

VICTORIA CROSS STATION  
OVER STATION DEVELOPMENT

**CONCEPT STATE  
SIGNIFICANT  
DEVELOPMENT  
APPLICATION**

VOLUME ONE



# **GLOSSARY AND ABBREVIATIONS**





# Glossary and Abbreviations

Term	Definition
concept SSD Application	A concept development application as defined in section 4.22 of the EP&A Act, as a development application that sets out concept proposals for the development of a site, and for which detailed proposals for the site or for separate parts of the site are to be the subject of a subsequent development application or applications
Council	North Sydney Council
CSSI	Critical State Significant Infrastructure
CSSI Approval	The approval under the EP&A Act for the construction of the Sydney Metro City & Southwest Chatswood to Sydenham project, as amended by subsequent modification applications. The CSSI project (application number SSI 15_7400) was approved by the Minister for Planning on 9 January 2017 and has been amended on 18 October 2017 (Modification 1), 21 December 2017 (Modification 2), 22 March 2018 (Modification 3) and 13 December 2017 (Modification 4). Any reference to the CSSI Approval is a reference to the most current version of that approval as amended by any subsequent modification application.
detailed SSD Application	The SSD Application(s) made after the concept SSD Application is approved that seeks consent for the design and to physically carry out the development
EP&A Act	<i>Environmental Planning and Assessment Act 1979 (NSW)</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000 (NSW)</i>
EIS	Environmental Impact Statement
Heritage item	An item of environmental heritage listed in Schedule 5 of <i>North Sydney Local Environmental Plan 2013</i> or on the State Heritage Register under the <i>Heritage Act 1977</i>
Integrated Station Development	Integrated Station Development – combined station, OSD and public domain works
NSLEP 2013	North Sydney Local Environmental Plan 2013
NSDCP 2013	North Sydney Development Control Plan 2013
OSD	Over station development as defined in the CSSI Approval – includes non-rail related development that may occupy land or airspace above, within or in the immediate vicinity of the Sydney Metro CSSI but excluding spaces and interface works such as structural elements that may be constructed as part of the CSSI Approval to make provision for future developments
PIR	The Submissions and Preferred Infrastructure Report submitted as part of Sydney Metro City & Southwest Chatswood to Sydenham project, application no. SSI 15_7400.
Secretary	Secretary of the NSW Department of Planning and Environment, or their delegate
SSD	State Significant Development as defined by Section 4.36 of the <i>Environmental Planning and Assessment Act 1979</i> .
Station box	The volumetric area of the Victoria Cross Station development approved under the CSSI Approval – includes below and above ground elements up to the ‘transfer slab’ level, within and above which would sit the OSD.

Term	Definition
<p><b>Sydney Metro City &amp; Southwest – Chatswood to Sydenham project</b></p>	<p>The Chatswood to Sydenham component of Sydney Metro City &amp; Southwest involves the construction and operation of a 16.5 kilometre metro line from Chatswood, under Sydney Harbour and through Sydney’s CBD out to Sydenham.</p> <p>This section of Sydney Metro City &amp; Southwest will deliver seven new metro stations at:</p> <ul style="list-style-type: none"> <li>● Crows Nest</li> <li>● Victoria Cross</li> <li>● Barangaroo</li> <li>● Martin Place</li> <li>● Pitt Street</li> <li>● Central (new underground platforms)</li> <li>● Waterloo.</li> </ul> <p>This part of the project will operate between Chatswood and Sydenham Stations and also includes the upgrade of Sydenham Station.</p>
<p><b>Sydney Metro City &amp; Southwest –Sydenham to Bankstown Upgrade</b></p>	<p>The T3 Bankstown Line is being converted to Sydney Metro standards between Sydenham and Bankstown, including the upgrade of all 10 stations. These works are the subject of a separate Critical State Significant Infrastructure project (reference SSI 17_8256) which was lodged with the DP&amp;E in September 2017. This application is yet to be determined.</p>
<p><b>Sydney Metro CSSI</b></p>	<p>Sydney Metro City &amp; Southwest – Chatswood to Sydenham project</p>
<p><b>TfNSW</b></p>	<p>Transport for NSW- the applicant for the concept SSD Application</p>

# STATEMENT OF VALIDITY



# Statement of Validity

Item	Details
<b>Development application details (SSD 17_8874)</b>	
Applicant name	Transport for NSW
Responsible person	Fil Cerone, Director Sustainability Environment & Planning, Sydney Metro City & Southwest, Transport for New South Wales
Applicant address	PO Box K659 Haymarket NSW 1240
Land to be developed	In North Sydney: <ul style="list-style-type: none"> <li>● 155-167 Miller Street</li> <li>● 181 Miller Street</li> <li>● 187 Miller Street</li> <li>● 189 Miller Street</li> <li>● Land formerly part 65 Berry Street</li> </ul>
Proposed development	Sydney Metro Victoria Cross Over Station Development. A concept State Significant Development Application for over station development at the approved Victoria Cross Station, North Sydney. The application seeks consent for concept development including a maximum building envelope, maximum gross floor area, land uses, pedestrian and vehicle access, car parking, signage zones, future subdivision of part of the OSD footprint (if required) and structural, servicing and space provisioning integration with Victoria Cross Station which was approved as Critical State Significant Infrastructure (SSI 15_7400) by the Minister for Planning on 9 January 2017 (as modified). The application also seeks approval for strategies for stormwater management, ecological sustainable development, public art and design excellence.
<b>Environmental Impact Statement prepared by:</b>	
Name	Adam Coburn Western Sydney Practice Director Mecone Pty Ltd
Qualifications	Master of Planning - University of Technology Sydney Bachelor of Environmental Planning - University of Western Sydney
Address	Level 7, 91 Phillip Street, Parramatta 2150
Declaration	I declare that I have prepared the contents of this Environmental Impact Statement and to the best of my knowledge: <ul style="list-style-type: none"> <li>● it is in accordance with Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i></li> <li>● it includes all available information that is relevant to the environmental assessment of the development to which the Statement relates</li> <li>● the information contained in the Statement is neither false nor misleading.</li> </ul>
Signature	
Date	18 May 2018

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# EXECUTIVE SUMMARY





# Executive Summary

## Introduction

Sydney Metro is Australia's biggest public transport project.

Services start in 2019 in the city's North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. Sydney Metro includes new CBD railway stations underground at Martin Place, Pitt Street and Barangaroo, and new metro platforms under Central.

In 2024, Sydney Metro will have 31 stations on a new 66-kilometre rail system – the biggest urban rail project in Australian history. Sydney Metro will have ultimate capacity for a train every two minutes in each direction under the CBD.

Sydney Metro will revitalise communities, transform places and make the nation's only global city more liveable and connected.

Not only will this new mass transit system move more people safely and reliably than ever before, it will unlock the potential of Sydney as a growing global city, creating new and diverse opportunities to support changing communities.

Joining other great global mass transit development initiatives, the NSW Government has identified Sydney Metro stations which can be better integrated with the areas around them, creating world-class places that will shape our city's future.

In building new metro stations for Sydney, an exciting opportunity exists to integrate global best practice and innovative thinking to create a sense of place.

Vibrant neighbourhoods help strengthen communities, attract investment and enhance liveability. A dynamic place integrates restaurants, parks, footpaths, buildings and other public spaces to invite greater interaction between people and foster healthier, more social and economically viable communities.

### **Victoria Cross Integrated Station Development**

Victoria Cross station is in the heart of the North Sydney CBD – a growing commercial and residential precinct.

The new station will support the continued growth of North Sydney, adding to the vibrancy of the area through new employment and retail opportunities, improved pedestrian connections and high quality outdoor spaces.

Only six minutes to the heart of the city at Martin Place and four minutes to Barangaroo, North Sydney will be more connected than ever before.

Situated at the corner of Miller and Berry Streets, the new Victoria Cross Over Station Development (OSD) represents a unique opportunity to create a new precinct in the heart of North Sydney that has seamless access to retail, commercial offices and transport infrastructure.

The concept proposal for the Over Station Development (OSD) at Victoria Cross is a 42-storey commercial tower above the station's southern entrance integrating retail opportunities and enhancing North Sydney as a thriving commercial, residential, retail and entertainment hub.

The proposed future development will sit prominently in the North Sydney skyline and complement neighbouring developments including existing heritage buildings and nearby buildings currently under construction.

As new metro stations are built underground, the opportunity exists for the procurement of the stations and OSDs as a single Integrated Station Development package which would encourage delivery at the same time and provide the flexibility for the OSD to be delivered in line with market conditions. Concurrent construction of the station, public domain works and OSD would help to reduce community impacts and would allow for the whole development to be completed close to when Sydney Metro services start in 2024.

Other opportunities to deliver station and public domain works as part of Integrated Station Developments have been identified at Crows Nest, Martin Place, Pitt Street and Waterloo stations.

TfNSW is progressing the concept State Significant Development (SSD) Application for the Victoria Cross OSD, which seeks approval for a building envelope (i.e. volumetric parameters), maximum gross floor area (GFA), land uses, future subdivision (if required) and general development strategies to inform the future detailed design of the OSD. The building envelope has been designed to allow a future commercial office building to sit above and be fully integrated with the Victoria Cross station, forming a single Integrated Station Development.

This concept SSD Application is the first stage in the development assessment process for the OSD. Consent is not sought for any construction or other physical work as part of this application, although a high level assessment of potential construction related impacts is provided.

## Sydney Metro City & Southwest planning approval

In January 2017, the construction of the initial portion of Sydney Metro Stage 2 (Chatswood to Sydenham) was approved by the Minister for Planning under Part 5.1 (now Division 5.2) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as a Critical State Significant Infrastructure project (SSI 15\_7400). The project (hereafter referred to as the CSSI Approval) includes the delivery of seven new Metro stations, including a new station at Victoria Cross at North Sydney.

Since its determination, four modifications have been lodged to modify various aspects of the CSSI Approval. These modification applications relate to Victoria Cross and Artarmon Substation, Central Walk, Martin Place Station (associated with changes proposed by Macquarie Group in their Unsolicited Proposal) and Sydenham Station and Sydney Metro Trains Facility South. Further detail in respect to each application is provided in Chapter 1.2.1 of this EIS.

The remainder of Stage 2 of the City & Southwest project (Sydenham to Bankstown) proposes the conversion of the existing heavy rail line and the upgrade of the existing railway stations along this alignment to Metro standards. This part of the project, referred to as the Sydenham to Bankstown Upgrade, is the subject of a separate CSSI Application (No. SSI 17\_8256) for which an Environmental Impact Statement was exhibited between September and November 2017.

## Planning relationship between Victoria Cross Station and Victoria Cross OSD

While the Victoria Cross Station and OSD will form a single Integrated Station Development, the planning pathways defined under the *Environmental Planning & Assessment Act 1979* require separate assessment for each component of the development. In this regard, the approved station works (CSSI Approval) are subject to the provisions of Part 5.1 of the EP&A Act (now referred to as Division 5.2) and the OSD component is subject to the provisions of Part 4 of the EP&A Act.

The station works under the CSSI Approval include the construction of below and above ground structures necessary for delivering the station and also enabling construction of the integrated OSD. This includes but is not limited to:

- demolition of existing development
- excavation
- station structure including concourse and platforms
- lobbies
- retail spaces within the station
- public domain improvements
- pedestrian through-site link
- access arrangements including vertical transport such as escalators and lifts
- structural and service elements and relevant space provisioning necessary for constructing OSD, such as columns and beams, space for lift cores, plant rooms, access, parking and building services.

The vertical extent of the approved station works is defined by the 'transfer slab' level (which for Victoria Cross is defined by RL 82), above which would sit the OSD, as illustrated in Figure 1 below.

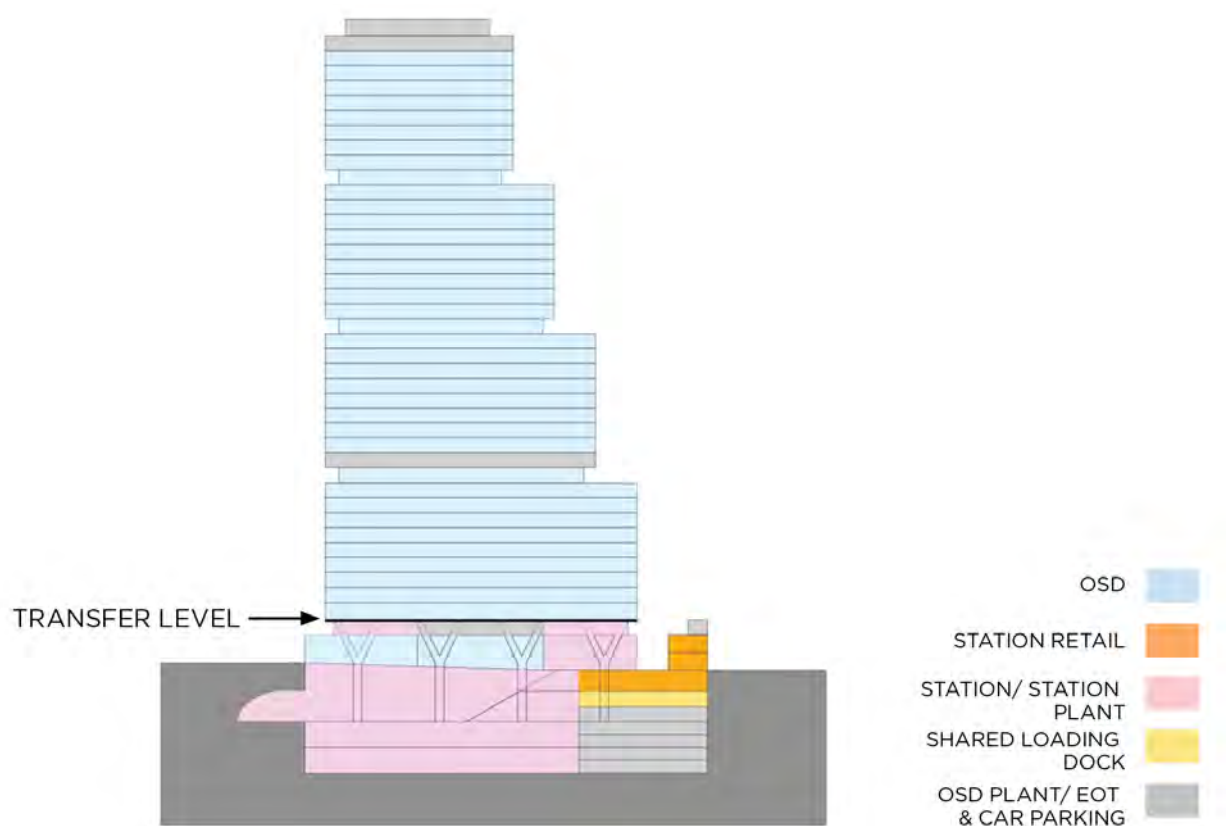


Figure 1 - Delineation between station and OSD (Note: EOT = End of trip facilities)

However, the use of the OSD spaces physically provisioned for in the CSSI Approval are included as part of this concept proposal (e.g. area within the basement identified for use as car parking). The future fit-out of these conceptual spaces would be subject to the more detailed SSD Application.

The CSSI Approval also establishes the general concept for the ground plane of Victoria Cross Station including access strategies for commuters, pedestrians and workers. In this regard, pedestrian access to the station would be from Miller and Denison Streets and the commercial lobby would be accessed from Miller Street. Retail uses (approved under the CSSI Approval) would be located on the ground floor of the development at both the Miller Street and Denison Street levels, activating the through site link. Separate consent would be sought in the future for the fit out and specific use of this retail space.

Since the issue of the CSSI Approval, TfNSW has undertaken sufficient design work to determine the space planning and general layout for the station and identification of those spaces within the station area that would be available for the OSD. In addition, design work has been undertaken to determine the technical requirements for the structural integration of the OSD with the station. This level of design work has informed the concept proposal for the OSD. It is noted that ongoing design development of the works to be delivered under the CSSI Approval would continue with a view to developing an Interchange Access Plan (IAP) and Station Design Precinct Plan (SDPP) for Victoria Cross Station to satisfy Conditions E92 and E101 of the CSSI Approval.

The public domain improvement works around the site would be delivered as part of the CSSI Approval.

## Planning context

This Environmental Impact Statement (EIS) has been prepared by TfNSW for submission to the NSW Department of Planning and Environment (DP&E) in support of a concept SSD Application for OSD comprising a commercial tower integrated with the future Victoria Cross Station, which is part of the new standalone Sydney Metro rail network.

*State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP) identifies development considered to be State significant. Under the criteria in Clause 19(2) of Schedule 1 of the SRD SEPP, this proposal is SSD, as it is within a rail corridor, is associated with railway infrastructure for the purposes of commercial premises and has an estimated capital investment value in excess of \$30 million. Accordingly, it also qualifies as SSD for the purposes of section 4.36 of the EP&A Act.

This application is being made under Part 4 of the EP&A Act and comprises a 'concept application' under section 4.22 of the EP&A Act. It forms the first stage of the Victoria Cross OSD project and sets the planning framework (height, setbacks, floor space, carparking, access and land use) against which future detailed SSD applications will be assessed. The concept design for the OSD has been designed to be fully integrated with the current stage of station design for Victoria Cross Station. No physical works are proposed under this application.

The EP&A Act requires that an EIS be prepared for SSD, including particulars of the location, nature and scale of the development and an assessment of the development's environmental impact under section 4.15. The EIS must be prepared in accordance with the requirements referred to in the EP&A Act and *the Environmental Planning and Assessment Regulation*. This includes the Secretary's Environmental Assessment Requirements (SEARs) issued by the Secretary of the DP&E (Appendix A).

This EIS has been prepared for exhibition and assessment by the DP&E and the application will be determined by the NSW Minister for Planning.

## Project objectives

The following objectives have been identified for this concept SSD Application following an assessment of the site opportunities and constraints:

- support the NSW Government's planning strategies and objectives, including the *Greater Sydney Region Plan* (2018) and the *North District Plan* (2018)
- support North Sydney Council's strategies and objectives for the area as outlined in Council's *Sydney Metro Planning Study* (2016), *North Sydney Centre Capacity and Land Use Strategy* (2017) and the accompanying planning proposal giving effect to the strategy's recommendations
- enable the development of a world-class office building that caters to the needs of North Sydney's skilled workforce
- build on the strength of North Sydney CBD as one of Sydney's primary office markets
- enhance the customer experience and urban amenity through the development of an integrated design concept that ensures delivery of a quality public domain area with strong connections to the surrounding area
- create an urban environment that drives high usage of the new Metro rail, responding directly to the principles of transit oriented development
- provide the opportunity to deliver the OSD as early as possible with the aim of opening concurrently or shortly following completion of the metro station
- provide a built form that minimises overshadowing impacts to surrounding Special Areas and dwellings outside North Sydney CBD
- enable a design that responds sensitively to surrounding heritage items

## Project need and benefits

Victoria Cross Station is a key new station on the future Sydney Metro network. The station will provide a new focal point for North Sydney CBD, extend the rail catchment north within the North Sydney CBD and reduce overcrowding at North Sydney Station. The station will also improve access to North Sydney's highly-skilled job market and education facilities and improve pedestrian access in the area.

This concept SSD Application for OSD capitalises on the benefits of the future Victoria Cross Station by proposing a commercial tower directly above the station. Additional commercial uses in this location would strengthen North Sydney's role as a primary office market in an internationally competitive Sydney and would align with a key action in the *North District Plan* by maximising the land use opportunities provided by the station.

This concept SSD Application also responds to the need for revitalisation of the commercial stock in North Sydney CBD. Without the renewal of the commercial office stock, there is a risk that the overall quality of the North Sydney office market will deteriorate over time and diminish North Sydney's role as one of Sydney's prime office markets. This application responds positively to this issue by providing the framework for a world-class office building in an ideal location directly above future high-frequency public transport.

## The concept proposal

This concept SSD Application seeks concept approval in accordance with Section 4.22 of the EP&A Act for OSD above the approved Victoria Cross Station (southern portal). This application establishes the planning framework and strategies to inform the detailed design of the future OSD and specifically seeks approval for:

- a building envelope as illustrated in Figure 2
- a maximum building height of Relative Level (RL) 230 or 168 metres (approximately 42 storeys) for the high rise portion of building envelope and RL 118 or 55 metres (approximately 13 storeys) for the lower rise eastern portion of the building envelope. It is noted that this comprises approximately 40 commercial storeys with two additional storeys to support rooftop plant
- a maximum gross floor area (GFA) of 60,000 square metres for the OSD component, which is equivalent to a floor space ratio of 12.46:1
- use of the building envelope area for commercial premises including commercial office, retail and business premises
- use of the conceptual OSD space provisioning within the footprint of the CSSI Approval (both above and below ground), including the OSD lobby and associated retail space, basement parking, end-of-trip facilities, services and back-of-house facilities
- car parking for a maximum of 150 parking spaces over four basement levels with an additional 11 parking spaces allocated to the station retail approved under the terms of the CSSI Approval
- loading, vehicle and pedestrian access arrangements from Denison Street
- strategies for utilities and services provision
- strategies for the management of stormwater and drainage
- a strategy for the achievement of ecologically sustainable development
- indicative signage zones
- a strategy for public art
- a design excellence framework
- the future subdivision of parts of the OSD footprint (if required)

As this concept SSD Application is a staged development pursuant to section 4.22 of the EP&A Act, future approval would be sought for the detailed design and construction of the OSD.

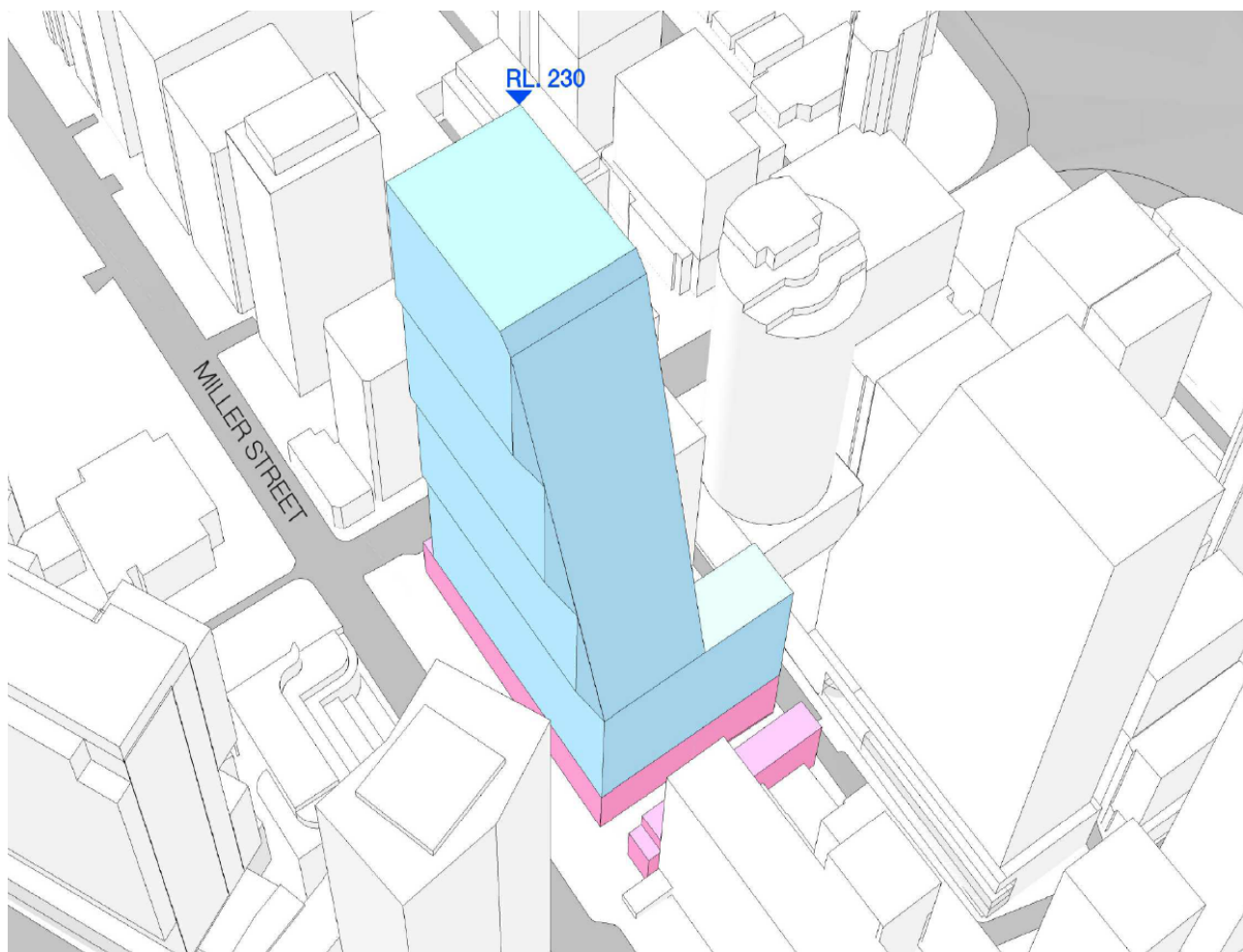


Figure 2 – Proposed Victoria Cross OSD building envelope (axonometric diagram from southwest)

## Assessment of impacts and mitigation measures

This EIS has been prepared in accordance with the provisions of Part 4 of the EP&A Act, including key requirements to address the SEARs issued for the project.

Key environmental issues have been examined throughout the design and development process. Consultation has been carried out with key stakeholders to identify potential impacts at an early stage. Where possible, measures to avoid or mitigate impacts have been recommended.

An overview of the impacts and measures proposed to minimise and/or address these impacts is provided below. More detailed assessment is provided in Chapter 8 of this EIS, supported by a range of Technical Papers included as appendices to this EIS. Measures proposed to manage impacts are addressed in Chapter 13 of this EIS.



## Built form

The height, form and setbacks of the proposed building envelope respond sensitively to the site and surrounding context, including adjoining heritage buildings. Key features of the building envelope include:

- a maximum height and form that allows for A-grade commercial floor plates
- an 18-metre south setback that opens up views to the heritage-listed MLC Building and improves amenity to the through-site link to be delivered under the CSSI Approval
- a tapered southern elevation that improves solar access to the through-site link to be delivered under the CSSI Approval
- a subtly stepped setback along Miller Street, which requires a variation to NSLEP 2013 but allows for a unique design solution appropriate to the site's important role as a key station on the Metro network

In order to ensure the future detailed design and construction of the OSD achieves a high quality design suitable to its landmark location, a Design Excellence Strategy has been prepared (Appendix C). This strategy outlines a process for managing design excellence in the future detailed design and delivery of the development. Design Guidelines (Appendix CC) have also been developed to guide the detailed design of the OSD.

## View impacts

### *Impacts on surrounding vantage points*

A View Impact Assessment has been prepared to determine the concept proposal's visual effects when seen from key locations within North Sydney and the surrounding area (including some City of Sydney locations). The assessment has concluded that the proposal would be visually prominent when seen from certain vantage points in the local area. However, this is considered acceptable, as the building envelope would result in a built form which is appropriate to the CBD context and is consistent with controls in Council's recently exhibited *North Sydney Centre Planning Proposal*.

When seen from across Sydney Harbour, the proposal would appear compatible with surrounding context and would be largely screened by existing and under-construction development.

### *Impacts on Beau Monde Apartments building*

A separate assessment has been conducted to determine impacts on the views of residents of the neighbouring Beau Monde Apartment building. The assessment concluded that the envelope would cause minor to significant loss of land-sky interface views to the southwest and the west, although only partially assessed due to limitations in gaining access to apartments within the Beau Monde development. Notwithstanding this, the assessment concluded that the building envelope would cause minor to major loss of land-sky interface views to the southwest and the west, although none of the affected views are described as iconic. The Visual Impact Assessment found that the development is consistent with Planning Practice Principles established by the Land and Environment Court of NSW.

The building envelope has been designed to minimise view loss, in particular through its large 18-metre south setback and tapered southern elevation.

The building envelope is also appropriate to the commercial core and is consistent with planning controls proposed in the *North Sydney Centre Planning Proposal*.



## Overshadowing

Detailed overshadowing analysis has demonstrated that the proposed envelope would result in no net increase in overshadowing to surrounding Special Areas and land zoned RE1 Public Recreation (including Brett Whiteley Plaza and the Miller Street Special Area) during the times nominated in NSLEP 2013 and the *North Sydney Centre Planning Proposal*, when assessed against the environment of the site before the integrated station demolition and redevelopment commenced.

The proposed building envelope would overshadow the Tower Square and Elizabeth Plaza Special Areas; however these areas are proposed to be removed under the *North Sydney Centre Planning Proposal*, which is expected to be gazetted prior to determination of this application.

The proposed building envelope would also result in some additional overshadowing to dwellings outside the CBD, but this overshadowing is considered acceptable, as it is minor and complies with the relevant provisions of NSLEP 2013 and recognised residential amenity standards such as those contained in NSDCP 2013.

## Heritage

Assessment of heritage impacts has demonstrated that the proposed building envelope would result in no unacceptable impacts to the significance of any surrounding heritage items, including the adjoining MLC Building and the nearby Rag & Famish Hotel. The scale, form and composition of the proposed building envelope are such that key views to these items would remain intact.

Importantly the building envelope is setback 18 metres from the south boundary to respect the neighbouring MLC Building and open up views to the building's tiled northern facade. Also, the eastern portion of the building envelope is lowered in height to reference the height of the MLC Building and to create a more appropriate scale along Denison Street, which is planned for pedestrianisation.

The Statement of Heritage Impact accompanying this EIS provides recommendations to be considered as part of future detailed design and detailed SSD Application(s) for the OSD, including the use of high quality building materials that are compatible with the surrounding built environment and the application of architectural detailing which responds to the height of the MLC Building and other medium-scale buildings in the vicinity.

## Transport

Vehicular and bicycle access to the OSD would be via a basement ramp from Denison Street. Pedestrians would be able to access the OSD via a lobby fronting Miller Street.

A total of 161 vehicle parking spaces are proposed for the entire Integrated Station Development in the basement levels, which constitutes a net decrease of 45 spaces compared to the site's previous development. A total of 150 spaces are proposed for OSD use. These quantities are consistent with maximum rates under *North Sydney Development Control Plan 2013* (NSDCP 2013).

The physical access, loading dock and car parking areas are being delivered under the CSSI Approval.

Assessment of traffic impacts has demonstrated that the entire Victoria Cross Integrated Station Development, including the OSD, would result in a net increase of approximately 33 additional traffic movements during the AM peak (the busiest period) including from cars and service vehicles. This is a minor increase and would have no noticeable impact on the surrounding road network. No upgrades to the surrounding road network would be required to facilitate the development.

### **Prescribed airspace for Sydney Airport**

The proposed building envelope has been assessed having regard to the building height limitations associated with Sydney Airport prescribed airspace. The proposed building envelope is below the relevant Procedures for Air Navigation Surfaces-Aircraft Operations (PANS-OPS) surface and Radar Terrain Clearance Chart Height (RTCC); however, it breaches the relevant Obstacle Limitation Surface (OLS) by 74 metres. Any breach of the OLS by future OSD would constitute a 'controlled activity' under the *Airports Act 1996* and would trigger a safety assessment by the airport operator, Civil Aviation Safety Authority (CASA) and Airservices Australia, with the Department of Infrastructure and Regional Development (DIRD) being the final approval authority.

The formal application for the controlled activity approval would be made to DIRD during the detailed SSD Application stage when the final building height and crane heights required for construction are known.

### **Ecologically sustainable development**

An Ecologically Sustainable Design (ESD) Framework has been prepared to define the principles that will be incorporated into the future design, construction and operation of the OSD. A series of sustainability strategies have also been prepared with the intention that these be considered and developed further in the future design of the OSD to ensure that the development will reflect best practice sustainable building principles to improve environmental performance, including energy and water efficient design and technology, and use of renewable energy. These strategies have been grouped by two levels of performance:

- proposed targets and features which set out proposed minimum standards of performance and indicative design features
- world best practice/innovation, which outlines opportunities for higher sustainability benchmarks to be achieved, subject to feasibility analysis in future stages of the project.

The future detailed SSD Application would be required to address how the proposed OSD development aligns with these requirements.

### **Construction management**

A Preliminary Construction Management Statement has been prepared by TfNSW to address how future stages of the project would manage impacts to pedestrians, Metro users, bus services and taxis. The statement considers the potential impacts associated with the three potential staging scenarios for construction of the Integrated Station Development and provides preliminary mitigation measures for managing impacts for each stage.

### **Noise and vibration impacts**

A number of potential sources of noise emissions from future OSD have been identified, including traffic flow, car park and loading bay movements, and building services. It has been found that these emissions would be sufficiently mitigated by the future building structure itself or through implementation of standard noise treatments, which would be explored at the future detailed SSD Application stage.

In regards to noise intrusion into the future OSD, impacts would be able to be sufficiently mitigated through the use of standard glazing treatments and plant placement.

The isolation of noise and vibration from Sydney Metro will occur at the source, not within future OSD, and would adequately attenuate structure-borne rail-induced noise and vibration in the OSD to acceptable levels. Therefore no special mitigation measures are necessary within the OSD.

### **Economic impacts**

The concept proposal would provide for up to 60,000 square metres of commercial floor space in North Sydney CBD, including office and retail uses. This floor space would cater to the North Sydney market demand (North Sydney CBD is currently experiencing historically low office vacancy rates) and would align with Council's strategic objective of maximising the site's commercial potential to take advantage of the productivity benefits of Sydney Metro. The proposed commercial floor space has the capacity to accommodate approximately 4,200 jobs during the operation phase.

### **Signage**

Four indicative signage zones are proposed as part of this concept SSD Application – two at the top of the building on the south and east elevations for building naming rights and two for tenant identification associated with the commercial lobby facing Miller Street and the retail tenancy facing Berry Street. These zones are integrated into the building design and are typical of surrounding commercial towers in the locality.

The signage zones have been assessed against SEPP 64 and the relevant NSDCP 2013 controls and have been found to be acceptable. Specific signage within the zones would be proposed in a future application.

### **Other issues**

A number of other issues have been assessed in this EIS including:

- utilities, infrastructure and services
- stormwater and flooding
- accessibility
- crime prevention through environmental design (CPTED)
- waste management
- wind impacts.

No issues or major risk or consequence were identified. Management and mitigation measures have been identified to minimise any potential impacts.

## Framework for Management of Design and Environmental Impacts

Given the integration of the delivery of the metro station with an OSD development, TfNSW has given consideration to the management of impacts associated with the project. The project approach to environmental mitigation and management identified for the CSSI is illustrated in Figure 3 and includes:

- project design – measures which are inherent in the design of the project to avoid and minimise impacts
- mitigation measures – additional to the project design which are identified through the environment impact assessment
- construction environmental management framework – details the management processes and documentation for the project
- construction noise and vibration strategy – identifies measures to manage construction noise and vibration
- design guidelines – provides an assurance of end-state design quality
- environmental performance outcomes – establishes intended outcomes which would be achieved by the project

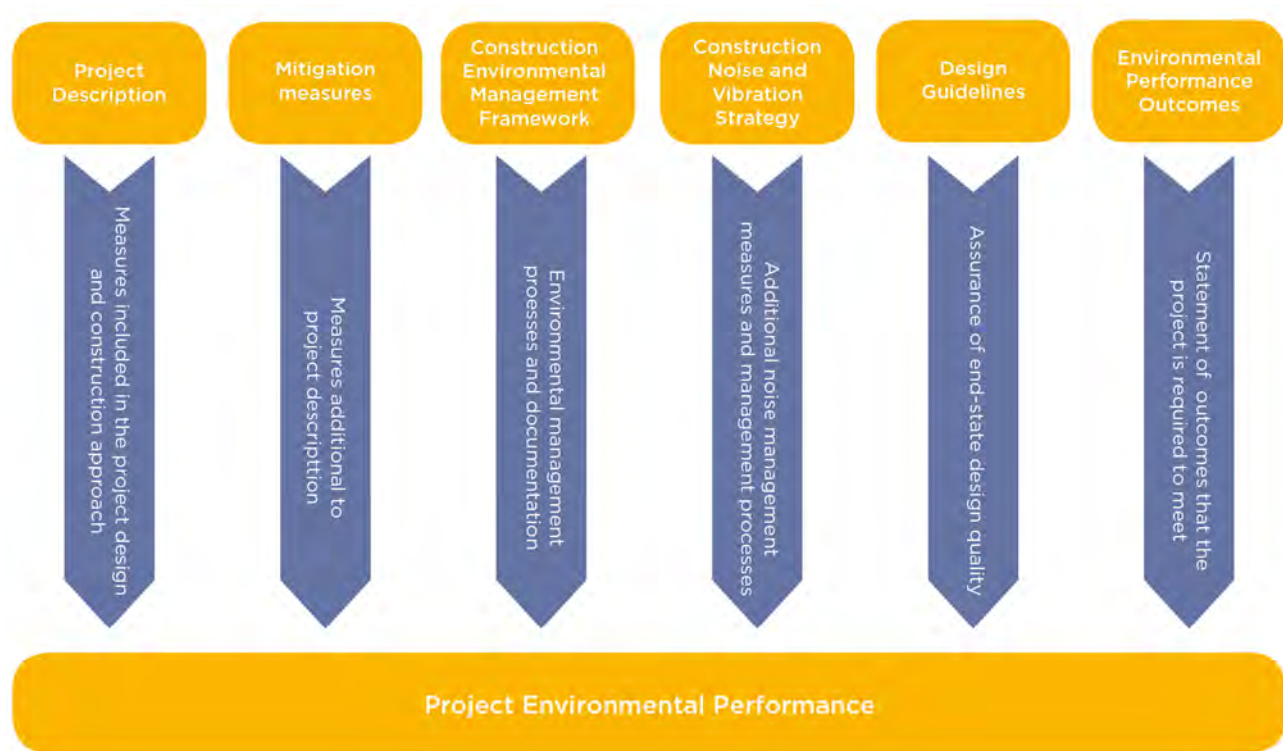


Figure 3 – Project approach to environmental mitigation and management

TfNSW proposes to implement a similar environmental management framework where the integrated delivery of the CSSI station works and the OSD occur concurrently. This would ensure a consistent approach to management of design interface and construction-related issues.

TfNSW proposes this environmental management framework would apply to the OSD until completion of the station and public domain component of the Integrated Station Development delivery contract (i.e. those works under the CSSI Approval). Should the OSD be constructed beyond the practical completion and opening of the station, standard practices for managing construction-related environmental impacts would apply in accordance with relevant guidelines and Conditions of Approval for the detailed SSD Application(s).

Further detail regarding this framework and how it would be applied is included in Chapter 8.16 of this EIS.

## Community consultation

As part of the preparation of this application, consultation was conducted with a range of stakeholders. Key consultation activities included:

- An industry briefing, held in November 2017 in Sydney. This event provided detailed information on Sydney Metro Integrated Station Developments and was attended by 640 industry representatives.
- A community information session (advertised by letterbox drop, newspaper advertisements, media release and website forums) held on 16 November 2017 and was attended by 52 community members.
- Engagement with multiple State and local government agencies and public authorities prior to submission to brief them on the project, including, but not limited to, North Sydney Council, Greater Sydney Commission, Department of Planning and Environment, Roads and Maritime Services, Government Architect of NSW, Sydney Airport Corporation Limited and Civil Aviation Safety Authority, Ausgrid, Sydney Water and Jemena.
- Place Managers engaged by TfNSW to build relationships and act as a feedback mechanism. Place Managers have engaged with neighbouring residents, tenants and businesses around the Victoria Cross Station site throughout the preparation of this application.

Feedback received from consultation has been incorporated into the design of the proposed envelope where appropriate.

The DP&E will place this concept SSD Application on public exhibition during which time community members and other stakeholders will be able to review the application and make a written submission.

Should this application be approved, TfNSW would continue engagement activities throughout the course of the project.

## Conclusion and justification

The Victoria Cross OSD would be a new commercial hub in North Sydney. It would support the continued growth of North Sydney's commercial core through new employment opportunities, aligning with State and local strategies, and would improve the vibrancy of the area through new retail spaces, improved pedestrian connections and high quality outdoor spaces.

The new development would sit prominently in the North Sydney skyline and complement neighbouring developments and nearby buildings currently under construction.

The development would contribute to strategic employment needs and anticipated benefits, taking into account the objectives of the EP&A Act and matters of ecologically sustainable development. The development is considered to best meet the objectives when compared to all other alternatives considered.

Key environmental issues have been examined throughout the design process and preparation of this EIS. Consultation has been carried out with key stakeholders to identify potential impacts and to develop mitigation measures where required. Using the measures and commitments specified in this EIS the identified environmental impacts are considered to be acceptable and manageable.

## Next steps

TfNSW is seeking approval from the Minister for Planning for a commercial tower over the Victoria Cross Station. Subsequent steps in the process include:

- exhibition of the SSD Application and EIS in accordance with the relevant statutory requirements and invitation for the community and stakeholders to make submissions
- consideration of submissions received by the Secretary of DP&E. Submissions received would be placed on the DP&E's website and a copy would be provided to TfNSW
- TfNSW may then be required to prepare and submit:
  - ◆ a submissions report, responding to issues raised in the submissions
  - ◆ a preferred project report, outlining any proposed changes to the concept proposal to minimise its environmental impacts or to deal with any other issues raised
- determination of the concept SSD Application by the Minister for Planning or his delegate (if approved, the determination may include modifications to the development and/or Conditions of Approval).

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# INTRODUCTION

## CHAPTER ONE





# 1. Introduction

## 1.1 Purpose of this Statement

This Environmental Impact Statement (EIS) is submitted by Transport for NSW (TfNSW) to the NSW Department of Planning and Environment (DP&E) in support of a concept State Significant Development application (concept SSD Application or concept proposal).

The concept SSD Application is made under section 4.22 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and seeks approval for an Over Station Development (OSD) comprising a commercial office tower with ground floor retailing integrated with the southern portal of the future Victoria Cross Station. Victoria Cross Station is part of the new standalone Sydney Metro rail network.

Sydney Metro is Australia's biggest public transport project. It presents a major opportunity to shape Sydney for generations to come and will be a legacy for our evolving global city. Sydney Metro will move more people than ever before in a safe and reliable way; facilitating Sydney as a growing global city by providing opportunities to strengthen existing centres, revitalise communities and create great places.

In accordance with State and local strategic objectives, the OSD seeks to maximise the land use opportunities associated with Sydney Metro, support business activity in North Sydney's commercial core, drive a high level of patronage on the new metro rail and contribute to the creation of a single Integrated Station Development. The OSD would be prominent within the North Sydney skyline and would form a new landmark destination and focal point for the CBD that would complement neighbouring development, including existing heritage buildings and new high-rise buildings currently under construction (Figure 4).



Figure 4 - Indicative OSD in North Sydney CBD context

This concept SSD Application is the first stage of the Victoria Cross OSD project. The second stage will be a detailed SSD Application for the design and construction of the OSD.

The concept proposal seeks approval for a building envelope (i.e. volumetric parameters), maximum gross floor area (GFA), land uses future subdivision (if required) and general development strategies to inform the future detailed design of the OSD. The building envelope has been designed to allow a future commercial office building to sit above and be fully integrated with the Victoria Cross Station, forming a single Integrated Station Development. No physical works are proposed as part of this concept SSD Application. The application includes an indicative OSD design to demonstrate one potential design solution. Its integration (structural, architectural and functional) with the station structure has been informed by the current stage of design work undertaken for the station prepared on behalf of TfNSW.

The proposed building envelope is considered to provide an appropriate design response to the site constraints and its North Sydney CBD context.

The concept proposal is classified as State significant pursuant to Clause 19(2) of *State Environmental Planning Policy (State and Regional Development) 2011*, as it is within a rail corridor, is associated with railway infrastructure for the purposes of commercial premises and has an estimated capital investment value in excess of \$30 million. Accordingly, it also qualifies as State Significant Development for the purposes of section 4.36 of the EP&A Act.

## 1.2 Sydney Metro City & South West – Chatswood to Sydenham

### 1.2.1 Overview

Sydney Metro consists of two stages – Sydney Metro Northwest (Stage 1), which is due for completion in 2019 and Sydney Metro City & Southwest (Stage 2) which is due for completion in 2024 (refer to Figure 5). Once complete, Sydney Metro will have ultimate capacity for a train every two minutes through the Sydney CBD in each direction – a level of service never seen before in Sydney.

The application for Sydney Metro City & Southwest – Chatswood to Sydenham (the initial portion of Stage 2) was lodged by TfNSW as a Critical State Significant Infrastructure project (reference SSI 15\_7400) and was approved by the Minister for Planning in January 2017. The project is described in the approval (hereafter referred to as the CSSI Approval) as follows:

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

The seven stations identified in the approval are at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Central (new underground platforms) and Waterloo.

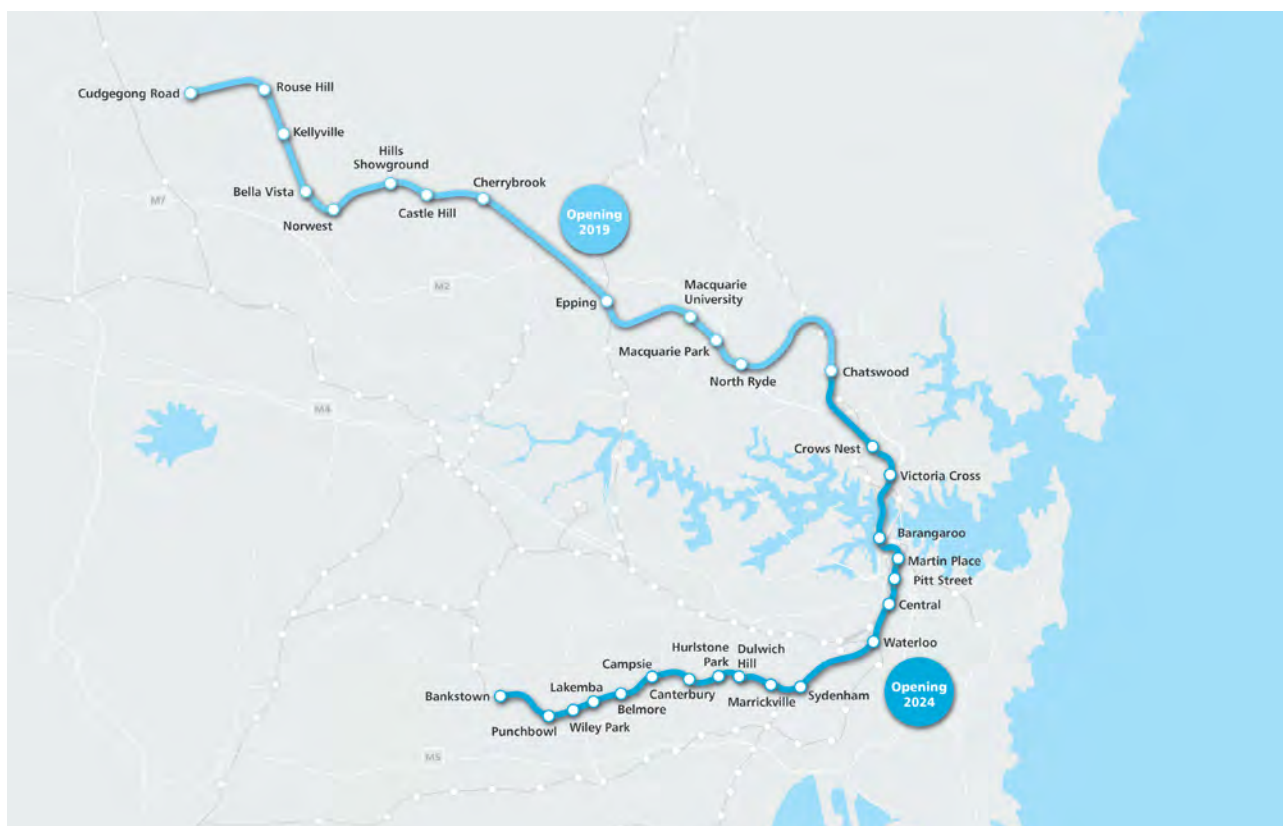


Figure 5 – Sydney Metro alignment map

Since the Chatswood to Sydenham CSSI Approval was issued, TfNSW has lodged four modification applications to amend the approval as outlined below:

- Modification 1 – Victoria Cross and Artarmon Substation which involves relocation of the Victoria Cross northern services building in North Sydney from 194-196A Miller Street to 50 McLaren Street together with inclusion of a new station entrance at this location referred to as Victoria Cross North. It is noted that works at Victoria Cross North do not form part of the current concept SSD Application. 52 McLaren Street would also be used to support construction of these works. The modification also involves the relocation of the substation at Artarmon from Butchers Lane to 98-104 Reserve Road. This modification application was approved on 18 October 2017.
- Modification 2 – Central Walk which involves additional works at Central Railway Station including construction of a new eastern concourse, a new eastern entry, and upgrades to suburban platforms. This modification application was approved on 21 December 2017.
- Modification 3 – Martin Place Station which involves changes to the Sydney Metro Martin Place Station to align with the Unsolicited Proposal by Macquarie Group Limited (Macquarie) for the development of the station precinct. The proposed modification involves a larger reconfigured station layout, provision of a new unpaid concourse link and retention of the existing MLC pedestrian link and works to connect into the Sydney Metro Martin Place Station. It is noted that if the Macquarie proposal does not proceed, the original station design remains approved. This modification application was approved on 22 March 2018.

- Modification 4 – Sydenham Station and Sydney Metro Train Facility South which incorporates Sydenham Station and precinct works, the Sydney Metro Trains Facility South, works to Sydney Water's Sydenham Pit and Drainage Pumping Station and ancillary infrastructure, and track and signalling works into the approved project. This modification application was approved on 13 December 2017.

The CSSI Approval as modified allows for all works to deliver and operate Sydney Metro between Chatswood to Sydenham Stations and also includes the upgrade of Sydenham Station.

The remainder of Stage 2 of the City & Southwest project proposes the conversion of the existing heavy rail line from west of Sydenham Station to Bankstown to metro standards and the upgrading of the existing railway stations along this alignment to metro standards. This part of the project, referred to as the Sydenham to Bankstown upgrade, is the subject of a separate CSSI Application (reference SSI 17\_8256) for which an Environmental Impact Statement was exhibited between September and November 2017, and a Submissions and Preferred Infrastructure Report is currently being prepared.

### 1.2.2 Integrated Station Development

The construction of the Sydney Metro stations presents an exciting opportunity to incorporate global best practice for place-making and environmentally sustainable development, and to apply innovative thinking to create new city icons. The new metro stations will contribute to Sydney's reputation for design excellence and leave a lasting legacy.

To help ensure success, the metro rail service will be integrated into activated Integrated Station Developments featuring station, OSD, retail opportunities and public domain improvements. These Integrated Station Developments will be welcoming and inclusive, serving as focal points for local communities. They will provide new places for people to work, live, shop and play, with public spaces designed to encourage walking, cycling and social interaction. This approach will support the NSW Government's planning strategies and objectives to grow high-value jobs, provide workers with better access to employment, and create liveable and sustainable centres.

Following the issue of the CSSI Approval, TfNSW has further developed the design of Victoria Cross Station to determine the space planning and general layout for the station and to identify those spaces within the station area (under the CSSI Approval) that would be available for the OSD. In addition, design work has been undertaken to determine the technical requirements for the structural integration of the OSD and station. This design work has informed this concept SSD Application and the indicative OSD design.

Ongoing design development of the works to be delivered under the CSSI Approval will continue with a view to developing an Interchange Access Plan (IAP) and Station Design Precinct Plan (SDPP) for Victoria Cross Station to satisfy Conditions E92 and E101 of the CSSI Approval.

The Victoria Cross Integrated Station Development would be a new commercial and retail hub in North Sydney. It would support the continued growth of North Sydney's commercial core through new employment opportunities and would improve the vibrancy of the area through new retail spaces, improved pedestrian connections and high quality outdoor spaces. The OSD component would sit prominently in the North Sydney skyline, providing an exceptional built form to mark the North Sydney CBD as a primary office market in a global city.

Figure 6 shows the location of the north and south portals of the Victoria Cross Station in its context, including the alignment of Sydney Metro and surrounding key educational, health and retail uses.



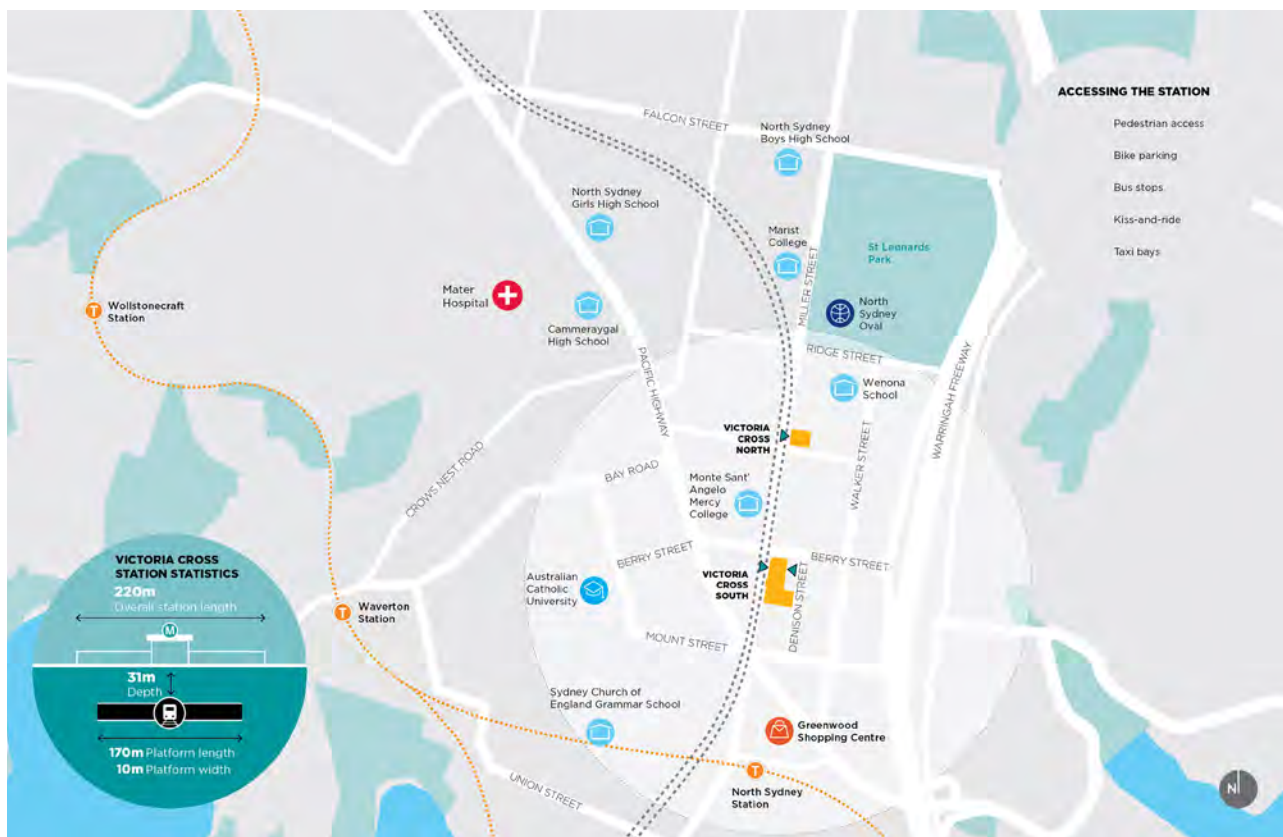


Figure 6 - Victoria Cross Station location plan

### 1.2.3 Planning relationship between Victoria Cross Station and Victoria Cross OSD

While the Victoria Cross Station and OSD will form part of an Integrated Station Development, the planning pathways defined under the EP&A Act require separate approval for the two components of the development. The approved station works (CSSI Approval) are subject to the provisions of Part 5.1 of the EP&A Act (now referred to as Division 5.2) and the OSD component is subject to Part 4 of the EP&A Act.

The approved station works under the CSSI Approval include the construction of below and above ground structures necessary for delivering the station and also enabling construction of an integrated OSD. This includes but is not limited to:

- demolition of existing development
- excavation
- station structure including the concourse and platforms
- lobbies
- retail spaces within the station building
- public domain improvements
- pedestrian through-site link
- access arrangements including vertical transport such as escalators and lifts

- structural and service elements and relevant space provisioning necessary for constructing the OSD, such as columns and beams, space for lift cores, plant rooms, access, parking, retail and building services.

The rationale for this delivery approach, as identified within the CSSI application for the Sydney Metro project, is to enable OSD to be more efficiently built and appropriately integrated into the station structure. The EIS for the Chatswood to Sydenham component of the City & Southwest project identified that future OSD would be subject to a separate assessment process.

The vertical extent of the approved station works (CSSI Approval) is defined by the 'transfer slab' level, above which would sit the OSD. This delineation is illustrated in Figure 7 .

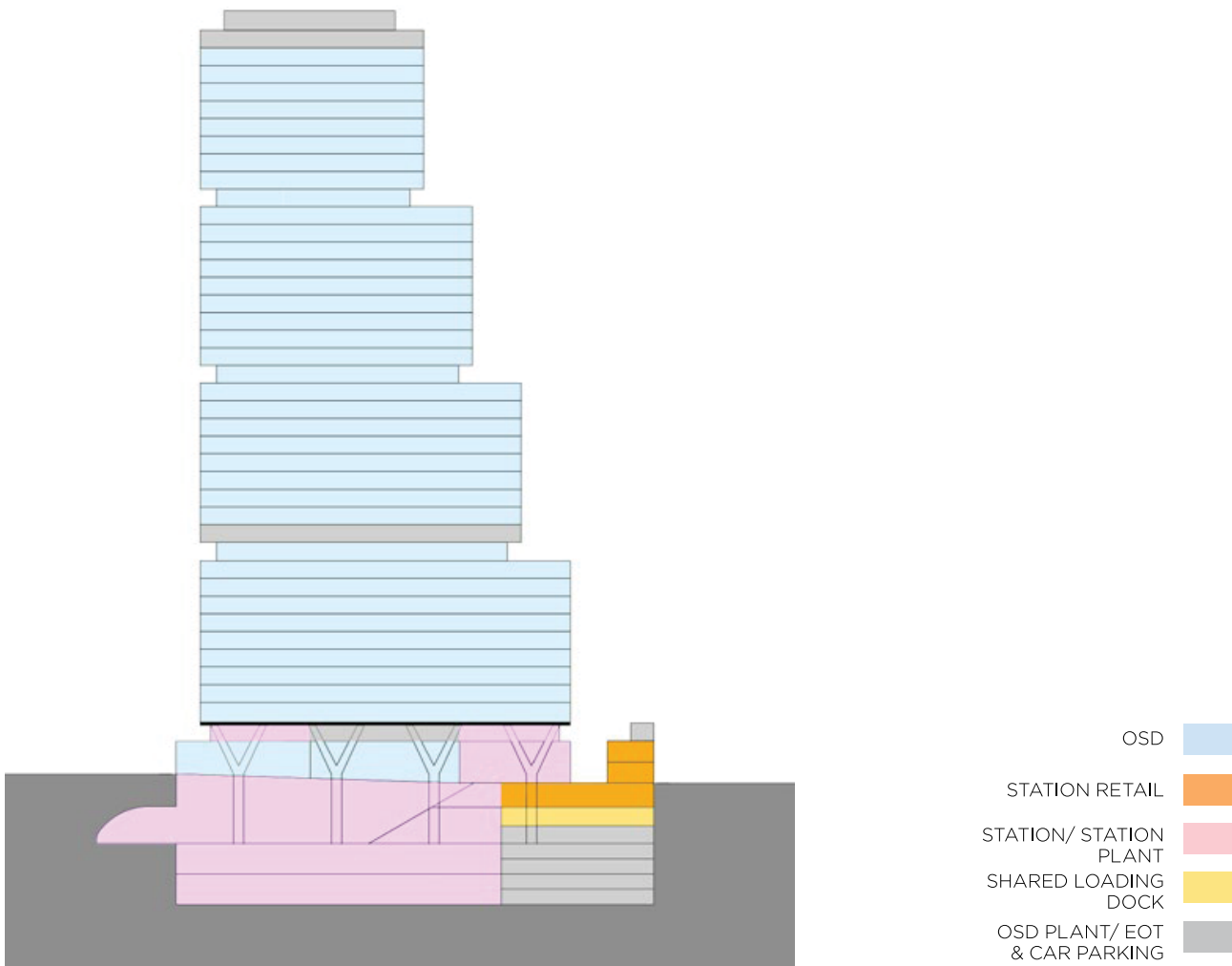


Figure 7 - Delineation between station and OSD

The CSSI Approval also establishes the general concept for the ground plane of Victoria Cross Station including access strategies for commuters, pedestrians and workers. In this regard, pedestrian access to the station would be from Miller and Denison Streets and the commercial lobby would be accessed from Miller Street. The provision of space for retail uses approved under the CSSI Approval would be located to activate the through site link and Denison Street entry. Separate consent would be sought in the future for the fit-out and specific use of the station retail space.

The public domain improvement works around the site will be delivered under the CSSI Approval.

The relationship between the CSSI Approval and this concept proposal is discussed in further detail in Chapter 4.9 of this EIS.

### 1.3 Overview of proposed Victoria Cross OSD

This concept SSD Application seeks concept approval for OSD above and within the approved Victoria Cross Station (southern portal) including the following:

- a building envelope for a commercial office tower
- a maximum building height of RL 230 or 168 metres (approximately 42 storeys) for the high rise portion of the building envelope and RL 118 or 55 metres (approximately 13 storeys) for the low rise portion of the envelope
- a maximum GFA of 60,000 square metres for the OSD component, which is equivalent to a floor space ratio of 12.46:1
- use of the building envelope area for commercial premises including office, retail and business premises
- use of OSD space provisioning (both above and below ground) within the approved Victoria Cross Station (CSSI Approval) including areas such as the OSD lobby, basement parking, end-of-trip facilities, services and back-of-house facilities
- Car parking for a maximum of 150 parking spaces for OSD use over four basement levels.

The concept SSD Application also seeks approval for future subdivisions (if required) and the strategies to guide the detailed design of the future OSD, including pedestrian and vehicular access, utility service provision, managing stormwater and drainage, public art and the achievement of ecologically sustainable development. The application is also accompanied by a Design Excellence Strategy and Design Guidelines to which the future detailed design would need to respond.

Architectural drawings illustrating the proposed building envelope are provided at Appendix D. An indicative OSD design for a possible building solution is provided at Appendix E.

The west elevation of the proposed building envelope and a photomontage of the indicative OSD design are shown at Figure 8 and Figure 9, respectively.

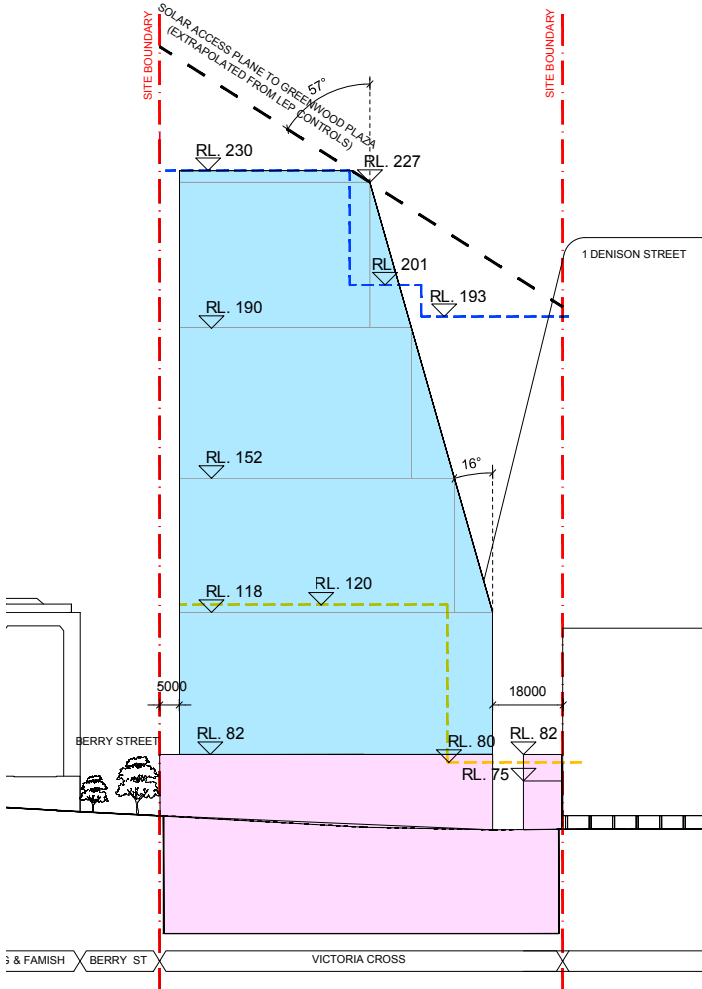


Figure 8 - The proposed OSD building envelope



Figure 9 - Indicative OSD design

The OSD project is expected to create 600 jobs in the construction phase and the commercial floorspace could accommodate an estimated 4,200 workers in the operational phase.

The delivery strategy proposed by TfNSW involves engaging a single contractor to deliver the Integrated Station Development package. This delivery strategy would provide the opportunity to commence construction on the OSD while the station construction is underway, aimed at having the full Integrated Station Development completed as close as is feasibly possible to the station opening in 2024. This would result in the delivery of the complete, integrated outcomes for the station precinct and would reduce impacts on the community during the construction stage.



## 1.4 Need for the project

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

Victoria Cross Station is a key new station on the Sydney Metro network. This station will provide a new focal point for the North Sydney CBD, extending the rail catchment north within the North Sydney CBD and reducing overcrowding at North Sydney Station. The station will also improve access to North Sydney's highly-skilled job market and education facilities and improve pedestrian access in the area.

The concept proposal capitalises on the introduction of Sydney Metro by providing for a commercial tower integrated with the future Victoria Cross Station. Additional commercial uses in this location will strengthen North Sydney's role as a primary office market in an internationally competitive Sydney and will align with a key action in the *North District Plan* by maximising the land use opportunities provided by the new Victoria Cross Station.

The concept proposal also responds to the need for revitalisation of the commercial stock in North Sydney CBD. As detailed in Urbis' recent *North Sydney Commercial Centre Study (2015)* prepared for North Sydney Council, the ageing office accommodation and an increase in the standard thresholds for office accommodation grades have combined to diminish the level of prime quality stock in the North Sydney Centre. Without the renewal of the commercial office stock, there is a risk that the overall quality of the North Sydney office market will deteriorate over time and diminish North Sydney's role as one of Sydney's prime office markets. The concept proposal responds positively to this issue by providing the framework for a world-class office building in an ideal location directly above future high-frequency public transport.

The concept proposal's consistency with key strategic plans, strategies and policies is discussed in detail in Chapter 6 of this EIS.

## 1.5 Objectives of the development

The objectives of this concept SSD Application are to:

- support the NSW Government's planning strategies and objectives, including the *Greater Sydney Region Plan (2018)* and the *North District Plan (2018)*
- support North Sydney Council's strategies and objectives for the area as outlined in Council's *Sydney Metro Planning Study (2016)*, *North Sydney Centre Capacity and Land Use Strategy (2017)* (NSCCLUS) and the accompanying planning proposal giving effect to the strategy's recommendations
- enable the development of a world-class office building that caters to the needs of North Sydney's skilled workforce
- build on the strength of North Sydney CBD as one of Sydney's primary office markets

- enhance the customer experience and urban amenity through the development of an integrated design concept that ensures delivery of a quality public domain area with strong connections to the surrounding area
- create an urban environment that drives high usage of the new metro rail, responding directly to the principles of transit oriented development
- provide the opportunity to deliver the OSD as early as possible with the aim of opening concurrently or shortly following completion of the metro station
- provide a built form that minimises overshadowing impacts to surrounding key public spaces and dwellings outside North Sydney CBD
- enable a design that responds sensitively to surrounding heritage items.

## 1.6 Analysis of alternatives

This section of the EIS should be considered with reference to the detailed floor plate and building envelope options included in the Built Form and Urban Design Report (Appendix G) and also the broader delivery framework for the Metro Project (Chapter 4.11)

### 1.6.1 Alternative option – do nothing

The ‘do nothing’ option (no OSD above the Victoria Cross Station) is considered impractical and fails to meet the Government’s aspirations for a Sydney Metro project that maximises land use opportunities. Sydney Metro is well advanced and the OSD forms a key component of the integrated station development. The ‘do nothing’ option would forego an exciting opportunity to create a new Victoria Cross Integrated Station Development that is a new focal point for the North Sydney CBD. The opportunity cost to the local community and to the broader metropolitan area would be significant if the OSD were not pursued. In this regard, the key economic, transport and social benefits would not be realised.

This option would also be inconsistent with NSW transport policy direction by missing a major opportunity to create new jobs, promote public transport use and encourage walking and cycling.

This option would also not align with State and local strategic objectives for the site and the broader North Sydney CBD by failing to promote public transport use and contribute to employment targets.

### 1.6.2 Alternative option – non-employment generating land use

This option would involve development for non-employment-generating uses, such as residential. This option is not supported, as it would counteract the strong commercial consolidation in the North Sydney CBD and fail to optimise the productivity benefits of Sydney Metro.

North Sydney is an important employment destination, and the site’s location within the established commercial core favours a commercial land use for the OSD. A commercial use for the OSD would directly contribute to the growth of North Sydney’s cluster of high-skilled knowledge-based jobs and would leverage the improved travel times associated with Sydney Metro.

This option is also at odds with Council's vision for the site, as reflected in the site's B3 Commercial Core zoning, which promotes commercial development and prohibits residential accommodation. Non-commercial uses would also contradict the recommendations in various strategic documents, including the *North District Plan (2018)*, *North Sydney Centre Capacity and Land Use Strategy (NSCCLUS) (2017)* and *Sydney Metro Planning Study (2016)*, as discussed in further detail in Chapter 6 of this EIS.

### 1.6.3 Alternative option – alternative building envelope designs

A number of building envelope designs were considered by TfNSW during the preliminary OSD design stage. The designs were assessed against a set of criteria including key commercial objectives, urban design considerations, heritage constraints, public domain benefits and compliance with NSLEP 2013. The options considered and an assessment against this criteria are provided in Section 5.0 of the Urban Design and Built Form Report (Appendix G).

The three key options (and a number of sub-options) considered are discussed below.

Option 1, shown in Figure 10, demonstrates different possibilities for a single rectilinear commercial floor plate. This option (specifically Option 1C) was refined to form the concept building envelope which is the subject of this concept SSD Application. This option allows for large, contiguous commercial floor plates commensurate with A-grade office space and accommodates the through-site link at the southern end of the site (which will be delivered under the CSSI Approval). While the final building envelope features a low-scale perpendicular extension to Denison Street to create an overall L-shape form, the primary tower is situated towards the north of the site along Miller Street.

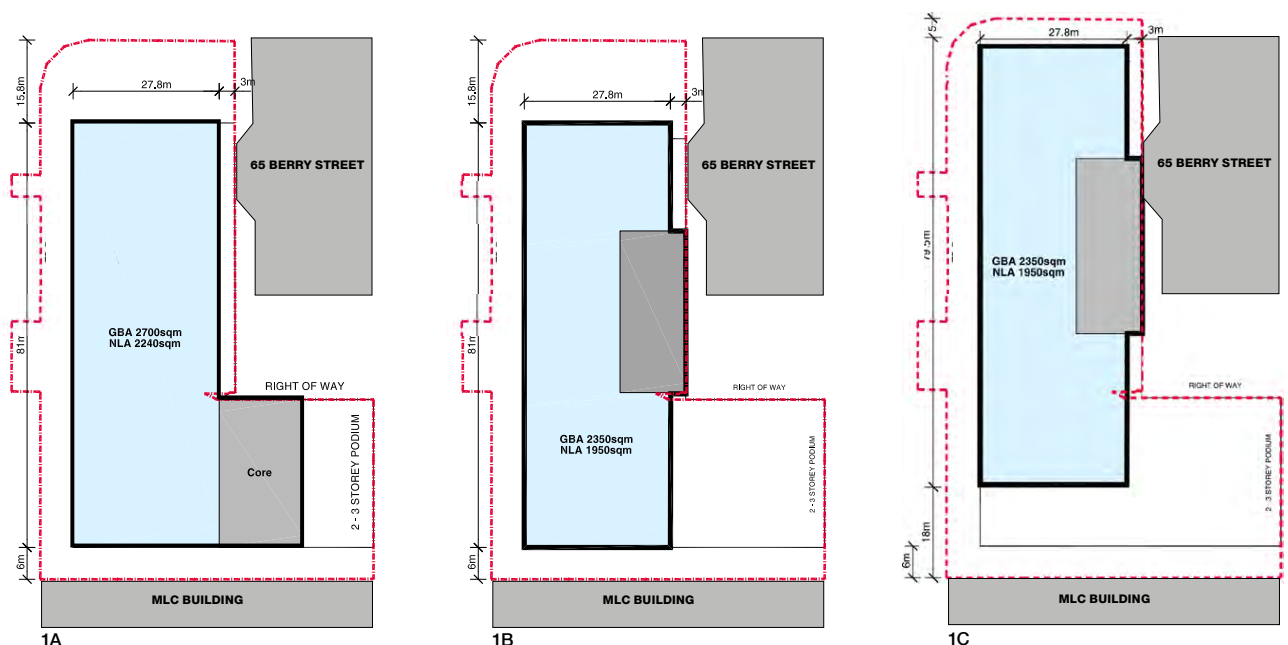


Figure 10 – Preliminary floor plate study (Option 1)

Option 2, shown in Figure 11, would involve two distinct towers at the northern and southern ends of the site. This Option was not pursued primarily as it could not accommodate the large, contiguous commercial floor plates commensurate with A-grade office development and would complicate delivery of the through-site link. Given that the A-grade office space and a through-site link are key design deliverables for the site identified in Council strategic documents, such as the NSCCLUS and *Sydney Metro Planning Study*, this option was considered inferior.

Option 2 is also likely to result in an unsympathetic design response to the heritage listed MLC Building immediately to the south of the site, as it would significantly reduce important street level views to the tiled northern façade of the building and the bulk and scale of the southern tower would result in a poor built form relationship with the scale and massing of the MLC Building.

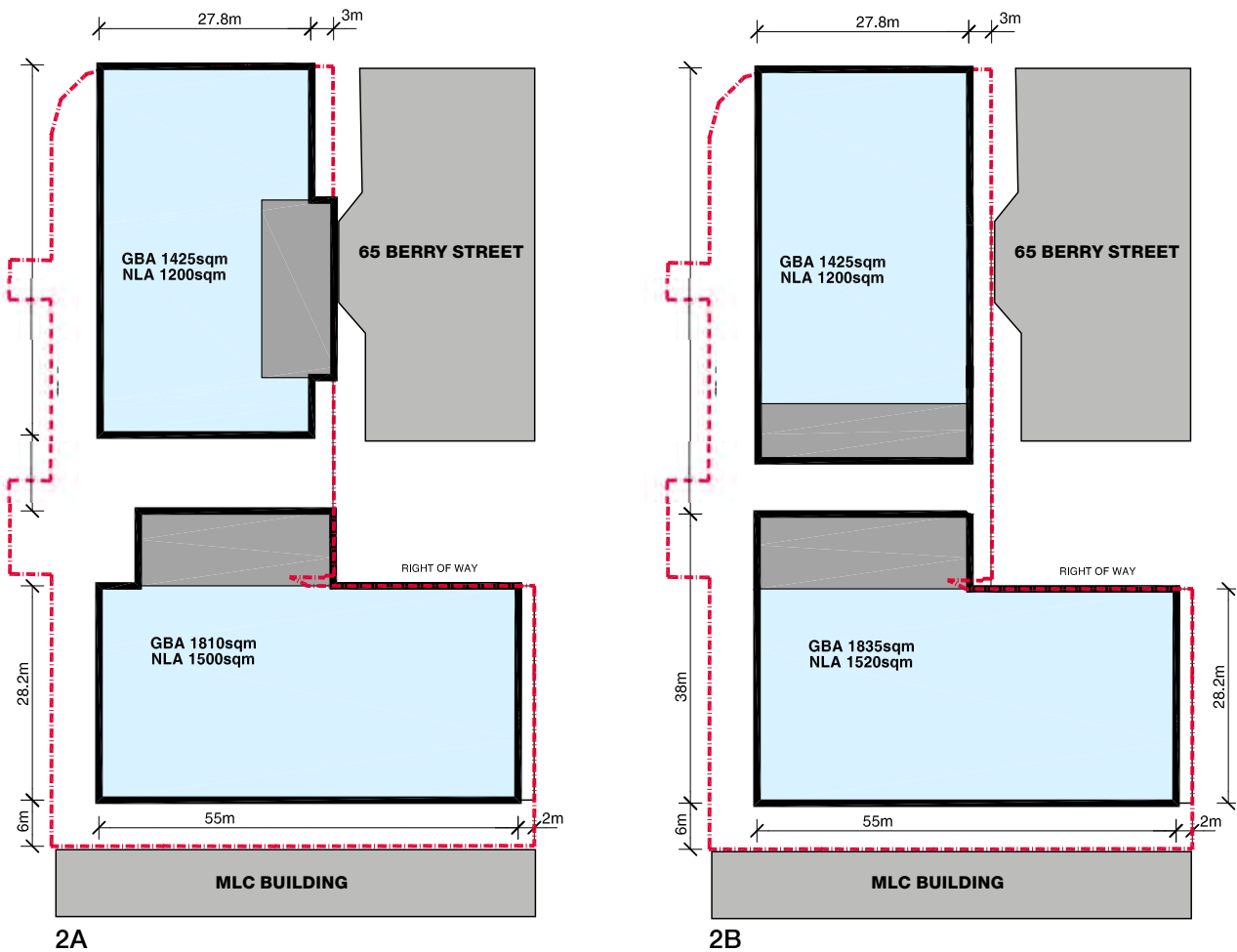


Figure 11 - Preliminary floor plate study (Option 2)

Option 3, shown in Figure 12, would allow for very large L-shape floor plates, but it would also inhibit delivery of the through-site link, which is a key component of the station design. Also, given its reduced setback to the south, this option would cause additional view loss to residents of the Beau Monde Apartment building, would result in an unsympathetic design response to the MLC Building, including to block important views from street level to its tiled northern façade. It would also result in a poor built form relationship with the scale and massing of the MLC Building.

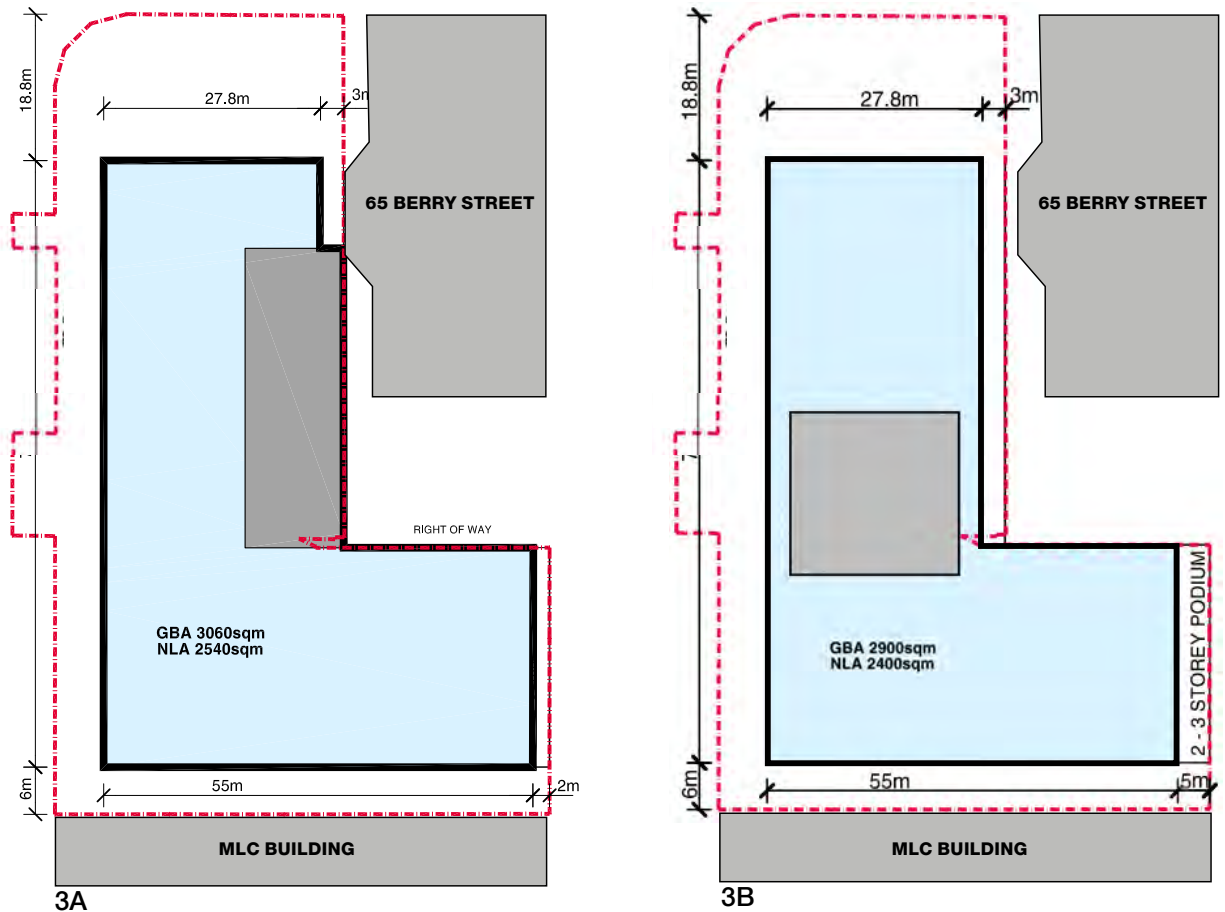


Figure 12 - Preliminary floor plate study (Option 3)

Further analysis of the building envelope options considered by TfNSW is provided in the Built Form and Urban Design Report at Appendix G. This report illustrates a number of building envelopes explored during refinement of Option 1C. This includes the exploration of a number of horizontal and vertical stack forms, while maintaining the 18-metre setback to the south (refer Figure 13 and Figure 14).

Option 2B (Figure 14) forms the basis of the proposed building envelope which is the subject of this concept SSD Application. This option, which features four horizontal stacked volumes, was selected for its superior relationship to the form and massing of the MLC Building, its ability to break-down the overall scale of the development, and its sensitive relationship to neighbouring development and broader CBD context.

The proposed building envelope (refer Figure 15) detailed in the concept SSD Application is a refinement of Option 2B and features a tapered southern elevation, which functions to optimise the amenity to the through-site link and minimise view impacts to residents of the neighbouring Beau Monde Apartment building. It is considered that this building envelope is capable of delivering an innovative Integrated Station Development, which would make a significant contribution to the amenity of the CBD and foster commercial confidence.

The proposed building envelope form is considered in further detail in Chapter 4.3 and Chapter 8.1 of this EIS.

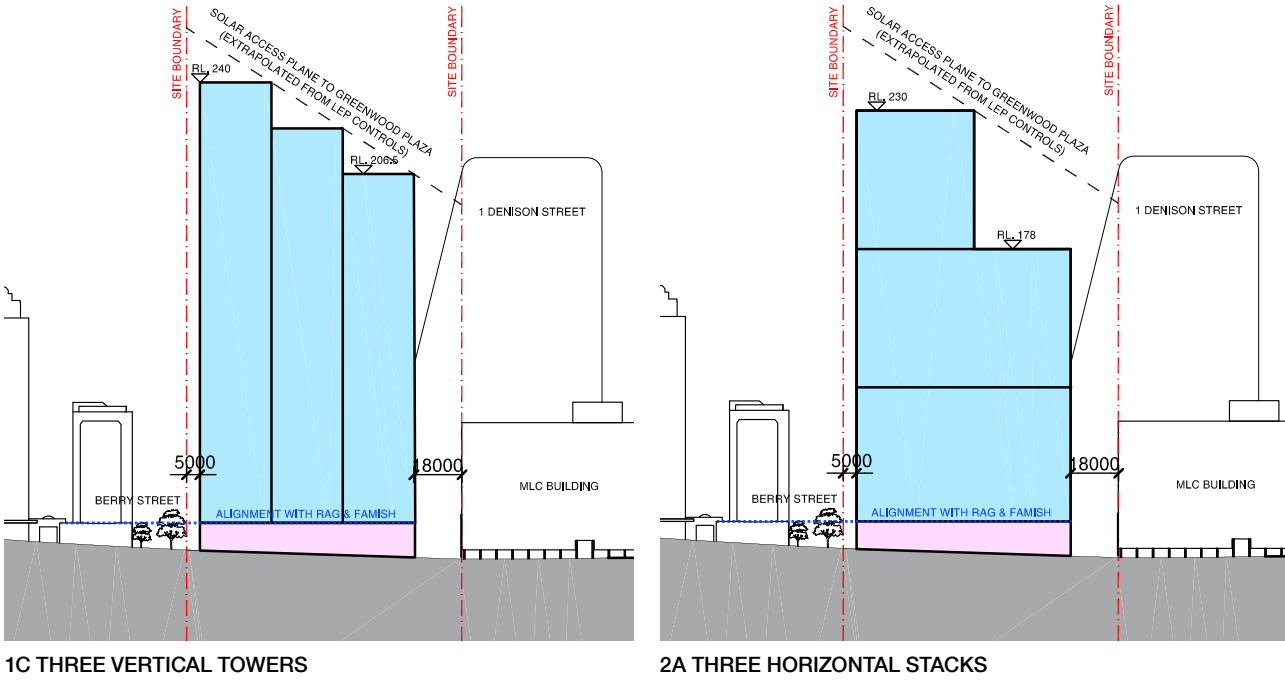


Figure 13 - Building envelope Options 1C and 2A

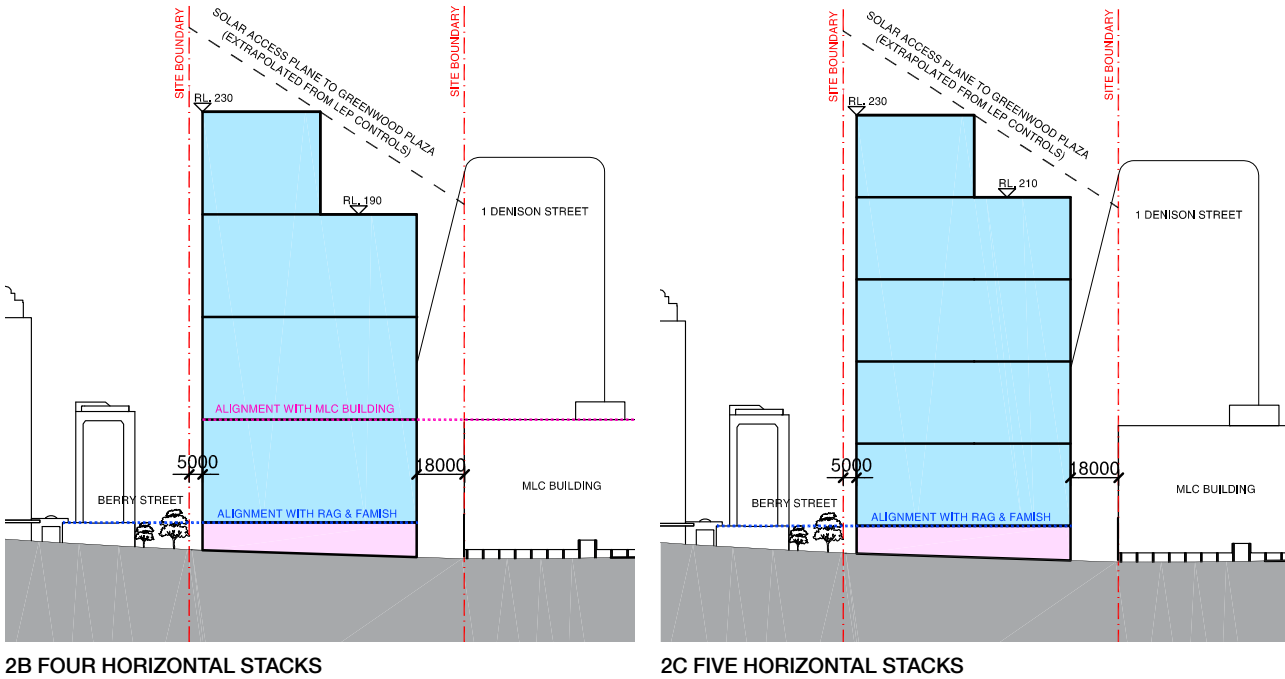
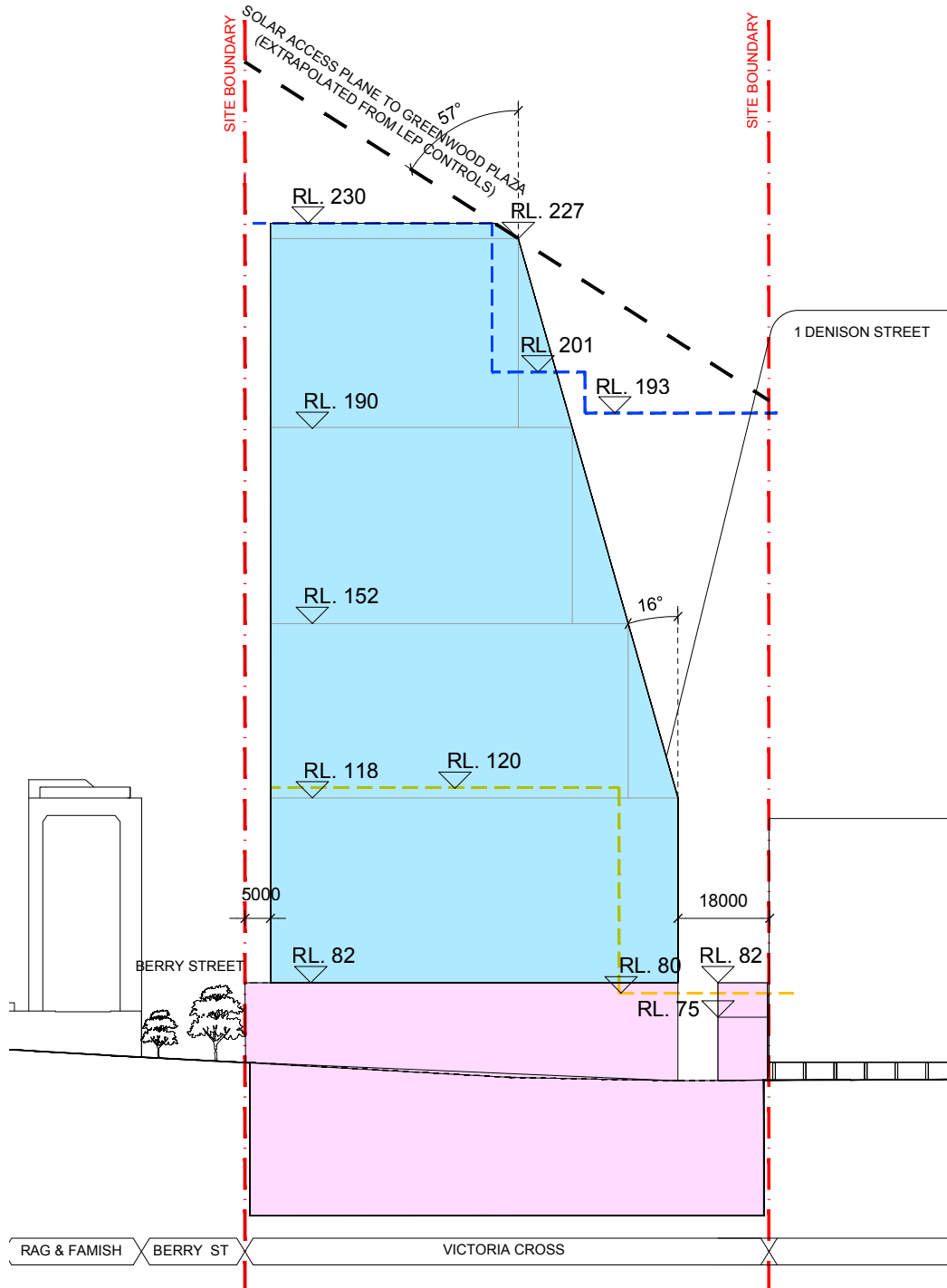


Figure 14 - Building envelope Options 2B and 2C



KEY:

- - - MAXIMUM BUILDING HEIGHT NORTH SYDNEY CENTRE PLANNING PROPOSAL (AS AMENDED BY COUNCIL RESOLUTION 19TH MARCH 2018)
- - - MAXIMUM BUILDING HEIGHT NORTH SYDNEY LEP 2013

VICTORIA CROSS STATION CSSI APPROVAL - INCLUDES STRUCTURE AND BUILDING INFRASTRUCTURE AND SPACE FOR LIFT CORES, ACCESS, PARKING, RETAIL AND BUILDING SERVICES FOR THE FUTURE OSD

OSD CONCEPT SSDA BUILDING ENVELOPE INCLUDES OSD AREAS INSIDE THE CSSI 'SHELL' BELOW GROUND AND IN THE PODIUM LEVELS

Figure 15 - The proposed OSD building envelope

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# PLANNING CONTEXT

CHAPTER TWO



## 2. Planning context

### 2.1 State significant development

*State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP) identifies development considered to be State significant. Specifically, clause 19(2) of Schedule 1 of the SRD SEPP provides that the following development is SSD:

*Development within a rail corridor or associated with railway infrastructure that has a capital investment value of more than \$30 million for any of the following purposes:*

- (a) commercial premises or residential accommodation;*
- (b) container packing, storage or examination facilities;*
- (c) public transport interchanges.*

As the concept proposal comprises development within a rail corridor and is associated with railway infrastructure for the purposes of commercial premises and has a Capital Investment Value in excess of \$30 million, it qualifies as SSD for purposes of section 4.36 of the EP&A Act.

Section 4.12(8) of the EP&A Act requires an application for SSD to be accompanied by an EIS. Accordingly, 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 Secretary's Environmental Assessment Requirements (SEARs) for the preparation of the EIS.

The application is made as a concept development application under section 4.22 of the EP&A Act. It sets out the concept proposal for the development of the site and seeks consent for a maximum building envelope, maximum gross floor area, land uses, pedestrian and vehicle access, car parking, signage zones, further subdivision of parts of the OSD footprint (if required) and its integration with Victoria Cross Station. The application also seeks approval for strategies for stormwater management, ecological sustainable development, public art and design excellence. As this is a first stage concept application only, consent is not sought for any construction or other physical work, although a high-level assessment of potential construction related impacts is provided.

This application is accompanied by an indicative OSD design prepared by TfNSW (Appendix E). The indicative building design complies with the proposed building envelope and fully integrates with the design for Victoria Cross Station.

Other supporting documents are appended to this EIS (refer to the Table of Contents). All images used to support this application are indicative/representative only and are subject to normal planning processes, approval and design development as part of the future detailed SSD Application.

### 2.2 Secretary's Environmental Assessment Requirements

In accordance with section 4.39 of the EP&A Act, the Secretary of the DP&E issued the SEARs on 30 November 2017 for the preparation of this EIS. The SEARs are included in Appendix A.

Table 1 below provides a detailed summary of the individual matters listed in the SEARs and identifies where each of the environmental assessment requirements has been addressed in this EIS and the accompanying supporting technical studies.

Table 1 – Secretary’s Environmental Assessment Requirements

Secretary’s Environmental Assessment Requirement	Chapter of EIS	Appendix of EIS
<b>General Requirements</b>		
The Environmental Impact Statement (EIS) must address the <i>Environmental Planning and Assessment Act 1979</i> and meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 the Environmental Planning and Assessment Regulation 2000.	Chapter 2	NA
Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	Chapter 11	NA
Where relevant, the assessment of the key issues below, and any other significant issues identified in the assessment, must include: <ul style="list-style-type: none"> <li>justification of impacts</li> <li>consideration of potential cumulative impacts due to other development in the vicinity</li> <li>measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.</li> </ul>	Chapter 8, 13	Each appendix
The EIS must also be accompanied by a report from a qualified quantity surveyor providing: <ul style="list-style-type: none"> <li>a detailed calculation of the capital investment value (CIV) of the development (As defined in clause 3 of the Environmental Planning and assessment Regulation 2000), including details of all assumptions and components from which the CIV calculation is derived</li> <li>a close estimate of the jobs that will be created by the development during construction and operation</li> <li>verification that the CIV was accurate on the date that it was prepared.</li> </ul>	NA	Submitted under separate cover
<b>Key Issues</b>		
<b>1. Environmental Planning Instruments, Policies and Guidelines</b>		
Address the relevant statutory provisions applying to the site contained in the relevant EPIs, including:		
<ul style="list-style-type: none"> <li><i>State Environmental Planning Policy (State &amp; Regional Development) 2011</i></li> </ul>	Chapter 7.3	NA
<ul style="list-style-type: none"> <li><i>State Environmental Planning Policy (Infrastructure) 2007</i></li> </ul>	Chapter 7.3	NA
<ul style="list-style-type: none"> <li><i>State Environmental Planning Policy No.55 – Remediation of Land (SEPP 55)</i></li> </ul>	Chapter 7.3	NA
<ul style="list-style-type: none"> <li><i>Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005</i></li> </ul>	Chapter 7.3	NA
<ul style="list-style-type: none"> <li><i>Draft State Environmental Planning Policy (Environment) 2017</i></li> </ul>	Chapter 7.3	NA
<ul style="list-style-type: none"> <li><i>North Sydney Local Environmental Plan 2013</i></li> </ul>	Chapter 7.4	NA
<ul style="list-style-type: none"> <li><i>North Sydney Centre Planning Proposal (PP_2017_North_002_00)</i></li> </ul>	Chapter 7.5	NA

Secretary’s Environmental Assessment Requirement	Chapter of EIS	Appendix of EIS
Address the relevant provisions, goals and objectives in the following:		
<ul style="list-style-type: none"> <li>NSW State Priorities</li> </ul>	Chapter 6.1	NA
<ul style="list-style-type: none"> <li>Premier’s Priorities</li> </ul>	Chapter 6.2	NA
<ul style="list-style-type: none"> <li>A Plan for Growing Sydney</li> </ul>	Chapter 6.3.1	NA
<ul style="list-style-type: none"> <li>Towards our Greater Sydney 2056</li> </ul>	Chapter 6.3.2	NA
<ul style="list-style-type: none"> <li>Draft Greater Sydney Region Plan</li> </ul>	Chapter 6.3.3	NA
<ul style="list-style-type: none"> <li>Revised Draft North District Plan for Sydney</li> </ul>	Chapter 6.3.4	NA
<ul style="list-style-type: none"> <li>NSW Long Term Transport Master Plan</li> </ul>	Chapter 6.3.5	NA
<ul style="list-style-type: none"> <li>Better Placed – an integrated design policy for the built environment of NSW 2017</li> </ul>	Chapter 6.3.7	NA
<ul style="list-style-type: none"> <li>Development Near Rail Corridors and Busy Roads – Interim Guideline</li> </ul>	Chapter 7.3	Appendix P
<ul style="list-style-type: none"> <li><i>Guide to Traffic Generating Developments</i> (RMS)</li> </ul>	NA	Appendix P
<ul style="list-style-type: none"> <li>NSW Planning Guidelines for Walking and Cycling</li> </ul>	Chapter 6.4	NA
<ul style="list-style-type: none"> <li><i>North Sydney Section 94 Development Contributions Plan</i>, June 2013</li> </ul>	Chapter 8.13	NA
<ul style="list-style-type: none"> <li><i>Sydney Metro Planning Study 2016</i> (North Sydney Council)</li> </ul>	Chapter 6.5.2	NA
<ul style="list-style-type: none"> <li>North Sydney Centre Capacity and Land Use Strategy 2016</li> </ul>	Chapter 6.5	NA
<ul style="list-style-type: none"> <li>Public Domain Review North Sydney Centre 2015</li> </ul>	Chapter 6.5.3	NA
<ul style="list-style-type: none"> <li><i>The North of Centre Precinct Master Plan, 2016</i> (North Sydney Council).</li> </ul>	Chapter 6.5.4	NA
<b>2. Land Use, Gross Floor Area and Floor Space Ratio</b>		
The EIS shall:	Chapter 4.4	NA
<ul style="list-style-type: none"> <li>include a detailed description, analysis and justification of all proposed land uses</li> </ul>		
<ul style="list-style-type: none"> <li>include a detailed gross floor area (GFA)/floor space ratio (FSR) schedule and calculations, for the site, each building and land use</li> </ul>	Chapter 4.5	Appendix F
<ul style="list-style-type: none"> <li>include a floor by floor breakdown of GFA and FSR.</li> </ul>	NA	Appendix F
<b>3. Design Excellence</b>		
The EIS shall:	Chapter 1.5	Appendix G
<ul style="list-style-type: none"> <li>describe the design process leading to the Concept Proposal including how the feedback provided by the DRP constituted under the Critical State Significant Infrastructure (CSSI 7400) approval has been incorporated.</li> </ul>	Chapter 5.2.4 Chapter 8.1	

Secretary's Environmental Assessment Requirement	Chapter of EIS	Appendix of EIS
<ul style="list-style-type: none"> <li>○ provide a Design Excellence Strategy for the future stage(s) of the development which demonstrates how design excellence will be achieved. This strategy should include: <ul style="list-style-type: none"> <li>◆ the proposed form and constitution of any design review panel</li> <li>◆ a proposed schedule for regular design review throughout the planning process</li> <li>◆ how feedback will be documented and addressed</li> </ul> </li> </ul>	Chapter 4.8.2	Appendix C
<ul style="list-style-type: none"> <li>○ include design quality guidelines for the future built form.</li> </ul>	NA	Appendix CC
<b>4. Built Form and Urban Design</b>		
The EIS shall:		
<ul style="list-style-type: none"> <li>○ provide an urban design analysis which considers the proposed building forms, typologies, height, bulk and scale in the context of the immediate locality and the broader North Sydney CBD</li> </ul>	Chapter 8.1	Appendix G
<ul style="list-style-type: none"> <li>○ demonstrate how the orientation, height, setbacks, bulk, scale, and massing of the proposed development will fit within the context of the site and the existing and future desired character of North Sydney CBD</li> </ul>	Chapter 8.1	Appendix G
<ul style="list-style-type: none"> <li>○ provide an indicative building showing a possible built form within the proposed building envelope</li> </ul>	Chapter 4.7	Appendix E
<ul style="list-style-type: none"> <li>○ the building envelope shall consider the future design, location and aesthetic treatment of all mechanical services.</li> </ul>	Chapter 4.104.18	Appendix E Appendix CC
<b>5. Integration with Sydney Metro Station Infrastructure</b>		
The EIS shall		
<ul style="list-style-type: none"> <li>○ identify the extent of the proposal that is State Significant Development (SSD) and how this relates to the approved Critical State Significant Infrastructure (CSSI 7400) and any modifications to the CSSI</li> </ul>	Chapter 4.9	Appendix D Appendix E Appendix G
<ul style="list-style-type: none"> <li>○ show how the proposed over station development will integrate in design terms and structurally with the Victoria Cross Sydney Metro station infrastructure, and identify any specific requirements of the CSSI approval that have influenced the design of the over station development.</li> </ul>	Chapter 4.10	Appendix E Appendix G

Secretary’s Environmental Assessment Requirement	Chapter of EIS	Appendix of EIS
<b>6. Amenity</b>		
The EIS shall: <ul style="list-style-type: none"> <li>● include a solar access and overshadowing analysis outlining impacts on adjoining developments and the public domain, including design options to protect solar access to Special Areas and land zoned RE1 including Miller Street Special Area, Brett Whiteley Plaza and Greenwood Plaza</li> </ul>	Chapter 8.3	Appendix I Appendix J Appendix K Appendix L
<ul style="list-style-type: none"> <li>● include a view analysis to and from the site from key vantage points and streetscape locations including photomontages or perspectives of the proposed development</li> </ul>	Chapter 8.2	Appendix Y Appendix AA
<ul style="list-style-type: none"> <li>● include a view impact analysis from adjoining developments, including from Beau Monde Apartments in Berry Street</li> </ul>	Chapter 8.2	Appendix Z Appendix AA
<ul style="list-style-type: none"> <li>● include a wind analysis outlining the impacts and any proposed measures to address pedestrian amenity</li> </ul>	Chapter 8.12	Appendix M
<ul style="list-style-type: none"> <li>● demonstrate how the proposal impacts and any proposed measures to mitigate potential impacts, the amenity of surrounding properties, including residential development, with regard to solar access, privacy and view impacts</li> </ul>	Chapter 8.3.5 Chapter 8.4 Chapter 8.2	Appendix G Appendix Z Appendix Y
<ul style="list-style-type: none"> <li>● include a noise impact assessment identifying:                             <ul style="list-style-type: none"> <li>◆ the main noise and vibration generating sources and activities from the site at all stages of operation</li> <li>◆ measures to minimise and mitigate potential noise and vibration impacts on surrounding occupiers</li> <li>◆ the impacts of likely noise and vibration from surrounding land uses, such as noise from the operation of the rail line and surrounding road networks, including Pacific Highway and management and operational arrangements or mitigation measures to protect the amenity of residents/visitors/ employees.</li> </ul> </li> </ul>	Chapter 8.11	Appendix N
<b>7. Heritage</b>		
Provide a detailed heritage impact statement (HIS) that identifies and addresses the extent of heritage impact of the proposal on the site and surrounding areas, including the locally listed MLC building and Rag & Famish Hotel.	Chapter 8.5	Appendix O

Secretary's Environmental Assessment Requirement	Chapter of EIS	Appendix of EIS
<b>8. Transport, Traffic, Parking and Access</b>		
<p>The EIS must include a Transport and Traffic Impact Assessment that provides, but is not limited to, the following:</p>	Chapter 8.6	Appendix P
<ul style="list-style-type: none"> <li>accurate details of the current daily and peak hour vehicle, public transport, pedestrian and bicycle movements from existing buildings/ uses on the site using the adjacent and surrounding road network</li> </ul>		
<ul style="list-style-type: none"> <li>forecast total daily and peak hour trips likely to be generated by the proposed development including vehicle, public transport, pedestrian and bicycle trips, together with cumulative impacts of existing, proposed and approved developments in the area and any transport/ traffic upgrade</li> </ul>		
<ul style="list-style-type: none"> <li>impacts of the proposed development on the operation of existing and future transport networks, including the public transport capacity and its ability to accommodate the forecast number of trips to and from the development</li> </ul>		
<ul style="list-style-type: none"> <li>detailed assessment of the existing and future performance of key intersections providing access to the site, supported by appropriate modelling and analysis to the satisfaction of RMS and TfNSW</li> </ul>		
<ul style="list-style-type: none"> <li>measures to mitigate impacts of the proposed development on the operation of existing and future traffic, public transport, pedestrian and bicycle networks, including any required upgrades</li> </ul>		
<ul style="list-style-type: none"> <li>proposed car and bicycle parking provision for workers and visitors, including consideration of the availability of public transport and the requirements of the relevant parking codes and Australian Standards</li> </ul>		
<ul style="list-style-type: none"> <li>loading dock and servicing arrangements, including consideration of loading zone hub facilities</li> </ul>		
<ul style="list-style-type: none"> <li>measures to be implemented to encourage users of the development to make sustainable travel choices, including walking, cycling, public transport and car sharing, such as provision of adequate bicycle parking and end of trip facilities</li> </ul>		
<ul style="list-style-type: none"> <li>consider the future pedestrianisation of laneways east of the Metro site (Denison Street, Spring Street and Little Spring Street) with regard to the North Sydney Council concept plan for the treatment of laneways in the CBD</li> </ul>		
<ul style="list-style-type: none"> <li>consider the impacts of the proposed Western Harbour Tunnel Beaches Link</li> </ul>		
<ul style="list-style-type: none"> <li>identify required work zones and the functionality and impact on pedestrian amenity and public domain.</li> </ul>		



Secretary’s Environmental Assessment Requirement	Chapter of EIS	Appendix of EIS
<b>9. Ecologically Sustainable Development (ESD)</b>		
<ul style="list-style-type: none"> <li>detail how ESD principles (as defined in clause 7(4) Schedule 2 of the EP&amp;A Regulation 2000) will be incorporated in the design, construction and ongoing operation of the development</li> </ul>	Chapter 8.7	Appendix Q
<ul style="list-style-type: none"> <li>include a framework for how the proposed development will reflect best practice sustainable building principles to improve environmental performance, including energy and water efficient design and technology and use of renewable energy.</li> </ul>	Chapter 8.7	Appendix Q
<b>10. Biodiversity</b>		
<ul style="list-style-type: none"> <li>The EIS shall provide an assessment of the proposal's biodiversity impacts in accordance with the Biodiversity Conservation Act 2016, including the preparation of a Biodiversity Development Assessment Report where required under the Act.</li> </ul>	Chapter 7.7	Appendix GG
<b>11. Public Benefits, Contributions and/or Voluntary Planning Agreement</b>		
The EIS shall address in regard to contributions:	Chapter 8.13	NA
<ul style="list-style-type: none"> <li>the proposed method of calculating developer contributions payable</li> </ul>		
<ul style="list-style-type: none"> <li>any additional contributions proposed or material public benefits associated with any proposed floor space above existing planning controls</li> </ul>	Chapter 8.13	NA
<ul style="list-style-type: none"> <li>any proposed Voluntary Planning Agreement or other legally binding instrument agreed between relevant public authorities.</li> </ul>	Chapter 8.13	NA
<b>12. Prescribed airspace for Sydney Airport</b>		
Identify any impacts of the proposal on the prescribed airspace for Sydney Airport.	Chapter 8.8	Appendix R
<b>13. Utilities</b>		
Address the existing capacity of the site to service the development proposed and any augmentation requirements for utilities, including arrangements for drinking water, wastewater and recycled water.	Chapter 8.9	Appendix S

Secretary's Environmental Assessment Requirement	Chapter of EIS	Appendix of EIS
<b>14. Staging</b>		
The EIS shall set out the staging of the proposed development, including the relationship with the construction/ delivery of the approved Victoria Cross Sydney Metro Station and timing of public domain works.	Chapter 4.11	Appendix G
<b>15. Consultation</b>		
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers and community groups. In particular you must consult with: <ul style="list-style-type: none"> <li>Government Architect of NSW</li> <li>Roads and Maritime Services</li> <li>North Sydney Council</li> <li>Sydney Airport Corporation Limited and the Civil Aviation Safety Authority</li> <li>Surrounding residents, businesses and local community groups.</li> </ul>	Chapter 5	Appendix BB
The EIS must include a report describing pre-submission consultation undertaken, including a record of the stakeholders consulted, the issues raised during the consultation and how the proposal responds to those issues. Where amendments have not been made to address an issue, a short explanation should be provided.	Chapter 5	Appendix BB
<b>Plans and Documents</b>		
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i> . Provide these as part of the EIS rather than as separate documents.		
In addition, the EIS must include the following: <ul style="list-style-type: none"> <li>clause 4.6 variation written request (if required)</li> </ul>	Chapter 7.4	Appendix EE Appendix FF
<ul style="list-style-type: none"> <li>site title diagrams and survey plan, showing existing levels, location and height of existing and adjacent structures/ building</li> </ul>	NA	Appendix B
<ul style="list-style-type: none"> <li>site analysis plan</li> </ul>	NA	Appendix G
<ul style="list-style-type: none"> <li>schedule of proposed gross floor area per land use</li> </ul>	NA	Appendix F
<ul style="list-style-type: none"> <li>building envelopes showing the relationship with proposed and existing buildings in the locality</li> </ul>	Chapter 4.3	Appendix D
<ul style="list-style-type: none"> <li>architectural drawings (to a useable scale at A3)</li> </ul>	NA	Appendix E
<ul style="list-style-type: none"> <li>architectural and urban design statement, including illustrations and justification showing how the buildings will relate to the station entrances and enhance the surrounding public domains</li> </ul>	Chapter 8.1	Appendix G

Secretary’s Environmental Assessment Requirement	Chapter of EIS	Appendix of EIS
<ul style="list-style-type: none"> <li>○ solar access analysis report and diagrams</li> </ul>	Chapter 8.3	Appendix H Appendix I Appendix J Appendix K Appendix L
<ul style="list-style-type: none"> <li>○ wind impact assessment (including a wind tunnel study)</li> </ul>	Chapter 8.12	Appendix M
<ul style="list-style-type: none"> <li>○ flood assessment/ storm water management plan</li> </ul>	Chapter 8.10	Appendix T
<ul style="list-style-type: none"> <li>○ retail/ commercial office strategy</li> </ul>	Chapter 4.15	Appendix DD
<ul style="list-style-type: none"> <li>○ ESD statement (incorporating a sustainability framework)</li> </ul>	Chapter 4.14	Appendix Q
<ul style="list-style-type: none"> <li>○ pre-submission consultation statement</li> </ul>	Chapter 5	Appendix BB
<ul style="list-style-type: none"> <li>○ heritage impact assessment</li> </ul>	Chapter 8.5	Appendix O
<ul style="list-style-type: none"> <li>○ access/DDA impact statement</li> </ul>	Chapter 8.17	Appendix X
<ul style="list-style-type: none"> <li>○ transport traffic and parking assessment</li> </ul>	Chapter 8.6	Appendix P
<ul style="list-style-type: none"> <li>○ visual and view impact analysis and photomontages</li> </ul>	Chapter 8.2	Appendix Y Appendix Z Appendix AA
<ul style="list-style-type: none"> <li>○ physical and 3D digital model (generally in accordance with North Sydney Council requirements)</li> </ul>	Submitted under separate cover	Submitted under separate cover
<ul style="list-style-type: none"> <li>○ services and utilities infrastructure report</li> </ul>	Chapter 8.9	Appendix S
<ul style="list-style-type: none"> <li>○ signage details (if proposed)</li> </ul>	Chapter 4.16	Appendix E Appendix G
<ul style="list-style-type: none"> <li>○ flight path report</li> </ul>	Chapter 8.8	Appendix R
<ul style="list-style-type: none"> <li>○ waste strategy</li> </ul>	Chapter 8.15	Appendix U
<ul style="list-style-type: none"> <li>○ noise and vibration report</li> </ul>	Chapter 8.11	Appendix N
<ul style="list-style-type: none"> <li>○ CPTED assessment</li> </ul>	Chapter 8.14	Appendix W
<ul style="list-style-type: none"> <li>○ preliminary construction management statement addressing how future stages will manage impacts to pedestrians, rail users, bus services and taxis.</li> </ul>	Chapter 8.16	Appendix V

## 2.3 Environmental Planning and Assessment Regulation 2000 requirements

This EIS has been prepared in accordance with the requirements of Schedule 2 of the EP&A Regulation. Table 2 outlines these requirements and identifies where each requirement has been addressed in this EIS.

Table 2 – Schedule 2 of EP&amp;A Regulation

Requirement	Chapter of EIS
<b>6. Form of environmental impact statement</b> An environmental impact statement must contain the following information:	
<b>a.</b> The name, address and professional qualifications of the person by whom the statement is prepared	Statement of Validity (page vii of EIS)
<b>b.</b> The name and address of the responsible person	Statement of Validity (page vii of EIS)
<b>c.</b> The address of the land: (i) In respect of which the development application is to be made, or (ii) On which the activity or infrastructure to which the statement relates is to be carried out	Statement of Validity (page vii of EIS)
<b>d.</b> A description of the development, activity or infrastructure to which the statement relates	Statement of Validity (page vii of EIS)
<b>e.</b> An assessment by the person by whom the statement is prepared of the environmental impact of the development, activity or infrastructure to which the statement relates, dealing with the matters referred to in this Schedule	Statement of Validity (page vii of EIS)
<b>f.</b> A declaration by the person whom the statement is prepared to the effect that: (i) The statement has been prepared in accordance with this Schedule, and (ii) The statement contains all information that is relevant to the environmental assessment of the development, activity or infrastructure to which the statement relates, and (iii) That the information contained in the statement is neither false or misleading	Statement of Validity (page vii of EIS)
<b>7. Content of environmental impact statement</b> (1) An environmental impact statement must also include each of the following:	
<b>a.</b> a summary of the environmental impact statement	Executive Summary
<b>b.</b> a statement of the objectives of the development, activity or infrastructure	Chapter 1.5
<b>c.</b> an analysis of any feasible alternatives to the carrying out of the development, activity or infrastructure, having regard to its objectives, including the consequences of not carrying out the development, activity or infrastructure	Chapter 1.6
<b>d.</b> an analysis of the development, activity or infrastructure, including:	
(i) a full description of the development, activity or infrastructure, and	Chapter 4
(ii) a general description of the environment likely to be affected by the development, activity or infrastructure, together with a detailed description of those aspects of the environment that are likely to be significantly affected, and	Chapter 8 and Appendices
(iii) the likely impact on the environment of the development, activity or infrastructure, and	Chapter 8 and Appendices

Requirement	Chapter of EIS
(iv) a full description of the measures proposed to mitigate any adverse effects of the development, activity or infrastructure on the environment, and	Chapter 12
(v) a list of any approvals that must be obtained under any other Act or law before the development, activity or infrastructure may lawfully be carried out	Chapter 2.4
e. a compilation (in a single section of the environmental impact statement) of the measures referred to in item (d)(iv),	Chapter 12
f. the reasons justifying the carrying out of the development, activity or infrastructure in the manner proposed, having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development set out in sub clause (4) Note. A cost benefit analysis may be submitted or referred to in the reasons justifying the carrying out of the development, activity or infrastructure.	Chapter 13

## 2.4 Other approvals

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

- An environment protection licence under the *Protection of the Environment Operations Act*
- A compliance certificate under section 73 of the *Sydney Water Act 1994* for connection of water supply for the new building
- An approval for Obstacle Limitation Surface protrusion under the *Airports (Protection of Airspace) Regulations* – to ensure construction and the proposed building will not interfere with operations and safety of Sydney Airport
- Approvals under the *Roads Act 1993* (including section 138 approvals) – may be required in the construction scenario where the station has been completed while OSD works are ongoing

It is noted that the works to the public domain and the access arrangements to the development are being undertaken under the terms of the CSSI Approval process and the necessary approval for this work will be obtained under the terms of that approval. Following completion of these works, and in the event that the OSD construction is still being undertaken or is yet to commence, separate approval/s will be obtained as necessary for any OSD works not undertaken in conjunction with the station. Refer to Chapter 4.11 of the EIS for details in relation to three potential construction scenarios for the Integrated Station Development.

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# **THE SITE AND ITS CONTEXT**

CHAPTER THREE





## 3. The site and its context

### 3.1 Location

The site is located at the southeast corner of the intersection of Miller Street and Berry Street, North Sydney, directly above the future Victoria Cross Station southern portal (Figure 16).

The site has a total area of 4,815 square metres and has frontages of approximately 37 metres to Berry Street, 34 metres to Denison Street and 102 metres to Miller Street.



Figure 16 – Site aerial photograph

The site is in the North Sydney local government area and is located in the northern section of North Sydney CBD, approximately three kilometres north of Sydney CBD, five kilometres southeast of Chatswood and two kilometres southeast of St Leonards.

North Sydney CBD forms Sydney's third largest office market (behind Sydney CBD and Macquarie Park) with some 830,000 square metres of commercial floor space. It is characterised by a consolidated commercial core, views to Sydney Harbour and Sydney CBD, a skilled labour force and surrounding high-amenity residential and mixed-use precincts.

North Sydney's commercial core is complemented by educational institutions, including the Australian Catholic University and many schools, a number of retail developments including those at Greenwood Plaza and Northpoint, and civic uses including the North Sydney Council chambers and Stanton Library.

A local context map is provided at Figure 17.





Figure 17 - Local context map

### 3.2 Legal description

The site comprises seven lots as detailed in Table 3 and illustrated in Figure 18.

Table 3 - Legal description of site

Address	Lot and DP
155-167 Miller Street	SP 35644
181 Miller Street	Lot 15 in DP 69345 Lot 1 & 2 in DP 123056 Lot 10 in DP 70667
187 Miller Street	Lot A in DP 160018
189 Miller Street	Lot 1 in DP 633088
Formerly part 65 Berry Street	Lot 1 in DP 1230458

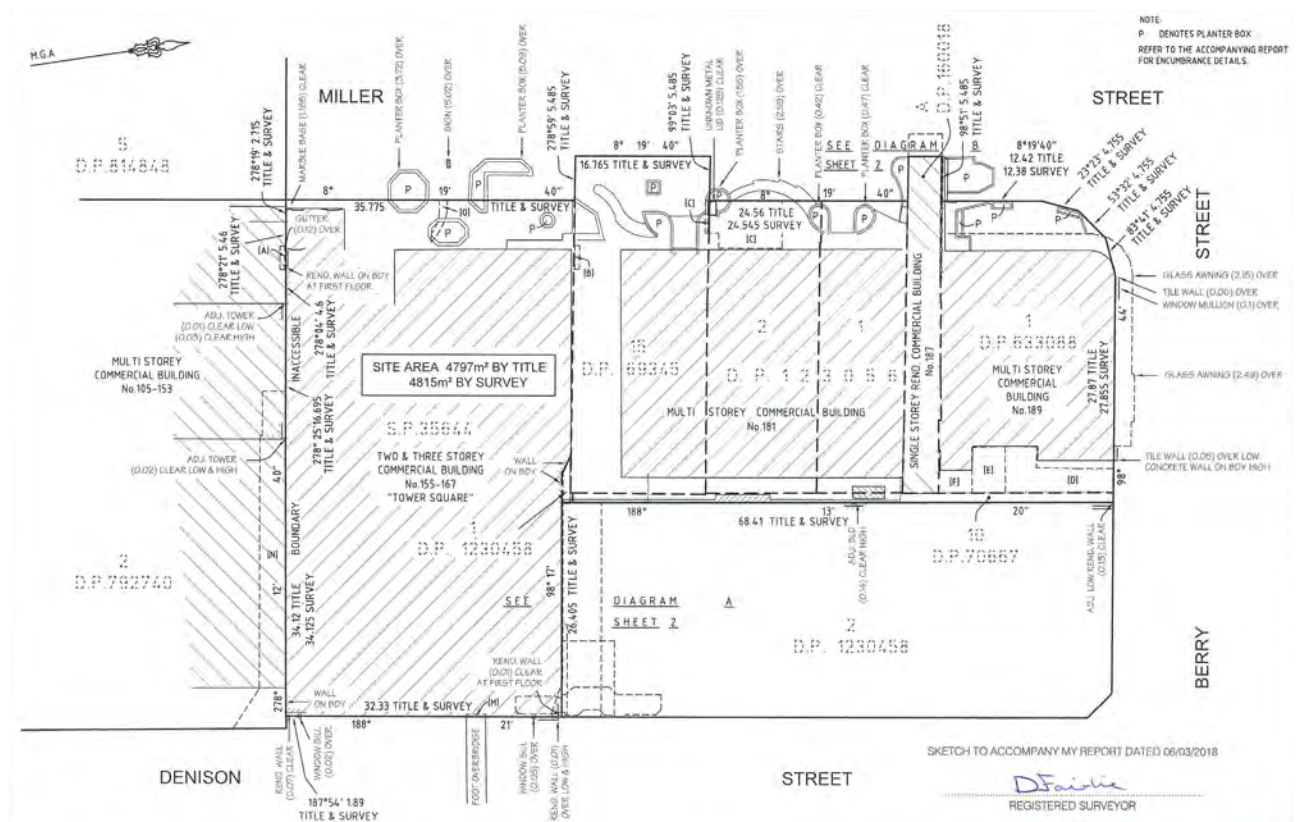


Figure 18 - Site survey

It is noted that the title lots comprising the site will be consolidated and subdivided under terms of the CSSI Approval and this is proposed to occur on or prior to the station date of completion in 2024. In this respect, the Preferred Infrastructure Report submitted with the CSSI application clarified that the project also included the subdivision of the station sites (including at Victoria Cross) to create separate lots for each station and the airspace for the future OSD. This concept SSD application seeks approval for the further subdivision of the OSD lot, if required. Refer to further discussion in Section 4.18 of this EIS.



### 3.3 Development on the site pre-demolition

All building structures on the site have been demolished under the terms of the CSSI Approval. This includes a mix of low-rise retail and mid-rise office development which were formerly on the site, as described below.

#### **155-167 Miller Street (formerly Tower Square)**

The former Tower Square comprised a two-storey shopping centre stretching between Miller and Denison Streets with more than 30 businesses, including restaurants and retail shops, and basement parking (Figure 19).

The NSLEP 2013 identifies certain areas within the former Tower Square, namely open-air food courts, as being a Special Area and includes special provisions to preserve solar access to these areas between 12 pm and 2 pm. Due to the demolition of this building, Council is proposing to remove the Special Area provisions relating to the site as part of the North Sydney Centre Planning Proposal (refer to discussion in Chapter 7.5 of this EIS).

#### **181 Miller Street**

This development comprised a 14-storey commercial tower fronting Miller Street with retail premises at the bottom two levels and office space above (Figure 20). The building featured a consistent front setback and no true podium, though the lower two retail levels were architecturally distinct.

#### **189 Miller Street**

This development comprised a seven-storey commercial building fronting Miller Street with ground level retail and office space above (Figure 20). The building featured consistent setbacks and no true podium, though the ground level was architecturally distinct.

#### **187 Miller Street**

This development comprised a two-storey shop fronting Miller Street (Figure 21) and is currently listed as a heritage item in NSLEP 2013. This building was one of the few remaining Victorian shopfronts on Miller Street, providing a strong contrast in its scale and architecture to the surrounding multi-storey commercial buildings in the North Sydney CBD. The building extended out towards Miller Street beyond the typical building alignment of the neighbouring office buildings, forming an irregular notch along the site's Miller Street frontage as evidenced in the site survey at Figure 18 and the detailed survey plan at Appendix B.

#### **Part 65 Berry Street**

The portion of the site which forms Lot 1 in DP 1230458, has a site area of 5.38 square metres and was formerly part of the neighbouring site at 65 Berry Street. It comprised part of a former access way to 65 Berry Street, did not contain any building structure and was defined by the perimeter walls of Tower Square and 65 Berry Street. Refer to the detailed survey plan at Appendix B.



Figure 19 – Former Tower Square, North Sydney (July 2016)



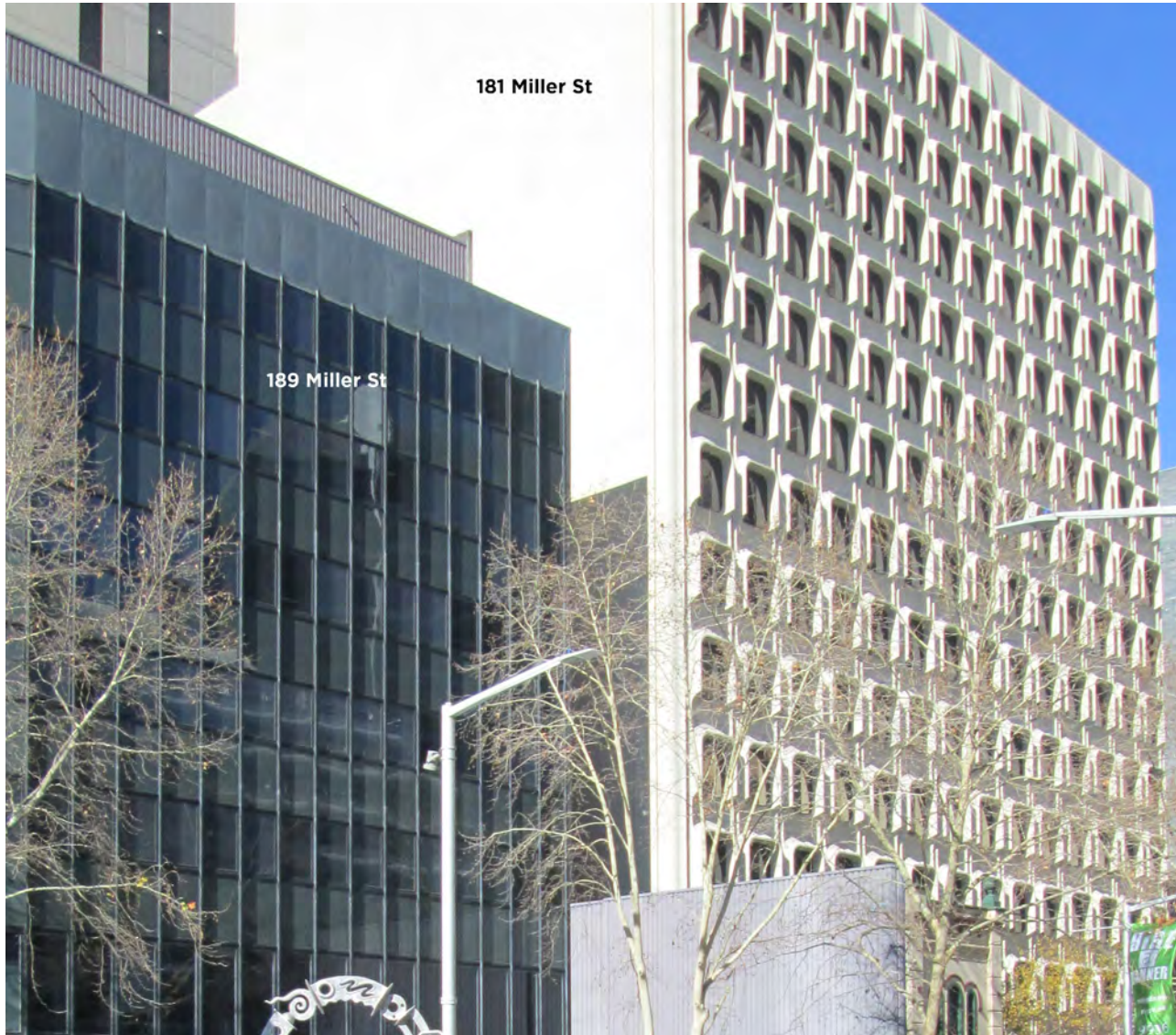


Figure 20 – 181 and 189 Miller St, North Sydney (July 2016)



Figure 21 – 187 Miller St, North Sydney (February 2017)

### 3.4 Surrounding development

The site is generally surrounded by mid to high rise commercial development interspersed with lower scale heritage items, education and civic uses, as shown in the map at Figure 22 and described in the following sections.



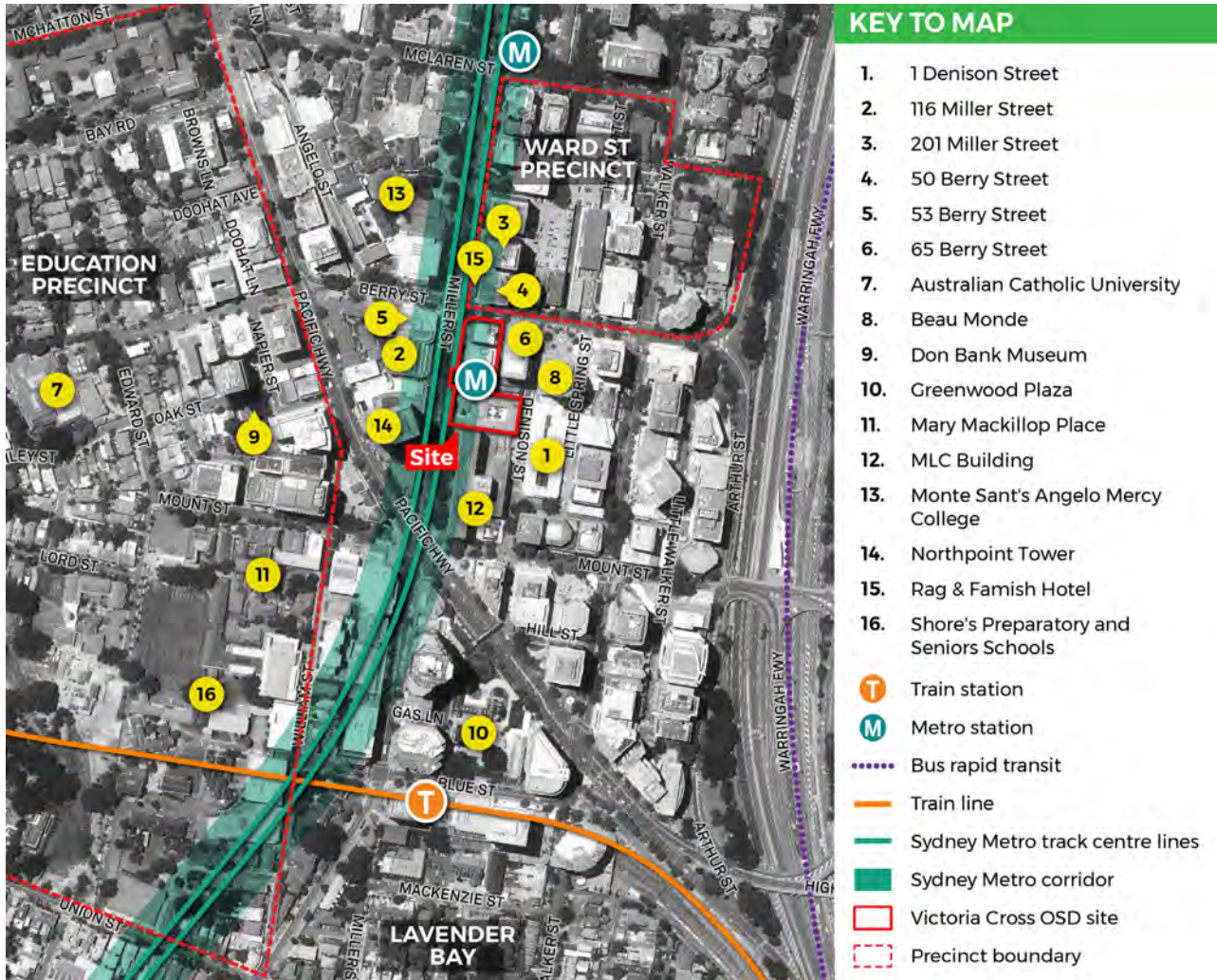


Figure 22 – Surrounding development

### 3.4.1 To the north

The area to the north of the site across Berry Street is known as the Ward Street Precinct and is generally defined by McLaren Street to the north, Berry Street to the south, Warringah Expressway to the east and Miller Street to the west. This precinct includes a mixture of commercial and residential development of varying architectural styles and scales, and a large 570-space car park.

North Sydney Council has identified this precinct as a key renewal opportunity given its proximity to Victoria Cross Station. A key component of Council's renewal plan for the area is the replacement of the Ward Street car park with a major new community facility and a 1,450-square metre public plaza.

Development immediately to the north of the site includes the 14-storey office building at 50 Berry Street and the two-storey Rag & Famish Hotel at 199 Miller Street (Figure 23) located on the corner of Miller Street and Berry Street. The Rag & Famish Hotel is a well-maintained example of a hotel in the Federation Free Classical style and is the last surviving traditional hotel in North Sydney CBD. It is listed as a heritage item in NSLEP 2013.



Beyond the Rag & Famish Hotel is a 21-storey office building at 201 Miller Street, which is also listed as a heritage item in NSLEP 2013, and other high density commercial and residential developments further to the north.

On the corner of McLaren Street and Miller Street is the site planned for the Victoria Cross North services building and station entry which forms part of the CSSI Approval. Other significant developments in the vicinity include the Wenona School, North Sydney Council Chambers, Stanton Library and St Leonards Park.

To the northwest of the site, diagonally opposite the intersection of Berry and Miller Streets, is the 'Monte Sant' Angelo Group of buildings, which contains a collection of nineteenth and early twentieth century buildings including an early mansion, chapel and Mercy Hall. This group of buildings is listed as a heritage item in NSLEP 2013.



Figure 23 – Development to the north of the site



### 3.4.2 To the south

To the south, the site is adjoined by the MLC Building at 105 Miller Street (Figure 24), a 14-storey office building listed as a heritage item in NSLEP 2013. The MLC Building's primary frontage is to Miller Street, but the building also features ground floor retail uses and a secondary office lobby on its Denison Street frontage.

To the south of the MLC Building is Brett Whiteley Plaza, a recently upgraded pedestrian plaza connecting Mount Street and the Pacific Highway. Brett Whiteley Plaza is zoned *RE1 Public Recreation* and is protected by special provisions in NSLEP 2013 which prohibit any net increase in overshadowing resulting from new development between 12 pm and 2 pm.

Development further to the south across Pacific Highway includes Greenwood Plaza and the Greenwood Shopping Centre, North Sydney Station, and other mid to high rise commercial buildings. Greenwood Plaza is identified as a Special Area in NSLEP 2013 and is subject to the same overshadowing provisions identified for Brett Whiteley Plaza. Greenwood Shopping Centre also includes an underground pedestrian link to North Sydney Station (to the south) and to the northern side of Pacific Highway (to the north). A footbridge over the Pacific Highway from the shopping centre provides an alternative access route to the site from North Sydney Station.

Bordering the CBD to the south is low-density residential development in Lavender Bay.



Figure 24 – MLC Building (105 Miller St) (May 2018)

### 3.4.3 To the east

To the east, the site is adjoined by an 18-storey office building at 65 Berry Street (Figure 25).

Further to east across Denison Street is the Beau Monde Apartment building at 77-81 Berry Street (Figure 25). This building comprises of a mixed use 37-storey building containing seven levels of commercial floor space and 30 storeys of residential accommodation (241 apartments).

To the east of the former Tower Square development and directly to the south of the Beau Monde Apartments is the 1 Denison Street development site which is currently under construction for a 37-storey commercial tower (Figure 25). The 1 Denison Street development will feature a pedestrian through-site link between Little Spring Street and Denison Street, which will connect to the future Victoria Cross Station entry/through-site link. Further details in relation to the form and scale of the 1 Denison Street development and its relationship to the subject site is provided in the Built Form and Urban Design Report at Appendix G of this EIS.

Further to the east, development predominantly comprises mid to high rise commercial development up to the Warringah Freeway, which forms the eastern CBD boundary. Beyond the freeway is the Cahill Expressway, and development further to the east of the expressway is generally characterised by low-density residential development, with the exception of a strip of small scale commercial development fronting Alfred Street to the north of Whaling Road at North Sydney. Overshadowing impacts to the residential dwellings on the southern side of Whaling Road (Figure 26) during the afternoon hours is a key consideration for the concept proposal and is addressed in further detail in Chapter 8.3.5 of this EIS.

It is noted that the eastern side of Miller Street between Berry Street and the Pacific Highway is identified as Special Area in NSLEP 2013, including land within the subject site and the MLC Building site. This area is protected by special provisions in NSLEP 2013 which prohibit any net increase in overshadowing resulting from new development.





Figure 25 – Denison St (looking north from Mount Street) (April 2018)



Figure 26 – Dwellings on Whaling Rd, North Sydney

#### 3.4.4 To the west

Development to the west across Miller Street includes the four- to six-storey commercial development at 116 Miller Street (refer to Figure 27) and 53 Berry Street, and the 34-storey Northpoint Tower at 100 Miller Street, which is currently being redeveloped (Figure 28).

Further to the west is the North Sydney Education Precinct, a 26-hectare area containing the North Sydney Demonstration School, the North Sydney campus of the Australian Catholic University and Shore's preparatory and senior schools, as well as Mary Mackillop Place and the Don Bank Museum.





Figure 27 - 116 Miller St (May 2018)





Figure 28 – Northpoint (100 Miller St) (April 2018)



### 3.4.5 Development under construction

The site is located in an area of the North Sydney CBD undergoing urban renewal, resulting in significant changes to the site's urban context. A number of high density commercial and residential developments are currently under construction, as outlined below:

- **1 Denison Street:** a new commercial tower with a maximum building height of RL 210 or 37 storeys and a total GFA of 66,706 square metres (MP08-0238, as amended)
- **100 Mount Street:** a new commercial tower with a maximum building height of RL 199.7 or 36 storeys and a total GFA of 46,359 square metres (MP08\_0241)
- **118 Mount Street:** a new commercial tower up to RL 154.57 or 25 storeys with total GFA of 19,798 square metres (2017SNH016 DA)
- **100 Miller Street:** the redevelopment of Northpoint Tower involving reconfiguration of podium levels and new hotel tower with a maximum building height of RL 106.5 (2014SYE149 DA). This development is nearing completion
- **221 Miller Street:** a new 22-storey mixed-use building with a maximum building height up to RL 146.7 or 22 storeys and a total GFA of 19,628 square metres (2013SYE006 DA)

These developments are identified in the map at Figure 29.



Figure 29 – Surrounding development currently under construction and recently completed



Notably, the public domain for the Victoria Cross Integrated Station Development is being designed to integrate with that of the approved 1 Denison Street development directly to the east. As shown in Figure 29, the 1 Denison Street development will feature a through-site link between Denison and Little Spring Streets. This link will connect further to the east to the existing pedestrian link to Walker Street and to the west to the future through-site link through the Victoria Cross Station site to Miller Street, forming a continuous east-west link between Walker and Miller Streets.

In addition to development currently under construction, a number of large commercial office buildings in close proximity to the site have been completed in recent years. These developments, including 177 Pacific Highway and 40 Mount Street, exemplify a shift in the nature of commercial development in North Sydney towards large commercial office plates and contemporary architectural forms.

### 3.5 Transport and accessibility

#### 3.5.1 Public transport

The site is well-connected to the public transport system, as shown in the map at Figure 30 and as described below.

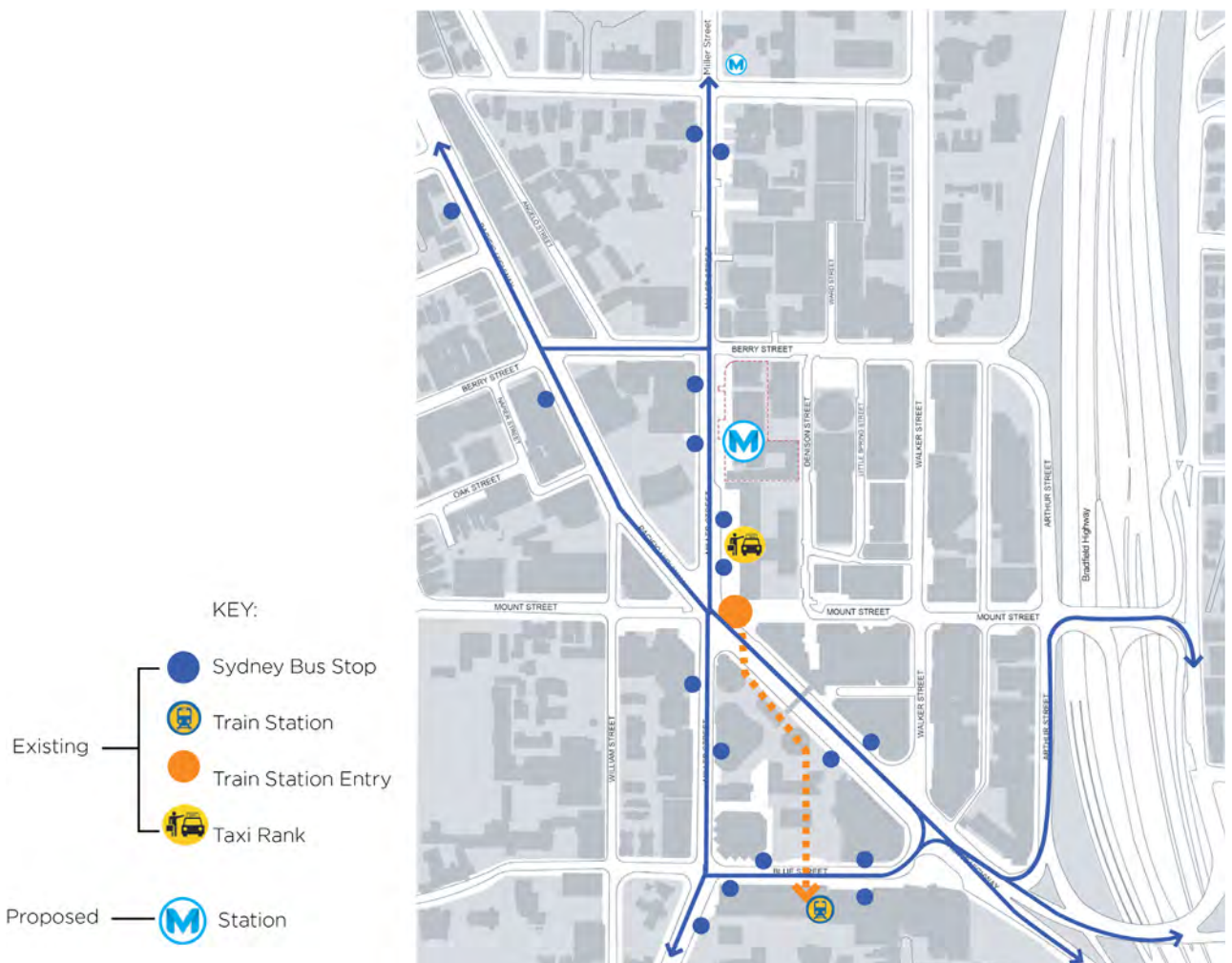


Figure 30 - Surrounding public transport

### Rail

The site is approximately 400-metres walking distance north of the existing North Sydney Station, Sydney's fifth busiest rail station with approximately 52,000 daily patrons. The station is located on the T1 North Shore Line, which provides connections to Hornsby, Chatswood and Macquarie Park to the north, Sydney CBD to the south, and Parramatta, Blacktown and Penrith to the west.

The proposed building envelope is located directly above the future Victoria Cross Station, which is one of seven new Sydney Metro City & Southwest stations. The future OSD would integrate physically with the station. From Victoria Cross Station, commuters will be able to access Barangaroo in three minutes, Martin Place in five minutes and Central Station in nine minutes.

### Bus

There are numerous bus services in the vicinity of the site, with over 40 different routes passing through the area. The Pacific Highway forms a major thoroughfare with southbound services through Sydney CBD to Botany, Kingsford and Botany, and northbound services to Chatswood. Major bus stops are also located on Miller Street in close proximity to the site, serving the primary purpose of transporting passengers to and from the T1 North Shore Line.

### Ferry

The site is located approximately 1.25 kilometres north of McMahons Point Ferry Wharf, which provides services to Circular Quay and Parramatta.

## 3.5.2 Vehicular access, loading and parking

As illustrated in Figure 30, the following three roads border the site:

**Berry Street:** This road borders the site to the north. It has an east-west alignment and is classified as a State road east of its intersection with Pacific Highway. It provides four lanes in the eastbound direction only, with the kerbside lanes subject to time restricted parking. East of Walker Street, it continues as Arthur Street and provides access to the M1 Motorway and Sydney Harbour Bridge. It has a speed limit of 40 kilometres per hour.

**Denison Street:** This road borders the site to the east and runs between Mount Street and Berry Street. The section between Mount Street and Spring Street runs one-way to the south, while the section between Mount Street and Berry Street (including the section bordering the site) runs one-way to the north. Denison Street is planned for upgrades, including its partial pedestrianisation under Council's *Central Laneways Masterplan* (2016).

**Miller Street:** This road borders the site to the west. It is a classified (regional) two-way road comprising one traffic lane and one bus/loading zone lane running north, and one traffic lane plus on street parking running south which expands to two traffic lanes plus bus and loading zone lane in front of the MLC Building.

Prior to demolition of the existing buildings on the site, vehicular access to the site was via multiple driveways from Denison Street and one driveway from Berry Street. A total of 208 parking spaces were previously provided on the site including a Wilson Public Parking Station.

There is no unrestricted parking within 400 metres of the site, which reflects the CBD environment.

### **3.5.3 Pedestrian access**

Pedestrians can access the site via the surrounding road network. All three bordering roads feature dedicated footpaths. Prior to demolition, the buildings on the site included entrances on Miller, Denison and Berry Streets.

Miller Street functions as a major thoroughfare for pedestrians travelling between North Sydney Station and the commercial, institutional and educational land uses to the north of the site. The predominant pedestrian movement around the site is north-south along Miller Street. There is also strong north-south movement along Denison Street, the lower end of which is proposed to be pedestrianised under Council's *Central Laneways Masterplan (2016)*.

As detailed above, a new pedestrian through-site link between Miller and Denison Streets will be delivered as part of the CSSI Approval.

### **3.5.4 Bicycle network**

The site is accessible to cyclists via a network of on-road marked routes, off-road route/shared paths and unmarked suggested routes. Miller Street forms a key cycling route through North Sydney, with an on-road marked route running south of Berry Street and an unmarked suggested route running north of Berry Street (Figure 31). To the south the network connects to North Sydney Station, McMahons Point Ferry Wharf and the Sydney Harbour Bridge.

Bicycle parking facilities such as O-rings, rails and enclosed lockers are located in the area for cyclists. Use of the secure enclosed lockers available on Mount Street is subject to Council approval, and there is a waiting list for these, indicating high demand for secure cycling facilities.

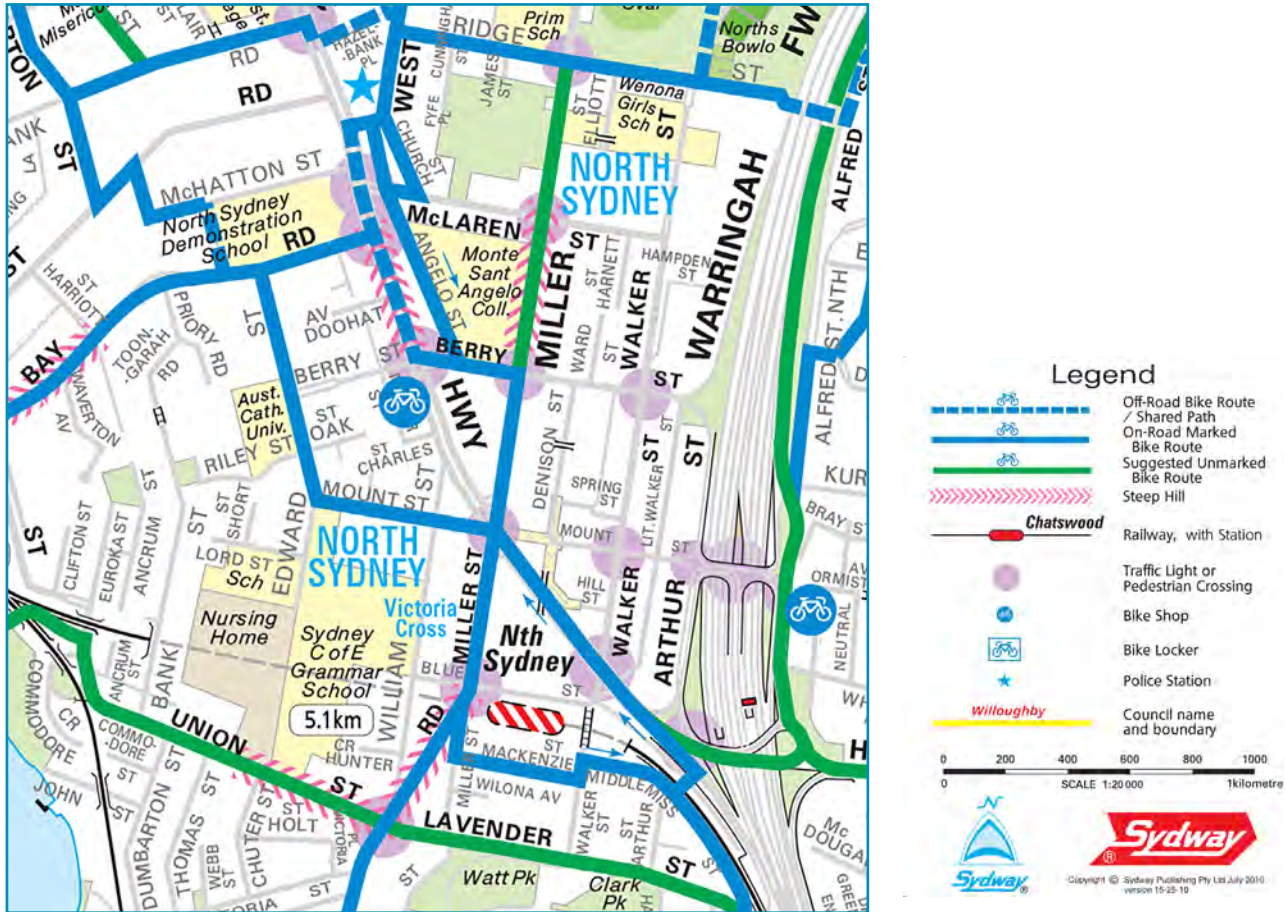


Figure 31 - North Sydney cycling network

## 3.6 Heritage

Table 4 summarises the heritage items listed on and surrounding the site. These items are identified on the map at Figure 32. The site is not located within or in close vicinity of a heritage conservation area.

Table 4 – On-site and surrounding heritage items

Item	Name and address	Significance	Description
I0898	Shop (187 Miller Street) – located on the site	Local	Two-storey narrow-fronted shop of rendered brick; demolished under the CSSI Approval.
I0893	MLC Building (105 Miller Street)	Local	Post War International style; first office block in North Sydney; notable for its then-innovative construction and structural techniques including curtain walling and modular units.
I0901	Rag & Famish Hotel	Local	Well-maintained example of hotel in Federation Free Classical style; last surviving traditional hotel in North Sydney CBD.
I0894 – I0897	Monte Sant' Angelo Group (128 Miller Street)	Local	Collection of nineteenth and early twentieth century buildings; contains a significant early mansion as its central building.
I0904	Commercial Building (201 Miller Street)	Local	Highly integrated office tower in Twentieth Century International style with distinctive detailing.
I0919	Former Bank of NSW (51 Mount Street)	Local	Excellent example of period bank architecture situated on a prominent corner.
I0920	Facade of S. Thompson Building (No 67a) (67-69 Mount Street)	Local	Early shopfront façade; important and visible relic of the retail development on this section of Mount Street.
I0921	House (67-69 Mount Street)	Local	Early shopfront façade; important and visible relic of the retail development on this section of Mount Street.
I0983	Former Fire Station (86 Walker Street)	Local	Original fire station for North Sydney and a relic of operations from horse drawn technology; fine example of a small regional government building in the Victorian Italianate style.
I0892	Greenwood (former North Sydney Technical High School) (101-103 Miller Street or 36 Blue Street)	State	Rare and unique example of Gothic and Romanesque Revival styles; sandstone structure now surrounded by open landscaping.
I0953	North Sydney Post Office and Court House (former police station) (92-94 Pacific Highway)	State	Distinctive example of the Victoria Free Classical style; located on a prominent corner site; provides an insight into the earlier built form of North Sydney CBD.



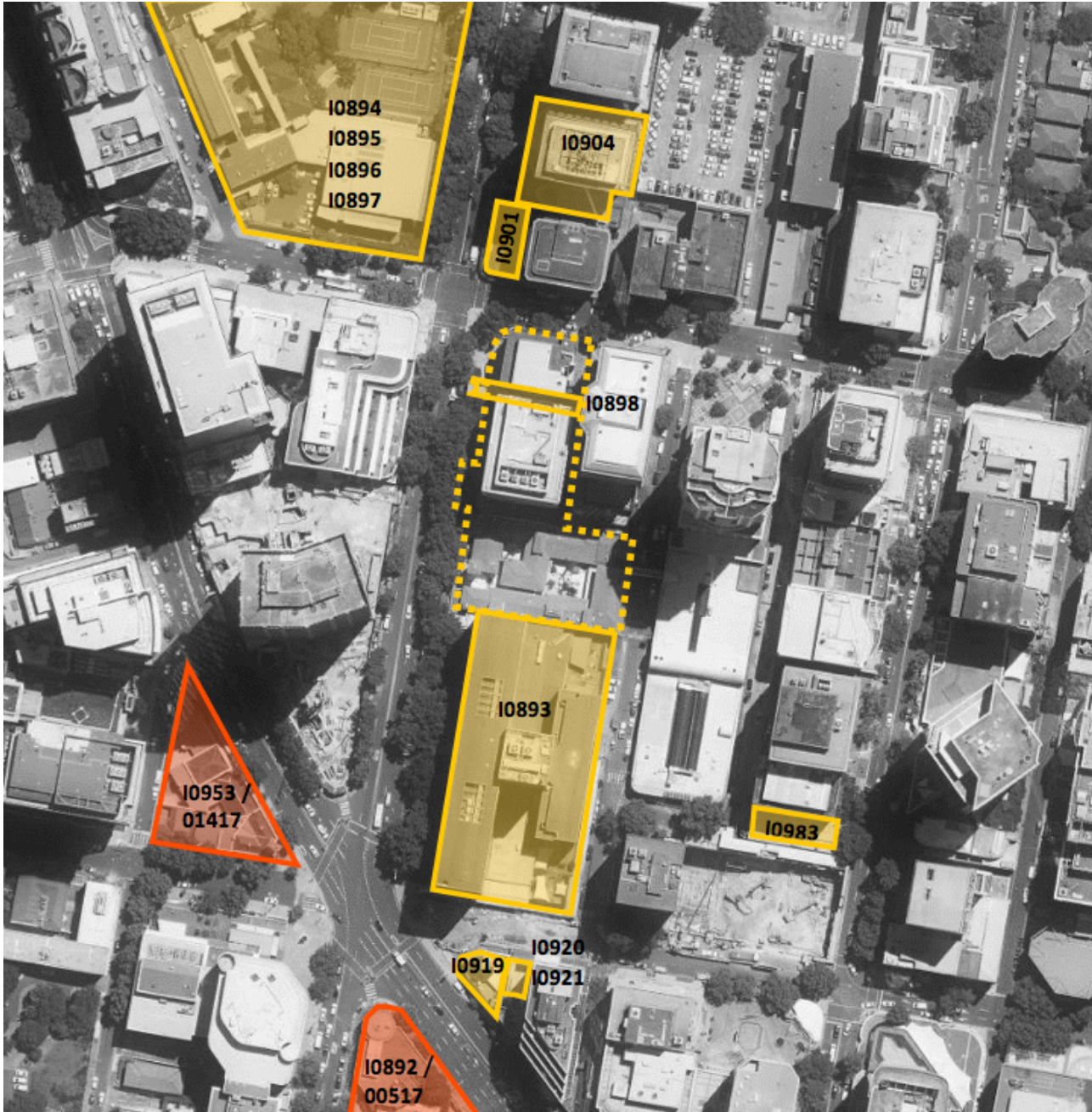


Figure 32 – Surrounding heritage items

The potential impact on surrounding heritage items has been a key consideration in the design of the proposed building envelope. This is discussed in Chapter 8.5 of this EIS and the Heritage Impact Assessment Report at Appendix O.

## 3.7 Topography/finished levels

### Pre-development topography

As shown in Figure 33, there is considerable variation in existing land levels across the site. The site falls approximately 7.5-metres towards the south-east, from a high point of RL 66.5 on the corner of Miller and Berry Streets to a low point of RL 59 on the Denison Street frontage. The southern end of the Miller Street frontage is a midpoint of the fall at RL 63.

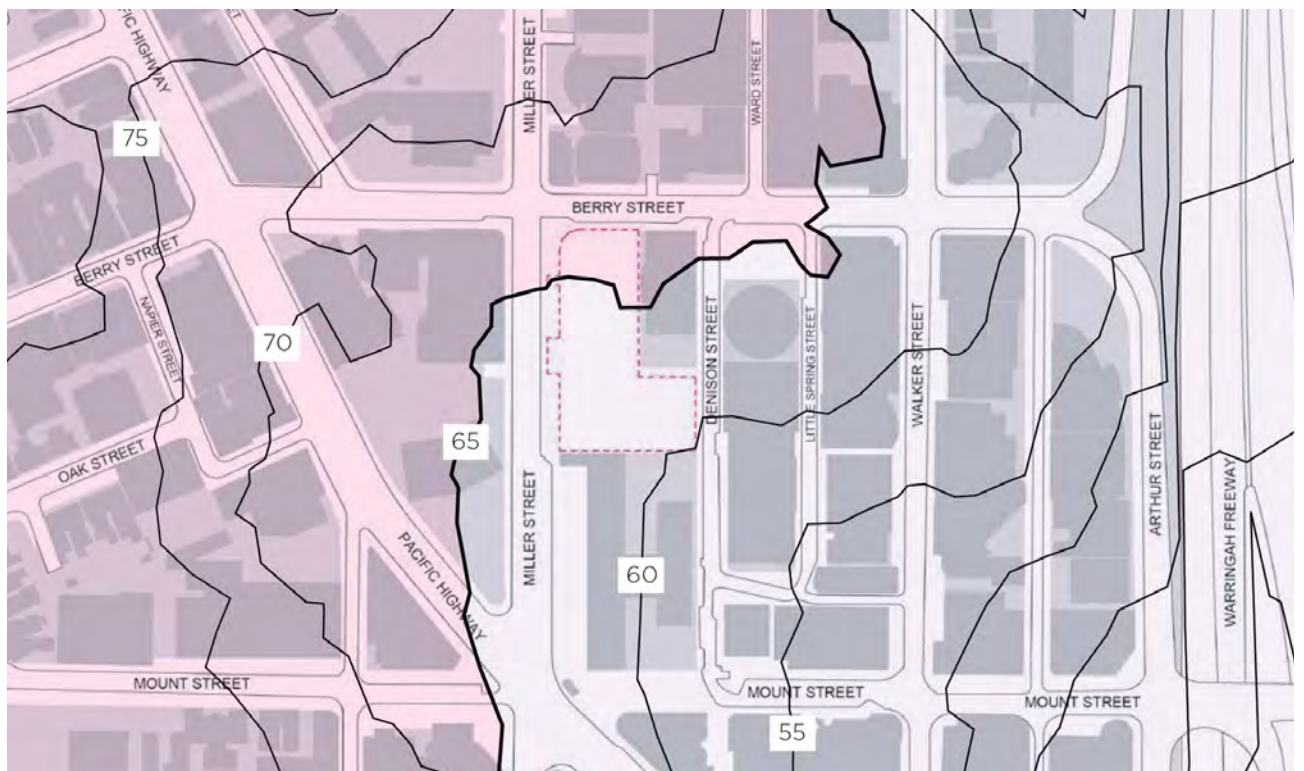


Figure 33 – Pre-development topography

The topography of the site has been a key consideration in the design resolution of the ground plane of the station, the access arrangement to the site and the pedestrian movement through the site. The ground floor levels for the station and its integration into the surrounding public domain will be resolved through further design development under the terms of the CSSI Approval and include the preparation of a SDPP and an IAP under Conditions E101 and E92, respectively. For the purposes of this concept application, the ground levels and ground floor arrangement reflect the current level of design work for the station and have been used as the basis of the design for the proposed OSD building envelope and the indicative OSD design.

Through the post approval design development to date, Sydney Metro's Victoria Cross Station design team has established a finished floor level of RL 64 at the entry to the commercial office lobby on Miller Street and RL 59 at the station entry (and access to the commercial office lobby via stairs or lifts from Denison Street), as illustrated in the plans at Appendix E. The base of the proposed OSD building envelope has been set at RL 82.

The final design and finished levels are yet to be determined for the public domain improvements

surrounding the site. As stated above, these will be delivered under the terms of the CSSI Approval. The design will ensure integration with the established levels of the surrounding public domain in Berry, Miller and Denison Streets and will be resolved in consultation with North Sydney Council.

The processes described in the Design Excellence Strategy and Design Guidelines (Appendix C and Appendix CC, respectively) would ensure that the design of the station, the public domain and the OSD are fully integrated and that a high-quality outcome is achieved.

## 3.8 Flooding and stormwater

The site has been identified by North Sydney Council as flood prone land with depths in excess of 0.3 metres for events up to the 5-year Annual Recurrence Interval (ARI) event and in excess of one metre for the 100-year ARI event (*North Sydney LGA Flood Study, 2017*).

A preliminary flood assessment was undertaken as part of developing the Sydney Metro Victoria Cross Station design based on the 2017 Council Flood Model. The assessment confirmed the site is located in a flood affected area, noting that the previous building courtyard at Tower Square provided informal flood storage during major storm events and forms part of an overland flow path.

All flood affectation at the site will be resolved through the station design under the CSSI Approval. Refer to further discussion in Chapter 8.10 of the EIS and the Flood Assessment and Stormwater Management Report at Appendix T.

## 3.9 Vegetation

The site is located in a highly urbanised CBD context. Prior to the commencement of the demolition works approved under the CSSI Approval, the only vegetation on site consisted of a number of trees and shrubs located in raised planter beds along the Miller Street frontage. The location and configuration of these planters is shown on the site survey at Appendix B.

A number of street trees (primarily London Plane) are located along the street kerb edge around the perimeter of the site in both Miller Street and Berry Street. Several of these trees have been removed as part of the early site works for the CSSI Approval.

## 3.10 Utilities and infrastructure

The site is serviced by a full range of utilities and services, including stormwater drainage, sewerage, potable water, telecommunications, gas and electrical infrastructure. Appropriate utility and service connections will be provided under the CSSI Approval to meet the servicing requirements of the Victoria Cross Integrated Station Development. For further detail, refer to Chapter 8.9 and the Services and Utilities Infrastructure Report at Appendix S of this EIS.



## 3.11 Easements and covenants

The site is affected by the following notable easements and covenants:

- easement for stormwater drainage running the southwest portion of SP 35644 (former Tower Square development), which accommodates Sydney Water trunk drainage infrastructure
- substation premises (now demolished) located at the southeast corner of the basement floor of SP 35644
- easement for overhead concrete footbridge (now demolished) affecting a minor segment SP 35644 along the Denison Street boundary
- right of footway limited in height over the northeast corner of lot SP 35644 (to accommodate foot traffic from the office building at 65 Berry Street into the former Tower Square development)

These easements and other encumbrances relate to the development that existed on the site prior to demolition under the terms of the CSSI Approval. These encumbrances would be extinguished and appropriate easements and covenants created to respond to the final Victoria Cross Integrated Station Development.

Further details in respect to these encumbrances are shown on the site survey at Appendix B.

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# **THE PROPOSED DEVELOPMENT**

CHAPTER FOUR



## 4. The proposed development

This chapter provides a detailed description of the concept proposal and sets out the planning and development framework for the future detailed SSD Application. It articulates what TfNSW is seeking to achieve for the future OSD at the site, including its integration with the Victoria Cross Station.

This chapter is informed by the architectural drawings at Appendix E and the Built Form and Urban Design Report at Appendix G, as well as other supporting information appended to this EIS.

### 4.1 Description of the proposed development

This concept SSD Application seeks concept approval for the following:

- a maximum building envelope, including street-wall and setbacks, as illustrated in the architectural drawings at Appendix D
- a maximum building height of RL 230 or 168 metres (approximately 42 storeys – 40 commercial storeys and two additional storeys for rooftop plant) for the high rise portion of the building envelope and RL 118 or 55 metres (approximately 13 storeys) for the lower rise eastern portion of the building envelope.
- a maximum gross floor area (GFA) of 60,000 square metres for the OSD component (equivalent to an FSR of 12.46:1)
- use of the building envelope area for commercial premises including office, retail and business premises
- use of the conceptual OSD space provisioning within the footprint of the CSSI Approval (both above and below ground), including the OSD lobby and associated retail space, basement parking, end-of-trip facilities, services and back-of-house facilities
- car parking for a maximum of 150 parking spaces for OSD over four basement levels (noting that the basement also includes an additional 11 spaces allocated to the station retail approved under the CSSI Approval)
- loading, vehicle and pedestrian access arrangements from Denison Street
- strategies for utilities and services provision
- strategies for the management of stormwater and drainage
- a strategy for the achievement of ecologically sustainable development
- indicative signage zones
- a design excellence framework
- a public art strategy
- the future subdivision of parts of the OSD footprint, if required

As this is a staged development pursuant to section 4.22 of the EP&A Act, future approval would be sought for the detailed design and construction of the OSD.

## 4.2 Key development information

The key numeric details for the proposed building envelope and the Integrated Station Development are summarised in Table 5.

**Table 5 – Key development information**

Item	Details
Site area	4,815 square metres
GFA	<ul style="list-style-type: none"> <li>60,000 square metres (proposed OSD component)</li> <li>67,000 square metres (entire Integrated Station Development including 2,500 square metres and 4,500 square metres attributed to the station operations and station retail, respectively)</li> </ul>
FSR	<ul style="list-style-type: none"> <li>12.46:1 (proposed OSD component only)</li> <li>13.91:1 (entire Integrated Station Development)</li> </ul>
Height	<ul style="list-style-type: none"> <li>High rise (northern portion of the building envelope): maximum RL 230, equivalent to approximately 168 metres or approximately 42 storeys (40 commercial storeys and 2 storeys for rooftop plant)</li> <li>Low rise (eastern portion of the building envelope): maximum RL 118, equivalent to approximately 55 metres or 13 storeys</li> </ul> <p><i>Note:</i> for the purposes of this concept SSD Application, the maximum height of the building envelope does not make provision for the following items, which will be resolved as part of the future detailed SSD Application:</p> <ul style="list-style-type: none"> <li>communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like, which are excluded from the calculation of building height, pursuant to the standard definition in NSLEP 2013; and</li> <li>architectural roof features, which are subject to compliance with the provisions of Clause 5.6 of NSLEP 2013, and may exceed the maximum building height, subject to development consent.</li> </ul>
Setbacks	<ul style="list-style-type: none"> <li>5-metre setback from Berry Street (northern boundary)</li> <li>18-metre setback from southern boundary (adjoining MLC Building)</li> <li>0-metre setback from Denison Street (eastern boundary)</li> <li>0-metre setback from 65 Berry Street (eastern boundary)</li> <li>From Miller Street, setbacks ranging from 6 metres at the lower levels beneath RL 118 to 1.5 metres at the upper levels of the building envelope above RL 190</li> </ul> <p>These setbacks apply only to the proposed OSD building envelope, which begins at RL 82.</p>

Item	Details
Car spaces	<ul style="list-style-type: none"> <li>○ <i>OSD</i>: Maximum of 150 spaces</li> <li>○ <i>Integrated Station Development</i>: Maximum of 161 spaces comprising 11 spaces for station retail tenancies and 150 spaces for the <i>OSD</i></li> </ul>
Loading docks	<ul style="list-style-type: none"> <li>○ <i>OSD</i>: <ul style="list-style-type: none"> <li>◆ 6 x courier spaces</li> <li>◆ Use of 2 x semi-rigid vehicles (SRV) and 2 x medium-rigid vehicles (MRV) including 1 allocated to garbage collection- these spaces are shared between the <i>OSD</i>, station retail and station operations.</li> </ul> </li> <li>○ <i>Integrated Station Development</i>: Maximum of 12 spaces in Basement Level 2 comprising: <ul style="list-style-type: none"> <li>◆ 6 x courier spaces for <i>OSD</i> and all retail uses</li> <li>◆ 2 x service vehicle spaces for station operator</li> <li>◆ 2 x semi-rigid vehicle (SRV) spaces (for all <i>Integrated Station Development</i> uses)</li> <li>◆ 2 x medium-rigid vehicles (MRV) spaces including 1 allocated to garbage collection (for all <i>Integrated Station Development</i> uses)</li> </ul> </li> </ul> <p>This application specifically seeks approval for the spaces allocated to the <i>OSD</i> uses, including those spaces shared with the station operations and station retail.</p>

### 4.3 Building envelope

The proposed building envelope defines the three-dimensional volume within which future *OSD* can occur. Figure 34 and Figure 35 show elevations of the proposed building envelope (shown in blue) and define the parameters for the development above the built form approved under the *CSSI* Approval (shown in pink).

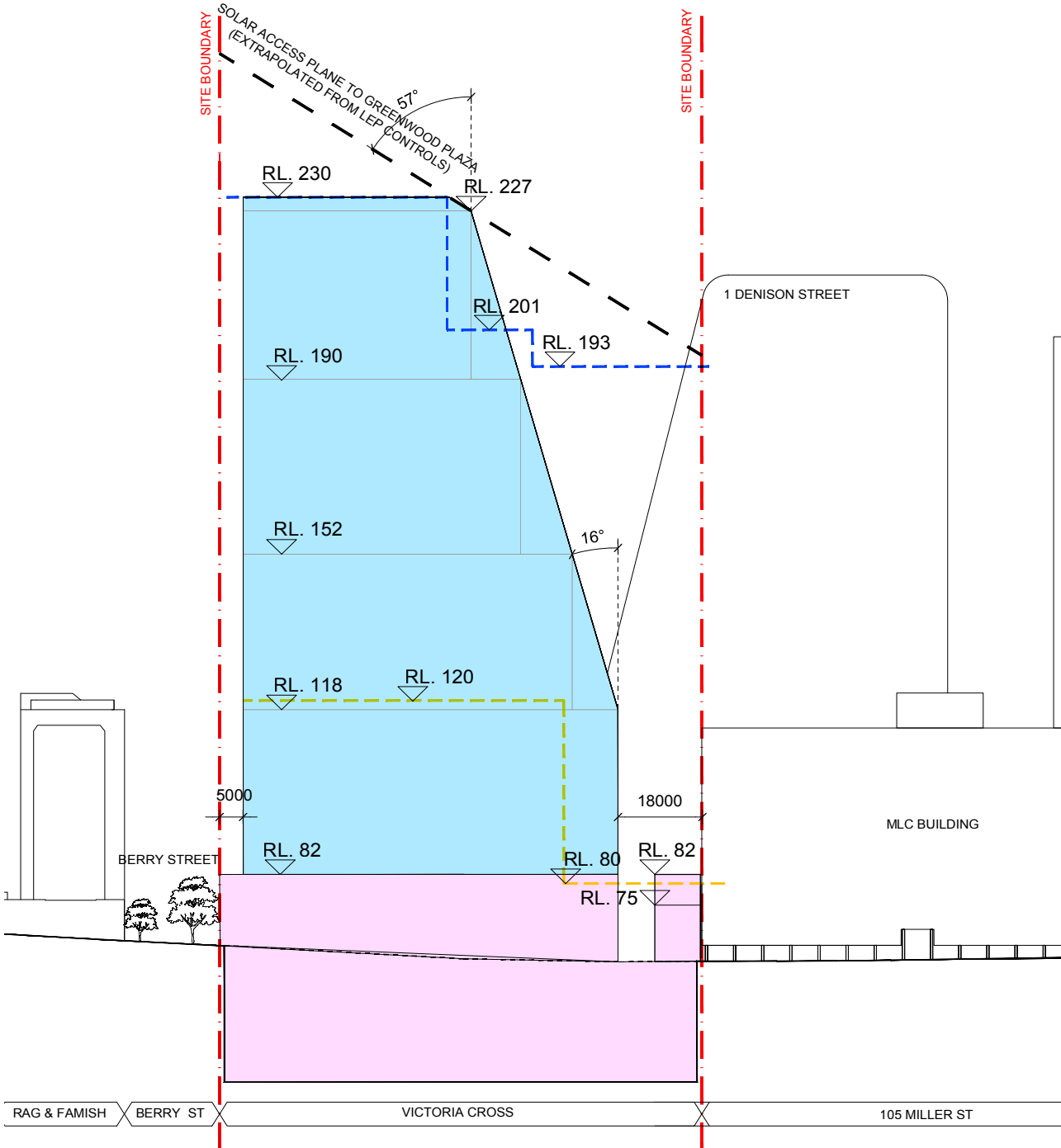


Figure 34 – Proposed building envelope- Miller St elevation

KEY:

- MAXIMUM BUILDING HEIGHT NORTH SYDNEY CENTRE PLANNING PROPOSAL (AS AMENDED BY COUNCIL RESOLUTION 19TH MARCH 2018)
- MAXIMUM BUILDING HEIGHT NORTH SYDNEY LEP 2013

■ VICTORIA CROSS STATION CSSI APPROVAL - INCLUDES STRUCTURE AND BUILDING INFRASTRUCTURE AND SPACE FOR LIFT CORES, ACCESS, PARKING, RETAIL AND BUILDING SERVICES FOR THE FUTURE OSD

■ OSD CONCEPT SSDA BUILDING ENVELOPE INCLUDES OSD AREAS INSIDE THE CSSI 'SHELL' BELOW GROUND AND IN THE PODIUM LEVELS



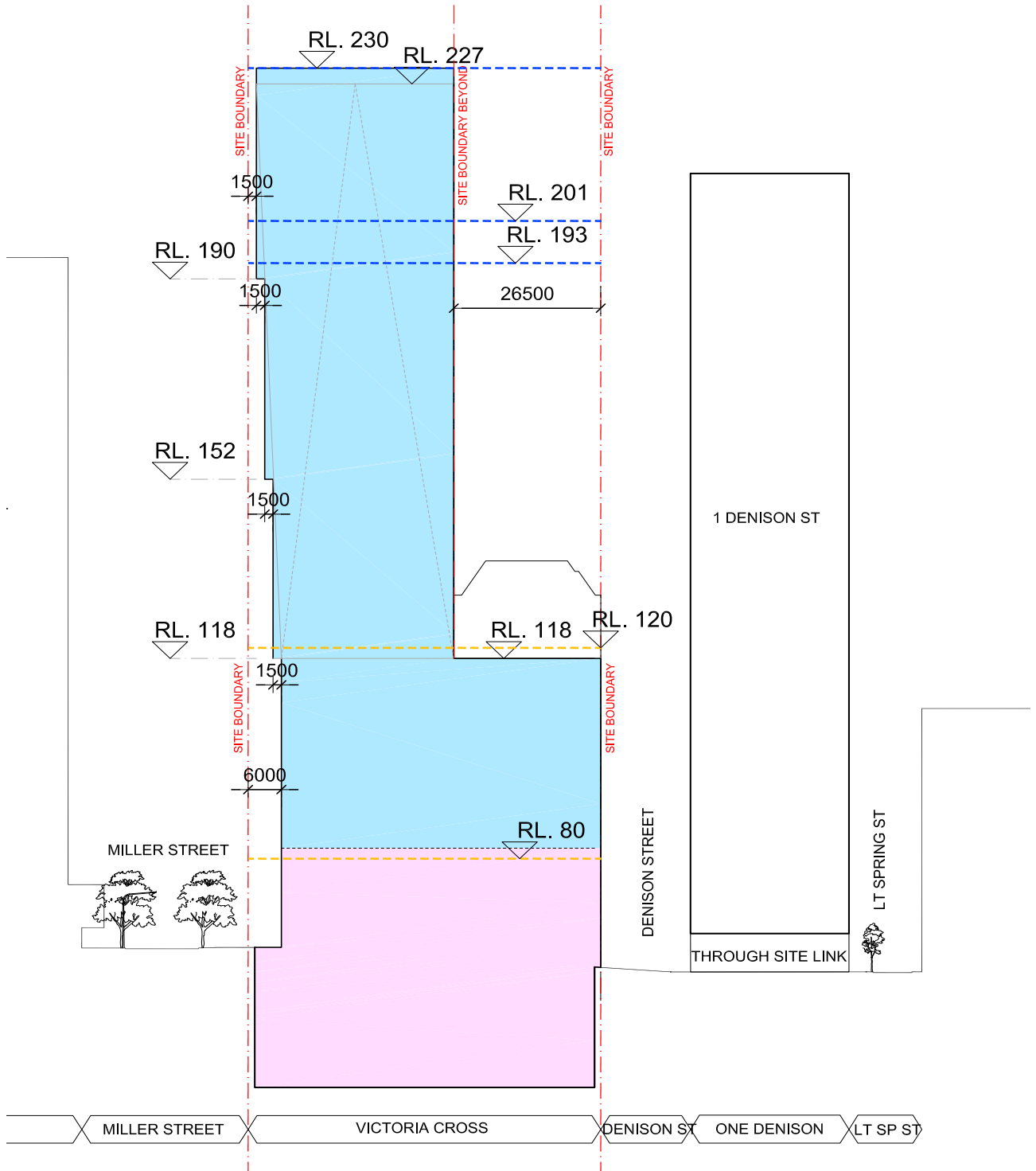


Figure 35 - Proposed building envelope- east west section

KEY:

- MAXIMUM BUILDING HEIGHT NORTH SYDNEY CENTRE PLANNING PROPOSAL (AS AMENDED BY COUNCIL RESOLUTION 19TH MARCH 2018)
- MAXIMUM BUILDING HEIGHT NORTH SYDNEY LEP 2013

VICTORIA CROSS STATION CSSI APPROVAL - INCLUDES STRUCTURE AND BUILDING INFRASTRUCTURE AND SPACE FOR LIFT CORES, ACCESS, PARKING, RETAIL AND BUILDING SERVICES FOR THE FUTURE OSD

OSD CONCEPT SSDA BUILDING ENVELOPE INCLUDES OSD AREAS INSIDE THE CSSI 'SHELL' BELOW GROUND AND IN THE PODIUM LEVELS

The building envelope has been designed to align with key controls in NSLEP 2013 and NSDCP 2013 and to fully integrate with the design for Victoria Cross Station.

The maximum building envelope height of RL 230 is consistent with the maximum height proposed for the site under *North Sydney Centre Planning Proposal*. As shown in Figure 34, the upper portion of the envelope exceeds the relevant proposed maximum height in the *North Sydney Centre Planning Proposal*. Such an exceedance is permitted on merit under clause 6.3 of NSLEP 2013, subject to compliance with certain overshadowing provisions (refer to further discussion in Chapter 7.4 of this EIS and the Clause 4.6 variation request at Appendix EE).

Figures 36 and 37 below show the proposed building envelope (blue) within the broader North Sydney CBD context, including to show its relationship with new development under construction (yellow) and surrounding development. These figures illustrate how the proposal fits into its urban context and is complementary to the emerging form and scale of neighbouring development in the CBD.

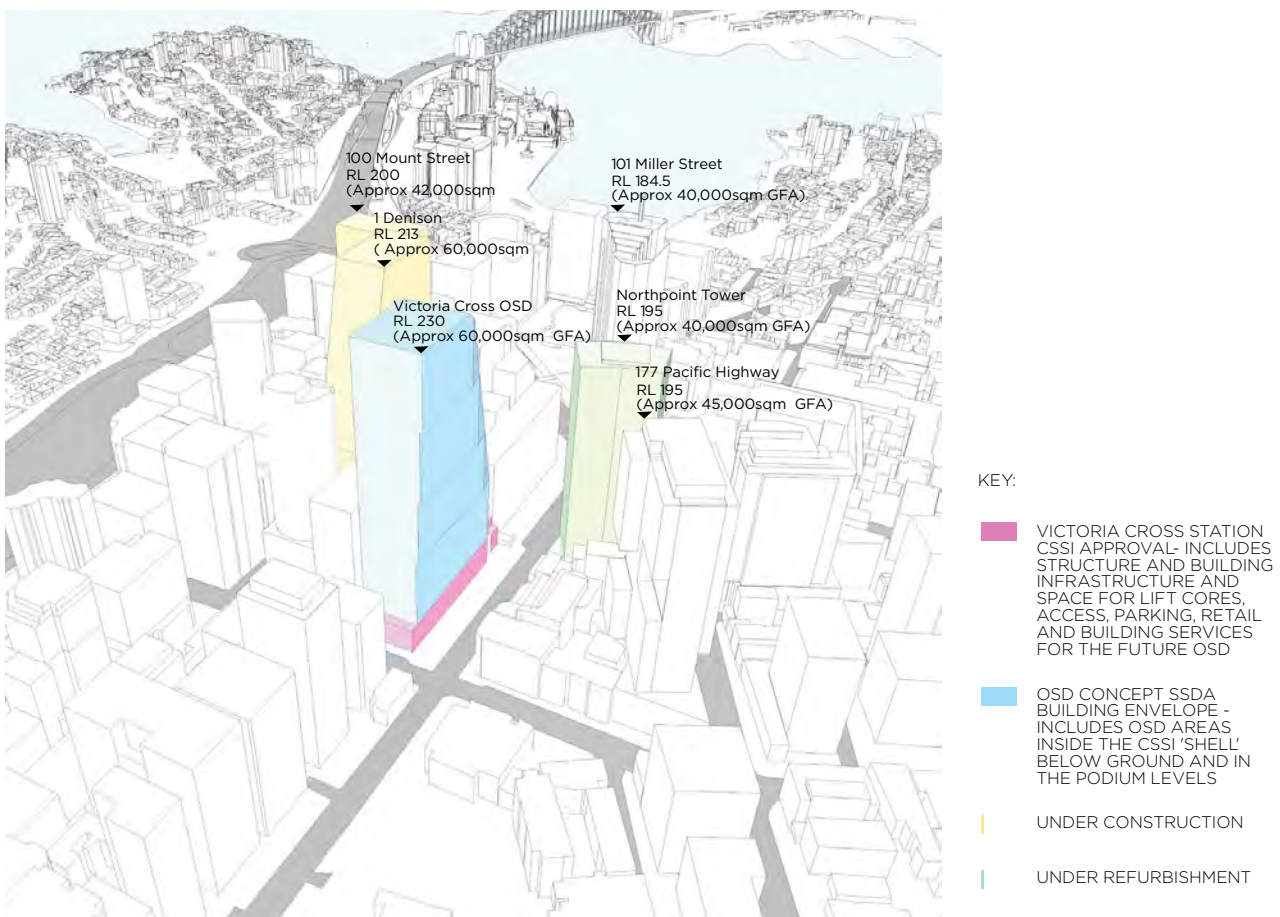


Figure 36 – The proposed Building envelope

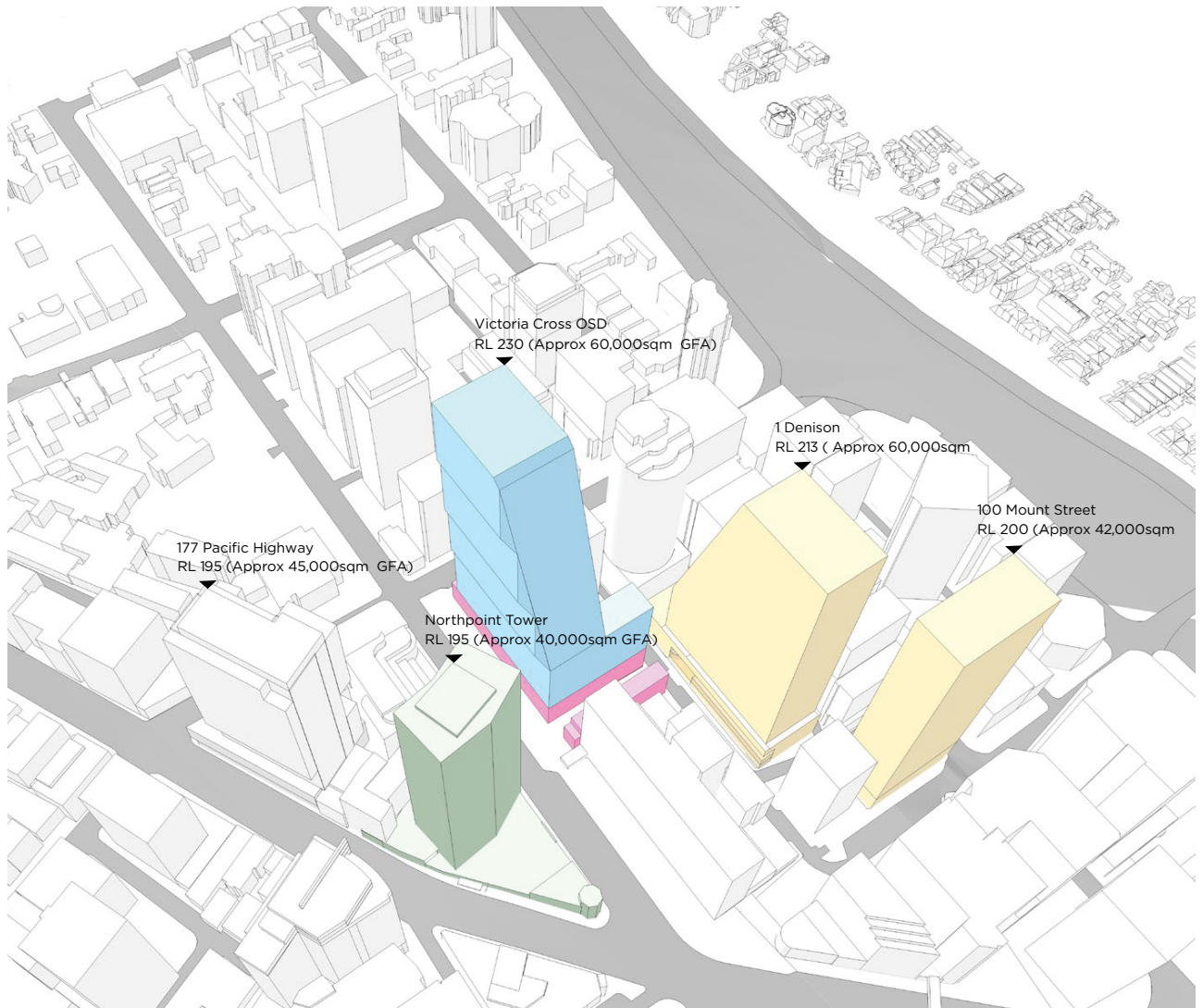


Figure 37 – Axonometric diagram of the proposed building envelope from southwest

## 4.4 Land use

This application seeks approval for the use of the proposed building envelope for commercial premises. Commercial premises are defined in NSLEP 2013 as follows:

*commercial premises means any of the following:*

- (a) *business premises,*
- (b) *office premises,*
- (c) *retail premises.*

As discussed in Chapter 1.3 and throughout Chapter 6 of this EIS, commercial uses for the OSD align closely with Council's vision for the site and are appropriate to the site's location within North Sydney's established commercial core.

Furthermore, as explained in the Retail and Commercial Office Strategy (Appendix DD), North Sydney CBD office vacancy rates are historically low and therefore, additional commercial floor space at the site is an appropriate response to market conditions.

It is envisaged that the OSD lobby and associated retail space on the Miller Street and Berry Street frontages of the site would be active, engaging spaces for the workers in the building as well as visitors to the site (refer Figure 38). The indicative OSD design illustrates how the proposal could engage with the public domain. Given its northern orientation, the lobby and retail space would benefit from sunlight and a high level of amenity year round.

As detailed above, this application also seeks approval for use of the various OSD spaces within the Station Box, which were approved as part of the CSSI Approval, that are necessary for the operation of future OSD, including basement car parking, end-of-trip facilities and back-of-house facilities, including building plant/service rooms and waste storage facilities.

## 4.5 Gross floor area

This application proposes a maximum GFA of 60,000 square metres. The proposed OSD GFA and the GFA for the indicative OSD design and entire Integrated Station Development are summarised in Table 6. A more detailed area schedule for the project is provided at Appendix F.

Importantly, the only GFA proposed under this application is the OSD component. The CSSI Approval components in the table below are provided for information purposes only.

**Table 6 – Gross floor area summary**

Component of Integrated Station Development	Level	Indicative OSD design GFA (square metres)	Proposed maximum GFA (square metres)
OSD (concept SSD Application)	OSD commercial floor plates	55,719	60,000
	OSD lobby and retail	931	
	OSD loading dock room	34	
	End of trip facility	440	
	Total	57,124	
Station retail space (CSSI Approval)	Ground floor (Miller Street)	378	4,500
	Ground floor (Denison Street)	808	
	Level 1	641	
	Level 2	656	
	Total	2,483	
Metro -station uses (CSSI Approval)	Basement Level 02	1,236	2,500
	Ground floor (Denison Street)	758	
	Ground floor (Miller Street)	262	
	Level 1	111	
	Level 2	115	
	Sub-total	2,482	
<b>Entire Integrated Station Development</b>		<b>62,089</b>	<b>67,000</b>

The indicative OSD design (Appendix E) has been prepared on a conservative basis as part of an exercise to ‘space-proof’ its integration with the station. It is anticipated that the future detailed design for the OSD would optimise efficiencies through design development and require additional GFA above that currently proposed in the indicative OSD design (i.e. GFA of 57,124 square metres). For this reason, the proposed maximum GFA for this concept proposal is 60,000 square metres, which includes a 5 percent GFA increase (or tolerance) for further design development.

## 4.6 Access and parking

### Vehicular access and parking

Vehicular access is proposed from Denison Street (Figure 38) via the driveway entry to the site approved for the station. The vehicular access will lead to the loading dock and car parking over four basement levels (Levels B2 to B7).

The volumetric space required conceptually for the OSD car parking forms part of the CSSI Approval and the space will only be constructed and provided for as part of the approved station works. This application seeks specific approval for the use of this basement space for a maximum of 150 parking spaces for OSD use. A total of 161 spaces are to be provided for the entire Integrated Station Development including 11 spaces assigned to station retail. For avoidance of doubt, the use of these additional 11 spaces is not provided for as part of this concept application. The indicative OSD design demonstrates that the full 161 spaces can be accommodated within the basement carpark and comply with the relevant Australian Standards and controls in the NSDCP 2013.

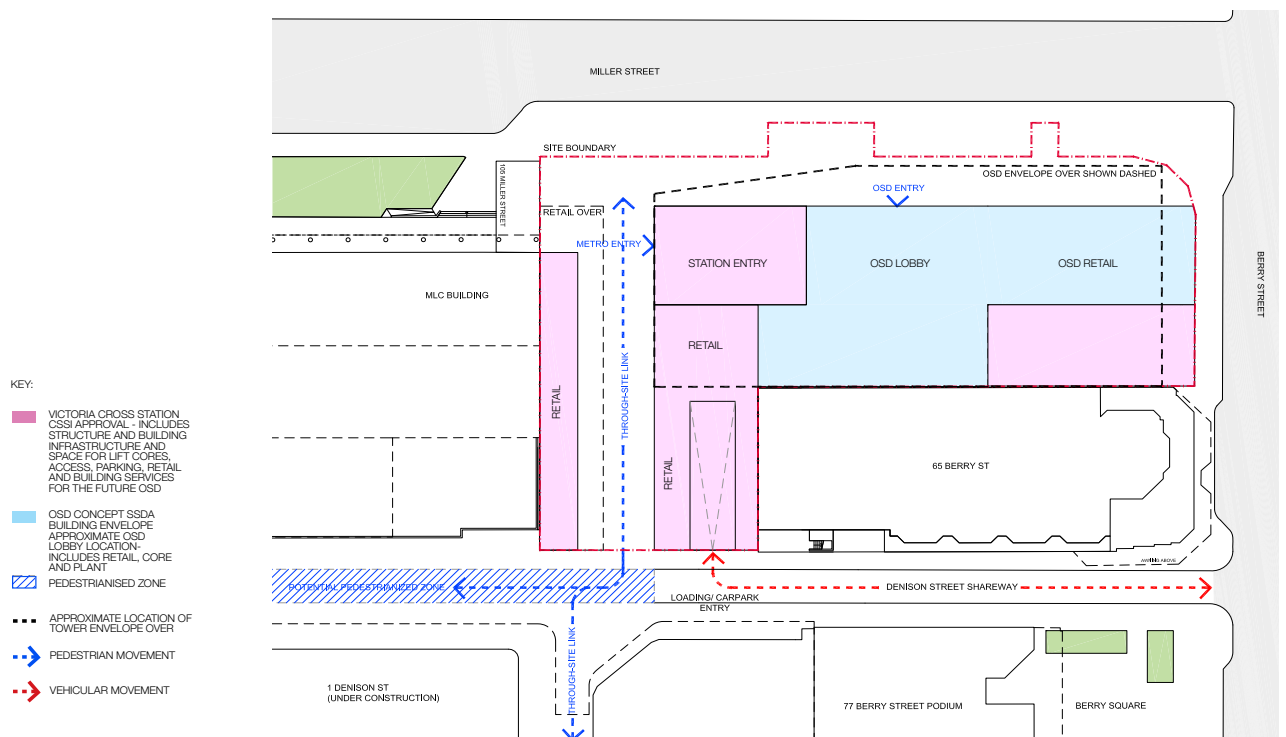


Figure 38 – Indicative ground floor plan



### **Loading and unloading**

The loading dock facilities are located on Basement Level 01 and would be accessed via the driveway off Denison Street. The loading dock is a shared facility for the entire Integrated Station Development. The loading dock will be constructed under the CSSI Approval and will be required to be fully operational for the opening of the station.

The current Integrated Station Development design accommodates 12 loading spaces comprising:

- 6 x courier spaces for OSD and all retail uses
- 2 x service vehicle spaces for station operator
- 2 x SRV spaces (for all Integrated Station Development uses)
- 2 MRV spaces including 1 allocated to garbage collection (for all Integrated Station Development uses).

This application specifically seeks approval for the use of the spaces by the OSD, including shared spaces for OSD purposes.

A Transport, Traffic and Parking Assessment Report has been prepared to assess the servicing requirements of the concept proposal (Appendix P).

### **Pedestrian access**

As shown in Figure 38, the principal pedestrian access point to the OSD lobby would be from Miller Street. From Denison Street, pedestrians would be able to access the OSD lobby by utilising the pedestrian through-site link (which is being designed and delivered under the CSSI Approval) and then travelling around to the Miller Street entrance. Alternative lift access between the Miller Street and Denison Street levels would also be provided.

The final design for the OSD would be fully integrated with the surrounding public domain. The Design Guidelines (Appendix CC) require that the building entries positively address the street and the public domain and add to the liveliness and vitality of the Miller Street Special Area and Berry Street.

## **4.7 Indicative building design**

To assist in the understanding of the possible final built form at Victoria Cross and its physical integration with the current design for the station, TfNSW has prepared an indicative OSD design that fits within the proposed building envelope.

The indicative OSD design has been used to estimate the maximum GFA for which consent is sought in this application. The indicative design illustrates that an A-grade commercial office building with contiguous commercial floor plates with GFA's ranging from 1,243 to 2,231 square metres is attainable within the building envelope.

The indicative OSD design is conceived as a series of stacked volumes, gently stepping out to the west towards Miller Street. Each stacked volume has a generous south-facing rooftop garden with spectacular views towards Sydney CBD and Sydney Harbour. The composition of each stack has been designed deliberately to respond to and reference the form and scale of neighbouring buildings, specifically the MLC Building and the Rag & Famish Hotel.

Drawings illustrating the indicative OSD design are provided at Figure 39. A full set of architectural drawings is at Appendix E. These architectural drawings, illustrate one potential architectural solution for the Victoria Cross Integrated Station Development, identify spaces which are shared by the station





Figure 39 – Elevations showing the indicative OSD design

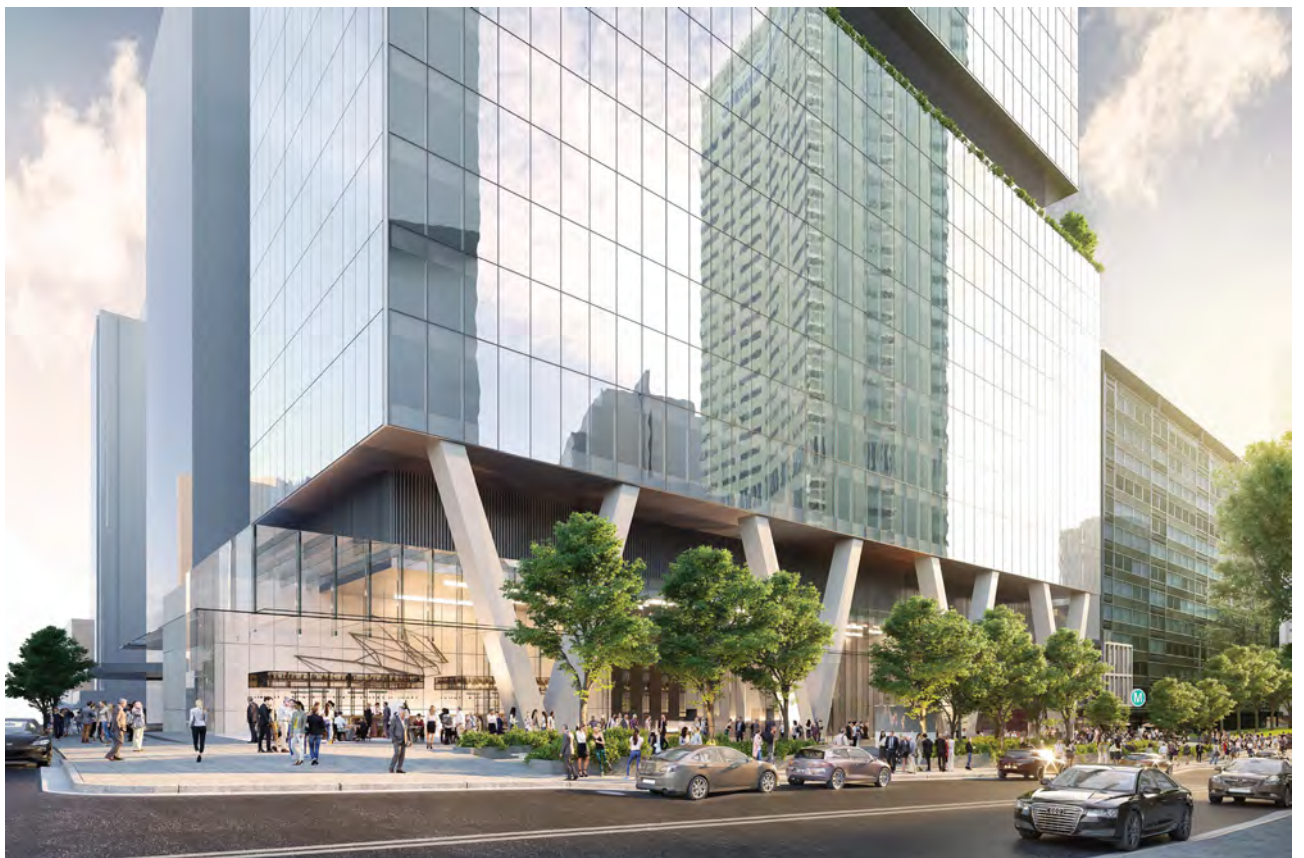


Figure 40 – Photomontage of indicative OSD design – station, OSD and public domain interface



Figure 41 – Photomontage of indicative OSD design in North Sydney CBD context

## 4.8 Design guidelines and design excellence strategy

TfNSW has prepared design guidelines and a design excellence strategy to guide the detailed design of the future OSD. These documents will ensure a high quality design will be achieved across the three potential staging scenarios describe at Section 4.11 below, including where the OSD is built at an undetermined stage in the future beyond the practical completion of the station.

Details of the design guidelines and strategy are further discussed below.

### 4.8.1 Design Guidelines

Design Guidelines (Appendix CC) have been prepared as part of this concept SSD Application. These guidelines are informed by a detailed site analysis and strategic planning objectives. They provide guidance on a range of development components, including land use, siting, scale, mass, architectural design, signage, public art and heritage impacts.

The fundamental principles for the OSD contained in the guidelines are to:

- Deliver a high quality built form that:
  - ◆ exhibits design excellence
  - ◆ is identifiable as a landmark building



- ◆ is architecturally integrated with the overall Metro Station design, yet distinctly identifies the Metro Station and the OSD entries at the ground plane
- ◆ responds sympathetically to the existing character of neighbouring buildings, including surrounding heritage items
- ◆ provides a podium that responds to and integrates with the public domain and the Metro Station
- ◆ minimises privacy and solar access impacts on the surrounding residential uses
- Protect and enhance the surrounding public domain by:
  - ◆ minimising any additional overshadowing from the building or any associated plant, lift overruns, or architectural roof feature
  - ◆ ensuring pedestrian comfort in and around the building through managing the potential for wind impacts
  - ◆ providing appropriate setbacks along street frontages in recognition of the established and emerging urban context
- Provide for an A-Grade commercial office use, supported by a range of complementary uses to revitalise and activate the public domain

Any future detailed SSD Application for OSD will need to respond to these Design Guidelines to ensure that future development achieves the vision for the site as expressed in this concept SSD Application.

#### 4.8.2 Design Excellence Strategy

A Design Excellence Strategy (Appendix C) has been prepared to establish a consistent framework for how Sydney Metro will deliver design excellence to all its Integrated Station Developments. The Strategy builds on Sydney Metro's existing design development and review processes and has been developed in consultation with the NSW Government Architect.

The Strategy draws from the NSW Government Architect's *Better Placed* and is consistent with the underlying principles of the NSW Government Architect's draft *Design Excellence Competition Guidelines*.

The Strategy provides an objective and structured design process that will ensure high quality architectural, urban and landscape designs are achieved in State Significant Development applications. The process is tailored to respond to the complexity of Integrated Station Development projects and assures that design excellence expectations are upheld in each stage of the design process.

The Strategy provides three phases to support high quality design of Integrated Station Developments:

- Phase 1 – the establishment of design quality expectations
- Phase 2 – competitive selection involving an open Expression of Interest process and Request for Tender process.
- Phase 3 – design integrity during the detailed SSD Application stage through to construction.

The process involves a Design Excellence Evaluation Panel (DEEP), that would perform the role of the Jury in the competitive selection process including to provide objective and independent advice and review of design submissions. Their role will also include:

- Confirming the capability of the proposed teams to achieve design excellence during the Expression of Interest process
- Participation in interactive workshops with each short-listed tenderer prior to lodgement of formal tender submissions
- Writing a Design Excellence Report documenting the elements of each submission that achieve design excellence and those elements that require further refinement. It is noted that the design excellence elements of the successful tenderer's submission will be incorporated into the contract documentation.

The DEEP members would be constituted from Sydney Metro's Design Review Panel with the addition of a local council nominee. The members would comprise:

- NSW Government Architect as Panel Chair (or an alternate Panel member endorsed by Sydney Metro)
- One representative nominated by the NSW Department of Planning & Environment
- Up to two representatives nominated by Sydney Metro, as the proponent
- One representative nominated by the local Council.

A Sydney Metro Design Review Panel (DRP) would provide ongoing design review post appointment of the successful delivery contractor. The Sydney Metro Design Review Panel would ensure design excellence and integrity are not compromised post contract award, and would also be responsible for reviewing any future proposed changes to the planning approval. The design integrity obligations will be handed over to the State Design Review Panel following the determination of the detailed SSD Application.

## 4.9 Planning pathway relationship between station and OSD

For the assessment purposes, it is necessary to delineate clearly between the station works approved under the CSSI Approval and the OSD proposed under this concept SSD Application. This delineation is explained in the sections below.

### 4.9.1 Extent of approved development under CSSI Approval

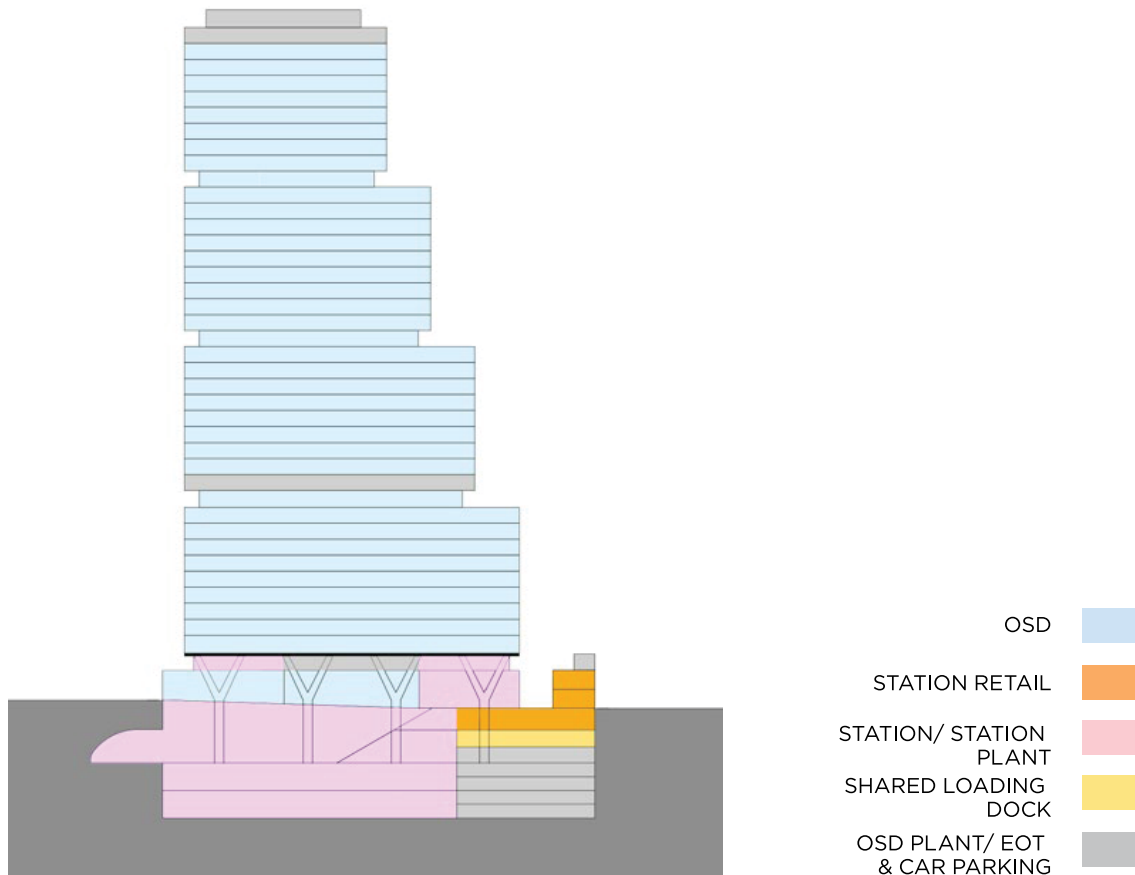
The station works approved under the CSSI Approval (i.e. those works *not proposed* under this concept SSD Application) are described in this section.

#### Primary station works

The CSSI Approval includes construction of all below and above ground works necessary for Victoria Cross Station.

As per Condition A1 of the CSSI Approval, the station must be constructed generally in accordance with the description of the project provided in the EIS, as amended by the description in the PIR and modifications. This description identifies station access via a pedestrian plaza opening to Miller, Denison and Berry Streets. The station design is being refined through post-approval detailed design work, including preparation of a SDPP as required by Condition E101 of the approval.

The vertical extent of the approved station works is defined by the transfer slab level (as explained at page 139 of the CSSI EIS and at pages 15-17 of the PIR), above which would sit the OSD (Figure 42).



**Figure 42 – Delineation between station and OSD**

Note: The area marked 'OSD' below the transfer level in Figure 42 refers to the OSD related spaces provided within the station envelope, including the OSD lobby and associated retail space. Refer to further discussion in Chapter 4.9.2.

### **Structural and service elements/spaces for OSD within station**

The CSSI Approval also approved the structural and service elements/spaces necessary for constructing the OSD including provision for utilities connections. The CSSI EIS, states 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' (page 139). The PIR associated with the CSSI approval clarifies these requirements on page 15 as follows:

- *Structural elements, building grids, column loadings and building infrastructure and services to enable the construction of future over station development*
- *Space for future lift cores, access, parking, retail and building services for the future over station development*

The integrated structural approach enables works on the OSD to begin while station construction is still underway. TfNSW's preferred scenario for construction is to deliver a single Victoria Cross Integrated Station Development by 2024 when metro services begin.

Figure 43 shows an indicative structural integration between the station and OSD.

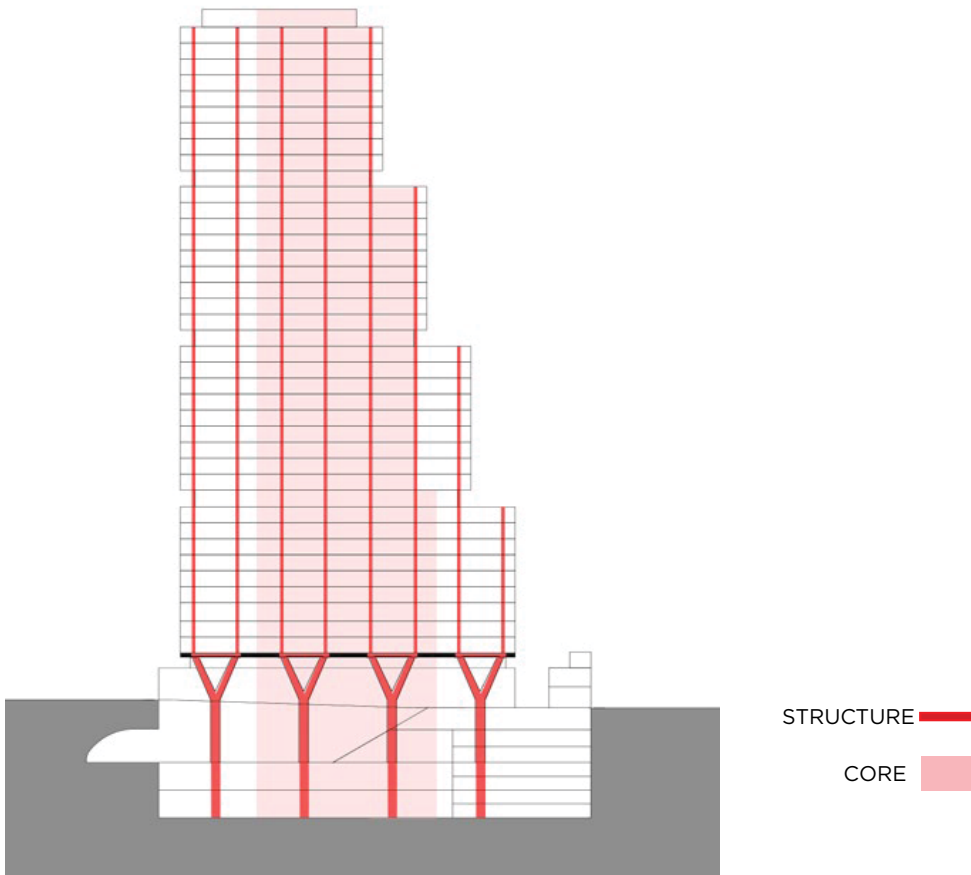


Figure 43 – Indicative structural integration of station and OSD

### Demolition

The demolition of all existing buildings is covered by the CSSI Approval and as documented in Chapter 3.3 above, is now completed. As such, this concept SSD Application does not seek consent for any demolition.

### Excavation and bulk earthworks

Excavation and bulk earthworks at the site are covered by the CSSI Approval. Details of the extent and methodology of the earthworks and excavation are contained within the CSSI EIS and PIR. Accordingly, this concept SSD Application does not seek consent for excavation or bulk earthworks.

### Public domain works

The public domain works within and surrounding the site are being designed and delivered under the CSSI Approval. Details of these works will be resolved through the preparation of the IAP and SDPP, which must be prepared prior to the commencement of above ground works in order to satisfy Conditions E92 and E10 of the CSSI approval. Accordingly, this concept SSD Application does not seek consent for any public domain works.

### Through-site link

The through-site link identified in the indicative OSD design (Appendix E) is being designed and delivered under the CSSI Approval. This link sits below the transfer level and as such does not form part of the building envelope proposed under this concept SSD Application.



The future fit out and use of these retail spaces within and above the link are not considered OSD related and therefore, are not the subject of this concept application.

#### **4.9.2 Extent of proposed development under this concept SSD Application**

Condition A4 of the CSSI Approval explicitly excludes OSD, as follows:

*Except to the extent described in the EIS or any document listed in A1, any over station development or any development above or within the Sydney Metro Trains Facility South, 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.*

Accordingly, this concept SSD Application seeks consent for the first (concept) stage of OSD as defined in the CSSI Approval. This includes a building envelope above the transfer level, maximum gross floor area for the envelope and all associated land uses.

The fit-out and use of the OSD-space provisioning within the station are not covered by the CSSI Approval. In this regard, the CSSI PIR states at p.16:

*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 approval process.*

As such, this concept application seeks approval for the use of the OSD spaces within the CSSI Approval footprint, including parking, end-of-trip facilities, OSD lobby and associated retail space, and other OSD plant and back-of-house requirements. The specific fit-out of these spaces is not the subject of this concept application.

#### **4.9.3 Summary of planning pathway relationship between CSSI Approval and concept SSD Application**

Table 7 summarises the planning pathway relationship between the works proposed under this concept SSD Application and those works covered under the CSSI Approval.

The illustrative drawings of the indicative building (Appendix E) demarcate between the parts of the Victoria Cross Integrated Station Development proposed under the concept SSD Application and those covered under the existing CSSI Approval.

Table 7 – Planning pathway relationship between concept SSD Application and the CSSI Approval

Component	Concept SSD Application	CSSI Approval
Building envelope above station (i.e. above transfer slab)	●	
Uses within OSD envelope (commercial premises including office and retail)	●	
Use of OSD spaces conceptually approved within the station (below and above ground) including: <ul style="list-style-type: none"> <li>● OSD lobby and adjoining retail space to the north (i.e non-station retail)</li> <li>● OSD parking and loading</li> <li>● OSD end-of-trip facilities</li> <li>● back-of-house facilities including building plant, waste and service rooms</li> </ul>	●	
Demolition and excavation		●
Station and OSD structure (i.e. structural elements, building grids, column loadings, building infrastructure and services up to the transfer level)		●
Non-OSD uses within the station including station retail		●
Public domain works and landscaping		●
Through-site link		●
Space for future lift cores, access, parking and building services for OSD		●
Provision for the connection of OSD utilities		●

## 4.10 Physical integration between station and OSD

### 4.10.1 Envelope footprint

The footprint of the proposed building envelope has been designed with regards to the design parameters set under the CSSI Approval process, as follows:

- The base of the proposed building envelope begins at RL 82. All station areas, services and infrastructure are located below this level.
- The building envelope's six-metre setback from Miller Street (for the lower levels) aligns with the 6-metre setback established by the station design.
- The building envelope's zero-metre setback from Denison Street aligns with the zero-metre setback established by the station design. The scale of the eastern component of the building envelope is capped at RL 118 (approximately 55 metres) to enable a design solution that responds to the lower scale and alignment of neighbouring buildings, and to optimise the amenity of Denison Street and the through-site-link.
- The building envelope's 18-metre setback from the south boundary is a deliberate design response to the low-rise building form and the through-site link established for the station design.

### 4.10.2 Interface levels

CSSI PIR sets out an indicative physical interface between station and OSD at Victoria Cross (refer to extract from the PIR at Figure 44).

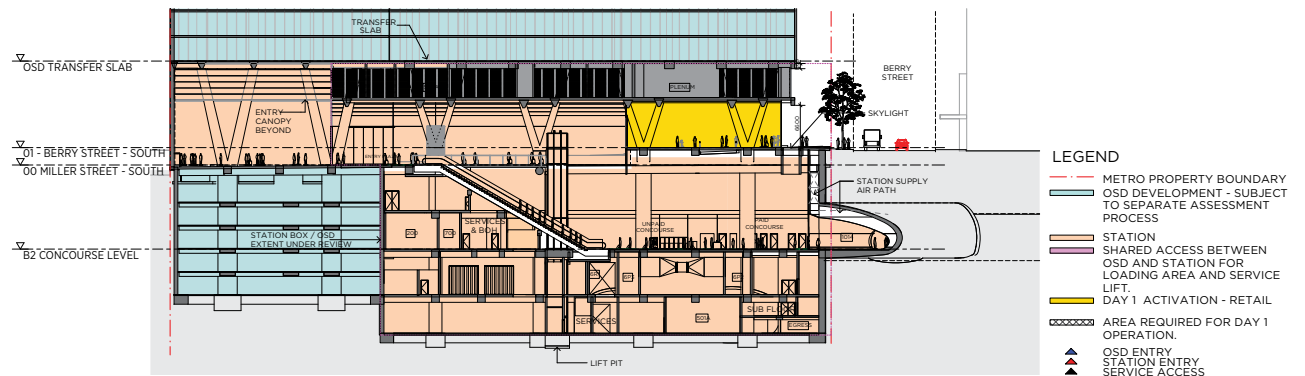


Figure 44 – Indicative east-west section of Victoria Cross Station and OSD interface

This indicative interface has been refined by a more detailed yet still indicative scheme (Appendix E), which demonstrates how the OSD and station can be physically integrated in a manner that enables efficient construction and operation.

Section drawings of the indicative OSD design showing the interface levels are provided at Figure 45 and Figure 46.

The ultimate design of the interface will be resolved through further design work, including preparation of an IAP and SDPP as required by Conditions E92 and E101, respectively, of the CSSI Approval.

The structural integration strategy for the development, which is described in the Built Form and Urban Design Report (Appendix G) and illustrated in the plans for the indicative OSD design (Appendix E), consists of a highly efficient and exceptionally flexible 17.8-metre x 10.5-metre column grid, which would provide excellent commercial floor plates with large, column-free spans suitable for A-grade tenants. At the transfer level, tower columns on the Miller Street frontage would transfer to four ‘Y’ columns, minimising the impact on the station entrance, OSD lobby and concourse level below.

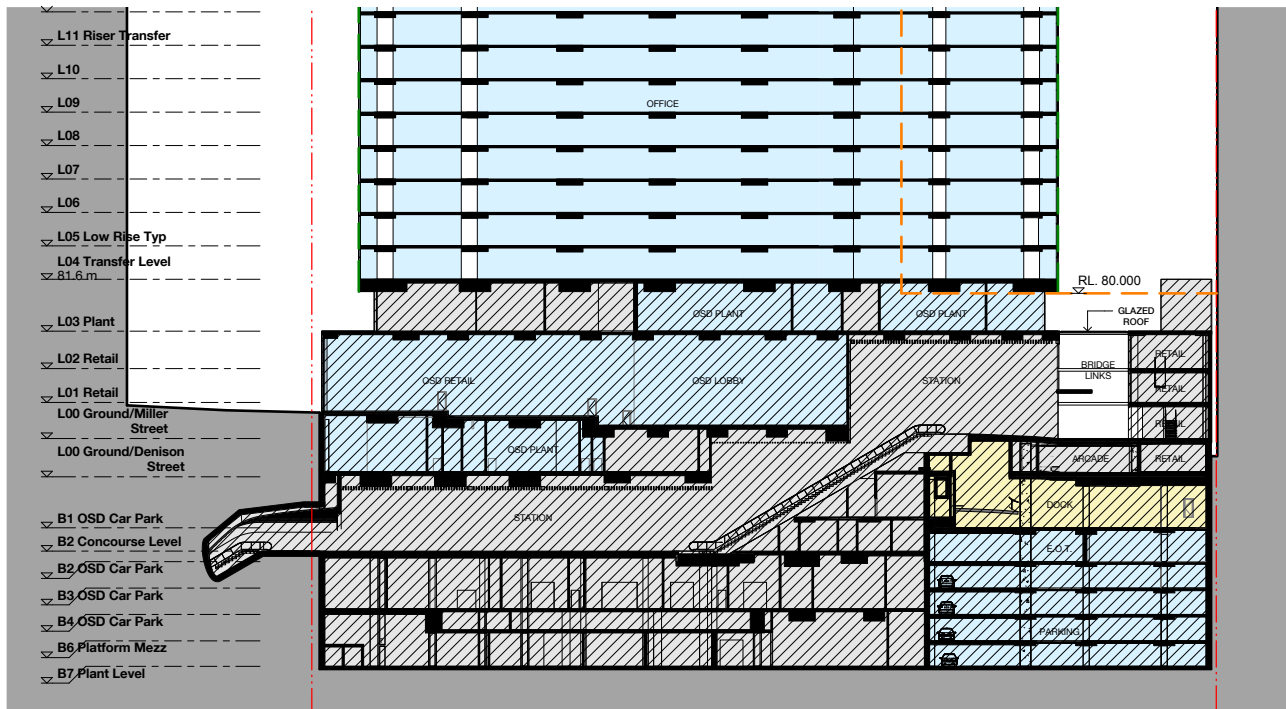


Figure 45 – North-south section of indicative OSD design

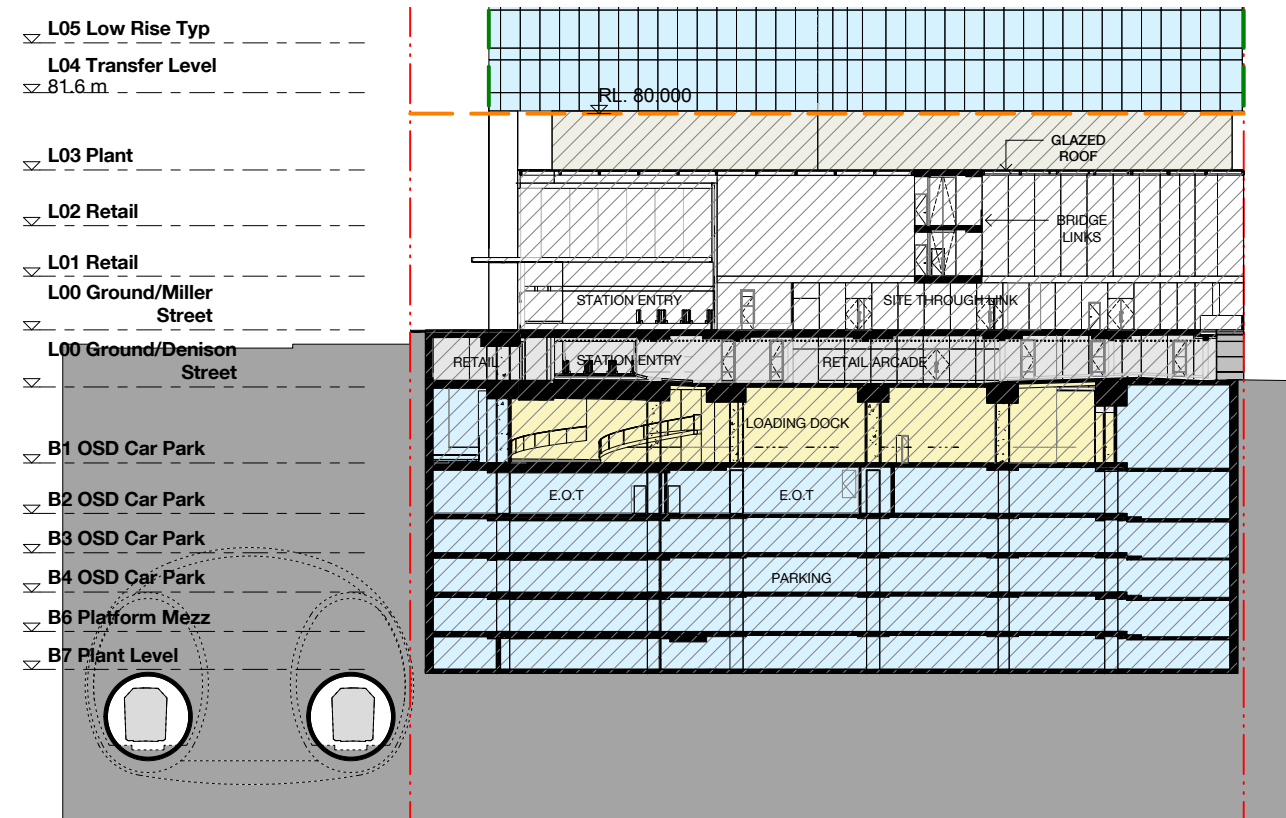


Figure 46 – East-west section of indicative OSD design

## 4.11 Staging

Through TfNSW, the State proposes to procure the delivery of the Victoria Cross Integrated Station Development in one single package, which will entail the following physical works:

- station structure and fit-out, including mechanical and electrical and station retail; and
- OSD structure and fit-out, including mechanical and electrical

The contractual obligation to complete the station has been separated from the contractual obligation to complete the OSD to allow the delivery of the OSD to respond to property market conditions.

Separate delivery packages are also proposed by TfNSW to deliver the excavation of the station boxes/shafts ahead of the Integrated Station Development works, line-wide systems (e.g. track, power, ventilation) and operational readiness works prior to the Sydney Metro City & Southwest metro system being able to operate.

The following three possible staging scenarios have been identified for delivery of the Integrated Station Development, as illustrated in Figure 47.

- **Scenario 1** - The station and OSD are constructed concurrently by constructing the transfer slab first and then building in both directions. Both the station and OSD would be completed in 2024.
- **Scenario 2** - The station is constructed first and ready for operation in 2024. OSD construction may still be incomplete or ready to commence after station construction is completed. This means that some or all OSD construction would likely still be underway upon opening of the station in 2024.
- **Scenario 3** - The station is constructed first and ready for operation in 2024. The OSD is built at a later stage, with timing yet to be determined. This creates two distinct construction periods for the station and OSD.

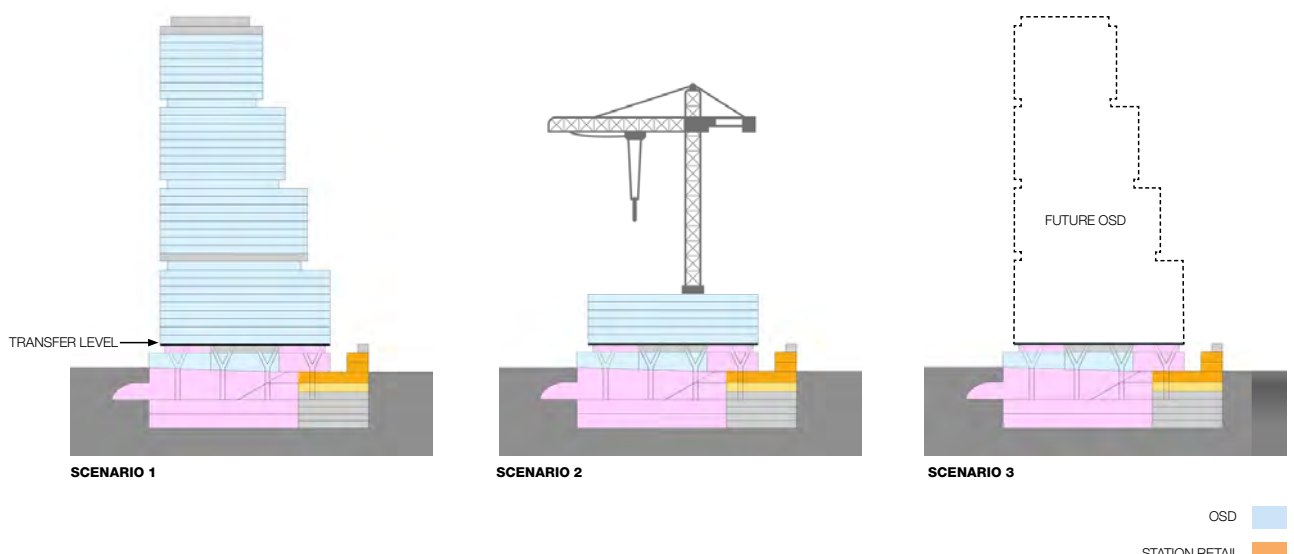


Figure 47 – Possible construction scenarios



Scenario 1 represents TfNSW’s preferred option, as it would provide for completion of the full Integrated Station Development, and therefore the optimum public benefit, at the earliest date possible (i.e. on or near 2024 when the station is operational). However, given the delivery of the OSD could be influenced by property market forces, scenarios 2 or 3 could also occur, where there is a time lag between the completion of the station component of the Integrated Station Development (station open and operational), and a subsequent development.

The planning process and indicative timing for the various works streams under Scenario 1 are outlined in Table 8.

As explained in the PIR for the CSSI Approval and Chapter 3.3 of this EIS, the project will require the creation of separate lots for Victoria Cross Station to distinguish the land and air space required for the station from the space required for the OSD and station retail.

The final staging for the delivery and subdivision of the OSD would be resolved as part of the detailed SSD Application. Notwithstanding this, it is envisaged that a single SSD Application is likely to be lodged for the design and construction of the OSD base building (i.e. excluding tenant fitout).

**Table 8 – Preferred staging and indicative timeline**

Works stream	Planning process	Indicative timing
Victoria Cross demolition works	CSSI Approval (CSSI_7400)	2017 - 2018 (now complete)
Victoria Cross tunnel and station excavation works	CSSI_7400	2018 - 2020
Victoria Cross Station fit-out works (below and above ground, including building grids, column loading, building infrastructure and services to enable the construction of future OSD)	<ul style="list-style-type: none"> <li>● CSSI_7400</li> <li>● Station Design and Precinct Plan (required under CSSI_7400)-</li> <li>● Interchange Access Plan (required under CSSI_7400)</li> </ul>	2020 - 2023 – prior to the commencement of works
Victoria Cross OSD works (above station) and works associated with space provisioning within the CSSI Approval footprint	Detailed SSD Application	2021 - 2024
Metro testing and commissioning	CSSI_7400	2021 - 2023
Victoria Cross OSD fit-out works	Development applications/exempt or complying development (if relevant)	2023 - 2024
Public domain works	<ul style="list-style-type: none"> <li>● CSSI_7400</li> <li>● Station Design and Precinct Plan</li> </ul>	Prior to station opening
Metro operations commence	CSSI_7400	2024

## 4.12 Infrastructure and services

The services upgrades to the site will be undertaken as part of the scope of works under the CSSI Approval. This will include independent connections with additional capacity to service the OSD based on the maximum services demand generated by the concept proposal (ie. as determined by the land uses and the maximum GFA proposed).

The service reticulation throughout the OSD will be the responsibility of the OSD developer and use of this additional services capacity will form part of the future detailed SSD application. This is discussed in further detail in Chapter 8.9 of this EIS. Also refer to the Services and Utilities Infrastructure Report at Appendix S.

### 4.13 Ecologically sustainable development strategy

An ESD Report (Appendix Q) has been prepared to set out an ESD framework to guide the future detailed SSD Application for OSD. The report identifies minimum ESD requirements as well as world best practice sustainability opportunities for future OSD.

The concept proposal is capable of achieving a high environmental rating and TfNSW is seeking as a minimum, 5 Star Green Star Design (v1.2), 5 Star NABERS Office Energy (Office Base Building) and 4 Star NABERS Water (Office). The ESD strategy proposes that the future detailed design for the OSD investigate uplifts to 6 Star Green Star, 5.5 Star NABERS Energy and 4.5 to 5 Star NABERS Water.

Refer to further discussion in Chapter 8.7 of this EIS.

### 4.14 Retail and commercial strategy

A Retail and Commercial Office Strategy (Appendix DD) has been prepared to outline the current commercial market in North Sydney and discuss how the concept proposal fits within this context.

North Sydney CBD is currently experiencing historically low office vacancy rates and is significantly undersupplied with retail floor space. The concept proposal would address these issues by providing for up to 60,000 square metres of commercial floor space within the CBD.

### 4.15 Public art strategy

#### Indicative locations

The OSD provides an opportunity for public art installations within publicly accessible and highly visible locations within and around the Integrated Station Development, including within the through-site link, the OSD lobby and the Miller Street setback area. These indicative locations are outlined in the Built Form and Urban Design Report at Appendix G.

#### Process

A Public Art Masterplan has been developed for all station locations on Sydney Metro City & Southwest. The Masterplan establishes parameters for artistic excellence, governance mechanisms and a structured art program that will improve the travel experience of customers.

A Public Art Strategy would be developed for the future detailed SSD Application for OSD at Victoria Cross to align with the broader approach to public art outlined in the Public Art Masterplan and the relevant North Sydney Council policies. Public art would be commissioned based on standards of excellence and innovation, integrity of work, relevance to the site context and consistency with planning policies.

A Public Art Management Plan would be developed and implemented by the contractor responsible for delivery of the Integrated Station Development. The Management Plan would need to demonstrate consistency with the Public Art Masterplan, provide initial public art concepts, and outline a framework for the commissioning and implementation of the art throughout the design, construction and operation of the OSD.

A Public Art Working Group would be implemented for the entire Integrated Station Development to oversee the execution of the Public Art Masterplan. The Working Group would provide a forum for considering and approving the best approach to curating, procuring, integrating, installing and decommissioning public art as outlined in the Public Art Masterplan and Management Plan.

Successful artists would be selected from a list decided by the TfNSW Selection Committee, which would be set up in accordance with the Masterplan.

Further details regarding the public art strategy and possible installation locations for the OSD artwork/s is provided in the Built Form and Urban Design Report at Appendix G.

## 4.16 Signage

The drawings for the indicative OSD design (Appendix E) show zones for potential future tenancy signage at the ground floor level (associated with the retail tenancy and commercial office lobby) and building naming rights at the top of the building on the south and east elevations. This application seeks concept approval for these signage zones.

The specific signage to be located within the signage zones would be subject to separate approval and will be refined as part of the future detailed SSD Application. Refer to future detail in Chapter 8.19 of the EIS.

## 4.17 Mechanical Services

The OSD building envelope includes space provisioning for the mechanical plant required to service the future office development. These spaces are separate from the station plant/mechanical services requirements. The final location and design of the mechanical plant for the OSD including the external façade treatment will be refined as part of the detailed SSD Application. Specific requirements have been included in the Design Guidelines (Appendix CC) to inform the future design, location and aesthetic treatment of all mechanical services.

The indicative OSD design includes two plant zones at the rooftop levels of the building (Levels 41 and 42) and at Level 14, with general building services for the OSD tower, retail and the low rise office being provided in basement Level 07 and podium Level 03. The architectural drawings of the indicative OSD (Appendix E) illustrate how the mechanical plant can be fully integrated into the building design and its façade to deliver a high quality design outcome.

## 4.18 Subdivision

As detailed in Chapter 3.2 and 4.9 above, CSSI Approval includes approval for subdivision of the station and the airspace for the future OSD. This is currently proposed to occur on or prior to the station date of completion in 2024.

This concept proposal seeks concept approval for a further subdivision of the OSD lot, if required once the subdivision requirements of the CSSI project are known. This may include subdivision of the OSD lot to create separate OSD lots. Details in relation to the subdivision of the OSD lot will be submitted with the future detailed SSD Application

# **STAKEHOLDER AND COMMUNITY ENGAGEMENT**

CHAPTER FIVE



# 5. Stakeholder and community engagement

Community consultation and stakeholder engagement have played a key role in the preparation of this concept SSD Application. This chapter provides a description of who has been consulted, how the consultation was carried out, the issues raised and how those issues have been addressed in the design resolution of the concept proposal.

## 5.1 Community consultation

Stakeholder and community consultation for Sydney Metro is an ongoing process that commenced with the release of *Sydney's Rail Future* in 2012. Consultation undertaken since June 2014 for the Sydney Metro City & Southwest project has played an important role in informing and scoping the design of the project.

The concept of Integrated Station Development was formally announced to the community in November 2017 and a range of early engagement activities were undertaken prior to lodgement of this concept SSD Application to engage with industry, the local community and stakeholders about Integrated Station Development at Victoria Cross Station. The consultation aimed to keep the community informed and to provide opportunities for feedback.

The level of consultation undertaken prior to the lodgement of this concept SSD Application satisfies, if not exceeds, the minimum requirements as set out in the Department of Planning and Environment's Major Project Community Consultation Guidelines (October 2017) and the SEARs (Appendix A).

### 5.1.1 Consultation during development of Sydney Metro City & Southwest

Consultation for Sydney Metro City & Southwest relating to Victoria Cross Station prior to the announcement of Integrated Station Development, has included:

- early stakeholder consultation between June 2014 and June 2015
- project scope consultation following the announcement of Sydney Metro City & Southwest in June and July 2015, and design development for Sydney Metro City & Southwest
- consultation during preparation and exhibition of the Environmental Impact Statement for the Chatswood to Sydenham project (CSSI EIS), between June 2015 and June 2016. The CSSI EIS and its summary document both outlined multiple stations, including Victoria Cross, which had been identified for potential property development including above and associated with, the proposed metro stations. The CSSI EIS also outlined the planning approvals process for OSD
- consultation with industry in June and December 2015 and on 1 September 2016
- engagement following the project update announcement in November 2015
- consultation during preparation of the modification for Victoria Cross Station (CSSI Approval, Modification 1) in June 2017, which included a new location for the Victoria Cross northern services facility and an additional station entry
- the Victoria Cross and Artarmon Substation Modification and its summary document outlined the locations of possible future OSD associated with the two Victoria Cross Station sites (refer to Chapter 1.2.1 of this EIS).



## 5.1.2 Consultation during preparation of this SSD Application

The following community engagement was undertaken specifically in relation to OSD at Victoria Cross Station.

### Industry engagement

An industry briefing was held in November 2017 in Sydney. This event provided detailed information on Integrated Station Development and early consultation. This event was attended by 640 industry representatives from Australian and international firms. Attendees to the sessions were invited via:

- Sydney Metro website
- Advertisements in *The Australian* newspaper
- Direct invitations

The briefing provided industry with information on:

- Integrated Station Development including at Victoria Cross Station
- Progress with the development of Sydney Metro City & Southwest
- Details of the updated project delivery strategy
- Timing of next steps, including upcoming procurement processes

Attendees received a copy of a booklet titled *Sydney Metro City & Southwest Industry Briefing* (November 2017) which is also published on the Sydney Metro website. TfNSW will continue to engage industry in the development of the wider Sydney Metro project.

### Community engagement

Early community engagement followed the industry briefing. The community were invited to participate in early engagement via the following communication methods, as detailed in the Consultation with Stakeholder's report at Appendix BB:

- 5,000 newsletters were letterbox-dropped within 500 metres of the Victoria Cross site inviting people to a community information session at Fred Hutley Hall on 16 November 2017.
- Advertisements were also placed in five newspapers:
  - ◆ *Australian Chinese Daily*
  - ◆ *Sydney Morning Herald*
  - ◆ *Mosman Daily*
  - ◆ *North Shore Times*
  - ◆ *Central Courier*
- A media release, website forums and Facebook were also used to communicate the concept proposal and to invite members of the public to give their feedback.

The community information session was attended by 52 community members. They were invited to provide feedback on the concept proposal for the OSD and to meet expert members of the project team. Information material available to the community at the session is provided in the Consultation with Stakeholders report at Appendix BB and included the following:

- Integrated Station Development booklet
- Newsletter
- Victoria Cross modification report summary
- Chatswood to Sydenham EIS summary
- Information display boards

The above information was also made available on the project website.

### Stakeholder consultation

Sydney Metro engaged with the following stakeholders to brief them on the proposal:

- Greater Sydney Commission
- Property Council of Australia
- Sydney Business Chamber
- Committee for Sydney
- North Sydney Council
- Department of Planning and Environment
- Sydney Trains
- Government Architect of NSW
- Roads and Maritime Services
- Transport for NSW's Sydney Coordination Office
- Transport for NSW's Design Review Panel
- Sydney Airport Corporation Limited and the Civil Aviation Safety Authority
- Ausgrid
- Sydney Water
- Jemena

### Community contact and information points

Table 9 outlines community contact and information points in use for the project.

**Table 9 – Community contact and information points**

Activity	Detail
Community information line (toll free)	1800 171 386
Community email address	sydneymetro@transport.nsw.gov.au
Website	www.sydneymetro.info
Postal address	Sydney Metro City & Southwest, PO Box K659, Haymarket, NSW 1240
Transport for NSW community information centre	388 George Street, Sydney

### **Place Managers**

TfNSW has engaged Place Managers to build relationships and act as a feedback mechanism to help ensure community and stakeholder aspirations are consistently considered in the planning process. Their role is to be a direct point of contact between members of the community and the project team and they play a vital role in maintaining close and ongoing contact with local communities and stakeholders during the design and delivery of the wider Sydney Metro project.

Place Managers have been engaging with neighbouring residents, tenants and businesses (by phone, email, newsletter or doorknock) around the Victoria Cross Station site to ensure they are aware of the project, invite them to community information sessions and stalls, and ensure they had the information they needed to make a submission on the project.

For large buildings and apartment blocks, including the Beau Monde Apartment building, Place Managers contacted the building/facilities/strata managers to assist with distributing information to tenants and owners.

Place Managers conducted an outreach to the community members around the Victoria Cross Station sites at the time of the SEARs lodgement in October 2017 to advise them of the start of a new planning phase for the OSD at Victoria Cross Station and to invite them to participate in a community information session. Community members were also given clear information about the statutory process for the concept SSD Application and an opportunity to provide a formal submission. Details of the stakeholder engagement and information made available during the consultation is included in the Consultation with Stakeholders report at Appendix BB.

## **5.2 Outcomes from consultation**

TfNSW has undertaken consultation with local residents, businesses, various government bodies and other stakeholders in accordance with the SEARs. Feedback received during consultation activities has been considered during the preparation of this concept SSD Application as outlined in Tables 10 to 13.

Key issues raised during consultation relevant to the concept SSD Application, including the potential impacts to be considered and the information to be provided, are summarised in the following sections.

### **5.2.1 Summary of community feedback**

Feedback was received at the community information sessions, either through the Sydney Metro project email address or via established relationships with Place Managers. The issues and design responses are outlined in the table below.

Table 10 – Community feedback summary

Issue	Response
<b>Environment</b>	
Concern about impact to amenity and obstruction of existing views	<p>The building envelope has been devised to minimise overshadowing impacts to key public areas and to minimise view loss to neighbouring buildings. In particular, the low scale eastern portion of the building envelope minimises view loss to the south west of the site from the neighbouring Beau Monde Apartment building.</p> <p>Refer to further discussion in Chapters 8.2 and 8.4, and Appendices Y, Z and AA of this EIS.</p>
<b>Traffic and transport</b>	
Concern about the scale of the development and potential increase in local traffic congestion	<p>Traffic impact modelling has demonstrated that the concept proposal would result in negligible impacts on the local road network, including to the performance of key intersections in the vicinity.</p> <p>Refer to further discussion in Chapter 8.6 and Appendix P of this EIS.</p>
Suggestion to include an underground pedestrian link between the existing North Sydney Station and the new Victoria Cross Station	<p>Opportunities for pedestrian connections to neighbouring development are being considered in the design development of the station (CSSI Approval) and are not relevant to the scope of this EIS.</p>
Suggestion for underground access below Miller Street to disperse pedestrians	<p>Refer comment above.</p>
Concern about the increase in pedestrian congestion on Miller Street	<p>The proposed public domain improvements in Miller Street will improve pedestrian amenity and circulation and will be delivered under the CSSI Approval. Refer to Appendix P of this EIS.</p>
Suggestion to have bus stop and pick up zones close to the station	<p>This matter is relevant to the CSSI Approval scope of works and the preparation of the IAP under the terms of that approval.</p>
Suggestion to free up more buses and traffic	<p>This matter is relevant to the CSSI Approval scope of works.</p>
<b>Construction impacts</b>	
Query about the general disruption during construction	<p>A Preliminary Construction Management Statement (Appendix V) has been prepared to demonstrate how construction impacts can be minimised under three construction scenarios. The management of construction activities on the site will need to have regard to cumulative construction impacts (including construction activities on neighbouring sites). The statement indicates how construction impacts can be minimised and mitigated under each scenario.</p>
Concern about the cumulative impacts of Sydney Metro and RMS Western Harbour Tunnel project – need to take into account the disruption to the neighbourhood and removal of spoil for both projects	<p>Refer to comments above.</p>

Issue	Response
<b>Building uses</b>	
Suggestion to incorporate school or community uses at the site	This can be explored through the future detailed SSD Application(s). This concept SSD Application seeks approval for a building envelope and its use for commercial premises.
Suggestion to make the integrated station development a seven-star building	An ESD Strategy (Appendix Q) has been prepared which establishes the minimum benchmarks for sustainability. Refer to further discussion in Chapter 8.7 of this EIS.
Suggestion to make the building an attraction, seeing it has such a large footprint	The future building, given its location and height, will be a landmark building for North Sydney CBD. The station and its surrounding precinct will become a destination.
Suggestion to have the building set back in line with existing buildings on Miller Street	The building envelope drawings (Appendix D) illustrate how the building setback responds to the neighbouring context. Refer to further discussion in Chapter 8.1 and Appendix G of this EIS.
Suggestion to incorporate a 400-place aged care facility, which was previously approved for the McLaren Street site, into the building	The future use of the development is a matter for the future detailed SSD Application and subsequent applications for the fit-out and use of the premises.
General support for retail at Victoria Cross Station	The concept proposal includes an opportunity for a retail use on the corner of Miller and Berry Streets to activate the ground floor level and engage with the public domain.

## 5.2.2 Stakeholder feedback – North Sydney Council

Regular consultation has been undertaken with North Sydney Council in relation to the CSSI project, the proposed OSD and the integration of both elements. Meetings are conducted on a monthly basis to co-ordinate design development, the preparation of both the IAP and the SDPP, and to discuss construction related issues arising from early works at the site. In addition to these recurring meetings, targeted meetings have also been held specifically to discuss proposed OSD and related issues. Key issues raised during this consultation and the responses are summarised in Table 11.

Table 11 – Stakeholder feedback summary – North Sydney Council

Issue	Response
<b>North Sydney Council</b>	
Construction traffic and pedestrian impacts	Management and mitigation of construction and pedestrian impacts has been addressed in the Preliminary Construction Management Statement (Appendix V) based on three construction scenarios. Detailed consideration of these issues is a matter for the detailed SSD Application when the successful contractor has determined the construction staging and interface with the station construction.
Treatment of the retail space on the corner of Berry and Miller Streets to ensure its amenity and presentation as a public space	The concept proposal includes an opportunity for a retail use on the corner of Miller and Berry Streets to activate the ground floor level and engage with the public domain. The Design Guidelines (Appendix G) require that the retail space contributes to the liveliness and vitality of the Miller Street Special Area and Berry Street. This matter will need to be addressed in the future detailed SSD Application.

Issue	Response
Concerns regarding overshadowing in the context of new and approved development schemes	The shadow studies demonstrate that the concept proposal would result in minimal overshadowing impacts including to the Miller Street Special Area. Refer to discussion in Chapter 8.3 and the shadows studies at Appendices H, I, J, K and L of this EIS.
Opportunities to upgrade Denison Street in conjunction with proposal	The integration of the ground plane with the Denison Street upgrade will be resolved through the preparation of the SDPP under the terms of the CSSI approval.
Consideration of existing pedestrian links and possible future connections	This matter will be considered in the preparation of the SDPP under the terms of the CSSI Approval.

### 5.2.3 Stakeholder feedback – Sydney Coordination Office

Meetings with the Sydney Coordination Office in relation to the concept proposal have been ongoing since the third quarter of 2017. The primary focus of the meetings has been to agree the traffic analysis assumptions, to resolve potential cumulative impacts with respect to planned changes to the traffic network and to input into design development to ensure the traffic impacts of the proposal are minimised. Key issues raised during this consultation and the responses are summarised in Table 12.

Table 12 – Stakeholder feedback summary – Sydney Coordination Office

Issue	Response
<b>Transport for NSW / RMS / Sydney Coordination Office</b>	
Impacts on the wider road network during construction and operation	The traffic analysis has been undertaken to assess potential impacts on the local road network. The analysis and assumptions used have been based on investigations of neighbouring commercial developments in North Sydney CBD and have been supported by the Sydney Coordination Office as providing an appropriate and relevant basis for the traffic assessment. The assessment concludes that the proposal would result in a maximum of 33 additional traffic movements during the AM peak and that this would have an inconsequential impact on the level of services of surrounding key intersections.  Refer to the Transport, Traffic and Parking Assessment Report at Appendix P and the assessment at Chapter 8.6.
How the development will integrate with the wider transport system, in particular the Western Harbour Tunnel and Beaches Link proposed road upgrade	Changes to the local road network as a result of local and State projects are addressed in the Transport, Traffic and Parking Assessment Report at Appendix P. It is noted that the design for the Western Harbour Tunnel and Beaches Link and its potential impacts on the traffic network has not yet been resolved. This matter will be considered in further detail at the detailed SSD Application stage.
Acknowledgment that the OSD proposal will have marginal impact on road network operations	The assessment concludes that the proposal would result in a maximum of 33 additional traffic movements during the AM peak.



Issue	Response
Transport for NSW / RMS / Sydney Coordination Office	
Ensuring that any footpath modifications in Denison Street do not impact service vehicle access.	Any changes to footpaths in Denison Street will need to be undertaken having regard to service vehicle access needs and swept paths and delivered under the terms of the CSSI Approval.
Ensuring that any changes to the intersection of Berry Street and Denison Street do not compromise service vehicle access.	Any changes to the intersection will need to be undertaken having regard to service vehicle access needs and swept paths.
Concerns regarding the ability to accommodate the loading and servicing needs of the station and OSD development.	A loading dock management plan will be prepared to ensure the efficient operation of the loading dock facility. TfNSW has prepared a delivery service plan principles document which outlines the principles that will apply to the management of deliveries, servicing and loading dock operations for the Victoria Cross OSD. The full document can be viewed in Appendix A of the Transport, Traffic and Parking Assessment Report at Appendix P.

#### 5.2.4 Summary of stakeholder feedback – Design Review Panel

The Sydney Metro Design Review Panel (DRP) is an advisory body that is chaired by the NSW Government Architect. The objectives of the DRP are to provide independent, high-level design advice, ensure quality design outcomes and support the delivery of the Sydney Metro program. With respect to OSD, the primary role of the DRP is to review, critique and advise on the application of design objectives to key design elements, including such themes as place making, activation, architecture, heritage, urban design, landscape design and artistic elements and more specifically, to review the OSD designs to facilitate the achievement of design excellence.

Consultation with the DRP in relation to this concept proposal has been ongoing since the third quarter of 2016, beginning with the consideration of site constraints, opportunities and different building envelope options. The project team has presented to the DRP throughout the design development and has taken their comments on board in the concept design, as demonstrated in Table 13.

Table 13 – Stakeholder feedback summary – Design Review Panel

Issue	Response
TfNSW Design Review Panel (DRP)	
The use of 'X' columns at the ground plane and potential visual permeability impacts to Miller Street.	Further design work has been undertaken to improve the design of the columns and how they land. Subsequently, the design has been amended to incorporate 'Y' columns and they have been rotated and pushed to the west, eliminating their impact on the Miller Street ground plane including the entries to the OSD lobby.
Treatment of the building's eastern façade.	This is a matter for the future detail SSD Application. The indicative scheme shows how the eastern façade could be resolved.
Potential wind impacts.	A Wind Impact Assessment (Appendix M) has been undertaken to inform the building envelope design and to make recommendations to mitigate potential ground level impacts. This matter will be further considered at the detailed SSD Application stage.
The need for Design Guidelines to inform future design.	Design Guidelines have been prepared to guide the future development of the site and are included at Appendix CC.

Issue	Response
Potential sun glare impacts resulting from proposed sloping façades.	This is a matter for consideration at the detailed SSD Application stage.
Miller Street urban design is important and needs to be balanced with retail activation.	The concept proposal now includes a retail opportunity on the corner of Miller Street and Berry Street and has the potential to enhance and activate the adjacent public domain.
Importance of pedestrian and security protection at the Denison Street entry. Development of alternative options for security to support a pedestrianised Denison Street outcome was desired.	A CPTED Report (Appendix W) has been prepared as part of this concept proposal. Recommendations of this report will be incorporated into the future design and will be further considered at the detailed SSD Application stage.

### 5.2.5 Stakeholder feedback – Air Services

Consultation has been undertaken with Sydney Airport Corporation Limited and the Civil Aviation Safety Authority. Details of this consultation is contained in the Airspace Assessment Report at Appendix R of this EIS.

### 5.2.6 Stakeholder feedback – Utility Services Providers

Consultation has been undertaken with the key utility services agencies; Ausgrid, Sydney Water and Jemena. The details of this consultation and the status of agreements with these providers is contained in the Services and Utilities Infrastructure Report at Appendix S of this EIS.

### 5.2.7 Department of Planning and Environment

Consultation has been ongoing with the DP&E since the second quarter of 2016. During this consultation, TfNSW has presented the design development of the concept proposal and has outlined key issues raised during stakeholder engagement.

### 5.2.8 Office of the Government Architect

Consultation has been undertaken directly with the Government Architect's Office during the preparation of Sydney Metro's Design Excellence Strategy. The Strategy (Appendix C) has been refined to specifically address the following feedback and key issues raised during this consultation:

- To confirm the commitment to design excellence to showcase inspiring, ambitious and diverse architecture and design that is both globally and locally relevant and resonant
- To increase competition by encouraging the broadest range of participants as possible in the competitive selection process including investigating partnering strategies to reduce the apparent barrier of Authorised Engineering Organisation (AEO) status
- Formalising the use of benchmarks to set minimum performance requirements for tender responses
- Binding the design excellence elements of the selected tender design into the contract documents at execution in order to mandate elements that underpin excellence outcomes

## 5.3 Public exhibition of the SSD Application

The DP&E will place this concept SSD Application on public exhibition in accordance with the relevant statutory requirements. During the exhibition period, government agencies, project stakeholders and the community will be able to review the concept SSD Application and make a written submission to the DP&E for consideration in its assessment of the application.

Advertisements will be placed in newspapers to advise of the public exhibition, where the concept SSD Application can be viewed and details provided of community consultation activities and information sessions.

During the public exhibition period, TfNSW will also undertake further community and stakeholder engagement. Communication materials and activities to assist the community to understand the concept SSD Application and process for making a submission will include:

- SSD Application overview document
- Media releases
- Community information sessions and events
- Door knocks
- Newsletter letterbox drop
- Project website updates
- Newspaper advertising
- 3D Model displays at institutions
- Stakeholder meetings
- Local business engagement
- Government stakeholder engagement

At the completion of the public exhibition period and after reviewing the submissions, TfNSW will prepare a Response to Submissions Report and if required, a Preferred Project Report. This report will be made available to the public via both the DP&E and TfNSW websites.

## 5.4 Ongoing consultation and engagement

Tf NSW will continue to work with stakeholders and the community to ensure they are informed about the project and have opportunities to provide feedback to the project team. A list of activities and their timing is provided in Table 14.

Table 14 – Ongoing consultation and engagement activities

Activity	Timing	Design	Delivery	Operation
Awareness and marketing campaign to engage future customers	Ongoing	●	●	●
Community events	Ongoing	●	●	
Community information centres	Ongoing	●	●	
Community information sessions	As required	●		
Community communications strategy	Prior to construction	●	●	
Construction complaints management system	Prior to construction	●	●	
Construction notifications	Seven days prior to construction starting		●	
Doorknocks	As required	●	●	●
Email updates	Relevant milestones	●	●	●
Enquiries and complaints hotline	Ongoing	●	●	●
Fact sheets	As required	●	●	●
Engagement with stakeholders including government, peak bodies and local businesses	As required; relevant milestones	●	●	●
Media releases	Relevant milestones	●	●	●
Newsletter	Relevant milestones	●	●	●
Newspaper advertising	Relevant milestones	●	●	●
Operation communications plan	Prior to operation			●
Place managers	Ongoing	●	●	
Project briefings and presentations	Relevant milestones	●	●	
Project overview document	Relevant milestones	●	●	
Site signage	Prior to construction		●	
Social media updates	As required; relevant milestones	●	●	●
Website, animations and online forums	Ongoing	●	●	

## 5.5 Next steps

Sydney Metro will continue to engage with the community about the CSSI Approval and the concept SSD Application, including staging of works and the integrated relationship between the Victoria Cross Station and the OSD. The community will continue to be provided with opportunities to make enquiries and provide feedback.

# **ASSESSMENT OF COMPLIANCE WITH STRATEGIC PLANS**

CHAPTER SIX





## 6. Assessment of compliance with strategic plans

This chapter assesses the consistency of the concept proposal with the provisions, goals and objectives of the key strategic plans and policies relevant to the site, including those identified in the SEARs. The concept proposal is generally consistent with the identified strategic plans and policies, as detailed in the following sections of this report.

### 6.1 NSW State Priorities

In 2015, the State Government introduced 18 NSW State Priorities identifying its key policy commitments. A number of these priorities are relevant to this concept proposal both directly and indirectly, as set out below.

#### **Strong budget and economy**

This priority aims to improve the ease of doing business in NSW to create jobs and encourage investment. The OSD at Victoria Cross would build business confidence in North Sydney CBD by integrating land use with transport infrastructure investment, capitalising on the productivity benefits of Sydney Metro and providing an incentive for further development.

#### **Accelerating major project assessment**

TfNSW will work with the DP&E to ensure an efficient, transparent and robust assessment of this concept proposal. This collaboration will assist the DP&E in meeting its responsibilities under this priority.

#### **Improving road travel reliability**

The OSD at Victoria Cross would help meet journey time targets for road users by encouraging increased commuter use of public transport. The public transport accessibility of North Sydney CBD would increase considerably as a result of Victoria Cross Integrated Station Development, which would contribute to achieving this priority. The OSD would be physically integrated with the future Victoria Cross Station, providing workers within the building with a reliable and easily accessible mode of transport.

#### **Ensure on-time running for public transport**

While Sydney Metro is not expected to be operational until 2024, the OSD at Victoria Cross would contribute to the longer term improvement of Sydney's public transport system by forming an integral component of Sydney Metro which would significantly cut travel and waiting times.

### 6.2 NSW Premier's Priorities

The NSW Premier's Priorities consist of 12 priorities personally set out and committed to by the Premier. The priorities contain measurable targets intended to guide the social and economic development of the State. Two of the priorities are particularly relevant to this concept proposal as detailed below.

### **Creating jobs**

This priority sets a target of 150,000 new jobs in NSW by 2019. According to the NSW State government, jobs growth is currently tracking significantly above target and the government continues to support job creation through a number of policies, including funding of Jobs for NSW, advice to small business through the Business Connect program, and creation of jobs and apprenticeships for the construction sector through government infrastructure projects. This will ensure NSW receives ongoing jobs growth to match the significant population growth predicted in the coming years.

Sydney Metro has created thousands of jobs which will continue to increase as construction of Sydney Metro City & Southwest continues. The OSD would further contribute to job creation through an estimated 600 construction-related jobs and in the long term, through the provision of significant additional commercial floor space in North Sydney CBD, which would support an estimated 4,200 workers.

### **Delivering infrastructure**

This priority aims to deliver key metropolitan, regional and local infrastructure projects on time and on budget. Sydney Metro City & Southwest is Australia's biggest public transport project and the nation's biggest urban rail investment in history. The concept proposal supports the delivery of Sydney Metro and optimises the project's productivity benefits by facilitating employment growth that is coordinated with the new station at Victoria Cross. The OSD at Victoria Cross would capitalise on the NSW Government's investment in this infrastructure project, contributing to the growth of North Sydney CBD.

Additionally, the concept proposal has been designed to ensure that the OSD will not hinder the ability of Sydney Metro City & South West to commence operation on time. This is discussed further in Chapter 4.11 of the EIS.

## **6.3 NSW policies and strategies**

### **6.3.1 A Plan for Growing Sydney**

*A Plan for Growing Sydney* (Department of Planning and Environment, 2014) was the NSW Government's 20-year vision for Sydney released in 2014. The plan was superseded by the *Greater Sydney Region Plan* in March 2018. As such, *A Plan for Growing Sydney* has not been considered in detail in this EIS.

### **6.3.2 Towards Our Greater Sydney 2056**

*Towards our Greater Sydney 2056* (Greater Sydney Commission, 2016) was a draft amendment to *A Plan for Growing Sydney*. It has been developed into the comprehensive *Greater Sydney Region Plan* (discussed below), which has been finalised and now forms Sydney's overarching metropolitan strategy. As such, *Towards our Greater Sydney 2056* has not been considered in detail in this EIS.

### **6.3.3 Greater Sydney Region Plan**

The *Greater Sydney Region Plan* (Greater Sydney Commission, 2018) (Region Plan) builds on the three cities vision introduced by *Towards our Greater Sydney 2056* and replaces *A Plan for Growing Sydney* as Sydney's overarching metropolitan strategy. It sets a 40-year vision for Sydney and establishes a 20-year plan to manage growth and change.

The Region Plan’s spatial plan is shown at Figure 48. The subject site forms part of the Harbour CBD and is located along the Eastern Economic Corridor.

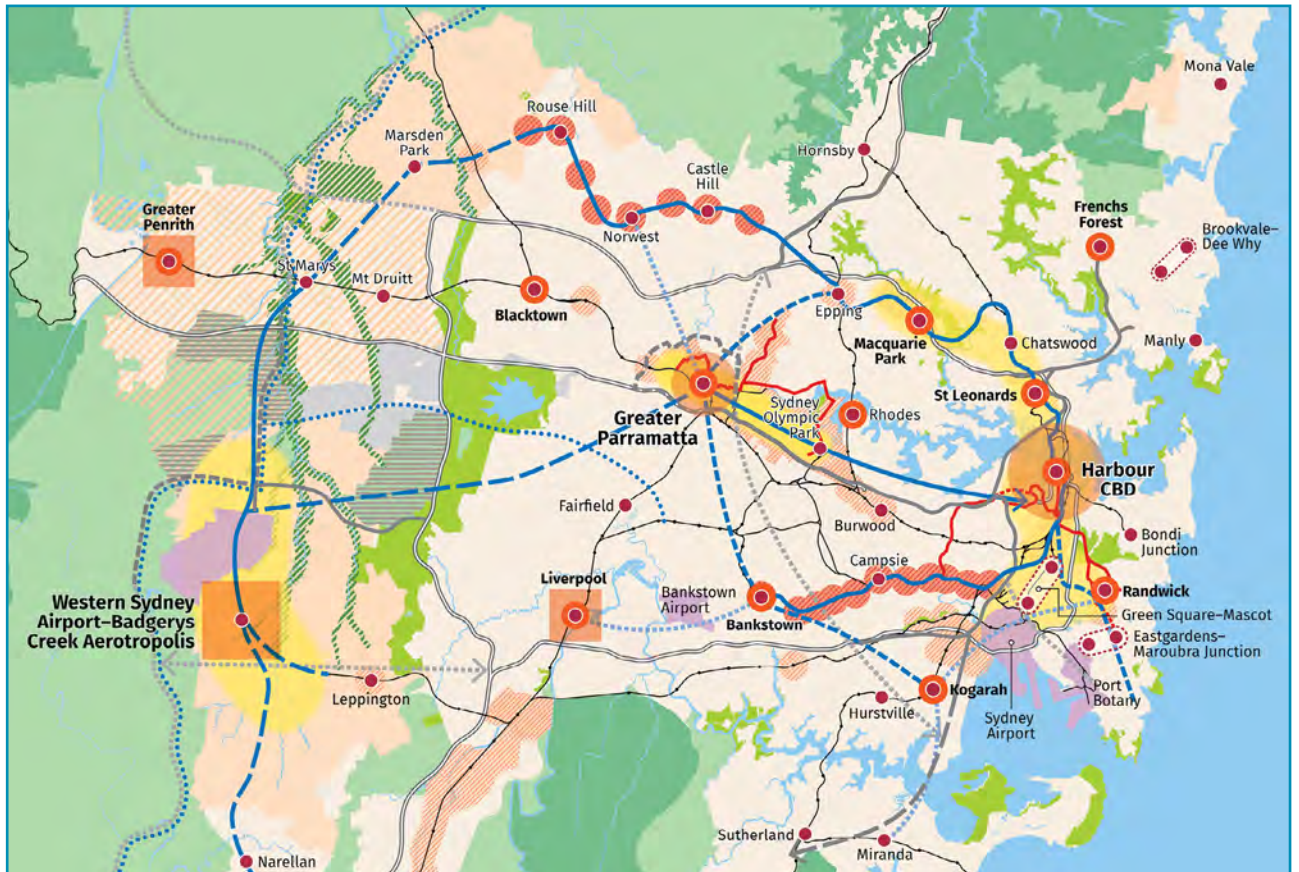


Figure 48 –Greater Sydney Structure Plan 2056 map



The Region Plan is structured around four key themes – infrastructure and collaboration, liveability, productivity and sustainability – and sets out a number of directions and objectives to guide delivery of these themes. The concept proposal's consistency with key relevant directions and objectives is outlined in the table below.

Table 14 – Consistency with Greater Sydney Region Plan

Direction	Objective	Consistency
A city supported by infrastructure	4: Infrastructure use is optimised	The OSD would allow for efficient land use by locating new commercial development in the airspace above Victoria Cross Station, leveraging the public benefits of integrated land use and transport planning. Workers employed within the OSD would benefit from the commuting advantages offered by the metro.
A city of great places	12: Great places that bring people together	The OSD would contribute to the creation of a vibrant place – the Victoria Cross Integrated Station Development featuring the station, OSD and public domain improvements. The integrated development would be a new focal point in North Sydney and will provide people with welcoming places to work, shop and socialise.
	13: Environmental heritage is conserved and enhanced	The concept proposal has been designed to be sympathetic to surrounding heritage items, including the Rag & Famish Hotel and MLC Building, through appropriate building heights and setbacks, and would maintain solar access to key public domain areas, such as Greenwood Plaza and the Miller Street Special Areas. The future detailed SSD Application for the OSD will ensure that the building design and materiality complement surrounding development and further enhance the character of North Sydney.
A well connected city	14. A metropolis of three cities – integrated land use and transport creates walkable and 30-minute cities	The OSD would help achieve the vision of a 30-minute city by placing significant new employment space in a highly accessible location along the new Sydney Metro. The project epitomises integrated land use and transport planning.
	15. The Eastern, GOP and Western Economic Corridors are better connected and more competitive	The OSD would strengthen Sydney's Eastern Economic Corridor by contributing to the continued growth of North Sydney's commercial centre, which is one of the primary office markets along the corridor. The OSD would harness the catalytic effects of the metro by offering commuting advantages to workers and enhancing business access to skilled labour. Workers in the OSD would be better connected to Sydney CBD and other major centres, which will improve business linkages.
Creating the conditions for a stronger economy	18. Harbour CBD is stronger and more competitive 22. Investment and business activity in centres 24. Economic sectors are targeted for success	In accordance with these objectives, the OSD would contribute to the economic success of North Sydney CBD and the broader Harbour CBD by enabling development for the purposes of a high quality office tower in a strategic location in North Sydney's commercial core, directly above key public transport infrastructure.



### 6.3.4 North District Plan

The North District Plan (Greater Sydney Commission, 2018) (District Plan) sets out a 20-year vision for the North District, which includes North Sydney, Hornsby, Hunters Hill, Ku-ring-gai, Lane Cove, Northern Beaches, Mosman, Ryde and Willoughby local government areas. Refer to Figure 49 for the District Plan’s spatial plan map.

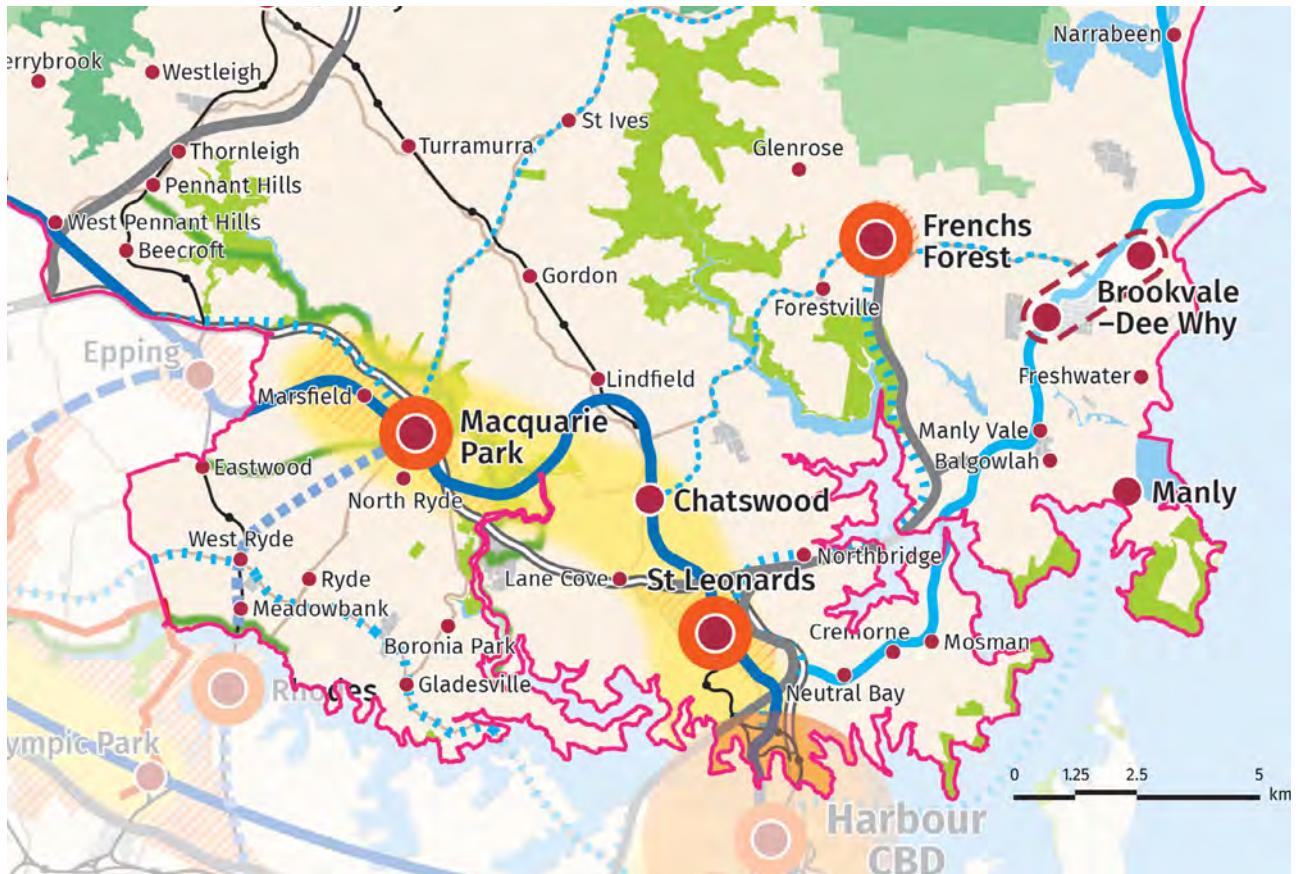


Figure 49 – North District Structure Plan

The District Plan sets out priorities and actions for the growth and development of the North District. The District Plan recognises North Sydney CBD as a strong commercial centre and an integral component of an internationally competitive Harbour CBD (comprising Sydney and North Sydney CBDs).

The District Plan sets out ten directions with supporting planning priorities. The concept proposal’s consistency with the relevant directories and planning relevant priorities is outlined in the table below.



Table 15 – Consistency with the North District Plan (2018)

Direction	Direction	Consistency
A city supported by infrastructure	N1. Planning for a city supported by infrastructure	The proposal would align economic growth and infrastructure investment by placing significant employment floor space directly above Sydney Metro infrastructure.
A city of great places	N6. Creating and renewing great places and local centres, and respecting the district's heritage	The OSD would contribute to the creation of a vibrant place – the Victoria Cross Integrated Station Development, which would form a new focal point in the thriving employment hub of North Sydney.  The OSD would respect the area's built form heritage by providing appropriate setbacks and building forms.
A well connected city	N12. Delivering integrated land use and transport planning and a 30-minute city	The OSD would place significant employment floor space directly above the future Victoria Cross Station, thereby contributing to the vision of a 30-minute city. The project epitomises integrated land use and transport planning.
Jobs and skills for the city	N7. Grow a stronger and more competitive Harbour CBD N8. Eastern Economic Corridor is better connected and more competitive N10. Growing investment, business and jobs opportunities in strategic centres N13. Supporting growth of target industry sectors	The OSD would add approximately 4,200 jobs (during the operational phase) in the heart of North Sydney, and it is anticipated that a significant portion of these would be highly-skilled, knowledge-intensive jobs, including jobs in the key economic sector of financial and professional services. These jobs would contribute to the competitiveness of the Eastern Economic Corridor and enhance North Sydney's status as a strategic employment hub.

The District Plan also identifies key actions specifically for North Sydney CBD to be undertaken by North Sydney Council and other planning authorities and State agencies. The following actions are particularly relevant to the OSD at Victoria Cross:

- maximise the land use opportunities provided by the new station
- grow jobs in the centre and maintain a commercial core
- provide a variety of high quality civic and public spaces befitting a globally-oriented CBD, which can be utilised for a range of cultural and entertainment activities
- create capacity to achieve job targets by reviewing the current planning controls

The project would align with the above actions in that it would:

- maximise land use opportunities, by growing commercial development opportunities directly above Victoria Cross Station
- support jobs growth through provision of up to 60,000 square metres of commercial floor space
- support provision of high quality public spaces by integrating with the station and maintaining solar access to key public spaces
- align with proposed amendments to NSLEP 2013 (refer Chapter 7.5 below).

Also, the District Plan identifies job targets for North Sydney CBD including a baseline target of 76,000 and a higher target of 81,500 by 2036. The OSD at Victoria Cross would help meet these targets.

### 6.3.5 NSW Long Term Transport Master Plan

The *NSW Long Term Transport Master Plan* (Transport for NSW, 2012) establishes a framework for the delivery of an integrated transport system over the next 20 years. The aim of the Master Plan is to help ensure that the development of transport infrastructure is aligned with future urban development. The Master Plan is currently under review. The *Future Transport 2056 Strategy* is discussed in Chapter 6.3.6 below.

The objectives underpinning delivery of the Master Plan are to:

- improve quality of service
- improve liveability
- support economic growth and productivity
- support regional development
- improve safety and security
- reduce social disadvantage
- improve sustainability
- strengthen transport planning processes.

The Master Plan emphasises the need to increase the capacity of Sydney's rail network to meet existing customer needs and to accommodate additional travel demand created by Sydney's population and economic growth over the coming decades.

The Master Plan identifies a three-tiered network approach to expand rail network capacity. This approach involves integration of high-capacity metro into the current two-tier arrangement of suburban and intercity services. A new metro rail line connecting Chatswood to Sydney CBD is identified as the centrepiece of Sydney's integrated and modernised rail system.

Since the release of the Master Plan, the new Sydney Metro City & Southwest – Sydenham to Chatswood line has been approved, and the Victoria Cross Integrated Station Development would form an important element of the approved line. It would function as a new focal point for the important employment centre of North Sydney and help reduce overcrowding at North Sydney Station. More broadly, it would contribute to a consolidated, connected and multi-centred Sydney by serving as a key stop along Sydney's Eastern Economic Corridor.

The OSD would maximise the productivity benefits of the metro and drive public transport use by placing additional commercial floor space directly above the station. The OSD would sit prominently in North Sydney's skyline, marking the Victoria Cross Integrated Station Development as a major piece of Sydney's modernised rail system.

The OSD would align with the key objectives underpinning the Master Plan, particularly by supporting the economic growth and productivity of North Sydney and improving the quality of life of Sydney residents through increased access to jobs.

### 6.3.6 Future Transport Strategy 2056

The *Future Transport Strategy 2056* is an update of the *NSW Long Term Transport Masterplan*. It sets the 40-year vision, directions and outcomes framework for transport customer mobility in NSW.

The Strategy will be delivered through a suite of accompanying plans, including Services and Infrastructure Plans and issue-based or placed-based Supporting Plans.

The Strategy builds on the fundamental improvements to the transport system resulting from the *NSW Long Term Transport Masterplan*, such as Sydney Metro, and seeks to incorporate rapidly evolving technology and new service models to support a modern, innovative transport system that serves the community and economy well into the 21st century.

The Strategy's 40-year vision is based on six outcomes:

- a customer focus
- successful places
- a growing economy
- safety and performance
- accessible services
- financial and environmental sustainability

The Strategy promotes a switch from 'planes, trains and automobiles' to 'mobility as a service' and sees the future of mobility as customer-focused, data-enabled and dynamic. This future will be supported by automated systems that are responsive, capable and 'smart'.

Sydney Metro will be Australia's first fully-automated rail infrastructure and will form a foundational piece of Sydney's technologically-driven transport future. The Victoria Cross Integrated Station Development will contribute directly to the creation of a successful place and support economic productivity. It will drive economic growth and social cohesion by providing new work and retail opportunities and new, high quality public places where people can meet and gather. The concept proposal is therefore strongly aligned with the Strategy.

### 6.3.7 Sydney's Rail Future

*Sydney's Rail Future: Modernising Sydney's Trains* (TfNSW, 2012) is the NSW Government's long-term plan to increase the capacity of Sydney's heavy rail network through investment in new services and upgrading of existing infrastructure. *Sydney's Rail Future* forms an integral part of *NSW Long Term Transport Master Plan* and once implemented will enable Sydney's rail network to carry an additional 90,000 to 100,000 people per hour in the peak period across the Sydney CBD rail lines.

*Sydney's Rail Future* aims to meet customers' needs for a clean, safe and reliable service that gets Sydneysiders to work on time. A primary instrument to achieve this aim is the new Sydney Metro rapid transit system including a second Sydney Harbour crossing, which will help unclog bottlenecks and provide access to key destination points through Sydney's major employment and education centres. Sydney Metro will provide a fast, frequent and reliable service and will offer customers a true 'turn up and go' experience. There will be a train from Chatswood to the CBD every three minutes in peak periods.

The Victoria Cross Integrated Station Development would capitalise on these improvements to Sydney's rail network. It would form a strategic node on the new Sydney Metro and provide a new focal point in North Sydney featuring high skilled jobs, high quality public domain and new retail destinations.

## 6.4 Other State and metropolitan strategies

Other relevant State and metropolitan strategies, policies and guidelines are discussed in Table 16.

**Table 16 – Consistency with other strategies, policies and guidelines**

Strategy	Consistency
<p><i>Better Placed – an integrated design policy for the built environment of NSW (Government Architect NSW, 2017)</i></p>	<p>This policy sets out the NSW Government’s position on design in the urban environment. It provides clarity on what the NSW Government means by good design and functions to assist in the design and assessment of projects. The policy includes seven applicable objectives:</p> <ul style="list-style-type: none"> <li>● better fit – contextual, local and of its place</li> <li>● better performance – sustainable, adaptable and durable</li> <li>● better for community – inclusive, connected and diverse</li> <li>● better for people – safe, comfortable and liveable</li> <li>● better working – functional, efficient and fit for purpose</li> <li>● better value – creating and adding value</li> <li>● better look and feel – engaging, inviting and attractive.</li> </ul> <p>As demonstrated by the indicative OSD design in Appendix E, the proposed building envelope is capable of accommodating a built form that is sustainable, functional, sensitive to its context and visually distinctive in accordance with the objectives of Better Placed.</p> <p>A Design Excellence Strategy (Appendix C) has been prepared with regard to Better Placed in order to ensure that future OSD achieves design excellence.</p>
<p><i>Sydney’s Cycling Future (TfNSW, 2013)</i></p>	<p>This policy provides direction for the planning, prioritisation and provision of cycling infrastructure in Sydney. The overarching goal of the plan is to make cycling a safe, convenient and enjoyable transport option for short trips. The concept proposal supports this goal by facilitating new development along North Sydney’s existing cycling network and by providing for end-of-trip facilities for cycling commuters.</p> <p>The plan identifies a North Shore link between the existing Naremburn Cycleway and the Sydney Harbour Bridge as a key priority. While Miller Street is named as a potential route for this link, <i>Council’s Integrated Cycling Strategy (2014)</i> nominates West Street–Pacific Highway as the preferred route. It is understood that design of this cycleway is currently underway. Future OSD at the site, as facilitated by the concept proposal, would place employees in close proximity to this cycleway and thereby support and benefit from the cycleway.</p>
<p><i>NSW Planning Guidelines for Walking and Cycling (RMS, 2005)</i></p>	<p>These guidelines function to improve the consideration of walking and cycling and their role in the creation of sustainable neighbourhoods and cities. The concept proposal and ultimate Victoria Cross Integrated Station Development align with these guidelines by improving walkability and cycle access across North Sydney CBD through the provision of new pedestrian routes, end-of-trip facilities and wayfinding signage. This will contribute to a high quality pedestrian and cycling environment, which is conducive to use of active transport options by future OSD workers and visitors.</p>

Strategy	Consistency
<i>NSW Bicycle Guidelines (RMS, 2005)</i>	<p>These guidelines function to assist road designers, engineers and planners in the design and construction of high quality bicycle transport facilities. The concept proposal responds to these guidelines by ensuring that appropriate areas are set aside for use as bicycle parking and end-of-trip facilities for OSD workers.</p> <p>The indicative OSD design (Appendix E) shows that the bicycle parking and end-of-trip facilities would be located on Basement Level B02.</p> <p>The future detailed SSD Application will ensure that the design of the facilities and other bicycle infrastructure meet the requirements of these guidelines.</p>
<i>Sydney's Bus Future (TfNSW, 2013)</i>	<p>This document sets out step-by-step actions to deliver fast and reliable bus services for customers. The concept proposal aligns with these actions by placing additional commercial floor space within walking distance of a number of key bus routes (although, it is anticipated that rail will be the primary mode of transport to the future OSD).</p>
<i>Sydney's Walking Future (TfNSW, 2013)</i>	<p>This plan aims to get people in Sydney walking more through actions that make it a more convenient, better connected and safer mode of transport. The plan draws on the consultation undertaken for the <i>NSW Long Term Transport Master Plan</i> and customer research.</p> <p>The Integrated Station Development supports the goal of increasing walking as a transport mode by situating new development in a highly walkable location along the key pedestrian routes of Miller and Denison Streets and by enabling enhancement of the existing pedestrian network through a mid-block connection between Denison and Miller Streets. This connection will serve as a key walking route between Victoria Cross Station and the surrounding CBD's commercial core.</p>

## 6.5 Local policies and strategies

### 6.5.1 North Sydney Centre Capacity and Land Use Strategy

On 1 May 2017 Council adopted the *North Sydney Centre Capacity and Land Use Strategy* (NSCCLUS), which forms the final component of Council's comprehensive, multi-faceted North Sydney Centre Review initiated in 2014. The NSCCLUS and wider review are informed by a number of studies, including the *North Sydney Commercial Centre Study* (Urbis, 2015) and the *North Sydney Centre Economic Study* (Hill PDA, 2013).

#### Objectives

The objectives of the NSCCLUS are to:

- develop a framework that allows for the growth of the North Sydney Centre to ensure it maintains its status as a resilient, vibrant and globally relevant commercial centre
- accommodate forecast demand for additional commercial floor space in the North Sydney Centre
- inform and respond to district planning, particularly employment and commercial floor space targets for the 'strategic centre'

- take advantage of planned infrastructure upgrades by intensifying land uses surrounding transport infrastructure
- identify and facilitate specific land uses that contribute to the centre's diversity, amenity and commercial sustainability.

The concept SSD Application is consistent with all of the above objectives. In particular, it would add to the economic prosperity of North Sydney by providing significant additional commercial floor space in North Sydney Centre. The project would revitalise and improve the amenity of North Sydney Centre by attracting business, adding to the commercial competitiveness of the area and creating a vibrant destination.

### **Key components of the strategy**

The NCCLUS identifies the need for a refined Height of Buildings Map in NSLEP 2013 in order to unlock North Sydney Centre's commercial potential. The NCCLUS advocates a new map with heights based on the principle of no additional overshadowing to dwellings outside the centre between the hours of 10 am and 2 pm at mid-winter. The NCCLUS also proposes a refinement to the height variation provision in NSLEP 2013, which would allow for increased height (above that shown on the Height of Buildings Map) on certain commercial sites where the development would not adversely impact on the solar access of dwellings outside the centre. The refined height variation clause is based on the principle of maintaining at least two hours of solar access to dwellings between the hours of 9 am and 3 pm.

The proposed building envelope demonstrates consistency with the refined height variation clause as discussed at Chapter 7.5 of this report.

Another key component of the NCCLUS is the *Special Areas Review* (North Sydney Council, 2016), which was prepared to assess the relative value or contribution of existing Special Areas to the amenity of North Sydney and to ascertain whether they should continue to be protected under existing policy settings. Relevant to this concept proposal, the review recommends removal of the Elizabeth Plaza Special Area, and that further consideration be given to Tower Square and Miller Street Special Areas to accord with Sydney Metro built form and public domain outcomes. It is noted that final recommendations of the NCCLUS (discussed below) recommend removal of the Tower Square Special Area.

Overall, it is evident that the NCCLUS recognises the importance of the Victoria Cross Station and the need to amend the planning provisions in NSLEP 2013 to facilitate the delivery of significant additional commercial floor space on the site.

### **Recommendations**

The NCCLUS contains 10 final recommendations for amendments to NSLEP 2013. The following four are particularly relevant to this concept proposal:

- apply new height controls to *B3 Commercial Core* sites
- apply a new height variation control based on the principle of maintaining at least two hours of solar access to residential properties outside of North Sydney CBD
- remove the Elizabeth Plaza, Blue Street, and Tower Square Special Areas
- remove clauses relating to railway infrastructure and limitations on future commercial floor space development.



The above recommendations, including the new recommended height map, are incorporated into the *Planning Proposal – North Sydney Centre* (PP\_2017\_NORTH\_002\_00) submitted by North Sydney Council to the DP&E to amend NSLEP 2013. Refer to Chapter 7.5 of this EIS for further discussion of this planning proposal.

## 6.5.2 North Sydney Council’s Sydney Metro Planning Study 2016

In response to the State Government’s 2015 Metro announcement, North Sydney Council prepared the *Sydney Metro Planning Study* to inform and guide the planning and design of the two metro sites in the North Sydney local government area at Victoria Cross and Crows Nest. The Study was adopted by Council on 16 May 2016, and an addendum to the study (Part 5 Built Form – Victoria Cross) was adopted on 20 February 2017.

The study considers in detail a range of development opportunities for the site and identifies principles to guide its future development. The concept proposal’s consistency with key relevant principles is outlined in Table 17 below. Notably, many of the principles identified in the study relate to ground level treatments, which, as described in Chapter 4.9 of this EIS, are being delivered under the CSSI Approval for the station.

Table 17 – Consistency with Sydney Metro Planning Study

Principle	Consistency
<b>Transport and movement</b>	
<b>A quality pedestrian connection will be created linking the Metro with Denison Street via the existing Tower Square site</b>	A pedestrian through-link between Miller and Denison Streets is being delivered under the CSSI Approval. The proposed building envelope has been designed to maximise amenity to this link by setting back the building envelope a minimum of 18 metres from the southern boundary of the site.
<b>Loading zones remain an important consideration in any planned intervention.</b>	The indicative OSD design (Appendix E) includes a shared loading dock area on Basement Level B2. The physical construction of this area will be subject to a future detailed development application.
<b>Provide new cycling infrastructure to encourage active transport</b>	The indicative OSD design (Appendix E) demonstrates sufficient space planning in the building envelope to accommodate bicycle storage areas and end-of-trip facilities for the OSD.
<b>Public domain and open space</b>	
<b>New and/or improved public spaces will provide for a number of functions, including pedestrian movement, outdoor dining, passive recreation and events</b>	All public domain improvements are being delivered through the CSSI Approval. Overall the Victoria Cross Integrated Station Development will include improved public domain areas around the site and activated street frontages.
<b>The potential for Miller Street to function as North Sydney’s key piece of civic space/public domain will be maximised</b>	The Integrated Station Development will maximise Miller Street’s function as a key civic space by improving solar access to the Miller Street Special Area, providing for street activation and providing a new landmark building.
<b>Design of the public domain will make the most of solar access opportunities</b>	The proposed building envelope would result in a net gain in sunlight to the adjoining Miller Street Special Area. Refer to discussion in Section 8.3 of this EIS.

Principle	Consistency
<p><b>An uninterrupted linear space that includes the MLC building setback along the eastern side of Miller Street is a priority</b></p>	<p>The proposed building envelope’s setback from Miller Street has been informed by the station design and complies with the setbacks nominated on the North Sydney Centre Map in NSLEP 2013.</p> <p>While the setback does not align with the MLC Building, the lower scale commercial/retail building element on the southern side of the through-site-link (CSSI Approval – refer Figures 34 and 38) does align with the MLC Building and contributes to the spatial quality of both Miller Street and the through-site link. Furthermore, it is considered that the solar amenity and ground level public domain treatments along Miller Street would be significantly improved as a result of the overall Integrated Station Development.</p>
<p><b>Facilitate the activation of both sides of Miller Street</b></p>	<p>The Integrated Station Development would provide for significant activation of the eastern side of Miller Street through entries, lobby areas and retail spaces. This concept proposal for OSD in particular provides for a lobby and adjoining retail space at the Miller Street ground level.</p>
<p><b>Land use</b></p>	
<p><b>Support the employment function of North Sydney Centre by providing significant commercial floor space</b></p>	<p>This concept proposal would contribute up to 60,000 square metres of commercial floor space, which can accommodate approximately 4,200 jobs.</p>
<p><b>Reinstate important lunchtime infrastructure to compliment improved public domain and add value to the site’s destination qualities</b></p>	<p>The retail activated through-site link at the south end of the site, which is being delivered under the CSSI Approval, will help reinstate important retail floor space lost through demolition of the Tower Square development. The proposed building envelope has been designed to maximise amenity to this link. The indicative OSD design incorporates a retail tenancy on the Berry Street and Miller Street corner of the site, further illustrating how the concept proposal could add to the amenity of the site’s qualities as a destination.</p>
<p><b>Maximise opportunities to incorporate retail and other non-residential floor space at ground level</b></p>	<p>This concept proposal allows for the OSD lobby and adjacent retail space at the Miller Street ground level. Other retail opportunities are being delivered under the CSSI Approval.</p>
<p><b>Restaurant, bar and retail opportunities at and above ground level will contribute to amenity, diversity and place making objectives</b></p>	<p>This concept proposal allows for a retail space adjacent to the OSD lobby. Other retail opportunities are being delivered under the CSSI Approval.</p>
<p><b>Incorporate community uses into above station development</b></p>	<p>This concept proposal does not seek approval for community uses. However, the OSD envelope has sufficient flexibility to accommodate these uses in the future.</p>

Principle		Consistency
<b>Built form</b>		
Facilitate optimum public domain outcomes	Massing and scale will consider important existing and future open spaces	The building envelope relates sensitively to surrounding Special Areas and public open space, including Greenwood Plaza and Miller Street Special Areas and Brett Whiteley Plaza by minimising overshadowing to these areas. Refer to further discussion in Chapter 8.3 of this EIS.
	At a minimum, the Miller Street Setback will be complied with, and opportunities to increase this to align with the MLC will be explored.	The ground and podium level setbacks have been set through the station design to comply with the Miller Street Setback. Above RL 118, the proposed building envelope features reduced setbacks, but this reduced setback only relates to the upper levels of the building and therefore preserves the integrity of the Miller Street streetscape. Refer to further discussion in Chapter 7.4 of this EIS.
Contribute to Place Making and Centre Amenity	Built form, particularly at ground and lower levels, will facilitate retail and other activity.	Ground and podium levels are being set through the CSSI Approval and do not form part of this concept proposal. Notwithstanding, the concept proposal for the OSD includes a commercial lobby and retail opportunity on the corner of Miller and Berry Streets which would activate the development and integrate with the public domain.
	Maximum opportunities for ground level activation and avoid excessive inactive frontages or space dedicated to access.	As above.
Connect People and Places	Provide a quality, public through-site link between Denison and Miller Streets.	As above.
	Explore the combining of Metro and MLC basement access to facilitate active frontages and public domain outcomes on Denison Street.	The design of the station will not inhibit future integrated access to the MLC basement.
Contribute to the Commercial Prestige of North Sydney	Provide commercial floor plates commensurate with premium or A-grade market demand.	The proposed building envelope provides opportunities for large commercial floor plates commensurate with A-grade market demand. Refer to the indicative design at Appendix E that illustrates contiguous commercial floor plates ranging from 1,243 and 2,231 square metres.
	Create an icon to reinforce the commercial character of the North Sydney Centre.	The building envelope allows for an iconic commercial tower that would reinforce the prominence of North Sydney as one of the metropolitan area's top office markets and would mark the significance of Victoria Cross Station.

Principle		Consistency
Provide Exceptional Built Form	Building height should be guided by recommendations of North Sydney Capacity and Built Form Study when formally endorsed.	The heights proposed for the building envelope are generally consistent with the recommendations of the <i>North Sydney Capacity and Built Form Study</i> as implemented through the <i>North Sydney Centre Planning Proposal</i> , as discussed at Chapter 7.5 of this EIS.
	Have regard to other controls as per North Sydney Development Control Plan 2013.	The proposed building envelope is generally consistent with the relevant controls in NSDCP 2013, as discussed at Chapter 7.8 and Appendix HH of this EIS.
	Over station development will respect adjoining and nearby heritage items.	The proposed building envelope respects adjoining and nearby heritage items, including the MLC Building and the Rag & Famish Hotel, through the use of appropriate setbacks and massing. Refer to Chapter 8.5 of this EIS for further discussion of heritage impacts.
	Seek input from Council's Design Excellence Panel.	This is a matter for DP&E as part of its assessment of the concept SSD Application.

### 6.5.3 North Sydney Council's Public Domain Review

The *North Sydney Centre Public Domain Review (2015)* was prepared as part of Council's broader North Sydney Centre Review. The review contains a number of recommendations for the Victoria Cross Station site including the following:

- co-locate the entry/exit with North Sydney Station – consider relocating to unblock view into Brett Whiteley Plaza and splitting exit/entry points to spread users
- exit points should be in the direction of desired pedestrian movement
- provide sufficient space for heavy foot traffic during peak hours, separate from 'staying places' and spread paths to avoid a bottle neck
- ensure there is a 'landing pad' for people entering/ exiting the station that allows for a pause and reorientation or landmark for meeting
- improve pedestrian connectivity across the intersection, as well as from the intersection to other streets
- provide a clear visual connection to Mount Street/Brett Whiteley Plaza to create a sense of arrival – arrive at a vibrant, busy pedestrian-focused place, with a view of the whole area
- celebrate history – Victoria Cross, North Sydney's historical standing as the commercial hub
- unify character under the place brand 'Victoria Cross'
- maximise view to harbour/bridge for a sense of orientation/way-finding
- experience on arrival at street level must be better than underground

As noted previously, all public domain works at the site are being designed and delivered as part of the CSSI Approval for the station, specifically through the preparation and implementation of the SDPP required under Condition E101 of the CSSI Approval. As such, the above recommendations are not directly relevant to this concept SSD Application.



### 6.5.4 North Sydney’s draft Ward Street Precinct Masterplan

The draft *Ward Street Precinct Masterplan* (North Sydney Council, 2016) relates to an area to the north of the site generally bounded by McLaren Street to the north, Berry Street to the south, Warringah Expressway to the east and Miller Street to the west (Figure 50). The draft Masterplan was prepared primarily in response to the impending expiry of the Ward Street car park lease (at which time Council will regain control of the land) and the future construction of the Victoria Cross Integrated Station Development.

The key component of the draft Masterplan is the replacement of the Ward Street car park with a major new community facility, a 1,450-square metre public square (with the working title ‘North of Centre Square’) and a new mixed-use building up to RL 230. The precinct is expected to host 50-85 new dwellings, 11,970 square metres of new A-grade commercial floor space, 5,101 square metres of new community floor space and 463 square metres of new retail floor space.

The Victoria Cross Integrated Station Development will complement the vision under the draft Masterplan, and together the two redevelopments will invigorate the northern North Sydney CBD with additional commercial floor space, high quality public domain and improved connectivity to surrounding areas.

The concept proposal is not considered to result in any land use conflict or amenity issues for the future development of the Ward Precinct envisioned under the draft Masterplan.



Figure 50 – Ward Street Precinct

# **ASSESSMENT OF COMPLIANCE WITH STATUTORY PROVISIONS**

CHAPTER SEVEN





# 7. Assessment of compliance with statutory provisions

This chapter addresses compliance with:

- *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act)
- *Airports Act 1996* (Cth)
- *Biodiversity Conservation Act 2016* (NSW)
- *Environmental Planning and Assessment Regulation 2000* (NSW)
- relevant environmental planning instruments (EPIs) including:
  - ◆ *State Environmental Planning Policy (State and Regional Development) 2011*
  - ◆ *State Environmental Planning Policy (Infrastructure) 2007*
  - ◆ *State Environmental Planning Policy No.55 Remediation of Land*
  - ◆ *State Environmental Planning Policy No.64- Advertising and Signage*
  - ◆ *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*
  - ◆ *North Sydney Local Environmental Plan 2013*
- relevant proposed EPIs that have been the subject of public consultation under the EP&A Act including:
  - ◆ draft amendment to *North Sydney Local Environmental Plan 2013* – North Sydney Centre Planning Proposal (PP\_2017\_NORTH\_002\_00)
  - ◆ draft *State Environmental Planning Policy (Environment) 2017*
- North Sydney Development Control Plan 2013 including draft amendments (Note: Clause 11 of SRD SEPP states that development control plans do not apply to SSD).

## 7.1 Environmental Planning and Assessment Act 1979 (NSW)

### 7.1.1 Objects (section 1.3)

As outlined in Table 18, the concept proposal is considered to be consistent with the objects of the EP&A Act provided for under section 1.3.

Table 18 – Consistency with objects of EP&amp;A Act

Object	Consistency
(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 concept proposal promotes the social and economic welfare of the community and a better environment through the integrated development of the Victoria Cross Station site.
(b). to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The concept proposal commits to high standards of ecologically sustainable development. For details refer to the ESD Report at Appendix Q.
(c). to promote the orderly and economic use and development of land,	The concept proposal promotes the orderly and economic use and development of land through a staged planning process whilst delivering an integrated design response, which responds to the scale and complexity of the development.
(d). to promote the delivery and maintenance of affordable housing,	Not applicable. The concept proposal does not relate to residential development.
(e). to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The concept proposal relates to land within an existing urban context and will have no impact on threatened or other species or their habitats. Refer to Chapter 7.7.
(f). to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The concept proposal respects the significance of the area's heritage items and surrounding 'Special Areas'. Refer to the Heritage Impact Assessment Report at Appendix O.
(g). to promote good design and amenity of the built environment,	The concept proposal provides for a building envelope that responds appropriately to its context and allows for future construction of a high quality commercial tower.  Design Guidelines (Appendix CC) and a Design Excellence Strategy (Appendix CC) have been prepared to ensure future development contributes to a well designed built environment.
(h). to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The application relates only to a concept proposal and proposes no physical works. Nonetheless, a Preliminary Construction Management Statement has been prepared (Appendix B) to outline the methods for ensuring future construction impacts are managed and mitigated. A detailed construction management plan will be submitted with detailed SSD Application.  Matters in relation to the future maintenance of the building and the protection of the health and safety of the future building occupants is not relevant to this concept SSD Application. These matters will be relevantly addressed through BCA compliance at the detailed SSD Application stage and in the preparation of a Building Management Statement.

Object	Consistency
(i). to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	Not applicable.
(j). to provide increased opportunity for community participation in environmental planning and assessment.	The applicant, TfNSW, is committed to a broad and inclusive public consultation process as outlined in the EP&A Act. For details, refer to the Consultation with Stakeholders Report at Appendix BB and Chapter 5 of this EIS.

### 7.1.2 Evaluation (section 4.15)

Section 4.15 of the EP&A Act sets out the matters for a consent authority to take into consideration in determining a development application. These matters have been addressed throughout this EIS as outlined in Table 19.

**Table 19 – Section 4.15 of EP&A Act**

Matter for consideration	Location in EIS
(g). the provisions of:	
(i). any environmental planning instrument, and	Chapter 7.3, 7.4
(ii). any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	Chapter 7.5
(iii). any development control plan, and	Chapter 7.8
(iiia). any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and	NA
(iv). the regulations (to the extent that they prescribe matters for the purposes of this paragraph)	Chapter 2.3 Chapter 7.2
<b>that apply to the land to which the development application relates,</b>	
(h). the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	Chapter 8 Chapter 9
(i). the suitability of the site for the development,	Chapter 10
(j). any submissions made in accordance with this Act or the regulations,	To be considered following exhibition
(k). the public interest.	Chapter 10

### 7.1.3 State significant development (Division 4.7)

Division 4.7 of the EP&A Act sets out certain requirements for State significant development. The proposed development is consistent with this Division for the following reasons:

- the development has State significance as it relates to commercial premises within a rail corridor, associated with railway infrastructure and has a capital investment value of more than \$30 million (refer to further discussion at Chapter 2.1 of this EIS)
- the development is permissible with consent
- the development has been evaluated against the relevant heads of consideration in section 4.15 (Chapter 7.1.2 of this EIS)

Section 4.38(3) of Division 4.7 of the EP&A Act states that consent may be granted to State significant development despite the development being partly prohibited by an environmental planning instrument. As discussed at Chapter 7.4 of this EIS, the concept proposal's upper level setbacks along Miller Street do not align with Council's mapped Miller Street setback area (as called up in clause 6.4 of NSLEP 2013). While the concept proposal is considered consistent with the objectives of that clause, in order to remove any doubt about the proposal's permissibility, the consent authority may rely upon the partly prohibited provisions of section 4.38(3) of the EP&A Act to determine the application. A Clause 4.6 variation request (Appendix FF) has also been prepared to address the proposal's compliance with clause 6.4, should the consent authority consider this to be necessary.

## 7.2 Environmental Planning and Assessment Regulation 2000

Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) sets out the requirements for environmental impact statements. This schedule is addressed at Chapter 2.3 of this EIS.

## 7.3 State Environmental Planning Policies

The relevant State Environmental Planning Policies (SEPPs) are addressed in Table 20. Overall, it has been found that the development is consistent with provisions contained within the relevant SEPPs.

Table 20 – Consistency with State Environmental Planning Policies

SEPP	Consistency
<i>State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)</i>	<p>This application relates to commercial premises within a rail corridor, associated with railway infrastructure and has a capital investment value of more than \$30 million; therefore, it is SSD pursuant to sub-clause 19(2)(a) of Schedule 1 of the SRD SEPP.</p> <p>SSD Applications are assessed differently than regular local development applications. A range of legislation does not apply as outlined in section 4.41 of the EP&amp;A Act. Furthermore, development control plans do not apply to SSD pursuant to Clause 11 of the SEPP SRD. Notwithstanding this, consideration of NSDCP 2013 is provided in Chapter 7.8 of this report.</p> <p>The Minister for Planning is the consent authority for SSD in accordance with section 4.5 of the EP&amp;A Act, though section 2.4 enables the Minister to delegate the consent authority function to a person employed in DP&amp;E, the Independent Planning Commission, the Greater Sydney Commission, a Sydney district planning panel, the regional planning panel, a council (or member of staff) or to any other public authority (or member of staff).</p>

SEPP	Consistency
<p><b><i>Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (Sydney Harbour Catchment REP) (deemed SEPP)</i></b></p>	<p>The site is located within the boundaries of the Sydney Harbour Catchment REP. However, the site is neither zoned under the plan nor located within the Foreshores and Waterways Area, where the majority of the plan’s provisions apply. Therefore, the primary matter for consideration under the plan is views to and from Sydney Harbour as required under clause 26, which reads as follows:</p> <p>The matters to be taken into consideration in relation to the maintenance, protection and enhancement of views are as follows:</p> <ul style="list-style-type: none"> <li>(a) <i>development should maintain, protect and enhance views (including night views) to and from Sydney Harbour</i></li> <li>(b) <i>development should minimise any adverse impacts on views and vistas to and from public places, landmarks and heritage items,</i></li> <li>(c) <i>the cumulative impact of development on views should be minimised</i></li> </ul> <p>A Visual Impact Assessment Report (Appendix AA) has been prepared to assess the concept proposal’s impacts on key views, including views to and from Sydney Harbour. The assessment has found that the concept proposal would be compatible with the harbour’s overall visual catchment and would be largely obscured by existing development and development currently under construction when viewed from the harbour.</p> <p>Visual and view impacts are discussed in further detail at Chapter 8.2 of this EIS.</p>
<p><b><i>State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)</i></b></p>	<p>The relevant matters for consideration within the ISEPP are the referral requirements for development within or adjacent to, a rail corridor to the rail authority for the rail corridor (Clause 85 of Division 15 Railways) and traffic-generating development (Schedule 3).</p> <p>As set out in clause 85, development on land that is in or adjacent to a rail corridor must be referred to the relevant rail authority within seven days after the application is made for their consideration prior to the determination of the application. The concept proposal relates to development located within the Sydney Metro City &amp; Southwest Corridor and is to be referred to the rail authority for comment.</p> <p>The concept proposal also triggers consultation with NSW Roads and Maritime Services (RMS) under the provisions of Clause 104 (Traffic Generating Development) and the associated Schedule 3 of the ISEPP, as it would generate new premises with more than 15,000 square metres of commercial floor space.</p> <p><i>Development near Rail Corridors and Busy Roads – Interim Guideline</i> (DIPNR, December 2008) must be taken into account where development is proposed in or adjacent to specific roads and railway corridors under clauses 85, 86, 87, 102 and 103 of the ISEPP. The Transport, Traffic and Parking Report at Appendix P addresses this guideline.</p>



SEPP	Consistency
<p><b><i>State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)</i></b></p>	<p>SEPP 55 provides a Statewide approach to the remediation of contaminated land, and primarily promotes the remediation of contaminated land for the purpose of reducing risk of harm to human health.</p> <p>Site investigations have been undertaken as part of the CSSI Approval for the station (Chapter 18 and Technical Paper 8 of the CSSI EIS). With respect to the Victoria Cross Station site, it was found that there was moderate asbestos contamination risk associated with demolition of existing buildings. In order to manage impacts, the CSSI Approval imposed conditions requiring the preparation and implementation of an Unexpected Contaminated Land and Asbestos Finds Procedure (Conditions E69 and E70).</p> <p>All demolition and excavation works will be completed under the CSSI Approval, and therefore provisions of SEPP 55 will be wholly addressed through that approval and are not relevant to this concept SSD Application.</p>
<p><b><i>Statement of Environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64)</i></b></p>	<p>SEPP 64 aims to ensure that signage is compatible with the desired character of the area, provides effective communication in suitable locations and is of high quality design and finish.</p> <p>Four indicative signage zones are proposed for OSD – two at the top of the building on the south and east elevations for building naming rights, and two for tenant signage on the Miller Street and Berry Street facades. The zones are indicative only; no physical signage is proposed as part of this concept proposal.</p> <p>Clause 13 of SEPP 64 requires that a consent authority must not grant consent to an application to display an advertisement unless the advertisement is consistent with the objectives of the SEPP and the criteria in Schedule 1 of the SEPP.</p> <p>The indicative signage zones are consistent with the objectives of the SEPP in that it is similar to other signage in the surrounding commercial core and located so as to provide effective communication. The design and materials would be determined at the detailed SSD Application stage.</p> <p>An assessment against Schedule 1 of SEPP 64 is provided in Chapter 8.19 of the EIS.</p>
<p><b><i>Draft State Environmental Planning Policy (Environment) 2017 (Environment SEPP)</i></b></p>	<p>The draft Environment SEPP consolidates and simplifies seven existing SEPPs. Changes are also proposed to the <i>Standard Instrument – Principal Local Environmental Plan</i>. Some provisions of the existing policies will be transferred to new Section 117 Local Planning Directions where appropriate.</p> <p>The Explanation of Intended Effect (EIE) for the draft Environment SEPP was on exhibition from 31 October 2017 until 31 January 2018.</p> <p>Only one of the affected SEPPs (Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005) relates to this concept proposal. However, based on the EIE, there appears to be no proposed changes regarding view impacts, which is the only section of the draft Environment SEPP relevant to this application. Accordingly, this application is considered to be consistent with the draft Environment SEPP.</p>

## 7.4 North Sydney Local Environmental Plan 2013

The concept proposal's consistency with NSLEP 2013 is discussed in Table 21. Overall, it has been found that the concept proposal has some minor non-compliances with the NSLEP 2013, noting that building height and the Miller Street setback are not strictly compliant, as detailed further in Table 21.

**Table 21 – Consistency with North Sydney Local Environmental Plan 2013**

Clause	Consistency
<p><b>1.2 Aims of Plan</b></p>	<p>The concept proposal is consistent with the aims of NSLEP 2013 in that it:</p> <ul style="list-style-type: none"> <li>● promotes commercial development suitable to the existing commercial context of North Sydney Centre</li> <li>● provides for a commercial tower that is compatible with the high rise built form context of North Sydney</li> <li>● enhances North Sydney as an employment hub by providing opportunities for approximately 4,200 jobs</li> <li>● responds to and protects the significance of adjoining and surrounding heritage items through its sympathetic design response to its immediate context</li> </ul>
<p><b>2.3 Zone Objectives and Land Use Table</b></p>	<p>The site is zoned <i>B3 Commercial Core</i>. The proposed use of 'commercial premises' (which includes office, business and retail premises) is permitted with consent in the B3 zone.</p> <p>The concept proposal is consistent with the objectives of the B3 zone in that it:</p> <ul style="list-style-type: none"> <li>● provides for a variety of business, office and retail uses commensurate with worker, visitor, station customer and local community requirements</li> <li>● provides employment in a highly accessible location above the future Victoria Cross Station</li> <li>● maximises the use of public transport and encourages walking and cycling by placing development directly above future high frequency public transport</li> <li>● minimises overshadowing and view loss to surrounding residential development</li> </ul>

Clause	Consistency
<p>4.3 Height of Buildings</p> <p>4.6 Exceptions to Development Standards</p> <p>6.3 Building Heights and Massing</p>	<p>The maximum building height for the site as shown on the Height of Buildings Map is part RL 80 and part RL 120. The building envelope proposes maximum heights ranging from RL 118 (eastern portion of the site) up to RL 230 (northern portion), resulting in exceedance of the height shown on the map. A clause 4.6 Variation Request has been prepared to justify the exceedance (Appendix EE).</p> <p>Despite the exceedance, the proposed building envelope is consistent with clause 6.3(3), which allows for consent to be granted for development which exceeds the heights shown on the map if the consent authority is satisfied that any increase in overshadowing between 9 am and 3 pm is not likely to reduce the amenity of any dwellings located on land outside of North Sydney CBD. Although the proposed building envelope causes some additional overshadowing between 9 am and 3 pm to six dwelling allotments along Whaling Road, North Sydney, this overshadowing is minor in extent and short in duration, and would have a negligible impact on the amenity of these dwellings. Refer to further discussion in Chapter 8.3 of this EIS.</p> <p>Clause 6.3(2) controls building height in terms of overshadowing impacts. The clause states that development consent cannot be granted for the erection of a building on land in North Sydney CBD where the development would result in a net increase in overshadowing between 12 pm and 2 pm to land within Zone RE1 Public Recreation or that is identified as a 'Special Area'. In relation to the concept proposal, the relevant areas requiring consideration are the Miller Street Special Area and Brett Whiteley Plaza. The shadow studies (Appendix I and Appendix K) model the shadow impacts as at the summer and winter solstice and equinox. They illustrate that the Integrated Station Development would not result in a net increase in overshadowing to these areas at these times. Refer to further discussion in Chapter 8.3 of this EIS.</p> <p>Clause 6.3(5) sets out a number of considerations that the consent authority must take into account. The concept proposal responds positively to these considerations in that it:</p> <ul style="list-style-type: none"> <li>● would be compatible with the existing and future scale, form and massing in the locality</li> <li>● would have no adverse impacts on the natural environment</li> <li>● would have no unacceptable impacts on neighbouring development or development outside the city centre</li> <li>● would not obstruct any significant view lines or vistas to an unreasonable extent (refer to further discussion in Chapter 8.2 of this EIS)</li> <li>● would provide opportunity for a development that enhances the streetscape in regard to scale, materials and external treatments (as demonstrated by the indicative OSD design at Appendix E).</li> </ul> <p><i>Note:</i> for the purposes of this concept SSD Application, the maximum height of the building envelope does not make provision for the following items, which will be resolved as part of the future detailed SSD Application:</p> <ul style="list-style-type: none"> <li>● communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like, which are excluded from the calculation of building height, pursuant to the standard definition in NSLEP 2013; and</li> <li>● architectural roof features, which are subject to compliance with the provisions of Clause 5.6 of NSLEP 2013, and which may exceed the maximum building height, subject to development consent- refer to further discussion below in this table.</li> </ul>
4.4 Floor space ratio	There is no floor space ratio provision applicable to the site.

Clause	Consistency
5.6 Architectural roof features	<p>This clause permits variations to maximum building height for architectural roof features of visual interest.</p> <p>The indicative OSD design (Appendix E) includes an architectural roof feature, and illustrates how such a feature can contribute to the architectural termination of the building and add to the building’s visual distinction in the skyline. This feature is indicative only and does not form part of the proposed envelope.</p> <p>Any architectural roof feature proposed for any future building on the site would be subject to assessment at the detailed SSD Application stage and would be required to address the provisions of clause 5.6.</p>
5.10 Heritage conservation	<p>The concept proposal seeks consent for a building envelope on land containing a heritage item identified as ‘Shop’ at 187 Miller Street (I0898), and therefore consent is technically required under this clause. However, this item has been demolished under the terms of the CSSI Approval and therefore, the significance of the building is not a relevant consideration in the assessment of this application. It is assumed that this item will be removed from NSLEP 2013 under a future housekeeping amendment.</p> <p>This clause states that the consent authority may require a heritage report to be prepared for an application for works that would affect heritage items on the site or within the vicinity of the site. The site is surrounded by a number of State and local heritage items as detailed in Chapter 3.6 of this EIS. Accordingly, a Heritage Impact Assessment Report has been prepared to accompany this concept proposal (Appendix O).</p> <p>Heritage impacts are discussed in detail at Chapter 8.5 of this EIS.</p>
6.4 Miller Street setback	<p>This clause requires certain setbacks on the eastern side of Miller Street between McLaren Street and Mount Street. At the subject site, the required setback ranges from six metres to 11.5 metres.</p> <p>Up to a height of RL 118, the proposed building envelope is setback in accordance with the required Miller Street setback, in alignment with the floorplate approved for the station. Above RL 118, the envelope features reduced setbacks, which have been incorporated in order to facilitate an innovative and visually interesting building design.</p> <p>The reduced setbacks at the upper levels results in a technical non-compliance with this clause. Nonetheless, it is considered that the building envelope is consistent with the objectives of the clause, which seek to maintain the established setback and landscaped setting. The reduced setbacks begin at RL 118 (approximately 13 storeys above ground level) and therefore, the perceived street wall and ground level landscaping would not be affected.</p> <p>A Clause 4.6 variation request is included at Appendix FF in relation to this clause 6.4 control. In the event that the consent authority considers the non-compliance with clause 6.4 to be a prohibition, the consent authority can rely upon section 4.38 of the EP&amp;A Act, which allows consent to be granted for partly prohibited SSD.,</p> <p>The Miller Street setback is discussed in further detail in Chapter 8.1 of this EIS.</p>

Clause	Consistency
6.5 Railway infrastructure - transitional arrangements	<p>Clause 6.5(2)(b) prohibits approval of additional commercial floor space within the North Sydney Centre above 250,000 square metres from that existing on 28 February 2003. The clause was originally written in response to capacity constraints associated with North Sydney Station. Approval of this concept proposal would result in exceedance of the limit.</p> <p>The <i>North Sydney Centre Planning Proposal</i> proposes to delete this clause. It is anticipated that the planning proposal will be gazetted prior to determination of this concept SSD Application.</p> <p>Clause 6.5(4) requires that Council review the North Sydney Centre Division of NSLEP 2013 once 200,000 square metres of additional commercial floor space is approved. This review trigger point was reached in 2012 and is a key driver of the preparation of the NSCCLUS, which is discussed at Chapter 6.5.1 of this EIS.</p>
7.4 Airspace operations	<p>This clause requires that the consent authority consult with the relevant Commonwealth body prior to granting consent to any application that would penetrate the Limitation or Operations Surface. The proposed building envelope at RL 230 will penetrate the published Obstacle Limitation Surface (OLS) over the site (RL 157). Accordingly, the consent authority must consult with the Civil Aviation Authority (CASA) during assessment of this application. Consent may be given where CASA has no objections.</p> <p>An Airspace Assessment Report has been prepared to accompany this application (Appendix R) and documents pre-lodgement consultation with CASA. The assessment advises that the formal approval process for the penetration of the OLS would occur at the future detailed SSD Application stage, but, based on the proposed envelope, the penetration is unlikely to be problematic.</p> <p>Airspace impacts are discussed in further detail at Chapter 8.8 and in the Airspace Assessment Report at Appendix R of this EIS.</p>

## 7.5 Planning Proposal – North Sydney Centre

On 1 May 2017, Council adopted the *North Sydney Centre Planning Proposal* (PP\_2017\_NORTH\_002\_00). The proposed amendments to NSLEP 2013 give effect to the strategy's objectives, which principally aim to deliver increased floor space in the North Sydney commercial core.

A Gateway determination for the *North Sydney Centre Planning Proposal* was issued by DP&E on 20 July 2017, and public exhibition occurred between 14 September 2017 and 11 October 2017. Following exhibition, Council resolved on 19 February 2018 to send the proposal (including a number of amendments resulting from exhibition) to Parliamentary Counsel for finalisation. Accordingly, the *North Sydney Centre Planning Proposal* has legal status and is a matter for consideration by the consent authority under Section 4.15 of the EP&A Act. It is anticipated that the *North Sydney Centre Planning Proposal* will be made prior to the determination of this concept SSD Application and its making is understood to be imminent and certain.

The *North Sydney Centre Planning Proposal* seeks to:

- Prohibit development for the purposes of 'serviced apartments' within the B3 Commercial Core zone;
- Apply new height controls to the North Sydney Centre based on the following:
  - ◆ Maintaining solar access to residential land outside of the North Sydney Centre between 10 am to 2 pm; and
  - ◆ The continued prohibition of additional overshadowing to land identified as 'Special Areas'.

- Enable development to occur on sites less than 1000 square metres (but only where new development does not exceed 45 metres in height);
- Remove clauses relating to the provision of railway infrastructure within the North Sydney Centre;
- Remove clauses relating to the restriction on the amount of additional commercial floor space that can be accommodated within the North Sydney Centre;
- Remove the Elizabeth Plaza, Blue Street, and Tower Square ‘Special Areas’;
- Apply winter solstice or equinox periods for assessing no additional overshadowing between 12 pm and 2 pm on land identified as Special Areas, Public Recreation and other special sites, such as Don Bank Museum within the City Centre;
- Applying a ‘Special Area’ to the rear of 100 Pacific Highway.

The proposed changes to the NSLEP 2013 relevant to the concept proposal are discussed in Table 22. Sections or text proposed to be removed from NSLEP 2013 have been struck-out and the sections proposed for inclusion are in bold text.

**Table 22 – Consistency with *Planning Proposal for North Sydney Centre***

Clause	Proposed amendment
4.3 Maximum height of building	<p>The planning proposal seeks to increase the maximum height controls for the site to part RL 135, part RL 193, part RL 201 and part RL 230.</p> <p><b>Comment:</b></p> <p>The proposed building envelope complies with the RL 230, RL 135 and RL 193 portions but does not fully comply with the RL 201 portion. A Clause 4.6 Variation Request (Appendix EE) has been submitted to justify the non-complying height</p> <p>Importantly, the development is consistent with the amended clause 6.3(3) (discussed below), which allows for variations to the Height of Buildings Map, subject to certain overshadowing provisions.</p>
6.1 Objectives of Division	<p>The objectives of this Division are as follows:</p> <ul style="list-style-type: none"> <li>(a) to maintain the status of the North Sydney Centre as a major commercial centre;</li> <li>(b) to maximise commercial floor space capacity and employment growth within the constraints of the North Sydney Centre’s environmental context,</li> <li>(c) to encourage the provision of high-grade commercial space with a floor plate, where appropriate, of at least 1,000 square metres;</li> <li>(d) to prevent any net increase in overshadowing of any land in Zone RE1 Public Recreation (other than Brett Whiteley Plaza) or any land identified as a ‘Special Area’ on the North Sydney Centre Map;</li> <li>(e) to ensure that any land within a residential zone is afforded a reasonable amount of solar access;</li> <li>(f) to maintain areas of open space on private land and promote the preservation of existing setbacks and landscaped areas, and to protect the amenity of those areas.</li> </ul> <p><b>Comment:</b></p> <p>The concept proposal is consistent with the new objective for the North Sydney CBD in that it maximises the commercial development potential of the airspace above Victoria Cross Station while responding to key site constraints, in particular heritage and overshadowing.</p> <p>Refer to discussion of heritage and overshadowing in Chapters 8.5 and 8.3, respectively, of this EIS.</p>



Clause	Proposed amendment
<p><b>6.3 Building heights and massing</b></p>	<p>1. The objectives of this clause are as follows:</p> <ul style="list-style-type: none"> <li>(a). to promote a height and massing that has no adverse impact on land within the North Sydney Centre that is:                             <ul style="list-style-type: none"> <li>(i). located in Zone RE1 Public Recreation; or</li> <li>(ii). identified as a ‘Special Area’ on the North Sydney Centre Map; or</li> <li>(iii). as the Don Bank Museum at 6 Napier Street, North Sydney;</li> </ul> </li> <li>(b). to minimise overshadowing of, and loss of solar access to, land in Zone R2 Low Density Residential, Zone R3 Medium Density Residential, Zone R4 High Density Residential or Zone RE1 Public Recreation that is located outside of the North Sydney Centre;</li> <li>(c). to promote scale and massing that provides for pedestrian comfort in relation to protection from the weather, solar access, human scale and visual dominance;</li> <li>(d). to encourage the consolidation of sites for the provision of high grade commercial space.</li> </ul>
	<p><b>Comment:</b></p> <p>The amendments to the objectives of the clause are minor and generally for clarification purposes. The concept proposal remains consistent with the objectives for the reasons specified in Chapter 7.4.</p>
	<p>2. Development consent must not be granted for the erection of a building on land to which this Division applies if:</p> <ul style="list-style-type: none"> <li>(a). the development would result in a net increase in overshadowing between 12 pm and 2 pm on land to which this Division applies that is within Zone RE1 Public Recreation or that is identified as Special Area” on the North Sydney Centre Map during the winter solstice or equinox, or</li> <li>(b). the development would result in a net increase in overshadowing between 10 am and 2 pm of the Don Bank Museum during the winter solstice or equinox,</li> <li>(c). the development exceeds a building height of 45m where the site area of the development is less than 1,000 square metres.</li> </ul>
<p><b>Comment:</b></p> <p>This clause currently applies all year round. The effect of the proposed amendment is to make the clause less restrictive.</p> <p>As noted above in Chapter 7.4, the concept proposal envelope, when considered together with the integrated station including the demolition and redevelopment of the previous development footprint, does not result in a net increase in overshadowing to the Miller Street Special Area or Brett Whiteley Plaza. The proposed amendment has no effect on this.</p> <p>Refer to further discussion in Chapter 8.3 of the EIS.</p>	

Clause	Proposed amendment
	<p>3. Development consent for development on land to which this Division applies may be granted for development that would exceed the maximum height of buildings shown for the land on the Height of Buildings Map if the consent authority is satisfied that any increase in overshadowing between 9am and 3pm will not result in any dwellings located on land to which this Division does not apply:</p> <p>(a). receiving less than 2 hours of direct sunlight to any window of habitable room or principle [sic] private open space; or</p> <p>(b). where any window to a habitable room or principle [sic] private open space currently receiving less than 2 hours of direct sunlight, the amount of direct sunlight access must not be further reduced.</p> <p><b>Comment:</b></p> <p>The proposed building envelope is consistent with the amendments to subclause 3. It would not cause any dwelling outside the CBD to receive less than two hours of solar access between 9 am and 3 pm to any window of a habitable room, and it would cause no additional overshadowing to any dwelling’s principal private open space areas, which currently receive less than the required two hours.</p> <p>Overshadowing of dwellings outside the CBD is discussed in further detail in Chapter 8.3.4 of this EIS, and the full set of shadow diagrams is provided at Appendix H.</p>

## 7.6 Airports Act 1996 (Cth)

The proposed building envelope supports a future tower that would breach the Obstacle Limitation Surface (OLS) of RL 157, triggering a controlled activity under the *Airports Act 1996*. Under section 183 of the *Airports Act 1996* (Cth), a “controlled activity” (as defined in section 182) cannot be undertaken unless the carrying out of the activity is in accordance with an approval granted under the relevant regulations. The application for the controlled activity approval will be made during the future detailed SSD Application stage.

Preliminary consultation has occurred with Sydney Airport Corporation Limited (SACL) and the Civil Aviation Safety Authority (CASA). SACL and CASA have confirmed that the approval process for any breach to restricted airspace will occur at the future detailed development stage when final building and crane heights are known.

For further detail refer to Chapter 8.8 and the Airspace Assessment Report at Appendix R of this EIS.

## 7.7 Biodiversity Conservation Act 2016

Section 7.9 of the *Biodiversity Conservation Act 2016* requires preparation of a biodiversity development assessment for SSD that is assessed under Part 4 of the EP&A Act.

This concept SSD Application will be assessed under Part 4 of the EP&A Act and therefore would normally be required to include a biodiversity development assessment report. However, section 7.9(2) of the *Biodiversity Conservation Act* allows for exemption from the requirement where the development is not likely to have any significant impact on biodiversity values.

A request for a waiver for submission of a biodiversity development assessment report was submitted to the DP&E and the Office of Environment and Heritage. Subsequently, a waiver under section 7.9(2) of the *Biodiversity Conservation Act* was issued on 11 May 2018. A copy of the biodiversity development assessment report waiver is provided at Accordingly, no biodiversity development assessment report has been submitted as part of this concept SSD Application.

## 7.8 North Sydney Development Control Plan 2013

Clause 11 of the SRD SEPP states that development control plans do not apply to State significant development. Accordingly, NSDCP 2013 does not apply to this concept proposal. The SEARS do not list the NSDCP as a relevant document.

Nonetheless, the underlying objectives and controls in NSDCP 2013 have informed and influenced this application. An assessment of the proposal against key relevant controls of NSDCP 2013 is provided at Appendix HH of this EIS. This assessment includes consideration of the recent amendments to the DCP associated with the s. Whilst the new LEP has not been made, the DCP amendments have been adopted by Council and are contained with the current version of NSDCP 2013. Overall, it has been found that the concept proposal is generally consistent with NSDCP 2013.

# **ASSESSMENT OF ENVIRONMENTAL IMPACTS**

CHAPTER EIGHT



## 8. Assessment of environmental impacts

This chapter of the EIS discusses the potential environmental impacts of the concept proposal and how these impacts are justified or proposed to be minimised and mitigated. The associated technical reports referenced in this chapter are included in the appendices.

As required by the SEARs, the assessment of each issue includes, where relevant:

- justification of impacts
- consideration of potential cumulative impacts due to other developments in the vicinity
- measures to avoid, minimise and, if necessary, offset the predicted impacts

For the purposes of providing a high-level assessment of the potential environmental impacts associated with construction and operation of the Integrated Station Development, the following have been considered:

- impacts directly associated with the OSD, the subject of this concept SSD Application; and
- cumulative impacts of the Integrated Station Development including where the OSD is constructed concurrently with, or separately to, the station works, and where the OSD is operational.

### 8.1 Built form and urban design

The Built Form and Urban Design Report (Appendix G) considers the proposed building envelope form, typology, height, bulk and scale in the context of the site and broader North Sydney CBD. The report explains the design rationale of the proposed building envelope and identifies how the indicative OSD design responds to potential built form impacts.

Architectural drawings of an indicative OSD design have also been prepared (Appendix E). A discussion of the indicative OSD design is provided at Chapter 4.7 of this EIS.

#### 8.1.1 Design rationale

##### Floorplate shape

The shape of the floorplate has been determined after a detailed floorplate study, which considered the following three basic options:

1. a single rectilinear form fronting Miller Street
2. a two-tower form
3. a large L-shape form

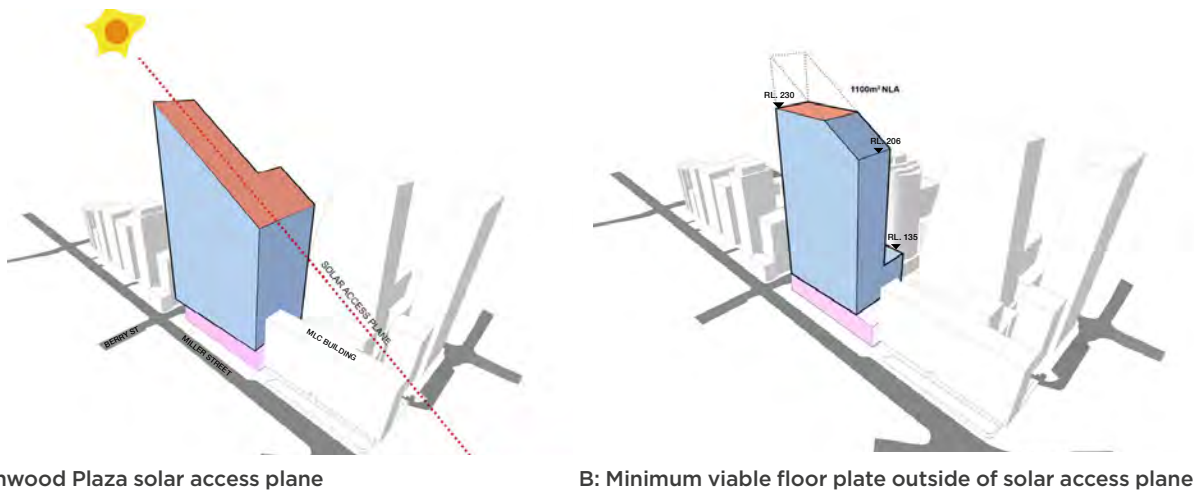
More detail on these three options is provided in Chapter 1.5 of this EIS and in the Built Form and Urban Design Report at Appendix G.

The proposed building envelope is a refinement of the first option, with a primary tower form along Miller Street and a relatively narrow low rise form extending to Denison Street. This floorplate is large enough to accommodate A-grade commercial floor plates, as well as a through-site link between Miller and Denison Streets, which forms part of the CSSI Approval. The floorplate would have no adverse view, overshadowing, privacy or heritage impacts, as discussed in Chapters 8.2, 8.3, 8.4 and 8.5, respectively, of this EIS.



### Maximum height

The maximum height of the proposed building envelope has been determined by setting the minimum viable commercial floorplate below the notional Greenwood Plaza Special Area sun access plane, which extends over the site at a 32.7 degree angle (i.e. the lowest sun angle at the winter solstice between 12 pm and 2 pm required to preserve solar access to Greenwood Plaza). This approach is illustrated in the pair of schematic images in Figure 51.



**Figure 51 - Schematic images showing maximum height approach**

The maximum building height varies substantially from the current height of buildings standard in NSLEP 2013 and varies slightly from the proposed height of buildings standard proposed in the *North Sydney Centre Planning Proposal*. Refer to further discussion and justification in Chapters 7.4 and 7.5 and the Clause 4.6 Variation Request at Appendix EE.

The proposed maximum height would provide for an OSD that is compatible with surrounding development and marks Victoria Cross Integrated Station Development as a new focal point for North Sydney.

### Design response to heritage items

A number of heritage items surround the site, as detailed in Chapter 3.6 of this EIS. The closest listed buildings being the MLC Building and The Rag & Famish Hotel

As illustrated in the pair of schematic images at Figure 52, the building envelope is intentionally setback 18 metres from the south boundary to respect the neighbouring MLC Building and open up views to the building’s tiled northern facade. Also, the eastern portion of the building envelope is lowered in height to reference the height of the MLC Building and to create a more appropriate scale along Denison Street, which is planned for pedestrianisation.

In addition to improving views to the MLC Building, the 18-metre south setback would improve the amenity of the through-site link. This link is an important outcome for the site as identified in various strategic documents including the *Sydney Metro Planning Strategy* (North Sydney Council, 2016).

In regard to the Rag & Famish Hotel, the proposed building envelope responds sensitively to this item by providing a five-metre setback from Berry Street above the podium, which serves to reinforce the lower scale of the podium and reduce the perceptible bulk of the envelope when seen from street level. Notably, the design of the podium levels to RL 82 is being resolved through the preparation of the SDPP under the terms of the CSSI Approval. The Design Guidelines (Appendix CC) and the Design Excellence Strategy (Appendix C) submitted with this concept SSD Application include appropriate design principles and a framework for a structured design excellence process to ensure a high quality integrated design solution for the site.

A detailed assessment of the potential heritage impacts of the building envelope is provided in the Heritage Impact Assessment Report at Appendix O. Notably, TfNSW’s heritage advisor has concluded that the proposed height and form of the building envelope is compatible with surrounding buildings. In particular, it is advised that:

- the height of the building envelope is consistent with the high rise setting of the North Sydney CBD
- the two-storey Rag & Famish Hotel is currently dwarfed by the scale of a large number of medium to high rise buildings in its immediate context and therefore, the proposal would not result in additional impacts that are unacceptable in heritage terms
- the height of the low-rise section of the building envelope fronting Denison Street is compatible with the height of existing buildings on the corner of Berry and Denison Streets, including the building at 65 Berry Street and the 14 storey MLC building to the south
- the transition in building heights proposed from north to south provides an appropriate contextual response that is sympathetic to the existing built form and the streetscape presence of the MLC building on both Miller and Denison Streets

Refer to Chapter 8.5 of the EIS for further assessment of the impacts of the proposed building envelope on the significance of the surrounding heritage items.

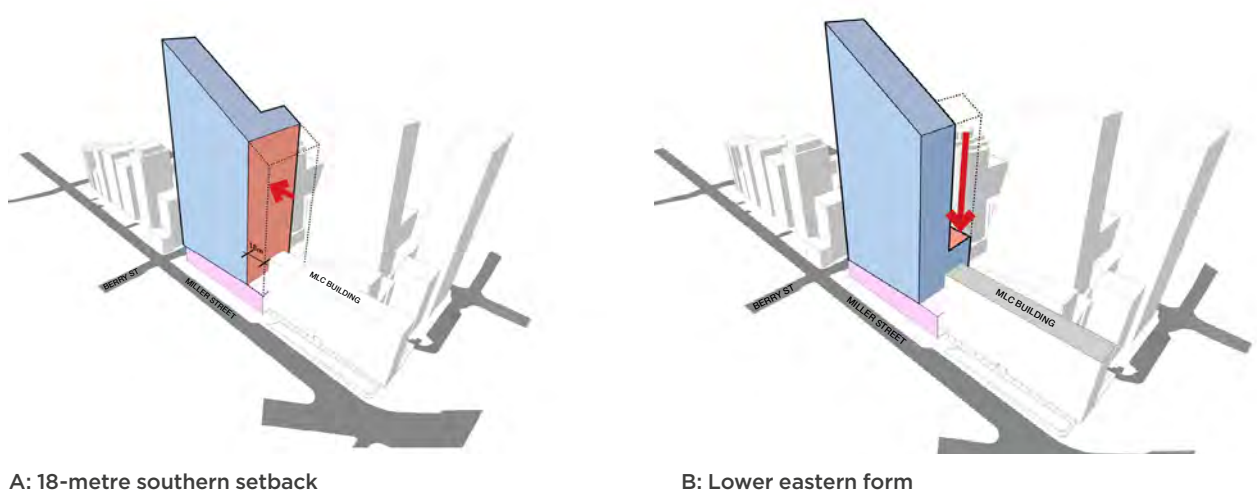
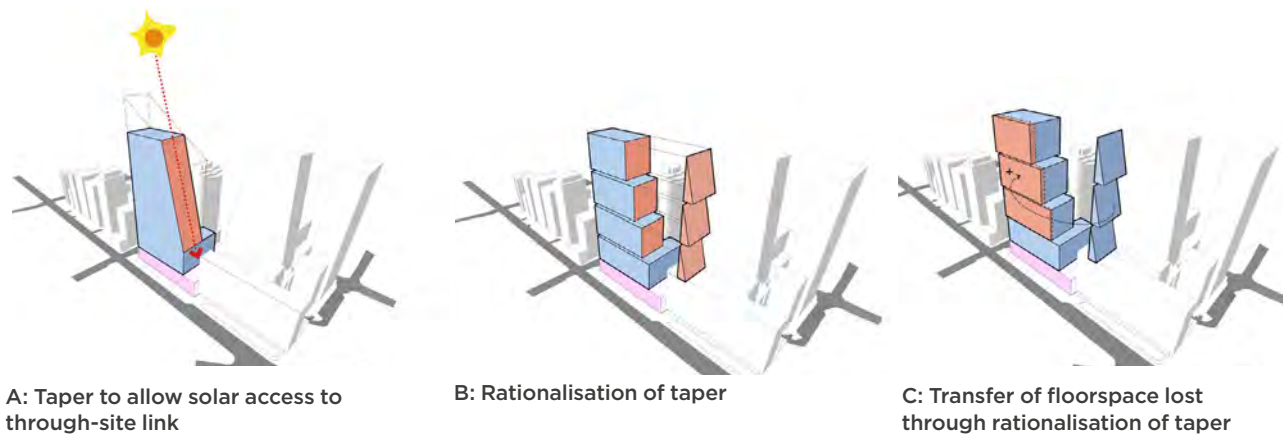


Figure 52 – Schematic images showing responses to MLC Building

### Tapered southern elevation and Miller Street setback

The building envelope features a tapered southern elevation and an overhanging setback on Miller Street, which is illustrated in Items A to C in Figure 53. These elements work together to create a building envelope that maximises amenity to the through-site link, accommodates rational and efficient floor plates, and allows for a visually interesting design.

To avoid a large number of atypical floor plates, the envelope has been conceived as a series of stacked volumes, and the floor space ‘lost’ along the southern taper has been ‘added’ to the Miller Street elevation. This approach is illustrated in Items B and C at Figure 53.



**Figure 53 – Schematic images demonstrating taper and stepping elements**

The building envelope features a subtle stepped design to Miller Street. From the base of the envelope (RL 82) up to RL 118, the building envelope is set back six metres from Miller Street, which aligns with the station below and accords with the Miller Street setback requirements in NSLEP 2013. This six-metre setback maintains views along Miller Street to nearby heritage items including the MLC Building and the Rag & Famish Hotel.

At RL 118, the setback begins to reduce (or step towards the street) in 1.5-metre increments. This stepping occurs at three heights (RL 118, RL 152 and RL 190), resulting in a minimum setback of 1.5 metres at the top section of the envelope.

As discussed at Chapter 7.4 of this EIS, the stepping of the setback along Miller Street would result in a technical non-compliance with clause 6.4 of NSLEP. Despite this, it is considered that the setbacks proposed are consistent with the objectives of the clause and do not undermine its intent. Given that the stepping setback begins at RL 118, which is approximately 13 storeys above ground level, it would have no impact on ground level landscaping or the perceivable street wall. It would also not obstruct key views to neighbouring heritage items. As illustrated in the indicative OSD design (Appendix E) and the Visual Impact Assessment Report (Appendix AA), the stepped façade to Miller Street is almost imperceptible and therefore, it is not considered to result in an adverse visual impact. Furthermore, this design solution enables the commercial floorplate at the mid and high-rise levels to be optimised.

## Setbacks

To the north, the proposed building envelope is set back five metres from the boundary in accordance with NSDCP 2013 controls. This setback emphasises the podium below and aligns with Council's desired streetscape as expressed in NSDCP 2013.

To the south, as described above, the building envelope is set back 18 metres from the boundary in order to avoid impacts on the neighbouring MLC Building.

To the east, the building envelope is set back zero metres from the boundary to the neighbouring development at 65 Berry Street and zero metres from Denison Street. This setback from 65 Berry Street is consistent with NSDCP 2013 controls. The future detailed SSD Application for OSD would need to ensure the building is designed to minimise any privacy impacts.

The zero-metre setback from Denison Street is inconsistent with NSDCP 2013, which requires a weighted five-metre setback above the podium. The purpose of the five-metre setback control is to maintain a consistent podium along the street. Denison Street has no consistent street wall at this location; neither the development to the north (65 Berry Street) nor the development to the south (MLC Building) has a recognisable podium with a five-metre setback for the upper levels. As such, it is considered that the inconsistency with the control is acceptable and would have no adverse impacts.

To the west, the envelope features a stepping setback from Miller Street ranging from six metres at the lower levels to 1.5 metres at the upper levels. As described above, this stepped setback, while technically inconsistent with clause 6.4 of NSLEP 2013, is consistent with the objectives of the clause and has no adverse impacts. Refer to further discussion in Chapter 7.4 of the EIS.

### 8.1.2 Recommendations

The future detailed SSD Application would need to propose a building contained entirely within the building envelope (other than a potential architectural roof feature and other rooftop devices, which would be assessed separately on merit). This would ensure that the future OSD achieves a form that is compatible with surrounding development, is sensitive to nearby heritage items and has no unacceptable overshadowing impacts.

The detailed design of the future OSD would also be guided by the Design Guidelines prepared by TfNSW (Appendix CC), which provide direction on a range of development components, including land use, siting, scale, mass, architectural design, signage, public art and heritage impacts.

The design excellence of the future OSD would be ensured through adherence to the Design Excellence Strategy (Appendix C) prepared by TfNSW, which provides an objective and structured process that ensures high quality architectural, urban and landscape designs are achieved in State Significant Development applications.

## 8.2 View impacts

A Visual Impact Assessment Report (Appendix AA) has been prepared to assess the proposed building envelope's visual effect on views from key vantage points and streetscape locations, and on views from the neighbouring Beau Monde Apartment building and surrounding commercial buildings.

The assessment has been informed by separate detailed view impact studies which provide various photomontages of the proposed building envelope when seen from key vantage points and streetscape locations (Appendix Y) and from the neighbouring Beau Monde Apartment building (Appendix Z). The fourteen key vantage points and streetscape locations for the assessment were selected in consultation with North Sydney Council.

The view impact studies assess the building envelope, being the outermost limit of future development. However, the future detailed design for the OSD would be refined within the parameters of the building envelope, and therefore the perceived visual scale and mass of the OSD would likely be reduced.

### 8.2.1 View impacts from surrounding vantage points and street locations

#### Long-range and scenic view impacts

The long range and scenic views considered include those from the Sydney Opera House, Mrs Macquarie's Chair, the Barangaroo Headland Park and Gladesville Bridge (refer Appendix Y).

TfNSW's technical consultant has advised that the visual environment of the Sydney Harbour when seen from long range viewpoints is a largely cohesive, distinct and memorable composition of natural and built elements. The environment is characterised by its undulating topography and its series of distinct clusters of high-rise buildings situated around transport nodes. North Sydney CBD forms one such cluster. It is located on the southern end of a major ridgeline and performs a distinct but subordinate role in the overall Sydney Harbour composition, typically forming a background to more visible foreground items.

Having regard to the above, the proposed building envelope is considered to be consistent with North Sydney CBD's role in this visual environment and has a low impact on Sydney Harbour scenic quality and long-range viewpoints. The building envelope is compatible with surrounding development and, due to its location at the northern end of North Sydney CBD, would be largely screened from view by existing and under-construction development, such as the developments at 103 Miller Street (Genworth), 1 Denison Street development and 100 Mount Street (Figure 54 ).





Figure 54 – Envelope seen from Barangaroo Reserve

### Short to medium-range view impacts

The short-range views considered include those from key locations on Walker Street, Miller Street and the Pacific Highway within the immediate North Sydney context. The medium range views considered include from key locations in Neutral Bay, Blues Point and Lavender Bay (refer Appendix Y).

Within North Sydney CBD, the proposed building envelope is visually prominent from certain short to medium-range viewpoints, such as the intersection of Miller Street and the Pacific Highway (Figure 55) and the intersection of Pacific Highway and McLaren Street (Figure 56). However, the envelope is not inconsistent with the scale of surrounding development, such as the nearby Northpoint Tower (100 Miller Street) and adjacent 1 Denison Street, and is considered appropriate to the metropolitan-level CBD context.





Figure 55 – Envelope seen from intersection of Miller St and Pacific Hwy



Figure 56 – Envelope seen from intersection McLaren St and Pacific Hwy

The Visual Impact Assessment Report includes an assessment of the acceptability of the visual impact of the building envelope based on the six key criteria, which have been informed by the SEARs, the North District Plan and the North Sydney DCP 2013. These key criteria include: amenity, scenic and cultural landscape, heritage, visual dominance, vistas and views from the public domain and building design. Having regard to this criteria, the assessment concludes that the building envelope:

- is capable of integrating well with the visual catchment of Sydney Harbour Foreshore, being compatible with the existing form of the North Sydney CBD and being largely screened from view by existing and under-construction buildings. This is particularly relevant to the Sydney Opera House due to its World Heritage listing.
- respects the settings/views to local heritage items through its proposed features including:
  - ◆ the low-form that is subordinate to the height and scale of the MLC Building
  - ◆ the substantial main building separation from the MLC Building
  - ◆ the height which recesses away from the MLC Building
  - ◆ the low rise street wall which mitigates impacts to the north to the Rag & Famish Hotel
- whilst visually prominent from certain viewpoints (in particular, the intersection of Miller Street and Pacific Highway), it is compatible with the height and massing of nearby development and has been carefully configured so that it would not be visually dominant or inconsistent with the prevailing built form character of the North Sydney CBD
- does not block or impede key views identified in NSDCP 2013. The Integrated Station Development opens up key views from the public domain through measures such as the creation of the through-site-link and the large ground level setback to the western boundary which maintains the visual dominance of the Rag & Famish Hotel and views to the MLC Building.

An assessment of the proposed building envelope was also undertaken against the Physical Absorption Capacity (PAC), which considers the extent to which the existing environment can mitigate the visibility of the proposal. Overall, the PAC ranged from low to high. Notably, for long range viewpoints the PAC was high due to ability of existing or under-construction building to screen the proposal, whilst medium range viewpoints ranged from low to high, with the low rating attributed to a number of viewpoints which demonstrated the building envelopes dominance as a new feature in the visual environment.

Overall, the Visual Impact Assessment concludes that the building envelope is acceptable on a balance of considerations, would have a low to medium visual effect on the existing visual catchment and that its compatibility with the scenic character of the visual catchment is high.

## 8.2.2. View impacts on residents of Beau Monde

The assessment of view impacts from the Beau Monde Apartment building has been limited by TfNSW's restricted access to this building. In this regard, the photomontages prepared and included in the View Impact Study (Appendix Z) and the Visual Impact Assessment Report (Appendix AA) is limited to potential view impacts from the east, south and south-west of the Beau Monde Apartment Building at Levels 15, 20 and 27 only. TfNSW's technical advisor has relied on a series of photographs previously taken to assess view impacts to the Beau Monde Apartment Building resulting from the 1 Denison Street development. These photographs focused on views to the east, south and south-west, as these were most relevant to that assessment. The assessment of the proposed building envelope's impact on westerly views is limited to Level 37, and relies on a series of more recent photographs taken from the rooftop of the Beau Monde Apartment building for this purpose.

View impacts on residents of the Beau Monde Apartments have been assessed under the Land and Environment Court's Planning Principle for view sharing in *Tenacity Consulting Pty Ltd v Warringah Council* [2004] NSWLEC 140, which establishes a four-part assessment process. This is the preferred approach for assessing view impacts in NSDCP 2013.

### Step 1: What are the affected views?

The proposed building envelope affects Beau Monde residents' views to the west and south west – to Sydney Harbour and the broader district. All of the affected views are partial, being obstructed by existing or under-construction development, such as Northpoint (100 Miller Street), Genworth (103 Miller Street), 100 Mount Street, 118 Mount Street and 1 Denison Street.

Based on the assessment (and having regard to its limitations), the following affected views have been identified:

- At Level 15, the affected views consist only of partial views to the open sky to the southwest. The land-sky interface to the southwest is obstructed by existing commercial development.
- At Level 20, the affected views consist of partial views to the open sky and a glimpse of the land-sky interface to the south west.
- At Level 27, the affected views consist of partial views to the open sky and land-sky interface to the south west, including a partial view of Sydney Harbour.
- At Level 37, the affected views consist of large sections of open sky and land-sky interface to the south west, west and north west, including a partial view of Sydney Harbour.

### Step 2: From which part of the property are the views obtained?

The affected views are obtained from the south and west portions of the Beau Monde Apartment Building. Due to the solid balcony edges, the best views (i.e. those views shown in Figures 57 to Figure 60 below) are obtained from a standing position at the edge of the balcony. More limited views can be obtained within the apartments, such as living room areas. Views are also obtained from the rooftop level (Level 37).

### Step 3: What is the extent of the impact?

TfNSW's technical advisor has concluded that the extent of view loss to Levels 15, 20 and 27 may be characterised as moderate (Figure 57 to Figure 59). However, as noted under Step 1 above, the affected views at these levels are either insignificant or partial.



The extent of view loss to Level 37 is more substantial (Figure 60), particularly to the west and north west (noting the limited assessment available), but the partial view to Sydney Harbour is maintained. There is no loss of any iconic view. Also, the view loss at this level is counterbalanced by the multiple directions from which views would be maintained.

Note: The white envelope in figures 57-60 represents the 1 Denison Street development, which is currently under construction. The proposed building envelope is shown in blue.

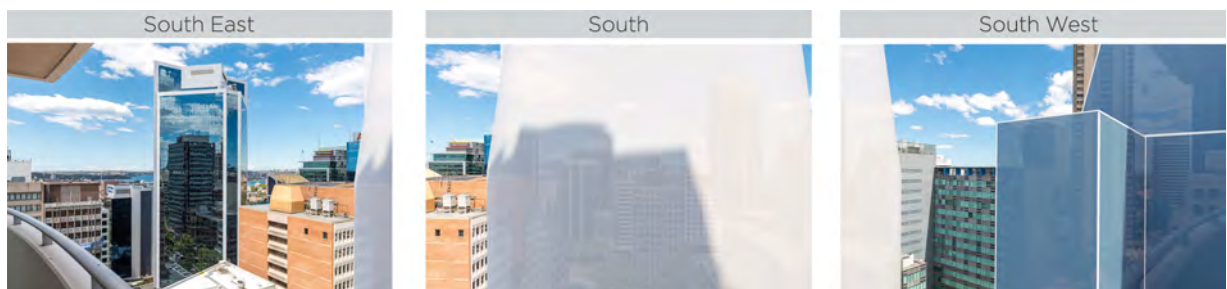


Figure 57 – Level 15 view from Beau Monde (proposed envelope in blue)

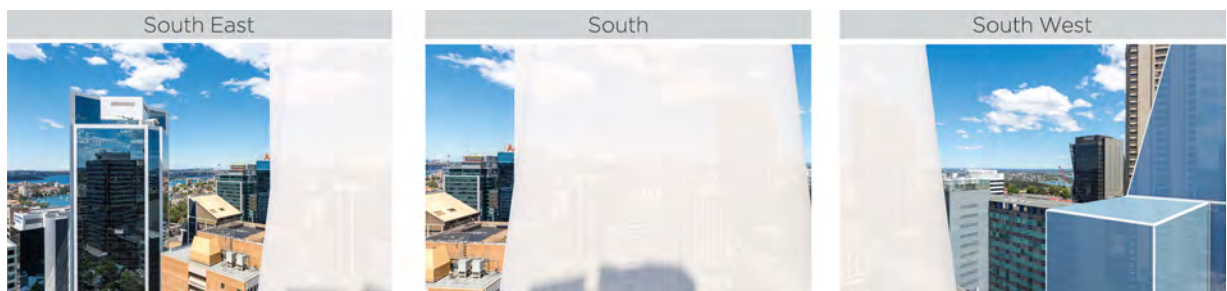


Figure 58 – Level 20 view from Beau Monde (proposed envelope in blue)

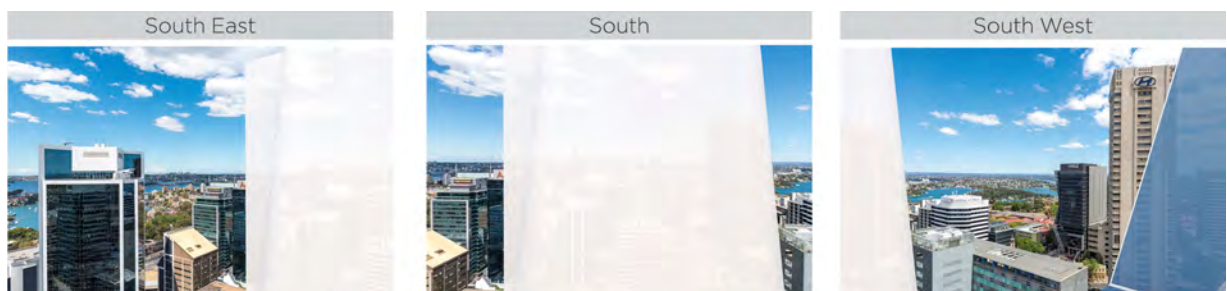


Figure 59 – Level 27 view from Beau Monde (proposed envelope in blue)

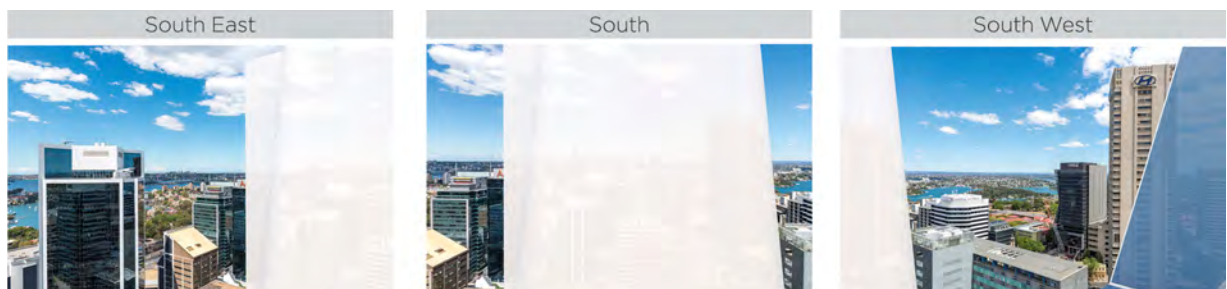


Figure 60 – Level 37 view from Beau Monde (proposed envelope in blue)

#### Step 4: How reasonable is the development?

The proposed building envelope is a generally complying form. It generally complies with setback controls, and any non-compliances would not notably impact on views from the Beau Monde Apartment Building. The building envelope features two variations to setback controls – one along the Miller Street elevation, which is not relevant to views from the Beau Monde Apartment Building, and a second along the east elevation of the envelope's lower-rise form fronting Denison Street, which, as evident in the figures above, would not impact on significant views from the Beau Monde Apartments.

In terms of height compliance, the proposed envelope varies from the Height of Buildings Map (both current and as amended under the *North Sydney Centre Planning Proposal*). However, clause 6.3 of NSLEP (both current and amended) allows for variations to the height map subject to certain overshadowing provisions. A variation to the building height is considered to be acceptable for the reasons discussed in Chapter 7.4 and 7.5 and Appendix EE of this EIS.

Given that the envelope is a generally complying form, the question should be asked, as per the Tenacity case, whether a different design could provide the same development potential while reducing view impacts.

The proposed building envelope includes three important design features that would help preserve views to the southwest while maintaining development potential:

- The envelope features a large 18-metre setback from the south boundary, which is greater than that required under NSDCP 2013. This large south setback would open up views to the southwest that would otherwise be blocked by a building form with a compliant height yet smaller setback.
- The envelope features reduced heights at the southern and south-eastern portions of the site (compared to those permitted under North Sydney Centre Planning Proposal), which would open up views that would otherwise be blocked by a form with a compliant height in these portions of the site.
- The envelope features a sloping southern elevation that would open up views that would otherwise be blocked by form with a compliant height yet uniformly vertical southern elevation.

These design features work to preserve partial views to the southwest that might otherwise be lost with an alternative design which meets NSLEP2013 and NSDCP 2013 controls. Based on the design options explored by TfNSW, there are no clear design alternatives that would provide the same development potential while reducing view impacts further.

Also importantly, the site is located within the commercial core area of North Sydney CBD. Some view loss is inevitable as a result of the redevelopment of the site and particularly, when compared to the former development on the site (ie. pre-demolition). This area has long been identified as being for employment uses of a significant density, scale and height, as reflected in current State and local strategic planning documents, including the Greater Sydney Region Plan, NSLEP 2013 and *North Sydney Centre Planning Proposal*.

Based on the above, it is considered that the view impacts of the proposed building envelope are acceptable, and view sharing is reasonable.

## 8.2.2 View Impacts on surrounding commercial buildings

The Visual Impact Assessment identifies that views from higher levels of commercial building in the North Sydney CBD include views to Sydney Harbour and Sydney CBD skyline. However, these views and their expanse generally reduce towards the northern end of the CBD, where the site is located. It is identified that views from 55 Berry Street and 201 Miller Street are likely to be impacted by the proposed building envelope. Notwithstanding this, and given the CBD is identified as an area for significant growth, the proposal is not considered to result in unacceptable view loss to commercial buildings.

## 8.2.3 Recommendations

Compliance with the proposed building envelope would ensure that future OSD has an acceptable visual impact.

The detailed design of the OSD should investigate opportunities to vary and articulate the building form within the envelope in order to minimise the visual and view impacts.

# 8.3 Overshadowing

## 8.3.1 Introduction

Detailed shadow diagrams have been prepared to assist in the analysis of the impact of the proposed building envelope on surrounding Special Areas, Zone RE1 Public Recreation land and residential areas outside the North Sydney CBD (Appendix H to Appendix L).

The key criteria for assessing overshadowing impacts are contained within clause 6.3 of NSLEP 2013, which states:

- (2) *Development consent must not be granted for the erection of a building on land to which this Division applies if:*
- (a) *the development would result in a net increase in overshadowing between 12 pm and 2 pm on land to which this Division applies that is within Zone RE1 Public Recreation or that is identified as “Special Area” on the North Sydney Centre Map, or*
- (3) *Development consent for development on land to which this Division applies may be granted for development that would exceed the maximum height of buildings shown for the land on the Height of Buildings Map if the consent authority is satisfied that any increase in overshadowing between 9 am and 3 pm is not likely to reduce the amenity of any dwelling [outside the CBD].*

As discussed in Chapter 7.5 of this EIS, the *North Sydney Centre Planning Proposal* seeks to refine the height variation subclause and subsequently the standards for overshadowing such that:

- the assessment period for overshadowing impacts to land zoned RE1 Public Recreation or identified as a Special Area (ie. Miller Street Special Area) between 12 pm and 2 pm has been refined to the winter solstice and equinox only
- new development must not cause dwellings outside the CBD to receive less than two hours of sunlight between 9 am and 3 pm to habitable windows and principal private open space areas, or, where the dwellings do not currently receive the required two hours, not reduce their sunlight further.



The overshadowing impacts resulting from the concept proposal are outlined below and should be considered with reference to the respective shadows studies.

### 8.3.2 Impacts on Miller Street Special Area

The shadow study for the Miller Street Special Area (Appendix I) includes shadow diagrams illustrating the shadows cast by the building envelope at 9 am, 12 pm and 3 pm and for 15 minute increments between 12 noon and 2 pm for the winter and summer solstice and equinox.

In summary, the shadow diagrams indicate the following with respect to overshadowing of the Miller Street Special Area between 12 pm and 2 pm:

- **March 21:** minor overshadowing to the Miller Street setback at 12 pm only
- **June 21:** no new overshadowing to the Miller Street Special Area
- **September 21:** no new overshadowing to the Miller Street Special Area
- **December 21:** no new overshadowing to the Miller Street Special Area

The overshadowing impact to the Miller Street Special Area at 12 pm on March 21 is illustrated in Figure 61. The extent of the overshadowing impact has been further analysed in section 8.0 of the Built Form & Urban Design Report (Appendix G) to determine its extent and duration. It has been determined that the building envelope causes a narrow band of shadow in front of the MLC Building for a duration of 10 minutes shortly after 12 pm. The average area overshadowed during that 10-minute duration is 33 square metres. When assessed against the environment of the site before the integrated station demolition and redevelopment commenced, it has been determined that the building envelope results in no net increase in overshadowing. In fact, the Integrated Station Development including the concept proposal would result in an overall net gain in solar access of 60.2 square metres to the Miller Street Special Area between 12 pm and 2 pm on 21 March.



Figure 61 – Overshadowing to Miller Street Special Area – 21 March at 12 pm

### 8.3.3 Impacts on Greenwood Plaza

The proposed building envelope causes no overshadowing to the Greenwood Plaza Special Area between 12 pm and 2 pm as demonstrated in the shadow study of Greenwood Plaza at Appendix J. The maximum height of the proposed building envelope has been determined specifically by the need to prevent overshadowing to Greenwood Plaza.

### 8.3.4 Impacts on Brett Whiteley Plaza

The shadow study for Brett Whiteley Plaza (Appendix K) includes shadow diagrams illustrating the shadows cast by the building envelope at 9 am, 12 noon and 3 pm and for 15 minute increments between 12 pm and 2 pm for the winter and summer solstice and equinox.

In summary, the shadow diagrams indicate the following with respect to overshadowing of the Brett Whiteley Plaza between 12 pm and 2 pm:

- March 21: no new overshadowing to Brett Whiteley Plaza
- June 21: minor overshadowing to the southern edge of Brett Whiteley Plaza between 12 pm and 12.15 pm
- September 21: no new overshadowing to Brett Whiteley Plaza
- December 21: no new overshadowing to Brett Whiteley Plaza

The overshadowing impact to Brett Whiteley Plaza at 12 pm on June 21 is illustrated in Figure 62. The extent of the overshadowing impact has been further analysed in section 8.0 of the Built Form & Urban Design Report (Appendix G) to determine its extent and duration. It has been determined that the shadow cast by the building envelope falls entirely on the awning of a shopfront of a building on the south-eastern corner of Brett Whiteley Plaza, which is mapped as RE1 Public Recreation zone in NSLEP 2013. The worst impact occurs at 12 pm on 21 June (winter solstice), at which point a shadow is cast to the awning for approximately 25 minutes over a maximum area of 37 square metres.

The extent of the shadow, which falls entirely over the existing building awning (and which already casts a shadow itself onto the surface of the plaza), is illustrated in Figure 63. Taking into account the presence of the existing awning, the building envelope technically casts no new shadow to surface of Brett Whiteley Plaza.

Based on an assessment of the shadow impacts of the building envelope on June 21 between 12 noon and 2 pm, to both the Miller Street Special Area and Brett Whiteley Plaza, when assessed against the environment of the site before the integrated station demolition and redevelopment commenced, it has been determined that the Integrated Station Development would result in no net increase in overshadowing. In fact, the Integrated Station Development would result in an overall net gain in solar access of 158.4 square metres between 12 pm and 2 pm on 21 March.



OSD concept SSDA Envelope    Victoria Cross Station CSSI    Shadow cast by Victoria Cross OSD Envelope    Shadow cast by existing North Sydney Buildings    Brett Whiteley Plaza    Elizabeth Plaza

Figure 62 – Overshadowing to Brett Whiteley Plaza – 21 June at 12 pm



Figure 63 – Overlay of overshadowing to Brett Whiteley Plaza – 21 June at 12 pm

### 8.3.5 Impacts on dwellings outside CBD

The shadow study of residential areas outside the North Sydney Centre (Appendix L) indicate that the proposed building envelope would cause minor additional overshadowing between 2:30 pm and 3 pm at the winter solstice to the six semi-detached dwellings at Nos. 1, 3, 5, 7, 9 to 11 Whaling Road, North Sydney, specifically:

- additional overshadowing to the front (north) façade of Nos. 1, 3, 5 and 7
- additional overshadowing to the west facade of No.1
- additional minor overshadowing to the middle and rear portions of the rear yards of Nos. 5, 7, 9 and 11, as outlined below:
  - ◆ 5.4 square metres of No. 5 (or 3.5% of year yard)
  - ◆ 6.5 square metres of No. 7 (or 4.3% of year yard)
  - ◆ 16.7 square metres of No. 9 (or 11% of year yard)
  - ◆ 4.3 square metres of No. 11 (or 2.9% of year yard)

(Note: The rear yards of Nos. 1 and 3 are already completely overshadowed at this time.)

Refer to Figure 64 and Figure 65 below. For the full set of detailed shadow diagrams relating to dwellings outside the North Sydney Centre, refer to Appendix L and the detailed analysis in section 8.0 of the Built Form & Urban Design report at Appendix G.





Figure 64 Overshadowing to residential area – 21 June at 3 pm

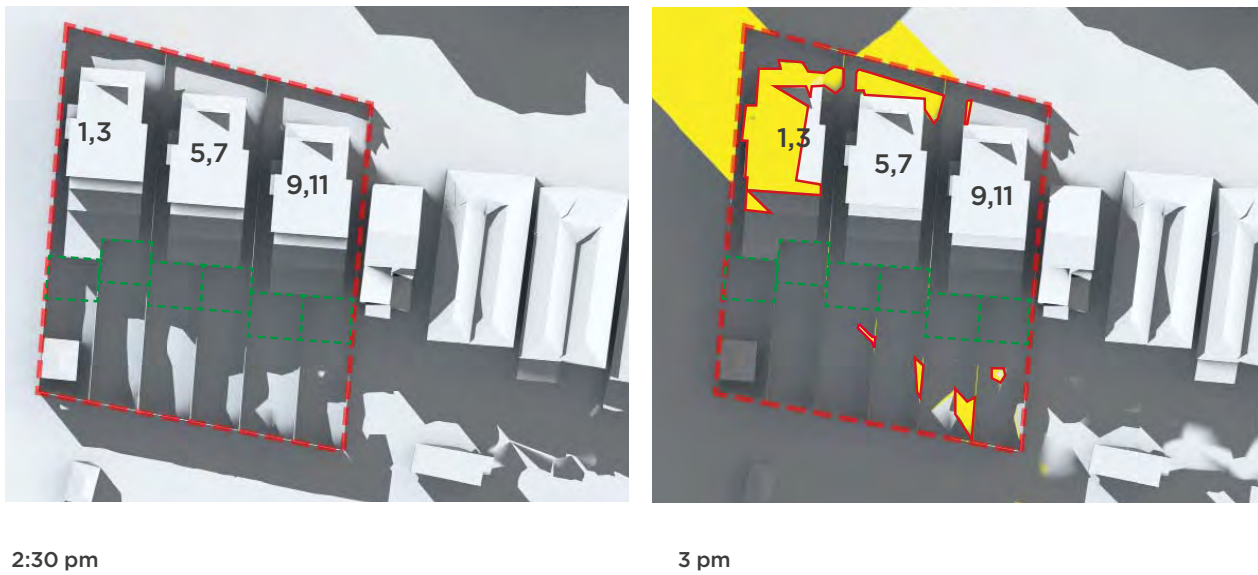


Figure 65 – Whaling Rd overshadowing detail – 21 June

When considering if this overshadowing is reasonable under clause 6.3(3) of NSLEP, it is useful to consult the requirements of NSDCP 2013, as the impact relates to dwellings that would ordinarily be considered against this DCP.

NSDCP 2013 requires that development should be designed such that at least three hours of sunlight is achieved between 9 am and 3 pm on the winter solstice, to the windows of main internal living areas and principal private open space areas. Whilst the DCP does not explicitly define 'principal private open space', it has been assumed for the purposes of this assessment that the principal private open space is a discrete 40-square metre area within the rear yard of each dwelling with a minimum dimension of four metres. This is the DCP's minimum private open space area required for a semi-detached dwelling on a lot size of up to 229 square metres. It has also been assumed that this discrete area is located directly behind the dwelling, which is the most accessible portion of the rear yard and presumably the most utilised.

As demonstrated in Figure 65, the overshadowing caused by the building envelope does not begin until after 2:30 pm on June 21. The shadow study demonstrates that the front facades of nos. 1 to 7 Whaling Road and west façade of no. 1 Whaling Road would receive at least 5.5 hours of sunlight to their front façades between the hours of 9 am and 3 pm as shown in the figure, and therefore, would remain compliant with the minimum solar access requirements in NSDCP 2013.

The principal private open space areas of nos. 5 to 11 Whaling Road are already overshadowed by the dwellings themselves and other surrounding development. The envelope causes some minor additional overshadowing to these rear yards, but it is negligible in duration and extent (no more than 11% of any rear yard is overshadowed between 2:30 pm and 3 pm) and is outside of the dwellings' principal private open space areas, which are located closer to the house.

Given the above, it is considered that the overshadowing impacts to nos. 1 to 11 Whaling Road would not reduce the amenity of these dwellings in accordance with clause 6.3(3) of NSLEP 2013 and therefore, would comply with this provision.

Furthermore, it is also clear that the building envelope complies with the amended clause 6.3(3) under the North Sydney Centre Planning Proposal. As noted above, the building envelope would cause no additional overshadowing to the affected dwellings' principal private open space areas, which are already overshadowed, and would not reduce sunlight below two hours to the habitable windows of the affected facades (front facades of nos. 1 to 7 Whaling Road and west façade no.1 Whaling Road)

### **8.3.6 Impacts on Beau Monde Apartment building**

Overshadowing to surrounding properties is generally not a critical matter in the assessment development in commercial core areas. However, in this case, there is a residential tower in close proximity to the site (Beau Monde Apartment building at 77 Berry Street), and the solar amenity of residents of this building should be considered.

As shown in the series of winter solstice shadow diagrams at Figure 66, the proposed building envelope casts a shadow over the upper portion of the west façade of the Beau Monde Apartment building beginning after 2 pm. This overshadowing is minor and is consistent with the design criteria and guidance in the Apartment Design Guide (ADG) as explained below.





**Figure 66 – Beau Monde overshadowing diagrams**

The ADG does not technically apply to this concept SSD for commercial use, but the ADG nonetheless provides a useful guide against which to assess overshadowing impacts. The design criteria under Objective 4A-1 of the ADG states that living rooms and private open spaces of at least 70 percent of apartments in a building should receive a minimum of two hours of direct sunlight between 9 am and 3 pm at mid-winter. Additionally, the design guidance under Objective 3B-2 of the ADG states that where an adjoining property does not currently receive the required hours of solar access, the proposed building should ensure solar access to neighbouring properties is not reduced by more than 20 percent.

As demonstrated by the solar analysis in the Built Form and Urban Design Report (Appendix G), 170 of 246 apartments (69 percent) in the Beau Monde Apartment building currently receive the required two hours of sunlight. Therefore, under the ADG design guidance, new development should not reduce the building’s solar access by more than 20 percent.

The proposed envelope would result in eight fewer apartments (-3 percent of the total 246 apartments) receiving the required two hours of sunlight. The affected apartments are located at the south-western corner of the building at Levels 22-29. Therefore, in accordance with the ADG design guidance, the envelope would not reduce the Beau Monde Apartment Building’s solar access by more than 20 percent.

Regardless of the building envelope’s consistency with the ADG, the additional overshadowing to the Beau Monde Apartment building is considered acceptable as the overshadowing is minor in extent, short in duration and typical of a high density commercial environment. Some overshadowing should be expected in this environment, particularly given Council’s commitment to jobs growth through built form intensification under the North Sydney Centre Planning Proposal.

### 8.3.7 Recommendations

During the design development of the OSD, compliance with the building envelope should be observed to ensure overshadowing impacts to the Miller Street Special Area, Brett Whiteley Plaza, the Beau Monde Apartment building and residential properties outside the North Sydney Centre are minimised. Detailed shadow studies should be submitted with the detailed SSD Application.

No other mitigation measures have been identified.

## 8.4 Privacy

Visual privacy in a commercial core land use zone is generally not a critical matter in the assessment of proposed commercial development in these areas. However, in this case, an assessment of privacy impacts on residents of the Beau Monde Apartment Building warrants consideration due to its proximity to the subject site.

### 8.4.1 Impacts on Beau Monde Apartment building

The Beau Monde Apartment building is located to the east of the site, on the opposite side of Denison Street. It is 37 storeys in height and features balconies/habitable windows on its west elevation, with a 0-metre setback from Denison Street. The residential levels begin at the eighth storey of the building.

Given the position of the Beau Monde Apartments building in relation to the subject site, there is limited opportunity for direct view lines between the proposed OSD and apartment windows and balconies on the west and south elevations of the Beau Monde Apartment building. As shown in Figure 67, the high-rise portion of the proposed building envelope is located approximately 40 metres from the Beau Monde Apartment building. This separation is greater than the 24 metre separation between habitable buildings required under the ADG for buildings higher than eight storeys. While the ADG is not applicable to this concept proposal for commercial development, it nonetheless provides a useful guide for visual privacy considerations.

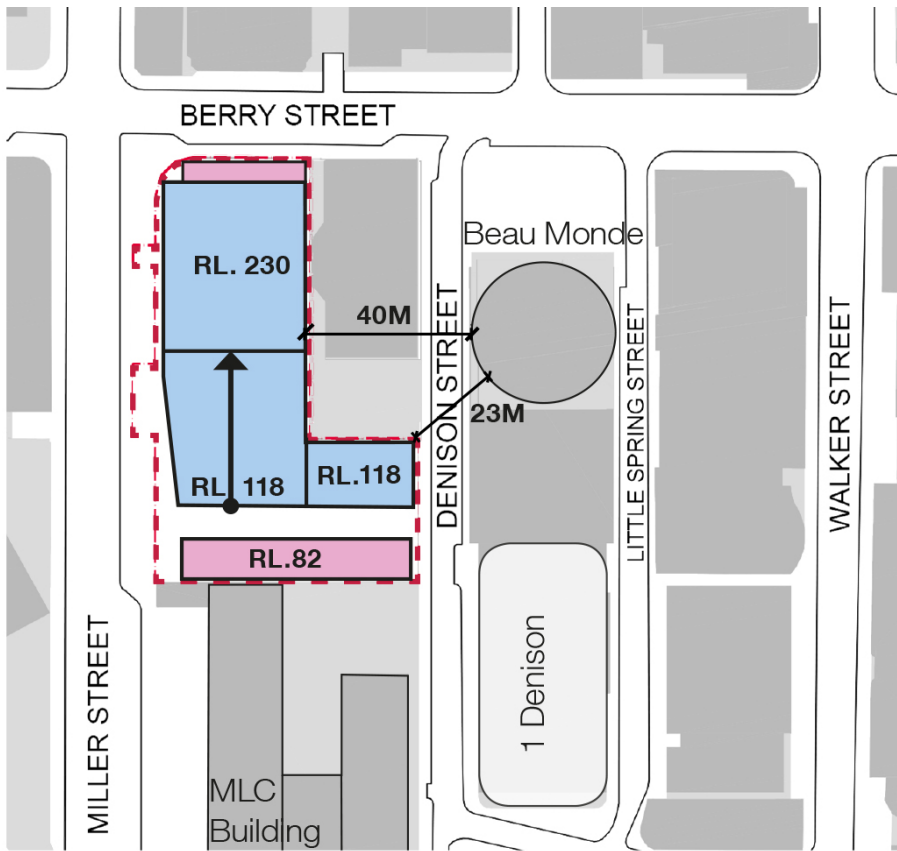


Figure 67 – Separation between proposed envelope and Beau Monde

Also, the existing 18-storey commercial development at 65 Berry Street acts as a physical obstruction to direct views between the Beau Monde Apartment building and the proposed OSD. However, even if there were no development at 65 Berry Street, the 40 metre separation would be sufficient for mitigating privacy impacts. Furthermore, it is likely that, following the changes to the planning controls under the *North Sydney Centre Planning Proposal*, 65 Berry Street could be redeveloped to a greater height and density, which would result in a larger physical barrier between the Beau Monde Apartment building and proposed OSD.

The indicative OSD design illustrates that the building core would be located on the eastern elevation. This arrangement would further reduce opportunity for views to the east toward the Beau Monde Apartment building by ensuring that the majority of its eastern elevation fronting 65 Berry Street would be a blank or solid façade.

There is limited opportunity for indirect, diagonal view lines between the balconies and windows of the southwest portion of the Beau Monde Apartment building and the proposed low-scale component of the OSD fronting Denison Street. As shown in Figure 67, the minimum distance between the buildings at this location is approximately 23 metres, which is one metre below the ADG separation criteria. This separation is considered sufficient, particularly given the diagonal nature of the view lines and the limited height of this element of the building envelope (13 storeys), which would help to mitigate potential privacy impacts.

#### **8.4.2 Other privacy impacts**

The proposed zero-metre setback to 65 Berry Street has the potential to cause privacy impacts on occupants of that development depending upon the façade treatment of the OSD's eastern elevation. As noted above, the indicative OSD design shows that the building core would be located on its eastern elevation. This arrangement would reduce opportunity for direct overlooking and privacy impacts on 65 Berry Street.

There is an existing childcare centre with an outdoor play area located in the lower-rise southern portion of the 65 Berry Street development. Future workers within the OSD may be able to overlook this play area, should it remain in operation. The area is already overlooked by surrounding development, including the upper levels of 65 Berry Street, the Beau Monde Apartment building and the (future) 1 Denison Street development. Also, a solid noise barrier has recently been constructed (through the CSSI Approval process) around the area in order to shield it from construction-related impacts. This barrier would have the secondary effect of limiting direct views to the centre.

#### **8.4.3 Recommendations**

As noted above, the proposed location of the building core on the eastern boundary would help mitigate impacts on the development at 65 Berry Street. Through design development leading to the lodgement of the detailed SSD Application, consideration should be given to incorporating appropriate architectural treatments/and or devices to minimise the potential for overlooking to neighbouring residential development and adjoining sensitive land uses where this privacy is not provided by the core.

No other mitigation measures have been identified.

## 8.5 Heritage impacts

A Statement of Heritage Impact Assessment Report (Appendix O) has been prepared to assess the impacts of the proposed building envelope on the significance of the surrounding heritage items. Key issues are discussed below.

Particular attention has been paid to the two heritage items closest to the site – the MLC Building, which adjoins the site to the south, and the Rag & Famish Hotel, which is directly opposite the site across Berry Street.

Notably, the site is identified in NSLEP 2013 as containing local heritage item ‘shop’ at 187 Miller Street (I0898), a two-storey narrow-fronted shop of rendered brick. However, this item has been demolished under the terms of CSSI Approval, and therefore impacts to this item have not been considered.

### 8.5.1 Impacts on MLC Building

TfNSW’s heritage advisor has concluded that the proposed building envelope would have a minor visual impact on the MLC Building due to the additional bulk and height in close proximity to the item. However, it is considered that the building envelope would not dwarf, obstruct views to, or otherwise significantly impact upon the significance of the item and therefore, the visual impact is considered acceptable with mitigation.

The building envelope’s design response to the MLC has been addressed in Chapter 8.1 of the EIS.

### 8.5.2 Impacts on Rag & Famish Hotel

TfNSW’s heritage advisor has concluded that the proposed building envelope would also have a minor visual impact on the Rag & Famish Hotel due to the additional bulk and height in close proximity to the item. However, this item is already dwarfed by surrounding high-rise development, and the proposed envelope would not exacerbate this situation, with key views to the item being maintained. The minor additional impact associated with the proposed building envelope is considered acceptable with mitigation.

The building envelope’s design response to the Rag & Famish Hotel has been addressed in Chapter 8.1 of the EIS.

### 8.5.3 Impacts on other surrounding heritage items

A number of other heritage items surround the site. However, given their distance from the site and the absence of significant view lines between these items and the site, TfNSW’s heritage advisor has concluded that the concept proposal would not have a significant impact on these items. There would be some minor visual impact, but such impact is considered acceptable in the CBD context. A summary assessment of the impacts on these other items is provided in Table 23.

Table 23 – Heritage impact summary assessment

Item	Impact
Commercial Building (201 Miller Street)	No direct impact; no visual impact.
Monte Sant Angelo Group (128 Miller Street / Lots 1-8, DP 262534)	Minor visual impact due to additional bulk and height in close proximity to heritage item.
North Sydney Post Office and Court House (former Police Station) (92-94 Pacific Highway)	No direct impact; minor visual impact.
Former Bank of NSW (51 Mount Street)	No direct impact; minor visual impact.
Façade of S. Thompson Building (No 67A) (67-69 Mount Street)	No direct impact; minor visual impact.
House (67-69 Mount Street)	No direct impact; minor visual impact.
Former Fire Station (86 Walker Street)	No direct impact; minor visual impact.
Greenwood (Former North Sydney Technical High School) (101-103 Miller Street or 36 Blue Street)	No direct impact; minor visual impact.

### 8.5.4 Recommendations

Based on the above assessment, TfNSW's heritage advisor has concluded that the proposed building envelope provides an appropriate design response as it adopts appropriate contextual cues and sympathetically responds to the significant and streetscape presence of nearby heritage items. On this basis, it is concluded that the concept SSD Application would not give rise to any adverse heritage impacts.

TfNSW's heritage advisor has also advised that the indicative OSD design demonstrates that a sympathetic design response can be achieved within the parameters of the proposed OSD building envelope. In particular, the podium height and architectural detailing demonstrates appropriate visual references to the heights and features of the surrounding heritage buildings.

The Statement of Heritage Impact provides a number of recommendations for ensuring future OSD has acceptable heritage impacts, including:

- the future detailed SSD Application should demonstrate design excellence in terms of the overall architectural form, detailing and materials of the building
- the OSD should be detailed to not detract from views to heritage items and within the locality generally.
- colour schemes for the OSD building should be sympathetic to the urban environment and should use a neutral colour palette with few colour variants
- within the parameters of the building envelope, the OSD should adopt a range of forms and heights with the aim of breaking up the building bulk
- the OSD should be designed to provide a visual reference to the heights of surrounding buildings, in particular, the MLC Building, and other medium-rise buildings in the vicinity
- the OSD should utilise high-quality, durable, well-crafted materials, selected with consideration of the character of the immediate surrounding built environment and adjoining heritage items



- the use of glass as a predominant external wall material, reinforced concrete, and other high-quality durable building materials are considered to be appropriate
- the use of glass for external walls may create a sense of openness which would provide new opportunities to view the adjoining Rag & Famish Hotel and MLC Building from the lower levels of the OSD building
- the design of the lobby and station entrance, whilst being undertaken separately to the OSD building, should be detailed to create a sense of openness and introduce a street frontage height that provides a transition between the Victoria Cross site and the surrounding buildings
- where relevant, the OSD should incorporate heritage interpretation measures identified in the Heritage Interpretation Plan and Station Design and Precinct Plan which are to be prepared in accordance with E21 and E101 of the Conditions of Approval for the CSSI Sydney Metro City & Southwest Chatswood to Sydenham.

These recommendations should be considered in the design development of the detailed SSD Application. Appropriate controls have also been included in the site-specific Design Guidelines (Appendix CC) to ensure the future design is both contextually appropriate and sympathetic to neighbouring heritage items.

## 8.6 Transport, traffic, parking and access

A Transport, Traffic and Parking Assessment Report (Appendix P) has been prepared to assess the forecast and cumulative impacts of the concept proposal on the surrounding road and pedestrian network and to analyse other relevant transport-related issues. Key issues are discussed below.

### 8.6.1 Existing travel patterns

North Sydney CBD's existing travel environment is characterised by high levels of public transport use and good connectivity to the surrounding road network. Based on data from the Australian Bureau of Statistics, the total public transport mode share for journey-to-work trips to the North Sydney CBD area is 59 percent. This is significantly greater than the Greater Sydney average of 20 percent and similar to other highly accessible localities in the Eastern Harbour City. A high proportion of journey-to-work trips are made by train (47%), and a high proportion are also made by private vehicle (31%). It is expected that the Victoria Cross Station will result in a shift towards further public transport and active travel modes.

### 8.6.2 Existing intersection performance

SCATAs data from 7 December 2016 (extracted by the RMS and used by the station design team) indicates that the intersections surrounding the site operate at a level of service of 'satisfactory' or better during both the AM and PM peak periods, with a degree of saturation (DoS) of less than 0.90.

*(Note: DoS refers to the ratio of traffic volume and intersection capacity. As DoS approaches 1.0, both queue length and delays increase rapidly. Satisfactory operations generally occur with a DoS of less than 0.90.)*

### 8.6.3 Existing vehicle traffic generation

Given that the previous commercial development on the site has been demolished, it was not possible to survey the vehicle traffic generation on the site associated with that development. Instead, 'existing' generation was based on the RMS's Guide to Traffic Generating Developments: Updated traffic surveys and information available for the nearby approved development in North Sydney at 1 Denison Street and 177 Pacific Highway along with surveys undertaken at 65 Berry Street. A summary of the existing traffic generation is provided in the Table 25.

**Table 25 – Summary of existing vehicle traffic generation**

Vehicle type	Parking spaces/ GFA	Generation rate	Peak period trips	In	Out
Passenger vehicles	208	0.3 vehicles/ hour per space	62	50	12
Service vehicles	20,000 square metres	0.07 vehicles/ hour per 100 square metres GFA	14	7	7
Combined	-	-	76	57	19

### 8.6.4 Proposed vehicle traffic generation

Similar to the approach utilised to determine existing traffic generation, the proposed traffic generation for the Integrated Station Development was estimated using the RMS's Guide to Traffic Generating Developments: Updated traffic surveys and information available for the approved developments at 1 Denison Street and 177 Pacific Highway. A more conservative rate for passenger vehicles was utilised in order to reflect a worst-case network impact. A summary of the predicted traffic generation is provided in Table 26.

**Table 26 – Summary of predicted vehicle traffic generation**

Vehicle type	Parking spaces/ GFA	Generation rate	Peak period trips	In	Out
Passenger vehicles	161	0.4 vehicles/ hour per space	64	51	13
Service vehicles	65,000 square metres	0.07 vehicles/ hour per 100 square metres GFA	45	23	12
Combined	-	-	109	74	25

As seen in the table, it has been estimated that the Integrated Station Development would generate 109 vehicle trips in the AM peak (net increase of 33 trips) or approximately one trip every two minutes during the peak hour. This is a minor increase that would have no material impact on the operation or performance of the surrounding intersections. Accordingly, no upgrades are required to the surrounding road network to facilitate the development.

### 8.6.5 Pedestrian generation

The expected OSD pedestrian movements to and from the site are illustrated in Table 27. It has been estimated that the OSD would generate approximately eight to nine percent of the total number of pedestrians utilising the Victoria Cross Station.

**Table 27 – Forecast peak hour OSD pedestrian movements**

Peak	Direction	OSD pedestrian movements
AM Peak	From Metro	1,004
	To Metro	112
	Total	1,116
PM Peak	From Metro	102
	To Metro	914
	Total	1,016

In order to determine footpath performance under the forecast pedestrian movements, a static assessment was undertaken at movement pinch points around the site. The results indicate that the narrow existing footpath along Denison Road is expected to fail by the year 2036. Widening of the footpath into the adjacent parking lane to create an effective footpath width of three metres, is being considered under the terms of the CSSI Approval and is expected to improve the performance of the footpath to an acceptable level. Any changes to the footpath in Denison Street would need to be undertaken such that service vehicle access is not impacted.

### 8.6.6 Proposed parking and access

Prior to demolition, the site contained 208 car parking spaces. As demonstrated by the indicative OSD design, the Integrated Station Development would accommodate a total of 161 car parking spaces for office and retail use within the basement levels – a net reduction of 47 spaces. Of these spaces, 150 are proposed for OSD use as part of this concept SSD Application.

The loading dock would be capable of accommodating two medium rigid vehicles, two small rigid vehicles, two service vehicle spaces to support station operations and six courier spaces. Principles for the management and operation of the loading dock are included as an appendix to the Transport, Traffic and Parking Assessment Report.

NSDCP 2013 requires a minimum of 587 bicycle parking spaces for occupants and 201 spaces for visitors. A total of 802 bicycle parking spaces and eighty-two showers and change cubicles are proposed for the concept proposal, which exceeds the NSDCP 2013 minimum requirements.

Vehicle and bicycle access to the car park would be off Denison Street as per the pre-demolition environment. A two-lane, two-way ramp would provide access to the car park in accordance with the CSSI approval.

### **8.6.7 Pedestrianisation of Denison Street**

The Central Laneways Masterplan prepared by North Sydney Council indicates that there is potential in the future for the full pedestrianisation of Denison Street. As such, the southern section of Denison Street may be closed to through vehicle access, south of the subject site.

This pedestrianisation would result in existing traffic diverting to other parts of the CBD road network. Traffic currently accessing the site via Walker Street and Spring Street would be redistributed to the Pacific Highway and Berry Street. However, this is unlikely to result in any major network impacts, as the Pacific Highway and Berry Street are already used as the primary access routes for this locality. It is also noted that through traffic currently generated along Denison Street would be removed under Council's proposal and as a result, would help to balance out any change.

### **8.6.8 Western Harbour Tunnel and Beaches Link**

Impacts associated with the proposed Western Harbour Tunnel and Beaches Link have also been considered in the Traffic and Transport Report. As the final details for the Western Harbour Tunnel and Beaches Link are not yet known, for the purposes of this application a sensitivity test has been undertaken, assuming a 15% total growth in background traffic on Berry Street. The results of this test indicate that the intersection performance in the vicinity would likely continue to operate within a satisfactory range.

Further detailed assessment of the Western Harbour Tunnel and Beaches Link will be undertaken with the future detailed SSD Application.

### **8.6.9 Construction traffic**

Refer to discussion in Chapter 8.16 of the EIS.

### **8.6.10 Conclusion**

The transport, traffic and pedestrian impacts of the proposed concept SSD application have been assessed to have a negligible impact on the surrounding network. The parking and servicing requirements of the proposal have also been demonstrated to be able to operate efficiently in a manner which meets the travel and access demands of all users.

Importantly, through the provision of 802 bicycle parking spaces, end of trip facilities, minimum vehicle parking and the integration of the OSD with the new metro station, the proposal will support a positive shift away from private vehicle usage and is consistent with local and state government policies.

A number of mitigation measures are recommended below which will ensure the safe and convenient access of vehicles, pedestrians and bicycles to the OSD, Metro stations and surrounding public domain.

### 8.6.11 Recommendations

The Traffic and Transport Report identifies a number of mitigation measures to be applied during the detailed SSD Application stage to ensure the OSD has acceptable traffic and transport impacts. These include:

- The adoption of servicing planning principles and commitment to develop servicing plans to manage loading dock operations as part of the detailed planning application process
- A commitment to provide parking in line with the North Sydney DCP
- The inclusion of two accessible parking bays in accordance with North Sydney Council DCP 2013 and AS 2890 and as such will be situated within easy access of lifts
- All pedestrian access points and corridors will be designed to comply with AS1428.1 and 1428.2 and will form part of the detailed planning of the site
- All parking areas will be designed to comply with the relevant Australian Standards including AS 2890.1, 2890.2, 1428.1 and 1428.2 to help manage vehicle access and circulation in parking areas
- A commitment to deliver a development with over 800 bike parking spaces, which are easily accessed and are supported by end of trip facilities
- The provision for safe access, secure and conveniently located bike parking facilities within the building to support and promote cycling and help North Sydney CBD improve its cycling mode share rates
- Adoption of the green travel plan and associated measures in the conditions of consent for the building to help manage travel demand by supporting and promoting travel by alternative modes of travel to the private vehicle
- All pedestrian access points and corridors are expected to be designed to comply with AS1428.1 and 1428.2 and will be appraised as part of the detailed planning of the site
- The detailed SSD Applications to develop a strategy and technology solutions that will help manage conflict between loading dock, parking area access and bike parking access
- The adoption of Construction Traffic Management Principles, staging options and construction traffic management documentation set out in section 8 of this report with a focus on managing the subsequent impact on the CBD public domain and road environment as part of detailed planning of construction
- The detailed design of the OSD building and assessment of its impact is to be undertaken in consultation with the Traffic and Transport Liaison Group(s) established under Condition of Approval E77 of CSSI Approval No. 15\_7400 for the Sydney Metro City & Southwest Chatswood to Sydenham project, until such time as completion of Victoria Cross Station has been reached. Beyond completion of Victoria Cross Station, detailed design of the OSD building and its traffic, parking, pedestrian and cycle accessibility impacts would require consultation with relevant stakeholders.

## 8.7 Ecologically sustainable development

### 8.7.1 ESD principles under EP&A Regulation

There are four ecologically sustainable development (ESD) principles defined by clause 7(4) of Schedule 2 of the EP&A Regulation which must be considered in the assessment of the concept proposal. These are briefly addressed in Table 28, and in further detail in Chapter 4.0 of the ESD Report at Appendix Q.

**Table 28 – ESD principles under EP&A Regulation**

Principle	Description	Comment
Precautionary principle	The precautionary principle says 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.	There are no threats of serious or irreversible environmental damage associated with the concept proposal. The proposal provides opportunity for an OSD that avoids damage to the environment wherever practicable. An ESD framework (refer to discussion below) has been developed to guide the design, construction and operation of the building by setting out strategies for reducing energy and water consumption, limiting carbon emissions, encouraging use of responsible materials, reducing waste and limiting other forms of emissions including light pollution. The OSD would also target a number of environmental and sustainability ratings as part of the framework.
Intergenerational equity	The principle of intergenerational equity says that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.	The concept proposal provides opportunity for an OSD that would benefit present and future generations through health and environmental benefits associated with reductions in road emissions and pollution, active transport networks and accessible spaces.
Conservation of biological diversity and ecological integrity	This principle says that conservation of biological diversity and ecological integrity should be a fundamental concern.	The site is located in a highly developed urban context and has no notable biological and ecological value. Future OSD would feature appropriate stormwater management systems and have no detrimental impact on surrounding waterways.
Improved valuation, pricing and incentive mechanisms	This principle says that environmental factors should be included in the valuation of assets and services.	The ESD framework (refer to discussion below) recommends that life-cycle costing forms part of the project decision-making and the selection of major building components and systems in order to maximise sustainability benefits.



## 8.7.2 ESD framework and sustainability strategies

The ESD Report (Appendix Q) has been prepared to review the applicable ESD regulatory requirements, policies and rating tools that are relevant to the concept proposal, and to set out an ESD framework to guide the future detailed SSD Application for OSD.

The ESD Framework for the concept proposal is intended to enable incorporation of best practice sustainable building principles that respond to both policy and emerging market trends. The following key sustainability policies and regulatory requirements have informed the framework:

- EP&A Regulation 2000
- Building Code of Australia – Section J
- Sydney Metro City & Southwest sustainability objectives and proposed initiatives
- North Sydney Development Control Plan 2013
- Rating tools including:
  - ◆ National Australian Built Environment Rating System (NABERS)
  - ◆ Green Star Design & As-Built v1.2
  - ◆ The WELL Building Standard
  - ◆ Net Zero Carbon Offset Standard.

A series of sustainability strategies for the future OSD have been developed in the context of the project-specific ESD framework. The strategies are grouped by two levels of performance:

- proposed targets and features which set out proposed minimum standards of performance and indicative design features
- world best practice/innovation, which outlines opportunities for higher sustainability benchmarks to be achieved, subject to feasibility analysis in future stages of the project.

The project-specific sustainability strategies are summarised in Table 9.

Table 9 – Sustainability strategies

Element	Proposed targets and indicative features	World best practice/ innovation
<b>Code Requirements</b>	Building and services design to exceed BCA Section J minimum requirements	NA
<b>Rating Tools</b>	Min. 5 Star Green Star (v1.2) Design Min. 5 Star NABERS Energy (Office Base Building) Min. 4 Star NABERS Water (Office)	OSD to investigate uplift to 6 Star Green Star, 5.5 Star NABERS Energy and 4.5 to 5 Star NABERS Water WELL Rating (Commercial) Net Zero Carbon
<b>OSD Design-façade</b>	High performance double glazing system in a curtain wall façade with passive solar design features to improve building thermal performance High performance thermal insulation installed for building fabric to reduce HVAC energy requirements External building and site elements such as roofing and landscaping to be made from materials of low SRI values to minimize project contribution to the 'heat island effect' Building air tightness testing	Consideration of Building Integrated PV Utilising a double-skin glass façade design
<b>OSD Design-Building Management</b>	Integrated BMS system to facilitate management of the asset Water and energy metering and monitoring systems Independent Commissioning agent to provide commissioning advice and monitor and verify the commissioning and tuning of nominated building systems Building user guides / interactive information	Smart building asset management systems
<b>Lighting &amp; Power</b>	LED lighting installations for buildings Lighting control systems including time scheduling, localised on/off control and lighting level adjustments to cater to daylighting effects and occupant preferences Zoned carpark lighting layout with timed motion detection dimming control to reduce lighting energy consumption in times of low use	SMART lighting incorporating user interface and data capture capabilities

Element	Proposed targets and indicative features	World best practice/ innovation
<b>HVAC</b>	<p>High efficiency water cooled chiller plant and hot water systems</p> <p>Air distribution via low temperature variable air volume system serving the floors</p> <p>Dedicated / separate air handling systems to serve the perimeter zones and interior zones</p> <p>Variable speed motors on all pumps and fans</p> <p>CO<sub>2</sub> sensors and outside air modulation systems used to determine the amount of fresh air delivered to the building</p>	<p>Incorporation of ground source heat / thermal pile heat rejection to reduce plant sizing and free up floor space</p>
<b>Emissions</b>	<p>Reduced impact refrigerants</p> <p>External lighting to be designed to have reduced light spill effects</p>	<p>No refrigerants used in the project</p> <p>Refrigerant leak detection and capture system / or natural refrigerants used in the project</p>
<b>Renewable energy/ systems</b>	<p>Consideration of onsite renewable energy generation such as a roof mounted photovoltaic system (subject to feasibility analysis)</p>	<p>Building Integrated PV</p> <p>Renewable energy purchased through green power</p>
<b>Water</b>	<p>Water efficient fixtures</p> <p>Rainwater harvesting system</p> <p>Stormwater (see note below) management through improving flows from the site, water sensitive urban design principles and water treatment systems where feasible</p> <p>Note: All ground level connections are not part of this application, but are part of the CSSI Approval for the Victoria Cross Station. This application is for connections into the approved system only.</p>	<p>Consideration of on-site small scale treatment of grey or black water treatment</p>
<b>Materials</b>	<p>Reduced Portland cement use</p> <p>Recycled timber, steel and concrete</p> <p>Low TVOC content &amp; low formaldehyde emission materials</p> <p>Sustainable timber procurement</p> <p>Low/ zero PVC-containing cable, piping, flooring and blind products</p>	<p>Consider using structural timber e.g. cross-laminated timber in sections of the building where practicable</p> <p>Life cycle assessment / design</p> <p>Responsible material sourcing through Environmental Product Declarations, Third-party Certification Schemes and Stewardship Programs</p> <p>Ultra-low TVOC products (&lt;5g/L content)</p>
<b>Operational Waste</b>	<p>Waste room sized to handle general waste and recyclable waste streams</p>	<p>Vacuum waste system to reduce storage requirements</p>

Element	Proposed targets and indicative features	World best practice/ innovation
<b>Construction Management</b>	<p>Establish a target for diversion of construction and demolition waste from landfill for recycling (indicative minimum 90%)</p> <p>Site specific Environmental Management Plan (EMP)</p>	<p>Site-specific sustainability training to educate contractors and subcontractors</p> <p>Contractor programs to promote positive and mental wellbeing for occupants/ staff</p> <p>High Performance Site Offices</p>
<b>Transport</b>	<p>Consider dedicated parking spaces for low emission vehicles</p> <p>Car share provision</p> <p>Cyclist parking and end of trip facilities to be provided (determined in accordance with both the DCP and Green Star requirements).</p>	<p>Dedicated electric vehicle spaces and charging infrastructure</p>
<b>Health and Wellbeing features</b>	<p>Thermal comfort provided through passive and active measures such as building fabric performance optimising radiant surface temperatures coupled with a well-controlled HVAC system optimising internal conditions</p> <p>Visual amenity supported through a combination of natural daylighting and appropriate artificial lighting</p> <p>Protection from noise achieved through building envelopes and suitably attenuated mechanical services design</p> <p>All materials to be low TVOC content and low formaldehyde emission to improve indoor air quality</p>	<p>Ultra-low TVOC products (&lt;5g/L content)</p> <p>Active design strategies through placement of interconnecting stairs</p>
<b>Commissioning and Handover</b>	<p>Building commissioning and tuning</p> <p>Building air tightness testing</p>	<p>Soft Landings framework</p>

### 8.7.3 Recommendations

Subject to the implementation of the minimum targets in the table above, the proposal is capable of complying with the applicable ESD requirements and statutory obligations.

In order to achieve a high level of ecological sustainability, the future detailed SSD Application should comply with the project-specific sustainability framework and strategies, including the minimum targets identified above and also consider and implement (where practicable) the world best practice/innovation strategies

## 8.8 Prescribed airspace for Sydney Airport

An Airspace Assessment Report or Flight Path Report (Appendix R) has been prepared to assess the building height limitations associated with Sydney Airport prescribed airspace and to provide an indication of the approvability of future detailed SSD Application for the OSD. Key elements of the assessment are discussed below.

### 8.8.1 Impacts on airspace restrictions

The airspace limitations applying to the site have been identified as follows:

- Obstacle Limitation Surface (OLS) is 156 metres Australian Height Datum (AHD)
- Procedures for Air Navigation Surfaces-Aircraft Operations (PANS-OPS) surface is 335.2 metres AHD
- Radar Terrain Clearance Chart Height (RTCC) clearance is 335 metres AHD.

At a maximum height of RL 230 metres AHD, the proposed building envelope is below the PANS-OPS and RTCC surfaces but above the OLS, with an estimated breach of 74 metres.

Any breach of the OLS by the future OSD (ie. at the detailed SSD application stage) would constitute a 'controlled activity' under the Airports Act 1996 and would trigger the need for a safety assessment by Sydney Airport Corporation Limited (SACL), Civil Aviation Safety Authority (CASA) and Airservices Australia, with the Department of Infrastructure and Regional Development (DIRD) being the final approval authority. TfNSW's technical advisor has advised that the OLS breach is unlikely to be problematic due to other tall building/obstacles in the area, which are typical of a CBD context.

Preliminary consultation with the airport operator (SACL) and CASA has been undertaken which has confirmed that formal assessment of the OLS breach would occur during the detailed SSD Application stage, when the final building height, including any architectural roof features and other rooftop devices, and crane heights are known.

There are a number of prescribed helicopter transit routes for helicopter operations in the Sydney Control Zone. A 'North Shore Lane' for helicopter access is located approximately 350 metres to the east of the site and is behind other tall buildings. Although the future development of the site is classified as an obstacle, safe navigation in helicopter operations can be achieved under Visual Flight Rules (VFR). On this basis, TfNSW's technical advisor has concluded that the concept proposal poses no increased safety risk.

### 8.8.2 Recommendations

During preliminary consultation, CASA has recommended that the building be obstacle-lit by medium intensity steady red lighting at the highest point of the building during the hours of darkness.

No other mitigation measures have been identified at this preliminary stage. As noted above, formal assessment of the OLS would occur during the detailed SSD Application stage once the building design is finalised and the final building height (including the height associated with architectural roof features, communication devices, antennae and the like) and crane heights are known.

## 8.9 Utilities, infrastructure and services

A Services and Utilities Infrastructure Report (Appendix S) has been prepared to identify existing infrastructure, identify required augmentation, outline the connection strategy and provide key considerations for each utility/service associated with the concept proposal. Additional detail on the stormwater system design, including provisions for the recycling of water, is provided within the Flood Assessment and Stormwater Management report (Appendix T).

The above mentioned reports also identify the extent of the proposal that is SSD and how this relates to the CSSI Approval. In particular, the reports identify that works associated with the provision of services connections, relocations and augmentation to the Victoria Cross Integrated Station Development (e.g. potable water, stormwater drainage, sewer drainage, electricity, gas and telecommunications) will be undertaken under the CSSI Approval. Where permanent service connections cannot be made due to timing differences between the delivery of the OSD and station, conduits and pits will be provided as part of the CSSI works to avoid the potential for future disruption associated with pavement or roadway breakthroughs.

Key elements of the reports are discussed below.

### 8.9.1 Stormwater infrastructure

Sydney Water is the service authority responsible for the operation and maintenance of the existing trunk drainage infrastructure within the site area, and North Sydney Council is responsible for the operation and maintenance of the local drainage infrastructure along Miller and Denison Streets.

Prior to the demolition of buildings, the site was nearly 100 per cent impervious, with the majority of the runoff occurring from building roofs via gutter and downpipes and from pavement surfaces. There were some minor bypass areas between buildings and along public footpath areas.

The site is traversed by a substantial stormwater channel, consisting of a U-shaped brick-lined invert with 0.9-metre diameter. This service crosses the basement area of the proposed OSD at the site's southwest corner. A preliminary design for the permanent diversion of this service through the site has been developed by TfNSW and concept approval has been received from Sydney Water. Further design definition of this relocation will require consultation with Sydney Water and North Sydney Council through the CSSI Approval.

Further discussion the flood modelling and stormwater management is provided in Chapter 8.10 of the EIS.

### 8.9.2 Sewerage infrastructure

Sydney Water is the service authority responsible for the operation and maintenance of the existing sewerage infrastructure within the site area.

The proposed sewerage connection strategy for OSD is to connect the building sewer system to the 225SGW sewer main in Denison Street. The connection will be subject to Sydney Water Corporation requirements and approval.

A water servicing coordinator (WSC) has been engaged by TfNSW and a Section 73 Notice of Requirements (NOR) application has been made to confirm Sydney Water's specific conditions and requirements. Refer to the Services and Utilities Infrastructure Report (Appendix S) for further detail on the application and sewerage demand calculations.



### 8.9.3 Potable water

Sydney Water is the service authority responsible for the operation and maintenance of the existing potable water infrastructure within the site area.

The proposed potable water connection strategy for OSD is to connect the domestic potable water service to the 150-millimetre Sydney Water water main in Miller Street.

A water servicing coordinator (WSC) has been engaged by TfNSW and a Section 73 Notice of Requirements (NOR) application has been made to confirm Sydney Water specific conditions and requirements. Refer to the Services and Utilities Infrastructure Report (Appendix S) for further detail on the application and potable water demand calculations.

### 8.9.4 Telecommunications infrastructure

A number of telecommunications providers have services within Miller, Denison and Berry Streets, including Telstra, Verizon Business, Vocus Communications, Primus Telecom, Nextgen, AARNET, AAPT, NBN and Optus. Given the size of the proposed OSD, a dedicated fibre system would be required to service the building.

The proposed connection strategy involves two building distributor rooms, each of which would have two diverse incoming connection paths so as to provide flexibility to accommodate various public network providers and possible tenancy telecommunications requirements. The strategy is for the incoming lead in cabling to come from the following two diverse routes:

- Denison Street and entry into the basement from Denison Street
- Miller Street and entry into the basement from Miller Street.

Cabling within the building would be provided by the National Broadband Network (NBN) Co, while additional allowances for carrier lead-in cabling would be provided in accordance with tenancy requirements (Telstra, Optus and Verizon).

### 8.9.5 Gas infrastructure

Jemena is the service authority responsible for the operation and maintenance of the existing gas infrastructure within the site area.

The proposed connection strategy is to connect to the secondary network gas main in Berry Street.

A preliminary feasibility estimate for the gas supply demand for the concept proposal and the station retail tenancies has been undertaken. The detail location of the main gas regulator is subject to further discussion and approval by Jemena. Refer to further detail in the Services and Utilities Infrastructure Report (Appendix S).

### 8.9.6 Electrical infrastructure

The site is within the Ausgrid electricity supply network. There is an existing Ausgrid substation within the development site, which appears to supply low voltage to a number of properties adjacent to the site and associated street lighting. This substation will be decommissioned as part of the CSSI approved works.

The proposed supply to the development is from underground high voltage cables leading in from Miller Street and/or Berry Street subject to Ausgrid coordination with a Level 3 Accredited Service Provider (ASP) designer.

It is estimated that the development would require two chamber substations located in the basement level (currently Denison Street ground level) adjacent to the Miller Street corner with Berry Street, each consisting of 3 x 1500kVA transformers.

TfNSW has engaged a level 3 Accredited Service Provider (ASP) to lodge a maximum demand application to Ausgrid, with subsequent assessment and connection design information received back from Ausgrid.. Refer to further detail in the Services and Utilities Infrastructure Report (Appendix S).

### **8.9.7 Protection of existing utility infrastructure**

As the OSD would sit above the Metro station, there are no earthworks associated with the project. Protection of existing utilities will be undertaken as part of the station works under the CSSI Approval.

### **8.9.8 Recommendations**

Based on preliminary consultation between TfNSW and the relevant service providers, it is understood that there is sufficient capacity in existing infrastructure to accommodate the future OSD as envisioned by the concept proposal. In developing the future design for the detailed OSD, more detailed enquiries would need to be made with the relevant services and utility providers and arrangements for final connections and associated approvals obtained based on the final design.

## **8.10 Stormwater and flooding**

A Flood Assessment and Stormwater Management Report has been prepared to consider flood risk management and set out a stormwater drainage strategy for the Victoria Cross Integrated Station Development (Appendix T). Key elements from the report are discussed below.

### **8.10.1 Flooding Management**

#### **Existing flood context**

The North Sydney LGA Flood Study (2017) provides information and maps indicating that the subject site is flood prone with depths in excess of 0.3 metres for events up to the 5-year Annual Recurrence Interval (ARI) event and in excess of 1 metre for the 100-year ARI event as shown in Figure 68 below.

A preliminary flood assessment has been undertaken as part of the development of the Victoria Cross Integrated Station Development design based on Council's 2017 flood model. The assessment has confirmed that the site is located in a flood-affected area, noting that the previous courtyard at Tower Square (demolished under the CSSI Approval) provided informal flood storage during major storms greater than the 5-year ARI event.

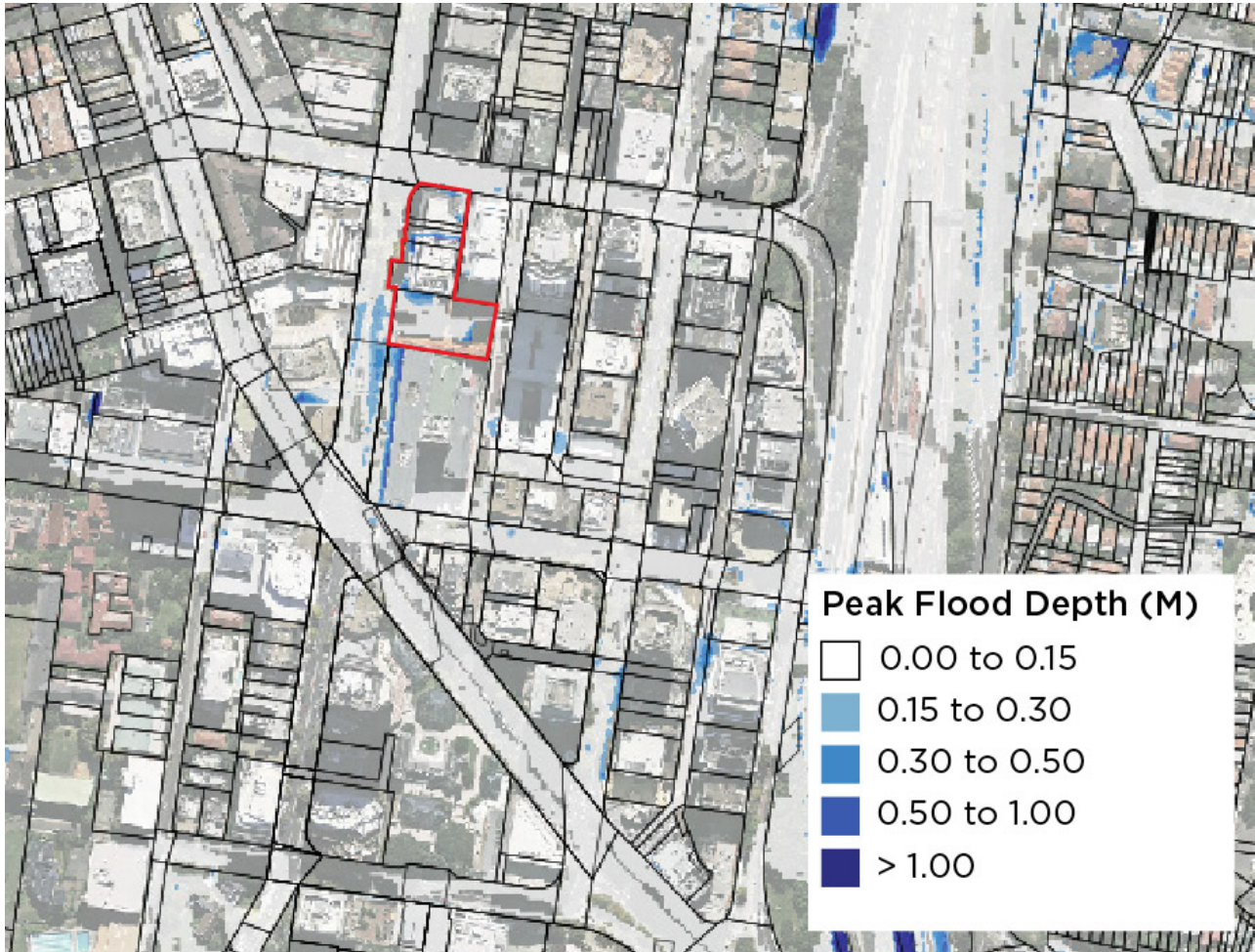


Figure 68 – Peak flood depth contours map

### Flood planning requirements

TfNSW’s technical advisor has confirmed that Council has not yet commissioned a floodplain risk management study based on the 2017 flood study. This being the case, the flood planning requirements for the site have been based the following criteria:

- station entry levels and basement ramp thresholds set to PMF level
- retail areas located within the through-site link overland flow path are to be protected to 100-year ARI level
- lift shafts located with the through-site link overland flow path are to be protected to events greater than 100-year ARI event using automatic barriers
- all other entrances are to be set to the 100 year ARI flood level +500-millimetre freeboard

### Mitigation strategy

Preliminary flood modelling has been conducted as part of the station design through the post CSSI Approval process. The following features form part of the flood mitigation strategy for the site:

- the safe conveyance of overland flow path between Miller Street and Denison Street within the future pedestrian through-site link at the south end of the site. It is proposed that the station entrances and basement areas will be protected up to the PMF flood level with protection of the retail entrances up to the 100yr ARI flood levels.
- compensatory flood storage below ground in Denison Street. An indicative location for the storage is shown in the Flood Assessment and Stormwater Management Report, however the final design is to be developed in further consultation with Sydney Water and North Sydney Council.
- realignment of the existing Sydney Water trunk drainage line that traverses the site with a new sealed pipeline that will connect to the existing trunk drainage in Miller Street to the compensatory floor storage in Denison Street.

This mitigation strategy will be refined and implemented as part of the detailed design of the station (CSSI Approval), as all flood mitigation measures will be implemented under the terms of that approval, including the public domain, ground levels and thresholds/entrances to the building (including the OSD lobby and the car park entrance). It is noted that Condition E8 of the CSSI Approval requires that the measures identified in the PIR to maintain or improve flood characteristics at the site must be incorporated in the detailed design of the station.

## 8.10.2 Stormwater Management

### Existing drainage infrastructure

Existing Sydney Water trunk drainage stormwater infrastructure is located within the southwest portion of the site. The asset is believed to consist of a U-shaped brick lined invert with 0.9-metre diameter.

North Sydney Council operate and maintain the local street drainage infrastructure around the site. The site is believed to be serviced by the local infrastructure in Miller Street and Denison Street. The local system appears to discharge directly to the Sydney Water trunk drainage line.

### Proposed OSD Stormwater Management Plan

The OSD's stormwater drainage reticulation is not addressed under the CSSI Approval but rather would need to be addressed under the future detailed SSD Application for OSD and will be separate to the Victoria Cross station drainage reticulation arrangements.

Preliminary consultation suggests that Council may seek to enforce on-site detention requirements to restrict site peak discharge of all events up to the 100-year ARI event to that of the pre-development peak discharge for the 5-year ARI event.

The following two potential on-site detention options for OSD stormwater have been identified by TfNSW's technical advisor:

- segregated storage and reuse tank to regulate peak discharge
- combined on-site detention and rainwater re-use via storage tanks within the building

The preferred option would be selected and refined at the detailed SSD Application stage.

Stormwater run-off from the tower roof would be collected using a gutter and downpipe system. Run-off would be directed to the building's on-site detention and stormwater treatment system. Run-off from the terrace areas would be graded to a series of proprietary drainage inlet systems and is charged to the building's on-site detention and water treatment devices.

The peak discharge from the Integrated Development site would be restricted to comply with North Sydney Council and Sydney Water on-site detention and permissible site discharge requirements.

Discharge from the on-site detention tank would be separate from the station drainage reticulation arrangement. A preliminary coordination exercise has been undertaken to show how downpipes can avoid the station.

To achieve Greenstar rating points and Council's water quality targets, the stormwater management plan identifies that the development would need to achieve pollution reduction targets. Specific water quality targets would be defined at the detailed SSD Application stage. Typical treatment devices include:

- first flush diversion of the captured roof water, prior to connection to water harvesting and OSD tank system
- trash screens installed over the stormwater outlets on the OSD tank
- gross pollutant trap to screen all stormwater discharging from the site before entering Council's stormwater system

Rainwater harvesting systems would collect rainwater from the roof and gravitate to the rainwater harvesting tanks. Treated rainwater would then potentially be used for toilet flushing, landscape irrigation and wash down.

A schematic layout for the proposed OSD stormwater management system has been prepared as part of the Flood Assessment and Stormwater Management Report (Appendix T).

### **8.10.3 Recommendations**

All future design of the proposed development would need to consider North Sydney Council and Sydney Water requirements for stormwater and flooding. Consultation with Council and Sydney Water would be required to help inform development of the on-site stormwater management plan.

The future detailed SSD Application would need to ensure full coordination of stormwater discharge can be achieved between station and OSD.



## 8.11 Noise and vibration

A Noise and Vibration Impact Assessment Report (Appendix N) has been prepared to assess the potential construction and operation noise/vibration impacts associated with future OSD, and also to consider the amenity of future occupants of the building. The assessment is based on the indicative OSD design.

### 8.11.1 Existing noise and vibration environment

The existing noise environment surrounding the site comprises a mix of medium to high-rise mixed use receivers. In order to assess the existing environment, noise sensitive receivers were grouped into two noise catchment areas (NCAs), as described below and as illustrated at Figure 69.

- NCA 1:** Comprises predominantly high-rise commercial and residential receivers along Miller Street, Berry Street, Mount Street, Arthur Street and Walker Street. The subject site is located within NCA 1, and the nearest commercial receivers border the site in all directions. The nearest residential receiver is approximately 15 metres away, opposite Denison Street (Beau Monde Apartment building). The noise environment within NCA 1 is dominated by road traffic noise.
- NCA 2:** Comprises predominantly mixed-use premises with a number of single and double-storey semi-detached houses and multi-storey residential units. There are also a number of educational and commercial establishments. The nearest commercial receiver is across Berry Street to the north. The nearest residential receivers – multi-level residences along Berry Street – are located approximately 150 metres east of the site. Like NCA 1, the noise environment of NCA 2 is urban and dominated by road traffic noise.



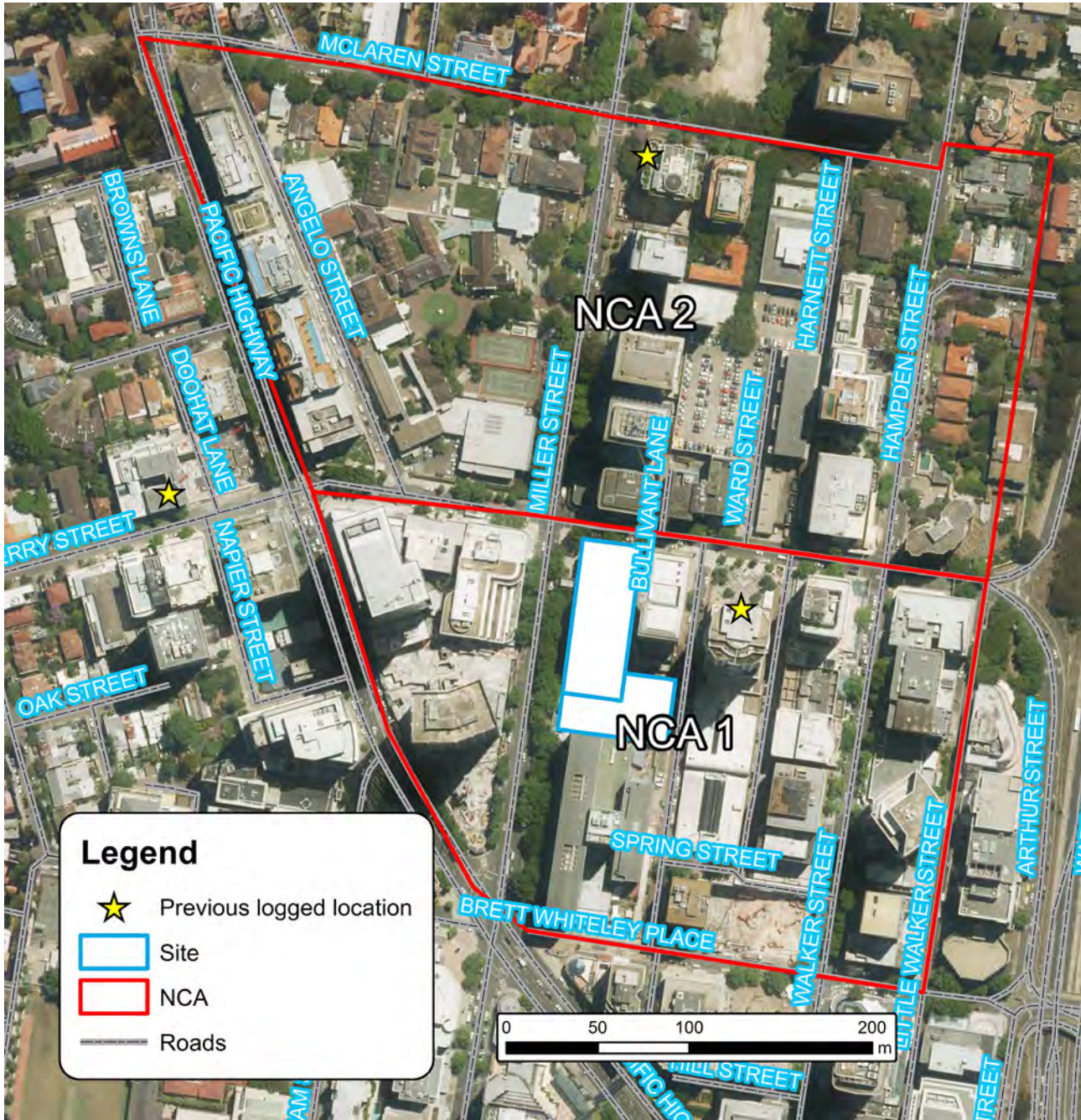


Figure 69 – NCA boundaries

Noise monitoring was conducted between 1 and 15 September 2015 as part of the EIS for the CSSI project. This noise monitoring is applicable to this concept SSD Application, as the results are not affected by the construction activities currently underway at the site. It is noted that as the OSD design develops, the local noise environment will be reviewed to account for the variations which are likely to occur due to current development, as well as potential differences between receivers located on the main roads and those facing rear lanes and side streets. The monitoring was carried out at three locations:

- Unit 3004, 77-81 Berry Street, North Sydney, which is representative of receivers in NCA 1
- 237 Miller Street, North Sydney, which is representative of residential receivers in NCA 2
- 12-16 Berry Street, North Sydney, which is considered representative of residential receivers off the main road in NCA 1 and NCA 2 for the purpose of the OSD Design Concept noise assessment.

The results of the modelling, in terms of Rating Background Levels (RBLs) are summarised in Table 30.

**Table 30 – Environmental noise emission assessment criteria for residential receivers**

Period	Existing RBL, L <sub>A90</sub> , dB(A)	Existing ambient, L <sub>Aeq</sub> , dB(A)	Overall cumulative development criteria <sup>1</sup>		Indicative OSD Design only criteria	
			Intrusiveness criteria, L <sub>Aeq 15 min</sub> , dB(A)	Amenity criteria, L <sub>Aeq period</sub> , dB(A)	Intrusiveness criteria, L <sub>Aeq 15 min</sub> , dB(A)	Amenity criteria, L <sub>Aeq period</sub> , dB(A)
<b>NCA 1 – residential receivers facing main road</b>						
Day	65	68	70	58	65	53
Evening	63	65	68	55	63	50
Night	52	62	57	52	52	47
<b>NCA 2 – residential receivers facing main road</b>						
Day	65	74	70	64	65	59
Evening	57	71	62	61	57	56
Night	51	67	56	57	51	52
<b>NCA 1 and 2 – residential receivers off the main road (rear-facing)</b>						
Day	55	61	60	60	55	55
Evening	50	55	55	50	50	45
Night	44	51	49	45	44	40

## 8.11.2 Environmental noise emission criteria

The environmental noise emissions criteria for the project have been based on Technical Paper 2: Noise and Vibration of the CSSI EIS, which references the *NSW Industrial Noise Policy* (INP). The INP was superseded by the *Noise Policy for Industry* (NPfI) on 27 October 2017. The Sydney Metro station and tunnel works were approved (CSSI Approval) prior to the publication of the NPfI. The CSSI EIS noted the likely provision of an OSD in the whole development. The INP applies to CSSI Approval, and the Integrated Station Development (ie. the Sydney Metro and OSD) will be designed to ensure that the combined noise emissions meet INP criteria. Accordingly, the INP has been adopted for the purposes of establishing environmental noise criteria for the concept OSD. Since the concept SSD Application post-dates the publication of the NPfI, for consistency, the OSD portion of the development has also been assessed against the NPfI criteria. This will also ensure that the INP approach adopted by the Sydney Metro will not result in OSD exceedances of the project trigger levels set in accordance with the new Policy.

The noise criteria are summarised in Table 30. The criteria have been adjusted to allow for an equal distribution of the criteria between the station, running tunnel and OSD, which allows each component to contribute equally to noise emission levels but maintain compliance with the overall cumulative noise criteria. All criteria will be reviewed and refined during the development of the OSD detailed design, to ensure that variations in the local environment are adequately considered.

## 8.11.3 Noise and vibration impacts during construction

As discussed in Chapter 4.11, three potential staging scenarios have been identified for delivering the Integrated Station Development:

- Scenario 1: concurrent metro and OSD construction
- Scenario 2: OSD construction continues after metro opening
- Scenario 3: OSD construction starts after metro opening.

In order to assess noise impacts relevant to each scenario, TfNSW's technical advisor has created a model to represent the worst-case scenario for impacts of construction activities both for the station and the tower.

The noise management levels used to inform the modelling were determined using the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009). Additionally, the *Guideline for Child Care Centre Acoustic Assessment* (Association of Australian Acoustical Consultants, 2013) was used specifically to determine noise management levels for the childcare centre within the neighbouring development at 65 Berry Street (should it remain in operation).

The modelling showed that compliance with the relevant criteria was achieved across all residential receivers for all construction activities, while a number of potential exceedances were identified for non-residential receivers in regard to both the podium and tower construction activities.

Recommendations for mitigating impacts are outlined below.



#### **8.11.4 Noise emission during operation**

The predicted maximum percentage increase in traffic flow from the Integrated Station Development corresponds to an increase of less than 1 dB(A), which complies with the Environmental Protection Authority's NSW Road Noise Policy criteria. Therefore, the predicted impact of noise from vehicles arriving at and leaving the development would be insignificant.

Noise emission from vehicle movements within the car park and loading dock would be sufficiently attenuated by the development structure to comply with the relevant criteria.

The mechanical and electrical services plant for the future OSD has the potential to cause acoustic impacts and would need to be assessed during the detailed SSD Application stage. However, it is anticipated that standard acoustic treatments outlined in section 8.11.7 would be sufficient to meet the relevant criteria.

Sleep disturbance due to operation of the OSD would also need to be assessed during the detailed SSD Application stage. However, it is anticipated that standard acoustic treatments outlined below in section 8.11.7 would be sufficient to meet the relevant criteria.

Mechanical plant associated with the future OSD has the potential to cause vibration impacts and would need to be assessed during the detailed SSD Application stage. Recommendations for plant treatments and selection are outlined in section 8.11.7.

#### **8.11.5 Traffic noise intrusion**

Traffic noise from the surrounding road network has the potential to affect the amenity of occupants of the future OSD. However, the façade of the building, of which the main component would be glazing, is expected to sufficiently mitigate the noise intrusion from traffic and can be further considered at the detailed SSD Application stage.

#### **8.11.6 Ground-borne rail noise and vibration**

The isolation of noise and vibration from the metro trains will occur at the source, not within future OSD, and would adequately attenuate structure-borne rail-induced noise and vibration in the OSD to acceptable levels. [AA2]

Condition D9 of the CSSI Approval requires that a Track Attenuation and Operational Ground-borne Noise Review be prepared to specify design objectives for noise sensitive receivers and to predict ground-borne noise impacts. Condition D13 requires an Operation Noise and Vibration Monitoring Program to be prepared to confirm that the operational noise and vibration levels of the metro meet the design objectives required under Condition D9. In combination, the satisfaction of these conditions will ensure that ground-borne rail noise and vibration will not have an adverse impact on the future OSD.

## 8.11.7 Recommendations

### Noise emissions – construction

The Sydney Metro Construction *Noise and Vibration Strategy* (CNVS) has been developed to manage construction noise and vibration issues. The CNVS defines the strategies by which construction noise and vibration impacts are to be minimised on Sydney Metro projects and aims to provide a consistent approach to management and mitigation across the Sydney Metro projects.

The CNVS would be implemented to manage construction noise and vibration impacts for the delivery of the OSD where that delivery occurs concurrently with and up until completion of the station (i.e. construction Scenarios 1 and 2). For Scenario 3 (i.e. an OSD developed at some stage in the future beyond the completion of the station), the construction-related noise and vibration impacts would be managed in accordance with the applicable guidelines/standards that apply at the time and any relevant conditions of consent.

### Noise emissions – operation

Should entry/exit warning systems be required for safety purposes at the car park access point, the use of audible warning devices should be avoided and visual warning devices used instead.

In regard to sleep disturbance caused by noise emissions, it is expected that standard acoustic treatments would be sufficient to meet the relevant criteria, such as: testing of emergency equipment, such as generators, during daytime periods.

In regard to noise emissions from mechanical and electrical services plant, it is expected that standard acoustic treatments would be sufficient to meet the relevant criteria, such as:

- acoustic barriers around roof top plant
- robust construction of plant rooms
- acoustic louvres to some plant room openings
- acoustic attenuators incorporated into mechanical ductwork
- acoustic mufflers incorporated into generator exhaust systems
- internal lining of ductwork
- selection of low-noise plant
- acoustic isolation mounts.

In regard to potential vibration impacts caused by building mechanical plant, all major equipment should be mounted on isolation mounts. A number of detailed measures to be adopted for mounting the plant can be found in the Noise and Vibration Impact Assessment Report (Appendix N).

## 8.12 Wind impacts

A Wind Impact Assessment Report (Appendix M) has been prepared to identify wind sensitive locations around the site and to recommend mitigation measures for the future detailed SSD Application.

As the concept SSD Application seeks approval for a building envelope, TfNSW's technical advisor has recommended that wind tunnel testing be conducted during the detailed SSD Application stage. Wind tunnel testing has not been conducted at this concept SSD Application stage, as the final wind environment (post-development) will be a function of the detailed design of the entire Integrated Station Development (ie. station and OSD) including the building's articulation, façade design, awning locations etc. Given the potential for the design of the OSD to change as a result of TfNSW's procurement process for the delivery of the Integrated Station Development, it is recommended that the detailed wind tunnel testing of the OSD be deferred to the detailed SSD Applications stage. At the detailed SSD Application stage, the design of the station box would also be suitably resolved and accurate wind tunnel testing and assessment against the Lawson wind comfort criteria can be prepared for the entire Integrated Station Development, having specific regard to the final ground plane design and architectural resolution.

Having regard to the above, the Wind Impact Assessment Report provides a high-level desktop study of likely wind conditions around the proposed OSD and the surrounding streets.

Based on the indicative OSD building design, the following locations have been identified as potentially sensitive to wind flows and are considered further below:

- along Miller Street
- along Berry Street
- along Denison Street
- through-site link between Miller and Denison Streets
- lower mid-rise, upper mid-rise and high-rise roof terraces

### 8.12.1 Impacts along Miller Street

Based on the preliminary wind impact assessment undertaken, conditions along Miller Street are expected to be suitable for leisure walking at a minimum, with the area directly outside the front of the building entry suitable for short periods of sitting or standing.

Southerly and northerly winds are likely to channel along Miller Street with relatively few obstructions to divert winds. However, it is considered that construction of the OSD is unlikely to exacerbate these winds.

### 8.12.2 Impacts along Berry Street

Based on the preliminary wind impact assessment undertaken, conditions along Berry Street are expected to be suitable for leisure walking at a minimum, with the area directly outside the front of the building entry suitable for short periods of sitting or standing. Westerly winds are likely to be deflected around the western facade of the development, resulting in accelerated wind speeds along Berry Street.



### 8.12.3 Impacts on the pedestrian through-site link

Based on the preliminary wind impact assessment undertaken, conditions through the through-site-link are expected to be suitable for long periods of sitting or standing, the most stringent category in the relevant criteria. The entrance to the walkway on Miller Street is likely to be relatively well-sheltered by the buildings to the west of the site. However, there is a risk that westerly winds would be deflected by taller buildings (177 Pacific Highway and 100 Miller Street) and channeled through the through-site-link, causing discomfort.

### 8.12.4 Impacts on the roof terraces

Based on the preliminary wind impact assessment undertaken, the Level 3 roof terrace is expected to be suitable for short periods of sitting or standing, though exposure would generally be by choice and easily avoidable. Like the pedestrian through-site link, the terrace is relatively sheltered but is at risk from winds deflected by, and channeled between 177 Pacific Highway and 100 Miller Street.

It is expected that the higher roof terraces would also be suitable for short periods of sitting or standing, though exposure would be easily avoidable. These higher terraces would be generally more exposed than the lower Level 3 Terrace, and therefore conditions would likely be less comfortable.

### 8.12.5 Recommendations

The Wind Impact Assessment Report recommends that detailed computational assessment and wind tunnel testing be conducted as part of the detailed SSD Application stage in order to identify wind impacts accurately and to assess the suitability of mitigation measures in accordance with the Lawson wind comfort criteria.

A number of preliminary mitigation measures have been identified as part of the assessment. These preliminary mitigation measures are detailed below and should be considered and developed during the detailed SSD Application phase once the final building design is known and the wind tunnel testing has been conducted:

- In regard to Miller Street, awnings at low levels should be provided to protect pedestrians from downwash effects. Tall canopied trees would also provide overhead protection, though effectiveness would be largely dependent on the species and maturity. It is anticipated that these measures would be implemented as part of ground level works under the CSSI Approval. Accordingly, future wind tunnel testing for the OSD would need to take into account the detailed design of the station and its wind mitigation treatments.
- In regard to Berry Street, trees and low level planting are recommended to provide protection. It is anticipated that such plantings would be implemented as part of the ground level works under the CSSI Approval. Accordingly, future wind tunnel testing for the OSD would need to take into account the detailed design of the station and its wind mitigation treatments.
- For the roof terraces, balustrades of at least 1.6m (and potentially taller) are recommended to provide protection to users.

## 8.13 Public benefits, contributions and voluntary planning agreement

The future OSD at the site would be subject to North Sydney Council's contributions requirements under *North Sydney Section 94 Contributions Plan (2013)*. The plan levies a contribution against new development within North Sydney CBD, including commercial development, to assist in funding public facilities, amenities and services to meet the needs of the increase in workforce population.

For commercial development, the contributions plan calculates the levy according to the increase in workers, assuming an average of 20 square metres of gross floor space per employee. The levy is determined by multiplying the per-worker cost of each service by five, giving a levy per 100 square, which would then be applied to the increase in commercial floor space.

The application of the levy is not relevant at the concept stage but rather would be resolved in the determination of the detailed SSD Application when the precise floorspace of the OSD is known.

The SEARs require that *“any additional contributions proposed or material public benefits associated with any floor space above existing planning controls”* be addressed in the EIS. It is noted that floor space controls (ie. floor space ratios) do not apply to commercial development in the North Sydney Centre pursuant to NSLEP 2013. The quantum of floor space proposed in this application is considered to be reasonable and appropriate, in that it would result in a built form outcome that is context appropriate to its CBD location, reflects the current market conditions and Council's strategic vision of the North Sydney Centre. This being the case, no additional contributions or material public benefit is considered relevant to this application.

Further to the above, no Voluntary Planning Agreement is proposed with this concept SSD Application and there is no other legally binding instrument agreed between any public authorities in relation to this concept proposal.

## 8.14 Crime prevention through environmental design assessment

A Crime Prevention Through Environmental Design (CPTED) Assessment Report (Appendix R) has been prepared to assess the proposed building envelope and indicative OSD design against the key CPTED principles including surveillance, territorial reinforcement, space management and access control.

### **Surveillance**

The indicative OSD design provides ample opportunity to incorporate natural surveillance, particularly at the retail and lobby areas at ground level. Effective natural surveillance (ie. where the risk of crime detection and apprehension is enhanced through high levels of visibility) in these locations can be achieved through the use of extensive glazing to the facades. Additional opportunities for natural surveillance would be provided by the station entry, the through-site link and retail areas under the CSSI Approval.

### **Territorial reinforcement**

The lobby and retail uses proposed as part of the OSD indicative design are clearly defined by their use of separate entries, which are distinct from the station uses. This clear delineation between OSD and non-OSD space would provide strong territorial cues to users. It is expected that a concierge desk and potentially access-controlled gates would be provided in the OSD lobby, providing clear indication of the private nature of the OSD use.

Differentiation in architectural design and materials would further assist the delineation between private OSD and public station uses.

### **Space management**

Maintenance of the future OSD would be the responsibility of the owners of the various stratum lots. A building management committee is required to manage spaces shared between lot owners and is one potential space management measure. Other potential measures for achieving effective space management include activity coordination, site cleanliness, rapid repair of vandalism, quick replacement of lighting and refurbishment of physical elements. These can be further considered at the detailed SSD Application stage.

### **Access control**

The concept proposal provides sufficient opportunity for effective access control. Pedestrian access to the OSD would be controlled through the use of a separate lobby area distinct from the public uses associated with the station. It is anticipated that this lobby would feature a concierge desk and potentially access-controlled gates. Access to the OSD retail area would be similarly controlled via separate entrances.

The indicative OSD design (Appendix E) illustrates how these key principles can be achieved. In particular, the design exhibits active uses and extensive use of the glazing at ground level, which increases surveillance opportunities.

### 8.14.1 Recommendations

The CPTED Assessment Report makes a number of recommendations to guide the detailed design of the OSD, including the following:

- entry points should be designed so as to maximise surveillance opportunities to and from these areas
- clear sightlines should be maintained between the development and the public domain, particularly around entries
- consideration should be given to the orientation of entry points to improve natural vantage points and potential guardianship from neighbouring developments and surrounding public domain
- future design should consider and seek to minimise potential concealment or entrapment areas
- there should be appropriate wayfinding and identification signage within and around the building in order to aid legibility and promote territorial reinforcement
- blind bends and corners should be avoided in building corridors and walkways whenever possible; and where they cannot be avoided, surveillance can be enhanced through the use of vandal resistant mirrors, windows, and bright, evenly distributed lighting
- lighting should be designed to the Australian and New Zealand Lighting Standards and appropriate for users and activities of the area
- landscaping should be used to enhance the appearance of the development and assist in reducing opportunities for vandalism
- landscaping should seek to maintain sightlines at eye level
- some type of formal access control, such as security gates or swipe cards, should be considered to restrict unwanted guests
- a maintenance plan should be put in place to ensure ongoing maintenance of the building, open space areas and the public domain connections

These recommendations and CPTED principles will be further considered in the detailed SSD Application and its design integration with the station.

As the concept SSD Application does not include any public domain works, it is worth noting that the incorporation of CPTED principles in the final design of the public domain and station areas of the Integration Station Development will be through the CSSI Approval and specifically, resolved through the preparation of the SDPP required by Condition E101 of that Approval. *The Sydney Metro City & Southwest- Chatswood to Sydenham Design Guidelines* (June 2017) also require that the CPTED principles inform the station design and furthermore, that a Crime Risk Assessment audit be applied to the precinct design to ensure compliance with the CPTED principles.

## 8.15 Waste management

A Waste Strategy Report (Appendix U) has been prepared to provide a framework for waste management during the construction and operation phase for the OSD. The Waste Strategy Report includes an assessment of the waste generation and storage requirements of the future OSD (and station retail), based on the proposed maximum GFA and then references the indicative OSD design in order to demonstrate compliance.

The report aligns with the *Sydney Metro City & Southwest Sustainability Strategy 2017-2024*, which sets out a clear vision for the Sydney Metro City & Southwest project to demonstrate best-practice environmental, social and economic outcomes in delivery and operation. The Strategy indicates that for OSD, Sydney Metro will be seeking to achieve site specific responses to the project's sustainability objectives, which include waste minimisation through the project life-cycle.

### 8.15.1 Construction phase

The Waste Strategy Report identifies a number of objectives for the management of waste during construction works based on the broader objectives of the *Sydney Metro City & Southwest Sustainability Strategy* and Sydney Metro Construction Environmental Management Framework, including:

- minimise waste throughout the project lifecycle
- Implement waste management strategies in accordance with the *Waste Avoidance and Resource Recovery Act 2001*
- maximise the recycling and reuse of recyclable construction and demolition waste
- maximise the recycling and reuse of office waste generated during the construction phase

Based on the above, the construction of the OSD is anticipated to have predictable and manageable waste impacts, subject to implementation of the appropriate management measures. In this regard, the Waste Strategy recommends that the Principal Construction Contractors develop and implement a Waste Management Plan which incorporates relevant waste management and recycling mitigation measures, including the adoption of industry best practice construction techniques to ensure that minimum waste volumes are generated during construction works, and for all waste removed from the site to be appropriately tracked using waste tracking dockets.

### 8.15.2 Operation phase

The future OSD is anticipated to have acceptable waste impacts during operation of the building, subject to implementation of an appropriate Waste Management Plan (WMP) as described in the recommendations below.

The Waste Strategy Report identifies waste streams and approximate quantities for future OSD (and station retail) and uses this information to provide recommendations for waste bin sizes and quantity and waste storage areas. The future detailed SSD Application would build on these recommendations and provide more certainty in regard to waste generation, ensuring that future development complies with relevant waste management controls and guidelines.

Based on the indicative OSD design, the Waste Strategy Report identifies four waste storage areas within Basement 1 – three storage rooms for OSD use and one for retail use (both station retail and OSD retail). The strategy proposes that waste from the point of generation would be transported to the relevant storage room in Basement 1 by a caretaker via the service lifts at the end of each day. From the storage rooms, waste would be transported to the loading dock by the caretaker using a bin tug for collection each day. Waste would then be transported off-site by a private contractor for recycling or disposal. It is anticipated that rear loading MRV collection vehicles would be used to collect waste from the site.

The following waste minimisation techniques for operational use have been identified:

- improved operation and maintenance practices to reduce the quantity of resources used and to minimise the amount of waste generated
- application of most efficient processes to ensure resourcefulness in the use of energy, water, and natural resources
- identification and selection of energy efficient equipment at procurement
- minimisation of waste generated in day-to-day operations and ensuring that process residues are re-used where possible or recycled
- safe storage and disposal of residual waste and process residues ensuring least amount of harm to surrounding environment
- promotion of safe handling procedures of products in line with regulations and industry best practices.

These above techniques will be further developed as part of a future detailed SSD Application.

### 8.15.3 Recommendations

#### Construction phase

A Waste Management Plan should be prepared as part of the Construction Environment Management Plan in accordance with provisions of *Sydney Metro Construction Environmental Management Framework* up until completion of the Victoria Cross Station. Beyond that time, a separate Construction Waste Management Plan should be prepared in accordance with best practice guidelines.

Details regarding impacts to be managed during construction are to be submitted as part of the detailed SSD Application and should include:

- the waste management and recycling mitigation measures as detailed in the Waste Management Strategy prepared for this concept SSD Application
- the responsibility of key project personnel with respect to implementation of the plan
- waste management and recycling monitoring requirements
- procedures for the assessment, classification, management and disposal of waste in accordance with the *NSW EPA Waste Classification Guidelines* (EPA, 2014)
- compliance record generation and management



### Operation phase

A Waste Management Plan for the operation phase should be prepared and submitted as part of the detailed SSD Application addressing the following:

- relevant legislative and Council requirements
- type of waste to be generated
- expected volume per week
- proposed on-site storage and treatment facilities
- destination of waste
- information about the ongoing management of waste on-site.

The plan should also address the objectives, principles and strategies outlined in the Waste Management Strategy prepared for this concept SSD Application.

## 8.16 Construction management

A Preliminary Construction Management Statement (Appendix V) has been prepared by TfNSW to address how future stages of the project would manage impacts to pedestrians, metro users, bus services and taxis. The statement considers the three construction scenarios outlined in Chapter 4.11, which are:

- *Scenario 1:* OSD constructed while metro construction is underway
- *Scenario 2:* OSD construction may still be occurring after commencement of metro station operations
- *Scenario 3:* OSD construction starts after commencement of metro station operations.

The OSD construction management statement proposes that construction would generally occur in accordance with the following:

- Metro contract requirements and relevant standards
- Construction Traffic Haulage Routes (in accordance with the CSSI Approval)
- Construction Traffic Management Framework (in accordance with the CSSI Approval)
- Relevant traffic management methodologies and procedures approved previously for the site (and associated with CSSI works)
- Construction analysis assumes that traffic flow in Denison Street is one-way north bound in all scenarios.

The identified risks and proposed mitigation strategies for each construction scenario is outlined in the Table 31.

Table 31 – Construction management risks and mitigation strategies

Impact type	Risks	Mitigation
<b>Scenario 1</b>		
<b>Pedestrians</b>	Risk higher than in other scenarios due to concurrent construction activities.	Number of construction driveways should be reduced. Specific measures would need to be put in place to manage pedestrians on all three frontages.
<b>Metro users</b>	No notable risk, as construction for both projects would be completed upon commencement of metro services.	Not applicable.
<b>Bus users</b>	Moderate to high risk that construction activities would impact bus operations along Miller Street.	Bus interchange prior to metro opening is planned to continue in Miller Street using existing bus stops north of the Pacific Highway intersection. Number of construction driveways should be reduced to avoid pedestrian conflict and encroachment into this bus zone.
<b>Taxis</b>	Existing single taxi zone in Miller Street would likely be displaced.	A replacement taxi zone would need to be provided in the immediate vicinity.
<b>Scenario 2</b>		
<b>Pedestrians</b>	Risk to pedestrians lower than Scenario 1 given completion of ground level construction.	Clear segregation of construction activity would be required. A Pedestrian Management Plan would need to be prepared and implemented. Restrictions on heavy vehicle access during the AM and PM peak may be required.
<b>Metro users</b>	Risk to metro users greater than Scenario 1 due to ongoing OSD construction.	Clear segregation of construction activity would be required.
<b>Bus users</b>	OSD construction vehicle activity and higher Metro-generated bus activity would coincide.	Bus interchange for the new metro station would occur as per scenario 1. Numbers of construction driveways should be reduced as per Scenario 1.
<b>Taxis</b>	As per Scenario 1.	As per Scenario 1.
<b>Scenario 3</b>		
<b>Pedestrians</b>	Risk similar to Scenario 2, as OSD construction is occurring after metro has opened.	As per Scenario 1.
<b>Metro users</b>	As per Scenario 2.	As per Scenario 2.
<b>Bus users</b>	As per Scenario 2.	As per Scenario 2.
<b>Taxis</b>	As per Scenario 1.	As per Scenario 1.

Notwithstanding the above construction scenarios, the OSD developer will determine the timeframe for construction of the OSD and document the relevant construction management and mitigation measures in a Construction Management Plan (CMP) to be provided with the future detailed SSD Application. This will include the refinement and implementation of the mitigation measures detailed in the Preliminary Construction Management Statement (as relevant). Further consultation with the Sydney Coordination Office and RMS will occur during the preparation of the CMP.

Refer to further detailed in Chapter 11 of this EIS which sets out how TfNSW proposes to manage the environmental impacts associated with delivery of the OSD under the three-construction scenario identified above.

## 8.17 Accessibility

An Accessibility and DDA Impact Statement (Appendix X) has been prepared to assess whether the indicative OSD design is capable of achieving compliance with key legislative requirements. The scope of the assessment includes consideration of the OSD space provisioning in the indicative OSD design. However, the assessment excludes the outdoor landscaped spaces and access ways, Metro station areas and retail areas that would be designed and delivered under the terms of the CSSI Approval.

The accessibility assessment has found that all areas assessed comply or are capable of complying with relevant requirements including Disability Discrimination Act, the Building Code of Australia 2016 and the relevant Australian Standards. This is considered sufficient from an accessibility perspective for enabling a planning determination at this concept proposal stage.

### 8.17.1 Recommendation

Accessibility would be assessed further during the future detailed SSD Application stage and a detailed assessment would be submitted with the future SSD Application.

No mitigation measures have been identified at this concept stage.

## 8.18 Reflectivity

The future OSD has potential to cause reflectivity glare on motorists and pedestrians. However, no physical built form is proposed as part of this concept SSD Application, and therefore reflectivity impacts have not been considered in detail in this EIS.

The detailed design of the future OSD would be required to confirm the façade treatment, and the impact of this treatment in terms of solar reflectivity glare to motorists, pedestrians and surrounding properties. A requirement that the visible light reflectivity from building materials not to exceed 20% has been included in the project specific Design Guidelines (Appendix CC). Compliance with this requirement would need to be demonstrated in the future detailed SSD Application.

### 8.18.1 Recommendation

The future detailed SSD Application demonstrate that no adverse reflectivity glare will result from the building design and building materials selection and that the visible light reflectivity from building materials not exceed 20%.

## 8.19 Signage

As discussed at Chapter 4.16 of the EIS, four indicative signage zones are proposed as part of this concept SSD Application – two at the top of the building on the south and east elevations for building naming rights and two for tenant identification associated with the commercial lobby facing Miller Street and the retail tenancy facing Berry Street. An assessment of the signage zones against Schedule 1 of SEPP 64 is provided in Table 32 below. An assessment against the relevant provision in the North Sydney DCP 2013 is also included at Appendix HH.

**Table 32 – Assessment against Schedule 1 of SEPP 64- Advertising and Signage**

Criteria	Comment
<p>(1) <i>Character of the area</i></p> <ul style="list-style-type: none"> <li>● Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?</li> <li>● Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?</li> </ul>	<p>The proposed indicative signage zones would allow for future signage which is typical of and compatible with the CBD context and is compatible with the desired future character for the CBD (as detailed in North Sydney DCP 2013, as amended). A large number of the surrounding commercial towers feature top-of-building and lobby signage similar to that proposed.</p> <p>There is no particular theme for outdoor advertising in the area.</p>
<p>(2) <i>Special areas</i></p> <ul style="list-style-type: none"> <li>● Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?</li> </ul>	<p>The site is not located within an environmental sensitive area, heritage area or other notable special area. In this regard, it is not considered that the proposed indicative signage zones would detract from the larger Sydney Harbour visual catchment and as detailed above, would allow for future signage that is similar to the signage on other surrounding commercial developments in the North Sydney CBD.</p>
<p>(3) <i>Views and vistas</i></p> <ul style="list-style-type: none"> <li>● Does the proposal obscure or compromise important views?</li> <li>● Does the proposal dominate the skyline and reduce the quality of vistas?</li> <li>● Does the proposal respect the viewing rights of other advertisers?</li> </ul>	<p>The proposed indicative signage zones are flush against the building facade and would not obscure or compromise any important view. Signage within the indicative zones would not dominate the skyline and is consistent with other surrounding signage in the CBD.</p>

Criteria	Comment
<p>(4) Streetscape, setting or landscaping</p> <ul style="list-style-type: none"> <li>● Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?</li> <li>● Does the proposal contribute to the visual interest of the streetscape, setting or landscape?</li> <li>● Does the proposal reduce clutter by rationalising and simplifying existing advertising?</li> <li>● Does the proposal screen unsightliness?</li> <li>● Does the proposal protrude above buildings, structures or tree canopies in the area or locality?</li> <li>● Does the proposal require ongoing vegetation management?</li> </ul>	<p>The proposed indicative signage zones are of a scale, proportion and form which are appropriate to the CBD context. The signage would not protrude above the building and would not require ongoing vegetation maintenance.</p>
<p>(5) Site and building</p> <ul style="list-style-type: none"> <li>● Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?</li> <li>● Does the proposal respect important features of the site or building, or both?</li> <li>● Does the proposal show innovation and imagination in its relationship to the site or building, or both?</li> </ul>	<p>The proposed indicative signage zones are appropriately scaled and located so as not to compromise the building's overall design. As demonstrated in the indicative OSD design (Appendix E), the signage would not detract from the key features of the building, such as the stepped terraces, stepped Miller Street setback or the station-OSD interface.</p>
<p>(6) Associated devices and logos</p> <ul style="list-style-type: none"> <li>● Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?</li> </ul>	<p>Further details of the signage, including any devices and logos, would be included in the future detailed SSD Application.</p>

Criteria	Comment
<p>(7) Illumination</p> <ul style="list-style-type: none"> <li>● Would illumination result in unacceptable glare?</li> <li>● Would illumination affect safety for pedestrians, vehicles or aircraft?</li> <li>● Would illumination detract from the amenity of any residence or other form of accommodation?</li> <li>● Can the intensity of the illumination be adjusted, if necessary?</li> <li>● Is the illumination subject to a curfew?</li> </ul>	<p>It is anticipated that future signage within the proposed indicative signage zones, if illuminated, would not cause any unacceptable glare or any other adverse safety or amenity impacts. Illumination details would be provided with the future detailed SSD Application.</p>
<p>(8) Safety</p> <ul style="list-style-type: none"> <li>● Would the proposal reduce the safety for any public road?</li> <li>● Would the proposal reduce the safety for pedestrians or bicyclists?</li> <li>● Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?</li> </ul>	<p>The indicative signage zones are proposed to be flush against the building facades and would not extend over any road or obstruct any sightlines from public areas.</p>

### 8.19.1 Recommendation

A detailed assessment of building signage should form part of the future detailed SSD application and include an assessment of the relevant provisions in SEPP 64 and the signage guidelines included in the project specific Design Guidelines (Appendix CC), which require that future signage is to comply with the following requirements:

- to respond to and complement the architectural design of the building and contribute positively to the appearance of the building, the streetscape and the CBD skyline
- to not conceal or detract from integral architectural features or cover any mechanical ventilation systems
- include a signage strategy providing the location, dimension, illumination and types of signage proposed on the building. The signage strategy should ensure signage is of high quality, integrated with the overall building design, and compatible with, whilst not detracting from, the broader Sydney Metro Station Wayfinding Strategy.

Subject to compliance with the above, it is considered that the signage zones are an appropriate component of the concept proposal and that the inclusion of signage in the future detailed SSD application will be compatible with and complementary to its CBD context.



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# **SOCIAL AND ECONOMIC IMPACTS**

CHAPTER NINE



# 9. Social and economic impacts

## 9.1 Economic benefits

North Sydney Centre has over 800,000 square metres of commercial floor space and is Sydney's third largest commercial centre (behind the Sydney CBD and Macquarie Park/North Ryde). It caters for a workforce of over 45,000 and is the predominant contributor to the North Sydney local government area's gross regional product. Robust tenant demand for commercial floor space in combination with limited new supply has caused a decline in office vacancy rates in the centre. In the six-month period from January 2017 to July 2017, the overall vacancy rate fell from 7.3 percent to 6.4 percent, which is well below the North Sydney average over the past 16 years.

Another challenge faced by the North Sydney office market is a lack of prime office stock and the encroachment of non-commercial development (as outlined in North Sydney Commercial Centre Study (Urbis, 2015) and North Sydney Economic Development Strategy (SGS Economics and Planning, 2016).

Furthermore, from a retail perspective, North Sydney is significantly undersupplied. As noted in the Retail and Commercial Office Strategy (Appendix DD), retail comprises approximately four percent of all combined commercial and retail floor space. This is considerably lower than the other major commercial centres in the Sydney metropolitan area.

A new commercial OSD at Victoria Cross would address these challenges by placing up to 60,000 square metres of high quality commercial floor space (including office and retail uses) in a highly accessible location within North Sydney's commercial core. This floor space would replace floor space lost through demolition of the site's buildings and contribute significant additional floor space, providing an appropriate response to the market conditions and needs identified above.

The proposed building envelope has been designed to accommodate A-grade floorplates at each level, which would help elevate North Sydney's status as a top office market. It is anticipated that the OSD would host highly-skilled, knowledge-intensive jobs, which would add to the agglomeration effects of North Sydney's commercial core. Additionally, future workers in the OSD would increase the customer base for local businesses and help support the local economy.

It is estimated that the floor space proposed in this concept SSD Application has the capability to accommodate approximately 4,200 workers during operation, providing long-term employment benefits to the area. The construction stage of the project would generate short-term economic benefit through the addition of an estimated 600 jobs.

Having regard to the above, it is considered that the future OSD would result in positive economic benefits for the North Sydney CBD and the broader Sydney Region. For additional discussion on these matters, refer to the Retail and Commercial Office Strategy at Appendix DD.

## 9.2 Social impacts

The OSD would have positive social impacts in that it would contribute to the creation of an Integrated Station Development, which would form a welcoming and inclusive focal point for the community with new places to work, shop and socialise. The new pedestrian connections and high quality outdoor spaces would add to the vibrancy of the area and encourage healthy, sustainable modes of transport such as walking and cycling.

The OSD would also support and strengthen the role of Miller Street as North's Sydney's civic thoroughfare. The OSD would maintain solar amenity to the key landscaped areas along Miller Street and integrate with improvements to the public domain.

As demonstrated throughout this EIS, the OSD would have overall minor impacts, and appropriate strategies and mitigation measures can be applied to manage these impacts (refer to Chapters 12 and 13 for a summary discussion of the identified impacts and proposed mitigation measures).

# **SITE SUITABILITY AND PUBLIC INTEREST**

CHAPTER TEN





# 10. Site suitability and public interest

## 10.1 Site suitability

Overall, the concept proposal is considered suitable for the site in that:

- it is permissible in the **B3 Commercial Core** zone pursuant to NSLEP 2013 and would deliver additional A-grade commercial floor space in the commercial core of the CBD
- it is compatible with the existing locality and built form which predominantly comprises medium to high rise commercial office buildings
- it is centrally located in North Sydney CBD and is accessible to existing and future amenities and transport, in particular the future Victoria Cross Station
- it would be physically integrated with the future Victoria Cross Metro station in a single Integrated Station Development, which would serve as a new focal point for the community with new places to work, shop and socialise
- it does not create unreasonable adverse impacts on nearby residential properties in terms of privacy or views
- it respects and improves the amenity of nearby heritage items through appropriate height, setbacks, transitions and scale

## 10.2 Public interest

Overall, the concept proposal is considered to be in the public interest in that it would:

- support the concept of a '30 minute' city envisioned in the Greater Sydney Region Plan by co-locating commercial premises with rapid transit infrastructure
- strengthen and complement the commercial core of North Sydney CBD
- provide significant short-term construction employment opportunities (600 jobs) and significant long-term employment opportunities during operation (4,200 workers)
- be coordinated and integrated with existing and planned public domain improvements
- provide a landmark commercial building with high quality architectural design that will positively contribute to the North Sydney skyline
- respect nearby heritage items, in particular the MLC Building and the Rag & Famish Hotel
- maintain the solar amenity to Miller Street and Greenwood Plaza Special Areas, and to Brett Whiteley Plaza
- not unreasonably reduce the solar amenity of dwellings outside of the CBD.

In consideration of the above, the concept SSD Application is demonstrably in the public interest.

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# **FRAMEWORK FOR MANAGEMENT OF DESIGN AND ENVIRONMENTAL IMPACTS**

CHAPTER ELEVEN



# 11. Framework for management of design and environmental impacts

Given the potential for the delivery of the Metro station to be integrated with an OSD development, TfNSW has given consideration to the management of impacts associated with the project.

The approach to environmental mitigation and management identified for the CSSI Approval is illustrated in Figure 69 and includes:

- project design – measures which are inherent in the design of the project to avoid and minimise impacts
- mitigation measures – additional to the project design which are identified through the environment impact assessment
- construction environmental management framework – details the management processes and documentation for the project
- construction noise and vibration strategy – identifies measures to manage construction noise and vibration.
- design guidelines – provides an assurance of end-state design quality
- environmental performance outcomes – establishes intended outcomes which would be achieved by the project.

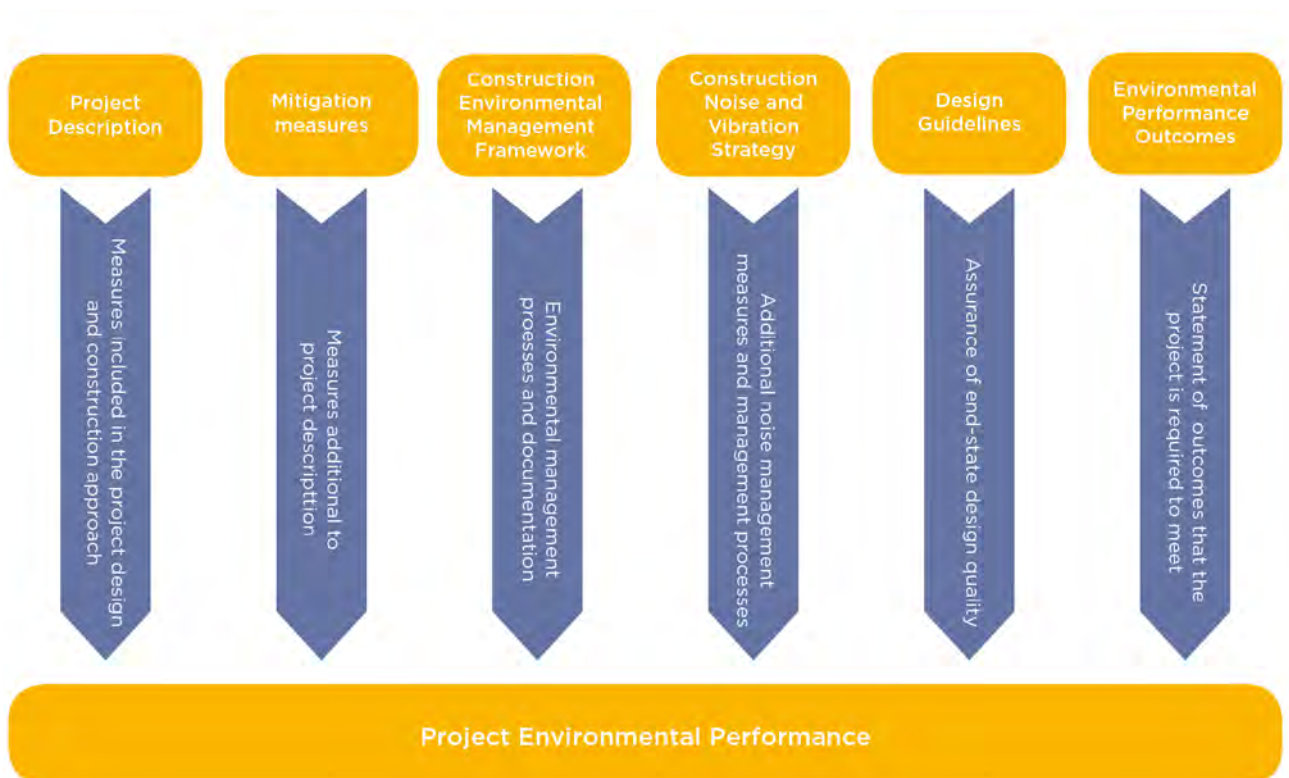


Figure 69 – Project approach to environmental mitigation and management

The EIS documentation for the Sydney Metro City & Southwest project identified that the construction environmental management framework, construction noise and vibration strategy and design guidelines for the station would be reviewed and updated periodically throughout delivery of the project.



TfNSW proposes that the delivery of the CSSI station works and the OSD be subject to a similar environmental management framework up until the point of completion of the station to ensure a consistent approach. The applicability of this framework to the various components of the Integrated Station Development is detailed in the Table 33 below.

**Table 33 – Environmental management framework for the integrated station development**

	CSSI Approval	Concept SSD Application	Detailed SSD Application(s)
<b>Project Description</b>	As detailed in EIS, PIR and subsequent modification reports and Conditions of Approval (CoA). Covers both construction and end state /operation.	Building envelope, maximum floor space, use and measures/ requirements to guide detailed design as described in the EIS.  Concept design and high-level consideration of construction.	Detailed design and supporting information in EIS, including its design and construction.
<b>Mitigation Measures</b>	As detailed in EIS, PIR and subsequent modification reports and CoA.	Mitigation measures proposed in EIS to be taken into account in detailed design/ SSD Application.	Project specific mitigation measures would be detailed in EIS to manage design requirements and construction related impacts.
<b>Construction Environmental Management Framework</b>	Appended to EIS and referred to in CoA, therefore requirement in delivery of project.	Commitment to implementation of <i>Construction Environment Management Framework</i> (CEMF) requirements in the delivery of Integrated Station Development up until the point of completion of the station. These commitments are detailed as part of this EIS.  CEMF requires preparation of Traffic and Transport Management Plan.	Commitment to implementation of CEMF requirements in the delivery of Integrated Station Development up until the point of completion of the station. These commitments would be detailed as part of EIS.  Construction staging to be confirmed in the EIS. Where OSD construction is not concurrent with station construction, the OSD contractor would prepare a separate Construction Environmental Management Plan. Details would be submitted with the EIS.

	CSI Approval	Concept SSD Application	Detailed SSD Application(s)
Construction Noise and Vibration Strategy	Appended to EIS and referred to in CoA, therefore requirement in delivery of project.	Commitment to implementation of <i>Construction Noise and Vibration Strategy</i> (CNVS) in the delivery of Integrated Station Development up until the point of completion of the station. These commitments are detailed as part of this EIS.	Commitment to implementation of CNVS in the delivery of Integrated Station Development up until the point of completion of the station. These commitments would be detailed as part of EIS.  Where OSD construction is not concurrent with station construction, the OSD contractor would prepare a separate Construction Noise and Vibration Management Plan. Details would be submitted with the EIS.
Design Guidelines	Appended to EIS and referred to in CoA, therefore requirement in delivery of project.  Note also CoA E100 requires Design Review Panel (DRP) to review and refine design and CoA E101 requires Secretary approval of Station Design Precinct Plans (SDPPs).	Design Guidelines for OSD included as part of this EIS.  Design Excellence Strategy included as part of this EIS.  Concept proposal has been reviewed by DRP.  Commitment to ongoing review by DRP to manage interface between station/ public domain and OSD until completion of station.	Detailed design required to respond to Design Guidelines.  Detailed design subject to review by DRP.

	CSSI Approval	Concept SSD Application	Detailed SSD Application(s)
<b>Environmental Performance Outcomes</b>	As detailed in EIS, PIR and subsequent modification reports and Conditions of Approval (CoA). Covers both construction and end state /operation.	<p>This EIS includes the following to be met in development of design and construction methodology:</p> <ul style="list-style-type: none"> <li>noise and vibration criteria for both construction and operation stages</li> <li>noise and vibration mitigation measures</li> <li>Construction Environmental Management Statement</li> <li>heritage outcomes to be achieved through design (interface with CoA E101)</li> <li>issues and process to resolve traffic and transport impacts for design (interface with CoA E92 – IAP) and construction (CoA E77 - Traffic and Transport Liaison Group and CoA E82 – Construction Traffic Management Plans)</li> </ul>	<p>The EIS would address how environmental criteria have been met through design and provide detailed impact assessment together with mitigation measures.</p> <p>These measures would reflect commitments in Concept SSD EIS (refer Chapter 12) and where applicable to construction, would be applied up until the point of completion of the station. The detailed SSD Application would detail appropriate mitigation measures to be implemented to manage construction related impacts beyond completion of the station (in accordance with latest published Guidelines) and any relevant conditions of approval.</p>

## 11.1 Construction environmental management framework

The *Sydney Metro Construction Environmental Management Framework* (CEMF) has been reviewed to provide a framework for management of environmental impacts for the delivery of the OSD (refer Table 33 ), where that delivery occurs concurrently with, and up until, completion of the station (i.e. staging Scenarios 1 and 2). For staging Scenario 3 (i.e. an OSD developed at some stage in the future beyond the completion of the station), the construction related impacts would be managed in accordance with the applicable requirements at the time (e.g. through the implementation of an approved *Construction Environmental Management Plan*) and any relevant conditions of approval.

The practical application of the CEMF is as a linking document between planning approval documentation and construction environmental management documentation, which would be developed by the construction contractors.

The CEMF details the environmental, stakeholder and community management systems and processes for the construction of the project. Specifically, it details the requirements in relation to the Construction Environmental Management Plan, sub-plans and other supporting documentation for each specific environmental aspect.

## 11.2 Construction noise and vibration strategy

The *Sydney Metro Construction Noise and Vibration Strategy* (CNVS) has been developed to manage construction noise and vibration issues. The CNVS defines the strategies by which construction noise and vibration impacts are to be minimised on Sydney Metro projects and aims to provide a consistent approach to management and mitigation across the Sydney Metro projects. The CNVS would be implemented to manage construction noise and vibration impacts for the delivery of the OSD, where that delivery occurs concurrently with and up until the completion of the station (i.e. staging Scenarios 1 and 2). For staging Scenario 3 (i.e. an OSD developed at some stage in the future beyond the completion of the station), the construction related impacts would be managed in accordance with the applicable standards and controls that apply at the time (e.g. *Interim Construction Noise Guidelines*, DECC, 2009) and any relevant conditions of approval.

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# **ENVIRONMENTAL RISK ASSESSMENT**

CHAPTER TWELVE





# 12. Environmental risk assessment

This chapter provides an environmental risk assessment (ERA) of the development proposed under this concept SSD Application.

The ERA identifies all potential impacts, the significance of each impact, the manageability of each impact and any potential residual impacts following mitigation.

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

- the receiving environment
- the level of understanding of the type and extent of impacts
- 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
- the opportunity for adaptive management.

The sum of the significance and manageability values provides an indicative ranking (between 1 and 10) of the potential residual impacts after the mitigation measures are implemented, in accordance with the Risk Assessment Matrix in Table 34. An environmental risk assessment of the concept proposal is provided at Table 35. A full list of the mitigation measures is presented in Chapter 13 of this EIS.

The ERA has been adapted from Australian Standard *AS4369:1999 Risk Management and Environmental Risk Tools*.

**Table 34 – Risk Assessment Matrix**

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

Table 35 – Environmental Risk Assessment

Item	Phase	Potential Environmental Impact	Significance of impact	Manageability of impact	Residual impact
Visual and Views	Operation	<ul style="list-style-type: none"> <li>Visual/view impacts from surrounding streetscape and key vantage points</li> <li>View impacts on neighbouring residential building</li> </ul>	3	2	5 Low/ Medium
Overshadowing	Operation	<ul style="list-style-type: none"> <li>Increase in shadows to surrounding public domain and Special Areas</li> <li>Increase in shadows to surrounding residential properties including to the properties outside the North Sydney Centre</li> </ul>	2	2	4 Low/ Medium
Privacy	Operation	<ul style="list-style-type: none"> <li>Privacy impacts on neighbouring residential buildings</li> </ul>	2	2	4 Low/ Medium
Traffic and Transport	Construction	<ul style="list-style-type: none"> <li>Increased traffic on local roads</li> <li>Conflict with normal pedestrian and vehicle operations</li> </ul>	2	2	4 Low/ Medium
	Operation	<ul style="list-style-type: none"> <li>Increased traffic on local roads</li> </ul>	2	2	4 Low/ Medium
Aboriginal Heritage	Construction	<ul style="list-style-type: none"> <li>Potential impacts on Aboriginal places of significance</li> </ul>	1	2	3 Low
Non-Indigenous Heritage	Operation	<ul style="list-style-type: none"> <li>Impact on the significance of heritage items in the vicinity</li> </ul>	2	2	4 Low/ Medium
Noise and Vibration	Construction	<ul style="list-style-type: none"> <li>Increase in noise and vibration associated with construction including from vehicles and machinery</li> </ul>	3	2	5 Low/ Medium
	Operation	<ul style="list-style-type: none"> <li>Increase in noise and vibration associated with emissions from building plant and services</li> <li>Increase in noise associated with vehicle movements</li> </ul>	2	2	4 Low/ Medium
Infrastructure and utilities	Operation	<ul style="list-style-type: none"> <li>Adequate connection to infrastructure and utilities</li> <li>Adequate capacity to service building</li> </ul>	2	2	4 Low/ Medium
Flooding	Operation	<ul style="list-style-type: none"> <li>Potential flooding of development</li> <li>Adequate stormwater management for development</li> </ul>	4	2	6 Medium

Item	Phase	Potential Environmental Impact	Significance of impact	Manageability of impact	Residual impact
Reflectivity	Operation	<ul style="list-style-type: none"> <li>Adverse solar reflectivity glare to motorists and pedestrians</li> </ul>	2	2	4 Low/ Medium
Contamination	Construction	<ul style="list-style-type: none"> <li>Exposure of contamination or hazardous materials during construction</li> </ul>	1	2	3 Low
Wind Impact	Operation	<ul style="list-style-type: none"> <li>Adverse wind environment along surrounding streets, station entries and through-site link</li> <li>Adverse wind environment to outdoor areas in the OSD including outdoor terrace levels</li> </ul>	2	2	4 Low/ Medium
Crime and Public Safety	Operation	<ul style="list-style-type: none"> <li>Anti-social and criminal behavior</li> </ul>	2	2	4 Low/ Medium
Environmental and Construction Management	Construction	<ul style="list-style-type: none"> <li>Noise, dust, air quality, waste management and traffic impacts</li> </ul>	3	2	5 Low/ Medium
Biodiversity	Construction	<ul style="list-style-type: none"> <li>Impacts on street trees</li> </ul>	1	2	3 Low
Waste	Construction	<ul style="list-style-type: none"> <li>Waste production associated with construction activities</li> </ul>	2	2	4 Low/ Medium
	Operation	<ul style="list-style-type: none"> <li>Waste production associated with operation of the building</li> </ul>	2	2	4 Low/ Medium
ESD	Operation	<ul style="list-style-type: none"> <li>Carbon emissions</li> <li>Energy consumption</li> <li>Thermal comfort of building occupants</li> </ul>	2	2	4 Low/ Medium
Accessibility	Operation	<ul style="list-style-type: none"> <li>Adequate access for people with a disability</li> </ul>	1	2	3 Low
Social impact	Construction	<ul style="list-style-type: none"> <li>General disruption to community associated with large scale construction</li> </ul>	1	2	3 Low
	Operation	<ul style="list-style-type: none"> <li>Potential anti-social behaviour associated with operation of the various tenancies</li> </ul>	1	2	3 Low
Property and land use	Construction	<ul style="list-style-type: none"> <li>Acquisition of site for development (undertaken through CSSI Approval)</li> </ul>	1	2	3 Low
	Operation	<ul style="list-style-type: none"> <li>Compatibility between OSD uses and station/surrounding uses</li> </ul>	1	1	2 Low

Item	Phase	Potential Environmental Impact	Significance of impact	Manageability of impact	Residual impact
Business impacts	Construction	<ul style="list-style-type: none"> <li>Permanent loss of established tenants on site</li> <li>Impacts on surrounding business during construction (due to loss of amenity)</li> </ul>	2	2	4 Low/ Medium
	Operation	<ul style="list-style-type: none"> <li>Permanent loss of established tenants on site</li> <li>Altered access and visibility to surrounding businesses</li> <li>Impacts on surrounding business during operation (due to changes in amenity)</li> </ul>	1	2	3 Low
Water quality	Construction	<ul style="list-style-type: none"> <li>Potential erosion and sediment impacts on drainage system</li> </ul>	2	2	4 Low/ Medium
	Operation	<ul style="list-style-type: none"> <li>Impacts on quality of stormwater discharge into drainage system</li> </ul>	1	2	3 Low
Air quality	Construction	<ul style="list-style-type: none"> <li>Dust associated with construction activities</li> <li>Emissions associated with construction vehicles</li> </ul>	2	2	4 Low/ Medium
	Operation	<ul style="list-style-type: none"> <li>Emissions associated with entering and existing vehicle traffic</li> <li>Plant and equipment emissions</li> </ul>	1	2	3 Low
Cumulative impacts	Construction	<ul style="list-style-type: none"> <li>Cumulative impacts (traffic, noise, dust, etc.) associated with concurrent construction of station and OSD, and other development in the area</li> </ul>	2	2	4 Low/ Medium
	Operation	<ul style="list-style-type: none"> <li>Cumulative impacts (traffic, noise emissions, etc.) during concurrent operation of station and OSD, and other development in the area</li> </ul>	1	2	3 Low

# MITIGATION MEASURES

CHAPTER THIRTEEN





# 13. Mitigation measures

A full list of measures required to mitigate the potential impacts associated with the concept proposal are detailed in Table 6 below.

**Table 6 – Mitigation measures**

	<b>Proposed OSD Specific Measure</b>	<b>OSD Interface Issue with CSSI Approval</b>
<b>Operation (Detailed Design) Measures</b>		
<b>Built Form and Urban Design</b>	<p>The detailed design of the OSD is to be undertaken in accordance with the Victoria Cross Design Guidelines included as Appendix CC. The future detailed SSD Application(s) must address the manner in which the design/proposal has responded to the detail within this concept SSD Application and the Design Guidelines.</p> <p>The proposed building envelope has been designed in consideration of minimising overshadowing to Special Areas and impact on the public interface of the station, and responding to the existing built context.</p> <p>Future detailed SSD Application(s) must implement the process outlined in the Design Excellence Strategy detailed at Appendix C.</p>	<p>The integration of the OSD with the design of Victoria Cross Station is to be reviewed by the Design Review Panel established under Condition of Approval E100 of the CSSI Approval.</p> <p>The design of the OSD is required to be prepared having regard to the Station Design Precinct Plan required by Condition of Approval E101 of the CSSI Approval.</p>
<b>Visual &amp; View Impacts</b>	<p>The detailed design of the OSD will investigate opportunities to provide further articulation of the built form to minimise visual and view impacts. Details are to be demonstrated in the detailed SSD Application.</p>	
<b>Overshadowing</b>	<p>The detailed design of the OSD is not to result in a net increase in overshadowing when assessed against the environment of the site before the integration station demolition and redevelopment commenced. Details are to be demonstrated in the detailed SSD Application.</p> <p>The detailed design of the OSD must ensure that overshadowing to nearby residential properties is minimised and that the amenity of dwellings outside North Sydney CBD is not unreasonably affected. Details are to be demonstrated in the detailed SSD Application.</p>	
<b>Privacy</b>	<p>No mitigation measures proposed. However, it is recommended in the detailed design of the OSD that the location of the building core be considered to mitigate potential visual and privacy impacts to 65 Berry Street and Beau Monde Apartment building.</p>	

	Proposed OSD Specific Measure	OSD Interface Issue with CSSI Approval
Heritage	<p>Future detailed development SSD application(s) must address how the recommendations made in the Heritage Impact Asses Report prepared by OCP Architects (Appendix O) have been addressed to ensure the development achieves a positive heritage outcome for the site. This includes the following:</p> <ul style="list-style-type: none"> <li>(a). design excellence in terms of the overall architectural form, detailing and materials of the building. In this regard, the OSD should be detailed to not detract from views towards heritage items and within the locality generally. Colour schemes for the proposed OSD should be sympathetic to the urban environment and should use a neutral colour palette with few colour variants</li> <li>(b). within the maximum building height envelope, the design of the building should adopt a range of forms and heights with a view to breaking up the building bulk</li> <li>(c). The future detailed design of the OSD should be developed to provide a visual reference to the heights of surrounding buildings, in particular, the MLC Building, and other medium rise buildings in the vicinity</li> <li>(d). Building materials should be selected with consideration of the character of the immediate surrounding built environment and adjoining heritage items and have regard to opportunities to view the adjoining Rag &amp; Famish Hotel and MLC Building from the lower levels of the OSD</li> <li>(e). The design of the OSD lobby (including the associated retail), should be detailed to create a sense of openness and introduce a street frontage height that provides a transition between the Victoria Cross site and the surrounding buildings</li> <li>(f). Where relevant, design of the OSD should incorporate heritage interpretation measures as identified in the Heritage Interpretation Plan and Station Design and Precinct Plan.</li> </ul>	<p>The design of the OSD should incorporate, where relevant, heritage interpretation measures identified in the Heritage Interpretation Plan and Station Design and Precinct Plan required to be prepared by Conditions of Approval E21 and E101 of the CSSI Approval.</p>

	Proposed OSD Specific Measure	OSD Interface Issue with CSSI Approval
<p><b>Transport, traffic, parking and access</b></p>	<p>The detailed design of the OSD is required to address the recommendations of the Transport, Traffic and Parking Assessment Report prepared by AECOM (refer to Appendix P), including:</p> <p>preparation of a detailed building services plan detailing how the loading dock facilities can be managed and operated for the Integrated Station Development without relying on the local road network</p> <p>Details are to be demonstrated in the detailed SSD Application.</p>	<p>The detailed design of the OSD should be developed in conjunction with the Interchange Access Plan required to be prepared in accordance with Condition of Approval E92 of the CSSI Approval.</p> <p>The detailed design of the OSD and assessment of its impact is to be undertaken in consultation with the Traffic and Transport Liaison Group(s) established under Condition of Approval E77 of the CSSI Approval. Beyond completion of Victoria Cross station, the detailed design of the OSD and its traffic, parking, pedestrian and cycle accessibility impacts would require consultation with and the approval of the relevant roads authority in accordance with the terms of the relevant approval.</p>

	Proposed OSD Specific Measure	OSD Interface Issue with CSSI Approval
ESD	<p>The detailed SSD Application should include a detailed ESD Strategy for the OSD which outlines the best practice sustainability initiatives which will be implemented during design and construction of the development.</p> <p>The detailed ESD Strategy will be generally consistent with the proposed targets and indicative features which are included in the ESD Report provided in <b>Appendix Q</b>.</p> <p>The detailed ESD Strategy will outline minimum standards of sustainability performance which will be achieved during the design and construction of the OSD and align with best practice, including:</p> <ul style="list-style-type: none"> <li>● 5 Star Green Star Design and as built Ratings</li> <li>● Building envelope and services design to exceed BCA Section J minimum requirements</li> <li>● 5 Star NABERS Energy (Office Base Building)</li> <li>● 4 Star NABERS Water (Office)</li> </ul> <p>The ESD Strategy nominates initial sustainability strategies for the future detailed design of OSD which include:</p> <ul style="list-style-type: none"> <li>● High-performing building envelope elements and façade materials</li> <li>● Energy-efficient lighting devices and smart control systems</li> <li>● Comprehensive building operations and facilities management practices</li> <li>● Extensive energy and water metering and monitoring systems</li> <li>● Appropriate stormwater and potable water reduction measures</li> <li>● Utilisation of low-emissions materials and use of recycled materials</li> <li>● Implementation of responsible construction practices that manage environmental impacts and reduce construction and demolition waste</li> <li>● Recycling and waste handling facilities and procedures.</li> </ul>	

	Proposed OSD Specific Measure	OSD Interface Issue with CSSI Approval
<p><b>Prescribed airspace</b></p>	<p>The detailed design and SSD application for the OSD is to confirm whether there is any breach of the Obstacle Limitation Surface (OLS).</p> <p>If the OSD breaches the OLS, it would constitute a ‘controlled activity’ under the <i>Airports Act 1996</i> and therefore trigger the need for a safety assessment by Sydney Airport Corporation Limited (SACL), Civil Aviation Safety Authority (CASA) and Airservices Australia, with final approval by the Department of Infrastructure and Regional Development (DIRD)</p> <p>Details are to be submitted with the detailed SSD Application.</p>	
<p><b>Utilities, infrastructure and services</b></p>	<p>In accordance to the specific requirements of the individual utility service providers, the developer of the OSD will be required to undertake detailed enquiries and arrange for final connections and any associated approvals based on the final design where these final connections cannot reasonably be provided as part of the station works under the CSSI Approval.</p>	<p>The provision of all utility services to the Integrated Station Developed are to be assessed and undertaken (including all approvals and reconfiguration of trunk infrastructure) as part of the station works under Condition of Approval E2 of the CSSI Approval.</p> <p>Where practicable, and having regard to the timing for the delivery of the OSD, permanent utility connections are to be provided to the OSD and capped off within the site. Where this is not practicable, suitable provision of connection pits and conduits shall be provided to avoid the need for future disruption to roadways and pavements as a result of these works.</p>



	Proposed OSD Specific Measure	OSD Interface Issue with CSSI Approval
<b>Stormwater and flooding</b>	<p><i>Stormwater</i></p> <ul style="list-style-type: none"> <li>● Council and Sydney Water must be consulted as part of the future detailed SSD Application in order to finalise the OSD stormwater management plan.</li> <li>● Permissible site discharge rates need to be confirmed with Sydney Water and Council as part of the future detailed SSDA Application.</li> <li>● The future detailed SSD Application must achieve Council’s water quality targets.</li> </ul> <p><i>Flooding</i></p> <p>The detailed design is to be undertaken in accordance with the following criteria which have been established by the station design team (under the provisions of the CSSI Approval):</p> <ul style="list-style-type: none"> <li>● OSD retail areas located with the through-site link overland flow path are to be protected to 100-year ARI Flood level</li> <li>● Lift shafts located within the through-site link overland flow path are to be protected to events greater than 100-year ARI event using automatic flood barriers</li> <li>● All other entrances are to be set to the 100-year ARI flood level +500-millimetre freeboard</li> </ul>	<p>All flood modelling, impact assessment and mitigation measures for the site are to be undertaken as part of the station works under the CSSI Approval.</p> <p>The detailed design of the OSD should be developed having regard to the flooding requirements in Conditions of Approval E8 and E9 of the CSSI Approval.</p>

	Proposed OSD Specific Measure	OSD Interface Issue with CSSI Approval
Noise and vibration	<p>The detailed design of the OSD is to be undertaken in accordance with the Noise and Vibration Impact Assessment Report included as Appendix N.</p> <p>The future detailed SSD Application(s) must address the manner in which the design/proposal has responded to the criteria established within this concept SSD application including the technical assessment at Appendix N. This includes the following:</p> <ul style="list-style-type: none"> <li>● The services plant associated with the OSD, including appropriate acoustic treatment, where required, to comply with the criteria</li> <li>● Sleep disturbance that could arise as a result of the operation of the OSD, with details of reasonable and feasible acoustic treatments, where required to minimise sleep disturbance</li> <li>● Emergency operations for the OSD building, with appropriate acoustic treatments incorporated into the design, where required, to meet the emergency operations' noise emission criteria</li> <li>● Noise mitigation measures, where required, to minimise the impact of environmental noise emissions from use of the carpark entries and loading docks from Denison Street</li> <li>● All major equipment installed as part of the OSD should be mounted on isolation mounts. All rotary machinery should be accurately balanced both statically and dynamically. Glazing and associated framing system is required to be capable of preventing unnecessary noise intrusion from outside noise sources</li> </ul>	<p>The detailed design of the OSD is to consider cumulative impacts having regard to the noise and vibration requirements under Condition of Approval E41 and E42 of the CSSI Approval.</p>
Wind impacts	<p>The recommendations of the Wind Impact Assessment Report prepared by AECOM (Appendix M) shall be taken into consideration when developing the detailed OSD design.</p> <p>Effects of wind can be mitigated through measures such as façade articulation, inclusion of shading louvres, ground plane landscaping and addition of building awnings.</p> <p>Computational analysis and wind tunnel testing is to be undertaken as part of the detailed design of the OSD and detailed development application stage to quantify expected wind speeds and demonstrate compliance with the Lawson comfort criteria.</p> <p>Measures to ameliorate impacts at ground level and to ensure recognised pedestrian comfort levels are met are to be implemented.</p>	
Public benefits, contributions and voluntary planning agreement	No measures proposed.	

	Proposed OSD Specific Measure	OSD Interface Issue with CSSI Approval
CPTED	<p>The detailed design of the OSD must incorporate CPTED principles relating to natural surveillance, access control, territorial reinforcement and space management, together with consideration of the recommendations of the CPTED Assessment Report prepared by Mecone (Appendix W).</p> <p>The future detailed SSD Application must address the manner in which the design/proposal has responded to the CPTED requirements.</p>	
Waste management	<p>A Waste Management Plan (WMP) is to be prepared and submitted as part of the detailed SSD Application for the OSD addressing the following:</p> <ul style="list-style-type: none"> <li>● Relevant legislative and Council requirements</li> <li>● Type of waste to be generated</li> <li>● Expected volume per week</li> <li>● Proposed on-site storage and treatment facilities</li> <li>● Destination of waste; and</li> <li>● Information about the ongoing management of waste on-site</li> </ul> <p>The WMP is to address the objectives, principles and strategies outlined in the Waste Report Strategy (Appendix U) to deliver effective waste management.</p>	
Accessibility	<p>The future SSD application must take into consideration the Australian Standards, Building Code of Australia, Federal Disability Discrimination Act (DDA) and Disability (Access to Premises – Buildings) Standards 2010), as relevant, and comply with the recommendations of the Accessibility and DDA Impact Statement (Appendix X).</p>	
Reflectivity	<p>The detailed design of the OSD will be required to confirm façade treatment and the impact of this treatment in terms of solar reflectivity glare to motorists and pedestrians. Details are to be provided in the detailed SSD Application.</p>	
<b>Construction Measures</b>		
General	<p>Construction Environment Management Plans are to be prepared in a manner consistent with the Sydney Metro <i>Construction Environmental Management Framework</i> up until completion of the Victoria Cross Station. Beyond that time, Construction Environmental Management Plans are to be prepared in accordance with best practice guidelines and conditions of approval.</p> <p>Details regarding the approach and impacts to be managed during construction are to be submitted as part of the detailed SSD Application.</p>	
Heritage	<p>Details to mitigate impacts to the MLC Building during construction are to be submitted as part of the detailed SSD Application.</p>	

	Proposed OSD Specific Measure	OSD Interface Issue with CSSI Approval
<p><b>Transport, traffic, parking and access</b></p>	<p>Construction traffic and transport related impacts of the OSD are to be managed in a manner consistent with the Construction Traffic Management Framework (CTMF) established under Condition of Approval N. E81 of the CSSI Approval, until such time as completion of Victoria Cross Station has been reached.</p> <p>Construction Traffic Management Plans (CTMPs) are to be prepared to address the potential traffic and transport related impacts associated with construction and how these impacts will be managed.</p> <p>In the event that construction activities for the OSD occur beyond the practical completion of Victoria Cross Station, a detailed Construction Pedestrian and Traffic Management Plan is to be developed by the proponent in consultation with the relevant roads authority and council during the detailed design stage and details are to be submitted with the detailed SSD Application.</p> <p>Preparation of Construction Traffic Management Plans or Construction Pedestrian and Traffic Management Plans are to take into consideration the preliminary mitigation measures identified in the Preliminary Construction Environmental Management Statement prepared by Sydney Metro (Appendix V)</p>	<p>The detailed design of the OSD and assessment of its impact is to be undertaken in consultation with the Traffic and Transport Liaison Group(s) established under Condition of Approval E77 of the CSSI Approval, until such time as completion of Victoria Cross Station has been reached. Beyond completion of Victoria Cross Station, detailed design of the OSD and its traffic, parking, pedestrian and cycle accessibility impacts would require consultation with and the approval of the relevant roads authority in accordance with the terms of the relevant approval.</p>
<p><b>Noise and vibration</b></p>	<p>The Construction Noise and Vibration Strategy (CNVS) would be implemented up until the time of completion of the Victoria Cross Station with the aim of achieving the noise management levels/ criteria established within this Concept SSD application including the Noise and Vibration Impact Assessment Report at Appendix N.</p> <p>In accordance with the CNVS, Construction Noise Impact Statements are to be prepared to address the potential noise impacts associated with construction and how these impacts will be managed.</p> <p>In the event that construction activities for the OSD occur beyond the completion of Victoria Cross Station, a Construction Noise and Vibration Management Plan (CNVMP) is to be developed by the proponent in consultation with the stakeholders and an acoustic engineer during the detailed design stage and details are to be submitted with the detailed SSD Application. In this instance, the CNVMP would be developed in accordance with ICNG or applicable guidelines in force at the time.</p>	<p>Construction Noise and Vibration Impact Statements prepared for the OSD are to consider cumulative impacts having regard to the Construction Noise and Vibration Impact Statements prepared under Condition of Approval E33 of the CSSI Approval.</p>

	Proposed OSD Specific Measure	OSD Interface Issue with CSSI Approval
Waste	<p>A Waste Management Plan is to be prepared as part of the Construction Environment Management Plan, in accordance with provisions included in the Sydney Metro <i>Construction Environmental Management Framework</i> up until completion of the Victoria Cross Station. Beyond that time, a Construction Waste Management Plan is to be prepared in accordance with best practice guidelines and conditions of approval.</p> <p>Details regarding impacts to be managed during construction are to be submitted as part of the detailed SSD Application and should include:</p> <p>The waste management and recycling mitigation measures as detailed in the Waste Management Strategy Report(Appendix U).</p> <ul style="list-style-type: none"> <li>● The responsibility of key project personnel with respect to implementation of the plan</li> <li>● Waste management and recycling monitoring requirements</li> <li>● Procedures for the assessment, classification, management and disposal of waste in accordance with the NSW EPA <i>Waste Classification Guidelines</i> (EPA, 2014)</li> <li>● Compliance record generation and management</li> </ul>	

# CONCLUSION AND JUSTIFICATION

CHAPTER FOURTEEN





# 14. Conclusion and justification

This EIS has assessed the environmental, social and economic impacts of the concept SSD Application for the proposed OSD above the future Victoria Cross Station, part of Sydney Metro. The EIS has comprehensively addressed the general and key issues, and has included the plan and document requirements identified in the SEARs and in Schedule 2 of the EP&A Regulation.

The purpose of this concept SSD Application is to define the key planning and design parameters and establish the framework and strategies to guide the future delivery of a high-quality office tower which would form a key component of the Victoria Cross Integrated Station Development. The Integrated Station Development would be designed and constructed as one overall building, with scheduled delivery in 2024 to align with commencement of the operation of Sydney Metro.

The Victoria Cross Integrated Station Development would be a new commercial and retail hub in the North Sydney CBD. It would support the continued growth of North Sydney's commercial core through new employment opportunities and will improve the vibrancy of the area through new retail spaces, improved pedestrian connections and high quality outdoor spaces. The OSD component would provide an exceptional built form and would add to the economic prosperity of the North Sydney CBD.

This concept SSD Application comprises the first stage in the planning process for the Victoria Cross OSD project. It will be followed by a detailed SSD Application for the design and construction of the OSD to be lodged by the successful developer who is awarded the contract to deliver the Integrated Station Development.

The design of the building envelope proposed in this concept SSD Application has utilised a tailored, site-specific approach to ensure the future commercial building relates to its context and responds sensitively to surrounding development. The proposed building envelope also offers a sufficient level of design flexibility for the future detailed SSD Application and is capable of delivering an A-grade office development.

Overall, it is considered that this concept SSD Application for OSD above the future Victoria Cross Station warrants approval for the following reasons:

- the proposed commercial land use is permitted with consent and meets the objectives of the *B3 Commercial Core* zone in NSLEP 2013
- the proposed building envelope supports a gross floor area of 60,000 square metres, which is capable of accommodating an estimated 4,200 workers and would contribute to North Sydney's job targets under the *North District Plan*
- the concept proposal aligns with key State strategies, including the *Greater Sydney Region Plan* and *North District Plan*
- the concept proposal responds positively to key local strategic plans, including the *Sydney Metro Planning Study* (North Sydney Council, 2016) and *North Sydney Centre Capacity and Land Use Strategy* (North Sydney Council, 2017)
- the concept proposal contributes to the creation of an Integrated Station Development, which will form a new focal point for North Sydney CBD and optimises the land use opportunities afforded by Sydney Metro
- the concept proposal establishes key building envelope controls, including maximum building heights and setbacks, in accordance with local planning controls (including *the North Sydney Centre Planning Proposal*) and which are appropriate to the site's immediate context

- the concept proposal causes no unacceptable overshadowing to key public areas or residential areas
- the concept proposal is sympathetic to the heritage items in the vicinity of the site, including the MLC Building and the Rag & Famish Hotel
- the concept proposal minimises impacts on neighbouring development, in particular the Beau Monde Apartment building, in terms of privacy and views, having regard to relevant planning controls
- the concept proposal has no unacceptable traffic impacts
- the concept proposal allows for a future form that is consistent with the principles of ecologically sustainable development as defined by Schedule 2(4)(4) of the *EP&A Regulation*
- the concept proposal has positive social and economic impacts
- the site is suitable for future development as would be permitted by the concept proposal.

