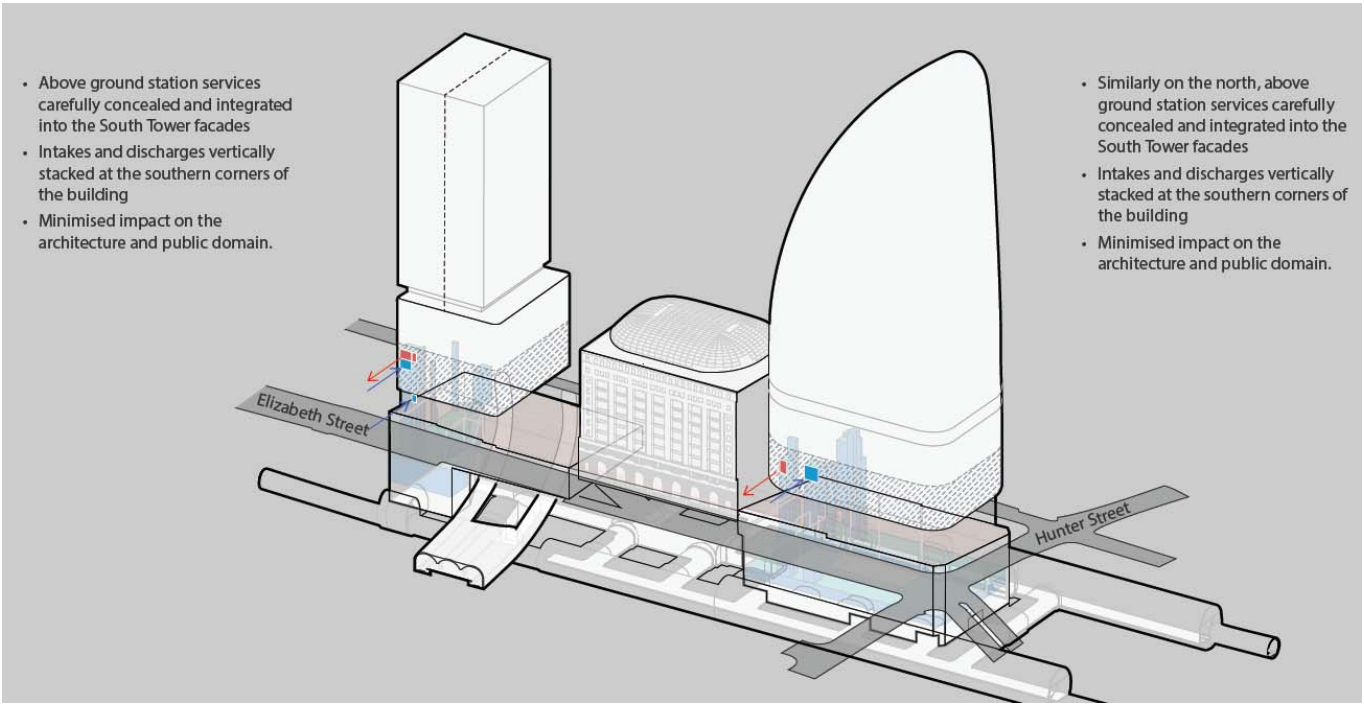


Figure 54 Façade integration of the OSD and Metro Station

Source: Grimshaw

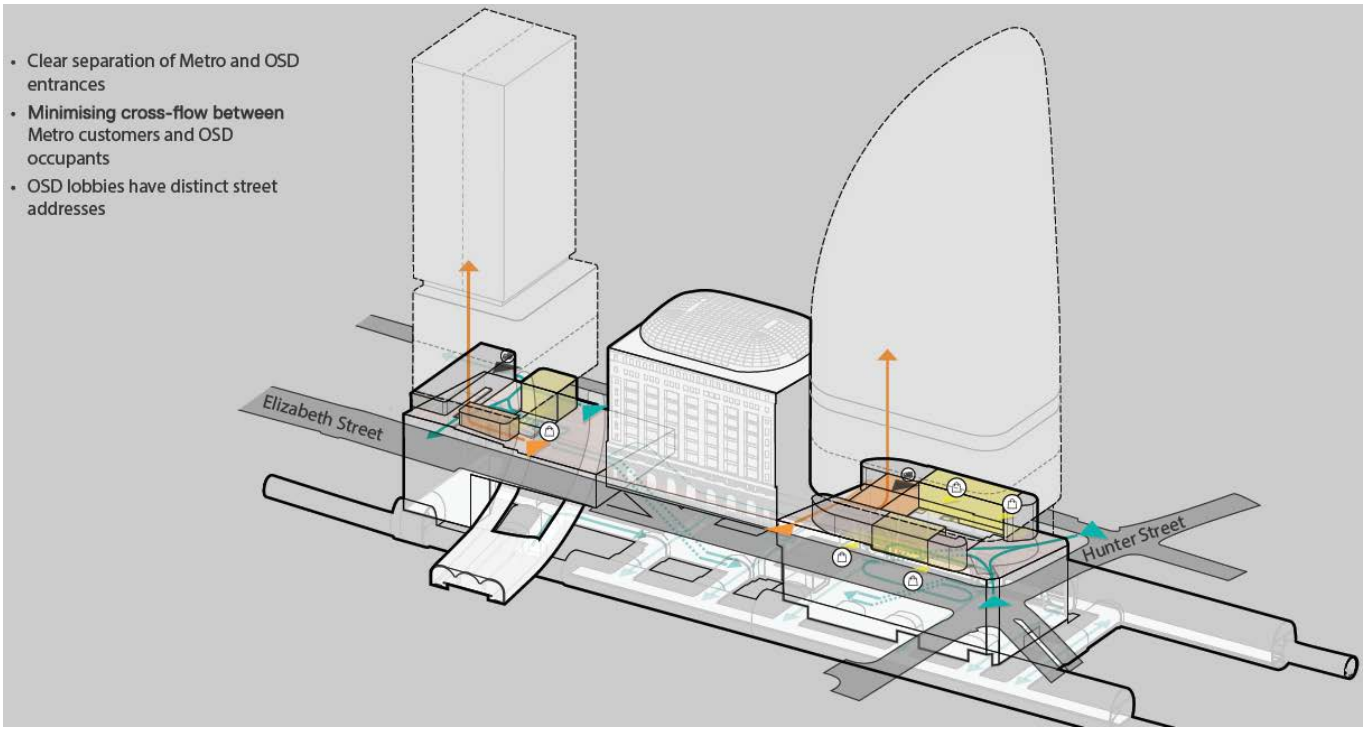


Figure 55 Pedestrian flow integration of the OSD and Metro Station

Source: Grimshaw

4.7 Interface Areas – OSD Components (SSD) within the Station Envelope (CSSI)

As part of the Stage 1 Concept Proposal, consent was granted for conceptual SSD areas in the approved Martin Place Metro Station envelope, or 'station box', above and below ground levels on the South Site. This application seeks approval for these locations which are SSD / OSD related.

Those elements within the Metro's "station box" include office entries, office space and retail areas not associated with the rail infrastructure, along with other office/retail plant and back of house (BOH) requirements (see details in **Table 6** below).

Table 6 Proposed SSD uses and areas within the CSSI 'station box' for the South Site

Level	Proposed OSD (SSD) Use	OSD GFA m^2
South Site		
Level 06	Office, core	1,520
Level 05	Office, core	1,513
Level 04	Office, core	1,509
Level 03	Office, core	1,502
Level 02	Office, core	1,502
Level 01	Office, core	1,501
Mezzanine	South tower lobby, retail, core	1,030
Ground floor (Elizabeth Street)	Retail, office lobby, core	469
Lower ground (Castlereagh Street)	Retail, loading dock, plant, back of house	375
B1 Upper Concourse	Plant, core	157
B2 Lower Concourse	Plant, core	63
B3 Plant / Concourse	Plant	-
B4 Station Plant Mezzanine	N/A	-

Level	Proposed OSD (SSD) Use	OSD GFA m^2
B4 Station Plant	N/A	-
B5 Platform	N/A	-

To identify the locations of the proposed SSD areas, a set of 'CSSI / SSD Demarcation Plans' has been prepared by Grimshaw (**Appendix A**). These drawings delineate between station 'CSSI' areas and OSD 'SSD' areas within the station envelope. Below are extracts from the ground level and lower ground level CSSI / SSD Demarcation Plans that are included at **Appendix A**, identifying the proposed 'SSD' areas and uses (green/blue) and the approved station 'CSSI' areas (orange) by different colours.

It is noted that the 'for approval' drawings identify CSSI areas using hatching in order to differentiate the SSD components the subject of this application.

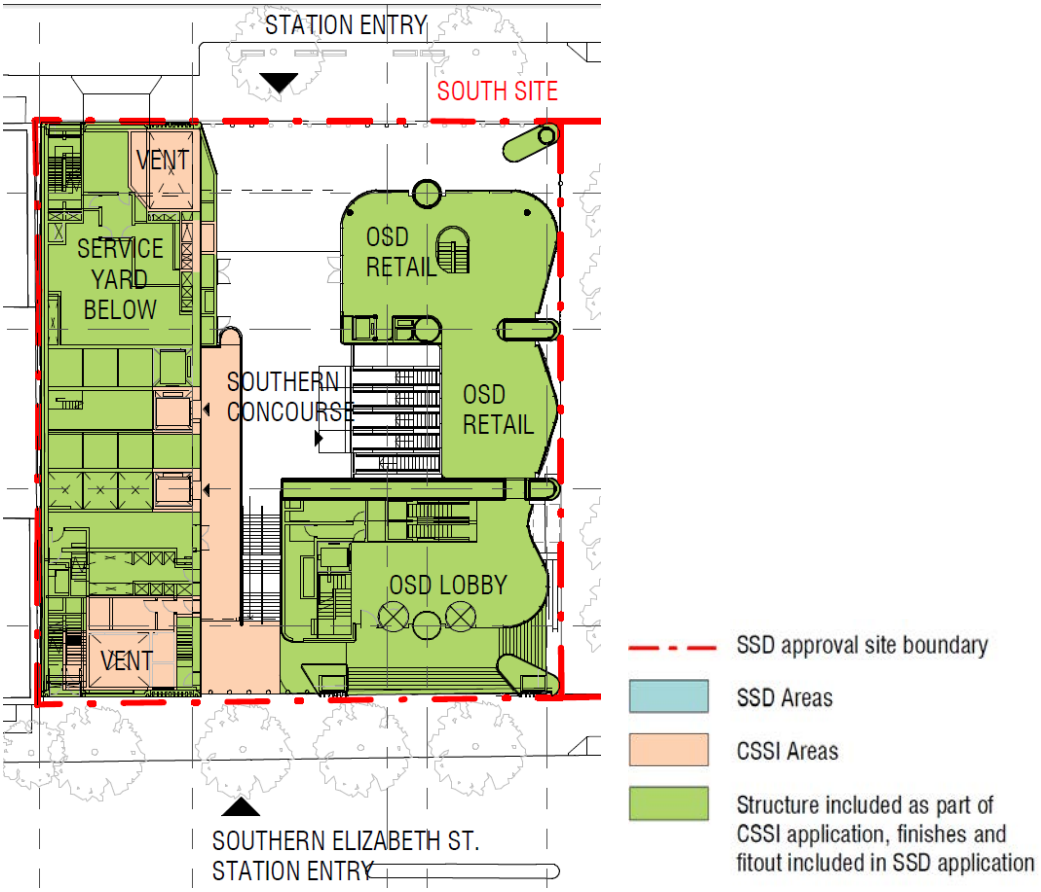


Figure 56 Ground Floor (Elizabeth Street) CSSI / SSD demarcation plan for the South Site

Source: Grimshaw

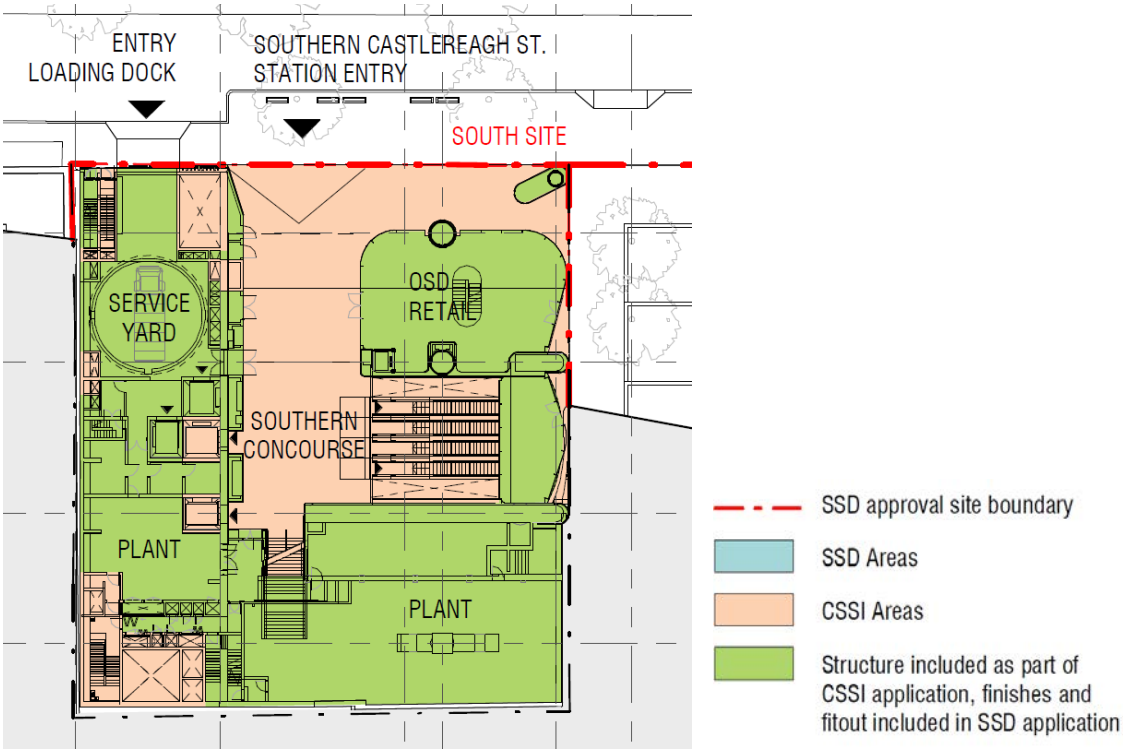


Figure 57 Lower Ground Floor (Castlereagh Street) CSSI / SSD demarcation plan for the South Site

Source: Grimshaw

4.8 Transport, Access and Parking

4.8.1 Vehicle Access and Parking

No parking spaces will be provided within the South Tower as part of this development. No private vehicles will be permitted access to the South Site outside of delivery/loading requirements discussed further below.

4.8.2 Bicycle Access, Parking and End of Trip Facilities

Bicycle parking and end of trip facilities associated with the South Site OSD and Metro Station and North Site will be consolidated within the North Site, which is the subject of a separate application (SSD 18_9270). Accordingly, consent is sought under this application for that component of the North Site that is to be used for bicycle parking and end of trip facilities associated with the operation of the South Site. These facilities will be located on Level B2 of the North Site and are accessed via lift and stairs from the Castlereagh Street frontage of the North Site (see **Figure 58** below). A breakdown of the proposed facilities comprises:

- Bicycle parking spaces – 230, including 222 spaces designed as Class 3 spaces for tenancy staff and 8 spaces design as Class 2 for visitors.
- Lockers – 276.
- Showers – 28.

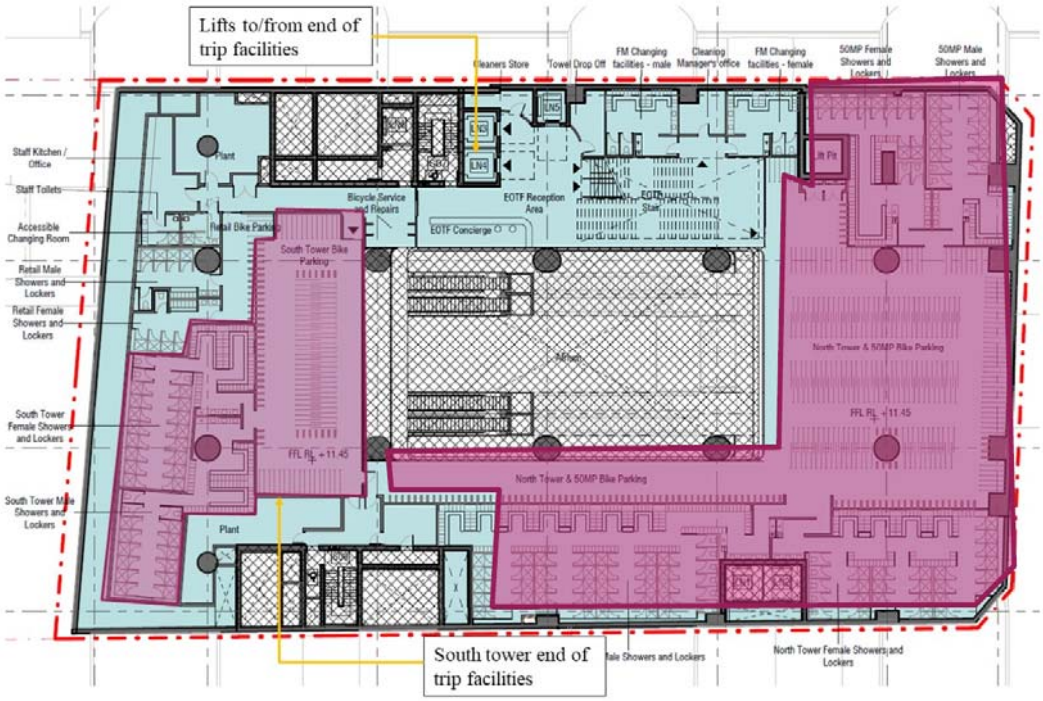


Figure 58 South Tower facilities located on Level B2 of the North Site

Source: Arup

4.8.3 Loading and Servicing

Loading and deliveries for the OSD will occur within the dedicated loading dock on the Lower Ground Level of the South Tower, which is accessed via a new driveway off Castlereagh Street.

The loading dock has been designed to accommodate up to an 8.8m long medium rigid vehicles with an operational clearance height of 3.6m. Only one space is available, and will be accessed via a single driveway with a turntable that allows vehicles to enter and exit the loading dock in a forward direction, as developed through consultation with the TfNSW's Sydney Coordination Office.

The loading dock will be managed in accordance with the Loading Dock Management Plan prepared by Arup (**Appendix N**), which assumes that the loading docks will operate independently with the North Site providing contingency for the South Site should an incident occur and the dock is closed (the North Site is the subject of a separate but concurrent DA). A common compressed booking system will be utilised between both docks. The logistics concept includes the following:

- deliveries will be required to be pre-booked at an allocated time slot, assuming a 30-minute turnaround time to allow for arrival time variations;
- a courier will collate deliveries in an off-site to reduce the number of trips required, and will then move goods from the Consolidation Centre to the South Site before returning to the Consolidation Centre;
- no maintenance or trade vehicles that typically loiter will be permitted in the loading docks, and will instead be redirected to a public car park; and
- a dock master and a concierge will be employed for the dock to manage bookings and move goods away from the dock.

The loading dock will operate from 6am to 8pm, 7 days a week, or as required. No deliveries will occur at kerbside and no goods will be transported via the public concourse between the South Site and North Site that is being developed as part of the CSSI. An overview of the logistics concept is included at **Figure 59** below.

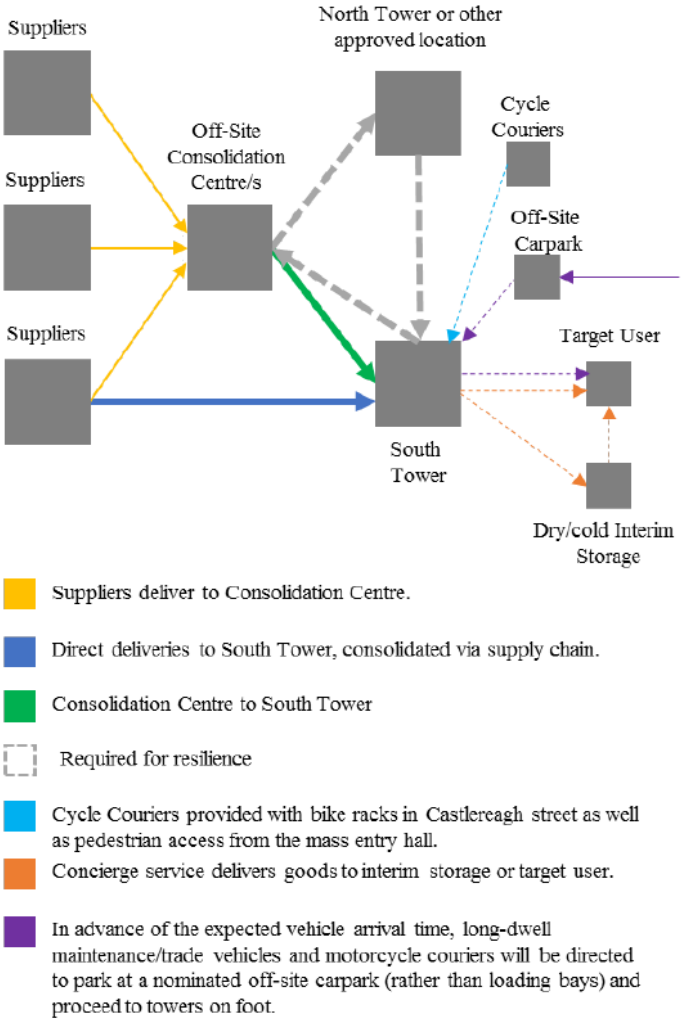


Figure 59 Logistics model for loading in the Precinct

Source: Arup

4.8.4 Emergency Vehicle Access

In the event of an emergency, ambulances, fire trucks and other response vehicles will be able to use the kerbside lanes along both Castlereagh Street and Elizabeth Street that are designated as bus lanes or loading zones. This approach has been agreed through consultation with emergency services.

4.9 Ecologically Sustainable Development

A key outcome of the proposal is to provide a development that achieves best practice ESD targets and is more sustainable than the former buildings on site. The South Tower has been designed with consideration of the sustainability targets approved under the Concept Proposal, and will achieve the following:

- 5 star NABERS Energy minimum based on 2016 protocol;
- 3.5 star NABERS Water Rating target based on 2016 protocol;
- 6 Star Green Star Office Design & As-Built v1.1; and
- Occupant wellbeing.

Consideration has also been afforded to the ‘stretch targets’, which aim to strive beyond the design features used to achieve the targets identified above. These sustainable building stretch targets will be considered in the design development of the proposal and include:

- precinct-wide greening strategies;
- integrating digital infrastructure, such as mobile applications for monitoring the integrated precinct; and
- community facilities that promote active lifestyles, arts and culture.

An ESD report, prepared by Arup and is included at **Appendix T**, provides greater detail around how ESD principles and leading industry practice in sustainable building principles have been incorporated into the design, construction and operation of the development.

4.10 Signage

The South Tower incorporates three top of building signage zones on the building 'crown'. These signage zones provide the future anchor tenant(s) of the building with signage opportunities and define the location and maximum possible extent of signs to be mounted on the building façade (refer to the elevations within the Architectural Drawings for details).

Details of the exact content, materiality, and illumination etc. of signs within these zones will be the subject of approval by the Secretary prior to the issue of the relevant construction certificate, which will inform a condition of consent (in the event that consent is granted).

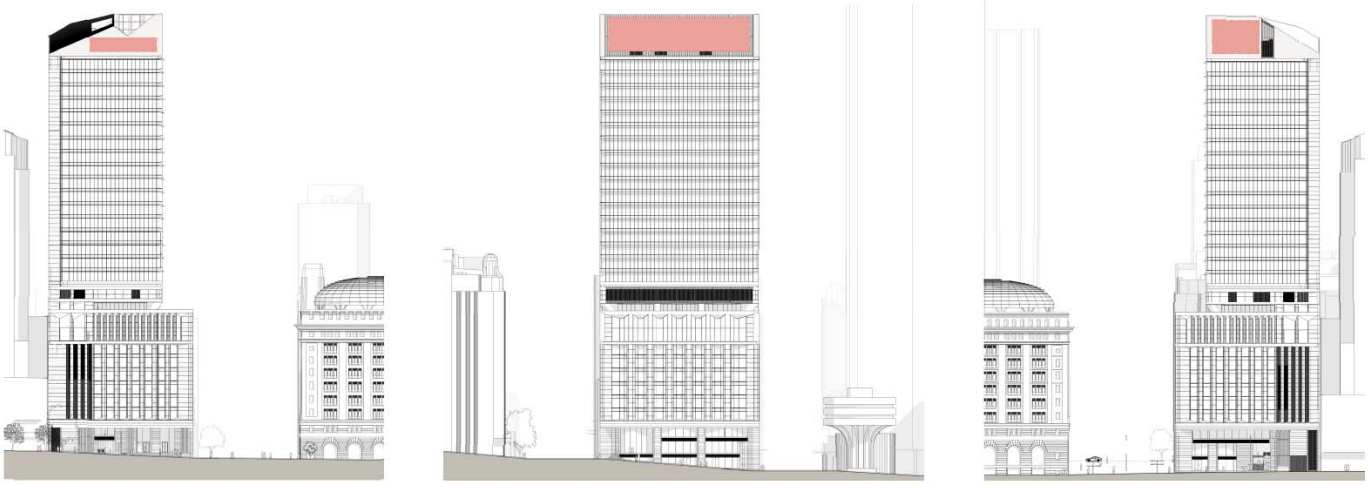


Figure 60 Proposed top of building signage zones (red)

Source: Tzannes

4.11 Waste Management

The storage, management and disposal of waste generated by the operation and construction of the South Tower is considered in the Waste Management Plan prepared by Arup (**Appendix U**) and discussed in the following sections.

Operational Waste

Arup has estimated the expected waste streams and their volumes for the future operation of the OSD based on Council requirements. Waste will be collected and stored in the dedicated waste storage room on Level B1, 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. The path of travel to the collection point will be free from steps, kerbs and uneven surfaces.

There will be no allocated temporary waste storage rooms on each floor of the South Tower, however this does not preclude a tenant from allocating space within their tenancy for temporarily storing waste and recyclables, as part of separate and future fit-out works, or specific business strategies.

Collection vehicles will access the loading dock from Castlereagh Street, and will collect waste out-of-hours to avoid disruptions to the loading dock. General, recycling and co-mingled waste will be collected five times a week, whilst other waste such as bulky goods will be collected as required.

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 procurement, handling, storage, use and disposal. It is targeted to recycle or reuse at least 90-95% 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, detailing the monthly and cumulative performance.

4.12 Water Cycle Management

A Stormwater Management Plan and civil drawings have been developed by Arup confirming the details of the proposed stormwater management measures and Water Sensitive Urban Design (WSUD) measures to be implemented as part of the South Tower (see **Appendix H**).

Roof and canopy drainage systems will collect and convey water through the building and into a rainwater harvesting tank. Overflows from the tank will be conveyed into an on-site detention tank, and overflows from the on-site detention tank will drain via gravity into the surrounding stormwater network via existing connections on Castlereagh Street, which are at a low point on the South Site. The majority of collected rainwater will be used by the development cooling towers.

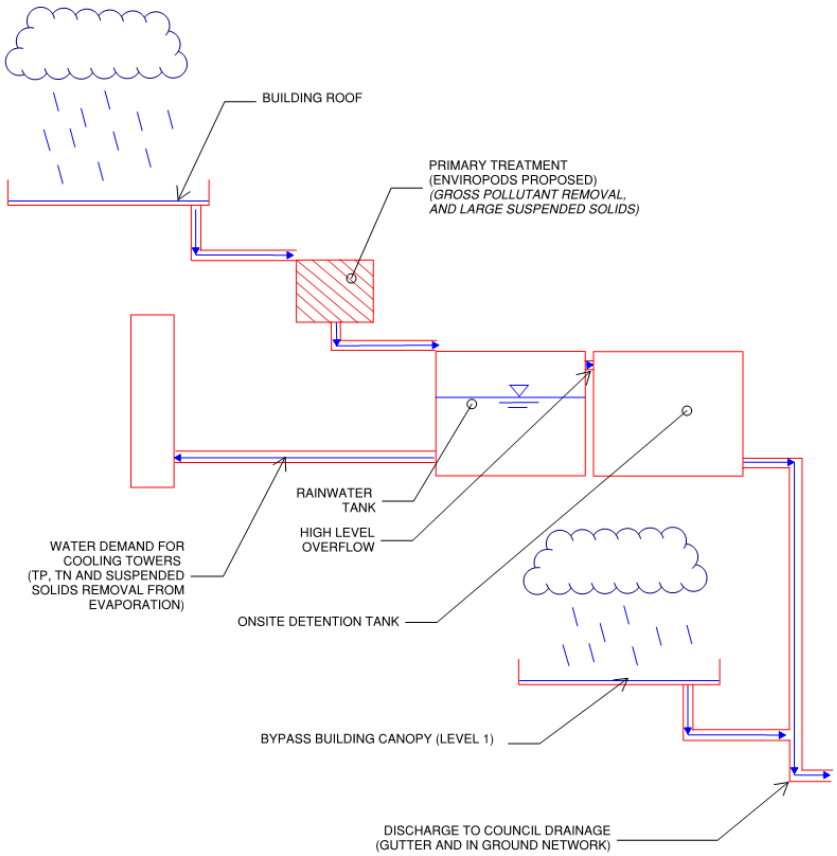


Figure 61 South Tower water management diagram

Source: Arup

4.13 Services and Utilities

In order to support the operation of the South Tower, it is proposed to relocate, alter, or augment infrastructure in the surrounding area. This comprises connections into the OSD including substations within the South Tower, stormwater, sewer, water and gas and communications from existing street mains or pits (utilising existing connection where possible), subject to further discussions and approval with asset owners / authorities. 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 Utilities Services Infrastructure Assessment at **Appendix E**.

4.14 Construction Management and Staging

A Construction Management Plan (CMP) has been prepared by Lendlease (**Appendix M**) which details the overall construction methodology for the proposed development. The CMP also defines the impacts of the proposed construction activities on areas within Precinct, and details the construction methodology, sequence and logic mitigating potential construction risks to the Precinct and its stakeholders. The information included in the CMP has been prepared to respond to the requirements of the SEARs and Condition B12 of the Concept Proposal (as relevant).

The Precinct will be split into three construction zones (North Tower, South Tower and Below Ground Station Box). The existing building at 39 Martin Place is, at the time of writing, being demolished under the terms of the CSSI Approval, and the site excavated by the Tunnel and Station Excavation Works (TSE) Contractor, prior to Lendlease commencing site establishment.

4.14.1 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 – 7pm
- 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, Lendlease will agree the process with the Department/Council, 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.

4.14.2 Site Establishment Works

The demolition 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 and Elizabeth Street, in accordance with the *Work Health and Safety Act 2011* and associated industry codes of practice. The requirements for the OSD will be detailed within the Construction Environmental Management Plan (or relevant sub-plan) for the project, expected to be conditioned as part of any future consent.

4.14.3 Vehicle Access and Control

Vehicle Access

A Framework Construction Pedestrian and Traffic Management Plan has been prepared by Arup and is included at **Appendix M**.

In total two site access points are proposed during construction works:

1. Entry and exit off Castlereagh Street, just north of the proposed future turntable loading dock. As Castlereagh Street is one-way southbound, access will be left-in, left-out.

2. Entry and exit off Castlereagh Street at Martin Place (south the existing pedestrian crossing). As Castlereagh Street is one-way southbound, access will be left-in, left-out.

Traffic controllers will be in place at each of the site access points.

Truck Routes and Controls

To keep the construction related traffic to a minimum on the surrounding roads, vehicles are proposed to be held in holding areas located in areas outside the Sydney CBD, and called via a number of defined construction routes to the site. The construction routes will be clearly communicated by traffic control to ensure construction vehicles are following the correct route. **Figure 62** below presents the inbound and outbound routes to the construction site.

All vehicles accessing the South Site and surrounding work zones will use the state road network from the surrounding areas prior to entering the Sydney CBD.

Vehicles from the north will enter the CBD via the Sydney Harbour Bridge and Cahill Expressway, and then use the Bridge Street off-ramps to access Macquarie Street and then Bent Street. Vehicles from the south and east will use Hunter Street from the Eastern Distributor. Vehicles from the west are proposed to enter the CBD via the Western Distributor and then use the King Street off-ramp to proceed up to Elizabeth Street (and onto Hunter Street if accessing Castlereagh Street).

Vehicles exiting to the north will exit the CBD via the Sydney Harbour Bridge using Macquarie Street. Vehicles heading west and south will exit the CBD via the Western Distributor by proceeding down Castlereagh Street and Market Street. Phillip Street and Bent Street provide eastbound access to the Eastern Distributor.

The deliveries of larger vehicles such as mobile cranes will need to be considered when accessing the South Site. These large vehicles will access the South Site according to a set programme, outside of road network peak periods. This will be coordinated with TfNSW/Sydney Metro and Council as required, through a separate approvals process.

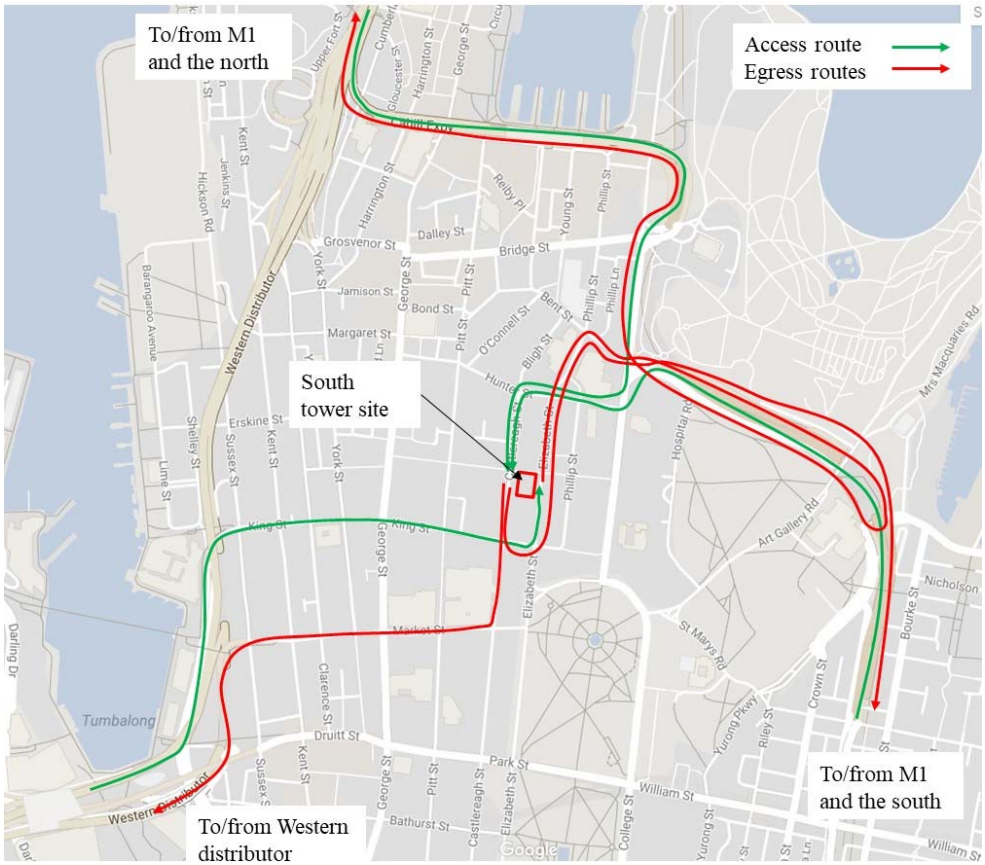


Figure 62 Construction vehicle routes to and from the site

Source: Arup

Peak Hour and Daily Truck Movements

Arup note in the Framework Construction Pedestrian and Traffic Management Plan that the CSSI Approval for the Sydney Metro project permits up to 26 Heavy Vehicles and 10 Light Vehicles per hour (between 10am and 3pm). Arup anticipates that cumulative construction traffic volumes will be of a similar scale to this given the constrained nature of the South Site.

4.14.4 Pedestrian and Cycle Access

Footpath space along all frontages will be maintained with only minor reductions possibly needed to facilitate the B Class hoarding and work zones. The space available along Martin Place will be much reduced from the existing situation in order to construct the station box. The hoarding will be relocated once completed, widening the pedestrian space to 15m.

Pedestrians will be managed by qualified traffic controllers so that they will not conflict with heavy vehicles accessing the works zones or the site access points to maximise pedestrian safety. As a result, additional delays to pedestrians will be minimal. When vehicles require access, pedestrians may be held for very short periods of time as trucks enter and exit the South Site.

4.14.5 Construction Staging

Works associated with the CSSI Approval, including demolition, has begun on the South Site in order to commence the delivery of the Station in time for the opening of the Metro 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 and Southwest line in 2024. On that basis, works are programmed on the South Site as follows:

- Site establishment and erection of hoarding Q1 2021
- Basement Structure Q2 2021 – Q2 2022
- Cores Construction Q4 2021 – Q4 2022
- Construction to Podium Level Q1 2022 – Q4 2022
- Construction of Floor Plates Q2 2022 – Q2 2023
- Façade installation Q2 2022 – Q4 2023
- Public Domain Works Q2 2023 – Q4 2023
- Commissioning and Fit Out Q3 2022 – Q4 2023

During the Metro Works already approved under the CSSI, the main heavy traffic movements are expected to occur during the demolition and bulk excavation stages which will be carried out by the TSE contractor.

During the South Site OSD construction works, the main traffic movements are expected to coincide with large concrete pours which will take place during the core construction stages (i.e. Q4 2021 to Q4 2022). The contractor will coordinate with key stakeholders regarding events occurring within Martin Place to prevent potential conflicts.

The contractor will coordinate with key stakeholders regarding events occurring within Martin Place 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 and public holidays.

5.0 Environmental Assessment

This chapter of the EIS contains our assessment of the environmental effects of the proposed development as described in the preceding chapters of this report.

Under Section 4.15(1) of the EP&A Act, in determining a development application the consent authority has to take into account a range of matters relevant to the development, including the provisions of environmental planning instruments; impacts of the built and natural environment, the social and economic impacts of the development; the suitability of the site; and whether the public interest would be served by the development.

The assessment includes only those key matters under Section 4.15(1) that are relevant to the proposal. The key planning issues associated with the proposed development are listed in **Table 7** below.

Table 7 Key planning issues

Planning Issues	Assessment	Technical Study
Secretary's Environmental Assessment Requirements	Section 5.1	Appendix B
Environmental Planning and Assessment Act 1971	Section 5.2	-
Compliance with Strategic Planning Framework	Section 5.3	-
Compliance with Planning Instruments	Section 5.4	-
Consistency with the Concept Proposal	Section 5.5	-
Design Excellence	Section 5.6	Appendix DD
Built Form	Section 5.7	Appendix A
Heritage	Section 5.8	Appendix D
Visual Impact	Section 5.9	Appendix W
Solar Access and Overshadowing	Section 5.10	Appendix K
Skyview	Section 5.11	Appendix X
Environmental Sustainability	Section 5.12	Appendix T
Traffic, Parking and Access	Section 5.13	Appendix M
Rail Corridor Impact	Section 5.14	Appendix I
Structural Engineering	Section 5.15	Appendix G
Wind Assessment	Section 5.16	Appendix L
Noise and Vibration	Section 5.17	Appendix P
Reflectivity	Section 5.18	Appendix J
Infrastructure and Utilities	Section 5.19	Appendix E
Water Cycle Management	Section 5.20	Appendix H
Flooding	Section 5.21	Appendix H
Waste Management	Section 5.22	Appendix U
Construction Management	Section 5.23	Appendix O
Archaeology	Section 5.24	Appendix D
Air Quality	Section 5.25	Appendix Y
Fire Safety	Section 5.26	Appendix R
Crime and Safety	Section 5.27	Appendix S
Building Code of Australia	Section 5.28	Appendix V
Accessibility	Section 5.29	Appendix Q
Social and Economic Impacts	Section 5.30	-
Ecologically Sustainable Development	Section 5.31	-

Planning Issues	Assessment	Technical Study
Public Benefits / Development Contributions	Section 5.32	-
Site Suitability	Section 5.33	-
Public Interest	Section 5.34	-

5.1 Secretary's Environmental Assessment Requirements

Table 1 in **Section 1.6** provides a summary of the individual matters listed in the SEARs and identifies where each of these requirements has been addressed in this EIS and the accompanying technical studies.

5.2 Environmental Planning and Assessment Act 1979

The EP&A Act establishes a specific assessment system to consider projects classed as SSD. SSD is development deemed to be of State significance and includes for example projects located in precincts or corridors regarded as important by the NSW Government, such as within a railway corridor or associated with rail infrastructure. As noted, the proposed development the subject of this DA is classed as SSD.

Division 4.4 of the EP&A Act relates to concept development applications. A concept development application is one that sets out concept proposals for the development of a site, and for which detailed proposals for separate parts of the site are to be the subject of subsequent development applications. The application may set out detailed proposals for the first stage of development.

This application comprises a detailed proposal for the South Site that is pursuant to the concurrent Stage 1 Amending DA, or 'new Concept Proposal' (SSD 18_9347). These terms are used interchangeably and should be interpreted to mean 'Concept DA' (for the purposes of Section 4.22 of the EP&A Act) in each instance.

Section 4.24 of the EP&A Act provides that while any consent granted on the determination of a Concept DA for a site remains in force, the determination of any further development application in respect of that site cannot be inconsistent with that consent. We note that upon approval and commencement of the Stage 1 Amending DA, which will have the effect of modifying the Concept Proposal, this subject DA will not be inconsistent with the Concept Proposal that will apply at the time of determination. This is discussed further in **Section 5.5** below.

This EIS has examined and taken into account all possible matters affecting or that are likely to affect the environment by reason of the proposed development. **Table 8** provides an assessment of the proposed development against the objects of the EP&A Act.

Table 8 Objects of the EP&A Act

Object	Comment
Section 1.3: (a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,	The proposed development will promote the social and economic outcomes for the community by supporting the long-term viability of the finance and banking sector in Sydney, improve access to jobs, and provide for a new landmark and environmentally sustainable development that strengthens 'Global Sydney' as a centre for economic and cultural activity. It will deliver part of a step-change project in the evolution of Sydney, and will greatly enhance a significant site within the Sydney CBD that has been the subject of significant public transport infrastructure investment. The proposal will also contribute to the proper management, development and conservation of resources of the Precinct. In particular, measures outlined in the ESD report prepared by Arup and included in **Appendix T** will be implemented to ensure the conservation of resources throughout the construction and operational phases, particularly existing built resources and infrastructure will be retained where practicable.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The principles of ESD, as set out in Schedule 2 of the EP&A Regulation 2000, as well as other relevant economic, environmental and social considerations have been addressed in this EIS and the accompanying information. **Section 5.31** of the EIS demonstrates how such factors have been considered in the detailed design and development of the Stage 2 SSD DA.

Object	Comment
(c) to promote the orderly and economic use and development of land,	This application provides for the orderly and economic development of the site in accordance with established planning parameters, facilitating the delivery of a new integrated commercial OSD tower.
(d) to promote the delivery and maintenance of affordable housing,	The proposed development does not include any residential development. Employment generating land uses offer the greatest level of positive impacts for the local community and broader economy of Sydney, NSW and Australia.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The proposed development takes place in a highly modified and disturbed CBD environment, which does not impact on biodiversity values. The Precinct does not, nor is it likely to, have habitat suitable for any threatened flora and fauna. This assessment has been confirmed in the waiver issued by the Department and OEH, to the preparation of a Biodiversity Development Assessment Report (see **Appendix AA**).
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The South Site is in proximity to numerous heritage items, which are identified as either items of National, State or Local heritage significance, including Martin Place and the existing building at 50 Martin Place. The heritage context has therefore been a key consideration when developing the detailed design of the South Tower, and its integration with the South Site. This application is supported by a Statement of Heritage Impact which assesses potential impacts and promotes the ongoing conservation and appreciation of the South Site's heritage and surrounds. This is discussed further in **Section 5.8** below.
(g) to promote good design and amenity of the built environment,	As part of the Stage 1 Concept Proposal, an alternative design excellence approach for the project was approved by the Minister for Planning, in place of the competitive design process typically used under clause 6.21(5) of the Sydney LEP 2012 for standard development projects in Central Sydney. The approved alternative process recognised the unique circumstances of the project, where the approved Metro CSSI station works are intricately linked to the OSD from a design, construction, functionality, and delivery perspective, and that any requirement for a design competition could only apply to the OSD component of the project, and not the station. The approved alternative design excellence process essentially involves: • The establishment of a Design Review Panel (DRP), comprising three members of the Sydney Metro DRP (including the chair) and two new members, one nominated by the City of Sydney. • A key role of the OSD DRP is to review and advise on the detailed building design to ensure the achievement of design excellence, having regard to the Sydney Metro Martin Place Station Precinct Consolidated Design Guidelines; and • To provide that advice prior to the lodgement of the Stage 2 Development Application(s), and throughout the assessment and post approval stages. The detailed design of the South Tower has followed this process as discussed in **Section 5.6**, and is considered to exhibit design excellence.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The proposed OSD tower has been designed as integrated part of a world-class metro facility, and in-line with this objective the development will achieve the highest standards in construction and maintenance.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	Consultation has been undertaken with various levels of government and government agencies during the preparation of this DA, as outlined in **Section 3** and all government agencies will be afforded the opportunity for further input into the development process during the public exhibition process.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The community consultation to date has assisted, and will continue to assist, the development of the proposal. This is detailed in **Section 3.0** of the EIS. Further consultation will be carried out during exhibition of the application, during design development, prior to the commencement of construction, and throughout the construction period.

5.3 Compliance with Strategic Planning Framework

The approved Concept Proposal and Planning Proposal established the strategic need and context in which to deliver the South Site OSD associated with the Martin Place Metro Station. It addressed the various plans and policies governing the long-term development of Sydney over the next forty years, and was found to be consistent with and support the strategic goals, directions and actions of these plans and policies. This Stage 2 SSD DA is pursuant to these applications and therefore remains generally consistent with the provisions of the relevant planning policies identified in the SEARs. As detailed in the following sections and other supporting technical information appended to this EIS, this application will seek to deliver a key piece of the strategically significant Sydney Metro Martin Place Station Precinct.

5.3.1 NSW Premier's Priorities

The NSW Premier's Priorities represent 12 of the 30 key policy priorities for the NSW Government, replacing the former NSW 2021 plan. The priorities outline the NSW Government's vision and objectives for the State's near-term future and are intended to guide all government action. The priorities set a series of targets designed to rebuild the economy, deliver quality government services, improve infrastructure, strengthen our local environment and communities and improve governance structures. The key priorities as they relate to the proposed development are discussed below.

Creating Jobs

The NSW Government identifies NSW as leading the nation on key economic indicators, whilst also acknowledging that more can be done to attract new jobs and businesses to the State. The State Government has targeted the creation of 150,000 new jobs in NSW by 2019, a key pillar of which is 'Jobs for NSW', a private sector-led and NSW Government-backed initiative which aims to make the NSW economy as competitive as possible and therefore help create new jobs across NSW. Whilst this jobs target was achieved in May 2016, the NSW Government is continuing to develop key initiatives that assist in the creation of jobs, such as attracting large and international companies to base their headquarters in NSW.

The following is highlighted:

- The proposal will deliver a new commercial tower in the City that has the potential to accommodate 3,267 – 4,083 people once operational, being an increase of 2,450 – 3,266 jobs on the existing building, and create over 865 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.
- This proposed tower is in arguably Sydney's pre-eminent commercial location, and will assist in increasing the attractiveness and competitiveness of the City and businesses operating in NSW, along with the North Tower. In this vein, the proposal is a true example of transit oriented development and seeks to optimise integrated transport and land use outcomes whilst strongly supporting the Government's significant investment in a major infrastructure project.

Building Infrastructure

Under this priority, the NSW Government has committed to delivering 10 of the largest and most high-profile infrastructure projects on time and on budget (refer to **Figure 63**). One of these 'step-change projects' is the Sydney Metro, planned to open in 2024. The proposed development directly responds to this strategic direction through building on the opportunity presented by the Metro and the creation of a new station and associated OSD at Martin Place.

The proposal seeks to construct and operate the South Site OSD, which represents the next step in the delivery of an integrated transport hub at Martin Place. It therefore directly assists in the timely delivery of the new Metro Station and in achieving this priority.

The proposal will also increase the capacity of employment land uses in the Precinct that will support, and benefit from, the delivery of an integrated world class transport hub at Martin Place. The proposal will facilitate employment growth in the delivery of over 37,000m^2 of commercial floor space, that is to be coordinated with and delivered at the

same time as the new Metro Station, to synchronise access to jobs and public transport, and to establish a modern business campus.

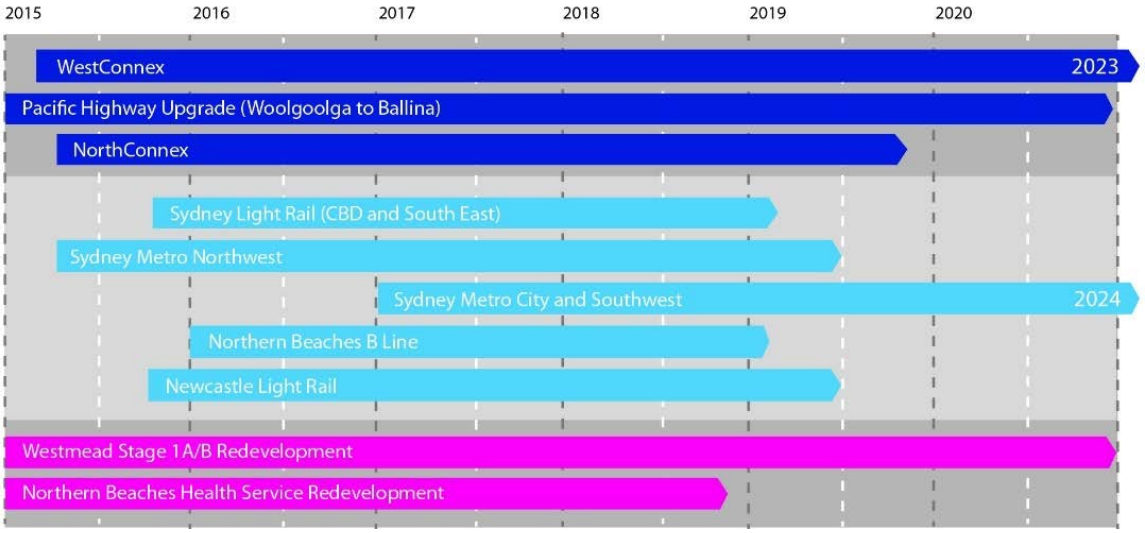


Figure 63 Key infrastructure projects and their committed delivery timeframe, as identified in the Premier's priorities

Source: Infrastructure NSW

5.3.2 Greater Sydney Region Plan – A Metropolis of Three Cities

The *Greater Sydney Region Plan* is the overarching strategy for growing and shaping the Greater Sydney Area. It sets a 40-year vision (to 2056) and establishes a 20-year plan to manage growth and change for Greater Sydney in the context of social, economic and environmental matters. The Plan was adopted in March 2018, and seeks to reposition Sydney as a metropolis of three cities – the western parkland city, central river city, and the eastern harbour city. In the same vein as the former *A Plan for Growing Sydney*, the Plan provides 10 high level policy directions supported by 40 objectives that inform the District Plans, Local Plans and Planning Proposals which follow in the planning hierarchy.

The proposal is consistent with the policy directions and objectives under the Plan, which govern growth and development in Sydney. This is demonstrated in **Table 9** below, and an assessment of the proposal against the specific vision for the Eastern District is provided in **Section 5.3.3** below.

Table 9 Consistency with the Greater Sydney Region Plan

	**A city supported by infrastructure** • The proposal is the next stage in the delivery of the Martin Place Metro Station, which represents a step-change piece of infrastructure in the development of NSW. It will connect more people with high-capacity transport and assist in achieving the '30-minute city model'. • The proposal also represents a coordinated approach in the delivery of higher capacity development in-hand with significant infrastructure investment; to assist in tackling congestion whilst still addressing the need for further employment floor space. It supports growth and infrastructure being provided 'at the right time'.
	**A collaborative city** • Whilst the South Site is not identified as being within a 'collaboration area', it represents a significant opportunity identified by Macquarie through the USP process, which encourages the private sector to come forward with innovative infrastructure or service delivery solutions. This process has enabled the delivery of an innovative OSD solution that is wholly integrated with the station beneath, and will be constructed on behalf of the NSW Government and opened in coordination the Metro Line in 2024. • The proposal has also been the subject of the relevant consultation with government agencies, the local community, and other key stakeholders to ensure that an acceptable local outcome is achieved as detailed in **Section 3.0**.

	• The proposal will also assist in delivering the Metro Station incorporating new public domain areas that will be accessible to all members of the public.
	**A city for people** • The proposal has been designed with consideration of intergenerational equity and promotes sustainability, universal design and accessibility, and community integration within the Precinct. • It prioritises opportunities for people to walk, cycle, and use public transport through assisting in the delivery of a new Metro Station and associated public domain areas, and new bicycle parking and end of trip facilities within the development. No car parking will be provided on the South Site, and direct access to the Station will enhance the convenience and accessibility of sustainable modes of transport.
	**Housing the city** • No housing is provided on the South Site, consistent with the Concept Proposal. • The development seeks to continue the existing and envisaged use for the South Site as a destination for employment and retail.
	**A city of great places** • The development seeks to offer 'more than just new homes and jobs'. The Precinct will itself become a lively destination, seven days a week and over an extended period of the day, and will build on the surrounding employment, retail and entertainment opportunities in the area. • The proposal has also been designed with detailed consideration of the heritage and cultural values that define the setting of the South Site, and will seek to celebrate the key features of this context. The implementation of various heritage interpretation initiatives will ensure a long-lasting connection to the unique heritage of the Precinct.
	**A well-connected city** • The proposal will seek to deliver additional commercial floor space over the southern entrance to the Martin Place Metro Station, and in doing so will connect new jobs to high-capacity transport. This will take advantage of substantial investment in public transport infrastructure, and support the achievement of a '30-minute city'.
	**Jobs and skills for the city** • The Plan recognises that Sydney's greatest economic strength globally and nationally is the concentration of financial services sectors in the CBD, and that one of the implications of a strong financial sector is a high demand for premium (Prime Grade and A-Grade) office space. The proposal is consistent with this objective in seeking to deliver new, premium-grade office space in the heart of Sydney's financial centre. • In conjunction with the OSD, associated retail and public domain spaces will also be delivered that support the diversity of functions in the CBD and encourage activity at the ground plane.
	**A city in its landscape** • The proposal does not affect any protected biodiversity or remnant or significant vegetation. An opportunity to provide a landscaped terrace on Level 9 has been identified as part of the detailed design of the project.
	**An efficient city** • A key initiative of the Concept Proposal was to deliver a more sustainable development than is presently provided, and as such sustainability targets and stretch targets were established for the OSD towers. This application will achieve the relevant targets and is aligned with world's best practice for ESD.
	**A resilient city** • The proposal has sought to minimise exposure to natural hazards by ensuring that future development is not affected by flooding. • The environmental initiatives implemented through the development will contribute to enhanced environmental outcomes and seek to mitigate impacts related to climate change.

5.3.3 Eastern City District Plan

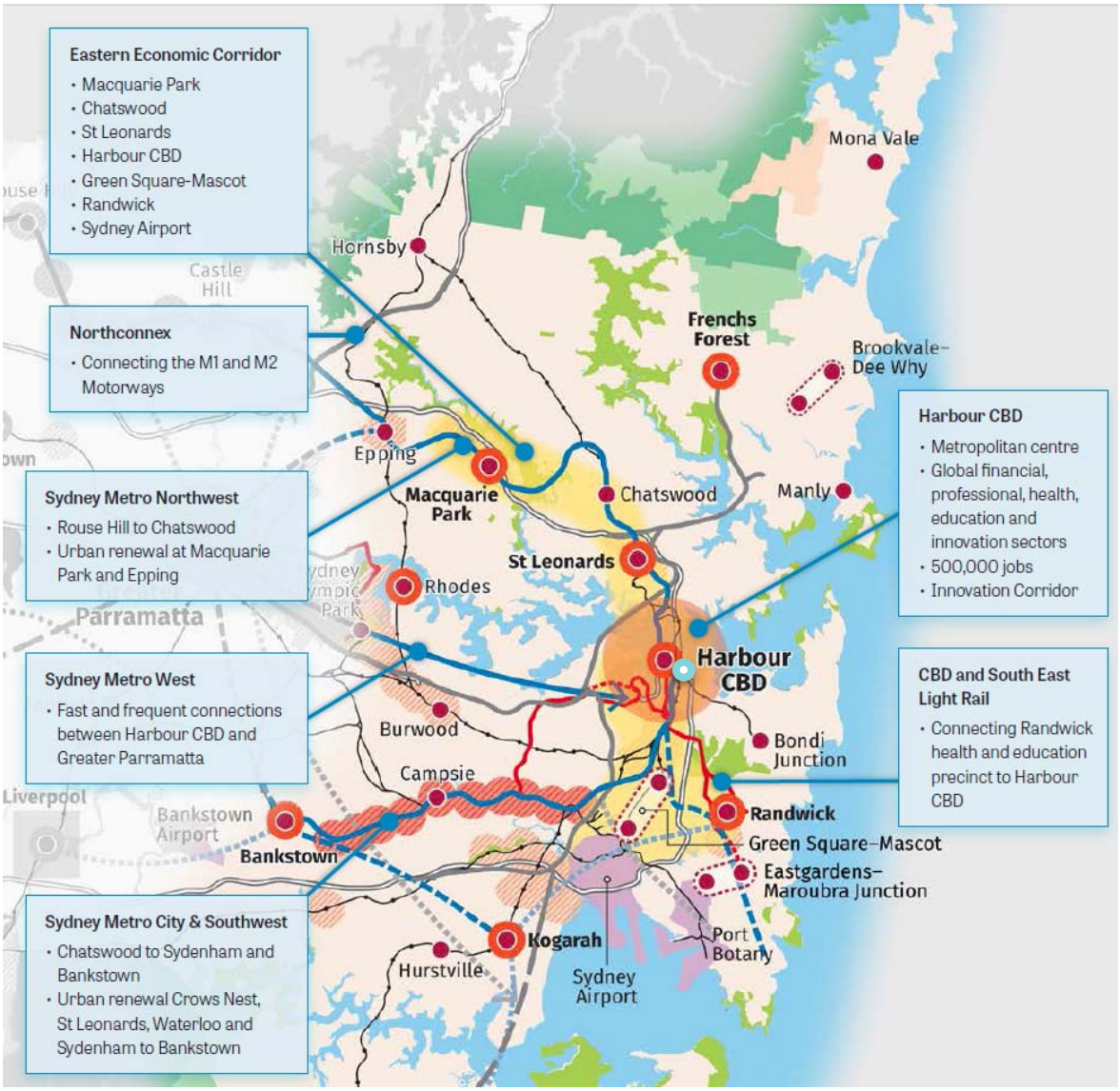
The *Eastern City District Plan* underpins the *Greater Sydney Region Plan* and sets the 20-year vision for the District through 'Planning Priorities' that are linked to the Region Plan. Under this Plan, the South Site is strategically located within the CBD of the Eastern City and the Eastern Economic Corridor (see **Figure 64** below).

The proposed development will achieve the relevant planning priorities, as demonstrate in **Table 9** above. A few of the key priorities have also been explored further below in the context of the Eastern City District.

Planning Priority E1 – Planning for a city supported by infrastructure

Objective 4 – Infrastructure use is optimised

Aligning land use and infrastructure planning ensures that infrastructure is maximised, and that growth and infrastructure provision are aligned. The development of over 37,000m^2 of commercial floor space in coordination with the southern entrance to the Martin Place Metro Station will align additional transport and employment capacity, and ensure that the Station is utilised on day one as the proposed offices will be provided in coordination with the Station and will be open for business alongside the Metro line in 2024.



The Site

Figure 64 Features of the Eastern City

Source: Sydney Region Plan

Planning Priority E7 – Growing a stronger and more competitive Harbour CBD

Objective 18 – Harbour CBD is stronger and more competitive

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 Prime-Grade 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.

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

Objective 14 – A Metropolis of Three Cities – integrated land use and transport creates walkable and 30-minute cities

The '30-minute city' model is a long-term aspiration for Sydney whereby jobs and services and strategic/metropolitan centres are accessible within 30 minutes by public transport. This development is uniquely placed to benefit the '30-minute city' model, by providing commercial floor space over the Martin Place Metro Station and thereby improve access to jobs. 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, and to establish a next generation business campus.

5.3.4 NSW State Infrastructure Strategy 2018

The *NSW State Infrastructure Strategy 2018-2038* brings together the infrastructure investment and land use planning of the *Future Transport Strategy 2056* (see **Section 5.3.5**) and the *Greater Sydney Region Plan* (see **Section 5.3.2**), and is underpinned by the *State Infrastructure Strategy 2018–2038: Building Momentum* that established a pipeline of investment for infrastructure that is underway or in advanced planning. The Strategy 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 and at the same time as 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 deliver infrastructure projects on-time and on-budget.
- 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 is appropriately safeguarded.
- Making our infrastructure more resilient – the South Tower 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 Martin Place 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.

5.3.5 Future Transport Strategy 2056

The *Future Transport Strategy 2056* is the 2017 update of the NSW Long Term Transport Master Plan, and superseded the Master Plan. It is a 40 year vision for mobility in NSW, developed with the Greater Sydney Commission, the Department, and Infrastructure NSW.

The Strategy sets out six state-wide outcomes to guide investment, policy and reform and the provision of services. Whilst a number of these outcomes relate to integrating technological advancements with services and providing regional connections, the proposal does support the need to connect centres that drive economic growth and the development of a transport system that supports the country's first 'trillion-dollar state economy'.

The proposed development represents the next phase in the delivery of the Martin Place Metro Station and will financially contribute to the Sydney Metro City and Southwest project that will connect new jobs with a high-capacity transport network. The growth of commercial floor space that is integrated with this network benefits the wider NSW economy; as "economic productivity will grow as the network moves people more efficiently to jobs centres and provides firms with access to the right workers, skills and customers." The proposal also supports public transport patronage, active modes of transport, and achieves best practice ESD targets.

5.3.6 Sydney City Centre Access Strategy

This is a long term, comprehensive, multi-modal plan that prioritises access to city centre streets for different modes of transport. It aims to balance competing demands for limited road space and deliver better public transport options whilst reducing congestion for those who do need to drive. The Access Strategy includes commitments to implement significant projects in partnership between the NSW Government and the Council. These commitments include:

- a Pedestrian Improvement Program that seeks to prioritise pedestrians in the centre of the city through improvements to footpaths, passage across roads and signage;
- the CBD-South East Light Rail project that proposes associated changes to bus services, taxi operations, general traffic, parking, interchanges, way-finding and loading availability in addition to delivering new light rail connections;
- a review of on-street and off-street parking in the city centre to convert on-street parking to other functions (e.g., loading, taxi pick-ups), remove on-street parking to ease congestion and ensure there is greater use of spare off-street parking;
- a network of taxi ranks to improve consumer access including the provision of new, expanded taxi zones to ensure there is a taxi rank within 150 metres across the city centre; and
- a city centre cycleway network including multiple north-south and east-west separated cycleways, in recognition of the data that reveals that for two-thirds of inner-Sydney residents to ride to work at least once a week if they had access to separated bike paths for the full journey.

5.3.7 Additional Relevant Planning Policies

In addition to the above, the proposal remains consistent with the key additional planning policies, guidelines and principles identified in the SEARs and as outlined in **Table 10** below.

Table 10 Summary of consistency with relevant additional planning policies

Strategy	Comments
Development Near Rail Corridors and Busy Roads-Interim Guideline	This Guideline has been addressed by Arup in the Acoustic Assessment report prepared in support of the application (**Appendix P**). The assessment notes that as the proposal does not include any residential uses, it is not considered appropriate to require an additional assessment to demonstrate 'compliance' with the interim guidance or the *State Environmental Planning Policy (Infrastructure) 2007*– since these are primarily concerned with residential uses.
Guide to Traffic Generating Developments	Schedule 3 of *State Environmental Planning Policy (Infrastructure) 2007,* discussed further in **Section 5.4** below, requires the development to be referred to the RMS as a Traffic Generating Development, as it will deliver a commercial building with a floor area of more than 15,000m^2. The Guide has also been specifically considered by Arup as part of preparing the Transport Assessment Report (**Appendix M**).

Strategy	Comments
NSW Bicycle Guidelines	The *NSW Bicycle Guideline* is a guide to practitioners on how the bicycle network should be developed as part of the wider NSW transportation network. 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 additional bicycle parking and end of trip facilities. Guide 11 specifically relates to bicycle parking and access to public transport interchanges, and has been considered when designing publicly accessible parking as part of the Station.
Sydney's Rail Future 2013	*Sydney's Rail Future: Modernising Sydney's Trains* has been effectively superseded by the *Future Transport Strategy 2056* discussed in **Section 5.3.5** above. The Sydney Metro City and Southwest project was announced as Stage 2 of the first tier of planned improvements for transforming Sydney's rail network under *Sydney's Rail Future* and is also acknowledged in the strategic transport plan *Future Transport Strategy 2056* released in 2017. The proposed development recognises and responds to these acknowledged improvements to the rail network.
Sydney's Cycling Future 2013	*Sydney's Cycling Future 2013* seeks to increase the mode share of cycling in the Sydney metropolitan region for short trips between 20 to 30 minutes. The South Site benefits from an existing cycling network and will provide additional bicycle parking for tenancy employees/visitors and within the public domain to benefit the users of the upcoming Metro Station. This will allow people to make trips by bike to locations with the CBD, and connect to other transport services, in support of the realisation of the objectives of Sydney's Cycling Future.
Heritage Council Guideline on Heritage Curtilages, 1996 **Heritage Council Guideline, Design in Context-guidelines for infill development in the Historic Environment 2005**	The assessment of heritage impacts within the SHI in **Appendix D** has been undertaken in reference to the model questions given in the NSW Heritage Office's publication 'Statement of Heritage Impacts'. The responses assess the potential heritage impacts of the proposed OSD on the South Site and on heritage items. Refer to **Section 5.8** of this EIS.
Better Placed – an integrated design policy for the built environment of NSW 2017	The design process for the Precinct was developed with reference to the NSW Government Architect's (OGA) integrated design policy *Better Placed*, that recognises that large-scale urban renewal projects are complex and often involve multiple projects being undertaken across stages. The Concept Proposal established the framework for design review and included a Design Excellence Framework (discussed further in **Section 5.6**). The Framework was consistent with *Better Placed* as it implemented a Design Review Panel that is identified as being key tool used to support, measure and evaluate design excellence.
Draft Greener Places Policy	This Policy was developed by the NSW Government Architect's (OGA) and seeks to deliver a network of green spaces or semi-natural systems across Sydney's urban environment. It is noted that public domain improvements are being developed under the separate CSSI Approval, and as such landscaping in the public domain does not form part of this application.
Interim Construction Noise Guideline	This Guideline has been considered in the Acoustic Assessment prepared by Arup (refer to **Appendix P**).
Noise Policy for Industry	The Industrial Noise Policy has been considered for consistency with the environmental noise criteria derived from the Sydney Metro EIS and CSSI assessment, and the approved Concept Proposal.
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 5.6**, 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 Plan at **Appendix U**.
Crime Prevention Through Environmental Design principles (CPTED)	CPTED principles are addressed in the CPTED report (**Appendix S**) and discussed in **Section 5.27** of this EIS.

5.4 Compliance with Planning Instruments

The following environmental planning instruments are relevant to the proposed development:

- *Biodiversity Conservation Act 2016*
- *State Environmental Planning Policy – (State and Regional Development) 2011;*
- *State Environmental Planning Policy – Infrastructure 2007;*
- *State Environmental Planning Policy No. 64 – Advertising and Signage;*
- *State Environmental Planning Policy 55 – Remediation of Land;*
- *Draft State Environmental Planning Policy (Environment) 2017; and*
- *Sydney Local Environmental Plan 2012*.

The SSD DA's consistency and compliance with these relevant planning instruments is located in **Table 11** or discussed in more detail below.

Table 11 Compliance with environmental planning instruments

Instrument	Comments
Biodiversity Conservation Act 2016	In accordance with the *Biodiversity Conservation Act 2016*, an assessment of any State Significant proposal's biodiversity impacts must be undertaken as part of the provision of any SSD DA, including the provision of a Biodiversity Development Assessment Report (BDAR) in instances where it is required. An application was lodged on 18 May 2018 requesting that the Department, in consultation with OEH, waive the requirement to prepare a BDAR on the grounds of the development being unlikely to impact biodiversity values in accordance with Clause 1.5 of the *Biodiversity Conservation Act 2016* and Clause 1.4 of the *Biodiversity Conservation Regulation 2017*. A waiver was issued on 25 May 2018 (see **Appendix AA**) under the delegation of the OEH Senior Executive.
SEPP (State and Regional Development)	Under Item 19(2) of Schedule 1 of SEPP SRD, development within a railway corridor or associated with railway infrastructure that has a capital investment value of more than $30 million and involves commercial premises is declared to be SSD for the purposes of the EP&A Act. This Stage 2 application has a CIV of over $30 million and is therefore identified as SSD and considered to be development of State and/or Regional Significance. This EIS has accordingly been prepared in support of the SSD DA. SSD applications are treated differently to regular 'local' and 'regional' developments, with a range of other legislation not applying (Section 4.41 and 4.46 of the EP&A Act) and other legislation needing to be applied consistently with the terms of any SSD consent (Section 4.42 of the EP&A Act). Relevantly in this instance an approval under Part 4, or an excavation permit under Section 139, of the Heritage Act 1977, is not required. Furthermore, Development Control Plans (DCPs) are specifically excluded from being applicable to SSD (Clause 11 SEPP SRD).
SEPP (Infrastructure)	The relevant matters for consideration within SEPP Infrastructure are the referral requirements for development within, above or adjacent to a rail corridor, within/adjacent to the Interim Metro Corridor (Division 15 Railways) and traffic generating development (Schedule 3). The South Site is located above and in proximity to the Eastern Suburbs Rail Corridor, and within the Interim Metro Corridor. However, this SSD does not seek approval for excavation or the construction of the Station or entries, as approval was granted for components of Stage 2 of the Sydney Metro project and for the construction of the associated station components (and therefore, relevant excavation required to deliver future OSD) has been granted by the Minister for Planning on 9 January 2017 under the CSSI Approval (SSI_15_7400) – as modified. Accordingly, the concurrence of the rail authority is not required in this instance. The proposed concept triggers consultation with RMS under the provisions of Schedule 3 of the SEPP as the proposed development provides over 15,000m^2 of commercial floor space. The interface/relationship of the OSD with the existing/future rail infrastructure is discussed further in **Section 5.14** and throughout this report.

Instrument	Comments
SEPP No. 64	Top of building signage zones are proposed for three facades of the South Tower, as illustrated on the Architectural Drawings at **Appendix A**. An assessment against the provisions of SEPP 64 is provided at **Appendix BB**.
SEPP No. 55	Clause 7 of SEPP 55 specifies that a consent authority must not consent to the carrying out of any development on land unless it has considered whether land is contaminated and if the land is contaminated, it is satisfied that the land is/can be suitable for the proposed development. As was established under the Concept Proposal, the construction methodology for the approved Sydney Metro (Martin Place Station) involves the demolition and excavation of the land (North and South Sites). SEPP 55 and any potential contamination issues have or will accordingly be addressed as part of this separate process.
Draft SEPP Environment	The Draft SEPP Environment was released for public exhibition in October 2017 and aims to repeal and replace a number of State Environmental Planning Policies and Sydney Regional Environment Plans that currently apply in NSW. The proposed development does not require further assessment under this Draft SEPP given the site is not zoned for the purposes of public open space, and it has been demonstrated above that it remains consistent with the provisions of SREP Sydney Harbour that is being amalgamated into the Draft SEPP Environment.
SREP Sydney Harbour	The Precinct is located within the boundaries of the Sydney Harbour Catchment Regional Environmental Plan. The Precinct is not 'zoned' under this Plan nor is it located within the 'Foreshores and Waterways Area', where the majority of the Plan's provisions apply. The key matter for consideration is therefore the visibility from Sydney Harbour. The View Impact Assessment prepared by Tzannes and Arterra illustrates that the amended proposal will not result in any adverse impacts on views from Sydney Harbour (refer to **Appendix W**). The proposal will result in an enhanced visual outcome through the provision of a high-quality building which exhibits design excellence.
Local Legislation	
Sydney Local Environment Plan 2012:	
Clause 1.2 Aims of Plan	The proposed development supports the aims of the Sydney LEP 2012 through: ▪ Accommodating increased commercial office capacity on a site located within the core of the Sydney CBD that contributes to creating and sustaining Sydney's role as a global business centre. ▪ Enabling development in a highly sustainable location that has achieved best practice ESD targets. ▪ Encouraging economic growth through providing new high quality commercial floor space. ▪ Delivering a land use and density that maximises the investment in public transport and facilitates more sustainable means of transport. ▪ Creating a high quality contribution to the CBD skyline that exhibits design excellence. ▪ Responding positively to the heritage context, including a consistent building line fronting Martin Place.
Clause 2.3 Zone objectives and Land Use Table	The Precinct is zoned B8 Metropolitan Centre. The proposed uses are permissible with development consent in the zone. The proposal is consistent with the objectives of the zone, as it: ▪ Recognises the pre-eminent role of, and provides, a mix of office and retail premises in the Sydney CBD. ▪ Provides opportunities for an intensity of the current land uses, commensurate with Sydney's global status. ▪ Includes a diversity of compatible land uses characteristic of Sydney's global status. The proposed uses (in particular commercial and retail and uses) will serve the workforce, visitors and wider community. ▪ Encourages the use of alternatives to private vehicles due to the proximity of the proposed commercial and retail uses to existing and planned public transport networks, as well as its integration with transport infrastructure as part of an integrated transport facility. ▪ Provides opportunities for active street frontages to Martin Place, Castlereagh Street and Elizabeth Street.
Clause 2.7 Demolition	The proposed development does not seek approval for demolition. All buildings required to be demolished to facilitate the proposal are the subject of the CSSI Approval (SSI 15_7400) - as modified.

Instrument	Comments
Clause 4.3 Height of buildings	The South Site is the subject of a site-specific development standard contained in Clause 6.38 discussed further below, which prevails over the provisions of Clause 4.3 of the LEP.
Clause 4.4 Floor space ratio Clause 6.3 Additional floor space in Central Sydney Clause 6.4 Accommodation floor space Clause 6.6 End of journey floor space	The South Site is the subject of a site-specific development standard contained in Clause 6.38 discussed further below, which prevails over the provisions of Clauses 4.4, 6.3, 6.4 and 6.6 of the LEP. The maximum FSR permissible on the South Site under Clause 6.38 is 22:1, with which the proposal complies.
Clause 4.5 Calculation of floor space ratio and site area	For the purposes of calculating FSR, the South Site has a site area of 1,897m^2, being the site of 39-49 Martin Place (Lot 1 DP 1103195 and Lot 2 DP 1103195). The maximum permissible FSR must include the GFA of the OSD and the Station uses covered by the CSSI Approval.
Clause 4.6 Exception to development standards	The proposed development does not vary the relevant development standards and as such no Clause 4.6 request is required.
Clause 5.10 Heritage conservation	The Precinct is located in the vicinity of Local, State and Commonwealth heritage listed items and includes, within the precinct, the Former Government Savings Bank of NSW (48-50 Martin Place) which is a State listed heritage item. 7 Elizabeth Street which is also located on the North Site is also a local heritage item, although demolition of this building has been approved as part of the CSSI Sydney Metro Stage 2 Approval to facilitate construction of the Metro, and has already substantially commenced. The proposal will not have any adverse impacts on the remaining heritage items, including 50 Martin Place, as discussed in **Section 5.8**.
Clause 6.16 Erection of tall buildings in Central Sydney	The development meets the objectives for erecting tall buildings in Central Sydney as: • It provide appropriate amenity for future tenants and to surrounding buildings, commensurate with the site's CBD context; • It does not adversely affect the amenity of public places, in particular Martin Place and Hyde Park; • The height of the proposed OSD is compatible with the Precinct's context, amongst a range of towers of varying heights; • The proposed building allows sunlight to reach the sides and rear of the future towers, having regard to existing/future buildings; • The proposed building will ensure future development is able to achieve ventilation of air around towers; and • The proposed building will allow active frontages at the ground level through future separate applications.
Clause 6.17 Sun access planes	The proposed development is consistent with the Hyde Park North Sun Access Plane. The objectives of Clause 6.17 are therefore automatically met, being: • to ensure that buildings maximise sunlight access to the public places set out in this clause, and • to ensure sunlight access to the facades of sandstone buildings in special character areas to assist the conservation of the sandstone and to maintain the amenity of those areas. The development also remains compliant with the minor changes to the Sun Access Plane by Council as part of its Planning Proposal: Central Sydney, July 2016 (yet to receive a Gateway Determination).
Clause 6.21 Design excellence	The proposed development has been designed in accordance with the rigorous design testing and assessment process approved under the Concept Proposal. It has been subject to an iterative design review process via the site-specific Design Review Panel that was compiled for this application in accordance with the Concept Proposal (in lieu of a competitive design process). 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 5.6** for further details on how the proposal responds to the relevant matters the consent authority must consider in deciding whether design excellence is exhibited for the South Site OSD.
Clause 6.38 Certain land in the vicinity of Martin Place, Sydney	Clause 6.38 establishes site-specific development standards for the Sydney Metro Martin Place Station Precinct, including the maximum building height and FSR applying to the land that makes up the South Site. The proposal complies with the requirements of this Clause as:

Instrument	Comments
	• Within 8m of Martin Place the South Tower achieves a height of 44m, whilst beyond 8m from the boundary to Martin Place, the tower complies with the Hyde Park North Sun Access Plane. • The South Tower comprises 37,553m^2 of GFA. When added to 2,398m^2 of CSSI GFA, the site achieves an FSR of 21.06:1, which is complaint with this subclause. • No part of the proposed development is to be used for the purposes of residential accommodation or serviced apartments.
Clause 7.1/ 7.6 / 7.7 Car parking	No car parking will be provided on South Site, which will truly support sustainable means of transport that fully accords with the objectives of Clause 7.1.
Clause 7.14 Acid sulfate soils	A Phase 1 Contamination Investigation was undertaken by Jacobs for the Sydney Metro Stage 1 Chatswood to Sydney CSSI project, which was approved in January 2017. The purpose of the Phase 1 Investigation was to identify and assess the potential impacts of the CSSI project during both construction and operation in relation to contaminated land, and to identify potential areas of environmental interest (AEI) which will assist in identifying construction limitations/constraints and management options within the project area with respect to contamination. The EIS which supported the CSSI identified that, based on a search of the Australian Soil Resource Information System (CSIRO 2015) to identify the probability for acid sulfate soils to be present within the project area, that the probability of acid sulfate soils within the project area between Barangaroo Station and Pitt Street Station was 'extremely low'. Accordingly, it is considered that the mitigation measures for acid sulfate soils as adopted with the CSSI Approval are satisfactory to mitigate any potential acid sulfate soils arising from the delivery of the development.
Clause 7.15 Flood planning	An assessment on the potential for flooding is included in the Stormwater Management and Flooding Report in **Appendix H** and is discussed in **Section 5.21** of this report.
Clause 7.16 Airspace operations	The applicable Obstacle Limitation Surfaces applying across the Sydney CBD is 156m AHD. The proposed building for the South Site is located below the OLS and therefore no further federal controlled activity approval is required as part of this application. The required approvals for future construction cranes will be the subject of a separate application. The airspace assessment provided at **Appendix CC** provides further details.
Clause 7.20 Development requiring or authorising preparation of a development control plan	Under Clause 7.20(2) of the LEP, a site-specific development control plan (DCP) must be prepared for development over 55 metres in height or on a site greater than 1,500m^2 in Central Sydney. A Concept DA may be undertaken in lieu of a site-specific DCP in accordance with Section 4.23 of the EP&A Act. A Concept DA has accordingly been approved in relation to the South Site, and is also proposed to be amended under the Stage 1 Amending DA. The requirements of clause 7.20 have therefore been met. The subject DA is for the detailed design of the Concept Proposal (as proposed to be amended).
Sydney Development Control Plan 2012	The Concept Proposal, Stage 1 Amending DA, and the associated Consolidated Design Guidelines set the new vision for the South Site and have the same effect and purpose 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. This approach is in accordance with Section 4.22 of the EP&A Act that confirms that a Staged DA may be made setting out concept proposals for the development of a site to which separate and future detailed proposals (i.e. this Stage 2 DA) are pursuant. 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. Further, it is noted that SSD applications are treated differently to regular 'local' and 'regional' developments, with a range of other legislation not applying (Section 4.41 and 4.46 of the EP&A Act) and other legislation needing to be applied consistently with the terms of any SSD consent (Section 4.42 of the EP&A Act). Accordingly, in this instance Development Control Plans are specifically excluded from being applicable to SSD applications per Clause 11 of the *State Environmental Planning Policy (State and Regional Development) 2011*.

5.5 Consistency with the Concept Proposal

Under Section 4.24 of the EP&A Act, whilst a Concept DA remains in-force, any further detailed application in respect to the South Site cannot be inconsistent with the consent for the Concept Proposal.

As discussed in **Section 1.2**, an existing Concept Proposal (17_8351) is already in place for the Precinct for two OSD commercial towers, one above the northern entrances of Martin Place Metro Station (on the North Site) and one above the southern entrances (on the South Site). The approved Concept Proposal sets out the building envelopes, land uses, gross floor areas (GFA) and includes Design Guidelines with which the detailed design of buildings (otherwise known as the Stage 2 DAs) must be consistent.

The separate and concurrent Stage 1 Amending DA seeks to amend the existing Concept Proposal that applies to the Precinct, by changing the building envelope for the South Site to align with the updated planning controls for the Precinct established in the recently gazetted amendment to Sydney LEP 2012. In doing so, it establishes a new planning and development framework as the basis for the design of the detailed building on the South Site, and against which to assess this detailed Stage 2 DA for the South Site.

The amendment is achieved by imposing a condition of consent on the Stage 1 Amending DA pursuant to Section 4.17(1)(b) of the EP&A Act, requiring the modification of the original consent (SSD 17_8351) upon the activation of the Consent, in accordance with the procedures under Clause 97 of the EP&A Regulation. This condition would address any inconsistency between the approved Concept Proposal and the Stage 1 Amending DA, and permit approval of this detailed Stage 2 DA for the South Site.

An assessment against the key features of the Concept Proposal (and as proposed to be amended under the Stage 1 Amending DA), to which this application is pursuant, has been provided in **Table 12** below. Detailed discussions concerning the mitigation measures and strategies proposed under the Stage 1 Amending DA are addressed in the following sections, as relevant.

The conditions of consent for the Concept Proposal (as proposed to be amended) have also been adhered to where required, including works to be completed prior the lodgement of this application under Condition A13 and A14 of the consent. Written notice was received from the Department on 6 April 2018 and 19 April 2018, respectively, confirming that the requirements of these conditions had been satisfied (refer to **Appendix CC**). The application's adherence to other conditions of the consent has been addressed in the sections following.

Figure 65 demonstrates how the proposed development sites entirely within the amended Stage 1 envelope.

Table 12 Consistency with Concept Proposal

Component	Discussion	Generally consistent
Land Uses	The proposed development is consistent with the land uses proposed as part of Stage 1, which sought consent for primarily commercial uses comprising offices, shops, and food and drink premises. The suitability of these uses was addressed with the Concept Proposal, and has been further demonstrated in this EIS. The detailed fit-out and operation of the offices and retail tenancies will be subject to separate and future applications.	Yes
Built Form	The proposed OSD tower has been designed to fit within the amended building envelope for the South Tower, for which consent is being sought for concurrently as part of the Stage 1 Amending DA. The proposed site layout and adopted setbacks are contained within the building envelope (as proposed to be amended).	Yes
Gross Floor Area and Floor Space Ratio	The development is compliant with the maximum GFA sought for the South Site under the Stage 1 Amending DA and the maximum FSR control for the South Site in Clause 6.38 of the Sydney LEP 2012. Refer to the breakdown in **Table 11** above.	Yes
Building Height	The proposed tower complies with the Hyde Park North Sun Access Plane that applies to development on the site under Clause 6.38 of the Sydney LEP, and complies with the maximum RL 152.44 established by the amended building envelope, as demonstrated in the Architectural Plans in **Appendix A**.	Yes

Component	Discussion	Generally consistent
Environmental Performance	The proposed development has been designed to achieve the sustainability targets nominated in the Concept Proposal, as demonstrated in the ESD Report at **Appendix T** and discussed in **Section 5.11.**	Yes
Design Excellence	A key benchmark of the design development and delivery of the OSD tower has been the achievement of design excellence. As discussed in **Section 5.6** below, the design of the proposed OSD has been developed in accordance with the alternative design excellence process approved as part of the Concept Proposal, which involves a review of the design by an established Design Review Panel (DRP). The proposed OSD promotes excellent architectural design, and has been designed to seamlessly integrate with the Station and public domain outcomes.	Yes
Consolidated Design Guidelines	The proposed development has been designed having regard to the site-specific Sydney Metro Martin Place Station Precinct Consolidated Design Guidelines that were developed to guide the detailed design of the towers and the integrated station. An assessment of the proposal against the Guidelines is provided at **Appendix A**, and discussed where relevant in the following sections.	Yes
Independent Urban Design Advice	Post approval of the Concept Proposal, DPE (on the recommendation of the OGA) engaged an independent urban design advisor to provide advice in relation to the effectiveness and appropriateness of setbacks to manage bulk and scale of building forms across the Precinct. This advice, prepared by Amenity, has been issued to the DRP and was used to assist and inform the DRP's consideration and assessment of the detailed design of the building (as required under Condition A14).	Yes

A detailed compliance assessment with the terms of the approved Concept Proposal is provided at **Appendix CC.** In summary, the detailed proposal for the South Site is consistent with the Concept Proposal.

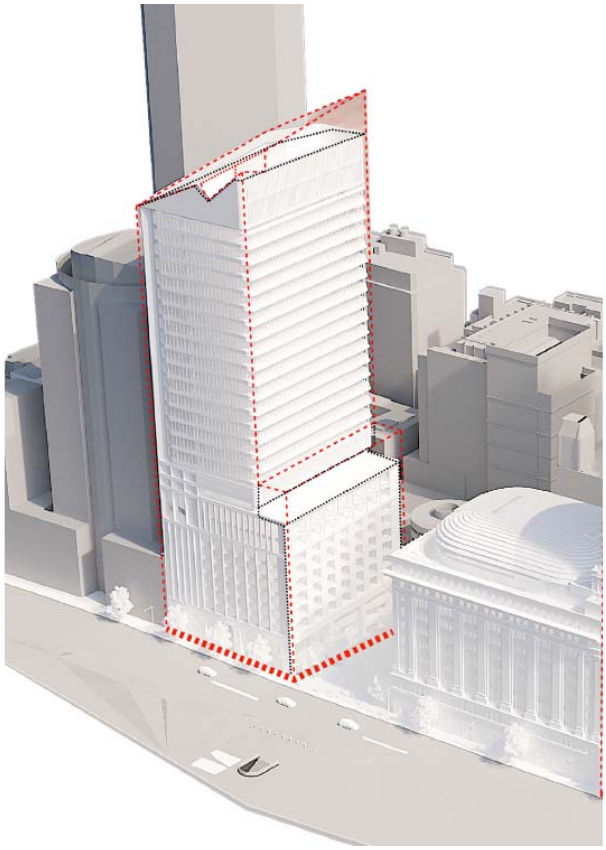


Figure 65 Compliance with Stage 1 Envelope (as amended)

Source: Tzannes

5.6 Design Excellence

This section of the EIS describes the process by which the South Tower has been designed in order to ensure it exhibits design excellence in accordance with the requirement of Clause 6.21 of the Sydney LEP 2012 and Condition A14 of the approved Concept Proposal.

As part of the Stage 1 Concept Proposal, an alternative design excellence approach for the project was approved by the Minister for Planning, in place of the competitive design process typically used under clause 6.21(5) of the Sydney LEP 2012 for standard development projects in Central Sydney. The approved alternative process recognised the unique circumstances of the project, where the approved Metro CSSI station works are intricately linked to the OSD from a design, construction, functionality, and delivery perspective, and that any requirement for a design competition could only apply to the OSD component of the project, and not the station.

The approved alternative design excellence process under the Concept Proposal, which applies to this subsequent Stage 2 SSD DA, involves:

- The establishment of a Design Review Panel (DRP), comprising three members of the Sydney Metro DRP (including the chair) and two new members, one nominated by Council.
- The OSD DRP reviewing and providing advice on the detailed building design to ensure the achievement of design excellence, having regard to the Sydney Metro Martin Place Station Precinct Consolidated Design Guidelines; and
- Macquarie having to obtain that advice prior to the lodgement of the Stage 2 Development Application(s), and throughout the assessment and post approval stages.

The Stage 2 Detailed Proposals for the North Site and South Site are therefore required by Condition A14 of SSD 17_8531 to follow this approved alternative design excellence process, and are required by Condition B1 to demonstrate consistency with the advice of the Design Review Panel and the Sydney Metro Martin Place Station Precinct Consolidated Design Guidelines as endorsed by the Secretary. These processes and how they have contributed to ensuring the detailed design of the subject development exhibits design excellence are discussed below.

Summaries of the feedback received by the Design Review Panel to date, and a discussion of how the design has been amended to respond to DRP advice, is included in the Design Excellence Report (**Appendix DD**). This report includes copies of the DRP's advice.

5.6.1 Design Review Panel Advice

Following approval of the SSD 17_8351, and in accordance with Condition A14 of that Consent, a Design Review Panel (DRP) was established, governed by terms of reference endorsed by the NSW Government Architect and the Secretary of the Department. The Terms of Reference require that the DRP review and provide advice on the detailed design of the buildings prior to the lodgement of the Stage 2 DA for the South Site, and be retained during the assessment of the DAs.

In accordance with the approved Terms of Reference the Martin Place OSD DRP was established, and consists of:

- Peter Poulet, Government Architect or his delegate (Chair);
- Yvonne von Hartel, Peckvonhartel (as nominee of Macquarie);
- Bob Nation, GHD (as nominee of Macquarie);
- John Choi, CHROFI (as nominee of the consent authority); and
- Graham Jahn, City of Sydney Council representative.

The DRP met six (6) times prior to Macquarie lodging its Stage 2 DAs for the North Site and the South Site as set out below. Meeting dates marked with an asterisk (*) denote those meetings during which the Sydney Metro DRP met concurrently:

- 1 May 2018 – Martin Place OSD DRP Meeting #1.

- 15 May 2018 – Martin Place OSD DRP Meeting #2*.
- 5 June 2018 – Martin Place OSD DRP Meeting #3*.
- 18 June 2018 – Martin Place OSD DRP Meeting #4.
- 3 July 2018 – Martin Place OSD DRP Meeting #5.
- 7 August 2018 – Martin Place OSD DRP Meeting #6*

Following each meeting, the OSD DRP Secretariat issued Macquarie with a summary of advice and recommendations arising from the meeting. Refer to the Design Excellence Report in **Appendix DD** for summaries of the feedback received during these meetings, including how that feedback has influenced the design of the development and the consistency of the DA in relation to the advice given.

Relationship with Sydney Metro DRP

Pursuant to the provisions of the CSSI Approval, Sydney Metro has established a program-wide Design Review Panel (the Sydney Metro DRP) to provide independent, expert design advice on aspects of the Sydney Metro (CSSI Approval) project. The Sydney Metro DRP is distinct from the Martin Place OSD DRP and is responsible for providing design advice to Sydney Metro for all station elements at Martin Place.

However, in recognition of the need to facilitate the design and delivery of a highly integrated station and OSD solution at Martin Place, some members of the Sydney Metro DRP are also members of the Martin Place OSD DRP. In addition, to optimise integration continuity of advice and the flow of information between the projects, the approved Terms of Reference identified that meetings of the Martin Place OSD DRP will occur concurrently with the Sydney Metro DRP (as required). It is noted that the Sydney Metro DRP advice does not apply to this DA.

5.6.2 Sydney Metro Martin Place Station Precinct Consolidated Design Guidelines

Condition B1 of the Concept Proposal requires that the Stage 2 DAs demonstrate consistency with the revised Sydney Metro Martin Place Station Precinct Consolidated Design Guidelines, as endorsed by the Secretary. The Secretary endorsed these revised Guidelines on 6 March 2018 [8].

The Consolidated Design Guidelines are a set of guiding design principles which have been prepared taking into account the urban design and heritage studies specifically undertaken for this Precinct, and the Metro Design Guidelines prepared by Sydney Metro. The guidelines were prepared as part of the Concept Proposal to help guide the design team and the project-specific DRP with the objective of ensuring the integrated project delivers the highest standard of architectural, urban and landscape design. The DRP's terms of reference require that these guidelines are considered by the DRP in reviewing and advising on the design of the building as required by Condition A14 of the Concept Proposal.

An assessment of the proposed development against these Consolidated Design Guidelines is provided in the Design Report prepared by Tzannes, included in **Appendix A**. The proposed development is consistent with these guidelines, including key guidelines relating to built form (podium and tower articulation, street wall character, setbacks and materiality), environmental performance (ESD measures), and environmental amenity (wind and overshadowing), as discussed throughout **Section 5.0**.

5.6.3 Tzannes

As identified in the Stage 1 Concept Proposal, a key component of Macquarie's strategy for ensuring the development exhibits design excellence was the appointment of a highly experienced, world class design team from project inception all the way through to completion. The calibre of the team and its consistency throughout is critical to realising Macquarie's unique vision for the Precinct, and ensuring the extra-ordinary level of integration required.

The principal members of the Design Team are Grimshaw, JPW and Tzannes Associates, as the architects in association, and Arup engineers. These firms have a long and demonstrated capacity to deliver such a specialised and highly technical project, whilst achieving an excellent level of design.

[8] It is noted that these Consolidated Design Guidelines are proposed to be modified under the Amending Stage 1 DA (SSD 18_9347).

Tzannes is the principal architects for the South Tower OSD, and is an award-winning Australian studio for architecture, urban and integrated design, based in Sydney. The practice's creative thinking and innovative, sustainable and enduring architecture has established it as a leader in the field. Tzannes' experience as urban designers includes developing the winning masterplan for the Fraser's Broadway Site in association with COX, the redevelopment of the National Art School located at Old Darlinghurst Gaol, Federation Drive at Centennial Park, the Olympic Cauldron and Overflow Park in Homebush, award winning commercial development at Barangaroo and even developing the public domain furniture for the City of Sydney Council.

Alec Tzannes (AM) as the director of practice and lead architect for the South Tower, has also served the community in a number of other preeminent roles including as National President of the Australian Institute of Architects (2006-7) and as Professor of Practice and Dean of UNSW Built Environment (2008-15). Alec was also awarded the Australian Institute of Architects highest award in 2018, the AIA Gold Model. Awarded since 1960, the Gold Medal recognises distinguished service by architects who have designed or executed buildings of high merit, produced work of great distinction resulting in the advancement of architecture or endowed the profession of architecture in a distinguished manner.

5.6.4 Consistency with Clause 6.21 Design Excellence (Sydney LEP 2012)

The objective of Clause 6.21 of the Sydney LEP 2012 is to deliver the highest standard of architectural, urban and landscape design. The clause applies to the proposed development as it involves the erection of a new building, which must exhibit design excellence in the opinion of the consent authority for consent to be granted. Clause 6.21 nominates a number of matters which the consent authority must have regard to in considering whether the development exhibits design excellence. An assessment of how the proposal addresses each of these matters is provided below.

Table 13 Considerations for design excellence under Clause 6.21(4) of the Sydney LEP 2012

Provision	Comment
(a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,	As demonstrated in the Architectural Drawings and Design Report (**Appendix A**), the design, material selection and detailing of the project is of the highest quality, appropriate to the building type in its prominent CBD context, and considerate of the civic and heritage context and proposed uses.
(b) whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,	The form and external appearance of the building has been carefully considered and design by Tzannes, having particular regard to the Consolidated Design Guidelines developed for the site and the Precinct, to ensure a world-class integrated Station and OSD development is delivered on this prominent land fronting Martin Place. The integrated nature of the project has ensured the development, which is integrated with the southern entrance of the future Martin Place Metro Station (and heavy rail station), has been designed from the 'ground up', putting at the forefront, the experience of station customers and the general public at the ground plane of Martin Place, arguably Sydney's most important civic space. The project will significantly improve the public domain experience, permeability of the site, and streetscape of Martin Place, Elizabeth Street and Castlereagh Street. This objective is central to the Consolidated Design Guidelines which have informed the design of this integrated transport interchange and commercial tower.
(c) whether the proposed development detrimentally impacts on view corridors,	As demonstrated within the Visual Impact Assessment prepared by Tzannes (**Appendix W**), the proposed development does not detrimentally impact any existing view corridors or landmarks. As assessed with the Concept Proposal (as amended), key view corridors to the GPO Clock Tower, the western sky from Martin Place and the Sydney Hospital are maintained and not affected by the proposal. The impact of the proposal on public domain views generally when compared to the Concept Proposal (as amended) is positive, given the building is proposed wholly within the building envelope, and the detailed building form positively contributing to views to and from Martin Place. The requirement for view sharing needs to be considered on what is reasonable. Within a context such as the Central Sydney CBD, and given the strategic location of the South Site integrated with a transport interchange, it would be unreasonable to expect views from adjoining commercial buildings should remain unobstructed. The proposal to this end

Provision	Comment
	constitutes and improvement on the view impacts compared to the Concept Proposal (as amended). A further discussion of the visual impact of the proposal is provided in **Section 5.9** of this report.
(d) how the proposed development addresses the following matters:	
(i) the suitability of the land for development,	The South Site is considered highly suitable for the proposal in that: • it is located within the Sydney CBD, and specifically within the finance and banking specialist knowledge hub within Sydney; • the existing building on the South Site will be demolished to construct Martin Place Metro Station, and was an outdated commercial office which did not contribute to Martin Place as an important civic space in Sydney; • it is directly integrated with significant public transport improvements, and will be developed in coordination with planned public domain improvements; • the South Site is capable of being appropriately serviced to accommodate future development; • it has excellent access to a wide range of services and facilities that will support, and benefit from, the future occupants of the development; and • the character of surrounding precincts, including existing built form, are compatible with the scale and nature of the proposal.
(ii) the existing and proposed uses and use mix,	The use of the South Site as a commercial OSD above a transport interchange is consistent with the previous use of the site as a commercial site. The proposal has been designed to accommodate Prime Grade and viable commercial floor plates in the podium and tower whilst balancing the built form objectives for the development and Precinct.
(iii) any heritage issues and streetscape constraints,	The proposal has been designed to ensure the heritage significance of nearby heritage items is protected. The design of the proposal has considered in particular the heritage significance 50 Martin Place, and the character of buildings along Martin Place including distinct podium characteristics such as street wall height and materiality. The Consolidated Design Guidelines also include a number of heritage guidelines which the design has specifically responded to also, including the street wall height of the podium relating to the height of 50 Martin Place. The proposed materials and colours of the South Tower have been designed to respect the heritage significance of 50 Martin Place.
(iv) the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,	The location and extent of the proposed tower is consistent with the location and extent of the tower envisaged as part of the Concept Proposal (as amended), and as reflected in the recent site specific amendment to Sydney LEP 2012. One of the key drivers of the LEP Amendment was to ensure a viable commercial floor plate size could be achieved on the South Site, commensurate with the prominence of the development above a transport interchange and the location of the South Site in the financial heart of global Sydney. The tower is a simple rectangular form, setback 8 metres from Martin Place (in line with the controls established with the recent LEP Amendment) and extends to the Elizabeth Street and Castlereagh Street boundaries, as established in the Concept Proposal. The setback from Martin Place gives the tower prominence from the podium when viewed from Martin Place, whilst providing a separation from the podium, reinforcing the distinct Martin Place street wall. The zero setbacks to north-south streets establishes a threshold condition for the building which is consistent with the intent of the development as established with the Concept Proposal. Vertical and horizontal articulation emphasises the formal response of the tower to its context. The strength of the corners of the built form relate to the MLC Centre to the west, which forms a break in the street wall of Martin Place, with the profile of the tower creating a unique and visually and striking form positively contributing to Sydney's skyline. The tower façade's density, depth and degree of openness, its separation from the podium through an 'interstitial space', and its material difference between the ceramic and masonry/precast base (through its predominantly glass and metalwork materiality) responds to its context and contributes significantly to the precinct. Refer to **Section 5.6.5** for further discussion about the proposed tower. The southern elevation of the tower has been given special design attention, as influenced by the DRP, to ensure an appropriate built form outcome is achieved both in the interim and future scenario should the adjoining commercial building be redeveloped.

Provision	Comment
(v) the bulk, massing and modulation of buildings,	The massing strategy for the South Site has been built out of the urban design work undertaken as part of the Concept Proposal and LEP Amendment. The LEP Amendment permits a tower form above the podium to be constructed to within 8 metres of the boundary of Martin Place. The proposed development is consistent with these controls, which primarily control the bulk and mass of the development. The proposed podium, however, does not 'fill' the height approved building envelope. Whilst the approved building envelope constitutes a podium height of 55m (commensurate with the LEP height limit for that portion of the site), the proposed podium through this application is 45m, specifically designed to match the height of 50 Martin Place. This podium height contributes to design excellence as it defines a strong built form relationship between these structures and better defines the space between them, Martin Place. As with the Concept Proposal, the tower of the South Site extends to the Hyde Park Sun Access Plane, however is modified at the roof to ensure no additional overshadowing occurs to Hyde Park above that permitted by Condition B2 of the Concept Proposal (as proposed to be amended). A recess between the tower and podium is to provide spatial articulation between these built form elements, and ensuring the parapet of the podium is legible in the spatial definition of Martin Place. Finally, zero tower setbacks to Elizabeth Street and Castlereagh Street provide a threshold condition to Martin Place, enhancing the relationship between the North and South Towers allowing the tower and podium of the South Site to form a cohesive built form entity with tower to ground architectural expression.
(vi) street frontage heights,	The podium form of the building has been established to reinforce the street alignment along Elizabeth Street, Castlereagh Street and Martin Place, referencing the height and scale of buildings along Martin Place and the height and scale of podium elements and datum lines along Castlereagh and Elizabeth Street through to Qantas House. This is achieved through: • A consistent stone base relating to 50 Martin Place and replicated the North Site (the subject of a separate DA) • A continued podium relationship with 50 Martin Place and replicated through the North Site, comprising of ceramic cladding, glazing and bronze coloured metalwork The street frontage heights of the proposal respond to the Consolidated Design Guidelines are discussed further in **Section 5.6.5**.
(vii) environmental impacts, such as sustainable design, overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity,	As discussed further in **Section 5**, the proposed South Tower has been designed to minimise environmental impacts within the locality. Overshadowing, solar access, visual impacts, noise, wind, and reflectivity have all been carefully considered and the proposal is found to have negligible impacts. Sustainable design has been at the forefront of the building's design, as evident in the best practice Green Star and NABERs targets to be adopted.
(viii) the achievement of the principles of ecologically sustainable development,	As discussed in detail in **Section 5.12** of this EIS, the proposal has been assessed by Arup with regard to ESD (**Appendix T**). An assessment of the proposal against the four principles of ecologically sustainable development has also been undertaken in **Section 5.31**, being: • The precautionary principle; • Intergenerational equity; • Conservation of biological diversity and ecological integrity; and • Improved valuation and pricing of environmental resources. The proposal has been found to achieve the above principles.
(ix) pedestrian, cycle, vehicular and service access and circulation requirements, including the permeability of any pedestrian network,	**Pedestrian:** Whilst the ground plane and station entry elements of the project are CSSI related, the development has been designed as a truly integrated project, with the pedestrian experience in the public domain, to and from the Station and within the commercial and retail areas of the OSD design holistically. The opportunities to integrate the OSD and Metro Station allow for a much improved level of spatial integration, providing enhanced architectural opportunities and benefits for the Metro Station, with the opportunity to create more grand, civic-scaled entrances that can accommodate future pedestrian demands and ensure easy and safe interchange for pedestrians, all whilst being fully coordinated with the OSD. **Cycle:** There are a number of key cross-city cycle routes in the Sydney CBD which for part of the city's cycling network, including routes along Kent Street, King Street,

Provision	Comment
	Macquarie Street, Alfred Street North and College Street. The Sydney City Centre Access Strategy also outlines the future city network and aims to encourage growth in cycling to reduce pressure on the public transport system. In order to cater for cycling demands and to achieve Green Star targets, end of trip facilities for the South Site will be located within the North Site OSD, as discussed in further detail in **Section 5.13**. **Vehicle and service access:** Vehicle access to the South Site will be limited to service vehicles access the loading dock. No parking is proposed with 68 parking spaces removed as part of the demolition of the existing building. The loading dock access for the South Site will be off Castlereagh Street. This is further discussed in **Section 5.13**.
(x) the impact on, and any proposed improvements to, the public domain,	Whilst the public domain elements of the Precinct will be addressed through CSSI related works, the proposal is considered to contribute significantly to the public domain as follows: • re-instatement of built form to the edge of the Martin Place boundary, in-line with the general character of Martin Place, contributing to the legibility of desired future character of this significant public space; • revitalisation of a key Sydney CBD site which for a number of decades accommodated a commercial building which detracted from the significant of Martin Place through its poor built form relationship to the street; • the activation of Martin Place through retail and OSD lobbies; and • the permeability of the South Site will improve the civic experience for pedestrians. The Consolidated Design Guidelines will be considered as part of the overall development of the Precinct, including CSSI related works, which include as a main focus, significant improvements to the public domain of the Precinct, especially along Martin Place where the existing (but dated) concourse connections to Martin Place Railway Station will be closed.
(xi) the impact on any special character area,	Part of the South Site is located within the Martin Place Special Character Area as mapped by Section 2.1.7 of Section 2 of the Sydney DCP. The proposed development has been designed to achieve and satisfy the outcomes expressed in the character statements and supporting principles, as follows: • The detailed design responds to the Consolidated Design Guidelines, which are consistent with and build upon the principles identified in the character statements for the Martin Place and Chifley Square Special Character Areas; • The proposal will retain and enhance the urban character, scale and strong linear enclosure of Martin Place through aligning the built form to the street alignment, adopting street frontage heights that are consistent with the prevailing form of buildings in the area, and accommodating a setback above the street frontage height to Martin Place to distinguish the podium from the tower; • The proposal will protect existing significant vistas to the east and west and will not detrimentally affect the silhouette of the GPO Clock Tower; • The proposal will provide a human scale at street level, while respecting and positively responding to the monumental nature of the place; and • The design of the proposal will conserve and enhance the heritage significance of the nineteenth and twentieth century institutional and commercial buildings in the locality, and their settings.
(xii) achieving appropriate interfaces at ground level between the building and the public domain,	A significant focus of the overall precinct redevelopment has been the need to achieve world class interfaces at ground level between the building and the public domain, particularly given the transport interchanges which the South Site constitutes. Whilst the public domain works associated with the Precinct are a CSSI matter, the design of the South Site's podium base is centred on maximising the potential for public domain activation. It does this by maximising the building's openness and its connection to the surrounding public domain. The South Site podium also responds to the predominantly closed masonry character of the majority of heritage buildings that form the distinctive character of Martin Place. The deep masonry has been designed to provide the solidity along Martin Place whilst maintaining the openness required to activate the public domain.
(xiii) excellence and integration of landscape design.	As outlined in the Design Report prepared by Tzannes, an integrated concept landscape plan has been prepared showing the landscaping zones and opportunities the development provides for landscaping, in particular the podium terrace to Martin Place.

5.6.5 Conclusion (Design Excellence)

In conclusion, it is considered that the proposal exhibits design excellence in accordance with Clause 6.21 of the Sydney LEP 2012, given it addresses all the requirements of the Clause, consistent with the Sydney Metro Martin Place Station Precinct Consolidated Design Guidelines and consistent with the advice of the DRP.

5.7 Built Form

The Concept Proposal (as proposed to be amended under the Stage 1 Amending DA) establishes the vision and planning framework to assess the detailed design of the future development on the South Site. Specifically, the South Tower has been designed with regard to the Consolidated Design Guidelines which provide for a well-considered and respectful approach to rejuvenating the Precinct and providing a world class, interconnected transport and employment precinct in the heart of metropolitan Sydney. The proposal has addressed and is consistent with these guidelines as is discussed in **Appendix A**, and the sections below where relevant.

Overall, the proposed development delivers a built form that is responsive to the context and characteristics of the Precinct including the retained building at 50 Martin Place, the character of the surrounding area, and the location of the Precinct along a key historical pedestrian promenade in the Sydney CBD – Martin Place – and above a future world-class Metro rail facility. The design of the South Tower is a complex response to the site-specific constraints, the features of the site and the surrounding area, and the future character of this Precinct that is undergoing significant change.

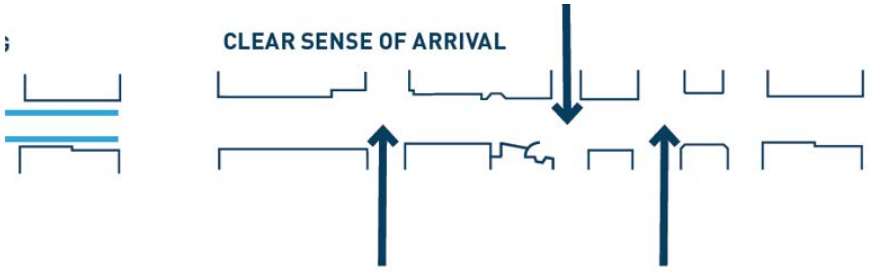
In addition, the South Tower's design has been informed by the commercial office market's expectations regarding floorplate sizes and configurations. The internal arrangements have been designed with future tenant requirements in mind and in part has influenced the building's external presentation to its context.

5.7.1 Castlereagh and Elizabeth Streetscapes

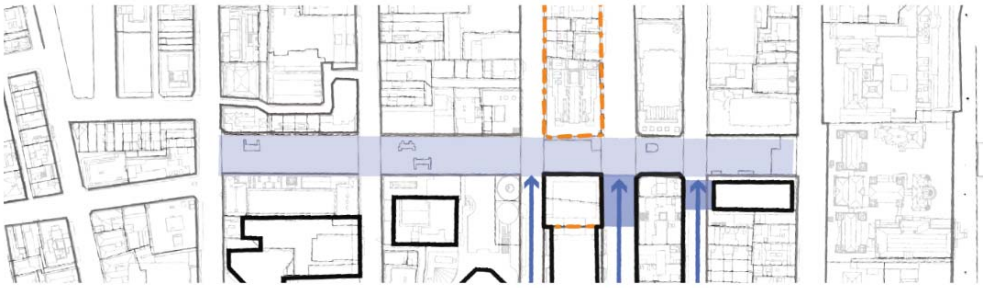
As part of the Concept Proposal and the Stage 1 Amending DA, Tzannes identified the opportunity to benefit the distinctive character of Martin Place by reinforcing defined street edges along the north/south streets that intersect Martin Place. The effect of this is to produce 'thresholds' – or the differentiation of one space to another – that create a clear sense of arrival to Martin Place. This was supported in the Jahn Gehl study from 2015 that argued for development to prioritise the creation of distinct entries to Martin Place, achieved by creating a narrow entry through Castlereagh Street and Elizabeth Street and other cross-streets. Whilst this defined entry requires the South Tower to vary the typical setbacks adopted in the city, it has the effect of increasing Martin Place's differentiation or 'specialness' when moving through the city.

In view of this, the proposed South Tower adopts zero setbacks to Elizabeth Street and Castlereagh Street, consistent with the approved (and amended) building envelope, with the intention of achieving the desired threshold condition. As a result, the South Tower creates a distinct urban morphology and provides a sense of arrival into Martin Place and other key public spaces such as Chifley Square and Richard Johnson Square in combination with the North Tower.

The South Tower also delivers on the potential to create a defined streetwall line through the Precinct to Qantas House and Chifley Square, as identified in the Concept Proposal. This is achieved by the physical break between the podium and the tower above in the proposed 'interstitial space', which reflects the streetwall height datum of 50 Martin Place, Qantas House and Chifley Square, creating a continuous streetwall when viewed from Castlereagh Street and Elizabeth Street. This responds to the pattern of the existing streetscape and contributes to a defined streetscape characteristic, reinforcing the uniformity and legibility of this area within the Sydney CBD.



_Jahn Gehl proposed threshold entries to Martin Place to enhance the importance of this space in context of the city in his CoS Urban Design Study 2015.



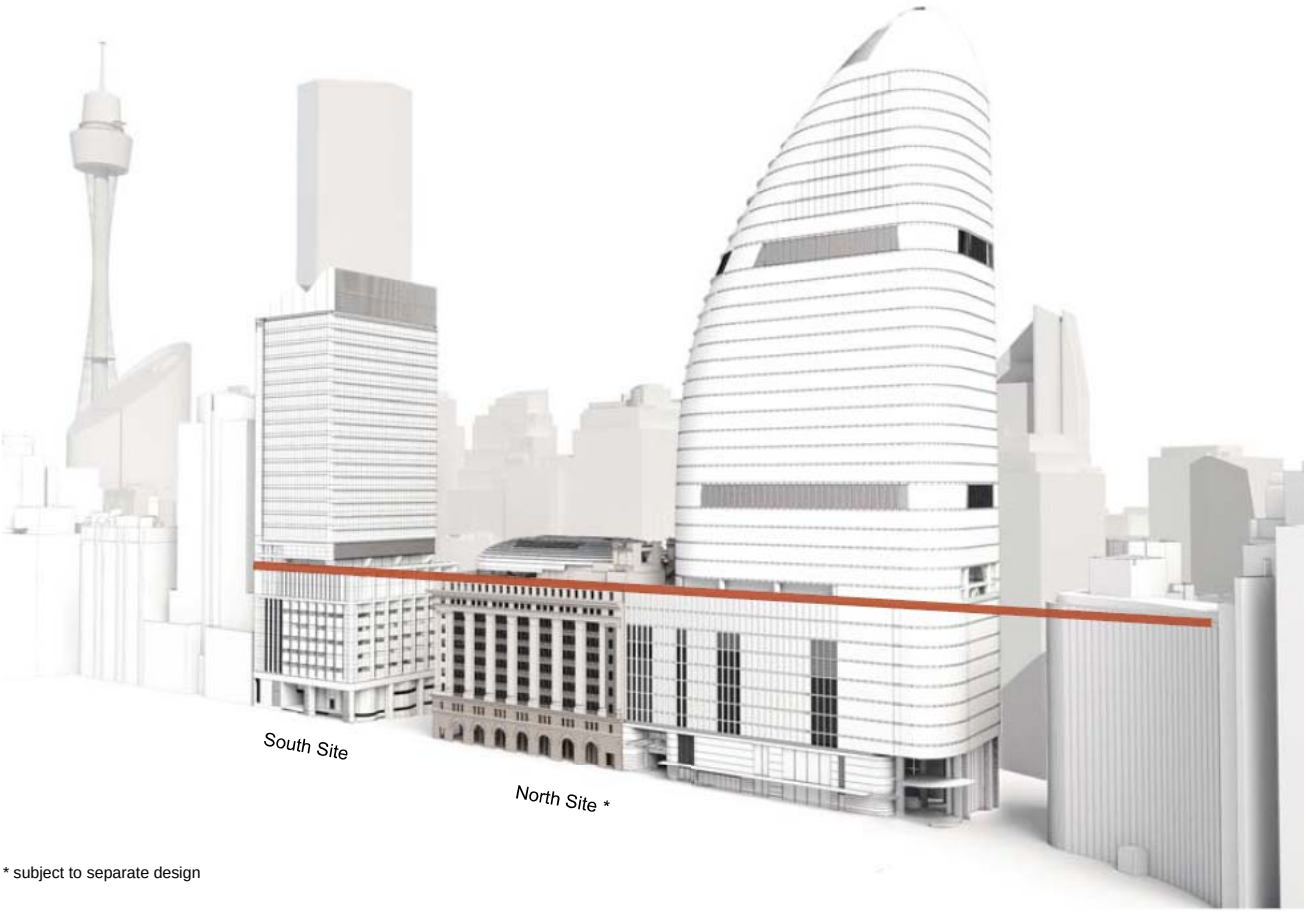
_The zero setback to the towers on Elizabeth and Castlereagh Streets create this threshold and support the character of Martin place on either side of the MLC centre.

Figure 66 Threshold examples to Martin Place, based on Jahn Gel's 2015 study

Source: Tzannes

Figure 67 Established threshold condition along Elizabeth Street

Source: Tzannes



* subject to separate design

Figure 68 Retained street wall datum line

Source: Grimshaw / JPW / Tzannes

5.7.2 Martin Place Streetscape

It is recognised in the Consolidated Design Guidelines that each block within Martin Place has a distinctive and overall well defined civic character. Whilst there are predominant conditions with how development addresses Martin Place, there are also exceptions to these conditions, meaning that each block along Martin Place effectively forms its own 'room' within the larger space of Martin Place. The 'urban room' within Martin Place that is created between the North Site and South Site is defined by the existing 50 Martin Place building, and the South Tower's response to this building at the podium level that is addressed further below.

Figure 69 Existing streetwall alignment to Martin Place

Source: Tzannes

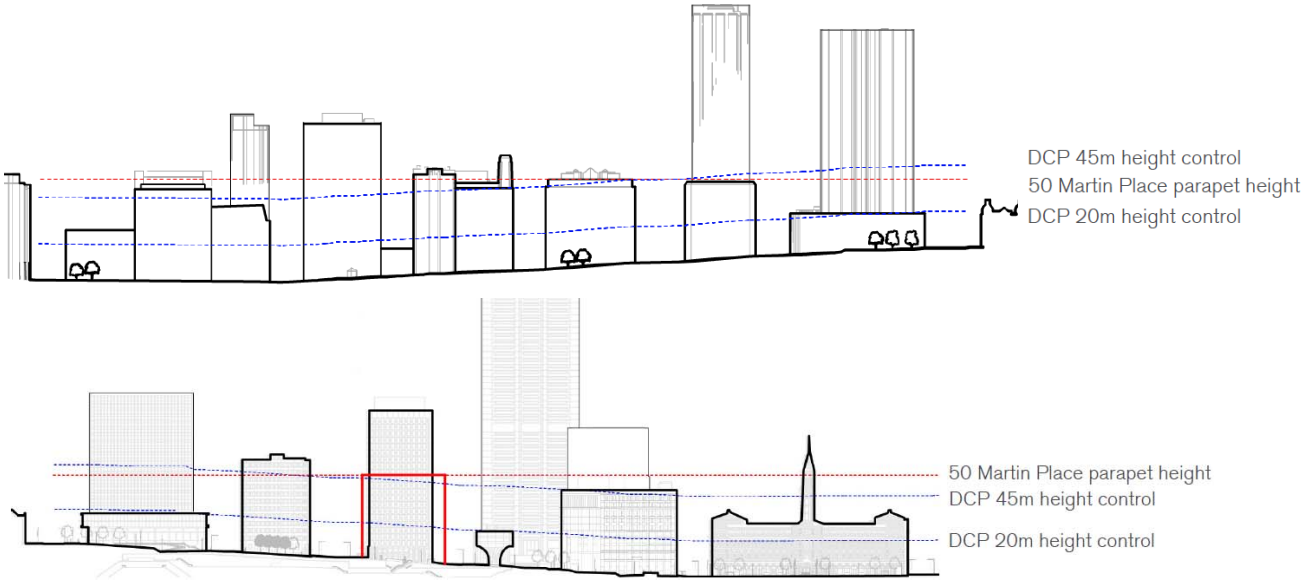


Figure 70 Existing streetwall heights along Martin Place

Source: Tzannes

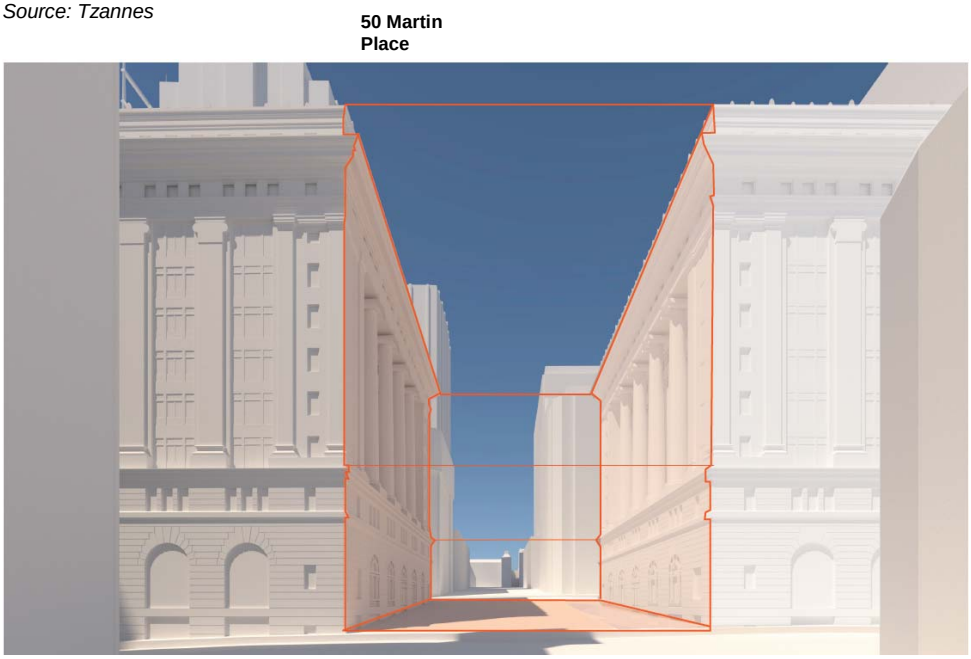


Figure 71 Creating an 'urban room' between the South Site and North Site

Source: Tzannes

The South Tower podium has been designed to specifically respond to the existing building at 50 Martin Place in terms of height, massing, articulation, and materials. In this way, it responds to the established streetscape, and reinforces the dominant characteristics of this streetscape. The following is noted:

- The alignment of the podium with a zero setback to Martin Place will reinforce the dominant streetwall along Martin Place, which the previous building (currently being demolished) did not provide. The benefit of this will be the continuation of distinct and strong built form edges to Martin Place, with an active and permeable ground plane.
- The proposed streetwall height is 10m less than what would otherwise be permitted under the approved (and proposed to be amended) building envelope, and has been specifically designed to reflect the height of the parapet at 50 Martin Place. In this way, the South Tower responds to the existing transition of streetwall heights along Martin Place as a whole, and creates a consistent streetwall height in this block of Martin Place defined by Castlereagh Street and Elizabeth Street.

- The materiality and fine-grain articulation of the podium has been designed as a contemporary interpretation of the 50 Martin Place building, to integrate the South Tower with its context and extend the site specific architectural language and strong, defining materiality of podium structures along Martin Place. The key elements of the 50 Martin Place building which have influenced the design of the South Site podium are shown in **Figure 72** below.

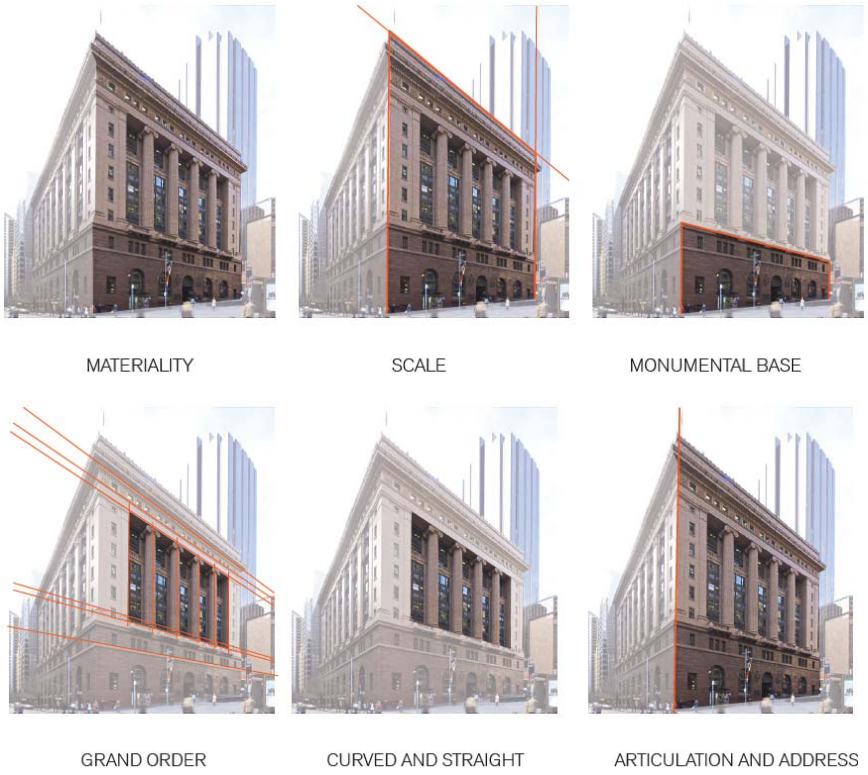


Figure 72 Key design principles of 50 Martin Place, adopted through the South Tower podium design

Source: Tzannes

Above the podium, the South Tower and its setback to Martin Place responds to the pattern of reduced setbacks on the eastern side of the break in Martin Place caused by the MLC Centre. The proposed alignment of the South Tower to Martin Place responds to the general alignment of the Reserve Bank Building's tower and reinforces the existing spatial conditions along Martin Place. The tower setback is consistent with the site-specific clause of the LEP that is applicable to the Martin Place Station Precinct, and provides the differentiation between the podium and tower. As established in the Stage 1 Amending DA, the proposed setback allows unimpeded access to views of the GPO Clock Tower from Martin Place.

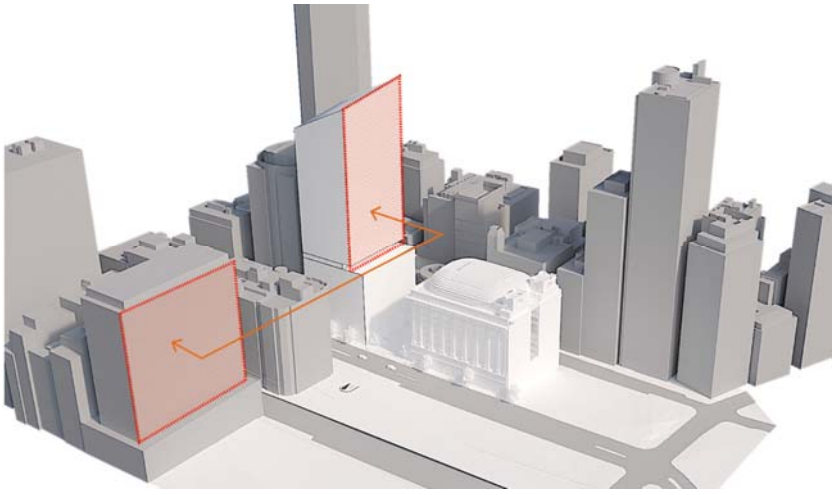


Figure 73 Tower setback above the podium to Martin Place

Source: Tzannes

5.7.3 Adjoining Development

Unlike the North Site which occupies an entire city block, the South Site forms the northernmost part of the block bound by Martin Place, Castlereagh Street, Elizabeth Street and King Street. The design has therefore been informed by the existing and potential future characteristics of development within this block in addition to the character of Martin Place and the wider precinct. The South Tower represents a balanced and considered outcome having regard to the potential for future development on the immediately adjoining site at 60 Castlereagh Street, the relationship with the existing commercial building on that site and its constraints, and also with particular regard to the following:

- The southern façade of the building has been constructed to the site boundary to create a legible and usable floor plate and to respond to the structural and servicing requirements of the Metro Station beneath the South Site.
- The continuity of the wall, which does not accommodate any windows or openings along this façade, opens up the possibility for multiple podium heights and tower setbacks for development on the site to the south. The strength of the southern wall and its role in the definition of the threshold to Martin Place also ensures a high degree of flexibility to the architectural language for future redevelopment at 60 Castlereagh Street.
- The existing commercial tower at 60 Castlereagh Street is setback from the shared boundary with the South Site, creating the opportunity for oblique views of the southern façade within the streetscape. The southern façade has therefore been designed to extend and wrap-around the geometric logic of the eastern and western facades for continuity and visual interest.

Figure 74 Southern elevation design rationale

Source: Tzannes

5.7.4 Relationship to the North Site

One of the key outcomes of the Concept Proposal was the ability and requirement to design the South Tower and North Tower to respond to each other, informing the future context of this area and celebrating the vision for a truly integrated Precinct. A place-making opportunity of this magnitude is extremely unique, emphasising the importance of delivering an integrated and well-considered design outcome for the Precinct as a whole. The relationship between the South Tower and the North Tower has been considered in the detailed design as follows:

- The South Tower and North Tower have been aligned to face Martin Place, and each other, and effectively ‘book-end’ this portion of Martin Place and the new Metro Station. This contributes to creating the defined ‘urban room’ within Martin Place between the North Site and South Site and a legible Precinct in the CBD.
- As was envisaged with the Concept Proposal and through the Consolidated Design Guidelines, the tower elements of both the South Tower, and the North Tower with 50 Martin Place, have been designed to read as a lighter and more ephemeral entity above a heavier and more robust podium. This profile will create a unique and visually striking form, and enhance the distinct and unique presence of 50 Martin Place within the streetscape.

- The interstitial space articulates the tower from the podium and emphasises the key datum line of the shared parapet height between the South Tower podium, 50 Martin Place, Qantas House and Chifley Square, and will be carried through in design terms on the North Site, reinforcing the predominant streetwall height through the Precinct and beyond.
- A curtainwall system on the tower facades, and the use of high quality detailed blades and recessed elements on the podium, form part of a Precinct-wide facade strategy to knit together the fine grain details of the South and North Towers with the 50 Martin Place.
- The adoption of a darker granite base, ceramic cladding, and bronze elements mimics the materiality of the 50 Martin Place building and is carried through to the North Tower to create a consistent streetwall and human scale. Typically, considered built form materiality reinforces the spatial character of urban spaces.

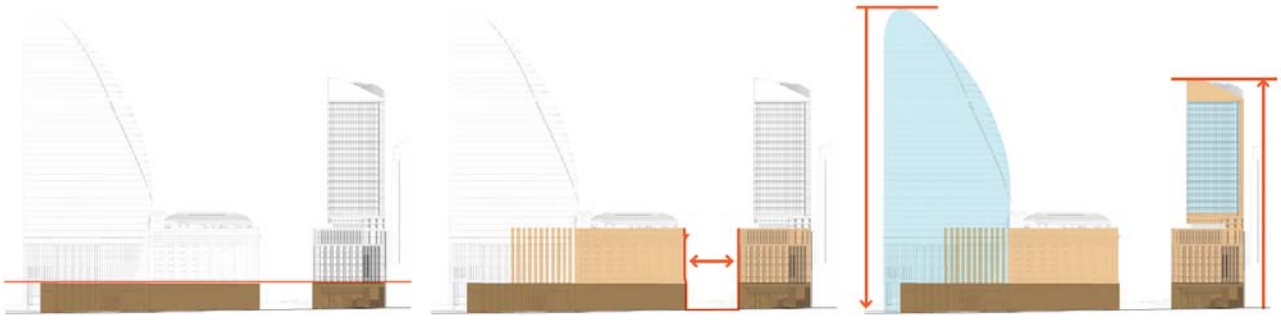


Figure 75 Relationship between the North and South Towers (Precinct wide design)

Source: Tzannes

5.7.5 City Skyline

The South Tower has been designed to create a visually distinct building form that contributes to views of the Sydney CBD. Its angled shape contributes to the pattern of buildings in the Precinct which respond to the Sun Access Plane and overshadowing controls of the Sydney LEP 2012, and the Conditions of the Stage 1 Concept Proposal and in this regard, fits contextually in this part of the city.

The tapered roof form with unique north, east and west profiles, effectively screens rooftop plant and services and contributes to the creation of a distinctive identity for the South Tower within the skyline. These profiles are clad with ceramic panels and fins that connect the South Tower podium to the roof, and extend the visual language of Martin Place so that Martin Place is legible in the skyline.

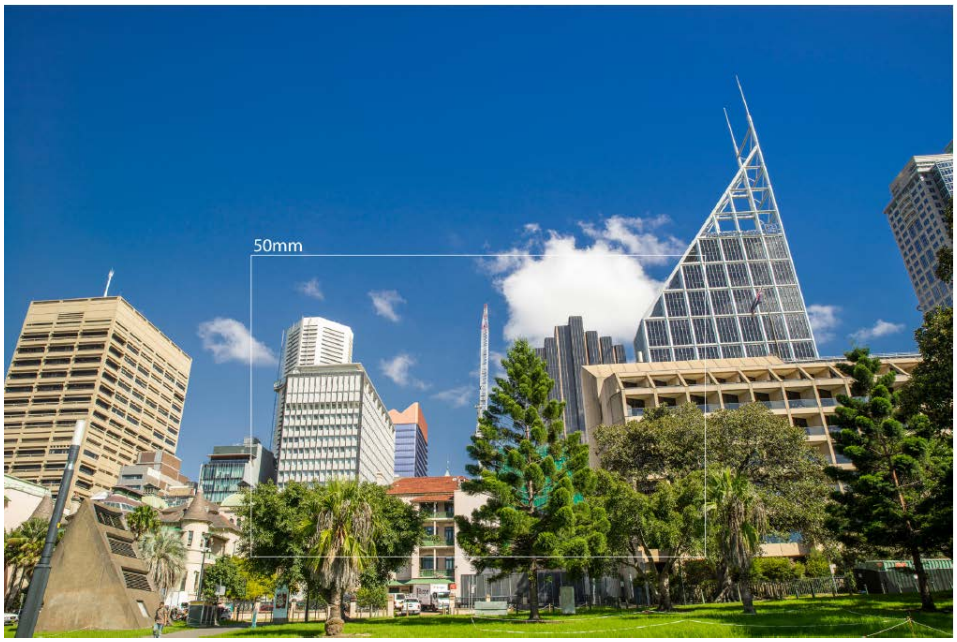


Figure 76 Modelling of the tower in the city skyline

Source: Tzannes

5.7.6 Connectivity and Activation

As a commercial development over a major new transport interchange, the design integrates a diverse range of working environments with public transport infrastructure and an active public domain. It seeks to maximise public domain activation and a permeable ground plane through:

- The inclusion of a Metro Station entrance hall, via a grand entrance within the podium, which opens up the South Site to the surrounding street frontages and draws passengers intuitively to their destination.
- The introduction of a through-site connection between Castlereagh Street and Elizabeth Street which provides a new public thoroughfare across the South Site and is enriched by retail and café opportunities.
- Reinstating the predominant ground floor building line along Martin Place, so that the proposed retail tenancies are more accessible and visible and directly relate to the surrounding public domain.
- Providing retail tenancies and the proposed office lobby, fronting the ground floor building edges, the though-site connection and within the mezzanine levels above, generating activity at the ground level and maximising opportunities for passive surveillance.

The above serves to create permeable, inviting and activated ground plane commensurate with the site's significance as a new major transport interchange within the Sydney CBD.

5.7.7 Commercial Office Requirements

Commercial premises and floor plates that meet market needs and expectations are an essential part of building a competitive Global City. The following is noted:

- The requirements of office tenants' in corporate real estate has changed in recent times to respond to changing work practices. Namely, the rise of flexible workplace strategies demands flexible office floor plates and functional efficiency that is more readily accommodated in buildings with larger footprints. Premium and A-Grade tenants typically require uninterrupted floor plates, adaptable building structures, flexible building services, well planned space grids and simplified building specifications. These floor plates fall into a range of between 1,500-2,000m² of Net Lettable Area (NLA), with a minimum offering of 1,200m² NLA.
- The Property Council of Australia's (PCA) parameters for a Premium Grade commercial building is a floorplate of >1,500m² while a A-Grade minimum requirement is >1,000m². An analysis of the average floor plate size demonstrates that 1,000m² is at the bottom end of the spectrum for Sydney CBD prime commercial floor plate sizes (see **Figure 77**), and well below the market preference for 1,500m² –2,000m² floor plates.

The South Tower has been designed with regard to the above, in order to attract premium global businesses and contribute to the prestigious setting of the site within Martin Place. The tower provides for approximately 1,200m² of NLA at the podium levels, and approximately 1,100m^2 of NLA on the floorplates above the podium, and has been designed with regard to the principles of flexible office floor plates. Whilst it is at the bottom of the acceptable size range for Premium Grade office space, the South Tower remains capable of contributing to the supply of quality office space essential to attracting calibre tenants and contributing to the growth of 'Global Sydney', all within the unique constraints of the site.

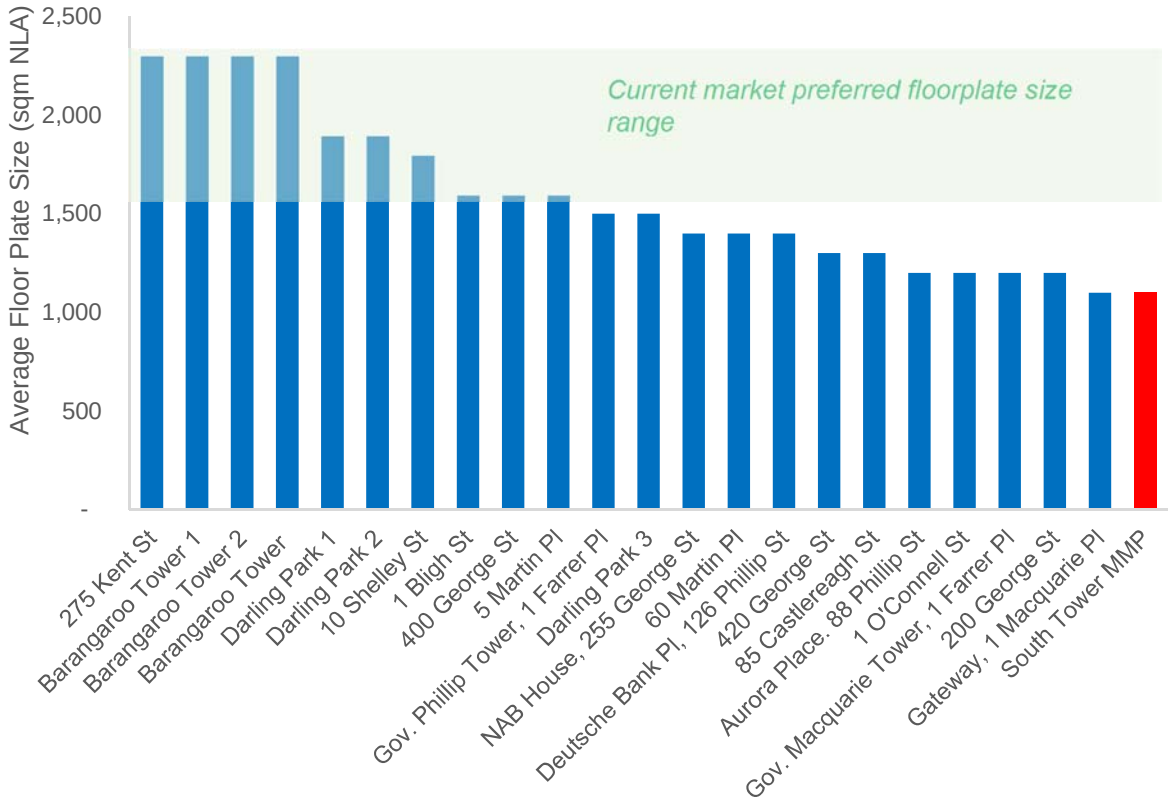


Figure 77 Market preferred floor plate size range

Source: Ethos Urban

5.7.8 Conclusion (Built Form)

In conclusion, it is considered the proposal's orientation, height, bulk, scale, massing, setbacks, articulation, materials, activation and pedestrian connectivity (including through site connections) will integrate with the context of the site and the existing and future character of the area, as demonstrated above, and the proposed built form and detailed design will integrate with the streetscape street wall elements along the Castlereagh and Elizabeth Street elevations.

5.8 Heritage

A Statement of Heritage Impact (SHI) has been developed by TKD Architects (TKD) (**Appendix D**), which identifies and assesses the potential heritage impacts associated with the South Tower on subject and neighbouring heritage items, their context and setting and significant views. It also assesses the proposal against the site-specific Heritage Guidelines that were adopted as part of the Concept Proposal within the Consolidated Design Guidelines. The guidelines established objectives and principles for the Stage 2 DA to respond to and have been addressed in detail at **Appendix A**.

The SHI follows the general guidelines for Statements of Heritage Impact, set out in the NSW Heritage Manual, Heritage Office and Department of Urban Affairs and Planning, the methodology and terminology described in *The Conservation Plan* from the National Trust of Australia and in the Australia ICOMOS Burra Charter. It also follows the relevant policies from the 50 Martin Place Conservation Management Plan and neighbouring heritage buildings.

5.8.1 Heritage Impacts on the Site

The building on the South Site is not of any heritage significance, and is in the process of being demolished under the CSSI consent. Accordingly, the proposed development will not impact any heritage items on the South Site.

5.8.2 Heritage Impacts on Neighbouring Heritage Items

The SHI assesses the impact of the proposed South Tower on neighbouring heritage items, their context, settings and significant views including the Martin Place Railway Station, the former MLC Building, the former APA Building, the GIO Building, and the Reserve Bank Building. It confirms that South Tower does not impact the significance of the streetscape presentation or setting of these buildings.

The South Tower reintroduces the dominant building form alignment of buildings in the area, reinforcing the strong linear character and spatial enclosure of Martin Place. The resultant alignment has the potential to partially obscure views along Castlereagh Street and Elizabeth Street of the 50 Martin Place building. This has been minimised through the scale of the podium and the proposed tower setback which has taken cues from the form of surrounding development.

Similarly, the tower will be prominent in views looking east along Martin Place and has the potential to impact views to the Reserve Bank Building. The proposed 8m setback is comparable to the setback of the Reserve Bank Building, ensuring that the South Tower is not visually dominating and maintains the visual prominence and landmark qualities of the Reserve Bank Building. Overall, the South Tower will not impact on the setting or views of this heritage item.

The SHI also considers the impacts of the proposal to the following heritage items including 38-46 Martin Place, Martin Place Railway Station, Martin Place, Chifley Square, Richard Johnson Square with the proposal not considered to impact on these items.

5.8.3 Conservation Management Plans

Conservation Management Plans (CMP) apply to the 50 Martin Place building directory north of the South Site and neighbouring buildings to the north, east and west, and have been appropriately considered when designing the South Tower. In particular, with regard to the *Former Government Savings Bank of NSW Conservation Management Plan 2012,* the South Tower podium has been designed as a contemporary interpretation of the 50 Martin Place building, informing the height, composition, materiality and form of the podium. The resultant architectural resolution is therefore consistent with the CMP's policy for development not to alter or compromise the buildings major visual contribution to Martin Place.

5.8.4 Heritage Impacts on Special Character Areas

The South Site is within the Martin Place Special Character Area of the Sydney DCP 2012, and has the potential to positively contribute to this area. TKD have completed an assessment against the principles and objectives governing development within this special character area, noting that:

- the South Tower podium will be constructed to the Martin Place street alignment, reinstating the defined streetwall of Martin Place that the previous building (currently being demolished) did not provide;
- the podium reflects the height, composition, materiality and form of the 50 Martin Place building, to retain the landmark qualities and civic presence of the building within Martin Place and its environs;
- the South Tower adopts the prevailing street frontage height established by 50 Martin Place, Qantas House, and Chifley Square, continuing this key height datum through the Precinct;
- the roof form has been designed with regard to the Sun Access Plane that applies to the South Site and the tower is clad in glass and metal, to protect and extend reflected sunlight to Martin Place;
- the tower is setback from Martin Place above the podium and protects views of the GPO Clock Tower along Martin Place; and
- the podium is divided into a base, shaft and termination that is similar to the composition of the facades of 50 Martin Place, retaining a human scale at the street as established by the 50 Martin Place building.

Overall, it has been determined that the proposal is consistent with the objectives and principles of this special character area that applies to the South Site.

5.8.5 Heritage Interpretation

Heritage interpretation for the South Site forms part of the Sydney Metro City and Southwest Heritage Interpretation Strategy, which was prepared to fulfil the conditions of consent for the CSSI Approval and provides the appropriate heritage interpretation strategy for the Precinct. This Strategy was developed in consultation with OEH and identifies heritage interpretation themes, drawing on the characteristics of the Precinct and its environs.

No additional heritage interpretation is proposed as part of this application.

5.8.6 Conclusion (Heritage)

In conclusion, the proposed design of the building has been carefully and purposefully considered to minimise potential impacts on 50 Martin Place, on the Elizabeth Street and Castlereagh Street streetscapes and on adjacent heritage items. The design of the proposal has ensured that no unacceptable impacts ensue, in particular through the following considered design decisions:

- The podium has been designed to reflect the height datum set by the parapet of 50 Martin Place to ensure that the streetwall on Martin Place, Elizabeth Street and Castlereagh Street are reinforced;
- The podium interprets the architecture of the highly significant building at 50 Martin Place and relates it to other significant buildings along the street;
- The architectural expression of the podium maintains the monumental civic character of the street and minimises impacts on heritage items in the vicinity of the South Site;
- Impacts of the tower component are minimised by its setback from the Martin Place frontage of the South Site, the visual separation of the tower from the podium, and an external cladding of reflective materials that should ameliorate its mass.

5.9 Visual Impact

A series of renders have been prepared to demonstrate the visual impact of the development when viewed from the public domain and key vantage points surrounding the South Site (see **Appendix W**). The analysis provided below demonstrates that the development will not result in any adverse visual impacts and provides a highly resolved architectural response to the South Site and its context. It is noted that the proposed development sits entirely within the building envelope of the Amending Stage 1 DA. The impact of the proposal on public domain views when compared with the Concept Proposal (as proposed to be amended) will be negligible from all locations.

The view analysis prepared by Tzannes is in accordance with the SEARs requirements in terms of methodology and approach, and considers the impact of the proposed building compared to the existing situation (existing building on the South Site prior to demolition) and the approved envelope when viewed from the public domain and key vantage points around the South Site.

The visual impact assessment of the Amended Concept Proposal envelopes in SSD 18_9347 concludes that generally, whilst the amended concept has an increased visual impact due to the increase in the bulk of the South Tower when compared to the South Site envelope in the Concept Proposal (SSD 8351), this impact is minor in extent, with the built form playing an important role in enhancing the morphology of the city and the definition of Martin Place. The increase in both extent and importance of the built form of the proposed South Tower is an appropriate response to the importance the new transport interchange and development will have in the city.

As part of its assessment of the Planning Proposal, which sought to amend the controls to permit the envelope sought with SSD 18_9347, the Department considered the view impacts of different building envelopes on the South Site. In doing so, the planning merits of the amended height and FSR controls were comprehensively tested as set out in the report it prepared on the Planning Proposal (*Plan Finalisation Report* ref. IRF18/1745, signed 1 May 2018), which stated as follows with regards to view impacts generated by an envelope consistent with those controls:

> *"In conclusion the Department is satisfied that an 8m setback for the building height control above the podium is appropriate for the South Site in that:*

- *the final built form and design for the site will be subject to rigorous architectural design review that will further ensure that a development will implement visual distinction between the podium and tower element and allow for design flexibility;*
- *the resulting floor plate for the tower development will maximise the versatility of this space, while still ensuring the creation of a separate tower element that is distinct from the podium;*
- *it will not result in development that will obstruct key views along Martin Place, in particular that of the GPO clock tower;*
- *the detailed design and proposed use of materials in the facade of the podium building will ensure the development is complementary to historic buildings in Martin Place;*
- *views to the sky along Martin Place will not be detrimentally diminished beyond that currently afforded by the existing development on the South Site;*
- *it will afford a tower element of regular shaped footprint that replicates and is balanced with other existing and approved tower development along Martin Place;*
- *a variation in the tower setback along Martin Place is not out of context with other existing development that does not conform with the 25m setback; and*
- *the visibility of the proposed tower on the South Site will identify the new Martin Place Metro Station that will contribute to an important evolution of the Martin Place precinct, which follows on from the recent redevelopment of 20 Martin Place and the current redevelopment of 60 Martin Place."*

In the context of the proposed detailed design of the South Tower being wholly contained within the amended building envelope sought with SSD 18_9347, tested during the assessment of the Planning Proposal and constituting an architecturally detailed and refined building form compared to simplistic building envelopes, the visual and view impacts resulting from the South Tower detailed design are logically less, and both appropriate and well within accepted parameters. An assessment of the visual impacts of the proposal in this context is provided below.

Assessment

As can be seen in the renders in the Visual Impact Report, which compare the proposed design with the Stage 1 Amending DA building envelope and the existing situation, the articulation of the South Site tower design ensures that it results in a reduction in impact on the view of the sky when compared to the amended envelope.

The reduction in height of the podium from 55m to 45m to match the height of 50 Martin Place reduces the impact of the proposed design compared to both the amended and approved building envelopes and also improves upon the existing situation. The loose-fit nature of the amended building envelope, particularly at the roof, also reduces the impact of the proposal.

The tower's northern façade design, which includes fine solar control fins to the north, also means that the glass line is set back, resulting in a minor reduction of the built form of the tower. The 'interstitial' recess between the tower and the podium, reduces the bulk of the building, softening the impact of the proposal, enhancing the legibility of these elements and establishing the relationship between the podium and 50 Martin Place.

Extending the materiality of 50 Martin Place through the architecture of the South Site with the use of stone, ceramics, glass and bronze coloured metalwork contributes lessens the visual impact of the proposal compared to the building envelope.

As with the amended building envelope, the impact of the proposal is assessed as follows:

- The building will occupy portions of the skyline beyond the existing building on the South Site. The increase in area by the proposed building is considered acceptable in the CBD context as this will not encroach or interrupt any significant views;
- Low, medium and high level views of the sky along streets are retained in a variety of contexts.
- Street views are maintained, however it is noted that long views to the north, east and west are limited by the topographic, non-orthogonal arrangement of the street network.

- Views of heritage buildings within the wider Precinct are maintained. For example, existing public domain views to key heritage buildings and places are retained, including 50 Martin Place, City Mutual Life Assurance Building, former “GIO” building, the GPO clock tower, Qantas House, Richard Johnson Square, Chifley Square, the RBA Building, the APA Building, and Martin Place itself.
- The key urban design principles adopted for the tower and have assisted in creating a strong, identifiable form when viewed within the city skyline and at the local pedestrian level.
- The proposal responds to the significant heritage character of 50 Martin Place and the Sun Access Plane controls, with the tower carefully positioned having regard to a range of constraints and opportunities.
- The South Site emphasises the strong and historic street wall character of Martin Place.
- The proposal supports the continued evolution of and change to the City skyline and defines a new density and scale of development that supports the Precinct’s role as a major transport hub.
- An analysis of the Precinct and its surrounds reveals that it is isolated from any nearby sensitive residential receivers. The proposal will therefore not have any direct adverse impact on views from nearby residential dwellings.

Conclusion

In view of the above, and with regard to the detailed renders in the Visual Impact Analysis Report at **Appendix W**, the visual impact of the South Tower is considered to be acceptable, having regard to its built form and materials, when viewed from the locations tested.

Figure 78 Building envelope (left) and detailed South Tower (right) within the skyline

Source: Tzannes + Arterra Interactive

Figure 79 Building envelopes (left) and detailed South Tower and North Tower (right) in Elizabeth Street looking south

Source: Tzannes + Arterra Interactive

Figure 80 Building envelopes (left) and detailed South Tower and North Tower (right) in Elizabeth Street looking north

Source: Tzannes + Arterra Interactive

Figure 81 Building envelopes (left) and detailed South Tower and North Tower (right) on Castlereagh Street looking north

Source: Tzannes + Arterra Interactive

Figure 82 Building envelope (left) and detailed South Tower (right) as viewed from Martin Place looking west

Source: Tzannes + Arterra Interactive

5.10 Solar Access and Overshadowing

A detailed shadow study analysis has been prepared by Virtual Ideas and is included in **Appendix K**. This analysis has also been verified by Virtual Ideas in regard to the accuracy of data and strict compliance with the Hyde Park North Sun Access Plane.

A yearly shadow study has been prepared, which follows the methodology adopted for the Concept Proposal and considers the:

- shadows cast by existing buildings;
- shadows cast by the Stage 1 Amending DA building envelope; and
- shadows cast by the proposed South Tower.

The modelling has been carried out at one-hour intervals on 14 April, 21 June, 21 September, 31 August and 21 December between 9:00am to 3:00pm, consistent with the requirements of the SEARs and Sydney LEP 2012.

A separate study which focusses on the proposal's compliance with Condition B2 of the Concept Proposal (as proposed to be amended) in terms of shadow impacts to Hyde Park has also been prepared, which considers:

- shadows cast by existing buildings, approved buildings and the LEP/DCP compliant envelope set out in the shadow analysis prepared by Grimshaw dated July 2018 (submitted with the Amending DA); and
- shadows cast by proposed Stage 2 Detailed design.

The findings of the studies are discussed below.

Assessment

The Concept Proposal (as proposed to be amended) provides a detailed assessment of the impact of the amended building envelope for the south site. As the proposed detailed design falls entirely within that building envelope, this assessment focuses on the detailed design's compliance with Condition B2 of the Concept Proposal (as amended), which relates to overshadowing.

Condition B2 of the Concept Proposal (as proposed to be amended) requires that the proposed detailed design not result in additional overshadowing of Hyde Park between the hours of 12 and 2pm at mid-winter (21 June), when compared to the shadow cast by existing buildings, approved buildings and the DCP/LEP compliant envelope set out in the shadow study contained in the Stage 1 Amending DA documentation (being a south tower which has 8m tower setbacks to Martin Place, Elizabeth Street and Castlereagh Street).

To ensure compliance with this condition, Virtual Ideas reverse engineered a built form envelope which met the requirements of this condition. The proposed detailed design is fully contained within this reverse engineered envelope, and does not fill its full extent, with the podium being lower, a recess being proposed between the podium and the tower, and the roof plant design being modelled within the envelope control. The outcome is that the proposed detailed design complies with this condition and does not result in additional overshadowing of Hyde Park when compared to the test scenario identified in the condition.

Conclusion

In conclusion, the solar access and shadowing impacts of the proposal are considered acceptable, noting they constitute an improvement to the impacts associated with the Concept Proposal (as proposed to be amended). The proposal also meets the requirements of Condition B2 of the Concept Proposal.

5.11 Skyview

A Skyview Factor Assessment has been prepared to investigate the degree of sky that can be seen from key points surrounding the Precinct when comparing the proposed detailed design of the South Site to a number of scenarios. Skyviews contribute to a sense of openness in the street, and can affect the attractiveness, thermal comfort and levels of light and amenity at ground level.

The Central Sydney Planning Strategy (CSPS) establishes a methodology and the baselines for measuring the proportion of skyviews available from within the Sydney CBD; termed the Skyview Factor (SVF). SVF is a measure of the obstruction of the sky at any point, quantified as a percentage where 0% is a completely obscured sky and 100% is completely unobscured. SVF can then be applied as an approximation of daylight levels, with the CSPS noting that the SVF range for most streets in Central Sydney is 15-25%; termed the 'typical SVF'.

This analysis has subsequently been included in the Draft Sydney DCP, which requires the modelling of SVF to address the appropriateness of street setbacks and the resultant daylight levels at the ground plane. Whilst this DCP has not been adopted, and DCPs do not apply to the subject application, the Macquarie team nevertheless undertook SVF modelling as part of the Planning Proposal application and in response to Gateway conditions received for that application.

Surface Design has completed SVF modelling for 14 key locations surrounding the Precinct addressing the relative impact of the existing buildings (pre-demolition), the Stage 1 Amending DA envelopes, and the detailed design of the South Tower. This modelling was undertaken in accordance with the Council's Guidelines for Skyview Factor Assessment, including the existing SVFs detailed in the CSPS, and is included in **Appendix X**.

The skyview assessment was undertaken for 14 points surrounding the Precinct. The results for each scenario and location are provided in **Table 14** below, noting that a number of the points were deemed to have been exclusively influenced by the separate North Tower and as such have not formed part of these results.

It is evident from this assessment, that the proposed detailed design for the South Site will have a negligible reduction of sky visibility compared to the existing skyviews currently experienced. Whilst there will be nominal changes in the detailed SVF percentages, the thresholds will remain consistent with the existing environment. Significantly, the relative impacts of the proposed development when compared to other tested envelopes are minor, with the design improving the amount of sky visible compared to the Amending Stage 1 DA envelope.

Table 14 Skyview Factor assessment results

	Location	Existing (Pre-demolition)	Stage 1 Amending DA Envelopes	Proposed Detailed Design (South)
1	36 Martin Place	19.5%	18.5%	19.0%
2	Corner of Martin place and Castlereagh Street	21.5%	20%	20%
3	37 Martin Place	20%	17.5%	18%
4	Corner of Martin Place and Elizabeth Street	24.5%	22.5%	22.5%
5	63 Martin Place	18.5%	18%	17.5%
6	30 Castlereagh Street	19.5%	19%	18.5%
7	80-85 Elizabeth Street	18.5%	17%	16.5%

Key

0% - 5%
5% - 10% *Low SVF*
10% - 15%
15% - 20% *Typical SVF*
20% - 25%

Source: Surface Design

Conclusion

In conclusion, it is evident from this assessment, that the proposed detailed design for the South Site will have a negligible reduction of sky visibility compared to the existing skyviews currently experienced.

5.12 Environmental Sustainability

An ESD report has been prepared by Arup and is provided in **Appendix T**, and demonstrates that the proposed development will achieve the requirements of Condition B5 of the approved Concept Proposal, including:

- 5 star NABERS Energy minimum based on 2016 protocol;
- 3.5 star NABERS Water Rating minimum based on 2016 protocol;
- 6 Star Green Star Office Design and As-Built v1.1; and
- Occupant wellbeing.

It is noted that these certified ratings will apply to the OSD elements of the project. The stretch target aspirations in the report will also be considered through design development.

An analysis of the proposal against the principles of ecologically sustainable development set out in the EP&A Regulation is provided in **Section 5.31.**

Conclusion

Key design strategies that are being considered throughout the development are highlighted as follows:

- Facade strategy:
    - Exceed BCA compliance by a combination of internal and external shading with high performance glazing
    - Reflectivity of the façade will be designed to comply with City of Sydney minimum performance guidelines
- Mechanical / BMS
    - High end mechanical systems and water cooled chillers to optimise indoor environmental quality, environmental and energy performance. Systems proposed are Variable Air Volume (VAV) and active chilled beams in the perimeter zones.
- Electrical/Hydraulic
    - Water Efficiency Labelling and Standards (WELS) rated fixtures
    - Rain-water harvesting
- Carbon Shift
    - Renewable energy options such as Green Power and Renewable Energy Certificate (RECs)
- Architectural – Spatial Planning
    - Area considerations for recycled waste and garbage rooms and effective waste management to optimise land fill diversion
- Materials
    - Recycled demolition and construction waste
    - Provision for responsibly sourced construction materials
    - Best Practice use of PVC
    - Material transparency
- Indoor Environmental Quality (IEQ)
    - Zone controls will enable system volumes to turn down when zones to minimse loads associated with ventilation, dehumidification, or heating / cooling further reduce system energy use.
    - Tenant lighting has daylight sensing (where appropriate) with each fitting having the ability to be individually controlled

- Innovation
    - Development of best practice indoor environments
    - Soft landings to minimise operational energy
    - Potential to purchase of Green Power to offset carbon emissions and improve performance in Energy credits
    - Tenancy fit-out systems review

In conclusion, the development will reflect leading industry practice in sustainable building principles by incorporating the measures documented in this report, and by benchmarking against world's best practice to improve environmental performance, including energy and water efficient design and technology, and use of renewable energy.

5.13 Traffic, Parking and Access

Arup has prepared a Transport, Traffic and Parking Report, which is included in **Appendix M**. This report assesses the main traffic and transport features of the proposal once it is operational. The management and potential impacts of access, circulation and traffic associated with construction works occurring on the site is discussed in **Section 5.23** below.

5.13.1 Mode Share and Daily Trips

The proportion of persons using sustainable modes of transport to access the South Site is significant in terms of both the existing situation (i.e.: the building that formerly occupied the South Site) and the proposed development. The South Site has some of the highest public transport accessibility in Sydney. The indicative mode share of persons travelling to and from the site remains generally consistent with the Stage 1 DA (as proposed to be amended), which forecasts that over half of tenancy employees will use the train or Metro to access the site (see **Table 15** below). The site benefits from excellent access to public transport, cycle and pedestrian paths that are capable of accommodating the demand generated by the proposed development, as is explored in the following sections. Initiatives to support the high proportion of persons using public transport, cycling and walking are discussed further in **Section 5.13.6** below.

Table 15 Breakdown of mode share and trip generation for the South Site

Mode	**Existing Mode Share**	**Existing Daily Trips** (1,000 employees)	**Future Mode Share ***	**Future Daily Trips** (2,950 employees)	**Increase Daily Trips**
Train/Metro	53%	1,502	53%	4,430	2,928
Bus	25%	708	25%	2,090	1,381
Vehicle Driver	11%	312	3%	251	-61
Walk	5%	142	6%	502	360
Vehicle Passenger	2%	57	1%	84	27
Tram/Ferry	3%	85	5%	418	333
Cycle	1%	28	5%	418	390
Other	0%	0	2%	167	167
Total	**100%**	**2,834**	**100%**	**8,360**	**5,525**

* Note: the mode share assumptions for Stage 1 and Stage 2 remain generally consistent, noting that this DA assumes a marginal increase in walking and train/metro use and a minor reduction in driving. This has been informed by further study of the 2016 Census Data, which shows that travel by train has increased and travel by car has been reduced since 2011 at this location. There is no change to the mode split targets from that assumed as part of the separate Stage 1 Amending DA.

Source: Arup

5.13.2 Future Peak Hour Movements

Arup has determined that the busiest movement occurs during the AM Peak hour (8am-9am), with people entering the development. The PM peak hour 'exit' movement is approximately 80% of that which occurs in the AM peak hour 'entry' movement.

The mid-day peak of 12:30-13:30 typically consists of local pedestrian trips (e.g. to shops, cafes etc.). In terms of volumes, it is approximately 65% of the AM peak hour 'entry' movement and occurs in both directions. While these trips are generally people leaving and returning during their lunch break, the AM and PM peak hour person trips are closely associated with commuting and the use of public transport. The AM peak hour has therefore considered to be most critical and been used to assess the impact to the transport network as a result of the South Site OSD.

The South Site OSD is anticipated to generate the number of employment arrival trips shown in **Table 16** below based on a typical working day (i.e. assumed 85% office occupancy). These trips would take place over a three hour morning peak period, with approximately 50% of trips taking place during the morning peak hour (8am-9am).

As shown in **Table 16**, the increase in the AM peak hour person trips generated by the OSD (in comparison to the 'existing scenario', i.e. before buildings were demolished for Metro) will be accommodated using sustainable modes with a negligible change in the total number of trips by private car.

Table 16 Breakdown of peak hour trip generation for the South Site

Mode	**Existing Peak Hour Trips** (1,000 employees)	**Future Peak Hour** (2,950 employees)	**Increase Peak Hour Trips**
Train/Metro	225	664	439
Bus	106	313	207
Vehicle Driver	47	38	-9
Walk	21	75	54
Vehicle Passenger	9	13	4
Tram/Ferry	13	63	50
Cycle	4	63	58
Other	0	25	25
Total	**425**	**1254**	**828**

5.13.3 Traffic Generation and Road Network Impact

Consistent with the strategic value of the Precinct as a transport interchange, which favours sustainable modes of transport over private vehicles, no new parking will be provided as part of the development. All parking associated with the former commercial building on the South Site has been removed as part of the demolition of this building. In view of this, the only traffic generated by the development will be in relation to servicing and deliveries.

It is assumed that the operation of the South Tower will generate 63 vehicle deliveries per day. Arup confirm that the predicted vehicle movements are negligible in terms of impacts to the road network and will occur throughout the day, rather than being concentrated in peak commuter periods. The loading dock will be managed in accordance with the Loading Dock Management Plan developed for the site and discussed in **Section 4.8.3** below, which has been designed to reduce the number of deliveries to the Precinct.

5.13.4 Pedestrian Access and Capacity

The South Tower is accessible from each of the road frontages, being Elizabeth Street and Castlereagh Street, and Martin Place. A Station Pedestrian Planning Report has been prepared in consultation with TfNSW/Sydney Metro which considers the cumulative impacts of pedestrian movements generated by the South Site OSD and the Station, with consideration of these access points. It takes into account pedestrian surveys, the patronage data from the CSSI Application, and the predicted mode share and growth as a result of the development to determine the relevant Level of Service (LoS) for walkways. It also makes the following assumptions:

- that there is a minimum footpath width of 2m throughout the Precinct;

- that the entrances to the South Tower are a minimum of 16m wide; and
- the cumulative population of the two OSD towers is 14,400, which is higher than is predicted for the purposes of a conservative assessment.

The assessment considers the worst-case scenario for pedestrian movements, being the AM peak period between 8am and 9am when over 50% of pedestrian movements occur. It assesses seven key locations within the Precinct (see **Figure 83**) and confirms that most of these locations will not experience reduced levels of service when compared to the forecast operation of the Metro Station under the CSSI Approval, remaining at LoS A.

There are only two locations where the pedestrian flows are expected to be reduced, being northern Castlereagh Street (Castle_1) that will operate at LoS B, and northern Elizabeth Street (Eliz_1) that will operate at LoS C. This reduced capacity primarily relates to the separate North Tower location in this half of the Precinct. Notwithstanding this Arup confirms that the impact of the increase in pedestrian flows on Elizabeth Street and Castlereagh Street as a result of the OSD is considered acceptable.

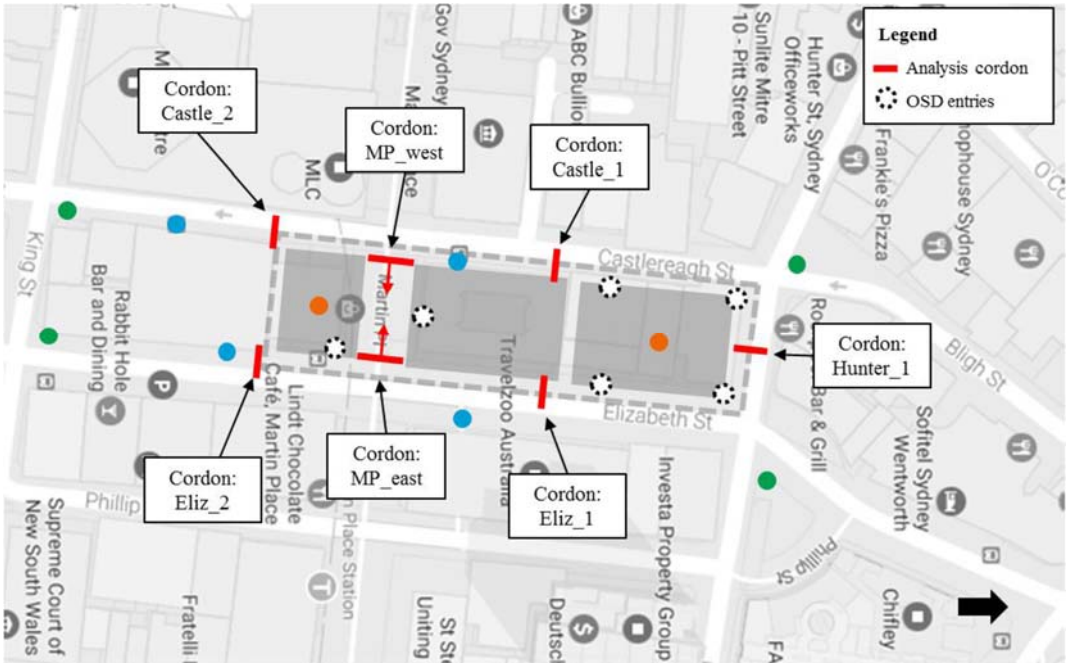


Figure 83 Locations used to assess pedestrian capacity

Source: Arup

5.13.5 Cycling Access and Parking

The South Tower is ideally located to take advantage of existing and planned bicycle connections within the CBD. It will be provided with dedicated bicycle parking and end-of-trip facilities, which will be for the exclusive use of the occupants and visitors of the South Tower, accommodated within a consolidated facility on the North Site. This consolidated precinct-wide arrangement is required because of the constraints of the South Site and the need to accommodate Metro Station facilities, plant and infrastructure beneath the South Site.

The proposed spaces and end-of-trip facilities provided have been designed to have regard to the Sydney DCP requirements and the relevant Australian Standards. The overall quantum of facilities will meet relevant Green Star requirements.

Given bicycle parking for the North Tower, South Tower and 50 Martin Place will be consolidated in one location, a cumulative assessment has been completed by Arup which confirms that an additional 240 trips are expected in the AM peak period when compared to the offices that were operating on the South Site prior to demolition. Arup confirms that the access point on Castlereagh Street is expected to be busy for a short period of time in the peak periods, but that this demand is considered to be manageable.

5.13.6 Green Travel Plan

A preliminary Green Travel Plan has been prepared by Arup, which outlines how Macquarie will encourage the use of public transport, walking and cycling when accessing the South Site. This plan will be implemented in the future operation of the proposed office through an appointed Travel Plan coordinator, and whilst it is expected that the initiatives will naturally evolve over time, the preliminary Plan includes the following programs:

- requiring tenancy staff inductions to introduce people to the Green Travel Plan, locate the relevant facilities, and go over the relevant policies and incentive programs;
- developing a dedicated webpage for tenancy employees outlining relevant travel information, including route maps and journey planning websites;
- promoting events, such as National Bike Week, through the intranet and broadcast messages;
- reducing the need to travel to the site by promoting teleconference facilities and working from home policies;
- consider flexible work policies to reduce the number of persons accessing the site during peak hours;
- develop policies to encourage tenancy employees to use public transport or walk instead of taxis for work related travel during the day, such as purchasing Opal Cards for general tenancy staff use for business journeys;
- promoting cycling through dedicated on-site bicycle parking and end of trip facilities, making information / training available with regard to cycle routes, bicycle maintenance and user groups; and
- creating and maintaining information on ‘useful walking routes’ such as shaded routes, shortcuts and distances to key parts of the Sydney CBD.

These initiatives demonstrate Macquarie’s commitment to setting a benchmark in sustainable and next generation workplace environments. They will effectively promote, and in certain circumstances actually enable, occupants of the South Tower to use sustainable modes of transport when travelling to and from the South Site. The success of the adopted initiatives will be the subject of an annual review, to assess travel demand and make refinements, as an ongoing commitment to sustainability.

5.13.7 Servicing and Loading

Arup have developed a Loading Dock Management Plan (**Appendix N**), detailing the demand for the loading and servicing on the site associated with the South Tower, and the logistics of operating and managing the dock. This includes processes for managing contingencies such as blocked access, delayed or early deliveries, and access to the site for emergency responders.

As discussed in **Section 4.8.3**, the approach assumes that the loading docks will operate independently with the North Tower providing contingency for the South Tower should an incident occur and the dock be closed, ensuring that adequate facilities are available for the South Tower that is unable to provide additional on-site loading docks owing to the constraints of the site and the need to accommodate facilities, plant and infrastructure associated with the Metro Station. This solution will also reduce the number of vehicles entering the Precinct and associated emissions, congestion, noise pollution, peak traffic levels, queuing and loading bay area requirements.

This coordinated approach has been developed in consultation with TfNSW/Sydney Metro and will achieve the following benefits:

- ensure adequate and dedicated loading spaces are available for the heavily constrained South Site;
- reduce the number of vehicles on the road network within the CBD;
- reduce the number of vehicles entering and exiting the driveway off Castlereagh Street;
- improve the level of security whereby fewer vehicles, and only known vehicles, are accessing the site; and
- improve sustainability associated with the reduction in vehicle trips.

The swept path analysis and vertical clearance plans at **Appendix M** confirm that vehicles will be able to enter and exit the site in a forward direction, with use of the turntable. The loading dock has been designed in accordance with the relevant Australian Standards. On balance, the proposed approach is considered reasonable and is unlikely to raise any unmanageable issues or impacts.

5.13.8 Conclusion (Traffic, Parking and Access)

In conclusion, Arup confirm the following:

- The SEARs and Stage 1 conditions of consent have been met through the design;
- No car parking is being provided as part of the development and therefore the traffic impact will be negligible.
- The analysis undertaken shows the impact of increased South Site population due to the development can be accommodated without negatively impacting existing transport or pedestrian infrastructure and systems.

5.14 Rail Corridor Impact

In accordance with Condition A15 of the Concept Proposal, consultation has commenced with TfNSW/Sydney Metro and Sydney Trains in relation to the detailed design of the development and potential impacts on the existing and future rail corridors. This has informed the Rail Corridor Impact Assessment completed by Arup (**Appendix I**), which has been prepared in relation to the feedback received during consultation, and the relevant standards and guidelines including TfNSW's technical note for *Development Near Rail Tunnels* and the Department's *Development Near Rail Corridors and Busy Roads – Interim Guideline* per Condition B6 of the Concept Proposal.

Arup certifies that the proposed development has been designed with regard to these requirements, and confirms the following:

- The existing Eastern Suburbs Rail Line runs beneath the South Site and through the south shaft station structure that forms the base of the South Tower (see **Figure 84**). This has been a key consideration and driver in the structural engineering of the South Tower, which has been addressed through the design of this tower as discussed in **Section 5.15**, which confirms that the structure has been designed to mitigate potential impacts on the rail line.
- Excavation, earthworks and other construction impacts on the Eastern Suburbs Rail Line have been considered and addressed as part of the CSSI Approval and have been the subject of ongoing consultation. Through this, a range of mitigation measures have been developed that can be put in place through the construction process to control risk to the Eastern Suburbs Rail Line structures and operations.
- The structures of the South Tower and the Metro Station have been designed as one integrated system, and as such the proposed OSD will not impact on the structure of the station beneath and the structural integrity of the combined arrangement has been confirmed by Arup to be adequate (see **Appendix G**).
- The station and OSD will utilise a combined earthing arrangement, which has been designed in accordance with the TfNSW Technical Note ETN 11/02, and will be subject to further detailed design and installation in accordance with Sydney Metro's line-wide earthing, bonding and electrolysis strategy.
- The South Tower has been designed to be separated from the station from a fire safety perspective, and as such does not impact on the station beneath that is being designed and reviewed separately.

Conclusion

The potential impacts have been considered by Arup and addressed through a design solution developed on a basis of separation or integration, depending on the potential impact, to provide the best design solution for both the South Tower above, the Sydney Metro station, and the Sydney Trains rail corridor below.

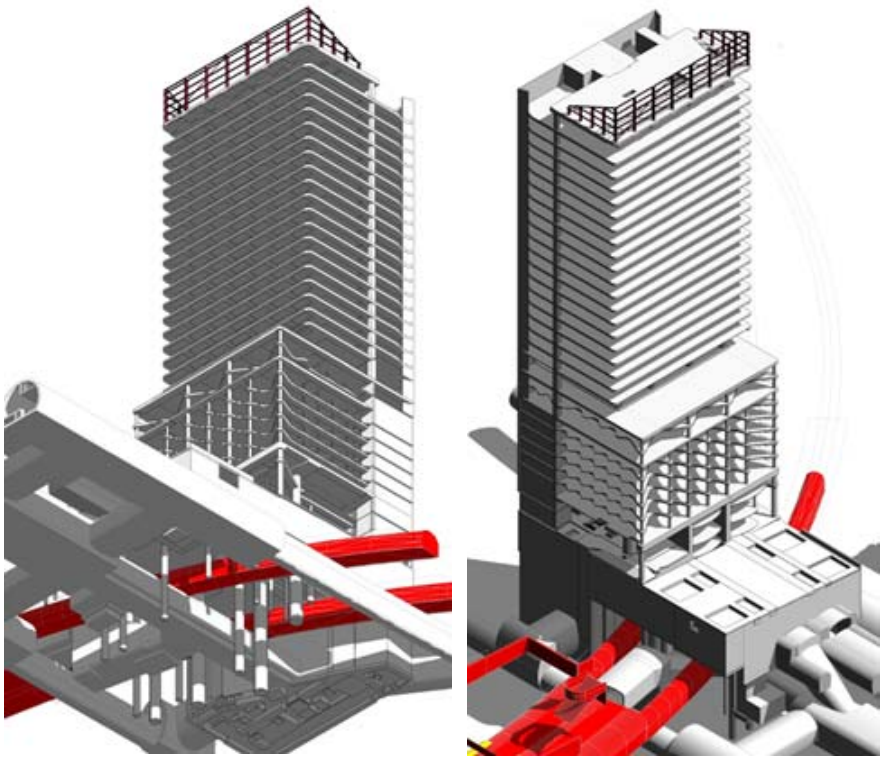


Figure 84 The Eastern Suburbs Rail Line (shown in red) running beneath the South Site

Source: Arup

5.15 Structural Engineering

Arup has completed an assessment of the stability of the tower, the vertical structures and the floor plate structures noting that the South Tower has been designed to integrate with that of the station beneath (**Appendix G**). The proposed development has been designed to achieve the following:

- All current relevant Australian Standards;
- Heritage requirements;
- Building Code of Australia;
- Sydney Metro/TfNSW standards and requirements where applicable;
- Development Near Rail Tunnels THR C1 12051 ST; and
- Development Near Rail Corridors and busy Roads Interim Guidelines.

5.16 Wind Assessment

Cermak Peterka Petersen Pty Ltd (CPP) has completed wind tunnel testing of the detailed South Tower design to determine the potential wind impacts on the surrounding pedestrian level wind environment, and to advise on potential improvements in terms of comfort and amenity for the use of footpaths, entrances, plazas, and terraces on the South Site.

The wind study notes that the Precinct is surrounded by high-rise buildings in its CBD context, meaning the Precinct receives some shielding from all wind directions. Wind speed measurements were recorded at 25 locations to evaluate pedestrian comfort in and around the South Site. Locations were chosen to determine pedestrian comfort at the building corners where relatively severe conditions are frequently identified, for instances near building entrances, on adjacent pavements with heavy pedestrian traffic and in areas potentially intended as upper level outdoor terraces.

The wind tunnel testing confirms that the surrounding pedestrian environment complies with the relevant safety criteria, and that pedestrian comfort has been improved at every location when compared to the approved South Site building envelope (other than one location, which still meets the desired ‘pedestrian standing’ criterion).

Accordingly, the detailed design of the South Tower has exceeded the assumptions under the Stage 1 Amending DA and will improve the existing pedestrian environment. The modelled wind conditions are generally rated as being suitable for pedestrian standing, including at the western Metro Station entrance on Castlereagh Street. The terrace on Level 10 also achieves the pedestrian standing comfort category.

Conditions resulting from the proposal are generally similar to existing conditions. Most test locations remain in the same comfort category as in the existing configuration. Wind conditions in Location 19 near the north-east corner of the tower are stronger than in the existing situation due to the larger tower footprint. The ground level colonnade reduces the effect of the wider tower footprint observed in the maximum envelope configuration, and the 5% exceedance wind speed is just above the upper threshold for the 'pedestrian standing' category.

Importantly, the results demonstrate the satisfaction of the 'pedestrian standing' criterion at the station entrance of the South Site, which is identified in the Consolidated Design Guidelines as a key aspiration.

In addition to this, CPP confirms that all locations have passed the Lawson distress criteria except for one location that is exposed to winds from the south-east over Hyde Park. The conditions in this location, however, have not been degraded by either the proposal.

Conclusion

The modelled wind conditions are generally rated as being suitable for pedestrian standing, including at the Metro Station entrance on Elizabeth Street (pedestrian standing) and Castlereagh Street (pedestrian sitting) which is in accordance with the requirements of the Consolidated Design Guidelines and the Concept Proposal conditions of consent. The terrace is also rated as being appropriate for pedestrian standing. All areas have been assessed and are confirmed to be suitable for their intended use in this section of the city, excluding those locations where existing conditions already exceed desirable levels of amenity.

5.17 Noise and Vibration

An Acoustic Assessment Report has been prepared by Arup and is included in **Appendix P**. This report assesses the noise and vibration impacts associated with the construction and operation of the proposed development. A summary of the assessment and proposed mitigation measures is provided below. Sensitive receivers to noise in proximity of the Precinct are identified the Report at **Appendix P,** and are noted as the following locations:

- 19 Martin Place: The Commercial Travellers Business Club in Martin Place which includes low-level hotel accommodation
- 1 Hosking Place: The Aston Apartments high rise serviced and residential apartment building
- 52 Martin Place: Seven Network television studios
- 55 Elizabeth Street: University of Newcastle campus
- 61-101 Phillip Street: Sofitel Sydney Wentworth Hotel
- 108 King Street: Theatre Royal within the basement of the MLC centre; and
- 165 Phillip Street: Travelodge Hotel temporary accommodation
- 1/17 O'Connell St, ELS Universal English College

It is noted that the area surrounding Precinct is zoned as B8 Metropolitan Centre and is predominantly comprised of general commercial and retail premises.

Assessment

Operational noise impact impacts have been assessed against the relevant criteria established in the Stage 1 DA and as itemised in the Acoustic Assessment Report in **Appendix P**.

The noise emission of mechanical plant and equipment associated with the development will be controlled so that the operation of such plant does not adversely impact nearby noise sensitive receivers including those within the proposed development site. Attenuation measures will include attenuators, acoustic louvres, equipment enclosures, sound absorption within plant rooms and internal duct lining. The detailed mechanical system noise control strategies will be developed as part of the detailed design.

The electrical plant and equipment will be assessed at the time of the detailed design having regard to nearby residential and commercial properties and criteria as discussed in the Acoustic Report. It is anticipated that a condition of consent will be imposed requiring compliance with the relevant standards.

Being a metropolitan zoned area, licensed premises (should they be proposed) are not uncommon for the locale. It is envisaged that noise impacts from any future licensed premises will be adequately controlled via appropriate engineering design and the suitable management of operations and will be assessed at such time against the relevant criteria.

With regards to impacts upon the development from noise and vibration sources, the Acoustic report notes:

- Environmental noise (including road traffic and building services) and groundborne rail noise and vibration are the most likely acoustically significantly noise and vibration sources to impact upon the proposed development.
- To ameliorate potential road traffic noise impacts, various indicative glazing selections and minimum insulation and sound performance for different parts of the building are recommended.
- Vibration and groundborne noise predictions from the Eastern Suburbs Rail Line indicate compliance with criteria for human exposure and open plan offices;
- Groundborne noise levels predicted from the future metro are within internal ground-borne noise targets for open plan office areas and therefore no additional mitigation measures are required.

Noise associated with the construction phase of development has also been modelled and assessed against all relevant policies and guidelines. For consistency, the assessment completed by Arup also considers the approach to construction noise and vibration adopted under the Sydney Metro project assessment to understand baseline assumptions made in acoustic modelling for the construction works.

Consistent with the findings for the construction of the Metro Station under the CSSI Application, there are expected to be exceedances of the airborne noise management levels in the absence of mitigation measures for all stages of works. When compared to the CSSI Application, Arup note that there are instances where a lower category or impact or a higher category of impact are identified for the cumulative construction works, owing to the margin or variability expected with this type of acoustic modelling.

With regards to grounborne construction noise, Arup recommends a programme of noise and vibration monitoring be included in the construction schedule at the commencement of works so that the actual levels experienced within the nearest affected receiver buildings can be measured and the construction activities and schedule be adjusted accordingly.

Metro fit-out works being undertaken concurrently with OSD construction works are understood to be relatively minor in terms of noise impact due to the type of construction works and the fact that they are below ground. These works are therefore not anticipated to contribute significantly to cumulative noise impacts.

Mitigation Measures

The Acoustic Assessment sets out noise and vibration mitigation measures that will be adopted for the construction of the development. These measures have been incorporated into the mitigation measures at **Section 7.0**.

Conclusion

In conclusion, all potential noise and vibration impacts of the project as described in the acoustic report in **Appendix P** have been mitigated through design and the construction methodology to minimise the impact on the city. These mitigations measures are in full accordance with industry standards, guidelines and legislation.

5.18 Reflectivity

Surface Design has prepared a Reflectivity Report (**Appendix J**). A summary of the assessment and recommended mitigation measures is provided below.

Assessment

The Reflectivity Report assesses the chosen materials and finishes and building facades to determine whether any unacceptable glare would result affecting motorists, pedestrians, or the occupants of neighbouring buildings. The Report evaluates the South Tower from three (3) viewpoints for drivers and three (3) viewpoints for pedestrians, where there is a potential risk of reflectivity, from locations on Hunter Street, Castlereagh Street, Bligh Street, Phillip Street, Hunter Street, and Elizabeth Street.

The report confirms that the risk of rogue reflections causing disability glare to drivers and pedestrians and limited and acceptable where the normal specular reflectivity of façade materials is limited to 20%, as per the design documentation.

Mitigation Measures

As noted above the reflections were not found to cause unacceptable glare as long as glazing reflectivity is limited to 20% (or below). Accordingly, the glazing must have a reflectivity of 20% at a minimum.

Conclusion

In conclusion, reflectivity impacts are considered acceptable subject to the mitigation measures recommended above.

5.19 Infrastructure and Utilities

Arup has prepared a Utility Services Infrastructure Assessment (**Appendix E**) that identifies the existing utilities and infrastructure in vicinity of the South Site and notes any expected impacts or required upgrades as a result of the proposed development. Preliminary consultation has been undertaken with the relevant service providers, noting that further consultation will be required to obtain the necessary consents prior to undertaking works on the site or in the vicinity of existing infrastructure.

The preliminary assessment and consultation confirms that the South Tower can be appropriately serviced, with consideration of the following:

- non-destructive in-ground services mapping will be undertaken to accurately locate existing infrastructure assets where practical;
- destructive investigations will be undertaken where considered necessary to more accurately locate existing critical infrastructure assets and investigate unknown services or potentially redundant services;
- utility providers will be further consulted to obtain any necessary consents to perform construction work in their vicinity and discuss necessary diversions and connections for the proposed works;
- utility technical and hazard requirements will be incorporated into the construction documentation;
- safe work methods statements and inspection and test plans will be prepared by accredited contractors;
- pre-start work checklists will be implemented and recorded; and
- field safety inspectors will be present during critical works as determined by each utility provider.

These considerations will be factored into the ongoing design and construction process and do not raise any insurmountable issues at this stage that would prevent the DA from being approved.

Conclusion

In conclusion, Arup have confirmed that:

- Utilities existing within and around the Metro Martin Place Precinct have been identified and assessed, and enabling works will be required, as well as future connections to a number of these utilities as part of the South Tower development.

- Enabling works including disconnection of existing services and diversion of existing services within the South Tower boundary will be conducted under the separate CSSI Approval works.
- Preliminary utilities design solutions for South Tower connections have been developed as reasonable to the current stage of design, through consultation with utilities providers. Issues raised by providers have been addressed and incorporated in the design.
- Through the consultation process, Ausgrid has advised that augmentation works may be required to be undertaken by Ausgrid. The extent of any potential works is yet to be confirmed by Ausgrid. At this stage of design development, as a result of agency consultations, it is not considered likely that any other utility providers will need to upgrade or augment existing network capacities beyond immediate works around the site.

5.20 Water Cycle Management

Arup have prepared a Stormwater Management and Flooding Report that accompanies this report at **Appendix H**.

Assessment

The proposed water cycle management strategy has been developed in accordance with Sydney Water requirements regarding on-site drainage and the discharge of stormwater from the site. The proposed on-site storage tank has been sized using DRAINS modelling, confirming that the proposal can accommodate any bypass flows in the 1 in 100-year ARI event.

Various water quality targets apply to the proposed development (City of Sydney, SWTC and Green Star). These targets have been used to assess the development using MUSIC modelling (see **Table 17**), which confirms that the proposal will meet and exceed all relevant targets.

The surrounding areas of the public domain, including Martin Place, are owned and maintained by City of Sydney Council. Accordingly, no specific criteria or mitigation measures are adopted for these areas in-line with standard practice as Council are the maintainer of these assets.

Table 17 Water quality targets and results

Pollutant	City of Sydney Criteria	Green Star Criteria	Results
Gross pollutants	90%	90%	93.3%
Suspended solids	85%	80%	85.7%
Phosphorus	60%	60%	78.6%
Nitrogen	45%	45%	74.3%
Oil and grease	-	90%	N/A

Source: Arup

Mitigation Measures

In order to maintain the quality of stormwater discharge from the South Site during the construction stage, an erosion and sediment control plan is to be prepared. Surface water management measures will be in accordance with the Landcom guidelines – Managing Urban Stormwater Runoff: Soils and Construction (“Blue Book”) and City of Sydney DCP. Potential erosion and sediment control measures for the development may include, but are not limited to, the following:

- Settling basins/ sumps;
- Surface water collection systems, i.e. drains to collected constructed site runoff and convey flows to control and treatment systems;
- Shaker grid and wash down areas at vehicle entry points; and
- Sediment protection devices on existing and proposed inlet pits.

These measures will be confirmed and enforced through the final, detailed CMP prepared by LendLease prior to the commencement of works on the site.

Conclusion

In conclusion, Arup have confirmed that stormwater discharge into the Sydney Water network will be managed through incorporation of On-Site Detention in the design, with due consideration of WSUD, to Sydney Water's requirements. It is also considered that the Stage 1 Conditions of Consent relating to stormwater have been complied with.

5.21 Flooding

Arup have prepared a Stormwater Management and Flooding Report that accompanies this report at **Appendix H**.

As discussed in **Section 2.7.8**, the available flood maps indicate that some areas of the Precinct are impacted by flooding, with generally deeper flooding isolated to Hunter Street and some minor flooding isolated to the road corridor along both Elizabeth Street and Castlereagh Street. This does not extend to the South Site that is exempt from the flooding in adjoining streets. Refer to **Figure 85** below.

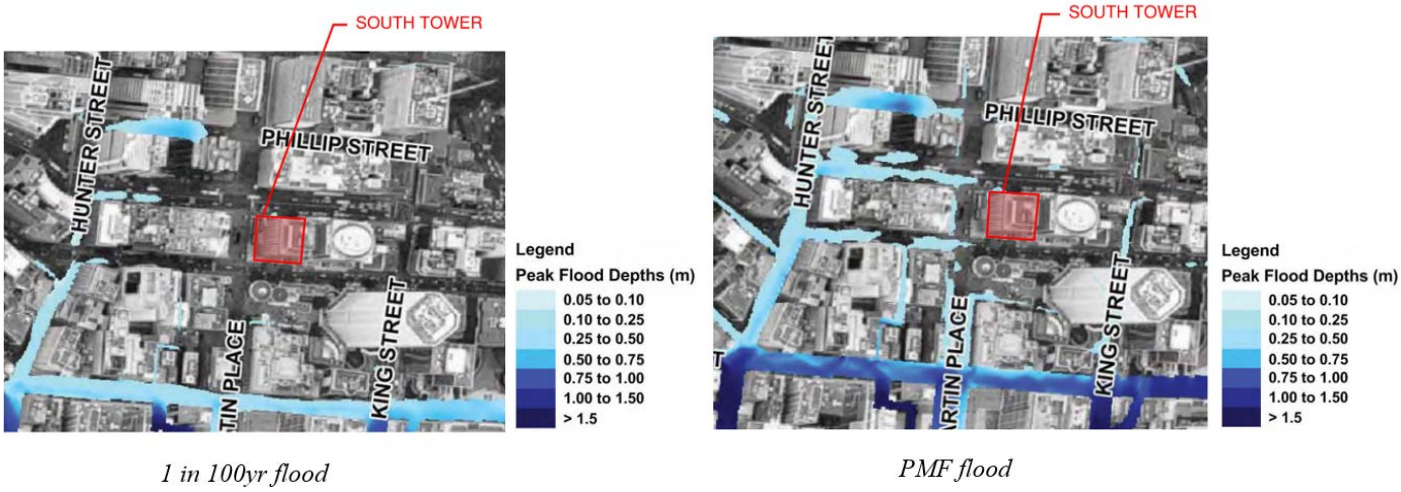


Figure 85 Existing flood risk extents and depths during both the 100yr (left) and PMF flood (right)

Source: City Area Catchment Flood Study (May 2016) and Arup Stormwater Management and Flooding Report

Flood planning levels for the Precinct are dictated by the higher of the *Interim Floodplain Management Policy* (City of Sydney, May 2014) and the Sydney Metro 'System Requirements Specification'. These two planning levels have been used to determine appropriate property entrance level/ threshold levels – to be detailed as part of the design development phase.

The *City Area Catchment Flood Study* also discussed the effect of climate change in terms of rainfall increase and rising sea levels. The Study confirms that in the worst case there will be increased flood levels at a maximum of 0.1m along part of Elizabeth Street compared to the existing situation. Sea level has no effect due to the height of the Precinct compared to sea level.

A flood risk management strategy was developed as part of the Concept Proposal and the CSSI Approval, with consideration of the City of Sydney Interim Floodplain Management Policy requirements and Sydney Metro 'System Requirements Specification', which govern the detailed design of the station and OSD on the site. This strategy considers the effect of 'worst case climate change' where applicable and comprises:

- Designing all entrances and access into the South Tower that do not directly connect to the Metro Station via louvres, doors or otherwise, so that the thresholds achieve the 1 in 100 year flood level or higher. This excludes underground levels.
- Designing all other entrances and exits with access to underground levels to be higher than the greater of either the 1 in 100 year flood level + 0.5m or the Probable Maximum Flood (PMF) level.

Flood modelling has been completed considering the impact of the 1 in 100 year flood event, with a climate change scenario assuming a 30% increase in rainfall, and the PMF level to demonstrate how the proposed building might impact and be impacted by flooding in the area. This confirms the following:

- The proposed development will have a negligible impact on flood levels locally. Flooding is primarily isolated to the road corridor, and any resultant increase in flood levels would not exceed 0.05m. This increase primarily relates to public domain works being completed under the CSSI Approval including changes to the kerbs along Martin Place and Castlereagh Street.
- All entrances to the proposed development will achieve the various flood planning criteria that applies, as detailed in the plans that accompany the Stormwater Management and Flooding Report at **Appendix H**.

Conclusion

In conclusion, Arup have confirmed the following:

- The South Tower design has been modelled against existing flood conditions in the Site area. The flood modelling identified minimal increases to modelled flood levels (<0.05m localised flood level increases) which are considered negligible and do not increase risk to the surrounding area.
- Freeboard has been assessed at all South Tower entrances in accordance with criteria identified in the City of Sydney Interim Floodplain Management Policy. The design incorporates thresholds at or above the required level to eliminate flood risk.

5.22 Waste Management

The Waste Management Plan (WMP) at **Appendix U** outlines the ambitions and management systems for the proposal and aims to support best practice waste management and environmentally sustainable development. It considers both construction and operational waste and provides guidance on waste minimisation, management, and effective waste separation, recycling and re-use measures. It confirms that the South Tower is capable of complying with Council, State and other requirements with regard to waste minimisation and management.

In conclusion, the WMP will inform a future Waste Policy Design Compliance Certificate for the Construction Certificate application, the Greenstar credit requirements, and any detailed plans and procedures for the management of different tenancies that will be subject to separate and future applications.

5.23 Construction Management

A Construction Management Plan (CMP) has been prepared by Lendlease (**Appendix O**) which details the overall construction methodology for the proposed development. The CMP also defines the impacts of the proposed construction activities on areas within Precinct, and details the construction methodology, sequence and logic mitigating potential construction risks to the Metro Martin Place precinct and its stakeholders. The information included in the CMP has also been prepared to respond to the requirements of the SEARs.

5.23.1 Construction Pedestrian and Traffic Management

A Framework Construction Pedestrian and Traffic Management Plan (CPTMP) has been prepared by Arup and is included at **Appendix M**. The framework CPTMP is consistent with the Construction Traffic Management Framework prepared as part of the Sydney Metro City and Southwest and includes the following:

- Loading and unloading, including the locations of all proposed work zones.
- Haulage routes.
- Construction vehicle access arrangements.
- Proposed construction hours.
- Estimated number and type of construction vehicle movements, including morning and afternoon peak and off peak movements, distinguishing concrete pours from other construction activity, and noting that construction vehicles would be restricted from using work zones on Castlereagh Street and Elizabeth Street during certain times of the day.
- Construction program, highlighting details of peak construction activities and proposed construction staging.
- Details of specific measures to ensure the arrival of construction vehicles to the site does not cause additional queuing on Elizabeth Street, Hunter Street, Castlereagh Street and King Street.
- Details of any construction vehicle marshalling areas.

- The staging of works and simultaneous construction with other projects in the area, including the Sydney Light Rail Project, Sydney Metro and other developments nearby, and identify mitigation measures to ensure the proposal can be constructed while the impacts to rail users (and their connections) are appropriately managed.
- Any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the construction of the proposed works.
- Measures proposed to mitigate any associated impacts of traffic, public transport, pedestrians and cyclists should be clearly identified and included in the draft CPTMP

The Sydney Coordination Office have been consulted with in the development of this plan and not raised any concerns in principle. The final CPTMP plan will be developed by the appointed Contractor for the project.

It is emphasised that this report forms a preliminary assessment that will be updated by a future detailed CPTMP and associated Traffic Control Plan(s) that will be prepared by the building contractor. The detailed CPTMP will confirm the detailed construction methodology and specific methods for safely managing construction traffic in the surrounding area.

5.23.2 Construction Traffic

Existing intersection performance

The Sydney Metro City & Southwest EIS analysis of traffic conditions in the vicinity of Martin Place Station found that Elizabeth Street northbound experiences heavy traffic volumes during both peak periods. There is a strong movement from Macquarie Street (southbound) in the east to Castlereagh Street (southbound) via Hunter Street, which contributes to relatively heavy westbound traffic on Hunter Street.

Currently, the Macquarie Street / Bent Street / Eastern Distributor ramps intersection is extremely congested during the AM and PM peaks with the intersection performing above its theoretical capacity at level of service F. Long delays are caused by conflicts between high volumes of traffic on the Eastern Distributor ramps (westbound) and Macquarie Street (southbound).

All other intersections near the Martin Place Station construction sites currently operate at level of service B or better. However, at the Elizabeth Street / Phillip Street / Hunter Street intersection, signal coordination along Elizabeth Street causes delays for conflicting right turn movements and vehicles on side-streets.

Construction Impacts (Intersection Performance)

With consideration of the existing situation, Arup has assessed the potential impact of construction vehicles on the performance of intersections which has been summarised in **Table 18** and **Figure 86.** This shows a minor deterioration in performance at the Castlereagh Street / Hunter Street / Bligh Street intersection in the AM peak from level of service A to level of service B. However, despite this particular scenario, the average delay and degree of saturation at the intersection does not change with the addition of the construction traffic and, therefore, the overall impact on the performance of the intersection would be negligible.

The remaining intersections maintain their base level of service during the construction of the project and therefore the impact of the construction traffic on these intersections would not be significant. As noted earlier, the peak period construction vehicle movements will be minimised to reduce the impact on the surrounding street network.

Table 18 Martin Place Station construction site intersection performance

	Without construction			With construction		
Peak Period	**Average delay (second per vehicle)**	**Level of Service**	**Degree of saturation**	**Average delay (second per vehicle)**	**Level of Service**	**Degree of saturation**
Elizabeth Street / Phillip Street / Hunter Street						
AM	23	B	0.84	23	B	0.83
PM	26	B	0.79	23	B	0.81
Elizabeth Street / Martin Place						
AM	5	A	0.42	7	A	0.42
PM	4	A	0.40	7	A	0.41
Elizabeth Street / King Street						
AM	26	B	0.73	26	B	0.73
PM	24	B	0.73	25	B	0.71
Hunter Street / Macquarie Street						
AM	20	B	0.83	21	B	0.86
PM	20	B	0.82	20	B	0.83
Macquarie Street / Bent Street / Eastern Distributor ramps						
AM	155	F	1.27	156	F	1.27
PM	161	F	1.19	167	F	1.29
Castlereagh Street / Hunter Street / Bligh Street						
AM	15	A	0.45	15	B	0.45
PM	16	B	0.52	16	B	0.50
Castlereagh Street / Martin Place						
AM	6	A	0.23	6	A	0.24
PM	6	A	0.28	6	A	0.28
Castlereagh Street / King Street						
AM	21	B	0.50	21	B	0.50
PM	22	B	0.61	21	B	0.64
Bent Street / Phillip Street						
AM	17	B	0.74	17	B	0.74
PM	18	B	0.63	25	B	0.71

Source: Sydney Metro City & Southwest EIS

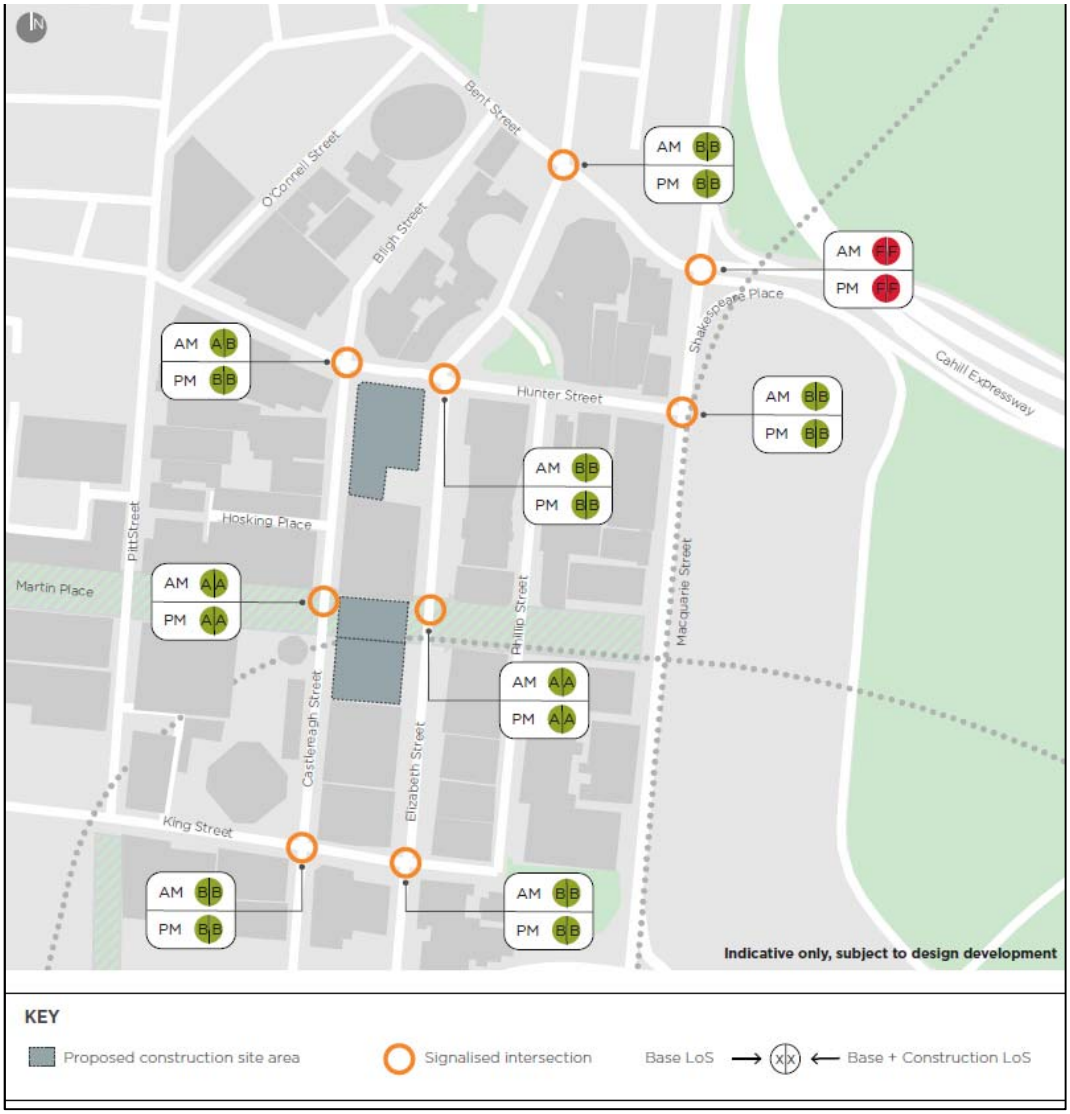


Figure 86 Martin Place Station intersection performance

Source: Sydney Metro City & Southwest EIS

5.23.3 Impacts on Public Transport Services

The Precinct experiences high volumes of bus traffic during peak and off-peak times, particularly along Elizabeth Street and Castlereagh Street which, since the closure of George Street, are the main north-south bus corridors through the Sydney CBD. Buses from all over Sydney converge and diverge at bus stops located adjacent to and near the proposed station.

Following the re-opening of George Street and the operation of light rail services, it is expected that the volume of buses on Elizabeth Street will be significantly reduced from the existing situation. Changes to bus zones and bus stop locations along Castlereagh Street and Elizabeth Street will be agreed between the appointed Contractor and the Sydney Coordination Office as part of the detailed CPTMP.

5.23.4 Impacts on Pedestrian and Cycle Movement

The TSE Contractors planning for pedestrian management and access across Martin Place for CSSI related works is not yet known. It is appreciated that the TSE Contractors approach to pedestrian management over the preceding 3 years, prior to OSD works commencing, will largely dictate future pedestrian patterns and influence the approach to pedestrian management in and around Martin Place.

During the detailed design phase, the TSE Contractors approach will be reviewed and a Pedestrian Management Plan developed to best accommodate the changing pedestrian flows and patterns to Martin Place in conjunction with the construction staging for the precinct.

5.23.5 Mitigation Measures

The measures proposed to ameliorate the impacts of the construction work proposed by Arup are as follows:

- Work zones along Castlereagh and Elizabeth Street
- B Class hoarding surrounding the site
- Online booking system
- Traffic controllers
- No on-site car parking
- Ongoing consultation with authorities

These measures are discussed in the Framework CPTMP and are based on discussions with the Sydney Coordination Office where the CPTMP for the project was discussed.

Additionally, drivers wishing to access the South Site for any reason will need to report to the traffic controllers and receive instructions and guidance. Scheduling will be the main management method in ensuring no multi-vehicle arrivals. A radio set-up will manage multiple vehicle arrivals from nominated holding points surrounding the CBD. The Contractor (once appointed) will need to nominate preferred sites for the north, south and west directions.

Traffic control plans will be developed by the Contractor once appointed and submitted with a finalised version of this plan. Traffic will not be impacted on entry or exit unless a temporary partial road closure is in place during the few occasions on weekends that a mobile crane may be required. These temporary road closures would be obtained through the normal approvals process.

Vehicle movements

Mitigation measures will be adopted during the construction phase to ensure traffic movements have minimal impact on surrounding land uses and the community in general, and would include the following:

- Truck loads would be covered during transportation off-site;
- Neighbouring properties would be notified of construction works and timing. Any comments would be recorded and taken into consideration when planning construction activities;
- All activities, including the delivery of materials would not impede traffic flow along local roads and highways;
- Materials would be delivered and spoil removed during standard construction hours;
- Deliveries would be planned to ensure a consistent and minimal number of trucks arriving at site at any one time; and
- Sydney Coordination Office and City of Sydney Council will be notified of any future disruption to roadways and footpaths.

Driver code of conduct

No queuing or marshalling of trucks is permitted on a public road. Trucks must wait until a suitable gap in traffic allows them to assist trucks to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction zone, and it is noted that the vehicles already on the road have right-of-way.

Traffic Control Group

As outlined in the Construction Traffic Management Framework, for each Sydney Metro City & Southwest contract, a Traffic Control Group (TCG) will be convened to provide a technical forum for the discussion of proposed works that will impact on the surrounding road network and feedback on proposed TCP's prior to formal submission. This group would meet on regular occasions (weekly or fortnightly) to provide an assessment of the forthcoming program and to ensure that any identified or potential issues are raised and addressed to ensure that works proceed in accordance with the agreed programme. Representation would be expected to include:

- The Contractor
- Macquarie Capital
- Sydney Metro Delivery Office
- TfNSW's Sydney Coordination Office
- RMS
- City of Sydney

The TCG will primarily provide a forum for discussion on proposed traffic management measures during the various stages of the works and to discuss potential impacts on the road network operations around the sites, and how to address or minimise those impacts.

Detailed CPTMP

The appointed Contractor will prepare a final CPTMP which will be approved before construction commences. It is also proposed to establish a traffic control group with all key stakeholders which will meet regularly to discuss proposed traffic management measures during the various stages of the works and to discuss potential impacts and how to address or minimise those impacts.

5.23.6 Conclusion (Construction Management)

In conclusion, the impacts identified in this section resulting from construction are considered acceptable, subject to the mitigation measures being implemented.

5.24 Archaeology

As identified in the Statement of Heritage Impact prepared by TKD (**Appendix D**), the site of the building at 7 Elizabeth Street is the only site associated with the North and South Sites that has been identified in the Central Sydney Archaeological Zoning Plan. It is identified as an Area of Archaeological Potential – Deep Subsurface Features. Demolition of 7 Elizabeth Street (which has already occurred) and bulk excavation is the subject of a separate approval process (being the CSSI consent).

In conclusion, no further archaeological assessment is considered warranted for the proposed development.

5.25 Air Quality

An Air Quality Assessment has been prepared by Arup to determine the baseline air quality conditions and evaluate the potential air quality impacts from the proposed construction works (**Appendix BB**).

Assessment

The assessment provides a qualitative assessment of potential dust and emissions as a result of works. In summary, Arup predicts dust emissions from the works at Martin Place Metro to be minor and transient. Although the land surrounding the development is predominantly commercial, during worst-case meteorological conditions and high-intensity activities on site, there is the possibility of dust generation causing nuisance and potential health impacts where no mitigation measures are implemented.

Mitigation Measures

Arup therefore recommends that standard construction dust mitigation methods be implemented where practical to avoid dust generation, which have been included with the Mitigation Measures at **Appendix Y**. Arup anticipates that with the application of the mitigation measures, sensitive receptors in the vicinity of the development will not experience significant air quality impacts as a result of the proposed works.

Conclusion

In conclusion, Arup have confirmed that construction related activities are expected to have limited, and transient impacts on air quality. Further, any impacts will only occur as short-term peak events. The best-practice mitigation measures proposed will act to reduce any potential dust emissions from the activities on site.

It is anticipated that with the application of the mitigation measures, sensitive receptors in the vicinity of the development will not experience significant air quality impacts as a result of the proposed works. This conclusion is in regard to SSD OSD works only. All demolition of existing buildings and excavation works on the South Site are covered by separate CSSI Approval.

5.26 Fire Safety

Arup has prepared a performance-based fire safety strategy in the form of a Fire Engineering Brief Report (**Appendix T**) for the South Site within the overall development of the Precinct, which addresses Condition B11 of the Concept Proposal. Arup has assessed the capability of the development to achieve the performance requirements of the Building Code of Australia (BCA). Fire and Rescue NSW have been consulted throughout the design process with specific items such as hydrant design being resolved through multiple engagements. FRNSW were briefed on the Metro Martin Place SSDA submission on 31 May 2018 and raised no objections to the proposed submission strategy.

Where the relevant Deemed-to-Satisfy (DtS) provisions are either inappropriate or onerous, an alternative performance solution has been suggested and tested against criteria to ensure an acceptable level of fire safety can be achieved. Fire engineering solutions are to be developed to address these non-compliances as part of the detailed documentation stage of the proposal. Agreement will be sought with the relevant project stakeholders, including Fire and Rescue NSW, regarding the suitability of the Brief.

Conclusion

Arup have confirmed that based on a review of the South Tower design, and consultations held with FRNSW, it is appropriate that performance-based fire engineering can be used to demonstrate compliance with the Performance Requirements of the BCA.

Non-compliances the DtS Provisions of the BCA may be identified as the design further develops that will require additional Performance Solutions. However, it is not considered likely that these Performance Solutions will materially affect the South Tower SSD DA design.

5.27 Crime and Safety

5.27.1 CPTED

Assessment

A CPTED Report has been prepared by Arup (**Appendix U**) which outlines the project, policy, and crime context for the project and makes recommendations about appropriate CPTED strategies to reduce the opportunity for crime to occur.

A review of crime occurring in the precinct area (the Sydney LGA) was conducted to identify relevant trends. The majority of relevant crimes to the project has been decreasing over the last five years, with trespass and transport regulatory offences increasing within the CBD.

Mitigation measures have been developed to minimise the level of crime risk in these areas as part of the detailed design phase.

Mitigation Measures

The following mitigation measures will be implemented during the detailed design phase:

- Provide clear definition and designation of space in a manner that encourages and predicts authorised movement and does not cause conflict between the intended purpose of the space and the desired behaviour[9];
- Maximise passenger circulation areas by minimising built structures and avoiding clutter, particularly along pedestrian routes that lead to the station concourse. This was achieved through consultation with the architects, providing input in to the open-space design of these routes;

[9] This has been achieved through early design input in to the South Tower, where demarcation and signage was advised on.

- Design and layout of building entrances and foyers to assist natural surveillance by reducing clutter and blind spots, positioning reception/concierge where they have clear sightlines of entrances, the general foyer areas, and waiting areas. This was achieved by positioning the South Tower secure line adjacent to the reception area, giving the concierge service the ability to have direct view of the entrance and exit points in to and from the lifts, as well as the general pedestrianised areas listed above;
- Use of glass partitions wherever possible to improve site lines and the transmission of natural light, and be fitted with anti-graffiti coatings (where practical) where these partitions are accessible to the public. All entrance and exit partitions in the South Tower have been designed to be transparent;
- Durable public furniture and amenity construction, to limit damage and subsequent repairs over the life of the facility;
- The mixture of different uses and tenancies will help ensure regular and diverse use of the facility which also enhances the territoriality aspects of the site, whilst enhancing the opportunity for natural surveillance. Encouraging regular and diverse use of the site through these and other measures has been recommended to the owners and operators of the site;
- Adequate lighting has been provided throughout the site;
- Control points between each external interface point and the site have been defined, heightening surveillance throughout the site;
- Ensure public realm lighting is appropriate for use at night;
- Provide signage throughout the precinct to remove excuses for loitering and littering, each being a significant detractor to territoriality. This has been advised and will be implemented by the relevant architect in the next phase of the design; and
- Ensure signage is appropriate to improve way finding and reduce terrain vagueness within the precinct. This has been advised and will be implemented by the relevant architect in the next phase of the design.
- Implementing these recommendations will increase the perception of risk to criminals by increasing the presence of deter, detect, delay and response characteristics (physical and electronic security systems) to the precinct. Further, such measures will increase the effort required to commit crime by increasing the time, energy or resources which need to be expended while reduce the potential rewards of crime by minimising, removing and concealing rewards.

Conclusion

In conclusion, Arup confirm that implementing these recommendations will increase the perception of risk to potential criminals by increasing the presence of deter, detect, delay and response characteristics (physical and electronic security systems) to the overall development. Further, such measures will increase the effort required to commit crime by increasing the time, energy or resources which need to be expended while reducing the potential rewards of crime by minimising, removing and concealing rewards.

5.27.2 Security

A separate Security Risk Assessment has also been completed by Arup, addressing the proposal in the context of protecting public places from terrorism. This report is included in **Appendix V**. This report has been produced to satisfy the SEARs and Condition B10 of the Concept Proposal and identifies the potential security risks during the delivery and operation of the OSD and station beneath. The report has been prepared having regard to the NSW Police Publication 'Safe Places' Comprehensive Guide for Owners, Operators and Designers for protecting public places from terrorism and CPTED in consultation with NSW Police and TfNSW/Sydney Metro.

Assessment

The report confirms that there are identified instances of security risks associated with the delivery phase and operations phase, which require security mitigation measures to reduce the identified security risks, discussed below.

Blast modelling has also been conducted for the South Tower with consideration of the structural design of the integrated tower and station, and the potential for threats within publicly accessible areas of the building and station. This confirms the following:

- The structural design of the South Tower was assessed when subjected to vehicle-borne improvised explosive device and pedestrian-borne improvised explosion device threats located within publicly accessible areas of the stations, and suitable enhancements were made to ensure that progressive collapse did not occur.
- The glazing performance of the South Tower was assessed and whilst significant glazing damage would be expected in the event of a threat, the extent of damage is in-line with the permitted standards provided by the United States Government (as best-practice measures). Façade construction adopts the principles of blast mitigation outlined in Centre for the Protection of National Infrastructure's Guidance Note and the relevant United States of America's guidance documents.

Mitigation Measures

Security mitigation measures to reduce the identified security risks include:

- implementation of the recommendations from the CPTED report;
- physical security measures;
- hostile vehicle mitigation measures;
- electronic access control;
- CCTV;
- intruder alarm systems (including duress);
- help points;
- intercoms;
- a security monitoring centre;
- on-site security officers; and
- operational security measures including a security plan and Standard Operation Procedures.

These measures will be implemented in the detailed design of the South Tower, and the continued operation and management of the South Tower post design and construction.

Conclusion

The Security Risk Assessment identifies potential risks and their associated likelihoods and consequences. The design has considered these risks and incorporated mitigation measures to reduce the risk likelihood and consequence so far as is reasonably practicable.

In the absence of specific blast criteria issued by the Department, the South Tower has undergone blast modelling analysis to assess blast damage in accordance with Australian and international standards and guidelines, and has been compared against international projects of similar scale and profile. Results of the analysis show that the design is capable of withstanding blast in accordance with criteria identified, and no further blast mitigation measures are required.

5.28 Building Code of Australia

McKenzie Group has completed an assessment of the South Tower to confirm it is capable of complying with the relevant sections or deemed-to-satisfy provisions of the Building Code of Australia (BCA) and Australian Standards (see **Appendix Y**). The assessment considers a number of alternative solutions that will be assessed against the performance requirements of the BCA by a suitably qualified person at the relevant Construction Certificate stage. Where these solutions relate to Category 2 fire safety provisions, prior approval will be required from the NSW Fire Brigade.

In conclusion, the project is capable of achieving compliance with the BCA through a combination of deemed-to-satisfy provisions and performance-based solutions as required by the BCA.

5.29 Accessibility

Morris Goding Accessibility Consulting has completed an assessment of the South Tower with respect to accessibility under the objectives of the *Disability Discrimination Act 1992* (DDA) and the requirements of the DDA Premises Standards 2010 (see **Appendix S**). It considers different user groups, including members of the public, visitors and tenancy staff and assesses the success of the design of eliminating, as far as possible, discrimination against persons on the ground of disability. The Review makes a number of recommendations to ensure the development achieves compliance as part of the detailed design phase which have been incorporated into the mitigation measures contained in the report and considered in **Section 7** of the EIS.

In conclusion, the design of the South Tower will be capable of compliance with the applicable requirements of the DDA Premises Standards 2010 and of the Building Code of Australia. The design of the South Tower will be continuously refined during design development phase to ensure that the various elements will meet all of the applicable Performance Requirements of the above codes.

5.30 Social and Economic Impacts

Economic Role of the City of Sydney

The proposed development supports a significant financial investment in the renewal and sustained pre-eminence of Martin Place as the commercial heart of the Sydney CBD, and the role of the Sydney CBD as Australia's principal centre for business. The delivery of 37,553m^2 of commercial floor space over the southern entrance to the new Martin Place Metro Station, within the heart of the Sydney CBD, will contribute to the CBD being the principal centre for business, consistent with the objectives of the Metropolitan Centre Zone.

Employment Generation

This Stage 2 SSD DA, and the separate Stage 2 SSD DA for the North Site, will have a substantial and positive impact on employment in Sydney, and on the economic viability of Sydney generally.

The NSW Government has identified Sydney as Australia's finance and economic capital, containing half of Australia's globally competitive service sector jobs. It accounts for approximately 70 per cent of the total NSW economic output and 20 per cent of Australia's gross domestic product (SGS Economics, 2014)[10]. The finance sector itself also generates up to 30% of Greater Sydney's Gross Domestic Product, and has been credited as growing Sydney's knowledge intensive industries that are fundamental to Australia's global competitiveness. Accordingly, the continued economic growth of Sydney, and the finance sector more specifically, is fundamental to the continued strength of NSW and broadly Australia.

The proposal contributes to strengthening Sydney's role as a globally competitive City, by supporting business activities and increasing capacity for new and upgraded office accommodation in the CBD. It will deliver new high quality offices within the heart of the Sydney CBD with the potential to attract premium global businesses and contribute to the prestigious setting of the site within Martin Place.

The operation of the South Tower is expected to accommodate 3,267 – 4,083 employees, being an increase of up to 2,450 – 3,266 jobs when compared to the pre-demolition scenario. This represents a significant increase to the site's employment capacity, which will contribute towards the NSW Government's focus on job creation.

In addition to this, during the delivery phase for the South Tower, a further significant number of full-time equivalent construction jobs will be supported (over 865 jobs). This will be subsidised by further employment and broader economic benefits occurring within the local and wider Australian economy relating to flow-on multipliers during the construction phase.

Whilst not specifically quantified, it is also expected that expenditure from the proposed redevelopment will benefit established local businesses in the locality, that would benefit from a growing local customers base. This will also likely extend to greater tourism spending in the area through the revitalisation of one of Sydney's landmark public and commemorative spaces, creating an improved working and tourism destination.

[10] Reference from CSSI Project Application Report, pg. 21

Table 19 Potential job creation analysis for the South Site

Scenario	Total GFA (sqm)	Total NLA (sqm) π	Job Numbers
Existing Development (pre-demolition scenario)	18,465	16,341	817*
South Tower OSD (proposed development scenario)	37,553 ¬	32,671	3,267~ to 4,083 ^
Difference	**19,088**	**16,330**	**2,450 ~ to 3,266 additional jobs**

π NLA is calculated at 87% of GFA, with NLA providing a more accurate figure for estimating job numbers.

** based on occupancy rates of 1 per 20sqm used by City of Sydney Council within the Central Sydney Planning Strategy, which are informed by the 2012 floor space and employment survey*

^ occupancy rate based on 1 per 8sqm NLA, corresponding to a modern, collaborative and flexible workplaces

~ occupancy rate based on 1 per 10sqm NLA, corresponding to Arup's assessments

¬ OSD GFA figures excludes GFA attributed to Martin Place Metro Station CSSI

Cultural Impacts

The South Tower forms the next step in the revitalisation of the Precinct as envisaged under the Concept Proposal and the Stage 1 Amending DA, which respects the cultural significance of the area and accommodates the various user groups forming its future community.

Martin Place is Sydney's premier public plaza and civic assembly or ceremonial space, and is highly accessible to the City's key cultural and government institutions. With the new Metro Station in particular, it will also be highly accessible to other centres in Metropolitan Sydney via the rail and Metro networks. The prestigious corporate buildings that frame Martin Place are integral to its character and standing in the City, and supporting Martin Place as a destination in its own right. The South Tower supports this important role by providing a prestigious new building on the South Site that achieves a sufficient scale and quality to satisfy high end financial and business services companies, as well as provide suitable amenities for the public, including a publicly accessible through site connections and retail spaces that activate the public domain.

Conclusion

In conclusion, the proposal is expected to result in positive social and economic impacts given it supports a significant financial investment in the renewal and sustained pre-eminence of Martin Place as the commercial heart of the Sydney CBD, and the role of the Sydney CBD as Australia's principal centre for business.

5.31 Ecologically Sustainable Development

Ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes. Ecologically sustainable development can be achieved through the implementation of the following principles and programs, in accordance with the EP&A Regulation.

Precautionary Principle

The precautionary principle is utilised when uncertainty exists about potential environmental impacts. It provides that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The precautionary principle requires careful evaluation of potential environmental impacts in order to avoid, wherever practicable, serious or irreversible damage to the environment.

This EIS has not identified any direct serious threat of irreversible damage to the environment and therefore the precautionary principle is not required to be given further consideration in this instance. Notwithstanding, indirect avoidance of damage to the environment can be achieved through implementing the mitigation measures identified in this EIS, which will inform the construction and operation of this stage of the delivery of the Sydney Metro Martin Place Station Precinct.

Intergenerational Equity

Intergenerational equity is concerned with ensuring that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations. The proposal has been designed to benefit both existing and future generations as a new destination for transport and employment, and will deliver a development

that achieves best practice ESD targets and is more sustainable than the former building on site. The Stage 2 application for the South Site has been designed to achieve the relevant standards and targets set under the Concept Proposal, including consideration of the identified stretch targets.

The proposal has also integrated both short and long-term social, financial and environmental considerations so that any foreseeable impacts are not left to be addressed by future generations. Issues with potential long-term implications such as waste disposal can be avoided and/or minimised through construction planning and the application of safeguards and management measures described in this EIS and the appended technical reports. The proposed development will assist with the success of Sydney as a Global City for future generations.

Conservation of Biophysical Diversity and Ecological Integrity

This principal upholds that the conservation of biological diversity and ecological integrity should be a fundamental consideration in development. The proposed development will not result in any direct impacts on the biophysical environment, with the site not having any present or significant ecological features, and has been designed to achieve best practice ESD targets and mitigate or minimise all projected environmental impacts.

Improved Valuation, Pricing, and Incentive Mechanisms

The principles of improved valuation and pricing of environmental resources requires consideration of all resources which may be affected by a proposal, including air, water, land and living things. The cost of infrastructure, biodiversity offsets, design measures, and other sustainability initiatives associated with the proposed OSD have been incorporated into the cost of development and will be delivered in the most cost-effective way via a life cycle cost approach that provides best return on investment. Mitigation measures for avoiding, reusing, recycling and managing waste during construction and operation would also be implemented to ensure resources are used responsibly in the first instance.

5.32 Public Benefits / Development Contributions

The provision of public benefits across the Precinct is intricately linked between the new Martin Place Metro Station and the OSD.

Direct State Benefits

OSD is identified by the NSW Government as an essential component to the success of the overall Sydney Metro project, both from a place making as well as financial perspective. In this regard, the broader Metro OSD strategy supports the NSW Government in funding the cost of this step-change piece of public transport infrastructure.

Macquarie (subject to progressing through to the final stage of the USP process) is therefore paying the NSW Government for the development rights for the OSD, with that money directed towards the funding of the Sydney Metro project. This approach aligns with the objectives outlined within Council's CSPS.

Direct Local Benefits

The proposal will also be subject to Council's contributions requirements under S61 of the *City of Sydney Act 1988*. This will levy an additional monetary contribution (1% of the development cost) to fund public facilities, amenities and services to meet the needs of the growing residential and workforce population within Central Sydney.

5.33 Site Suitability

Having regard to the characteristics of the Precinct and its location, the proposed development is suitable for the South Site as it:

- delivers significant commercial floor space in the commercial core of Sydney, contributing to the long-term viability and competitive edge of Sydney;
- contributes to the delivery of a world class integrated public transport and employment hub that will create a superior customer experience for both Sydney Metro and Sydney Trains commuters;
- has been designed to be developed in a manner that minimises impacts on its surrounds, and had been designed to actually improve the natural, historical, and environmental qualities of the site;
- will result in only minor environmental impacts that can be appropriately managed and mitigated; and

- will facilitate the renewal of the South Site with considerable benefits associated with the activated commercial and civic precinct offering a wide variety of amenities and services to both 'Sydney-siders' and visitors in line with global best practice.

In regards to the characteristics of the South Site and its location in the Sydney CBD, it is also considered to be highly suitable for the proposal in that:

- it is located within the commercial core of the Sydney CBD, where the finance, banking and professional services are concentrated;
- it already contained commercial office developments, even though most of the building stock was in need of a significant upgrade to lift environmental performance, commercial revitalisation and urban renewal of the precinct;
- it is directly integrated with public transport improvements, so that the additional floor space delivery is coordinated with a significant increase in public transport capacity;
- it is the subject of planned public domain improvements under the CSSI Approval, meaning the proposed OSD can contribute to and be integrated with an enhanced ground plane and public spaces;
- it is capable of being appropriately serviced to accommodate future development of the scale proposed;
- it has excellent access to a wide range of services and facilities that will support, and benefit from, the additional future occupants of the development; and
- the character of the surrounding area, including the existing built environment, and the likely future character, is compatible with and enhanced by the proposal.

5.34 Public Interest

It is in the public interest to enable the delivery of a world class commercial OSD that integrates grand civic spaces, high quality retail and offices with a world class transport gateway, and will be open for business alongside Sydney Metro in 2024. A development of this calibre and nature as part of a major new transport infrastructure initiative is extremely unique in the history of any city and must be fully realised. The proposed development represents the next stage in realising this vision, and the key objectives established under the Concept Proposal and CSSI consent, and is thereby in the public interest as it will:

- support Sydney's development as a compact and well-connected city;
- encourage sustainable behaviour by providing increased commercial floor space and associated jobs with direct access to new and existing public transport connections;
- provide the opportunity to deliver long lasting and significant public benefits either in the form of monetary contributions or works-in-kind to Sydney and NSW;
- create a significant number of jobs during construction, with the capacity to accommodate significantly more employees on the site when compared to the pre-demolition scenario;
- assist in the delivery of a city precinct that sets new standards in sustainability and wellbeing;
- contribute towards the vision for the Sydney CBD by enriching the Martin Place precinct, Sydney's premier civic and public space, and the adjoining CBD environment;
- create one part of a world class integrated public transport and employment hub that will deliver a superior customer experience to both Sydney Metro and Sydney Trains commuters;
- deliver a new office building that exhibits design excellence and contributes to the architectural legacy of the Sydney CBD; and
- enable the consolidation of Macquarie's operations at Martin Place, anchoring the broader Precinct, and providing the NSW Government with commercial certainty and early activation of the Precinct.

The proposed development is therefore considered to be within the public interest, and an essential next-step in realising the vision for site and ensuring the timely delivery of an integrated OSD and Station outcome on the North Site.

6.0 Environmental Risk Assessment

The Environmental Risk Assessment (ERA) establishes a residual risk by reviewing the significance of environmental impacts and the ability to manage those impacts. The ERA for the proposed South Tower has been adapted from *Australian Standard AS4369.1999 Risk Management and Environmental Risk Too*ls.

In accordance with the SEARs, the ERA addresses the following significant risk issues:

- Justification of impacts;
- consideration of potential cumulative impacts due to other development in the vicinity; and
- measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.

Figure 87 indicates the significance of environmental impacts and assigns a value between 1 and 10 based on:

- the receiving environment;
- the level of understanding of the type and extent of impacts; and
- the likely community response to the environmental consequence of the project;

The manageability of environmental impact is assigned a value between 1 and 5 based on:

- the complexity of mitigation measures;
- the known level of performance of the safeguards proposed; and
- the opportunity for adaptive management.

The sum of the values assigned provides an indicative ranking of potential residual impacts after the mitigation measures are implemented.

Significance of impact	Manageability of impact				
	5 Complex	4 Substantial	3 Elementary	2 Standard	1 Simple
1 – Low	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	3 (Low)	2 (Low)
2 – Minor	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	3 (Low)
3 – Moderate	8 (High/Medium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)
4 – High	9 (High)	8 (High/Medium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)
5 – Extreme	10 (High)	9 (High)	8 (High/Medium)	7 (High/Medium)	6 (Medium)

Figure 87 Risk Assessment Matrix

Table 20 Environmental Risk Assessment

Risk Item				Risk Assessment		
Item	**Phase**	**Potential Environmental Impact**	**Proposed Mitigation Measures and / or Comment**	**Significance of Impact**	**Manageability of Impact**	**Residual Impact**
Key: C – Construction, O: Operation						
Noise and vibration	C & O	Unacceptable noise and vibration impacts on sensitive noise receivers.	• The noise and vibration mitigation measures set out in the Acoustic Assessment prepared by Arup will be will be adopted for the construction phase. • The noise emission of mechanical plant and equipment associated with the development will be controlled so that the operation of such plant does not adversely impact nearby noise sensitive receivers including those within the proposed development site. Attenuation measures will include attenuators, acoustic louvres, equipment enclosures, sound absorption within plant rooms and internal duct lining. The detailed mechanical system noise control strategies will be developed as part of the detailed design. • The electrical plant and equipment will be assessed at the time of the detailed design having regard to nearby residential and commercial properties and criteria as discussed in the Acoustic Report. It is anticipated that a condition of consent will be imposed requiring compliance with the relevant standards.	3	3	6 Medium
Reflectivity	O	Unacceptable reflectivity on public domain and neighbouring properties	All glazing must have a reflectivity below 20%.	3	1	4 Low/Medium
Water quality and drainage	O	Unacceptable water quality entering into the stormwater network	An erosion and sediment control plan is to be prepared. Surface water management measures will be in accordance with the Landcom guidelines – Managing Urban Stormwater Runoff: Soils and Construction (“Blue Book”) and City of Sydney DCP. Potential erosion and sediment control measures for the development may include, but are not limited to, the following: • Settling basins/ sumps; • Surface water collection systems, i.e. drains to collected constructed site runoff and convey flows to control and treatment systems; • Shaker grid and wash down areas at vehicle entry points; and • Sediment protection devices on existing and proposed inlet pits.	2	2	4 Low/Medium
Construction traffic	C	• Impacts to intersection performance • Impacts on pedestrian movement	The appointed Contractor will prepare a final CPTMP which will be approved before construction commences. It is also proposed to establish a traffic control group with all key stakeholders which will meet regularly to discuss proposed traffic management measures during the various stages of the works and to discuss potential impacts and how to address or minimise	3	3	6 Medium

Risk Item				Risk Assessment		
Item	**Phase**	**Potential Environmental Impact**	**Proposed Mitigation Measures and / or Comment**	**Significance of Impact**	**Manageability of Impact**	**Residual Impact**
			those impacts. The final CPTMP will be generally in accordance with the Framework CPTMP prepared by Arup dated July 2018.			
Air quality	C	Unacceptable air quality effecting adjoining land uses and pedestrians	The mitigation measures set out in the Arup Air Quality Assessment will be adopted.	3	2	5 Low/Medium
Crime prevention	O	Environment that facilitates crime	• Provide clear definition and designation of space in a manner that encourages and predicts authorised movement and does not cause conflict between the intended purpose of the space and the desired behaviour. This has been achieved through early design input in to the South Tower, where demarcation and signage was advised on; • Maximise passenger circulation areas by minimising built structures and avoiding clutter, particularly along pedestrian routes that lead to the station concourse. This was achieved through consultation with the architects, providing input in to the open-space design of these routes; • Design and layout of building entrances and foyers to assist natural surveillance by reducing clutter and blind spots, positioning reception/concierge where they have clear sightlines of entrances, the general foyer areas, and waiting areas. This was achieved by positioning the South Tower secure line adjacent to the reception area, giving the concierge service the ability to have direct view of the entrance and exit points in to and from the lifts, as well as the general pedestrianised areas listed above; • Use of glass partitions wherever possible to improve site lines and the transmission of natural light, and be fitted with anti-graffiti coatings (where practical) where these partitions are accessible to the public. All entrance and exit partitions in the South Tower have been designed to be transparent; • Durable public furniture and amenity construction, to limit damage and subsequent repairs over the life of the facility; • The mixed-use areas will help ensure regular and diverse use of the facility which also enhances the territoriality aspects of the site, whilst enhancing the opportunity for natural surveillance. Encouraging regular and diverse use of the site through these and other measures has been recommended to the owners and operators of the site; • Adequate lighting has been provided throughout the site; • Control points between each external interface point and the site have been defined, heightening surveillance throughout the site;	3	3	6 Medium

Risk Item				Risk Assessment		
Item	**Phase**	**Potential Environmental Impact**	**Proposed Mitigation Measures and / or Comment**	**Significance of Impact**	**Manageability of Impact**	**Residual Impact**
			• Ensure public realm lighting is appropriate for use at night; • Provide signage throughout the precinct to remove excuses for loitering and littering, each being a significant detractor to territoriality. This has been advised and will be implemented by the relevant architect in the next phase of the design; and • Ensure signage is appropriate to improve way finding and reduce terrain vagueness within the precinct. This has been advised and will be implemented by the relevant architect in the next phase of the design.			
Security	C & O	Security threats to the construction and operation of the project	The mitigation measures set out in the Security Risk Report prepared by Arup will be adopted, including: • implementation of the recommendations from the CPTED report; • physical security measures; • hostile vehicle mitigation measures; • electronic access control; • CCTV; • intruder alarm systems (including duress); • help points; • intercoms; • a security monitoring centre; • on-site security officers; and • operational security measures including a security plan and Standard Operation Procedures.	5	3	8 High/Medium

7.0 Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed works are detailed in **Table 21** below. These measures have been derived from the previous assessment in **Section 5.0** and those detailed in appended consultants' reports.

Table 21 Mitigation Measures

Mitigation Measures
Noise and vibration • The noise and vibration mitigation measures set out in the Acoustic Assessment prepared by Arup will be will be adopted for the construction phase. • The noise emission of mechanical plant and equipment associated with the development will be controlled so that the operation of such plant does not adversely impact nearby noise sensitive receivers including those within the proposed development site. Attenuation measures will include attenuators, acoustic louvres, equipment enclosures, sound absorption within plant rooms and internal duct lining. The detailed mechanical system noise control strategies will be developed as part of the detailed design. • The electrical plant and equipment will be assessed at the time of the detailed design having regard to nearby residential and commercial properties and criteria as discussed in the Acoustic Report. It is anticipated that a condition of consent will be imposed requiring compliance with the relevant standards.
Reflectivity • All glazing must have a reflectivity below 20%.
Water quality and drainage. An erosion and sediment control plan is to be prepared. Surface water management measures will be in accordance with the Landcom guidelines – Managing Urban Stormwater Runoff: Soils and Construction ("Blue Book") and City of Sydney DCP. Potential erosion and sediment control measures for the development may include, but are not limited to, the following: • Settling basins/ sumps; • Surface water collection systems, i.e. drains to collected constructed site runoff and convey flows to control and treatment systems; • Shaker grid and wash down areas at vehicle entry points; and • Sediment protection devices on existing and proposed inlet pits.
Construction traffic • The appointed Contractor will prepare a final CPTMP which will be approved before construction commences. It is also proposed to establish a traffic control group with all key stakeholders which will meet regularly to discuss proposed traffic management measures during the various stages of the works and to discuss potential impacts and how to address or minimise those impacts. The final CPTMP will be generally in accordance with the Framework CPTMP prepared by Arup dated July 2018.
Air quality • The mitigation measures set out in the Arup Air Quality Assessment will be adopted.
Crime prevention • Provide clear definition and designation of space in a manner that encourages and predicts authorised movement and does not cause conflict between the intended purpose of the space and the desired behaviour. This has been achieved through early design input in to the South Tower, where demarcation and signage was advised on; • Maximise passenger circulation areas by minimising built structures and avoiding clutter, particularly along pedestrian routes that lead to the station concourse. This was achieved through consultation with the architects, providing input in to the open-space design of these routes; • Design and layout of building entrances and foyers to assist natural surveillance by reducing clutter and blind spots, positioning reception/concierge where they have clear sightlines of entrances, the general foyer areas, and waiting areas. This was achieved by positioning the South Tower secure line adjacent to the reception area, giving the concierge service the ability to have direct view of the entrance and exit points in to and from the lifts, as well as the general pedestrianised areas listed above; • Use of glass partitions wherever possible to improve site lines and the transmission of natural light, and be fitted with anti-graffiti coatings (where practical) where these partitions are accessible to the public. All entrance and exit partitions in the South Tower have been designed to be transparent; • Durable public furniture and amenity construction, to limit damage and subsequent repairs over the life of the facility; • The mixed-use areas will help ensure regular and diverse use of the facility which also enhances the territoriality aspects of the South Site, whilst enhancing the opportunity for natural surveillance. Encouraging regular and diverse use of the site through these and other measures has been recommended to the owners and operators of the South Site; • Adequate lighting has been provided throughout the site; • Control points between each external interface point and the site have been defined, heightening surveillance throughout the South Site;

Mitigation Measures

- Ensure public realm lighting is appropriate for use at night;
- Provide signage throughout the Precinct to remove excuses for loitering and littering, each being a significant detractor to territoriality. This has been advised and will be implemented by the relevant architect in the next phase of the design; and
- Ensure signage is appropriate to improve way finding and reduce terrain vagueness within the Precinct. This has been advised and will be implemented by the relevant architect in the next phase of the design.

Security

The mitigation measures set out in the Security Risk Report prepared by Arup will be adopted, including:

- implementation of the recommendations from the CPTED report;
- physical security measures;
- hostile vehicle mitigation measures;
- electronic access control;
- CCTV;
- intruder alarm systems (including duress);
- help points;
- intercoms;
- a security monitoring centre;
- on-site security officers; and
- operational security measures including a security plan and Standard Operation Procedures.

8.0 Justification of the Proposal and Conclusion

This EIS has been prepared to assess the environmental, social and economic impacts of the Stage 2 DA for the detailed design, delivery and operation of OSD above the southern entrance of the yet to be constructed Martin Place Metro Station. The EIS has addressed the issues identified in the SEARs (**Appendix B**) and Schedule 2 of the EP&A Regulations 2000, and has considered the relevant environmental planning instruments, built form, and social and environmental impacts resulting from the proposed development.

The purpose of this application is to facilitate the next stage in the delivery of the integrated Sydney Metro Martin Place Station Precinct, consistent with the vision established under the Concept Proposal (SSD 17_8351) (as proposed to be amended) the Sydney Metro City & Southwest project (CSSI 15_7400) to which the application relates. The integrated development has been designed as a public transport and employment hub, which will be constructed at the same time as and commence operating with the Sydney Metro.

With the construction of the Sydney Metro (a step change piece of transport infrastructure) there is a fundamental responsibility and fundamental expectation for the development to respond to the important opportunity and unique circumstances of the Precinct, and capitalise on the unparalleled access to public transport in the heart of the Sydney CBD.

The need for this development further stems from, and is consistent with, a range of government strategic studies that support accommodating additional jobs in Sydney and the coordinated delivery of increased capacity with infrastructure investment. At their highest level these planning policy documents are necessarily about enabling the evolution of a growing metropolitan area with sufficient flexibility and resilience to transcend change in the longer term.

The South Site OSD is born from a comprehensive design development process that has been shaped by the Concept Proposal, the recent LEP Amendment and site-specific clause in the Sydney LEP 2012, the establishment of a Design Review Panel and the adoption of site-specific design guidelines and heritage conservation principles, which together have informed the high-quality development. The proposal warrants approval for the following reasons:

- the proposal is permissible with consent and meets the requirements of the relevant statutory planning controls;
- the area and shape of the South Site allows for the provision of the proposal whilst not resulting in any unacceptable adverse impacts on surrounding buildings and uses;
- the proposal has been carefully tested and designed to consider important public view corridors, and to minimise shadows cast by the proposal in compliance with the relevant sun access planes, to reinforce the site's suitability to accommodate additional employment generating floor space;
- design guidelines developed as part of the Concept Proposal have ensured that the built form proposed byt this SSD DA performs an important role in making the city more distinctive, legible and with a discernible hierarchy of public spaces that can be appreciated from a variety of vantage points, distances and contexts;
- the heritage principles developed as part of the Concept Proposal and proposed to be implemented through this SSD DA have been successfully incorporated into the design, mitigating heritage impacts;
- the land is extremely well served by public infrastructure, particularly public transport infrastructure, and other utilities and public infrastructure are readily available and can be augmented to meet the needs of the additional business activities and population arising from the increased density;
- the proposal exhibits design excellence;
- the proposal is consistent with the principles of ecological sustainable development as defined by Schedule 2(7)(4) of the *Environmental Planning and Assessment Regulation 2000,* and will support a more ecologically sustainable development targeting a minimum 6 Star Green Star Office Design and As Built 2015 V1.1, NABERS Energy 5 Star and NABERS Water 3.5 Star;
- the proposal will revitalise the South Site in a manner that respects the cultural significance of the area, and accommodates the various user groups forming its future community;
- a number of benefits will be delivered as part of the Proposal that are intricately linked between the new Martin Place Metro Station and the OSD (such as an enhanced public domain, through-site connection, and the like);

- the proposal will provide for additional surveillance opportunities with the delivery of the future buildings and overall improvements to the Precinct, in turn increasing the perception of the area as a high quality and safe environment;
- the project has been informed by comprehensive pre-lodgement community consultation, with feedback from this consultation shaping the final design; and
- The proposal will promote considerable growth opportunities for the commercial heart of the Sydney CBD and enable it to prosper as Australia's leading global financial centre, which will have positive broader and longer-term impacts.

Given the planning merits described above, and the significant public benefits associated with the proposed development, it is recommended that this application be approved.