City & Southwest

Environmental Impact Statement

Detailed Stage Significant Development Application

Site C, Crows Nest over station development

May 2021 | Version: 1

Contents

Glossary and abbreviations

Term	Definition
CIV	Capital Investment Value
Concept SSD Application	A concept development application as defined in section 4.22 of the EP&A Act – 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. The concept for the Crows Nest Station precinct (SSD 9579) was approved by the Minister on 23 December 2020.
Council	North Sydney Council, unless otherwise indicated
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 (then) Minister for Planning on 9 January 2017 and has been amended on several occasions. Any reference to the CSSI Approval is a reference to the most current version of that approval as amended by any subsequent modification application.
Crows Nest Station precinct	The Crows Nest Station precinct comprises the land between the Pacific Highway and Clarke Street (eastern side of the Pacific Highway) and Oxley Street and south of Hume Street, Crows Nest. The precinct is divided into three (3) sites: • Site A: The block bound by the Pacific Highway, Hume Street, Oxley Street, and Clarke Lane (497-521 Pacific Highway, Crows Nest) • Site B: The block on the southern corner of Hume Street and the Pacific Highway (477-495 Pacific Highway, Crows Nest) • Site C: One lot on the north-western corner of Hume Street and Clarke Street (14 Clarke Street, Crows Nest)
DA	Development Application
Detailed SSD Application	The SSD Application(s) made after the approval of the concept SSD Application, and that seek consent for the use, design and to physically construct stages of the development.
DPIE	Department of Planning, Industry and Environment
EP&A Act	*Environmental Planning and Assessment Act 1979* (NSW)
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000* (NSW)
EIS	Environmental Impact Statement

Term	Definition
Heritage item	An item of environmental heritage listed in Schedule 5 of *North Sydney Local Environmental Plan 2013* or on the State Heritage Register under the *Heritage Act 1977*
ISD	Integrated station development – being the combined station, OSD and public domain works.
IAP	Interchange Access Plan required under Condition E92 of the CSSI Approval. The IAP complements the SDPP (see below) and informs the final design of transport and access facilities and services, including footpaths, cycleways, passenger facilities, parking, traffic and road changes, and the integration of public domain and transport initiatives around and at each station.
Minister	The Minister for Planning and Public Spaces
Mitigation measure	A specific action for how an environmental impact can be avoided, minimised, or offset.
NSDCP 2013	*North Sydney Development Control Plan 2013*
NSLEP 2013	*North Sydney Local Environmental Plan 2013*
OSD	Over station development as defined in the CSSI Approval – which 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, Industry and Environment, or their delegate
SEARs	The Secretary's environmental assessment requirements, which informs the content of an EIS
SSD	State significant development as defined by Section 4.36 of the EP&A Act
Station box	The volumetric area of the Crows Nest 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 each OSD
SDPP	Station Design and Precinct Plan required under Condition E101 of the CSSI Approval. The SDPP resolves the public domain areas

Term	Definition
	for the Crows Nest Station precinct as part of the CSSI Approval and addresses (among other things): • Opportunities for public art • Landscaping and building design opportunities to mitigate the visual impacts of rail infrastructure and operational fixed facilities • Any salvaged historic and artistic elements • Location of existing vegetation and proposed landscaping • Location and design of operational lighting and measures to minimise lighting impacts • Timing for the implementation of access, landscaping and public realm initiatives
Sydney Metro City & Southwest – Chatswood to Sydenham project	The Chatswood to Sydenham component of Sydney Metro City & 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 This section of the Sydney Metro City & Southwest will deliver new metro stations at: • Crows Nest • Victoria Cross • Barangaroo • Martin Place • Pitt Street • Central (new underground platforms) • Waterloo • Sydenham This part of the project will operate between Chatswood and Sydenham Stations.
Sydney Metro City & Southwest –Sydenham to Bankstown Upgrade	Upgrading of the T3 Bankstown Line 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 granted consent in December 2018.
Sydney Metro	The applicant for this detailed SSD Application
Sydney Metro CSSI	Sydney Metro City & Southwest – Chatswood to Sydenham project

Statement of validity

Item	Details	
Development application details (SSD-13852803)		
Applicant name	Sydney Metro	
Responsible person	Yvette Buchli, Sydney Metro City & Southwest, Sydney Metro Level 43, 680 George Street, Sydney	
Applicant address	PO Box K659 Haymarket NSW 1240	
Land to be developed	14 Clarke Street, Crows Nest Lot 1 in DP 1223850	
Proposed development	This application seeks consent for: • The design, construction and operation of a new nine storey (plus rooftop plant) commercial office building • Bicycle parking areas and end of trip facilities associated with the office space being provided on Site C • Provision of building / business identification signage zones • The fit-out and use of interface areas within the approved station box that contain OSD exclusive elements, including the office entry, bicycle parking and end of trip facilities, and plant not associated with the rail infrastructure.	
Environmental Impact Statement prepared by:		
Name	Kate Tudehope Associate Director, Planning Ethos Urban	Anna Nowland Principal Planner Ethos Urban
Qualifications	Bachelor of Planning (Hons 1) UNSW, MPIA	Bachelor of Planning (Hons 1) UNSW, MPIA
Address	173 Sussex Street, Sydney NSW 2000	
Declaration	We declare that we have prepared the contents of this Environmental Impact Statement and to the best of our knowledge: • it is in accordance with Schedule 2 of the Environmental Planning and Assessment Regulation 2000 • it includes all available information that is relevant to the environmental assessment of the development to which the Statement relates • the information contained in the Statement is neither false nor misleading.	
Signatures		
Date	9 May 2021	

Executive summary

Introduction

This Environmental Impact Statement (EIS) has been prepared on behalf of Sydney Metro for submission to NSW Department of Planning, Industry and Environment (DPIE) in support of a detailed SSD Application for Site C, pursuant to the approved Concept SSD Application which provided for a mixed-use development across three sites (known as Site A, Site B and Site C) integrated with the future Crows Nest Station. It seeks consent for the detailed design, construction and use of over station development (OSD) on Site C of the Crows Nest Station precinct.

This EIS responds to the Secretary's Environmental Assessment Requirements (SEARs) attached at **Appendix A**. This EIS should be read in conjunction with the supporting documentation provided from **Appendix A** to **Appendix U**.

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. The Crows Nest Station precinct is part of the Sydney Metro City & Southwest project.

Sydney Metro City & Southwest – Chatswood to Sydenham planning approval

The application for Sydney Metro City & Southwest – Chatswood to Sydenham was lodged by Sydney Metro as a Critical State Significant Infrastructure project (reference SSI 15_7400) and was approved by the Minister 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.

The new metro stations identified in the CSSI Approval are at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street and Waterloo. In addition to this, new metro platforms are proposed at Central Station and Sydenham Station.

Crows Nest Station Concept SSD Application (SSD 9579)

Sydney Metro is seeking to deliver OSD above the approved Crows Nest Station. The concept proposal was lodged in November 2018 and comprised building envelopes, development parameters and strategies for a future development above the approved Crows Nest Station, and the use of the OSD spaces approved within the station under the CSSI Approval. The concept proposal was amended in September 2020 in response to community and stakeholder submissions. In December 2020, the concept SSD Application for a mixed used development over the approved Crows Nest metro station was approved by the Minister for Planning and Public Spaces.

The concept proposal for Crows Nest OSD complements the St Leonards commercial core and seeks to minimise overshadowing and amenity impacts and integrate with the broader Crows Nest village including Willoughby Road. It provides an opportunity for a mixed-use development that capitalises on its immediate access to Australia's biggest public transport project that delivers significant improvements to the amenity of the local area. This aligns with the vision for the area, as outlined in key strategic planning documents, including the Greater Sydney Commission's (GSC) North District Plan and the St Leonards and Crows Nest 2036 Plan.

Crows Nest integrated station development

Crows Nest metro station is located on the Pacific Highway at Crows Nest – a growing commercial and residential precinct in close proximity to the village centre of Willoughby Road and proximate to the CBD centre of St Leonards.

The Crows Nest Station OSD site comprises three sites, referred to as sites A, B and C as illustrated in **Figure 1** and described below:

- Site A: Six lots in the block bound by the Pacific Highway, Hume Street, Oxley Street and Clarke Lane (497-521 Pacific Highway, Crows Nest)
- Site B: Three lots on the southern corner of Hume Street and Pacific Highway (477-495 Pacific Highway, Crows Nest)
- Site C: One lot on the north-western corner of Hume Street and Clarke Street (14 Clarke Street, Crows Nest) and is the subject site.

Figure 1: Aerial photograph of Site C within the greater Crows Nest Station precinct

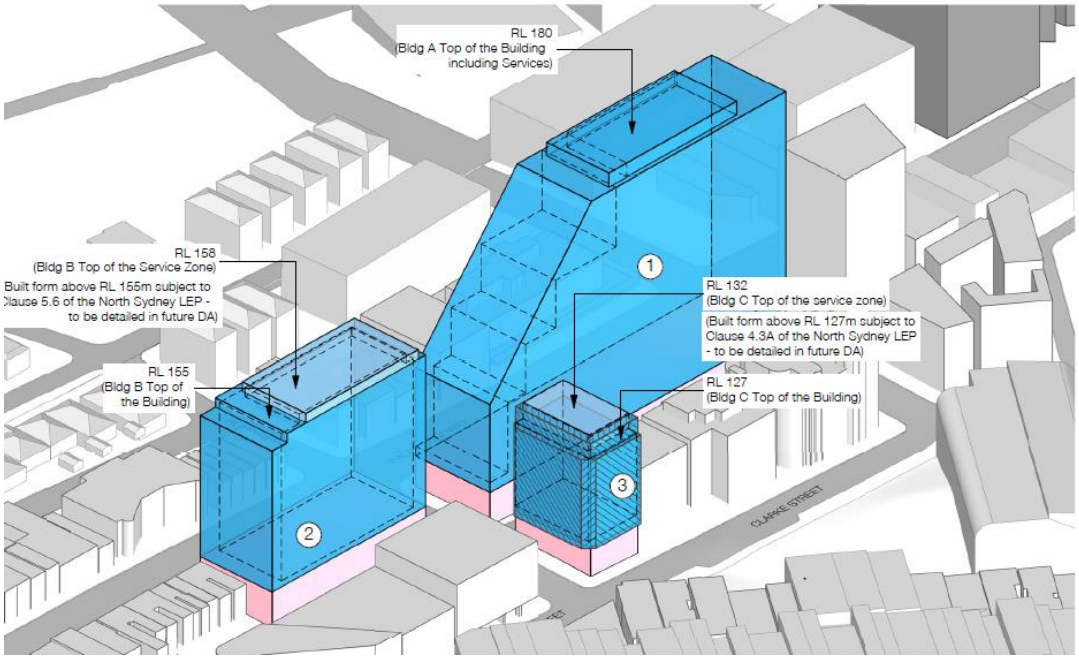
The following building envelopes and land uses were approved by the Minister on 23 December 2020 for each of the sites in the Concept SSD Application:

- three building envelopes, comprising:
    - maximum building envelope heights:
        - Building A: RL 175.6m
        - Building B: RL 155m
        - Building C: RL 127m.
- maximum gross floor area (GFA) of 56,400m^2 including:
    - 43,400m^2 commercial GFA
    - 13,000m^2 residential GFA.
- maximum of 101 car parking spaces.

Under the *North Sydney Local Environmental Plan 2013* (NSLEP 2013), a minimum non-residential Floor Space Ratio (FSR) provision applies to each site to ensure that the above nominated commercial uses are provided, and an appropriate mix of residential and non-residential uses are facilitated at the site. The built form of the OSD buildings are guided by the updated Crows Nest over station development Design Quality Guidelines approved as part of the Concept SSD Application.

The Concept SSD Application also established strategies for stormwater management, ecologically sustainable development, public art and design excellence. As this was the first stage of the planning process that established the broader vision for the precinct, consent was not sought for any construction or physical work, although a high-level assessment of potential construction related impacts did form part of the environmental assessment.

This EIS relates only to the detailed design and delivery of Site C OSD, with applications for sites A and B to be prepared separately in the future.



1. Site A, 2. Site B, 3. Site C

Figure 2: Approved building envelopes within the Crows Nest Station precinct, with this application relating to the detailed design of the building envelope for Site C only

St Leonards and Crows Nest Station precinct

North Sydney Council prepared the *Crows Nest Planning Study* in 2010 to direct future development and infrastructure provision in Crows Nest. This study recognised the need for updated planning controls to support future development in Crows Nest. Council commenced further studies in 2016, which focused on identifying localities or streets important to the community and identifying land use, built form and public domain priorities, which included the preparation of the *Sydney Metro Planning Study* (2017) and the *Crows Nest Placemaking and Principles Study* (2016).

In July 2016, DPIE announced it would also undertake strategic planning investigations into revitalising the surrounds of St Leonards railway station and the metro station at Crows Nest. This process resulted in the St Leonards and Crows Nest Priority Precinct in June 2017. In August 2017, DPIE released *the St Leonards and Crows Nest Station precinct Interim Statement* (Interim Statement) and in October 2018, DPIE released the draft Rezoning Proposal for the Crows Nest Sydney Metro site and the *St Leonards and Crows Nest 2036 Draft Plan*.

This Rezoning Proposal sought to change the relevant planning controls for the Crows Nest Station precinct in line with the future vision for the area under the 2036 Draft Plan and the building envelopes proposed in the Concept SSD Application.

The 2036 Plan and the associated Special Infrastructure Contribution (SIC) scheme was finalised by DPIE on 29 August 2020. The Rezoning Proposal was also finalised, and new planning controls gazetted on 31 August 2020 applying to the Crows Nest metro site.

Relationship between Crows Nest Station and Crows Nest OSD

While the Crows Nest Station and Site C OSD will form a single integrated station development, the planning pathways defined under the EP&A Act require separate assessment for each component of the development. In this regard, the approved station works (CSSI Approval) are subject to the provisions of Division 5.2 of the EP&A Act 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.

The vertical extent of the approved station works is defined by the 'transfer slab' level (which for Crows Nest is defined by RL 100.40 on Site A, RL 106.5 on Site B and RL 98.5 on Site C), above which would sit the OSD. OSD can also include the fit-out and use of spaces below the transfer slab which are for the exclusive use of the OSD, while the actual building structure itself is separately still approved as part of the Sydney Metro City & Southwest project (CSSI Approval).

The CSSI Approval also establishes the general concept for the ground plane of Crows Nest Station including access strategies for commuters, pedestrians, workers, visitors and residents. Through design development post the CSSI Approval, pedestrian access to the metro station is proposed from the Pacific Highway and from Clarke Street, opposite the Hume Street Park. Vehicular access to the precinct including separate access to the loading docks and podium parking is proposed from Clarke Lane.

Public domain works around the site will be delivered as part of the CSSI Approval. Notwithstanding, the OSD delivered under the Concept SSD Application will be appropriately designed to complement the station and activate the public domain.

Since the issue of the CSSI Approval, Sydney Metro 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 informed the approved Concept SSD Application, and has informed this subsequent detailed SSD Application for Site C.

Planning context

This application is made under Part 4 of the EP&A Act and follows a staged development consent within the meaning of Division 4.4 of the EP&A Act. The approved concept has established the overarching vision for the Crows Nest Station precinct and the planning and assessment framework for which this subsequent detailed application is to be assessed against in accordance with Section 4.24(2) of the EP&A Act.

State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) identifies development considered to be SSD. Under Clause 12 of the SRD SEPP, any development application that is pursuant to a Concept SSD Application is also classified as SSD whether or not that part of the development exceeds the minimum value specified in the relevant schedule of the SEPP. Accordingly, while the estimated capital investment value of this DA does not exceed $30 million, in accordance with clause 19(2) of Schedule 1 of the SEPP, it is pursuant to the approved Concept SSD Application and has not been delegated to Council under Section 4.37 of the EP&A Act. The proposed development is, therefore, classified as SSD and is submitted to DPIE for assessment and determination by the consent authority.

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 2000* (EP&A Regulation). This includes the Secretary's Environmental Assessment Requirements (SEARs) issued by the Secretary of the DPIE (**Appendix A**).

This EIS has been prepared for exhibition and assessment by the DPIE and the application will be determined by the NSW Minister for Planning and Public Spaces or his delegate.

Project objectives

The proposed development adheres to and assists with achieving the project objectives nominated in the Concept SSD Application, which established the overarching vision for the site. These are to:

- support the NSW Government's planning strategies and objectives, including the *Greater Sydney Region Plan* (2018) and the *North District Plan* (2018)
- enable the development of mixed-use buildings at the site which cater to various uses and work to create a fully integrated station precinct within the heart of Sydney's North Shore
- enable building forms which respond to the emerging character of St Leonards while providing a mediating transition in built form between St Leonards and Crows Nest, and in doing so, aligns with the St Leonards and Crows Nest 2036 Plan
- minimise, to the fullest extent possible, overshadowing impacts on public open spaces including Hume Street Park, Ernest Place and the Willoughby Road restaurant precinct
- enhance the customer experience and urban amenity through the development of an integrated design concept that ensures delivery of a quality public domain experience with strong connections to the surrounding area
- create an urban environment that drives the high usage of the Sydney Metro network, responding directly to the principles of transit-oriented development
- ensuring the delivery of OSD as early as possible, prior to the commencement of operations of the Crows Nest metro station thus ensuring a superior customer experience for new metro users utilising the Site C station entry
- enable a design that responds sensitively to surrounding heritage items
- create a framework which works to achieve design excellence in the final integrated station development.

Project needs and benefits

The NSW Government identified that stations on the Sydney Metro City & Southwest project could be better integrated with the communities and public spaces around them. This included the construction of buildings on top of these stations and commercial, residential, tourist and visitor accommodation and social infrastructure.

Through urban design principles and place making, Sydney Metro stations will be more than somewhere to catch the train; they will be the centre of communities through a variety of uses.

Sydney Metro has been working closely with communities on how to best integrate station development and deliver stations and buildings that are thriving, welcoming hubs for everyone to enjoy. OSD within the Crows Nest Station precinct is integral to the delivery of the Metro and creates the opportunity to support the continued growth of Crows Nest, adding to the vibrancy of the area through new employment opportunities, tourist and visitor accommodation, residential accommodation, social infrastructure and improved pedestrian connections and high quality outdoor spaces.

The Concept SSD Application capitalises on the metro by providing for additional commercial floor space and a range of housing opportunities in an ideal location directly above the future Crows Nest Station. Additional commercial uses in this location will strengthen the Crows Nest / St Leonards precinct's role as a working area in an internationally competitive Sydney and will align with one of the key actions (Action 34) in the *North District Plan*. The additional dwellings will assist in meeting the objective of the 30-minute city in the *North District Plan* by giving future residents access to jobs within the immediate Crows Nest Station precinct in addition to excellent access to major job centres in St Leonards, North Sydney and the Sydney CBD.

The proposed development

This application seeks approval for the following:

- construction of a new commercial building with the following parameters:
    - GFA of 3,097m^2 (excluding station areas)
    - a predominant building height of RL 127m, with an additional 5m 'building services zone' accommodating rooftop plant, equipment, services and lift overruns and fire stairs up to a maximum RL 132m
    - nine storeys within the maximum building height, comprising:
        - the internal fit-out and use of a building entrance lobby on the ground floor, with the building structure at this level being part of the CSSI Approval [1]
        - the internal fit-out and use of bicycle parking and end of trip facilities on Level 1, with the building structure at this level being part of the CSSI Approval [1]
        - office space on Levels 2 to 8

[1] The CSSI Approval for the metro station includes space provisioning on the ground level and Level 1 for the Site C OSD (namely the building entrance lobby, bicycle parking / end of trip facilities, and plant not associated with the rail infrastructure). The use and fit-out of these OSD spaces requires approval under Part 4 as part of this SSD Application, while the actual building structure itself is approved as part of the Sydney Metro City & Southwest project (CSSI Approval).

    - an accessible landscaped terrace on part of Level 9 for use by tenants

- associated servicing and landscaping elements not associated with the rail infrastructure
- signage zones for building / business identification
- no vehicle parking or loading will be provided on site
- temporary loading is proposed from Clarke Lane, and a permanent loading dock will be provided in Site A.

Figure 3: Photomontage of the proposed Site C OSD, as viewed from the corner of Hume Street and Clarke Street

Assessment of impacts and mitigation measures

This EIS provides an assessment of the environmental impacts of the proposed development in accordance with the SEARs and sets out the undertakings made by Sydney Metro to manage and minimise potential impacts arising from the development. The key environmental matters identified include:

- urban design, built form, and the achievement of design excellence,
- consistency with the approved Concept SSD Application and the existing and desired future character of the area,
- integration with the station areas separately being delivered on the site,
- any impact on environmental amenity including overshadowing, visual and view impacts, and wind,
- operational parameters including site access, loading and waste management,
- high standard of sustainability both during the construction and operation of the building, and
- the construction of the project.

The proposed development ultimately represents the next stage in realising the vision for the site established under the approved Concept SSD Application, and has been assessed against the planning and assessment framework established at the concept stage.

In achieving the project objectives and contributing to the delivery of a mixed use and transit-orientated development precinct that is consistent with the vision and framework for the site, the proposal will provide for a number of significant social and economic benefits for the local and wider community including:

- job creation, including 180 direct and indirect jobs during the construction phase and an additional 190 direct and indirect jobs during the ongoing operation of Site C
- significant improvements to design and sense of place as the result of design excellence process
- enabling a built form which responds to the emerging character of St Leonards while providing a mediating transition in built form between St Leonards and Crows Nest, and minimising overshadowing impacts on public open spaces including Hume Street Park, Ernest Place and the Willoughby Road restaurant precinct
- enhancing the customer experience and urban amenity through the development of an integrated design concept that delivers a quality public domain experience with strong connections to the surrounding area,
- ensuring the delivery of OSD as early as possible, prior to the commencement of operations of the Crows Nest metro station thus ensuring a superior customer experience for new metro users utilising the Site C station entry and
- enabling a design that responds sensitively to surrounding heritage items.

The EIS provides a detailed assessment of the environmental, social and economic impacts of the proposed development drawing upon information provided in the technical assessments appended to this report, from a range of disciplines. The EIS concludes that the proposed development will not result in any significant social, economic or environmental impacts which cannot be appropriately managed through the identified mitigation measures and conditions of consent.

Conclusion and justification

The EIS addresses the SEARs and provides a full assessment of the relevant environmental planning considerations in relation to this SSD Application for the detailed design, construction and operation of the Site C OSD. The proposed development represents the next phase in the delivery of a mixed use and transit-orientated development precinct that responds to the future desired character of Crows Nest/St Leonards in DPIE's 2036 Plan.

The environmental assessment at **Sections 6** to **11** confirms that the proposed development fulfils the requirements and commitments for OSD established within the approved Concept SSD Application, and the separate CSSI Approval, and that the potential impacts of the development are acceptable and are able to be managed through compliance with the identified mitigation measures. Given the planning merits of the proposal, the proposed development warrants approval by the Minister.

Next steps

This project represents the next phase in delivering the vision for Crows Nest metro station as envisaged in the CSSI Approval and the approved Concept SSD Application.

The next steps in the process include:

- exhibition of the detailed 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 in response to the public exhibition of the documents. Submissions received would be placed on DPIE's Major Projects Website
- lodging a Response to Submissions (RTS) Report by Sydney Metro outlining any proposed changes to the proposed development in response to any issues raised
- determination of the SSD Application by the Minister for Planning and Public Spaces or his delegate. If approved, the determination may include modifications to the development and/or conditions of approval.

1 Introduction

This Environmental Impact Statement (EIS) is submitted by Sydney Metro to the NSW Department of Planning, Industry and Environment (DPIE) in support of the detailed design, construction and use of over station development (OSD) on Site C of the Crows Nest Station precinct. It seeks consent for an OSD commercial office building located above and integrated with the Clarke Street entrance to the Crows Nest Station.

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.

This detailed SSD Application represents the next phase in the realisation of the Crows Nest Station precinct. It follows and is pursuant to the Concept SSD Application (SSD 9579), which was granted consent on 23 December 2020, establishing the planning and assessment framework for all OSD within the Crows Nest Station precinct. This detailed SSD Application has been prepared to be consistent with the Concept SSD Application in accordance with Division 4.4 of the *Environmental Planning & Assessment Act 1979* (EP&A Act).

The Concept SSD Application established the building envelopes (i.e. volumetric parameters), maximum gross floor area (GFA), minimum non-residential GFA, land uses, future subdivision (if required) and general development strategies to inform the future detailed design of the OSD on each of the three sites. This concept is aligned with the strategic planning work undertaken by DPIE, including the finalisation of the *St Leonards and Crows Nest 2036 Plan* (2036 Plan) and the *Crows Nest Sydney Metro Site Rezoning Proposal* (Rezoning Proposal), and other strategic policies released by North Sydney Council (Council).

These strategic planning documents highlighted that development above the Sydney Metro site should be mixed-use, and that density is appropriate above the metro station and along the Pacific Highway corridor whilst maintaining the amenity of key areas of open space and Willoughby Road. These documents identified the need for the development to contribute to the housing and employment targets set in the *North District Plan*. The approved Concept SSD Application supported these outcomes.

This detailed SSD Application for the Site C OSD is classified as SSD pursuant to Clause 12 of *State Environmental Planning Policy (State and Regional Developments) 2011* (SEPP SRD). Under Clause 12 of the SEPP SRD, any development application (DA) that is pursuant to a Concept SSD Application is also classified as SSD whether or not that part of the development exceeds the minimum value specified in the relevant schedule of SEPP SRD. Accordingly, while the estimated capital investment value (CIV) of this application does not exceed $30 million in accordance with clause 19(2) of Schedule 1 of the SEPP SRD, it is pursuant to the approved Concept SSD Application and has not been delegated to Council under Section 4.37 of the EP&A Act. The proposed development is, therefore, classified as SSD and is submitted to DPIE for assessment and determination.

This EIS has been prepared in accordance with the requirements of Part 4 of the EP&A Act, Schedule 2 of the *Environmental Planning & Assessment Regulations 2000* (EP&A Regulations), and the Secretary's Environmental Assessment Requirements (SEARs) for the preparation of the EIS. The EIS is based on the Architectural drawings prepared by Woods Bagot and should be read in conjunction with the technical supporting information and other plans appended to and accompanying this EIS (see the Table of Contents).

1.1 Sydney Metro

Sydney Metro is Australia's biggest public transport project. The Sydney Metro network is illustrated in **Figure 4**.

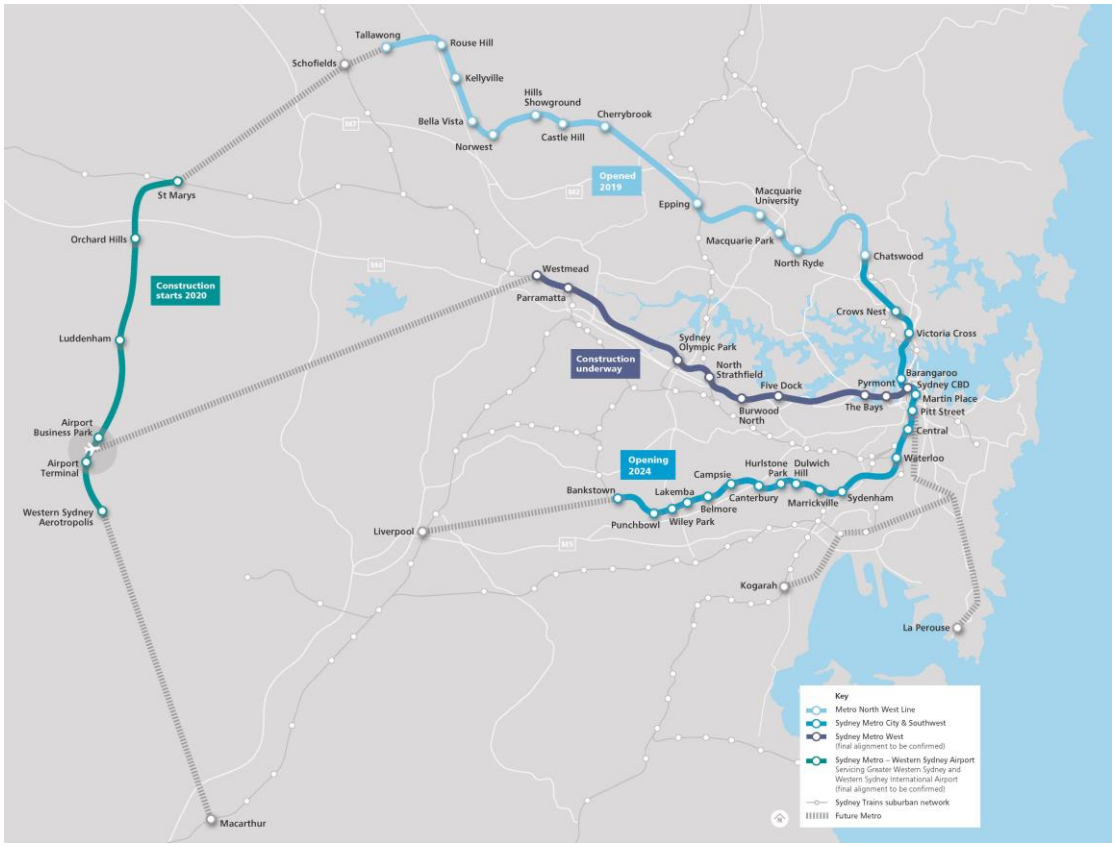


Figure 4: Sydney Metro alignment map

There are four core components:

- *Metro North West Line (formerly the 36 kilometre North West Rail Link)*

  Services started in May 2019 in the city's North West between Rouse Hill and Chatswood, with a metro train every four minutes in the peak. The project was delivered on time and $1 billion under budget.

- *Sydney Metro City & Southwest*

  The Sydney Metro City & Southwest project includes a new 30 kilometre metro line extending metro rail from the end of the Metro North West Line at Chatswood, under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024, and will deliver new metro stations at Barangaroo, Crows Nest, Victoria Cross, Martin Place, Pitt Street, Waterloo, and new underground metro platforms at Central Station. In addition, it will upgrade and convert all 11 stations between Sydenham and Bankstown to metro standards.

- *Sydney Metro West*

  Sydney Metro West is a new underground railway between Greater Parramatta and the Sydney CBD. This once-in-a-century infrastructure investment will transform Sydney, doubling rail capacity between these two key commercial areas, linking new communities to rail services and supporting employment growth and housing supply between the two CBDs. Sydney Metro West stations have been confirmed at Westmead, Parramatta, Sydney

Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont and Sydney CBD stations.

- *Sydney Metro - Western Sydney Airport*

  Metro rail will also service Greater Western Sydney and the new Western Sydney International (Nancy Bird Walton) Airport. The new railway line will become the transport spine for the Western Parkland City's growth for generations to come, connecting communities and travellers with the rest of Sydney's public transport system with a fast, safe, and easy metro service. Six new stations will be delivered at St Marys, Orchard Hills, Luddenham, Airport Business Park, Airport Terminal, and Western Sydney Aerotropolis. The Australian and NSW governments are partners in the delivery of this new railway.

1.2 Sydney Metro City & Southwest – Chatswood to Sydenham

1.2.1 Overview

Sydney Metro City & Southwest is due for completion 2024. It will link with and compliment the existing Metro North West Line which opened in 2019, providing ultimate capacity for a train every two minutes through the Sydney CBD in each direction – a level of service never seen before in Sydney.

Sydney Metro City & Southwest – Chatswood to Sydenham planning approval

The application for Sydney Metro City & Southwest – Chatswood to Sydenham was lodged by Sydney Metro as a Critical State Significant Infrastructure project (reference SSI 15_7400) and was approved by the Minister on 9 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.

The new metro stations identified in the CSSI Approval are at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street and Waterloo. In addition to this, new metro platforms are proposed at Central Station and Sydenham Station. The CSSI Approval includes all physical work required to construct the station, including the demolition of existing buildings and structures on each site.

The CSSI Approval also includes provision for the construction of below and above ground structures and other components of the future OSD (including building infrastructure and space for future lift cores, plant rooms, access, parking and building services, as relevant to each site). This is to enable the OSD to be more efficiently built and appropriately integrated into the metro station structure.

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 will leave a lasting legacy.

The metro rail service will form part of activated integrated station developments (ISD) featuring stations, OSD, station retail opportunities and public domain improvements. The ISDs 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.

Since the issuance of the CSSI Approval, Sydney Metro has undertaken further design work to determine the spatial planning and general arrangements for the layout of the Crows Nest Station and to identify spaces within the station area (defined under the CSSI Approval) that would be available for OSD use. Design work has also been undertaken to determine the technical requirements for the structural integration necessary between the station and the OSD. This design work has informed both the Concept SSD Application and this detailed SSD Application for the Site C OSD.

The OSD for Site C is influenced by the already approved station box containing the new station entrance to Clarke Street. The approved building envelopes under the Concept SSD Application allows for the appropriate integration of the station and OSD from an architectural, structural, and operational perspective.

All built forms associated with the station and the public domain works will be designed and delivered under the CSSI Approval. The design resolution of the station will be addressed through the preparation of an Interchange Access Plan (IAP) and Station Design and Precinct Plan (SDPP) which are required by Conditions E92 and E101 respectively of the CSSI Approval. Under the terms of these conditions, the final design of the public domain, the building entries and access (including footprint and architecture), and the station design and spatial arrangements for the OSD have been approved and are being resolved concurrently with the OSD applications.

The Crows Nest ISD will be a new mixed-use hub that will act as a focal point by offering a new key station in the evolving St Leonards/Crows Nest strategic centre. **Figure 5** shows the location of the Crows Nest Station in its context, including the alignment of Sydney Metro and the surrounding health, educational, retail, and commercial uses.

Figure 5: Crows Nest location plan

1.2.3 Planning relationship between Crows Nest Station and Crows Nest OSD

While the Crows Nest Station and Crows Nest Site C OSD will form part of an ISD, the planning pathways defined under the EP&A Act require separate approval for the two components. The approved station works (CSSI Approval) are subject to the provisions of Division 5.2 of the EP&A Act 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 concourse and platforms
- lobbies
- retail spaces within the station
- public domain improvements
- the pedestrian link between the two portals of Crows Nest station
- access arrangements including vertical transport such as escalators and lifts
- structure 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, and building services.

The rationale for this delivery approach, as identified within the CSSI Application for the Sydney Metro project, is to enable the OSD to be more efficiently built and appropriately integrated into the metro station construction.

The vertical extent of the approved station works (CSSI Approval) is defined by the 'transfer slab' level (RL 98.5 on Site C), above which would sit the OSD. An indicative image of the integrated station development is shown at **Figure 6**.

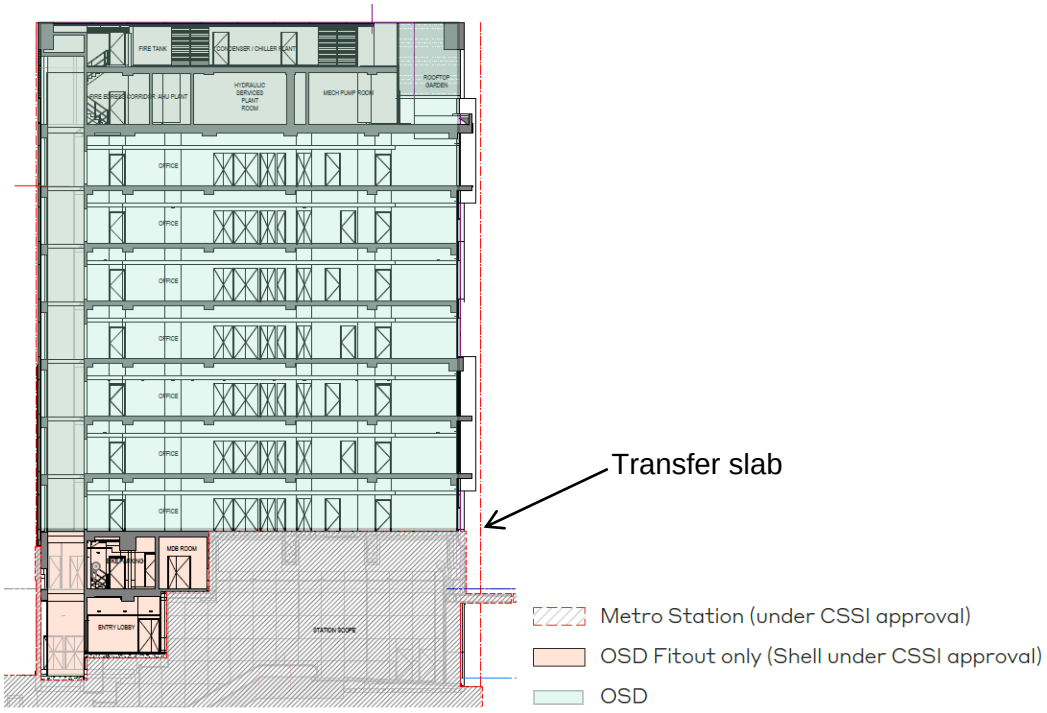


Figure 6: Section of Site C showing the delineation between the metro station and OSD

The EIS for the Chatswood to Sydenham component of the Sydney Metro City & Southwest project identified that the future OSD would be subject to a separate assessment and approvals process, being a Concept SSD Application and subsequent Detailed SSD Applications under Division 4.4 of the EP&A Act. The planning and approval pathway for the proposed Site C OSD is further discussed in **Section 2** of this EIS.

The CSSI Approval also establishes the general concept for the ground plane of Crows Nest Station precinct including access strategies for commuters, visitors, residents, pedestrians, and workers. In this regard, Site C accommodates a station entry onto Clarke Street as well as a separate integrated OSD lobby accessed from Hume Street.

The public domain improvement works around the site will be delivered under the CSSI Approval. The relationship between the CSSI Approval and this detailed SSD Application for Site C is discussed in further detail in **Section 4.3** of this EIS.

1.3 Overview of the approved Concept SSD Application

Development consent was granted by the Minister on 23 December 2020 for the Crows Nest Station OSD Concept SSD Application. This application established the planning and assessment framework for all subsequent detailed applications to follow, such as this detailed SSD Application for the Site C OSD.

The Concept SSD Application approved the following:

- maximum building envelopes for Sites A, B and C, including street wall heights and setbacks
- maximum building heights:
    - Site A: RL 175.60 metres or equivalent of 22 storeys (includes two station levels and conceptual OSD space in the podium approved under the CSSI Approval)
    - Site B: RL 155 metres or equivalent of 18 storeys (includes two station levels and conceptual OSD space approved under the CSSI Approval)
    - Site C: RL 127 metres or 9 storeys (includes two station levels and conceptual OSD space approved under the CSSI Approval)
- maximum height for a building services zone on top of buildings to accommodate lift overruns, rooftop plant and services:
    - Site A: RL 180 or 4.4 metres
    - Site C: RL 132 or 5 metres

  Note 1: roof enclosures should not contain GFA or be reasonably capable of being converted to GFA

  Note 2: for the purposes of the Concept SSD Application, the maximum height of the building envelope did not make provision for the following items, which will be resolved as part of the future detailed SSD Application(s):

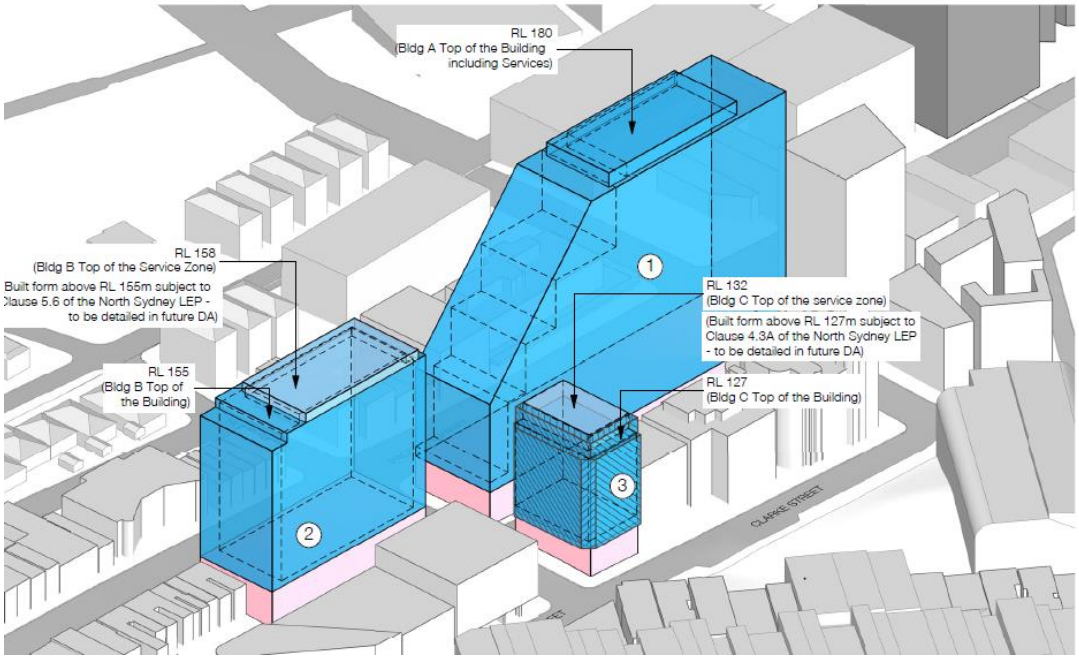
    - communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues, and the like, which are excluded from the calculation of building height pursuant to the standard definition in *North Sydney Local Environmental Plan 2013* (NSLEP 2013)
    - architectural roof features, which are subject to compliance with the provisions in Clause 4.3A or 5.6 of NSLEP 2013, and may exceed the maximum building height, subject to development consent.

- maximum gross floor area (GFA) of 56,400m^2 for the OSD comprising the following based on the proposed land uses:
    - Site A: Commercial office premises - maximum 40,300m^2
    - Site B: Residential accommodation - maximum of 13,000m^2
    - Site C: Commercial office premises - maximum of 3,100m^2

  Note: GFA figures exclude GFA attributed to the station and station retail space approved under the CSSI Approval
- a minimum non-residential floor space ratio (FSR) for the OSD across combined Sites A, B and C of 6.8:1 or the equivalent of 43,300m^2
- the use of approximate conceptual areas associated with the OSD which have been provisioned for in the Crows Nest station box (CSSI Approval) including areas above ground level (i.e. OSD lobbies and associated spaces)
- a maximum of 101 car parking spaces on Sites A and B associated with the proposed commercial and residential uses
- modulation and expression of built forms within an articulation zone extending to the property boundary for Site C
- loading, vehicular and pedestrian access arrangements
- strategies for utilities and services provision
- strategies for managing stormwater and drainage
- a strategy for the achievement of ecologically sustainable development
- a public art strategy
- a design excellence framework
- the future subdivision of parts of the OSD footprint, if required.

This detailed SSD Application for the Site C OSD has been designed to be consistent with the terms of the approved Concept SSD Application.

Figure 7: Photomontage of the indicative design of the approved Concept SSD Application building envelopes



1. Site A, 2. Site B, 3. Site C

Figure 8: Approved building envelopes within the Crows Nest Station precinct, with this application relating to the detailed design of the building envelope for Site C only

1.4 Need for the project

The *Greater Sydney Region Plan* (2018) identifies that Sydney's population is forecast to grow to eight million people 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 rail 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*.

Crows Nest Station is a key new station on the Sydney Metro network that will provide additional transport access complementing the existing heavy rail network at St Leonards, which is located 400m to the northwest of the site. This station will provide a new destination for the precinct, improving access to the health services and highly skilled jobs market and educational facilities in the area. This increased access is an appropriate response to the emerging strategic nature of the St Leonards/Crows Nest precinct as a key employment centre in Sydney to complement the nearby health, education and technology land uses.

The approved Concept SSD Application has sought to build upon the opportunities afforded by Sydney Metro through the provision of a mixed-use OSD integrated with the Crows Nest Station. The residential and commercial premises proposed in the concept proposal were considered to respond to a number of different in-demand land uses in the St Leonards/Crows Nest precinct and align with the 2036 Plan and the Rezoning Proposal.

The Site C OSD, specifically, is a vital component of this vision for Crows Nest station The proposed office space complements the St Leonards commercial core and capitalises on the significant accessibility improvements created by the Sydney Metro public transport network. The delivery of the OSD on Site C at the same time as, in coordination with, the station beneath also ensures that future station users will not be inconvenienced by ongoing construction works above the station entrance and that the precinct is vibrant and activated from the first day of operations.

The Site C OSD is consistent with the approved Concept SSD Application, with the Assessment Report prepared by DPIE noting the following with regard to the strategic significance and need for the project:

- The project will support integrated land use and transport planning by providing jobs and housing above a new metro station, consistent with the Greater Sydney Region Plan.
- The project is consistent with the priorities identified in the North District Plan through providing jobs and investment in the Eastern Economic Corridor and providing new commercial leasing opportunities for a more connected catchment along the City and Southwest metro corridor.
- The project will take advantage of the Government's investment in public transport by locating 13,000m^2 residential GFA for new homes and 43,400m^2 commercial GFA for new employment floorspace above the Crows Nest metro station. This includes 3,097m^2 of commercial GFA at Site C.
- The project will create a vibrant precinct that is well connected to transport, capable of achieving design excellence and resulting in the creation of 945 construction and 2,010 operational jobs. This includes 180 construction and 190 operational jobs at Site C.

- The project is consistent with the 2036 Plan, including the objectives of this plan. It will support place outcomes and long-term growth within the precinct and maximises commercial floorspace.
- The project is directly responsive to the Future Transport Strategy 2056 through providing new homes and jobs above a new metro station and encouraging the use of public transport and walking and cycling. In addition, the proposal would reduce reliance on private vehicles by including less car parking than the maximum permissible rate on the site.
- The project directly supports the success and patronage of the metro by providing residential and commercial floorspace within walking distance of the station and benefitting the creation of a new transport node, consistent with Sydney's Rail Future.

Further, the Crows Nest OSD would provide a range of benefits for the region and the State by providing new residential uses, retail and commercial uses, increased employment, and a capital investment value of approximately $381 million. Weighing all relevant considerations, the project was found to be in the public interest.

1.5 Objectives of the development

This detailed SSD Application for the Site C OSD forms part of a broader planning process necessary to realise the objectives and vision for the Crows Nest Station precinct. It responds to the overarching objectives established for the precinct-wide concept proposal:

- to support the NSW Government's planning strategies and objectives, including the *Greater Sydney Region Plan* (2018) and the *North District Plan* (2018)
- to enable the development of mixed-use buildings at the site which cater to various uses, creating a fully integrated station precinct within the heart of Sydney's North Shore
- to enable building forms which respond to the emerging character of St Leonards while providing a mediating transition in built form between St Leonards and Crows Nest, aligning with the 2036 Draft Plan and the Rezoning Proposal
- to minimise, to the fullest extent possible, overshadowing impacts on public open spaces including Hume Street Park, Ernest Place, and the Willoughby Road restaurant precinct
- to enhance the customer experience and urban amenity through the development of an integrated design concept that ensures delivery of a quality public domain experience with strong connections to the surrounding area
- to create an urban environment that drives the high usage of the Sydney Metro network, responding directly to the principles of transit-oriented development
- to deliver the Site C OSD as early as possible and thus ensuring a superior customer experience for new metro users utilising the Site C station entry
- to enable a design that responds sensitively to surrounding heritage items
- to create a framework which works to achieve design excellence in the final integrated station development

1.6 Analysis of alternatives

This detailed SSD Application for the Site C OSD is consistent with the approved Concept SSD Application, which assessed the available options for the redevelopment of the site including the 'do nothing scenario' and variables for achieving the best possible outcome, built form alternatives, and the timely and economic redevelopment of the land. There were three alternatives considered by Sydney Metro in responding to the identified strategic need for the project and objectives for the project, which ultimately concluded that the now approved concept for the Crows Nest Station precinct represents the best possible outcome for the site.

The below analysis identifies the alternative options for this subsequent detailed SSD DA, confirming that the proposed built form represents the ultimate and best possible outcome for the site.

1.6.1 Alternative A – do nothing

The 'do nothing' option (no OSD above the Crows Nest Station at Site C) is considered impractical and fails to meet the Government's aspirations for a Sydney Metro project which maximises true integrated land use and transport planning and transit-oriented development principles. It is an inappropriate built form outcome that is inconsistent with both the CSSI Approval and Concept SSDA Application, and the reasons for their approval.

Sydney Metro is well advanced in planning and construction of the Crows Nest metro and the OSD forms a key component of this station development. The 'do nothing' option would forego a genuine strategic opportunity to create a new Crows Nest integrated station precinct which will be a new hub of activity and a destination in the St Leonards / Crows Nest precinct.

Because the station portal on Site C is being delivered under the CSSI Approval, and is already under construction, there is no opportunity to leave the site vacant. Under the terms of the CSSI Approval, a degree of development is already approved that will cover the full extent of the site and extend up to the transfer slab at RL 98.5m. This ensures that the site will already accommodate a multi-storey building notwithstanding the proposed OSD.

The opportunity cost of not pursuing the OSD would also be significant, given the multitude of benefits which would be foregone if no OSD is pursued, including:

- job creation, including 180 direct and indirect jobs during the construction phase and an additional 190 direct and indirect jobs during the ongoing operation of the site
- significant improvements to design and sense of place as the result of design excellence process
- enabling a built form which responds to the emerging character of St Leonards while providing a mediating transition in built form between St Leonards and Crows Nest, and minimising overshadowing impacts on public open spaces including Hume Street Park, Ernest Place and the Willoughby Road restaurant precinct
- enhancing the customer experience and urban amenity through the development of an integrated design concept that delivers a quality public domain experience with strong connections to the surrounding area
- ensuring the delivery of OSD as early as possible and thus ensuring a superior customer experience for new metro users utilising the Site C station entry, and
- enabling a design that responds sensitively to surrounding heritage items

1.6.2 Alternative B – alternative land uses

It is intended that the Crows Nest OSD will promote commercial land uses to contribute to job creation, protecting and strengthening the commercial role of the Crows Nest/St Leonards centre. Site C specifically will accommodate commercial offices in addition to CSSI station areas (which includes ground floor retail uses). The proposed commercial uses are consistent with what was tested and approved in the Concept SSD Application. It is therefore in accordance with the strategic vision for the area and responds to the submissions received from agencies and the local community pertaining to the desired future character of the area, including the need to maximise non-residential land uses.

The main alternative land uses for this site from an economic point of view would be residential or hotel uses.

Residential uses on this site would be inconsistent with the Concept SSD Application and the long-term strategic vision for the Crows Nest/St Leonards Centre which seeks to maximise commercial floor space and would not comply with the non-residential FSR provisions in NLEP 2013. Site B is already approved to be developed as residential uses and as such further developing Site C as residential and not commercial as approved would be at odds with the local and state planning objectives, where there is a clear priority for employment growth and increasing office floor space capacity within the centre.

By their function, hotels typically require porte cocheres, bar/guest amenities and the like, all on the ground floor of the building. Site C is the smallest of the Crows Nest station precinct sites and cannot accommodate these essential functional requirements while also accommodating the station entrance that is being delivered on this site under the CSSI Approval.

In addition, community uses were also investigated to form part of Site C in the Concept SSD Application. Sydney Metro originally intended to support the delivery of community use space either on Site C or Site A by entering into a voluntary planning agreement (VPA) with Council. However, it was confirmed as part of the Concept SSD Application that Council did not support the dedication of community use space on the site and accordingly, community use space was removed from the Concept SSD Application and is not a viable alternative for Site C.

The proposed commercial land use is, therefore, the best possible option for the site which is aligned with the strategic vision for the area and the testing and assessment completed in the Concept SSD Application. This land use is permissible and will meet the objectives of the zone.

1.6.3 Alternative C – alternative building design

This detailed SSD Application has been informed by a design excellence and design review process, which has critically analysed options for the detailed design of OSD on Site C. A number of alternative designs and options were reviewed by the Sydney Metro Design Review Panel in the development of the proposed scheme, over a number of iterative review meetings as detailed in the Design Integrity Report at **Appendix D**.

This process confirmed that the proposed detailed design for the Site C OSD is capable of achieving design excellence. The building has been designed to be largely consistent with the Concept SSD Application (refer to **Section 7**), including the site-specific Design Quality Guidelines which were developed to guide the design development of buildings within the Crows Nest Station precinct.

2 Planning context

2.1 Staged development

This detailed application is pursuant to the approved Concept SSD Application for the Crows Nest Station precinct (SSD 9579) in accordance with Division 4.4 of the EP&A Act. The approved concept has established the overarching vision for the Crows Nest Station precinct and the planning and assessment framework for which all subsequent applications are to be assessed against in accordance with Section 4.24(2) of the EP&A Act.

"Status of concept development applications and consents

…

(2) While any consent granted on the determination of a concept development application for a site remains in force, the determination of any further development application in respect of the site cannot be inconsistent with the consent for the concept proposals for the development of the site."

This detailed SSD Application is pursuant to, and consistent with, the approved Concept SSD Application described in **Section 1.3**. A detailed assessment of the proposed Site C OSD against the approved concept proposal is provided in **Section 7** and **Appendix E**.

2.2 State significant development

State Environmental Planning Policy (State and Regional Developments) 2011 (SEPP SRD) identifies development that is considered to be State Significant Development (SSD). Under Clause 12 of SEPP SRD, any DA that is pursuant to a Concept SSD Application is also classified as SSD whether or not that part of the development exceeds the minimum value specified in the relevant schedule of the SEPP:

"Concept development applications

If—

(a) development is specified in Schedule 1 or 2 to this Policy by reference to a minimum capital investment value, other minimum size or other aspect of the development, and

(b) development the subject of a concept development application under Part 4 of the Act is development so specified,

any part of the development that is the subject of a separate development application is development specified in the relevant Schedule (whether or not that part of the development exceeds the minimum value or size or other aspect specified in the Schedule for such development."

Further, Section 4.37 of the EP&A Act states:

"If a concept development application is made in respect of State significant development—

(a) the consent authority may determine that a subsequent stage of the development is to be determined by the relevant council as consent authority, and

(b) that stage of the development ceases to be State significant development and that council becomes the consent authority for that stage of the development."

Accordingly, while the estimated CIV of this DA does not exceed $30 million in accordance with Clause 19(2) of Schedule 1 of the SEPP SRD, it is a subsequent stage of the approved Crows Nest OSD Concept SSD Application and has not been delegated to Council under Section 4.37 of the EP&A Act. The proposed development is, therefore, classified as SSD and is submitted to DPIE for assessment and determination.

Section 4.12(8) of the EP&A Act requires a development 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 EP&A Regulation, and the SEARs (provided at **Appendix A**). Other supporting documents are appended to this EIS (see Table of Contents).

2.3 Relationship to CSSI Approval

As discussed in **Section 1.2.3**, while the Crows Nest Station and Crows Nest OSD will form an integrated station development, the planning pathways defined under the EP&A Act require separate approval for the two components. The approved station works (CSSI Approval) are subject to the provisions of Division 5.2 of the EP&A Act and the OSD component is subject to Part 4 of the EP&A Act.

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

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

The development for which consent is sought under this application is detailed in **Section 4** below.

2.4 Secretary's Environmental Assessment Requirements

In accordance with Item 3 of Schedule 2 of the EP&A Regulation, the delegate of the Secretary of DPIE has issued requirements for the preparation of this EIS. A copy of the SEARs is included in **Appendix A**. The SEARs were finalised following input from agencies and Council (refer to **Section 5** for further details regarding the pre-lodgement consultation and engagement undertaken for the project).

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

The Concept SSD Application's terms of approval are addressed separately in **Section 7.4**.

Table 1: Secretary's Environmental Assessment Requirements

Term	Section of EIS	Technical Report
General Requirements		
• A development application (DA) for State significant development (SSD) must include all relevant information and documents specified in Part 1 of Schedule 1 of the Regulation, including an environmental impact statement (EIS) (Section 4.12(8) of the Act and clause 2(1)(e) of Schedule 1 of the Regulation).	Throughout EIS	N/A

Term	Section of EIS	Technical Report
• The DA must be lodged on the NSW planning portal (clause 50(1)(d) of the Regulation). • The form and content of the EIS must be prepared in accordance with clauses 6 and 7 of Schedule 2 of the Regulation. Any document adopted or referenced in the EIS will form part of the EIS (clause 9(1) of Schedule 2 of the Regulation).		
Key issues to be addressed		
1. Statutory and strategic context • Address all relevant legislation, Environmental Planning Instruments (EPIs) (including drafts), plans, policies and guidelines. • Identify compliance with applicable development standards and provide a detailed justification for any non-compliances.	**Section 8**	N/A
• Address the requirement of any approvals applying to the site, including any concept approval or recommendation from any Gateway determination.	**Section 7**	**Appendix E**
2. Capital Investment Value and Employment • Provide a detailed calculation of the capital investment value (CIV) of the development, prepared by a qualified quantity surveyor. • Provide an estimate of the retained and new jobs that would be created during the construction and operational phases of the development, including details of the methodology to determine the figures provided.	**Section 10.2**	**Appendix P**
3. Consistency with the concept approval • Demonstrate the proposal is consistent with the Crows Nest Over Station Development Concept Approval (SSD 9579) and provide details of consistency with any modification(s) to the concept approval if sought concurrently.	**Section 7**	N/A
4. Integration with Sydney Metro station infrastructure • Identify the extent of the proposal that is State Significant Development (SSD) and how this relates to the approved Critical State Significant Infrastructure (CSSI) applications and any modifications to the CSSI. • Address how the development supports the design objectives, principles and standards of the Station Design Precinct Plan and Interchange Access Plan under the CSSI. • Show how the SSD will integrate with the CSSI infrastructure such as structural design, detailed architectural approach, access, wayfinding, public domain works and construction management.	**Section 4.3** **Section 9.1.7** **Section 9.2**	**Appendix C**

Term	Section of EIS	Technical Report
5. Design excellence • Demonstrate compliance with the endorsed Design Excellence Strategy and submit a Design Integrity Report in accordance with the requirements of the Concept Approval. • Demonstrate compliance with the endorsed Design and Amenity Guidelines, dated January 2021 or any subsequent endorsed revision of the guidelines. • Demonstrate consistency with the design excellence requirements under the North Sydney Local Environmental Plan 2013. • Detail the measures to ensure design integrity is maintained in subsequent stages of the planning process (such as post approval and any modifications).	**Section 7.3**	**Appendix D**
6. Built form and urban design • Explain and illustrate the proposed built form, including a detailed site and context analysis to justify the proposed site planning and design approach. • Demonstrate how the proposed built form (layout, height, bulk, scale, separation, setbacks, interface and articulation) addresses and responds to the context, site characteristics, streetscape and existing and future character of the locality. • Demonstrate how the building design will deliver a high-quality development, including consideration of façade design, articulation, activation, roof design, materials, finishes, colours, any signage and integration of services.	**Section 4.5** **Section 9.1** **Section 9.3**	**Appendix C**
• Assess how the development complies with the relevant accessibility requirements.	**Section 9.18**	**Appendix N**
7. Public space • Demonstrate how the development maximises the amount, access to and quality of public spaces (including open space, public facilities and streets/plazas within and surrounding the site), reflecting relevant design guidelines and advice from the local council and the Department. • Demonstrate how the development: - ensures that public space is welcoming, attractive and accessible for all. - maximises permeability and connectivity. - ensures public spaces have excellent amenity, suitable for their intended use, such as through adequate facilities, solar access, shade and wind protection. - maximises street activation. - minimises potential vehicle, bicycle and pedestrian conflicts.	**Section 9.3**	N/A

Term	Section of EIS	Technical Report
• Address how Crime Prevention through Environmental Design (CPTED) principles are to be integrated into the development, in accordance with Crime prevention and the assessment of development applications.	**Section 9.4**	**Appendix R**
8. Environmental amenity • Address how good levels of internal and external environmental amenity would be achieved, including access to natural daylight and ventilation, pedestrian movement throughout the site, access to landscape and outdoor spaces. • Assess amenity impacts on the surrounding locality, including lighting impacts, solar access, visual privacy, visual amenity, view loss and view sharing, overshadowing, wind impacts and acoustic impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated. • Provide a solar access analysis of the overshadowing impacts of the development within the site, on surrounding buildings and public spaces (during summer and winter solstice and spring and autumn equinox) at hourly intervals between 9am and 3pm, when compared to the existing situation and a compliant development (if relevant).	**Section 9.1** **Section 9.3** **Section 9.5** **Section 9.11**	**Appendix C** **Appendix K** **Appendix L** **Appendix M** **Appendix Q**
9. Visual impacts • Provide a visual analysis of the development, including photomontages or perspectives illustrating potential visual and view loss impacts associated with the proposal when compared to the existing situation and concept approval, when viewed to and from key vantage points, including from existing and future Hume Street park extensions and from nearby affected residences. • Where the visual analysis has identified potential for significant visual impact, provide a visual impact assessment that addresses the impacts of the development on the existing catchment.	**Section 9.5.3**	**Appendix Q**
10. Landscaping • Provide a landscape plan, that: - details the proposed planting, including location, number and species of plantings, heights of trees at maturity and proposed canopy coverage. - demonstrates how the proposed development would: > contribute to long term landscape setting in respect of the site and streetscape. > mitigate the urban heat island effect and ensure appropriate comfort levels on-site. > contribute to objective to increase urban tree canopy cover.	**Section 4.6** **Section 9.1.4** **Section 9.3.5**	**Appendix C**

Term	Section of EIS	Technical Report
11. Transport, traffic, parking and access (operation and construction)	**Section 4.7**	**Appendix J**
• Prepare a traffic impact assessment, which provides:	**Section 9.6**	
- accurate details of the current daily and peak hour vehicle, public transport, pedestrian and bicycle movements in the vicinity of the site.	**Section 9.20**	**Appendix U**
- the predicted transport mode share split for the proposed development.		
- an analysis of the existing traffic network, including the road hierarchy, current daily and peak hour vehicle movements and existing performance levels of nearby intersections.		
- a forecast of additional daily and peak hour vehicle movements as a result of the proposal (using SIDRA modelling or as agreed by TfNSW) and identification of potential traffic impacts on road capacity, intersection performance and road safety (including pedestrian and cycle conflict).		
- proposals to mitigate any traffic impacts, including intersection upgrades to achieve acceptable performance		
- a vehicular servicing and management plan providing details of proposed vehicular access and service arrangements for off-street loading, deliveries and servicing of the development and any proposed infrastructure improvements or measures to reduce potential conflicts with pedestrians and cyclists.		
- proposals to improve walking and cycling, such as connections into existing walking and cycling networks, high quality end-of-trip facilities and adequate bicycle parking for visitors, employees and residents (provided in accordance with the relevant rates, specifications and standards).		
- measures to promote sustainable travel choices for employees, residents or visitors, such as minimising car parking provision, encouraging use of public transport, cycling and walking, implementing a green travel plan and providing end of trip facilities.		
- a draft Construction Traffic Management Plan providing details of predicted construction traffic movements, routes and access arrangements, and outline how construction traffic impacts on existing traffic, public transport, pedestrian and cycle networks would be appropriately managed and mitigated and how cumulative construction traffic impacts with the Sydney Metro project and other surrounding		

Term	Section of EIS	Technical Report
development would be managed and mitigated.		
12. Ecologically Sustainable Development (ESD) and climate change • identify how ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) will be incorporated into the design, construction and ongoing operation of the proposed development. • demonstrate how the future building will meet or exceed the relevant industry recognised building sustainability and environmental performance standards. • detail measures to be incorporated to reduce carbon emissions, reflecting the Government's goal of net zero emissions by 2050, and the consumption of resources, water (including through water sensitive design principles and water re-use) and energy. • estimate the likely greenhouse gas emissions from the development, including construction and operation, having regard to the Greenhouse Gas Protocol for Project Accounting, and measures to be incorporated to reduce greenhouse gas emissions.	**Section 9.7**	**Appendix F**
13. Heritage and archaeology • Provide a statement of significance and an assessment of the impact on the heritage significance of any heritage items, or conservation areas, on and adjacent to the site prepared in accordance with the relevant guidelines. • Address any archaeological potential and significance on the site and the impacts the development may have on this significance.	**Section 9.8**	N/A
14. Aboriginal Cultural Heritage • Provide an Aboriginal Cultural Heritage Assessment Report prepared in accordance with relevant guidelines, identifying, describing and assessing any impacts for any Aboriginal cultural heritage values on the site.	**Section 9.9**	N/A
15. Contamination and remediation • Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55.	**Section 9.10**	N/A
16. Biodiversity • Assess any biodiversity impacts associated with the proposal in accordance with the Biodiversity Conservation Act 2016 and the Biodiversity Assessment Method 2020, including the preparation of a Biodiversity Development Assessment Report, unless a waiver is granted.	**Section 9.17**	N/A

Term	Section of EIS	Technical Report
17. Noise and vibration (operation and construction) • Provide a noise and vibration assessment in accordance with the relevant EPA guidelines. This assessment must detail construction and operational noise and vibration impacts on nearby sensitive receivers and outline the proposed management and mitigation measures that would be implemented.	**Section 9.11**	**Appendix K**
18. Aviation • Assess any potential impacts of the development on the aviation operations of any nearby airports and affected flight paths of any existing Helicopter Landing Site.	**Section 9.12**	N/A
19. Waste Management • Identify, quantify and classify the likely waste to be generated during construction and operation. • Describe measures to be implemented to minimise, reuse, recycle and safely dispose of this waste. • Identify appropriate servicing arrangements.	**Section 9.13**	**Appendix G**
20. Stormwater • Provide an Integrated Water Management Plan for the development that: - is prepared in consultation with the local council and any other relevant drainage authority. - details the proposed drainage design for the site including on-site detention facilities, water quality measures and the nominated discharge points. - demonstrates compliance with the local council or other drainage authority requirements and avoid adverse impacts on any downstream properties. • Where drainage infrastructure works are required that would be handed over to the local council, provide full hydraulic details and detailed plans and specification of proposed works that have been prepared in consultation with the local council and comply with the local council's relevant standards.	**Section 9.14**	**Appendix H**
21. Flooding • Identify any flood risk on-site having regard to adopted flood studies for the development site, consideration of any relevant provisions of the NSW Floodplain Development Manual and the potential effects of climate change, sea level rise and an increase in rainfall intensity. • Assess the impacts of the development, including any changes to flood risk on-site or off-site, and detail design solutions to mitigate flood risk where required.	**Section 9.14**	**Appendix H**

Term	Section of EIS	Technical Report
22. Infrastructure and utilities • Consider the existing capacity of the site to service the proposed development. • Identify any required utility augmentation to accommodate the proposed development. • Address any requirements of the Infrastructure SEPP in relation to development on or adjacent to utilities and infrastructure.	**Section 8.4** **Section 9.15**	**Appendix I**
23. Contributions and Public Benefit • Prepare Voluntary Planning Agreement(s) (VPA) between Sydney Metro (or its nominated entity) and North Sydney Council in accordance with the commitments contained within the public benefit offer titled 'Sydney Metro Crows Nest over station development VPA' reference SM-20-00094429, prepared by Sydney Metro and dated 1 September 2020, including: - a lump sum prepayment of monetary contribution in lieu of Section 7.11 contribution requirements (as agreed with Council); and - a $2 million monetary contribution for public domain improvements. • Address the requirements of any other relevant contribution plan(s), voluntary planning agreement or EPI requiring a monetary contribution, dedication of land and/or works-in-kind and include details of any proposal for further material public benefit.	**Section 9.21**	N/A
24. Consultation • Detail consultation undertaken consistent with the Undertaking Engagement: Guidance for State Significant Projects, including any issues raised and feedback provided, and how the development has considered and responded. In particular, applicants must consult with: - any relevant local councils. - any relevant agencies. - the community (proportionate to the scale, likely impacts and likely level of community interest in the development). - if the development would have required an approval or authorisation under another Act but for the application of section 4.41 and 4.42 - of the EP&A Act, the agency relevant to that approval or authorisation. - if the development meets any threshold for referral or concurrence under SEPP (Infrastructure) 2007, the agency relevant to that referral or concurrence.	**Section 5**	N/A

Term	Section of EIS	Technical Report
Plans and Documents		
• The EIS must include all relevant plans, architectural drawings, diagrams, lists, certificates and any other documentation required under Schedule 1 of the Regulation.	Throughout EIS	Table of Contents
• In particular, the EIS must include a detailed schedule and plans showing proposed gross floor area and floor space ratio, and a report demonstrating compliance with relevant requirements of the Building Code of Australia.	**Section 4.4** **Section 9.18**	**Appendix C** **Appendix N**
• If the Department identifies any other document required to be included in the EIS before the DA is lodged, those documents must also be included in the EIS.	N/A	N/A
Further consultation after 2 years		
• You must lodge a DA and EIS within 2 years of the date of this SEARs. If you do not lodge a DA and EIS within 2 years of the date of this SEARs, you must consult with the Planning Secretary in relation to the preparation of the EIS.	N/A	N/A

2.5 Environmental Planning and Assessment Regulation 2000 requirement for the EIS

This EIS has been prepared in accordance with the requirements of Schedule 2 of the EP&A Regulation, which prescribes the information and content that must be submitted with a concept SSD Application. Table 2 below outlines these requirements and identifies where each of the requirements have been addressed in this EIS.

Table 2: Schedule 2 of the EP&A Regulation outlining the requirements of an EIS

Requirement for the content of an EIS	Location in the EIS
6. Form of the environmental impact statement	
• An environmental impact statement must contain the following information:	
a. The name, address and professional qualifications of the person by whom the statement is prepared	**Statement of Validity** (page 10 of EIS)
b. The name and address of the responsible person	**Statement of Validity** (page 10 of EIS)
c. 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 10 of EIS)
d. A description of the development, activity or infrastructure to which the statement relates	**Statement of Validity** (page 10 of EIS)

Requirement for the content of an EIS	Location in the EIS
e. 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 10 of EIS)
f. A declaration by the person whom this 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 10 of EIS)
7. Content of environmental impact statement	
(1) An environmental impact statement must also include each of the following:	
a. a summary of the environmental impact statement,	**Executive Summary**
b. a statement of the objectives of the development, activity or infrastructure,	**Section 1.5**
c. 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,	**Section 1.6**
d. an analysis of the development, activity or infrastructure, including:	
(i) a full description of the development, activity or infrastructure, and	**Section 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	**Section 9** and Appendices
(iii) the likely impact on the environment of the development, activity or infrastructure, and	**Section 9** and Appendices
(iv) a full description of the measures proposed to mitigate any adverse effects of the development, activity or infrastructure on the environment, and	**Section 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,	**Section 2.6**
e. a compilation (in a single section of the environmental impact statement) of the measures referred to in item (d)(iv),	**Section 12**
f. the reasons justifying the carrying out of the development, activity or infrastructure in the	**Sections 9.7.2** and **14**

Requirement for the content of an EIS	Location in the EIS
manner proposed, having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development set out in subclause (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.	

2.6 Other approvals

In addition to the approvals noted elsewhere in this document, other approvals will be required to permit the construction of the Site C OSD. These approvals include:

- a compliance certificate under Section 73 of the *Sydney Water Act 1994* (NSW) for connection of water supply for the new building
- approvals under the *Roads Act 1993* (NSW) (including Section 138 approvals) – may be required in the construction scenario where the station has been completed while OSD works are ongoing.

3 The site

3.1 Precinct location and context

The Crows Nest Station precinct is located within the North Sydney local government area (LGA) between the Pacific Highway, Clarke Street (eastern side of the Pacific Highway), Oxley Street and Hume Street, within the suburb of Crows Nest.

The Crows Nest Station precinct is identified under the St Leonards and Crows Nest 2036 Plan, which was finalised by DPIE on 29 August 2020. The 2036 Plan is the key strategic planning document for the St Leonards and Crows Nest area and identifies the future desired character of the precinct. The outcomes of the Plan were implemented through *State Environmental Planning Policy Amendment (Crows Nest Metro Station) 2020* on 31 August 2020, which gazetted the new updated planning controls as they apply to the Crows Nest Station precinct.

The design of the Crows Nest OSD project has been developed concurrently with the 2036 Plan and the associated Special Infrastructure Contribution (SIC) scheme, and directly responds to the key objectives of the Plan (see **Section 6.2.1** below).

3.2 Site description

The approved Concept SSD Application divided the Crows Nest Station precinct into three sites relating to the following properties:

- Site A: The block bound by the Pacific Highway, Hume Street, Oxley Street, and Clarke Lane (497-521 Pacific Highway, Crows Nest). Site A has a consolidated site area of 3,877m^2.
- Site B: The block on the southern corner of Hume Street and the Pacific Highway (477-495 Pacific Highway, Crows Nest). Site B has a consolidated site area of 1,871m^2.
- Site C (the subject site): One lot on the north-western corner of Hume Street and Clarke Street (14 Clarke Street, Crows Nest). Site C has a site area of 608m^2.

These sites have a combined site area of 6,356m^2 and frontages of approximately 180 metres to the Pacific Highway, 25 metres to Hume Street, and 25 metres to Clarke Street.

This application relates only to the detailed design and delivery of Site C OSD, with applications for Sites A and B to be separately developed and lodged in the future. Site C is a singular allotment at 14 Clarke Street that is legally described as Lot 1 in DP1223850. A survey plan is included at **Appendix B**.

A context map is provided at **Figure 9** and an aerial photograph at **Figure 10**.

Figure 9: Context map for the Crows Nest Station precinct

Figure 10: Aerial photograph of Site C's location within the greater Crows Nest Station precinct

3.3 Built form

3.3.1 Pre-demolition

All buildings and structures on the site have been demolished under the terms of the CSSI Approval. Prior to these demolition works occurring, Site C was occupied by a single storey tyre store known as 'Beaurepaires'.

3.3.2 Current state of the site

The demolition works approved under the CSSI Approval are now complete. The site is now vacant and excavation works for the station have been completed. The site is surrounded by construction hoarding which will remain for the duration of the Sydney Metro works.

Figure 11: Current site conditions – March 2021

3.4 Surrounding development

The precinct is surrounded by development of varying heights, ranging from Crows Nest Village characterised by a low scale, fine-grain retail and hospitality strip along Willoughby Road to the high-rise commercial and mixed-use centre at St Leonards.

3.4.1 To the north

To the north west of the precinct is the St Leonards centre, a high density area with a cluster of high-rise development focused around the St Leonards train station (600m from the site), and extending south along the Pacific Highway to the corner of Oxley Street. Directly to the north of the precinct, at the corner of Oxley Street and Pacific Highway, is a recently completed 15 storey mixed use building with commercial uses in the podium and apartments above.

There are also a number of significant developments that have been approved or are currently under construction in this area that will surpass the heights of existing development, commensurate with planned growth under the 2036 Plan. These are discussed further in **Section 3.4.5** below and include 617-621 Pacific Highway which is currently the tallest approved development in St Leonards at RL 263.

Further to the north is the Royal North Shore Hospital and North Shore Private. There are a number of existing industry specialisations related to the health care industry around these hospitals.

3.4.2 To the east

Directly to the east of the precinct, on the other side of Clarke Lane, is a locally heritage listed Brutalist building known as the ‘St Leonards Centre’, a six storey commercial building characterised by reinforced concrete and a curved form, as shown in **Figure 12.**

Other buildings on the block bounded by Clarke Street and Clarke Lane adjoining Site C include a seven storey residential building known as ‘Wyndel Apartments’ at 22-26 Clarke Street, and a five storey commercial building at 20 Clarke Street. On the eastern side of Clarke Street is public open space known as the ‘Hume Street Park’. Hume Street Park contains a childcare centre, indoor sports stadium and a public car park (**Figure 13**).

Willoughby Road denotes the centre of the Crows Nest Village and runs in a north-south alignment for approximately 100m further to the east of the precinct (**Figure 14**).

Figure 12: St Leonards Centre

Figure 13: Hume Street Park

Figure 14: Willoughby Road looking south

3.4.3 To the south

Five Ways South Education and Medical Precinct is located south-east of the intersection of Falcon Street, Shirley Road, Willoughby Road and two Pacific Highway road exits (north and south). More fine-grain retail development flows on from this, leading to the Five Ways intersection as shown in **Figure 15**.

North Sydney Girls High School and Cammeraygal High School are both located approximately 500 metres to the south of the precinct, with North Sydney Boys High School located further to the south east on Falcon Street. The Mater Hospital and its associated entities occupy a significant landholding within this area. The Melanoma Institute, Crows Nest Medical Practice, The Exercise Clinic and a number of other health and fitness related businesses are located in proximity of the hospital.

There is also residential development in this area, occurring a block back from either side of the Pacific Highway. On the eastern side, this generally comprises terrace development of one to two storeys, whilst on the western side, there are a number of walk-up residential apartment blocks approximately four storeys in height.

Figure 15: Five ways intersection, looking south west

3.4.4 To the west

Directly to the west of the precinct, along the Pacific Highway, are a number of commercial and residential developments. A four storey residential building is located at 402 Pacific Highway, and recently completed five storey residential building is located at 400 Pacific Highway, both with ground level retail uses.

Further to the west of the site is the Upper Wollstonecraft residential area. The terrain through this area is hilly and can be quite steep in some areas, particularly along Hume Street. It is characterised by leafy, well vegetated streets, and contains a number of older high rise apartment buildings setback from the street with significant grassed areas and landscaping, contributing to the vegetated character of the area.

3.4.5 New and forthcoming projects near the site

A number of DAs seeking consent for development, and planning proposals seeking to change the planning controls applying to land, are proposed or at varying stages of assessment within the immediate vicinity of the precinct. Many of these are high rise, multi-storey buildings that are expected to significantly alter the built form and character of the area. The height of the proposed Site C OSD is considerably below this scale and the planned growth occurring in the surrounding area and elsewhere in the Crows Nest Station precinct.

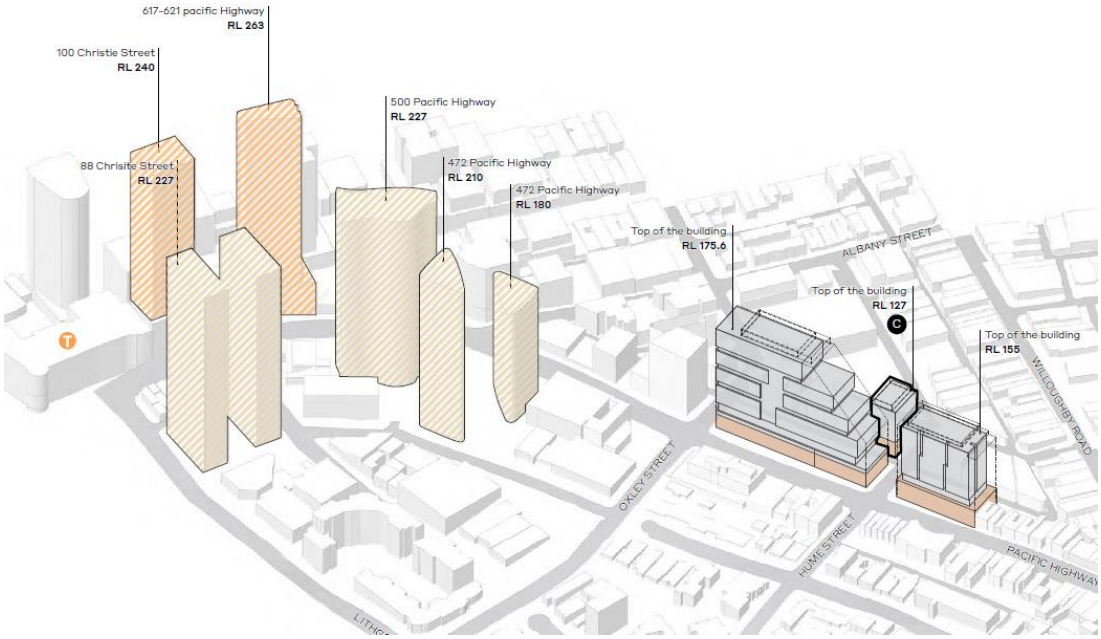


Figure 16: Indicative design of Crows Nest Station precinct within the approved building envelopes in relation to approved and future development under construction in the St Leonards Centre

In addition to these new and forthcoming development projects, it is also proposed to expand open space in the area. North Sydney Council has resolved to expand the Hume Street Park to the north of the site to include over 5,000m^2 of new open space (over 8,000m^2 in total). Council has already acquired properties to provide a pedestrian connection through to Willoughby Road, as discussed in **Section 3.6** below and demolition of the existing buildings on these properties has commenced. These works to the Hume Street Park are consistent with the 2036 Plan, which identifies the need to investigate opportunities to upgrade the park to create a large multi-function green open space at the heart of St Leonards and Crows Nest.

3.5 Transport and accessibility

3.5.1 Rail access

The proposed Site C OSD is located directly above the future Crows Nest metro station, which forms part of the Sydney Metro City and Southwest project as detailed in **Section 1.2** of this report. The proposed OSD will physically integrate with the Crows metro station, specifically the Clarke Street station entrance.

The site is also located within 600 metres of the existing St Leonards Railway Station. These services are detailed in the public transport context map provided at **Figure 17** below.

3.5.2 Bus access

There are numerous bus services in the vicinity of the site, with 10 unique routes servicing the bus stop on the site's Pacific Highway frontage in addition to a service operating from Hume Street.

Destinations serviced by these bus stops include the Sydney CBD, North Sydney, Manly, Chatswood, Balgowlah, St Leonards, Gladesville, McMahons Point, Riverview, Balmoral, Greenwich, Denistone East, Ryde, Milsons Point, Epping, Macquarie University and Botany. **Figure 17** shows existing and public future transport connections in the vicinity of the Crows Nest Station precinct, which includes the site.

Figure 17: Public transport network in the context of the Crows Nest Station precinct

3.5.3 Vehicle access and parking

The precinct is bordered by the following roads:

- Pacific Highway: A two-way arterial road comprising six general traffic lanes, with paid on-street parking on either side. A clearway is in operation along the Pacific Highway in peak times
- Oxley Street: A two-way street comprising a traffic lane in each direction. Parking is generally permitted in kerbside areas
- Hume Street: A two-way street comprising two general traffic lanes and four lanes at the intersection of the Pacific Highway, with paid on-street parking on the eastbound side
- Clarke Street: A two-way street comprising a general traffic lane in each direction and a dedicated cycleway, with paid on-street parking on the northbound side
- Clarke Lane: Partly one way and partly two-way laneway, with traffic permitted northbound only south of Hume Street (in both directions between Hume Street and Pole Lane) and northbound only north of Pole Lane

Prior to the demolition of existing buildings on the site, Clarke Lane was used as a service lane, with multiple loading areas. All other streets listed above operated in accordance with current arrangements.

3.6 Pedestrian access

Pedestrians can access the site via dedicated footpaths on all street frontages. The area surrounding the site also has a well-established pedestrian network and is characterised by high levels of pedestrian activity owing to the site's proximity to high-density development, an established commercial area and public transport nodes, as described above.

Council has exhibited plans to improve pedestrian access to Willoughby Road as part of the Hume Street Park improvements.

3.7 Bicycle access and parking

A dedicated cycle lane runs north-south along Clarke Street immediately adjacent to the site. Whilst there are some other bicycle-friendly roads in proximity to the precinct, including along Nicholson Street and Alexander Street, the cycle network is generally incomplete with a number of gaps and indirect routes.

Some public bike racks are installed along Willoughby Road for cyclists accessing Crows Nest town centre, however, these do not feature weather protection and there are none currently installed in the immediate vicinity of the site.

It is noted that as part of the broader Crows Nest Station development, a separated cycleway will be installed on Hume Street, connecting the cycle route on Clarke Street to the cycle route on Nicholson Street. **Figure 18** below shows the existing pedestrian and cycle networks surrounding the Crows Nest Station precinct, which includes the site.

Figure 18: Existing pedestrian and cycle network surrounding the Crows Nest Station precinct

3.8 Open space

Site C is located adjacent to Hume Street Park, to the north. Hume Street Park is bound by Hume Street, Clarke Street, Oxley Street and Pole Lane. It currently contains a childcare centre, indoor basketball centre and turfed space. North Sydney Council has endorsed plans for an expansion of the park involving a whole of block redevelopment outcome that includes over 5,000m^2 of new open space (over 8,000m^2 in total). Provision has also been made to provide a more direct connection to Willoughby Road by demolishing existing buildings on Hume Street and Willoughby Road. As stated above, DPIE's 2036 Plan also anticipates the future expansion of this Park.

Other areas of public open space in the vicinity of the precinct include Ernest Place, St Thomas' Rest Park and Newlands Park. **Figure 19** below shows open space in the vicinity of the Crows Nest Station precinct, which includes the site.

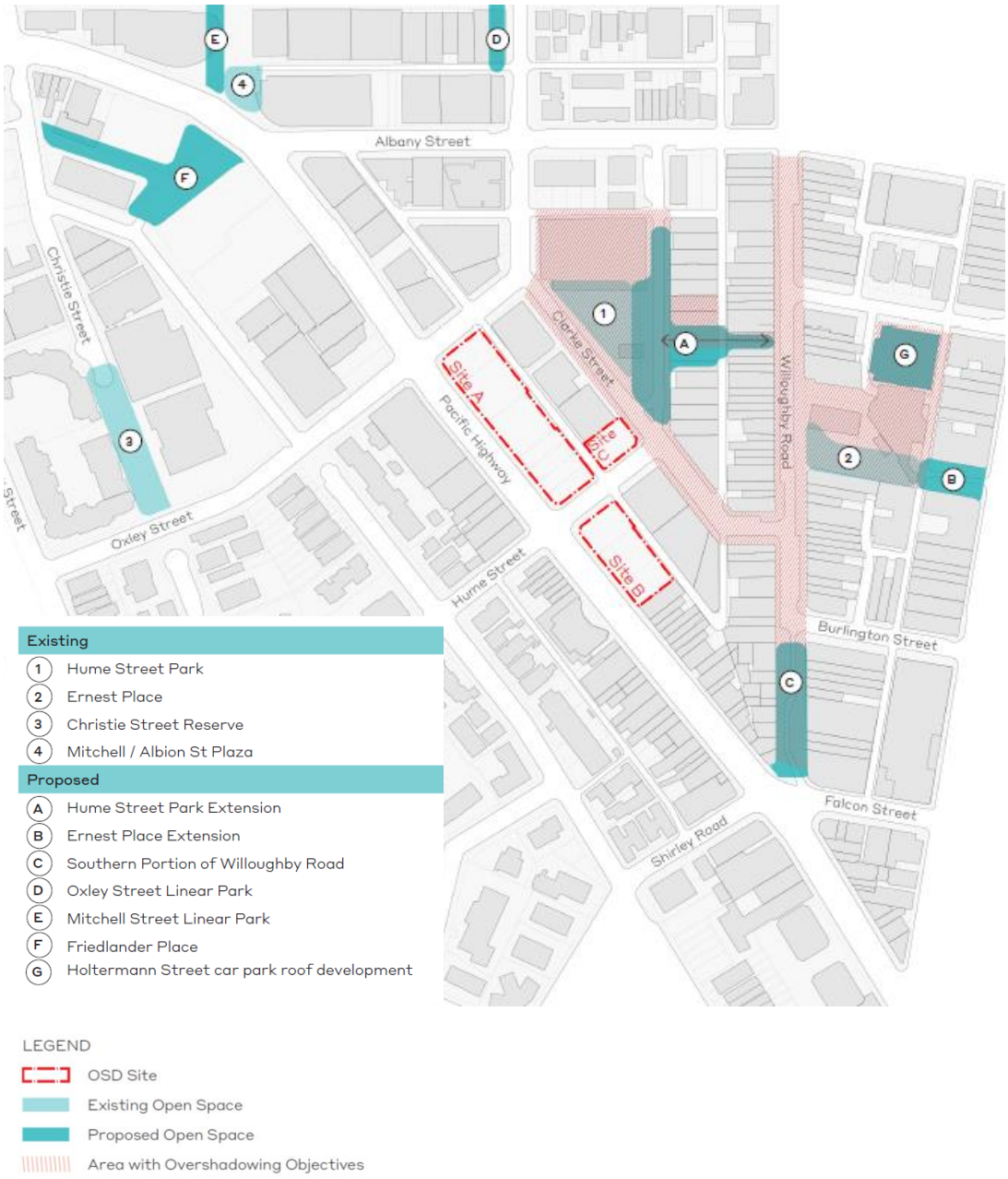


Figure 19: Open space in the vicinity of the Crows Nest Station precinct

3.9 Heritage

The site and other areas of the precinct are not listed as heritage items, nor are they located within a Heritage Conservation Area under the NSLEP 2013. However, the precinct is located in proximity of a number of local and State listed heritage items as illustrated at **Figure 20** and summarised in **Table 3** below.

Site C does not directly interface with any of these surrounding heritage items or conservation areas. The Statement of Heritage Impact that formed part of the approved Concept SSD Application identified and described the heritage significance of the sole item in the vicinity of Site C, being the St Leonards Centre (shown in **Figure 12** above).

Figure 20: Plan of the heritage items and conservation areas in proximity of the site

Table 3: Schedule of the heritage items in vicinity of the site

Item no. (Fig. 20)	Item no. (LEP)	Name and address	Significance
1	I0141	St Leonards Centre (28-34 Clarke Street)	Local
2	I0166 to I0171	Higgins Buildings (nos. 366, 368, 370, 372, 374, 376 Pacific Highway)	Local
3	I0160 to I0164	Shop (nos. 330, 332, 334, 336, 338 Pacific Highway)	Local
4	I0138	Electricity Powerhouse No 187 (23 Albany Street (corner Oxley Street))	State
5	I1034	Former Marco Building (582 Pacific Highway)	Local
6	I0146	Crows Nest Performing Arts Centre (6 Holtermann Street)	Local
7	I0147	Uniting Church hall (8 Holtermann Street)	Local
8	I0148	Uniting Church parsonage (10 Holtermann Street)	Local

Item no. (Fig. 20)	Item no. (LEP)	Name and address	Significance
9	I0182	Northside Baptist Church (63 Willoughby Road)	Local
10	I0153 to I0159	Shops (nos. 312, 314, 316, 318, 320, 322-324 Pacific Highway)	Local
11	I0152	Former Australia National Bank (397 Pacific Highway)	Local
12	I0172	Willoughby House, former OJ Williams store (429 Pacific Highway)	Local
13	I0181	Crows Nest Hotel (1-3 Willoughby Road)	Local
14	I0151	Bank (306 Pacific Highway)	Local
15	I0173	Crows Nest Fire Station (99 Shirley Road)	Local
16	I0150	Former North Shore Gas Co office (286-288 Pacific Highway)	Local
17	I1114	Crows Nest Uniting Church (122 Shirley Road)	Local
18	I1106	House (2 Nicholson Street)	Local
19	I0139	House (103 Alexander Street)	Local
20	I0144	Former hall (14 Hayberry Street)	Local
N/A	I0407	North Sydney bus shelters (various)	Local

3.10 Topography and finished levels

The Pacific Highway runs along the ridge line in a south easterly direction towards North Sydney, with its highest point around the Five Ways intersection between the Pacific Highway, Willoughby Road, Falcon Street and Shirley Road. Other local high points include the St Leonards Centre north of the precinct (generally along Mitchell Street) and the Holtermann Conservation Area east of the precinct.

Site C is relatively flat, ranging from RL 88 to RL 90 across the site. However, these levels are subject to change as construction works including site excavation for the metro station continue.

The ground floor levels for the station, including the new entrance on Clarke Street, and its integration into the surrounding public domain, forms part of the CSSI Approval and is not part of this application. The ground plane is being developed under the terms of the CSSI Approval including through the preparation of a SDPP and an IAP under Conditions E101 and E92 respectively.

3.11 Flooding and stormwater

Flood modelling undertaken by North Sydney Council (2017) show that the Crows Nest Station precinct is located within a low risk mainstream flooding area that is susceptible to 100-year Average Recurrence Interval (ARI) and Probable Maximum Flood (PMF) flooding. The extent of the PMF is shown in **Figure 21** below.

The modelling recommends a variable flood planning level of between 85.39m and 96.34m throughout the precinct. It further recommends that since the 100-year ARI flood depths are less than 0.15m in adjacent streets, a minimum flood planning level of 0.3m above ground level is recommended at the street reserve/site boundary. Minimum flood planning levels along the Pacific Highway site frontage are also to be 0.3m above ground level at the highway reserve/site boundary.

As the ground plane and the station box on Site C forms part of the CSSI Approval, the detailed flood planning for this site is resolved through the station design under the separate CSSI Approval. The proposed OSD described in this separate SSD Application has been designed to integrate with the station areas.

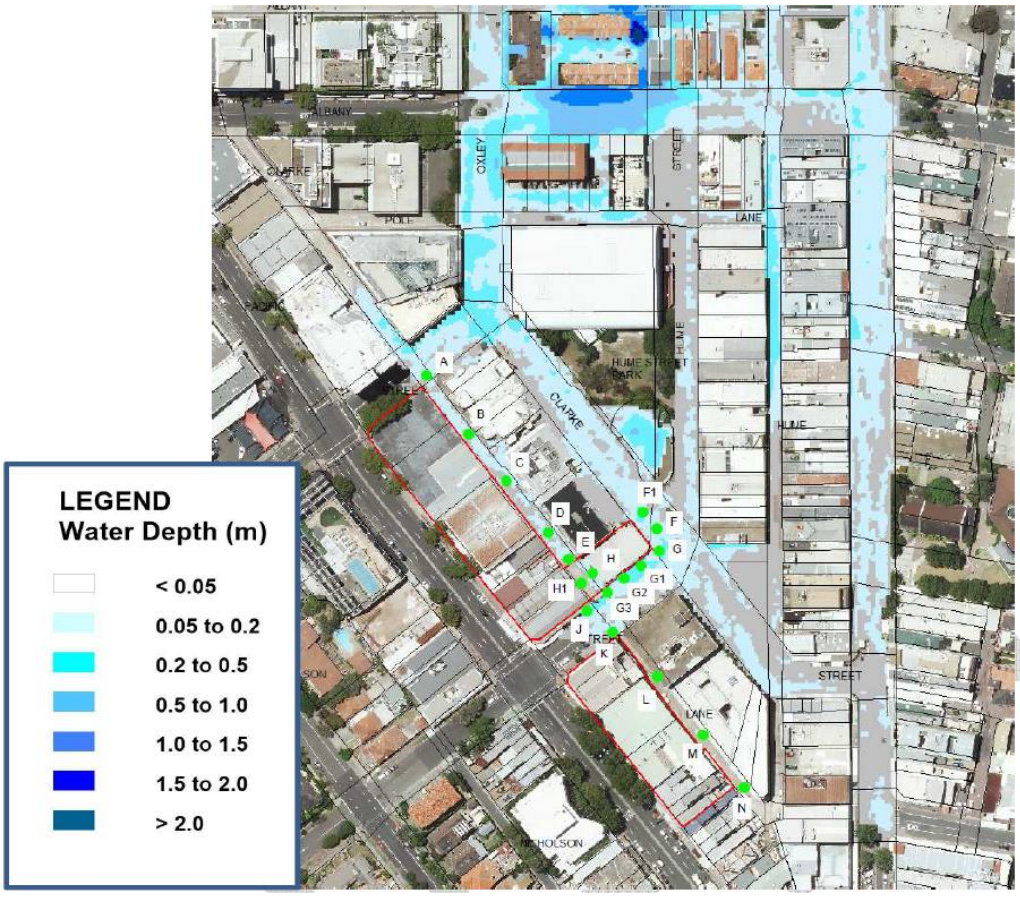


Figure 21: Extracted flood levels in relation to the precinct

3.12 Vegetation

No vegetation is currently located within the site or was located within the site before the demolition works were completed as part of the CSSI Approval. The site was entirely developed as is common for land in the St Leonards/Crows Nest area.

External to the site are trees located along each of the frontages to the site and broader precinct, with the exception of Clarke Lane.

3.13 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 Crows Nest integrated station development, as discussed in **Section 4.12**.

3.14 Easements and covenants

A number of easements and other encumbrances exist on the land title for Site C. The approved Concept SSD Application confirmed that these will be extinguished, and appropriate easements and covenants will be created to respond to the final Crows Nest integrated station development.

Further details of all encumbrances are provided on the site survey at **Appendix B**.

4 The proposed development

This section describes the development for which consent is sought, and its relationship to the approved CSSI Approval and Concept SSD Application. It articulates what Sydney Metro is seeking to achieve for the Site C OSD and how it contributes to the broader integrated station precinct.

Reference is made to the architectural plans and design report included at **Appendix C**.

4.1 Description of the proposed development

This application seeks approval for the following:

- construction of a new commercial building with the following parameters:
    - GFA of 3,097m^2 (excluding station areas)
    - a predominant building height of RL 127m, with an additional 5m 'building services zone' accommodating rooftop plant, equipment, services and lift overruns and fire stairs up to a maximum RL 132m
    - nine storeys within the maximum building height, comprising:
        - the internal fit-out and use of a building entrance lobby on the ground floor, with the building structure at this level being part of the CSSI Approval [2]
        - the internal fit-out and use of bicycle parking and end of trip facilities on Level 1, with the building structure at this level being part of the CSSI Approval [2]
        - office space on Levels 2 to 8
        - an accessible landscaped terrace on part of Level 9 for use by tenants
- associated servicing and landscaping elements not associated with the rail infrastructure
- signage zones for building / business identification
- no vehicle parking or loading will be provided on site
- temporary loading is proposed from Clarke Lane, and a permanent loading dock will be provided in Site A.

[2] The CSSI Approval for the metro station includes space provisioning on the ground level and Level 1 for the Site C OSD (namely the building entrance lobby, bicycle parking / end of trip facilities, and plant not associated with the rail infrastructure). The use and fit-out of these OSD spaces requires approval under Part 4 as part of this SSD Application, while the actual building structure itself is approved as part of the Sydney Metro City & Southwest project (CSSI Approval).

4.2 Key development information

The key numerical details of the proposal are summarised in **Table 4** below.

Table 4: Key development information

Component	Site C OSD
Site area	608m^2
OSD GFA	3,097m^2 (Total site GFA: 3,342m^2 including station areas)
OSD FSR	5.1:1 (Total site FSR: 5.5:1 including station areas)
Non-residential FSR	3,097m^2 of the 43,400m^2 of commercial floor space under the concept proposal
Height to top of building roof slab	RL 127m
Height to top of building services zone	RL 132m (contained in building services zone per Clause 4.3A of NSLEP 2013 and articulation zone per Condition B5 of the approved Concept SSD Application)
Number of storeys	9 storeys (including ground floor) plus rooftop plant
Car spaces	None
Bicycle spaces	21 parking spaces for tenants, 7 parking spaces for visitors (in addition to other publicly accessible parking being delivered as part of the public domain works under the CSSI Approval)
Loading docks	None on-site, loading will occur from Clarke Lane and on Site A

4.3 Relationship of the proposal to the CSSI Approval

It is essential that there is clear delineation between the scope of this detailed SSD Application for the Site C OSD (i.e. those elements for which consent is sought) and those elements already approved as part of the CSSI Approval.

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

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

The sections below outline the relationship between this detailed SSD Application and the CSSI Approval, highlighting the key components of the integrated project, and identifying those that fall within the scope of the CSSI Approval, or vice versa.

4.3.1 Integration between the OSD and metro station

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

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

The CSSI Approval provides consent for all structural elements to support future OSD, and space to accommodate various OSD elements within the station building footprints presented and assessed as part of the CSSI EIS.

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

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

In summary:

- This detailed SSD Application does not, and cannot, seek consent for those elements that form part of the approved metro station within the station envelope below the transfer slab, and which necessarily and specifically includes the following:
    - "structural elements (steel and / or concrete), building grids, column loadings and building infrastructure to enable the construction of future over station development; and
    - space for future lift cores, access, parking and building services for the future over station development."
- This application does seek consent for the fit-out and use of nominated interface areas. These areas are located within the approved station box but contain OSD elements, such as the building lobby and bicycle parking and end of trip facilities. Plans detailing the differentiation between of the CSSI Approval areas of Site C and the proposed OSD areas of Site C are included at **Appendix C**.

4.3.2 Public domain works

The public domain works within and surrounding the Crows Nest Station precinct are part of the design and delivery package for the CSSI Approval. The public domain strategy for the precinct is being resolved through the CSSI Approval process, and specifically the SDPP and IAP. Whilst forming part of a separate process, a holistic design approach to the integration of the Station and OSD at the ground plane has been adopted.

The ground levels and ground floor arrangement detailed in the architectural plans at **Appendix C** reflect the current level of design work for the station and have been used as the basis of the design for the proposal. The final design and finished levels are yet to be determined for the public domain improvements surrounding the site and will be delivered under the terms of the CSSI Approval.

4.3.3 Utilities and services

All enabling works associated with the Crows Nest Station are informed by the CSSI Approval and public domain works, and does not form part of this application. Such works include:

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

4.3.4 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. Importantly, the proposed OSD does not require any additional excavation beyond that already required and approved for the CSSI. Accordingly, this detailed SSD Application does not seek consent for excavation or bulk earthworks.

4.3.5 Summary of planning pathway relationship between the CSSI Approval and this detailed SSD Application

Table 5 summarises the planning pathway relationship between the works proposed under this detailed SSD Application and those works covered under the CSSI Approval.

Table 5: Planning pathway relationship between the CSSI Approval and this detailed SSD Application

Component	Site C OSD SSD Application	CSSI Approval
Design and construction of the building above the station (i.e. above the transfer slab)	X	
Uses within the OSD building	X	

Component	Site C OSD SSD Application	CSSI Approval
Use and design of interface areas within the approved station (below and above ground) including: • OSD lobby • OSD parking and loading • OSD end-of-trip facilities • Back-of-house facilities including building plant, waste and service rooms	X	
Demolition and excavation		X
Station and OSD structure (i.e. structural elements, building grids, column loadings, building infrastructure and services up to the transfer level)		X
Non-OSD uses within the station including retail		X
Public domain works and landscaping		X
Space for future lift cores, access, parking and building services for OSD		X
Provision for the connection of OSD utilities		X

4.4 Land use and gross floor area

The Site C OSD will be used for commercial office premises, which will occupy levels 2 – 8 above the station entrance (with a commercial entrance lobby and EOT facilities provided at ground level and level 1 respectively).

The detailed design of the Site C OSD envelope yields a total GFA of 3,097m^2. This exclusively relates to the OSD for which consent is sought under this application, and does not include areas attributed to the metro station which fall under the CSSI Approval. When combined with the GFA being developed as part of the metro station and associated areas that are subject to the CSSI Approval, the total GFA is 3,342m^2 or an FSR of 5.5:1.

As the proposed land uses are entirely commercial, the development will contribute to the non-residential floor space controls that have been set for OSD being developed within the Crows Nest Station precinct. The proposed OSD on Site C will achieve the nominated non-residential floor space ratio control of 5:1.

Table 6: Proposed GFA breakdown

Demarcation	GFA (m^2)
Site C OSD (this application)	3,097
Station on Site C (CSSI Approval)	245
Total	3,342

4.5 Built form

The proposed development is detailed in the design report and architectural plans included at **Appendix C** and discussed in the sections below. A diagram and photomontage of the Site C integrated station development is included at **Figure 22** and **Figure 23** below. It is noted that the architectural detailing and materiality of the proposed building has been designed in accordance with the Design Guidelines and the design review process in accordance with the updated Design Excellence Strategy. This is discussed further in **Section 7**.

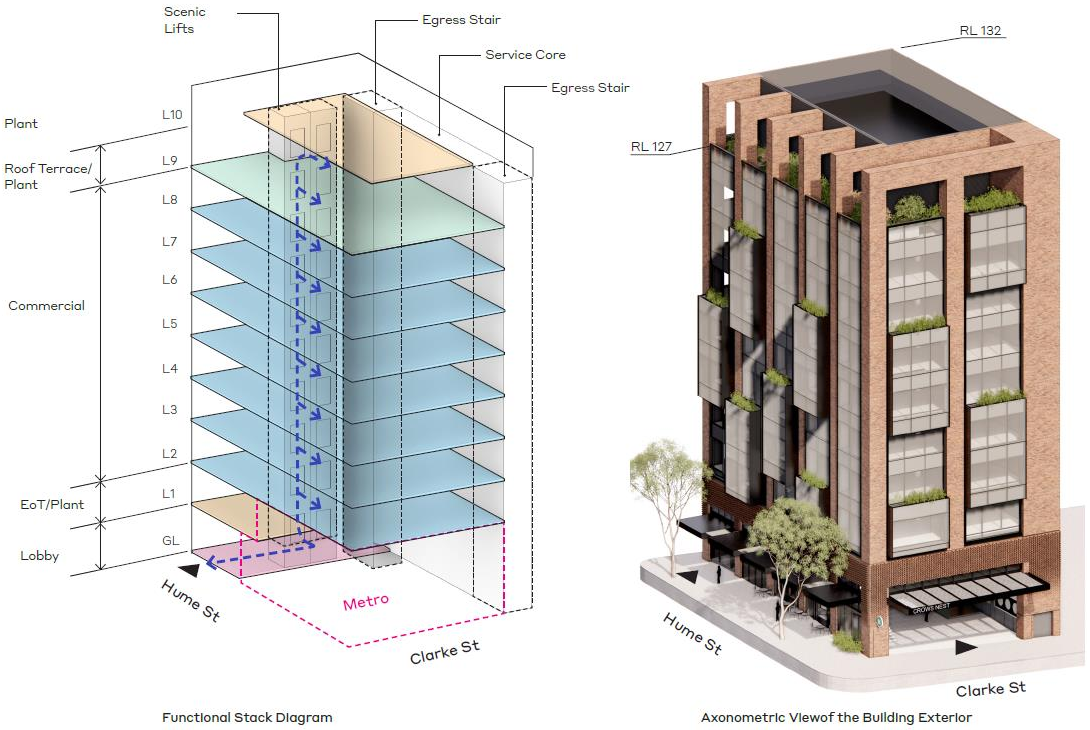


Figure 22: Diagrammatic summary of the proposed building and its components

Figure 23: Modelling of the Site C building in its future context as viewed from the Hume Street Park

4.5.1 Ground floor lobby

The proposed Site C OSD has been designed to integrate with the station portal for Crows Nest which forms part of the CSSI Approval as delineated in **Section 4.3** above. The station portal comprises a generous double-height space that assists in drawing metro station passengers intuitively to their destination. It includes retail areas accessed from within the station and Hume Street, servicing the local population and contributing to the vibrancy and activation of the station and surrounding areas.

The scope of works at the ground plane comprises an OSD entrance lobby accessed from Hume Street. The lobby is located towards the rear of the station entrance and provides elevator access to end of trip facilities (bicycle parking, lockers, amenities) at level 1 and the commercial office on levels 2 to 8 of the building. Two sets of staircases for vertical circulation are located at the north-eastern side of the building (facing 20 Clarke Street) and this also forms part of this Site C OSD SSD application.

Awnings are provided at the ground floor of the building for pedestrian amenity and to distinguish the entrances to the building (**Figure 24**).

Figure 24: Hume Street frontage of the building with the commercial lobby and retail areas

4.5.2 Level 1 (active transport facilities)

Level 1 of the Site C OSD comprises a void for the double-height station entrance accessed from Clarke Street. Bicycle parking and end of trip facilities (lockers and amenities) and plant areas associated with the operation of the OSD is provided on part of this level to service the site and encourage active transportation (**Figure 25**).

Facilities included at this level comprise male and female showers (with 3 showers and 15 lockers each), an accessible toilet, and 26 bike parking spaces.

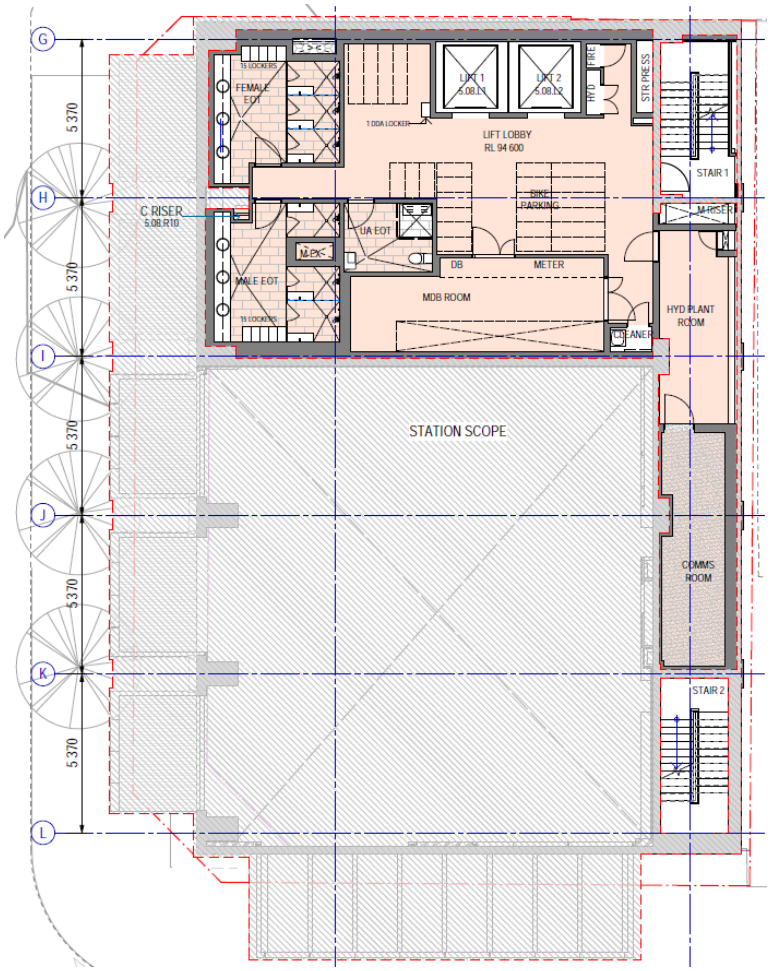


Figure 25: Proposed OSD areas on Level 1

4.5.3 Commercial offices (levels 2 – 8)

Levels 2 to 8 of the proposed building will provide new office space. These are designed as flexible contiguous floorplates of approximately 290m^2 of usable space which may be occupied by a single tenant or divided into multiple tenancies (**Figure 26**). Consent is sought for the office shell only, with the fit-out of these spaces to be subject to future applications or approval processes when tenants are confirmed.

The floorplates of the office levels include pop-outs to make use of the vertical articulation zones for Site C provided under the approved Concept SSD Application, as well as non-trafficable planter boxes, to modulate the building façade, improve visual interest, and reduce perceived bulk and scale.

The building core on the southern and western edges of the building provides amenities, plant, and circulation spaces.

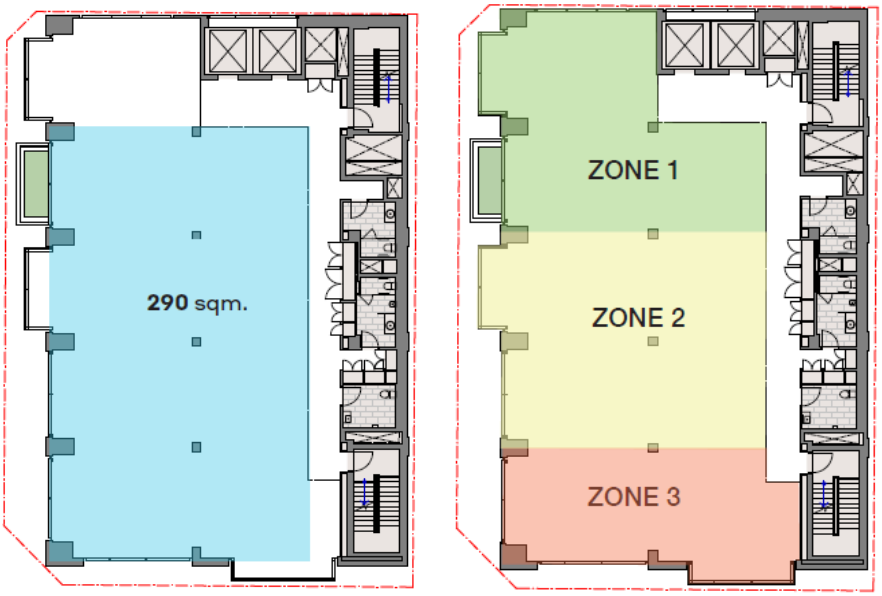


Figure 26: Typical office level designed as one contiguous space with the potential to accommodate multiple tenancies in the future

4.5.4 Rooftop services zone and terrace

The roof of the Site C OSD is designed to provide landscaped open space for use by the future tenants and to accommodate necessary building plant and services, which have been integrated into the overall design of the building through an architectural roof feature.

Level 9 includes a rooftop terrace which will be accessible to building tenants, in addition to building plant functions as shown on the architectural plans. Lift access is provided to this level ensuring that the terrace is accessible. It includes benches and break-out spaces and significant planting to create a landscaped outlook and shield users from wind and noise (see **Figure 27**).

The building services zone is provided between RL 125 and RL 132. These levels are wholly contained within the prescribed ‘building services zone’ for the site under clause 4.3A of the NSLEP 2013, and plant and services have been enclosed and setback from the street frontages to ensure they are visually discreet.

These upper levels of the building and the roof terrace are integrated into the overall building design by an architectural roof feature, comprising striking masonry columns that connect the negative space created by the terrace, to the office floors and the masonry base of the building below (see **Figure 28**).

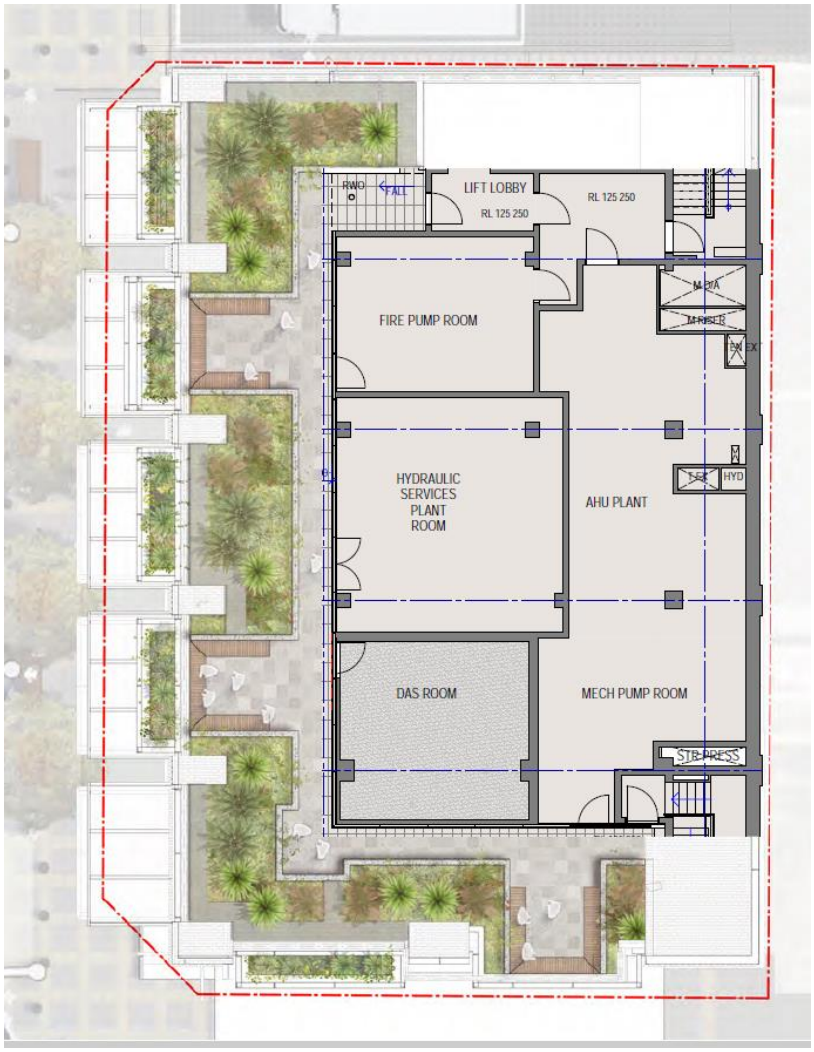


Figure 27: Landscaped terrace on the building roof

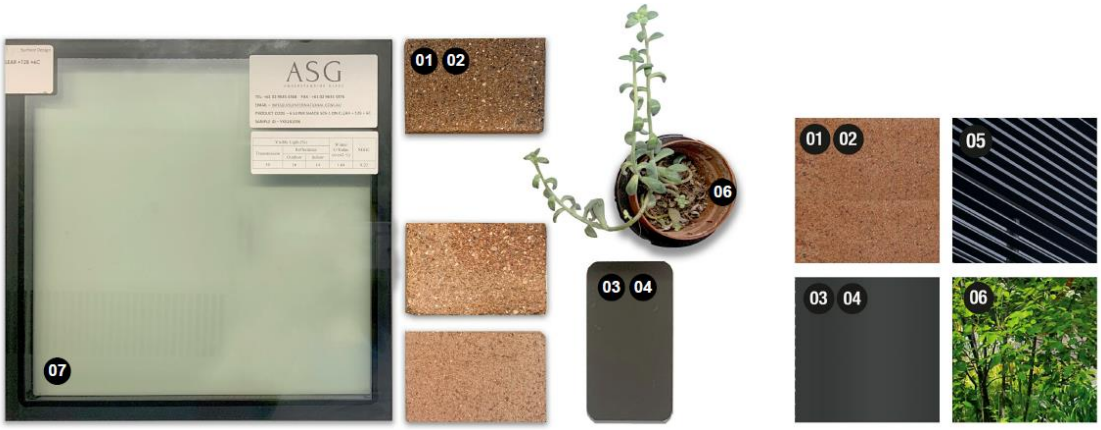
Figure 28: Architectural roof feature

4.5.5 Facades and materiality

The architectural detailing and materiality of the proposed building comprises the following:

- a two-storey brick clad base to the station building, which will be a consistent design feature for all three OSD sites within the Crows Nest Station precinct. This will create a consistent human scale and architectural language within the precinct (see **Figure 29** below). The Site C building base uses textured brick, to further distinguish this section of the building from the floors above.
- the masonry-style base is integrated into the façades above through vertical fins on the western, eastern, and southern facades that continue through to the architectural roof feature described in the section above. This ensures a consistent architectural language through the building, providing visual consistency between the station and OSD levels.
- the remaining sections of the western, eastern, and southern facades of the building are finished in floor to ceiling glazing with pop-out or bays used as planter boxes and office space.
- the northern façade of the building is finished with brick to create continuous expression around the corner, and coloured precast concrete beyond these corner treatments to match the brick's terracotta colouring and enable future development to be built up to this façade in the event that land to the west is redeveloped.
- the rooftop services zone is finished in powder coated metal in a charcoal grey to visually reduce its scale and prominence.

Figure 29: Consistent masonry-style base for Site C and the remaining OSD sites subject to separate approval



01, 02	CE:51	PRECAST PANELS WITH BRICK INLAYS
03,04	WD:51,CD:08, CD:51	METAL PLATE POWDER COATED IN CHARCOAL GREY
05	LV:51, LV:52	CONTINUOUS LOUVRE SCREEN
06		ROOF PLANTS
07	WD:51	CURTAIN WALL GLAZING

Figure 30: Site C OSD materiality palette

4.6 Landscaping

The proposed Site C OSD provides for landscaping on the roof and on the Hume and Clarke Streets facades, to create visual interest, amenity, and to better integrate the building with the Hume Street Park. Planting has been chosen with an emphasis on durable native species that create a diverse colour palette. Landscape plans are provided at **Appendix C**.

The location and number of street trees, including the height of these trees and canopy cover, is a matter for the CSSI Approval and the separate SDPP for public domain areas as discussed in **Section 9.2.1**.

4.7 Transport, access, and parking

4.7.1 Private vehicle access and parking

No car parking spaces will be provided within Site C as part of this development, and no private vehicles will access Site C, owing to the constraints of the site and in accordance with the approved Concept SSD Application. Future tenants are expected to access this site via public transport including the metro station that is integrated with this building, the surrounding bus and heavy rail network, or via active transport methods such as walking and cycling.

4.7.2 Bicycle access, parking and end of trip facilities

Bicycle parking and associated end of trip facilities (lockers and amenities) are provided on Level 1 of the building to service staff and visitors to the site. These include male and female change areas with three shower stalls and 15 lockers each, one accessible shower stall and locker, and 28 bicycle parking spaces for staff and visitors.

4.7.3 Loading and servicing

Owing to the constraints of Site C, which accommodates the station portal and is the smallest within the Crows Nest Station precinct, there is no opportunity to provide an on-site loading dock for the building.

Accordingly, loading and servicing for Site C will occur from the lay-by in Clarke Lane in accordance with the approved Concept SSD Application. Following completion of the OSD on Site A, loading and deliveries will then occur from the Site A Loading Dock in accordance with a booking system to be managed by the Site A OSD Building Manager. Service and maintenance vehicle parking for Site C OSD can also be accommodated within the Site A OSD parking on level 2.

Waste collection will continue to utilise the available spaces in Clarke Lane, recognising that waste collection occurs outside of typical operational hours and needs to occur adjacent to Site C.

Table 7: Proposed loading arrangement

Stage	Location	Loading dock access & management
Site C completed	Lay-by in Clarke Lane for waste collection and deliveries	Deliveries and loading and private refuse collection from Clarke Lane
Site A completed	Site A Loading Dock and Level 1 of Site A for service vehicle parking	Deliveries and loading via Site A loading area. Refuse collection from Clarke Lane.

4.7.4 Emergency vehicle access

Emergency vehicle access will be possible via the surrounding road network including the Pacific Highway, Clarke Lane, Hume Street and Clarke Street. No spaces are required to be provided within Site C for this purpose.

4.7.5 Point-to-point transfer (taxi, ride-share)

A taxi zone accommodating three spaces will be provided on Oxley Street, forming part of the public domain and access upgrades under the CSSI Approval. This zone will also be able to provide a pick-up and drop-off point, as a kiss-and-ride location for the Crows Nest Station precinct. No spaces are required to be provided within or specific to Site C for this purpose.

4.8 Ecologically sustainable development

The proposed development will continue to target the achievement of the ESD targets nominated in the approved Concept SSD Application including a 5 Star NABERs energy rating, 4 Star NABERs water rating, and a 5 Star Green Star As Built v1.2 rating, as well as ensuring general improvements where possible for energy and water consumption, transportation, and material selection and emissions as outlined in the Ecologically Sustainable Development (ESD) Framework at **Appendix F**.

Specific measures adopted by the building are explored across a range of criteria including energy efficiency, water efficiency, waste management, building materiality, indoor environment quality, active/public transportation, ecology, emissions reduction and resilience to climate change and are listed in Section 6 of **Appendix F**.

4.9 Signage

Three (3) signage zones are proposed for the Site C OSD, which will identify the future tenant/s of the building (see **Figure 31**). These signage zones define the location and maximum extent of future signs to be mounted on the building façade (refer to the elevations within the Architectural Drawings at **Appendix C**). Details of the exact content, materiality, and illumination of any signs within these zones will be the subject of separate and future approvals when the tenant/s of the building are known.

The proposed zones, therefore, ensure that business identification signage is sensitively integrated with the overall façade design of the building, while acknowledging that the detailed signs within these zones cannot be designed or installed until the future tenant/s of the building are confirmed.

Figure 31: Signage zones (shaded pink)

4.10 Waste management

Tenancy staff, waste contractors or building management (as appropriate) will be responsible for moving waste and recycling from the office tenancy/s to a central waste storage room located on the ground floor of the building and for collection, as follows:

- office spaces would be furnished with general waste and commingled recycling bins
- staff or cleaners would dispose of waste to the appropriate bin within the waste management room
- building management would be responsible for the transfer of bins to the required collection point on Clarke Lane

Waste rooms for the station retail and entrance will not be shared with the proposed Site C OSD and form part of the CSSI Approval.

A Waste Management Plan accompanies this EIS at **Appendix G**.

4.11 Stormwater

In-ground stormwater management, including the modification of existing stormwater assets and installation of new stormwater assets will be undertaken as part of the CSSI Approval. This strategy was developed in the CSSI Approval to reduce the potential for the future disruption of footpath access should the construction of OSD be delayed after the completion of the station, removing the need for detrimental construction works to the metro station and surrounding areas after the station is operational.

Accordingly, as all servicing will occur as part of the CSSI Approval, no assets will be handed over to Council as part of this application. Separate coordination with Council will occur as part of the CSSI Approval.

Notwithstanding this, the Stormwater and Flooding Report at **Appendix H** of this EIS identifies the existing and proposed drainage strategy for the site. It is proposed to install a detention tank for stormwater within Site C, consistent with the strategy considered in the approved Concept SSD Application.

Water quality treatment measures will also be installed to meet Council requirements and Green Star rating targets.

4.12 Services and utilities

Utility and service connections are provided under the CSSI Approval to meet the servicing requirements of the Crows Nest integrated station development, including independent connections with additional capacity to service the OSD based on the maximum services demand.

Notwithstanding this, the Infrastructure and Utilities Assessment at **Appendix I** confirms that the site is serviced by a full range of utilities and services, including stormwater drainage, sewerage, potable water, telecommunications, gas, and electrical infrastructure. The site can be appropriately serviced in accordance with the relevant providers' requirements and standards.

4.13 Construction management and staging

The Site C OSD is entirely integrated with, and will be constructed at the same time as, the station portal being provided on this site. Accordingly, the proposed works will be completed by the station contractor as a continuation of the Construction Environmental Management Framework and Construction Noise and Vibration Strategy utilised for the CSSI Approval (see **Appendix U**).

The key management documents that will continue to be implemented through the construction of the Site C OSD include:

- the Construction Traffic Management Plan, including the Logistics Lane Traffic Management Plan and the Concrete Delivery Operations Traffic Management Plan
- the Construction Environmental Management Plan and its sub-plans, which address matters such as noise and vibration, air quality, waste management, sediment and erosion control measures
- the Community Communications Strategy and the Business Management Plan

Construction management is discussed further in **Section 9.20**.

5 Stakeholder and community engagement

Community consultation and stakeholder engagement has played a key role in the design and form of the Crows Nest Station precinct. This Section 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 Communication objectives

Sydney Metro has informed, consulted and involved the community and key stakeholders who are interested or affected by the Crows Nest integrated station development. This level of engagement has taken place at all stages of the project starting from early engagement in 2014.

All engagement activities conducted by Sydney Metro have been:

- open and inclusive
- easy to access
- relevant
- timely
- meaningful.

Sydney Metro's ongoing communication objectives for this project include:

- communicating the rationale for the OSD and the broader benefits it would deliver
- communicating the Sydney Metro detailed design and timing
- building upon existing community and key stakeholder relationships and maintaining goodwill
- providing information about the planning approvals process and encouraging community participation.

5.2 Key stakeholders

The key stakeholders for the project include (but are not necessarily limited to):

- state government agencies
- relevant elected officials
- local councils
- public utilities
- business and industry groups
- public transport customers
- directly impacted stakeholders
- directly impacted communities and businesses
- the broader community.

5.3 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 Crows Nest Station precinct.

Sydney Metro communication and consultation objectives include:

- communicating the rationale for the OSD and the broader benefits it would deliver
- communicating the Sydney Metro detailed design and timing
- building upon existing community and key stakeholder relationships and maintaining goodwill, and
- providing information about the planning approvals process and encouraging community participation.

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 lodging the Concept SSD Application that this application follows to engage with industry, the local community and stakeholders. This consultation aimed to keep the community informed and to provide opportunities for feedback.

The level of consultation undertaken prior to this application satisfied the requirements of the (then) Department of Planning and Environment's *Major Project Community Consultation Guidelines* (October 2017).

5.3.1 Engagement timeline

A summary of engagement activities undertaken to date has been provided in **Table 8** below.

Table 8: Engagement activities

Activity	Content	Date
Industry briefing	Booklet updating industry on project contract packages, delivery strategy and future market soundings	November 2017
Media release	'New City Metro stations to shape Sydney' issued by Minister for Transport and Infrastructure, Andrew Constance	November 2017
Website	New integrated station development page uploaded to Sydney Metro website	November 2017
Facebook	Integrated station development post uploaded to Sydney Metro Facebook page	November 2017
Integrated station development book	Booklet of Sydney Metro's concept proposals for integrated station development	November 2017

Activity	Content	Date
Industry briefing	Booklet updating industry on project contract packages, delivery strategy and future market soundings	April 2018
Crows Nest OSD early consultation	Crows Nest integrated station development booklet	July 2018
Community information sessions	Displays, information and expert members of the project team made available to answer questions from the community	July 2018
Early feedback update /Request for SEARs	Crows Nest integrated station development update newsletter	September 2018
Response to Submissions community newsletter	Crows Nest Station project update detailing amended concept proposal and how to lodge formal submissions for the Response to Submissions report	September 2020

As demonstrated above, Sydney Metro City & Southwest began its broad engagement with the community and stakeholders in June 2014, including consultation about the Crows Nest Station. Community engagement has continued through all of the planning approval stages of the CSSI Approval, including the preparation of the Chatswood to Sydenham Environmental Impact Statement (EIS) and all subsequent modifications, and through the approved Concept SSD Application phase for Crows Nest.

Collateral used for engagement throughout has included newspaper advertisements, a media release, information on the Transport for NSW and Sydney Metro websites, distribution of a community information booklet, newsletters, and email updates to the project database. A summary of these activities, and the reach of these activities, is included in **Table 9** below.

An example of the newsletter circulated for the Response to Submissions (RtS) report for the Concept SSD Application is also show at **Figure 32** below, which was distributed to over 1,500 stakeholders as well as being letterbox dropped to all properties within 500 metres of the station site (shown in **Figure 33** below).

Table 9: Engagement statistics

Activity	Community reach
Community information sessions (July 2018)	482 attendees (4 sessions)
Industry briefings (November 2017 and April 2018)	More than 1,000 attendees
Crows Nest integrated station development booklet (early consultation) (July 2018)	6,000 emails More than 6,500 letterboxes
Early feedback update / request for SEARs (September 2018)	More than 6,000 emails

Activity	Community reach
Crows Nest integrated station development update newsletter	
Response to submissions community newsletter (September 2020)	1,500 emails More than 6,500 letterboxes
Station Design and Precinct Plan consultation (September 2020)	1,500 emails More than 6,500 letterboxes

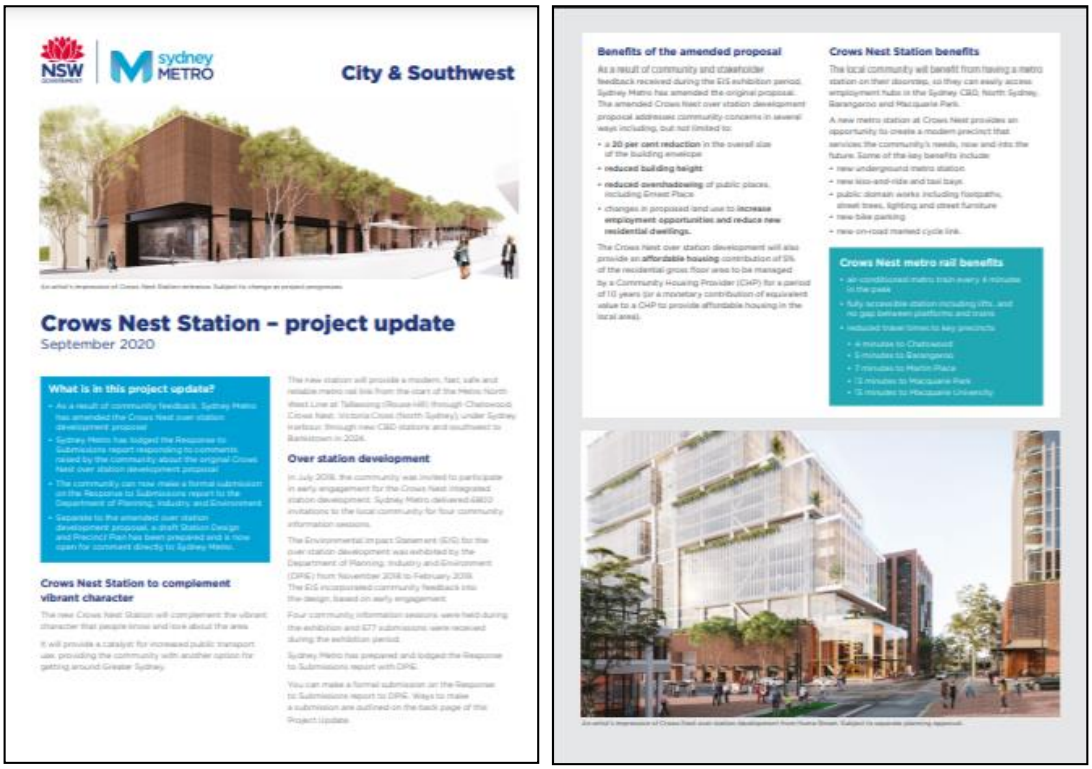


Figure 32: Project newsletter

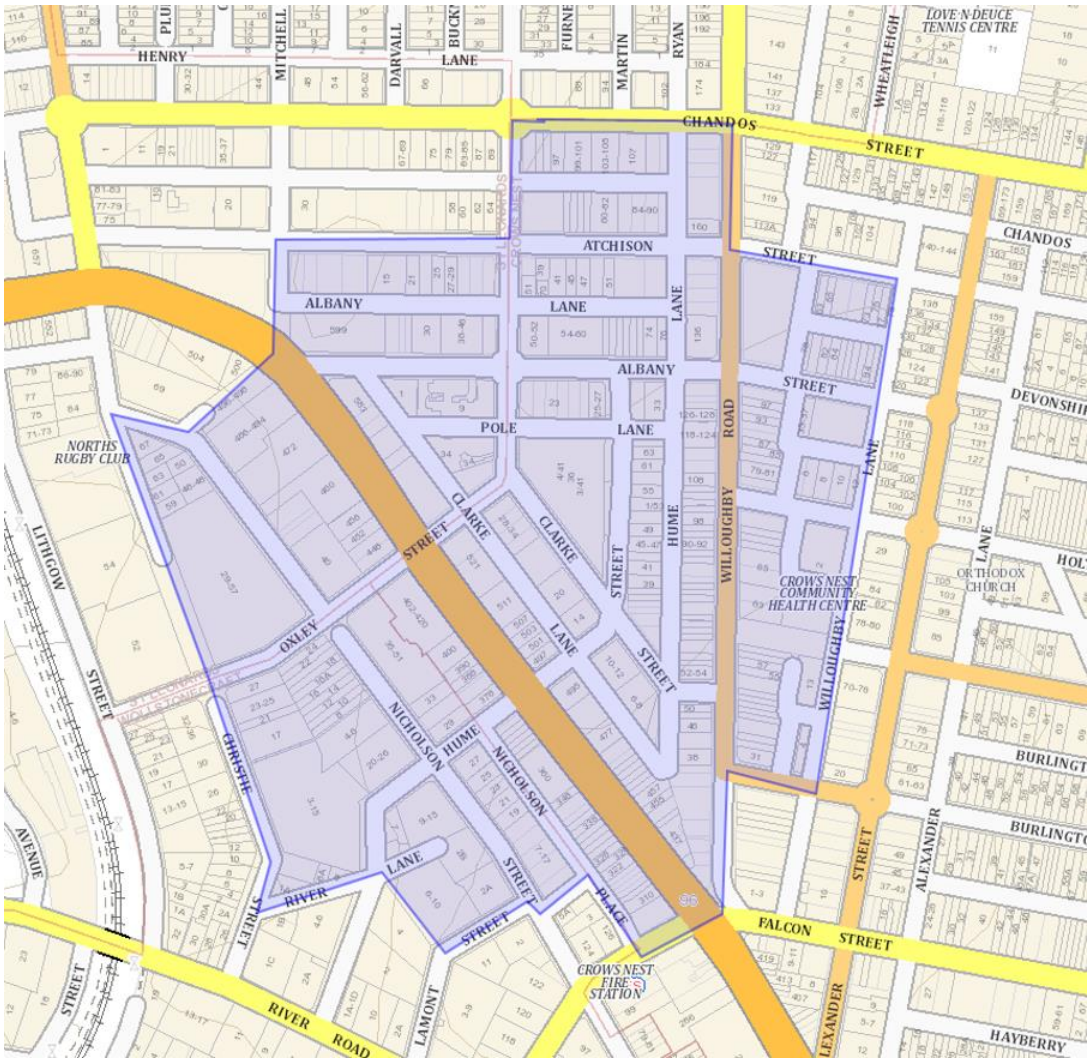


Figure 33: Example distribution map

5.3.2 Consultation as part of this detailed SSD Application process

The detailed SSD Application for the Crows Nest Site C OSD, including the EIS, will be required to be publicly exhibited as part of its statutory obligations.

Sydney Metro will also undertake consultation and engagement activities during this statutory public exhibition period for the EIS including:

- community information sessions – two information sessions to be held during the public exhibition period. Sessions will be held on a weeknight and a weekend to ensure the community has options to attend. Sessions will provide the community with information on the EIS and how to lodge formal submissions
- email updates – regular email updates will be provided to subscribed community members regarding public exhibition timelines, how to lodge formal submissions and invitations for the community information sessions. Regular email updates to the community will also be provided on an as needed basis
- newsletter/factsheet – a community newsletter/factsheet will be distributed to stakeholders and letterbox dropped within 500 metres of the station site. The newsletter/factsheet will provide information on the detailed design of Site C OSD and how the community or stakeholders can lodge their formal submissions

- government stakeholder engagement – relevant government stakeholders will be consulted with as required
- newspaper advertising – ads will be placed in relevant newspapers to advertise the community information sessions' dates and timings
- website updates – the Sydney Metro Crows Nest Station and integrated station development webpages will be updated to include all relevant information
- media announcement – post the approval of the detailed design, Sydney Metro will distribute a media release detailing the approval and additional information that may be of interest to the community.

All planned engagement activities will follow the principles listed above that are directly referenced in DPIE's 'Undertaking Engagement Guide – Guidance for State Significant Projects'.

Consultation with agencies and authorities

In the preparation of the technical reports that have informed this assessment, requests were made to key agencies and authorities to consult on a range of issues. These included Transport for NSW, Fire and Rescue NSW, NSW Police, and North Sydney Council.

The meeting with North Sydney Council was held on 1 April 2021 to discuss the Site C OSD. The Sydney Metro project team clarified and answered a number of questions including on the relationship between OSD and CSSI Approval areas and potential future applications for the remaining areas of the Crows Nest Station precinct. Council did not raise any significant objections in relation to the project.

Any feedback received from agencies and authorities has helped inform the Site C OSD and been addressed in consultants reports where relevant.

Further opportunities for review and feedback will occur as part of the exhibition of the EIS.

6 Assessment of compliance with strategic plans

This Section assesses the consistency of the proposal with the goals and planning objectives of the strategic land use, urban design and transport plans prepared by the relevant agencies and bodies. This assessment aligns with the SEARs issued for the project (see **Appendix A**) and ensures that all relevant policies and plans have been addressed as part of this detailed SSD Application.

It is emphasised that the approved Concept SSD Application addressed the strategic context of the site and the delivery of OSD as part of the Crows Nest Station precinct. It discussed the various plans and policies governing the long-term development of Sydney over the next forty years and was found to be consistent with and support the strategic goals, directions and actions of these plans and policies as identified in **Section 0** of the EIS. As detailed in the following sections and other supporting technical information appended to this EIS, the proposed Site C OSD remains consistent with the concept proposal and as such remains consistent with its strategic context.

The following strategic plans and policies are assessed in this section, or later in the EIS, in accordance with the SEARs:

- Greater Sydney Region Plan – A Metropolis of Three Cities (GSRP)
- Our Greater Sydney 2056 – North District Plan (North District Plan)
- Future Transport Strategy 2056 (Future Transport 2056)
- Revised NSW State Plan 2021
- Building Momentum: State Infrastructure Strategy 2018-2038 (Building Momentum)
- Better Placed: An Integrated Design Policy for Built Environment of NSW (Better Placed)
- Sydney's Rail Future: Modernising Sydney's Trains (Sydney's Rail Future)
- St Leonards and Crows Nest 2036 Plan (2036 Plan)
- St Leonards and Crows Nest Local Character Statement (Local Character Statement)
- Crows Nest Placemaking and Principles Study (Principles Study)
- North Sydney Local Strategic Planning Statement (LSPS)
- North Sydney Community Strategic Plan 2018-2028 (Community Strategic Plan)

6.1 Metropolitan and district strategies

A number of state and metropolitan planning strategies, policies and guidelines are relevant to the proposed SSD Application. Where relevant, an assessment of the proposal's consistency with these strategies is provided below.

6.1.1 Greater Sydney Region Plan

The *Greater Sydney Region Plan – A Metropolis of Three Cities* (GSRP) is the overarching strategy for growing and shaping the Greater Sydney Area. It sets a 40-year vision (to 2056) and establishes a 20-year plan to manage growth and change for Greater Sydney in the context of social, economic, and environmental matters.

The Plan was adopted in March 2018 and seeks to reposition Sydney as a metropolis of three cities – the Western Parkland City, Central River City, and the Eastern Harbour City. In the same vein as the former *A Plan for Growing Sydney*, the Plan provides 10 high level policy directions supported by 40 objectives that inform the District Plans, Local Plans and Planning Proposals which follow in the planning hierarchy.

These objectives have been broken down into the following five themes:

- Infrastructure and collaboration
- Liveability
- Productivity
- Sustainability
- Implementation.

An assessment of this proposal's consistency with key Planning Objectives identified in the Regional Plan is provided in **Table 10** below.

Table 10: Consistency with the Greater Sydney Region Plan

Planning Objective	Consistency
A city supported by infrastructure	
1. Infrastructure that supports the three cities	The delivery of the Site C OSD would enable key commercial floorspace to be delivered directly above new transport infrastructure in a location that encourages using the Metro and other public transport options by future building occupants.
4. Infrastructure use is optimised	The delivery of the Site C OSD would enable key commercial floorspace to be delivered in a location where use of the future Metro line can be optimised, representing a key transit-oriented development opportunity.
A collaborative city	
5. Benefits of growth realised by collaboration of governments, community and business	The Site C OSD represents an initiative by Sydney Metro to deliver a truly collaborative precinct anchored by a robust programme of public consultation. Extensive public consultation has occurred throughout the approvals process of the Concept SSD Application, including with regards to built form and urban design, with the Site C OSD approvals process being expected to further engage with government agencies and stakeholders within the local community, including businesses and individuals. Sydney Metro remains committed towards ongoing consultation with the community as discussed in **Section 5**.
A city for people	

Planning Objective	Consistency
6. Services and infrastructure meet communities' changing needs	The St Leonards and Crows Nest area is undergoing a period of rapid change catalysed by the delivery of the Sydney Metro project and its increasing importance as a key strategic centre identified for urban renewal to provide for an expanding employment centre and growing residential community. The delivery of Site C OSD will provide key employment floorspace within the Crows Nest Station precinct to the benefit of the local community.
7. Communities are healthy, resilient and socially connected	The delivery of the Site C OSD will provide additional street level activation and add to the precinct's vibrancy. As the proposal has been designed with regard to transit-oriented development principles, users will predominantly utilise public transport, and/or walking and cycling when travelling to and from the site, further enhancing the health and activation of the locality.
A city of great places	
12. Great places that bring people together	The Site C OSD development plays a key role in the creation of a high-quality Crows Nest Station precinct that contributes to the creation of a great future place within the St Leonards/Crows Nest Strategic Centre.
A well-connected city	
14. A Metropolis of Three Cities – integrated land use and transport creates walkable and 30-minute cities	The Site C OSD will contribute to the provision of a 30-minute Eastern City, locating employment floorspace at a site that directly benefits from very strong access to services and employment, seven days a week. .
15. The Eastern, GPOP and Western Economic Corridors are better connected and more competitive	The Site C OSD will strengthen Sydney's Eastern Economic Corridor by contributing to the continued growth of the St Leonards/Crows Nest Strategic Centre, harnessing the catalytic effects of the metro station to improve business linkages and access for OSD workers.
Jobs and skills for the city	
21. Internationally competitive health, education, research and innovation precincts	The delivery of the Site C OSD will further strengthen St Leonards' role as a key Health and Education Precinct as identified under the GSRP.
22. Investment and business activity in centres	The Site C OSD would facilitate business investment in the St Leonards/Crows Nest Strategic Centre through the provision of commercial floorspace in a highly accessible and sought after location.

6.1.2 North District Plan

The *North District Plan* (NDP) details a range of opportunities, priorities, and actions relevant to Sydney's north-eastern LGAs (North Sydney, Hornsby, Hunters Hill, Ku-ring-gai, Lane Cove, Northern Beaches, Mosman, Ryde, and Willoughby) that assists and facilitates the implementation of the GSRP vision.

Under the North District Plan, Crows Nest is included within the St Leonards/Crows Nest Planned Precinct, being an area identified for uplift and growth in housing supply. It is identified as being well served by public transport through the existing St Leonards and Artarmon stations, with the new Crows Nest metro station providing significant additional opportunity for renewal and activation.

The Plan identifies 24 Planning Priorities that respond to the objectives raised in the GSRP across the five themes of Infrastructure and collaboration, Liveability, Productivity, Sustainability, and Implementation. The Planning Priorities and Actions that are relevant to the proposed development are assessed in **Table 11**.

Table 11: Consistency with the North District Plan

Planning Priority	Consistency
Infrastructure and collaboration	
N1. Planning for a city supported by infrastructure	The delivery of the Site C OSD would enable key commercial floorspace to be delivered in a location where use of the future Metro line can be optimised, representing a key transit-oriented development opportunity.
N2. Working through collaboration	As stated above in Table 9. extensive public consultation has occurred throughout the approvals process of the Concept SSD Application. Sydney Metro remains committed towards ongoing consultation with the community as discussed in **Section 5.**
Liveability	
N4. Fostering healthy, creative, culturally rich and socially connected communities	The delivery of the Site C OSD will provide additional street level activation and add to the precinct's vibrancy. As the proposal has been designed with regard to transit-oriented development principles, users will predominantly utilise public transport, and/or walking and cycling when travelling to and from the site, further enhancing the health and activation of the locality.

Planning Priority	Consistency
N6. Creating and renewing great places and local centres, and respecting the District's heritage	The Site C OSD represents the first part of a vibrant and active station precinct that delivers housing, retail activation and office space in a highly accessible location. The built form, through the Crows Nest OSD Design Quality Guidelines, have been formulated with regard to minimising any potential heritage impacts and ensuring that the future development would align with the desired future character of the area. Heritage impacts are further discussed in **Section 0** of the EIS.
Productivity	
N9. Growing and investing in health and education precincts	The delivery of the Site C OSD will further strengthen St Leonards' role as a key Health and Education Precinct as identified under the North District Plan. Action 34 (strengthening St Leonards) under this Planning Priority is further discussed in **Table 12** below.
N10. Growing investment, business opportunities and jobs in strategic centres	The Site C OSD will directly grow employment and jobs in St Leonards/Crows Nest through both the development's construction and operational phases.
N12. Delivering integrated land use and transport planning and a 30-minute city	The Site C OSD will strongly contribute to the provision of a 30-minute city, locating employment floorspace at a site which is integrated with a new metro station. The development epitomises integrated land use and transport planning.
Sustainability	
N21. Reducing carbon emissions and managing energy, water and waste efficiently	The Site C OSD will provide a high-quality development that meets best practice environmental standards as further discussed in **Section 9.7** of this EIS.

Furthermore, under Action 34 of the North District Plan, specific actions are identified to strengthen the St Leonards Strategic Centre. These are detailed in **Table 12** below.

Table 12: Consistency with Action 34 of the North District Plan

Planning Priority	Consistency
a. leverage the new Sydney Metro Station at Crows Nest to deliver additional employment capacity	The Site C OSD will deliver key employment floorspace at Crows Nest, contributing employment capacity during both the construction and operational phases of the development. The delivery of 3,097m2 of high-quality office floorspace that is integrated with high-capacity transport infrastructure will directly benefit this priority.

Planning Priority	Consistency
b. grow jobs in the centre	As above, the Site C OSD will contribute to jobs growth within Crows Nest during both the construction and operational phases.
c. reduce the impact of vehicle movements on pedestrian and cyclist accessibility	Due to the introduction of a metro station on site, and a strong emphasis on transit-oriented development outcomes, the amount of vehicle movements throughout the precinct will be minimised.. No vehicle parking is provided on Site C. Refer to **Section 9.6** of this EIS for further discussion on traffic and transport.
d. protect and enhance Willoughby Road's village character and retail/restaurant strip	The protection of Willoughby Road has been a focus throughout the design of the Crows Nest Station precinct, including within the Crows Nest Design Guidelines which have informed the Site C OSD. The OSD will not overshadow or result in adverse view impacts on the precinct.
e. deliver new high quality open space, upgrade public areas, and establish collaborative place-making initiatives	Significant improvements are being made to the ground plane within the Crows Nest station precinct. The proposed development will complement the expanded Hume Street Park adjacent to the site being pursued by Council.
f. promote synergies between the Royal North Shore hospital and other health and education-related activities, in partnership with NSW health	Although not directly promoting synergies with health uses, the Site C OSD is not inconsistent with this objective as it delivers flexible office space that is capable of contributing to future synergies with the hospital.
g. retain and manage the adjoining industrial zoned land for a range of urban services	The Site C OSD and Crows Nest Station precinct in general does not impact the availability of industrial zoned land.

6.1.3 Future Transport 2056

Future Transport Strategy 2056 (Future Transport 2056) is a 40 year strategy to achieve the Government's vision for the city's transport system, supported by the *Greater Sydney Region Plan* and relevant District Plans. Importantly, the Strategy seeks to align strategic transport policy with planning policy, aligning future strategic locations for new development near transport. The delivery of the Site C OSD aligns with this intent as it seeks to provide an innovative integrated above station development that capitalises on its strategic location within one of Sydney's most accessible locations.

Six key outcomes for transport in NSW are defined as the focus of Future Transport 2056, comprising the following:

- customer focused
- successful places
- growing the economy
- safety and performance
- accessible services
- financial and environmental sustainability

Overall, the project aligns strongly with the above key transportation outcomes. The Site C OSD will contribute to the delivery of the Sydney Metro City & Southwest network, ensuring that the benefits of metro are delivered to customers as soon as possible following completion of the railway works. The proposed development represents the next step in the creation of a sense of place at Crows Nest and the overall legacy of the Sydney Metro project by creating an iconic and functional building above and integrated with the station, leading to a memorable station experience that capitalises on strong transit-oriented development opportunities.

6.1.4 Revised NSW State Plan 2021

The New South Wales State Plan sets the strategic direction and goals for the NSW Government across a broad range of services and infrastructure. The initial Plan was created in 2011. The current focus of the Government is outlined in 12 Premier's Priorities and 18 State Priorities.

The proposal is consistent with the revised NSW State Plan 2021, including the Premier's Priorities and State Priorities, as it will:

- Create construction jobs and contribute to ongoing job creation through the delivery of office floorspace.
- Facilitate the provision of public transport by locating development above a major rapid transit station, and provide active transportation opportunities through the delivery of end of trip (EOT) facilities for site users.
- Implement the latest standards in Ecologically Sustainable Development

The proposal also helps deliver one of the most critical city-shaping infrastructure projects in Sydney; Sydney Metro being Australia's largest and most iconic public transport project.

6.1.5 Building Momentum: State Infrastructure Strategy 2018-2038

Building Momentum: State Infrastructure Strategy 2018-2038 (Building Momentum) is a strategy for the future delivery of infrastructure within NSW, prepared by Infrastructure NSW. This strategy sets out a number of key directions which aim to assist with the development of high-quality infrastructure to meet the needs of Sydney over the next 20 years.

The delivery of the Crows Nest Site C OSD (and station precinct in general) is aligned with the key recommendations of this strategy as it takes advantage of the development potential created through the Sydney Metro project. Specifically, the following points are noted in respect to the proposed development:

- it is consistent with the Eastern Harbour City Geographical Objectives, as the delivery of Site C represents the next stage in realising the approved Crows Nest station precinct which forms part of the wider Sydney Metro project, and seeks to directly improve the quality of mass transit connections to the CBD.
- it is located in an area which benefits from a range of walking and cycling options, which are proposed to be improved through a number of local Council initiatives in the vicinity of the site including upgrades to Hume Street Park and improved access to Willoughby Road. Through the provision of EOT and bicycle storage facilities and nil on-site car parking, the proposed development will assist in promoting walking and cycling. This will of course also be aided by the OSD's location directly above a new Metro station.
- it comprises the direct integration of land use/s with transit infrastructure located at the site, achieving a direct objective of the policy to continuously improve the integration of land use and infrastructure planning.

6.1.6 Better Placed: An Integrated Design Policy for Built Environment of NSW

Better Placed: An Integrated Design Policy for Built Environment of NSW (Better Placed) was released in September 2017 as a strategic document to guide the future of urban environment planning so that it works towards the creation of better designed places throughout NSW.

It provides clarity on what the NSW Government identifies as good design and assists in the design and assessment of projects. Better Placed considers seven key objectives, which are assessed at **Table 13** below.

Table 13: Consistency with 'Better Placed'

Objective	Consistency
1. Better fit: contextual, local and of its place	The Site C OSD has been designed to be consistent with the approved Concept SSD Application. The approved Site C envelope was strongly influenced by the site's existing and emerging context, ensuring that its various constraints and opportunities are adequately responded to by the building form proposed. This includes through the Crows Nest Design Guidelines and Crows Nest Site C Design Excellence Strategy approved and endorsed as part of the approved Concept SSD Application (refer to **Section 7**).

Objective	Consistency
2. Better performance: sustainable, adaptable and durable	Environmental sustainability has been a key component to the project's design, and is further discussed in **Section 9.7** of the EIS.
3. Better for community: inclusive, connected and diverse	The Site C OSD will provide additional commercial capacity in the St Leonards/Crows Nest Strategic Centre and within the context of the Eastern City under the GSRP, contributing to the diversity of land use supply and its connectivity through its strategic positioning above the Metro.
4. Better for people: safe, comfortable and liveable	The Crows Nest OSD project, including Site C, is a key part of the overall development of the St Leonards/Crows Nest Strategic Centre as identified in the North District Plan. The station and the OSD elements are integrated to create a high quality and activated ground plane. The development has been designed in accordance with the principals of Crime Prevention Through Environmental Design, as discussed further in **Section 9.4** of the EIS.
5. Better working: functional, efficient and fit for purpose	The Site C OSD has been designed in a fully integrated manner with the station areas being delivered under the CSSI Approval and will provide a built form that is functional, efficient and fit for purpose, delivering high quality office floorspace within the Crows Nest locality and greater St Leonards commercial area.
6. Better value: creating and adding value	The proposed OSD contributes to the delivery of the Sydney Metro City & Southwest network, and provides new office floor space above the Crows Nest station to support return on investment.
7. Better look and feel: engaging, inviting and attractive	When considered alongside the works to create the Crows Nest station portal under the CSSI Approval, the Site C OSD would enable the provision of a high quality building that integrates well with station infrastructure, contributing to the creation of a vibrant, active and world class station precinct.

6.1.7 Sydney's Rail Future

Sydney's Rail Future: Modernising Sydney's Trains (Sydney's Rail Future) is the NSW Government's long term plan to increase the capacity of Sydney's heavy rail network through investment in new services and upgrades to existing infrastructure, enabling Sydney's ageing rail network to carry an additional 90,000 to 100,000 people per hour in the peak across the Sydney CBD rail lines.

A primary instrument to achieve this aim is the new Sydney Metro rapid transit system including a second Sydney Harbour crossing, which will 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.

The Crows Nest integrated station development, including the Site C commercial building, has specifically been designed to capitalise on these improvements to Sydney's rail network. It forms part of a strategic node on the new Sydney Metro line and a new focal point in the St Leonards/Crows Nest Strategic Centre. Therefore, the Site C OSD allows Sydney Metro to not just be a public transport project, but also a comprehensive urban renewal outcome to benefit the local community.

6.2 Local policies and strategies

6.2.1 St Leonards and Crows Nest 2036 Plan

The *St Leonards and Crows Nest 2036 Plan* (2036 Plan) is the key strategic planning document for the St Leonards and Crows Nest area that establishes the future desired character of the precinct. It envisages development capitalising on the significant opportunities for uplift offered by the delivery of the Crows Nest Station precinct to enable the area to meet its identified function as a key strategic centre.

The approved Concept SSD Application was developed to be consistent of the 2036 Plan, and the planning controls for the site as amended under *State Environmental Planning Policy Amendment (Crows Nest Metro Station) 2020* which sought to implement the outcomes of the 2036 Plan.

The 2036 Plan identifies a series of Precinct Objectives which respond to the Planning Priorities of the North District Plan. Where relevant, assessment of the proposal against these Objectives has been provided in **Table 14** below.

Table 14: Consistency with St Leonards and Crows Nest 2036 Precinct Objectives

Objective	Consistency
Infrastructure and collaboration	
Deliver key State and regional infrastructure to support long-term growth.	The delivery of the Site C OSD will support Sydney Metro as a major city-shaping project that enables the long-term growth and viability of Crows Nest/St Leonards.
Coordinate the delivery of infrastructure with growth to ensure infrastructure is available at the right time.	The delivery of the Site C OSD would enable key commercial floorspace to be delivered in a location where use of the future metro line can be optimised, representing a key transit-oriented development opportunity that coordinates growth with the delivery of infrastructure.

Objective	Consistency
Liveability	
Ensure new development retains and enhances important heritage elements by using sympathetic building materials and preserving key views and vistas.	The Crows Nest OSD precinct, including Site C, has been designed to respond to the surrounding heritage context. The proposal represents a sympathetic design response that is consistent with the Crows Nest Design Guidelines. Heritage is further discussed in **Section 0** of this EIS.
Retain and enhance the village atmosphere in and around Crows Nest, particularly along Willoughby Road.	The proposed development has been designed to be compatible with and enhance the village atmosphere of Willoughby Road through providing a built form that does not exhibit excessive bulk and scale and integrates well with the streetscape. The protection of Willoughby Road has been a focus throughout the design of the Crows Nest station precinct, with particular consideration having been given to overshadowing and visual impacts. The proposed development is generally consistent with the approved overshadowing and visual impacts under the Concept SSD Application as discussed further in **Sections 9.5.1** and **9.5.3** below.
Apply casual surveillance and universal access principles to new development to create a safe, inclusive and comfortable environment	The proposed Site C OSD building has been designed with consideration of CPTED principles, as detailed in the assessment at **Section 9.4**. The proposal contributes to passive surveillance and supports the amenity and vibrancy of the station entrance, thereby reducing opportunities for crime.
New development should have consideration to wind impacts demonstrated through a wind assessment.	A Wind Impact Assessment has been prepared and is available at **Appendix L**. Wind mitigation measures and impacts are further discussed in **Section 9.5.2** below.
New buildings adjoining Hume Street Park should contribute to the village green atmosphere. They should also provide an active frontage to the park and encourage connections between Willoughby Road, Hume Street Park and Crows Nest metro station.	The proposed building supports the activation of the site and Hume Street Park, and has been developed in accordance with public domain improvements being pursued as part of the CSSI Approval. Expansions and improvements to the Hume Street Park by Council are not compromised by the proposed development. Site C complies with the overshadowing controls for Hume Street Park in the 2036 Plan and Design Guidelines, as detailed in the Overshadowing Diagrams at **Appendix M** and discussed in **Section 9.5.1** of this EIS.

Objective	Consistency
New building design should provide high on-site amenity and consider street width and character by providing ground and upper level setbacks and awnings to achieve a human scale at street level	The detailed design of Site C is in accordance with the approved building envelope plans and endorsed Design Guidelines implemented in accordance with the Concept SSD Application. The human scale is maintained through materially differentiating the building podium from commercial office floors above, and the use of pedestrian awnings. Landscape elements are incorporated in the design of the facade and roof space and will contribute to on-site amenity as well as the building's relationship to the Hume Street Park.
Productivity	
Ensure new employment sites in the area cater to a range of business types and sizes.	The office floor space provided in the Site C building is capable of being fit-out for a variety of different layouts. Site C is the smallest site in the Crows Nest station precinct and can accommodate a single tenant over multiple floors, or smaller tenants over one or part of a floor.
Sustainability	
Ensure no additional overshadowing of public open spaces and important places in accordance with solar access controls identified on page 38 of the Plan.	The proposed development has specifically been designed to minimise overshadowing to public open spaces and important spaces, including Hume Street Park, Ernest Place and the Willoughby Road restaurant precinct. Overshadowing impacts are in accordance with the approved Concept SSD Application and the Design Guidelines as discussed further at **Section 9.5.1** below.

6.2.2 St Leonards and Crows Nest Local Character Statement

The 2036 Plan is supported by the *St Leonards and Crows Nest Local Character Statement*, which provides further context to the desired future character of the area to inform strategic plans and placemaking. It identifies five main themes (Place, Landscape, Built Form, Land Use and Movement) to guide future development. The consistency of Site C against these themes is assessed in **Table 15** below.

Table 15: Consistency with St Leonards and Crows Nest 2036 Precinct Objectives

Theme	Consistency
Place – The essential characteristics of St Leonards & Crows Nest	The Site C OSD forms an integral part of the Crows Nest station precinct that will deliver an activated, mixed use centre that capitalises on the significant transit oriented opportunities afforded by the Sydney Metro City & Southwest project, whilst retaining the desire village character of Crows Nest and Willoughby Road. The design of the building responds to the endorsed Crows Nest Design Guidelines (**Section 7.2**).
Landscape – The lay of the land in St Leonards & Crows Nest	The proposed Site C OSD building integrates site landscaping and rooftop planting, and has been designed with reference to Ecologically Sustainable Development principles as discussed in **Section 4.8** and **9.7** of the EIS. Public domain improvements in the Crows Nest station precinct are being delivered as part of the separate CSSI Approval. This will complement the improved permeability and access to Hume Street Park and Willoughby Road in the process of being delivered by Council.
Built form – The buildings of St Leonards & Crows Nest	The proposed building is consistent with the approved building envelope as part of the approved Concept SSD Application, and consistent with the NSLEP 2013 controls, which were developed to provide a high standard of amenity and integration into the future desired character of Crows Nest. The building incorporates landscaped elements and articulation zones to minimise perceived bulk and scale and provide a high standard of amenity, contributing towards the delivery of a memorable precinct.
Land use – How St Leonards & Crows Nest fits together	The approved Concept SSD Application seeks to deliver a true mixed use precinct at the site with commercial, residential and retail floorspace that responds to the future desired character in the 2036 Plan. The Site C OSD will provide office floorspace within the precinct in accordance with the approved Concept SSD Application, in a spatially advantageous location directly above Crows Nest metro station, hence harnessing significant opportunities for transit-oriented development.

Theme	Consistency
Movement – Getting around St Leonards & Crows Nest	The delivery of a new metro station at Crows Nest will have transformative effects on transit within the locality, supporting a shift from a reliance on private cars to public transport. The Site C OSD capitalises on this opportunity through providing key commercial floorspace directly above the new Metro station.

6.2.3 Crows Nest Placemaking and Principles Study

The *Crows Nest Placemaking and Principles Study* (Principles Study) was prepared by North Sydney Council to manage the positive urban renewal resulting from the announcement of the Crows Nest Metro station, whilst simultaneously matching community expectation for the area which was informed by extensive community consultation.

The key message of the consultation was to protect Willoughby Road, which is valued for its village atmosphere, its independent retailers and its sense of community. The consultation also suggested that if taller development is to occur, that it should be focussed along the Pacific Highway, on and around the new metro station and, to a lesser extent, in St Leonards.

As a result of the spatial analysis and community consultation undertaken, a set of principles were drafted to direct the future growth of this precinct. Where relevant, these principles are assessed for consistency with this application in **Table 16** below.

Table 16: Consistency with Crows Nest Placemaking and Principles Study

Theme	Consistency
Metro as a catalyst for renewal	The proposed development will catalyse the delivery of the Crows Nest station precinct, and the renewal of Crows Nest as envisaged under the St Leonards and Crows Nest 2036 Plan.
Enhance employment and activity	The proposed development will enhance employment outcomes at Crows Nest through the delivery of commercial floorspace directly above the new Crows Nest metro station, thereby aligning growth with the delivery of infrastructure and providing strong transit-oriented development opportunities.
Protect precinct character	The proposed development will maintain the village atmosphere of Crows Nest. It will deliver a built form that does not adversely impact views, overshadowing or heritage and is consistent with the approved Concept SSD Application and current NSLEP 2013 controls.
Respect heritage and design	The Crows Nest OSD precinct, including Site C, has been designed to respond to the surrounding heritage context. A sympathetic design response has been developed consistent with the Crows Nest Design Guidelines, as discussed further in the **Section 7.2** below.

Theme	Consistency
Prioritise public space	An enhanced ground plane through the Crows Nest station precinct is being delivered in accordance with the CSSI Approval (refer to **Section 4.3** above), with the proposed OSD integrated with this outcome. The proposal complements the improvements being undertaken to the Hume Street Park and access to Willoughby Road.
Equitable access	The proposed development will prioritise sustainable travel methods, including walking, cycling and public transportation through the delivery of EOT facilities and integration with the entrance to Crows Nest metro station. No vehicular parking is to be provided at Site C. The Site C OSD will meet all relevant accessibility requirements, as discussed in the Accessibility Assessment at **Appendix N** and discussed in **Section 9.18** below.
Delivering infrastructure	The proposed development aligns growth with the delivery of infrastructure through providing employment floorspace directly above a new metro station, thereby capitalising on an excellent transit-oriented development opportunity.

6.2.4 North Sydney Local Strategic Planning Statement

The *North Sydney Local Strategic Planning Statement* (LSPS) is a strategic planning document that defines North Sydney Council's long-term vision for land use and infrastructure provision within the LGA, giving guidance to its future character. Local Strategic Planning Statements are to give effect to the Greater Sydney Region Plan, North District Plan, and other strategies such as Future Transport 2056 through the provision of 15 Local Planning Priorities.

The LSPS, in draft form, was publicly exhibited from 24 June to 15 August 2019. The document was finalised in March 2020.

An assessment of the proposed development against the relevant Planning Priorities of the LSPS is provided in **Table 17** below.

Table 17: Consistency with North Sydney LSPS

Planning Priority	Consistency
Infrastructure and collaboration	
Provide infrastructure and assets that support growth and change	The delivery of the Site C OSD delivers commercial floorspace in a location where use of the future Metro line can be optimised, representing a key transit-oriented development.

Planning Priority	Consistency
Collaborate with State Government Agencies and the community to deliver new housing, jobs, infrastructure and great places	The Crows Nest OSD, including Site C, represents an initiative by Sydney Metro to deliver a precinct anchored by a robust programme of public consultation. Extensive public consultation has occurred throughout the design and assessment process for the CSSI Approval and Concept SSD Application. The Site C OSD process has and will continue to enable further engagement with government agencies and stakeholders within the local community, including businesses and individuals as discussed in **Section 5**.
Liveability	
Create great places that recognise and preserve North Sydney's distinct local character and heritage	The Site C OSD represents the next stage in the delivery of a vibrant and active station precinct that provides housing, retail activation and office space in a highly accessible location. The built form is guided by the site-specific Design Guidelines, which have been formulated with regard to minimising any potential heritage impacts and ensuring that the future development aligns with the desired future character of the area.
Productivity	
Develop innovative and diverse business clusters in St Leonards/Crows Nest	The delivery of the Site C OSD is consistent with the approved Concept SSD Application, which establishes the context for the renewal of the Crows Nest station precinct. The proposed office floor space will contribute to employment in the area and the desired St Leonards / Crows Nest precinct.
Develop a smart, innovative and prosperous North Sydney economy	The commercial office floorspace provided under the Site C OSD building is flexible and can be configured for a variety of potential future tenants, open campus-style office layouts or smaller divided tenancies.
Support walkable centres and a connected, vibrant and sustainable North Sydney	The Site C OSD will strongly contribute to the provision of a 30-minute city, locating employment floorspace which directly benefits from very strong access to services and employment. The concept proposal epitomises integrated land use and transport planning; furthered by future opportunities for the co-location of housing and employment through the delivery of Sites A and B of the Crows Nest OSD scheme.

Planning Priority	Consistency
Sustainability	
Reduce greenhouse gas emissions, energy, water and waste	The Site C OSD will provide a high-quality development that meets best practice environmental standards as further discussed in **Appendix F** and **Section 4.8**.

6.2.5 North Sydney Community Strategic Plan

The *North Sydney Community Strategic Plan 2018-2028* (Community Strategic Plan) provides further direction to planning in the LGA, and was adopted by Council in 2018 prior to the finalisation of the LSPS. The plan is divided into five directions, which this detailed SSD Application remains broadly consistent with. The proposal:

- incorporates Ecologically Sustainable Development (ESD) principles, provides opportunities for public and active transportation through integration with the new Crows Nest metro station and provision of EOT facilities, and incorporates site landscaping and rooftop planting to improve amenity and reduce the urban heat island effect.
- contributes to street level activation, reduces car dependency, and promotes the use of sustainable and active transport through the adoption of transit-oriented development principles
- forms part of the Crows Nest station precinct that will deliver a true mixed-use centre for commercial, retail and residential uses that meet the future needs of the community. Site C in particular will delivery commercial floorspace at a highly accessible location, contributing to the economic development of the North Sydney LGA
- embodies Crime Prevention Through Environmental Design (CPTED) initiatives including supporting passive surveillance at the entrance of Crows Nest metro station and to the Hume Street Park.

The proposed development is therefore consistent with the overarching themes and objectives of the North Sydney Community Strategic Plan.

7 Assessment of compliance with the Concept SSD Application

This detailed application is pursuant to the approved Concept SSD Application for the Crows Nest Station precinct (SSD 9579) in accordance with Division 4.4 of the EP&A Act. The approved concept has established the overarching vision for the Crows Nest Station precinct and the planning and assessment framework for which all subsequent applications are to be assessed against in accordance with Section 4.24(2) of the EP&A Act.

An assessment of the proposed detailed design for Site C OSD against the relevant matters for consideration for consistency with the approved Concept SSD Application is provided below. This includes:

- the approved building envelope plans
- the *Crows Nest Over Station Development – Design Quality Guidelines* (Design Quality Guidelines), dated July 2020 (Section 7.1) endorsed on 21 January 2021
- the *Crows Nest Over Station Development – Design Excellence Strategy – Site C* (Design Excellence Strategy), endorsed on 9 June 2021.
- assessment against the conditions of consent for the approved Concept SSD Application

7.1 Approved building envelope plans

The Concept SSD Application approved building envelopes for each of the OSD sites within the Crows Nest Station precinct. These building envelopes define the parameters within which the detailed design of buildings will occur, determining the overall bulk and scale of OSD.

The proposed Site C OSD is entirely consistent with the approved building envelope applying to this site, including the maximum building height. The proposed articulation elements including brick-clad columns, building pop-outs, and planter boxes are wholly contained within the building articulation zones, and within the lot boundaries (see **Figure 34**).

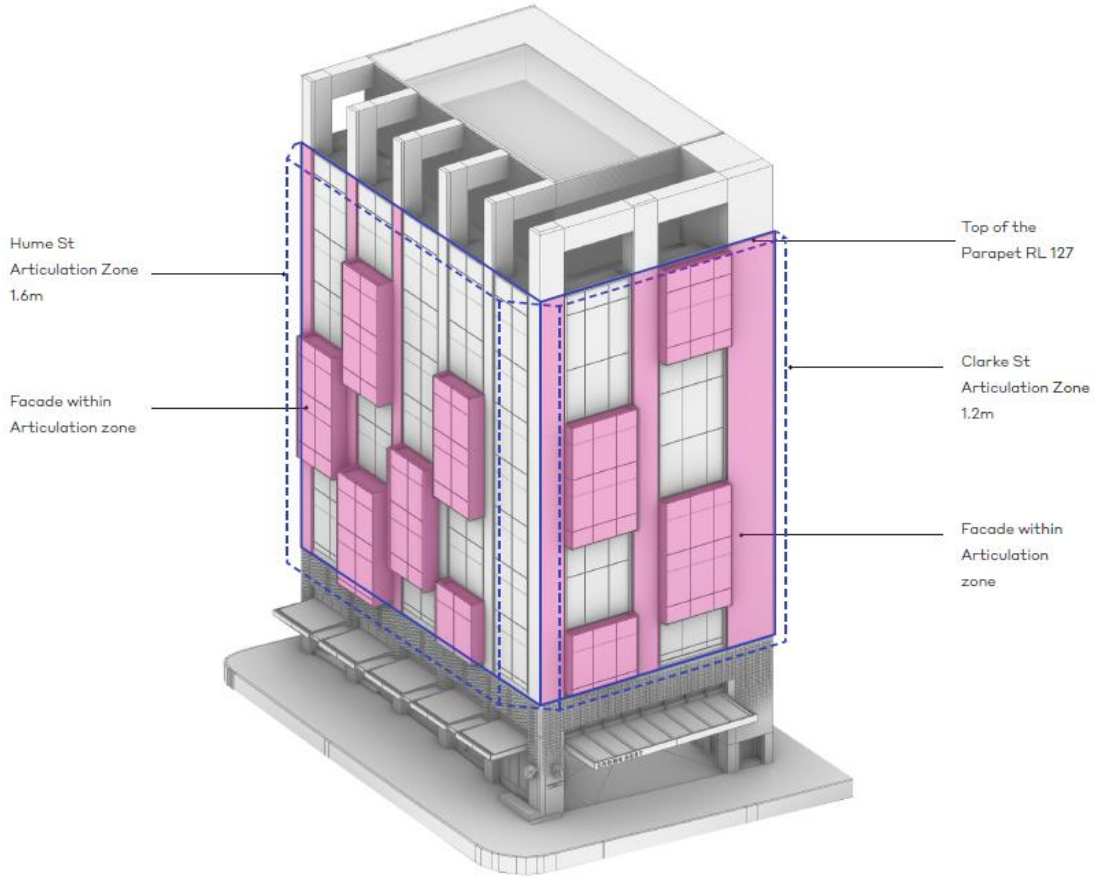


Figure 34: Site C OSD articulation elements located outside the building envelope but within the articulation zones (shown in pink)

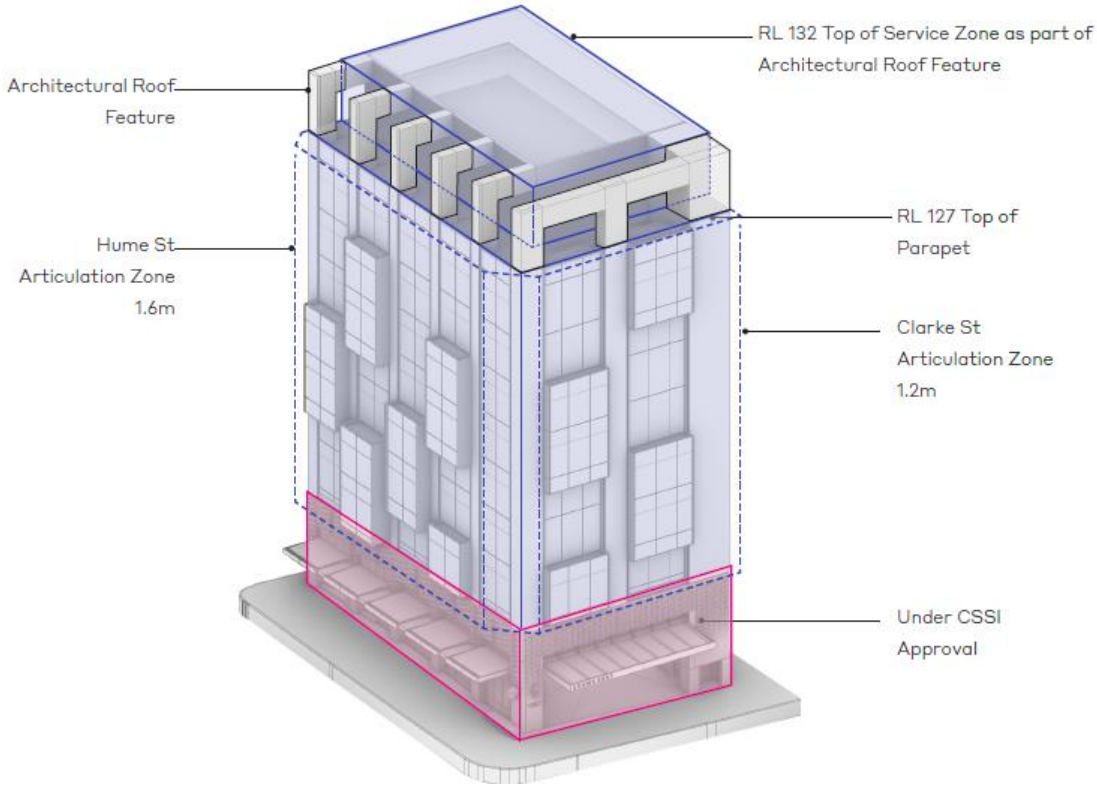


Figure 35: Site C OSD within the approved building envelope

7.2 Crows Nest OSD Design Quality Guidelines

The endorsed *Crows Nest Over Station Development – Design Quality Guidelines* (Design Quality Guidelines) were prepared to guide the future detailed design of the Crows Nest station precinct OSD, and is the appropriate reference document for the assessment of design outcomes.

Design parameters are nominated for the built form, integration with the public domain and Sydney Metro station, movement, connectivity and the legacy outcomes of the development. The Guidelines were prepared in reference to the following documents:

- Concept State Significant Development Application Built Form and Urban Design Report for Crows Nest Over Station Development, November 2019
- 'Sydney Metro City & Southwest: Chatswood to Sydenham Design Guidelines' (Sydney Metro CSW Design Guidelines), June 2017
- Sydney Metro City & Southwest Crows Nest over station development 'Statement of Heritage Impact', November 2018
- Crows Nest Station Draft Preliminary Design - October 2017

An assessment of the proposed development against the endorsed Design Guidelines is provided in the Design Report at **Appendix C**, with key outcomes and provisions discussed in the sections following.

- The proposed built form of the Site C building responds to the surrounding streetscape and local context. It is consistent with the building envelope established under the approved Concept SSD Application, and the relevant key planning controls under the NSLEP 2013.
- The proposed development makes use of an innovative building façade design and articulated elements to minimise perceived bulk and scale. The use of planting on the facades, as well as the adoption of a high quality materiality palette, further improves visual interest. The pop-outs on the building facades will not occupy more than 25% of the building articulation zones.
- The Site C OSD building is delineated from the station entrance for Crows Nest station under the CSSI Approval through the 'transfer slab' level, as discussed in **Section 4.3**. Given the small site area (608m^2) and limited height (RL 132m; 43.2m) of the Site C building, a clearly delineated podium and tower built form would not be visually appropriate. Instead, the Site C building has been designed to provide visual consistency between the station entrance and OSD approval, whilst maintaining interest through articulated façades. The Site C building utilises the articulation zones provided along the Hume Street and Clarke Street frontages of the site to deliver a visually interesting finish that responds to local context and minimises perceived bulk and scale.
- The proposed development uses landscaping to improve visual amenity and help mitigate the urban heat island affect. Planters have been provided on the north-eastern and south-eastern facades of the building (Hume Street and Clarke Street frontages), and the rooftop.
- The proposed development will activate surrounding street frontages and significantly enhance vibrancy and amenity at the site. The proposed OSD lobby will front onto Hume Street and Clarke Lane, improving their amenity and opportunities for passive surveillance.
- The proposed development provides strong inter-floor connections including a circulation core with two elevators and fire stairs.

- A highly efficient and compact built form has been provided at the site in recognition of Site C's small area and need to accommodate the Crows Nest station entrance, without comprising amenity.
- The proposed building height (RL 132m; 43.2m) is consistent with the NSLEP 2013 controls and consistent with the building envelope envisioned for Site C under the approved Concept SSD Application, and is considered to be appropriate for the Crows Nest skyline.
- The rooftop services zone above Site C will not be visually prominent or result in adverse overshadowing impacts, and is setback from the Hume Street and Clarke Street frontages. The services have been designed as an integrated element of the building.
- The proposed development will deliver a well-designed built form at the site with a high-quality finish. The proposed office floorspace is adaptable to a variety of configurations.
- The commercial lobby for the Site C building has been designed to complement and not impede pedestrian access to the Crows Nest station entrance. The lobby is accessed from Clarke Lane, and the entrance from Clarke Street.
- The proposed development provides bicycle parking and EOT facilities to encourage active transportation to and from the site, and reduce car dependency.

Therefore, as discussed and demonstrated in the Design Report at **Appendix C**, the proposed development provides for a high level of consistency with the Crows Nest OSD Design Quality Guidelines.

7.3 Crows Nest OSD Design Excellence Strategy

The *Crows Nest Over Station Development – Design Excellence Strategy* (Design Excellence Strategy) further refines the *Sydney Metro City & Southwest Design Excellence Strategy* (2018) and establishes the framework within which Sydney Metro will achieve design excellence for the Crows Nest metro station OSD. In particular, the Strategy describes a stand-alone and objective process, and is consistent with Sydney Metro's commitment to setting new benchmarks for delivery of excellence in design for major infrastructure projects.

The Design Excellence Strategy draws from the NSW Government Architect's *Better Placed* (see **Section 6.1.6**) and is consistent with the underlying principles of the NSW Government Architect's draft Design Excellence Competition Guidelines. Sydney Metro has had a long standing commitment to design excellence as an outcome and has led the way in setting new benchmarks for delivery of excellence in design for major infrastructure projects.

The Design Excellence outcomes for Site C comprises two phases: design quality expectations (Phase 1) and design integrity (Phase 2). The underlying premise is that design quality for architectural, urban design and infrastructure projects is supported broadly by these elements. The OSD designs for Sites C have been reviewed by the Sydney Metro Design Review Panel (DRP) through Phase 1 of the design excellence process as part of the approved Concept SSD Application. The Panel endorsed the OSD building envelopes, station box and public domain concepts.

A Design Integrity Report has been prepared and is attached at **Appendix D**, outlining how Sydney Metro DRP advice has informed and been addressed within the design outcomes for Site C to achieve design excellence. The Report is accompanied by copies of DRP feedback and responses.

Design integrity will be maintained in accordance with the process outlined in the Site C Design Excellence Strategy. This includes further revision and advice from the Panel prior to:

- the lodgement of the Response to Submissions for the detailed SSD Application
- any significant design changes, in the event any are proposed following the approval of the detailed SSD Application
- any items specified in delivery contracts as requiring review and/or endorsement by the Design Review Panel
- any modification applications referred to the Design Review Panel by the Planning Secretary or the Consent Authority.

The achievement of design excellence is discussed further in **Sections 8.5** and **9.1** below.

7.4 Concept SSD Application Terms of approval

This detailed SSD Application is pursuant to the approved Concept SSD Application's Terms of Approval. The proposal achieves the relevant conditions of consent is consistent with the Concept in accordance with Section 4.24(2) of the EP&A Act. A detailed compliance assessment with the terms of the approved Concept SSD Application is provided at **Appendix E**.

Further detailed discussions concerning the mitigation measures and strategies that were identified in the Concept SSD Application are addressed in **Section 9**, as relevant.

8 Assessment of compliance with statutory provisions

This Section assesses the proposed development's compliance against the following planning legislation:

- Environmental Planning and Assessment Act 1979 (EP&A Act)
- Environmental Planning and Assessment Regulation 2000 (EP&A Regs)
- Biodiversity Conservation Act 2016
- Relevant State Environmental Planning Policies (SEPPs), 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 (SEPP 55), including Draft State Environmental Planning Policy (Remediation of Land) 2018
    - State Environmental Planning Policy No. 64 – Advertising and Signage
    - State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Buildings (SEPP 65)
    - State Environmental Planning Policy (Building Sustainability Index) 2005
    - Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP 2005)
    - Draft State Environmental Planning Policy (Environment) 2017 (Draft Environment SEPP)
    - State Environmental Planning Policy (Urban Renewal) 2010
    - State Environmental Planning Policy (Vegetation in Non Rural Areas) 2017
- North Sydney Local Environmental Plan 2013 (NSLEP 2013)

8.1 Environmental Planning and Assessment Act 1979

8.1.1 Objects (section 1.3)

This Site C OSD detailed SSD DA is consistent with the objects of the EP&A Act, as demonstrated in **Table 18** below:

Table 18: Consistency with objects of the EP&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 proposed development represents the next stage in realising the highest and best use of the site. The delivery of the Site C OSD enables commercial floorspace to be delivered in a location where use of the future Metro line can be optimised, representing a key transit-oriented development opportunity. The proposal is generally consistent with the terms of the approved Concept SSD Application (assessed in **Section 7**), which delivers a vibrant mixed-use precinct.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment	The principles of Ecologically Sustainable Development, as set out in Schedule 2 of the EP&A Regulation, as well as other relevant economic, environmental and social considerations have been addressed in this EIS and the accompanying information. The conclusion and justification for the proposal is outlined in **Section 14** of this EIS and demonstrates how such factors have been considered in the detailed design and delivery of Site C OSD.
(c) to promote the orderly and economic use and development of land	The proposal represents the orderly and economic use and development of the subject land, having been through a robust multi-stage planning process and alternatives options analysis. The proposed development enables the redevelopment of the site to realise the vision set under the approved Concept SSD Application and CSSI Approval.
(d) to promote the delivery and maintenance of affordable housing	Site C does not comprise residential floorspace. However, diverse housing opportunities and typologies will be provided in a separate future detailed SSD Application for Site B.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats	Crows Nest is a highly urbanised area and the proposed development will have no impact on threatened species and native flora and fauna. A waiver from the requirement to prepare a Biodiversity Development Assessment Report was issued on 1 March 2021.

Object	Consistency
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)	The OSD does not incorporate any ground-level or below-ground works, as these components are being delivered as part of the CSSI Approval. Consequently, it is considered that the potential for OSD works to impact on items of Aboriginal Heritage remains is very low and has been addressed as part of the CSSI EIS by GML Heritage Pty Ltd. Conditions E23-E25 of the CSSI Approval regulate the assessment and management of any Aboriginal objects that are discovered as part of CSSI works. Requirements include consultation with Registered Aboriginal Parties with work completed by a qualified archaeologist. The impact of the proposal on surrounding heritage items, including the locally listed St Leonards Centre (Item I0141) has been assessed in **Section 0** of this EIS.
(g) to promote good design and amenity of the built environment	The Site C OSD building promotes good design and amenity of the built environment through the delivery of a high quality built form that responds to local context and the requirements of the endorsed Design Guidelines that were developed with reference to the overarching 2036 Plan. The proposal is consistent with these Design Guidelines and has been developed in accordance with the Crows Nest Site C Design Excellence Strategy endorsed on 9 June 2021 (refer to **Section 7**).
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants	The construction and maintenance of the proposed building will be undertaken in accordance with the relevant health and safety standards. Refer to Structural Statement at **Appendix O** and the preliminary traffic and acoustic assessments of the proposed construction works in **Appendices J** and **K**. The preparation of a detailed Construction Environmental Management Plan including relevant sub-plans in coordination with the appointed contractor for the construction of Site C will occur prior to the commencement of works on the site.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State	The proposal has been developed in consultation with the government and regulatory bodies.

Object	Consistency
(j) to provide increased opportunity for community participation in environmental planning and assessment	Sydney Metro remains committed towards a broad and inclusive public consultation process as outlined above in **Section 5**.

8.1.2 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: Consistency with EP&A Act evaluation requirements

Object	Consistency
Matters for consideration—general In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:	
a) the provisions of— (i) any environmental planning instrument, and	The provisions of relevant and key EPIs are addressed through **Section 8** and the environmental assessment in **Section 9** where relevant.
(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 Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	
(iii) any development control plan, and	Development Control Plans, including the NSDCP 2013, do not apply to State Significant Developments. An assessment against the approved Crows Nest Design Guidelines and Crows Nest Design Excellence Strategy is provided at **Section 7**, being the relevant site-specific framework for the design development of OSD in the precinct.
(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	The conditions of the approved Concept SSD Application require that a planning agreement be entered into with North Sydney Council, and that this VPA be exhibited and executed by 30 June 2021 or any such date agreed by the Secretary of DPIE. The VPA was reported at Council's meeting on 22 February 2021 and placed on public exhibition until 23 April 2021.
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),	The EIS has been prepared in accordance with the EP&A Regulation 2000, including Schedule 2 which is addressed in **Section 8.2** below.

Object	Consistency
(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	These matters are addressed in the assessments accompanying this EIS and summarised in **Sections 9** and **10** below.
(c) the suitability of the site for the development,	The development is considered to be suitable for the site, and vice versa the site suitable for the development as addressed in **Section 11.1** below.
(d) any submissions made in accordance with this Act or the regulations,	This matter is to be considered following exhibition
(e) the public interest.	The public interest is considered and addressed in **Section 11.2** below.

8.1.3 State Significant Development (Division 4.7)

The proposed development is State Significant Development under Division 4.7 of the EP&A Act by virtue of Clause 12 and Clause 19(2) of Schedule 1 of *State Environmental Planning Policy (State & Regional Development) 2011* (SRD SEPP). Refer to further discussion at **Section 8.4** below.

The proposed development is, therefore, classified as SSD and submitted to DPIE for assessment and determination.

8.2 Environmental Planning and Assessment Regulation 2000

This EIS has been prepared in accordance with the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulations), including the requirements of Schedule 2, which are a relevant factor in the preparation of an EIS. This schedule is addressed at **Section 2.5** of this EIS.

8.3 Biodiversity Conservation Act 2016

Section 7.9 of the *Biodiversity Conservation Act 2016* requires the preparation of a Biodiversity Development Assessment Report (BDAR) for SSD that is assessed under Part 4 of the EP&A Act. A waiver from the requirement to prepare a BDAR may be issued on grounds of the development being unlikely to impact biodiversity values in accordance with Section 1.5 of the *Biodiversity Conservation Act 2016* and Clause 1.4 of the *Biodiversity Conservation Regulation 2017*.

The site has been heavily modified from its original state and demolition and excavation works have been undertaken in accordance with the CSSI Approval works for the delivery of the metro station. A BDAR waiver request was submitted to DPIE, and a waiver was issued on 1 March 2021 confirming the proposed OSD will not impact any biodiversity values requiring the preparation of a Biodiversity Development Assessment Report.

8.4 State Environmental Planning Policies

The relevant State Environmental Planning Policies (SEPPs) are detailed in **Table 20** below. Overall, it is considered that the proposed development is consistent with the relevant SEPPs.

Table 20: Consistency with relevant SEPPs

SEPP	Consistency
State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)	The SRD SEPP identifies development which is declared to be State Significant. Clause 8(b) of the SRD SEPP identifies that development is SSD for the purposes of the EP&A Act if it is specified in Schedule 1 or 2 of the SRD SEPP. Clause 12 of the SRD SEPP identifies that a proposed development is SSD if it is a component part of a Concept SSD Application specified in Schedule 1 or 2 of the SEPP: *If—* *(a) development is specified in Schedule 1 or 2 to this Policy by reference to a minimum capital investment value, other minimum size or other aspect of the development, and* *(b) development the subject of a concept development application under Part 4 of the Act is development so specified,* *any part of the development that is the subject of a separate development application is development specified in the relevant Schedule (whether or not that part of the development exceeds the minimum value or size or other aspect specified in the Schedule for such development).* The relevant Concept SSD Application (SSD 9579) is SSD by virtue of Clause 19(2) of Schedule 1 of the SRD SEPP: *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.* Further, Section 4.37 of the EP&A Act states: *"If a concept development application is made in respect of State significant development—* *(a) the consent authority may determine that a subsequent stage of the development is to be determined by the relevant council as consent authority, and* *(b) that stage of the development ceases to be State significant development and that council becomes*

SEPP	Consistency
	the consent authority for that stage of the development." The estimated CIV of the detailed SSD Application does not exceed $30 million as per the Quantity Surveyor report at **Appendix P**. However, in accordance with Clause 12(1)(b) and Clause 19(2) of Schedule 1 of the SEPP, it is pursuant to the approved Concept SSD Application and has not been delegated to Council under Section 4.37 of the EP&A Act. The proposed development is, therefore, classified as SSD and will be submitted to DPIE for assessment and determination.
State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP; ISEPP)	The relevant matters for consideration within the ISEPP are: • the referral requirements for development within or adjacent to a rail corridor (clause 85 of Division 15 Railways) • development in or adjacent to an interim rail corridor (clause 88 of Division 15 Railways) • major development within the Interim Metro Corridor (clause 88A of Division 15 Railways) • development with a frontage to a classified road (clause 101 of Division 17 Roads and Traffic) • impact of road noise or vibration on non-road development (clause 102 of Division 17 Roads and Traffic) • traffic generating development (Schedule 3). Clause 88B (Development Near Proposed Metro Stations) is not applicable to the site as Crows Nest is not mapped as a metro station under ISEPP. As set out in clause 85 of the ISEPP, 'development on land that is in or adjacent to a rail corridor' must be referred to the relevant rail authority for the corridor for their consideration prior to the determination of the application. In this instance, the relevant rail authority is Sydney Metro, which is the applicant for this SSD Application. Clauses 87 and 102 are not relevant to Site C (despite being relevant to the approved Concept SSD Application) as Site C does not contain residential uses. Clause 88 would otherwise apply to Site C, as it has a CIV exceeding $200,000 and involves the provision of a building which would result in a height increase of more than 10 metres above the existing approved station height. However, given the status of the development as SSD, concurrence is not required to be obtained in accordance with Section 4.13 of the EP&A Act. Clause 101 is relevant to the proposal as the site fronts a classified road (Pacific Highway). Vehicular access to or from the Pacific Highway to Site C is not

SEPP	Consistency
	proposed. A detailed assessment regarding the impact of the Crows Nest OSD (and the cumulative impacts of the integrated station development) on the function of the Pacific Highway has been undertaken at **Appendix J** with further discussion at **Section 9.6**. Additionally, a review of noise impacts has been undertaken at **Appendix K** with further discussion at **Section 9.11**. The Site C detailed SSD Application also requires consultation with RMS under the provisions of clause 104 (Traffic Generating Development) and Schedule 3 of the ISEPP as it is commercial premises with GFA greater than 2,500m^2 (refer to Section 4.2) and would have access to a road that is less than 90 metres from a classified road. **Development Near Rail Corridors and Busy Roads – Interim Guideline** Development Near Rail Corridors and Busy Roads – Interim Guideline (DIPNR, December 2008) is the guideline that is to be taken into account where development is proposed in or adjacent to specific roads and railway corridors under clause 85 of the ISEPP. As discussed above, the proposal is located immediately above the future Crows Nest Station and is adjacent to a nominated road corridor, meaning that this guideline is a relevant consideration in this assessment. The Noise and Vibration Impact Report provided at **Appendix K** demonstrates that the proposal is capable of meeting the requirements of the Guideline. **Guide to Traffic Generating Development** The proposal is defined as 'traffic generating development' in accordance with the provisions of the ISEPP and on this basis, the Guide to Traffic Generating Developments is a relevant consideration and is addressed in the Traffic Assessment provided at **Appendix J**. Further discussion regarding traffic impacts has been provided at **Section 9.6**.
State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)	Site investigations have been undertaken as part of the CSSI Approval for the Station (refer to Section 18 and Technical Paper 8 of the CSSI EIS). With respect to the Crows Nest site, it was found that the Crows Nest site has increasingly become commercial from the former residential land use since the 1930s. Further to this, no NSW EPA Notified or Regulated Site within 500m of the Crows Nest Metro site has been identified. All demolition and excavation works will be completed under the CSSI Approval, and therefore, the provisions of SEPP 55 have been wholly addressed through that approval including to ensure that the site (as required) is suitable for its proposed purpose.

SEPP	Consistency
	Further, no OSD work relates directly to the ground or below ground works except for works above the ground floor slab which would be limited to the internal fit-out of the cold building shell constructed under the terms of the CSSI Approval. Therefore, there is no ability for the OSD to be exposed directly to any areas of earth. No further assessment or consideration of SEPP 55 is required.
State Environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64)	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. The subject SSD Application proposes signage zones for the purposes of identifying the future anchor tenant/s. The detailed signage within these zones will form part of future Development Applications when tenants of the Site C building are confirmed. Metro signage with regards to Crows Nest station are dealt with as part of the CSSI Approval. The proposed signage zones are assessed against the Schedule 1 of SEPP 64 in **Section 9.1.6** below**.**
State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Buildings (SEPP 65)	As Site C is not proposed to contain any residential floorspace, assessment against SEPP 65 and its accompanying Apartment Design Guide is not required.
State Environmental Planning Policy (Building Sustainability Index) 2005 (BASIX SEPP)	As Site C is not proposed to contain any residential floorspace, BASIX does not apply.
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP 2005)	The site is located within the boundaries of the Sydney Harbour Catchment and accordingly the Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (Sydney Harbour SREP) applies. The site is not located within the 'Foreshores and Waterways Area', wherein the majority of provisions apply, and therefore the key relevant consideration relates to the visibility of the site from Sydney Harbour. In this respect, a Visual and View Impact Assessment (VVIA) has been provided at **Appendix Q**, which demonstrates that the proposal would not have adverse view impact on views. Visual impacts are further discussed at **Section 9.5.3**
Draft State Environmental Planning Policy (Environment) 2017 (Draft Environment SEPP)	Draft State Environmental Planning Policy (Environment) 2017 was exhibited in December 2017 and seeks to consolidate and update the key elements of seven current SEPPs and SREPs. One of these SREPPs is the Sydney Harbour SREP. The Explanation of Intended Effect provided as part of the consultation package, as well as the exhibited maps, demonstrates that the site would continue to be defined within the Sydney Harbour Catchment and continues to not be located in any of the specific

SEPP	Consistency
	zones contemplated by the REP. On this basis, the previous assessment of the general principles of the Sydney Harbour SREP, primarily as a visual impact assessment, continues to be relevant to the Crows Nest OSD, as discussed above.
Draft State Environmental Planning Policy (Remediation of Land) 2018	In January 2018, DPIE exhibited the draft Remediation of Land SEPP, which seeks to provide an updated framework for the management of contaminated land in NSW. The Site C OSD does not necessitate the need to undertake remediation works, given the substantial works approved and to be undertaken under the terms of the CSSI Approval which will result in the site being suitable for the OSD land uses.
State Environmental Planning Policy (Urban Renewal) 2010	SEPP (Urban Renewal) 2010 provides particular considerations for development within land identified as being part of a potential urban renewal precinct. In accordance with the policy, the Crows Nest OSD site is not identified as being a potential urban renewal precinct. Therefore, the provisions of this SEPP do not apply.
State Environmental Planning Policy (Vegetation in Non Rural Areas) 2017	SEPP (Vegetation in Non-Rural Areas) 2017 ensures a biodiversity offset scheme will apply to all clearing of non-native vegetation that exceeds the offset thresholds in urban areas and environmental conservation zones that does not require development consent. As this SSD Application seeks consent for development above the transfer slab already granted under the CSSI Approval, no consent is sought for the clearing of any vegetation under this application, and hence, its provisions do not apply.

8.5 North Sydney Local Environmental Plan 2013

The proposal's consistency with the NSLEP 2013 is discussed at Table 21 below. Overall, it is considered that the proposal is generally consistent with the aims and objectives of the B4 Mixed Use Zone of the NSLEP 2013, and the key planning controls.

Table 21: Consistency with the provisions of NSLEP 2013

Clause	Consistency
1.2 – Aims of Plan	The proposed development is consistent with the aims as set out in Clause 1.2, in that it will: • provide development that is appropriate for its context, complementing the delivery of the new Crows Nest metro station and enhancing the activation and vitality of the local area • provide development that is compatible with the desired future character of the area, being consistent with the approved Concept SSD Application and CSSI Approval

Clause	Consistency
	• assist in maintaining diverse employment opportunities in North Sydney through the delivery of new commercial floorspace that is adaptable to different office sizes • ensure the continued amenity of residential properties and public places in terms of visual and acoustic privacy, solar access, and view sharing • ensure there is no significant or unmanageable stormwater runoff and that water quality targets are achieved • be sensitive to the qualities of surrounding heritage items and be constructed in accordance with the existing framework for managing unexpected archaeological finds
1.6 – Consent authority	The Minister for Planning and Public Spaces is the consent authority in accordance with Section 4.5 of the EP&A Act.
2.3 – Zone objectives and Land Use Table	The site is zoned B4 Mixed Use under the NSLEP 2013. The use of Site C for offices, defined as a *commercial premises*, is permitted with consent in this zone. The proposed development is consistent with the objectives of the zone, by: • providing offices in a highly accessible location directly above the new metro station to maximising public transport patronage • contributing to the delivery of a vibrant and mixed use outcome through the Crows Nest Station precinct • supporting active transport through providing bicycle parking and end of trip facilities as part of the proposed development
2.7 – Demolition requires development consent	Demolition of the previous existing building on Site C was carried out under the CSSI Approval (refer to **Section 3.3.1**). Accordingly, no demolition works are sought under this subject SSD Application.
4.3 – Height of buildings 4.3A – Exceptions to height of buildings	A height limit of RL 127m applies to the site under the most recent amendments to the NSLEP 2013 through *State Environmental Planning Policy Amendment (Crows Nest Metro Station) 2020*. The site is also identified as 'Area 1' under the Height of Buildings Map. Under Clause 4.3A of NSLEP 2013, land identified as 'Area 1' may exceed the maximum height limit by no more than 5 metres if the height exceedance comprises roof-top plant, equipment, lift overruns and associated structures or an architectural roof feature.

Clause	Consistency
	The proposed Site C building achieves a maximum height of RL 132m (43.2m), inclusive of a 5 metre rooftop 'building services zone' comprising plant, services, lift overruns, fire stairs and an architectural roof feature with no GFA above RL 127m. The detailed building design including the architectural roof feature and building services zone has been assessed in the overshadowing modelling discussed in **Section 9.5.1** below, confirming that the development will cause minimal overshadowing in compliance with the approved Concept SSD Application. Therefore, the proposed built form is compliant with the height parameters for the site under Clauses 4.3 and 4.3A of the NSLEP 2013.
4.4 – Floor space ratio & 4.4A – Non-residential floor space ratios	A floor space ratio limit of 6:1 applies to the site under the most recent amendments to the NSLEP 2013 through *State Environmental Planning Policy Amendment (Crows Nest Metro Station) 2020*. The proposed development seeks a GFA of 3,342m^2 (including 245m^2 of station GFA) with an FSR of 5.5:1. This is compliant with the maximum FSR for the site under Clause 4.4. Furthermore, Clause 4.4A establishes non-residential floor space ratios for the site. Under the Non-Residential Floor Space Ratio Map, the amount of non-residential floorspace for Site C must not be less than 5:1. As a total FSR of 5.5:1 is proposed, all of which is non-residential floorspace, the proposed development complies with this control.
5.6 – Architectural roof features	Clause 5.6 of the NSLEP 2013 also enables development to breach the maximum building height limit set under clause 4.3 for the purposes of decorative architectural roof features. Clause 5.6 does not apply to a building on land to which clause 4.3A applies.
5.10 – Heritage conservation	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 local heritage items as detailed in **Section 3.9** of this EIS. Heritage impacts are discussed in detail at **Section 0** of this EIS.

Clause	Consistency
6.3 – Building heights and massing	The proposed development is not located within land identified as 'North Sydney Centre' for the purposes of this clause.
6.15 – Airspace operations	The Site C building at 9 storeys and RL 132m will not breach the Obstacle Limitation Surface (OLS) applying to the site and, therefore, no further assessment against this clause is required. Further approval will be sought where construction cranes may temporarily breach the OLS.
6.19B – Design excellence in the area adjacent to Crows Nest Metro Station	This provision requires that development consent only be granted where the development exhibits design excellence with consideration of the matters contained in clause 6.19B(4). The Design Report at **Appendix C** and the Design Integrity Report at **Appendix D** confirms that the Site C OSD achieves design excellence.

8.6 North Sydney Development Control Plan 2013

Clause 11 of the SRD SEPP states as follows:

> *'Development control plans (whether made before or after the commencement of this Policy) do not apply to… State significant development'*

Accordingly, the North Sydney Development Control Plan 2013 (NSDCP 2013) is not a relevant consideration for SSD. Notwithstanding this, an assessment against the relevant NSDCP 2013 provisions was undertaken as part of the approved Concept SSD Application, to which this SSD Application is pursuant, where it was found that the Crows Nest station precinct is largely consistent with the intent and objectives of a number of the DCP controls including solar access, pedestrian connectivity, streetscape, parking, and others.

This EIS has assessed the proposed development against the endorsed site-specific Design Guidelines and endorsed Crows Nest Site C Design Excellence Strategy to guide the detailed development of OSD, as discussed at **Section 7** above.

9 Assessment of environmental impacts

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

Under Section 4.15 (1) of the EP&A Act, in determining a development application the consent authority must consider a range of matters relevant to the development including the impacts to the built and natural environment. The key environmental impacts of the development are assessed in the following sections of the EIS and a recommendation is made in relation to the degree of each assessed impact.

Appropriate mitigation measures have also been identified where needed to manage the impacts of the development through the construction and operational phases. A summary of all mitigation measures to avoid, minimise, or offset an impact is provided in **Section 12**.

9.1 Built form and urban design

9.1.1 Site layout

The site layout of the proposed Site C OSD responds to, and is influenced by, the requirements and constraints of the Crows Nest station box under the CSSI Approval and the planning framework established by the approved Concept SSD Application. The built form and layout responds to a number of urban design principles, including that of topography and flooding (whilst noting that this is mainly a concern of the CSSI Approval), orientation and solar access, wind, pedestrian and vehicular movements (noting this is mainly addressed by the CSSI Approval), and site identity and context, as discussed in the Design Report at **Appendix C**.

The CSSI Approval locates the station entrance along the building's north eastern Clarke Street elevation. This provides for a seamless connection between the metro station and the planned expansion of Hume Street Park (including creation of a new plaza between Hume Street and Hume Lane) and the existing village centre at Willoughby Road, as well as activating the Clarke Street frontage that is the primary frontage of the site.

The OSD lobby entrance is provided from Hume Street, to improve activation and passive surveillance opportunities while remaining functionally and operationally separate from the station entrance. This ensures legibility between the station and OSD entrances for wayfinding and security purposes. The OSD lobby entrance complements the ground floor retail frontage facing Hume Street approved under the CSSI Approval, providing a continuously activated street level frontage alongside the station entrance (**Figure 36**).

Figure 36: View from Hume Street elevation showing integration of OSD lobby with retail activation and station entrance portal

9.1.2 Bulk, scale, and height

The bulk, scale, and height of the proposed Site C OSD building is generally dictated by the building envelope for the site established under the approved Concept SSD Application, which was the result of a comprehensive and detailed planning process. The Site C OSD is entirely consistent with these envelopes. Hence, building's proposed height and built form is appropriate for the Crows Nest skyline and consistent with the strategic vision for this area to capitalise on the NSW Government's investment in public transport infrastructure, as assessed under the Concept SSD Application.

Importantly, the built form remains entirely consistent with the relevant provisions of the NSLEP 2013 (including maximum building height as defined under clauses 4.3 and 4.3A) and the maximum FSR as established under clause 4.4, and minimum non-residential FSR established under clause 4.4A.

The bulk and scale of the building is responsive to the existing and future desired character of the St Leonards/Crows Nest area, providing a transition in scale through 'stepping down' from the Site A and B building envelopes facing the Pacific Highway (which respond to the established commercial nature of St Leonards), to the reduced Site C building which responds to the 'village character' of Crows Nest and Willoughby Road (**Figure 37**).

Neighbouring developments on the southern side of the Hume Street Park, on Clarke Street, Clarke Lane, Hume Street and Oxley Street are also multi-storey buildings that are larger in scale to those areas north of the park. The Site C OSD contributes to a sense of visual consistency with the surrounding buildings including the heritage listed St Leonards Centre. Ground floor awnings that have been integrated into the base of the building will contribute to a consistent human scale with the neighbouring development on Clarke Street.

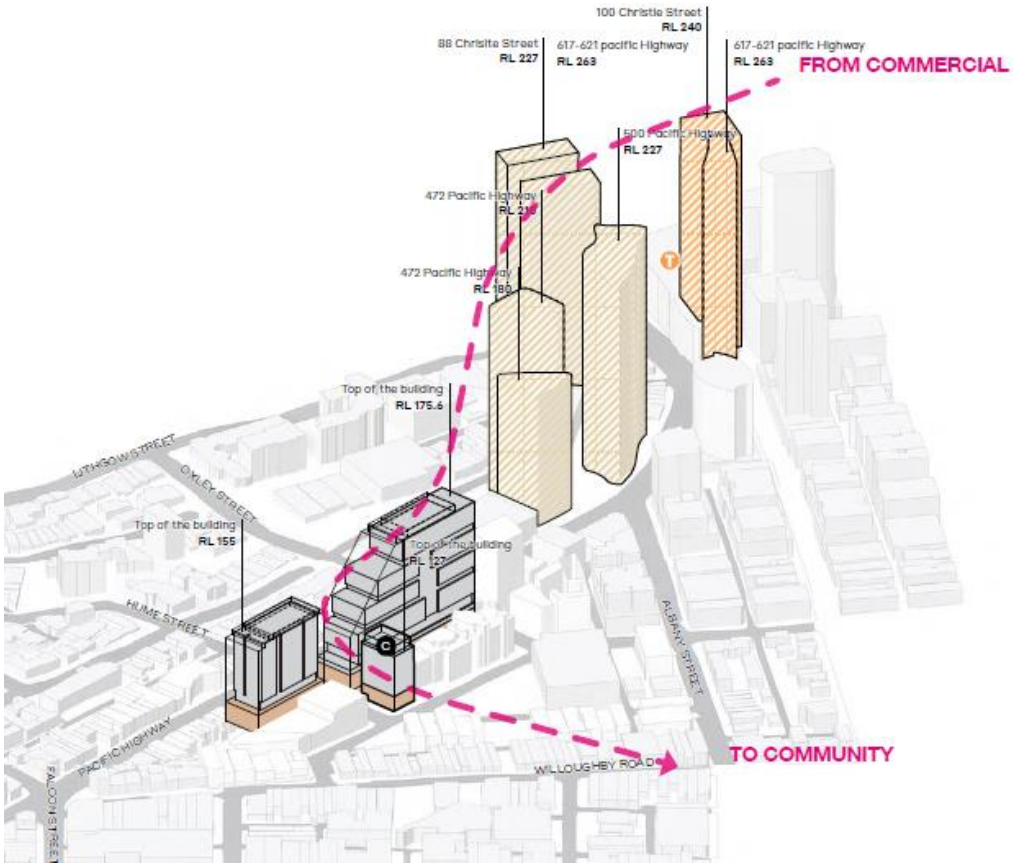


Figure 37: Integration of the Site C OSD with St Leonards and Crows Nest

9.1.3 Setbacks

The building footprint between the ground floor and level 2 is set by the station box under the CSSI Approval. The built form above the transfer slab has been designed as a continuation of this 'station box', given the small and constrained nature of the site (608m^2), and the relatively low height of the building (RL 132m; 43.2m). It was determined that a clearly delineated podium and tower built form would not be visually appropriate. The Concept SSD Application determined that providing setbacks above the podium (station box) would not be required if achieving the horizontal modulation and vertical articulation requirements of the Design Guidelines, which are discussed in the following section.

The Site C OSD building is delineated from the station entrance for Crows Nest station under the CSSI Approval through the establishment of a 'transfer slab' level, as discussed in **Section 4.3**. The overarching design of Site C is guided by the desire to provide visual consistency between the station entrance and OSD levels, whilst also delivering articulated façades with complex design elements further discussed below. Site C will present as one integrated building.

A number of nearby developments that are comparable in height to the proposal also do not have a distinctive and consistent podium and tower form, ensuring that the Site C OSD is responsive to its local context and streetscape.

9.1.4 Façade design and articulation

The Site C OSD has been designed as an articulated, visually interesting building that will contribute to the developing St Leonards/Crows Nest skyline. The building has three articulation areas (see **Figure 38**) being the CSSI Approval station box that is defined by textured brick distinguishing the two storey base of the building; the central glazed office levels with projecting glass and landscaped bays; and the bricked pillars that extend over the parapet to form the architectural roof feature acting as a serrated 'crown' for the Site C building. The division of the building into several articulation zones effectively break-ups the form consistent with the Design Guidelines applying to the Crows Nest Station precinct.

The pop-out bays provided on the north and east facades of the building above the transfer slab make use of the vertical articulation zones for Site C provided under the Concept SSD Approval and comprise both accessible spaces and planter boxes. These bays provide opportunities for landscaping to tie the building to the neighbouring Hume Street Park and will address the prominent oblique views of the Site C building from park including the extension to Willoughby Road and Clarke Street (see **Figure 39**).

Adjoining land to the north of the site has the potential to be redeveloped with a nil setback to the Site C OSD façade in the future. Accordingly, significant articulation of this façade is not possible or appropriate. Careful consideration has been given to maintaining the architectural design integrity through providing a brick finish on the visible corners of the façade, and using painted precast panels elsewhere to complement the brick finish and permit a future building to abut this façade. The precast panels mirror the vertical articulation of the north facade where each structural grid is expressed as a pilaster.

Additionally, the services zone of the building is supplemented by an architectural roof feature that extends upwards from the brick clad portal frame façade, inducing a further degree of visual interest (whilst noting that the roof feature is predominantly hollow and will not contribute to excessive bulk and scale; **Figure 40**).

The façade materials are diverse with respect to texture, material, and colour. The use of brick pays homage to the village character and existing built form of Crows Nest, whilst the curtain wall glazing is reflective of the modern commercial nature of the building. The metal cladding for the rooftop services zone infuses an additional layer of diversity into the façade, while the planter boxes along the Clarke and Hume Street frontages communicates the Site C OSD building as a ‘green’ building with a high standard of ecologically sustainable design, and enhances the garden character of Crows Nest.

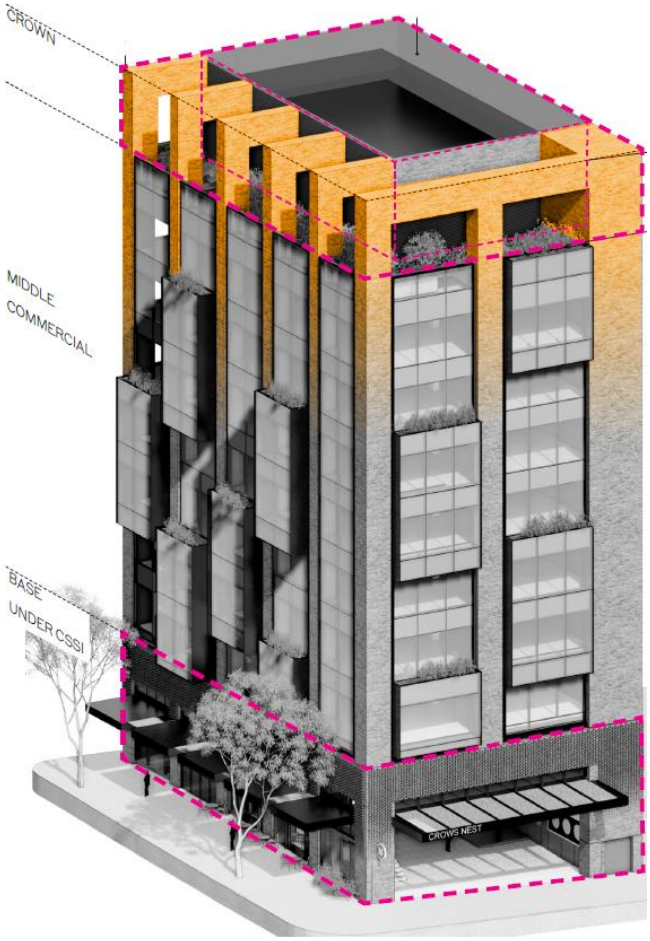


Figure 38: Division of the building into three design zones

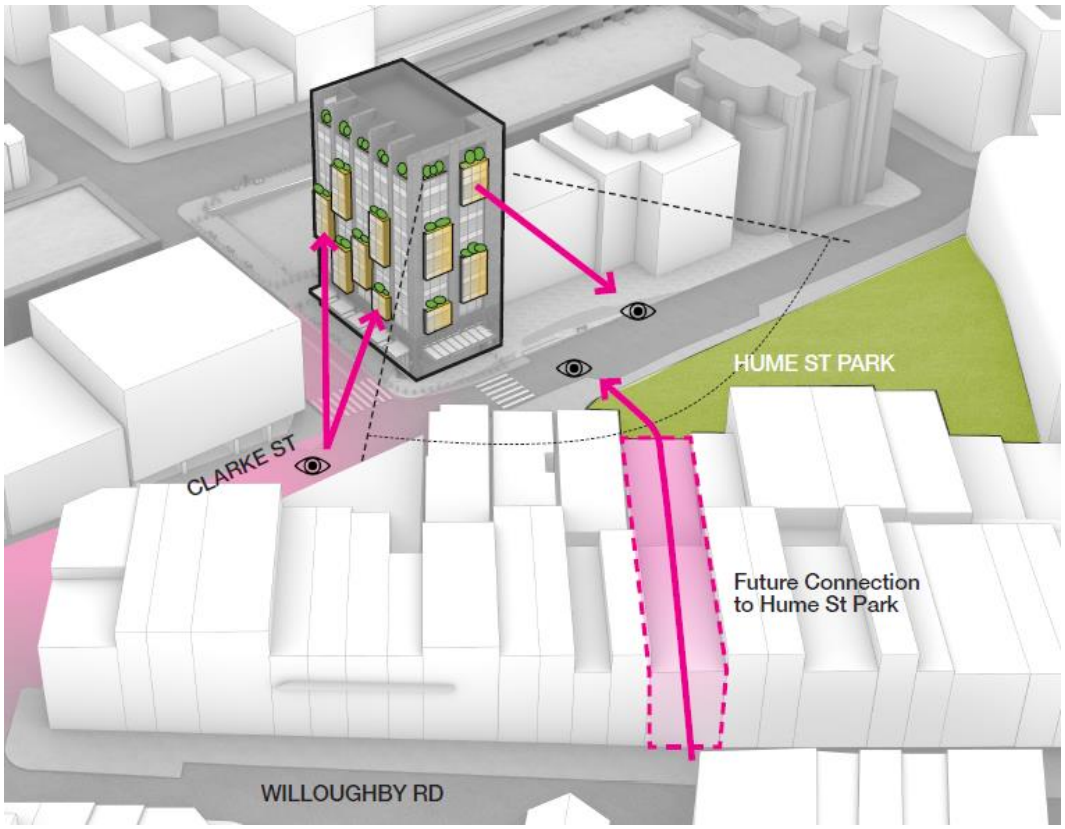


Figure 39: Using the approved building articulation zones to benefit prominent oblique views of the site

Figure 40: Architectural roof feature

9.1.5 Functional planning

The office floorplates of the Site C OSD building are responsive to modern-day commercial requirements and have been designed to offer flexibility for future tenants. The floorplates are contiguous in nature, allowing for open, campus-style office layouts to be provided where all occupants have direct visual connection to each other and allows for large teams to be accommodated on a single level, thereby minimising the need for inter-level travel. A typical floorplate has a single contiguous area of 290sqm that can then be subdivided up into three tenancies, to meet the needs of both large and smaller tenants. At least 80% of the office area on a level will have good access to natural light, allowing staff work areas and desks to be focused near natural light and views.

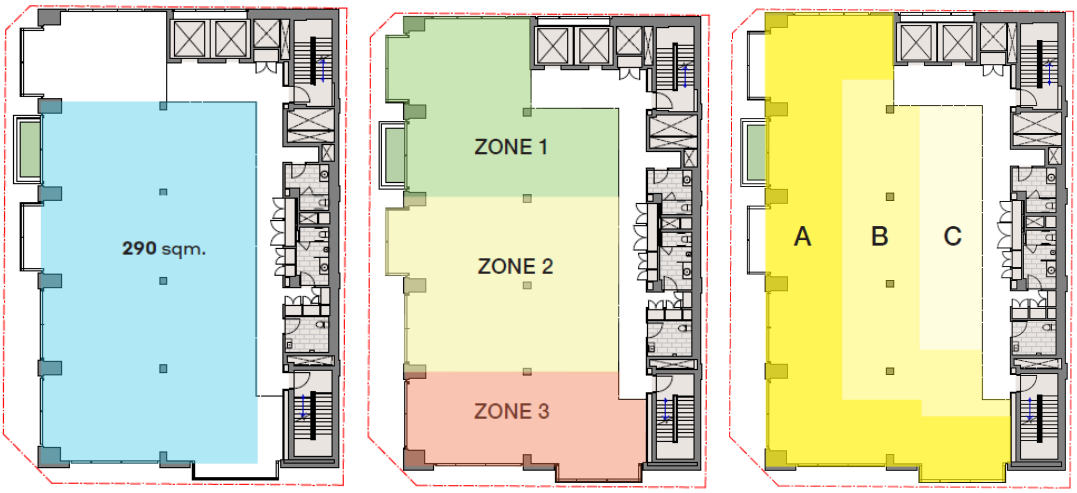


Figure 41: Functional planning of the office levels

9.1.6 Signage

As noted above in **Section 4.9**, the Site C OSD building features three signage zones which will identify the future tenant/s of the building (see Figure 42). These signage zones define the location and maximum extent of future signs, with exact details to be the subject of separate and future approvals when the tenants of the building are known.

The provision of signage zones as part of this application ensures that future signage will be highly integrated with the architectural elements of the building. It will also prevent clutter, as additional signage not within the signage zones will not be permitted in future.

The south elevation signage zone can generally be defined as a mounted wall sign, and the west and east elevation signage zones are defined as top of building identification signs.

Figure 42: Signage zones (shaded pink)

State Environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64) applies to all signage that, under an environmental planning instrument, can be displayed with or without development consent and is visible from any public place or public reserve. The proposed signage zones meet the objectives of the SEPP, as they:

- are scaled appropriately for the Site C building and the broader Crows Nest station precinct in which it is located
- are commensurate with the amenity and visual character of the area
- do not block any significant views and will not have an adverse impact on the amenity or future character of the surrounding area
- will effectively communicate the address of a significant tenants in the building
- are of a high quality design that integrates with the characteristics of the building.

A detailed assessment of the proposed signage zones' compliance with Schedule 1 of SEPP 64 is provided in **Table 22** below.

Table 22: Assessment against Schedule 1 of SEPP 64

Object	Consistency
Character of the Area	
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	The proposed signage zones are consistent with the area's existing and desired future character, especially given the envisioned uplift of Crows Nest. High quality signage zones are provided that integrate with the architectural characteristics of building and contribute to the character and visual interest of the surrounding public domain.
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	While there is no definitive theme of signage in the surrounding area, the signage zones have been designed with reference to the surrounding context of the locality in terms of their size and scale.

Object	Consistency
Special Areas	
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The signage zones will not detract from the amenity or visual quality of any environmentally sensitive area, heritage area (noting that the signs will not be seen from the heritage-listed St Leonards centre), natural or other conservation area, open space area, waterway, rural landscape, or residential area. It will not protrude above any building.
Views and Vistas	
Does the proposal obscure or compromise important views?	The signage zones do not protrude above the building and are instead located on the building façade, and will not compromise important views.
Does the proposal dominate the skyline and reduce the quality of vistas?	The signage zones do not protrude above the building and are instead located on the building façade, and will not dominate the skyline or reduce the quality of vistas.
Does the proposal respect the viewing rights of other advertisers?	The signage zones respect the viewing rights of other advertisers, as they do not obstruct or dominate over any other signage.
Streetscape, Setting or Landscape	
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The signage zones have been designed in tandem with the built form of the building which they are located on. They exhibit a high level of consistency with the scale, proportion, and form of the Site C OSD building and its surrounding streetscape.
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	The signage zones will contribute visual interest and prevent the appearance of blank building facades on the Site C OSD building.
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	N/A – no signage is currently located on the site.
Does the proposal screen unsightliness?	Although not specifically designed to screen unsightliness, the signage zones will promote visual interest.
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The signage zones do not protrude above the building and are instead located on the building façade.
Does the proposal require ongoing vegetation management?	The signage zones do not incorporate vegetation and do not require vegetation management.

Object	Consistency
Site and Building	
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The signage zones have been designed in tandem with the built form of the building which they are located on. They exhibit a high level of consistency with the scale, proportion, and form of the Site C OSD building and its surrounding streetscape.
Does the proposal respect important features of the site or building, or both?	The signage zones will accentuate the important features of the building, and do not hinder or cover these important features.
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The signage zones are intended to facilitate future identification signage of building tenants only. Therefore, a simple design is used as innovation and/or imagination would not be appropriate.
Associated Devices and Logos with Advertisements and Advertising Structures	
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?	Only signage zones are proposed. However, future signage on the site is not envisioned to incorporate platforms, external lighting, or external structures.
Illumination	
Would illumination result in unacceptable glare?	Only signage zones are proposed. Future signs may or may not be illuminated. This item can be further assessed as part of a future signage DA at the site.
Would illumination affect safety for pedestrians, vehicles or aircraft?	Only signage zones are proposed. Future signs may or may not be illuminated. The location of the signage zones ensures that there will not be adverse safety impacts due to illumination.
Would illumination detract from the amenity of any residence or other form of accommodation?	Only signage zones are proposed. Future signs may or may not be illuminated. The location of the signage zones ensures that they will not detract from the amenity of any residence or residential accommodation.
Can the intensity of the illumination be adjusted, if necessary?	Only signage zones are proposed. Future signs may or may not be illuminated. This item can be further assessed as part of a future signage DA at the site.
Is the illumination subject to a curfew?	Only signage zones are proposed. Future signs may or may not be illuminated. This item can be further assessed as part of a future signage DA at the site.
Safety	
Would the proposal reduce the safety for any public road?	The signage zones will not impact road safety.

Object	Consistency
Would the proposal reduce the safety for pedestrians or bicyclists?	The signage zones will not impact safety for pedestrians or bicyclists.
Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	The signage zones are located on the facades of the building and will not obstruct sightlines. They will not reduce safety, including for children.

9.1.7 Recommendation

The proposed built form and urban design outcomes at the site are considered to be of a high standard, exhibiting design excellence through a thoughtful and diverse design that supports visual interest and is responsive to the existing character of Crows Nest and its desired future character. The bulk and scale of the building complies with the relevant legislative planning controls and is consistent with the building envelope established under the approved Concept SSD Application.

Mitigation measures have been nominated in **Section 12** with regard to:

- safeguarding design integrity through the construction process in accordance with the submitted Design Excellence Strategy as identified in **Section 7.3**
- requiring the separate and future detailed design of building and business identification signs within the proposed signage zones associated with the OSD, and

The proposed built form represents an appropriate and high-quality outcome for the site.

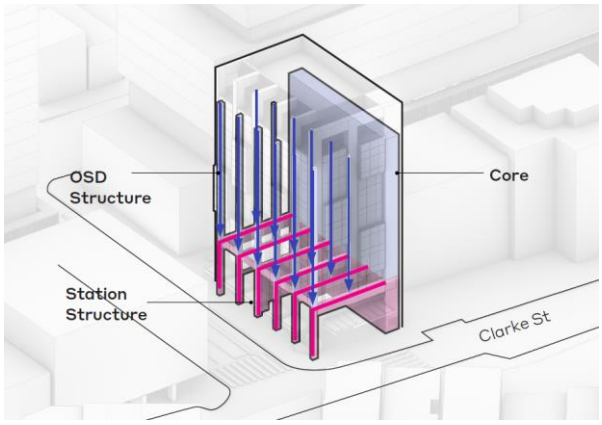
9.2 Integration with Sydney Metro infrastructure

The CSSI Approval anticipates that the design of metro stations will make provision for OSD areas within the station box as discussed in **Section 4.3**. Such provision would include for building foyers and entrances, lift wells and service cores, end of trip facilities, loading areas and the like. As shown in the Design Report and Architectural Plans at **Appendix C**, the Site C OSD proposal seeks further integration to provide cohesive structural engineering, services, building facades, and pedestrian flow through the station and OSD.

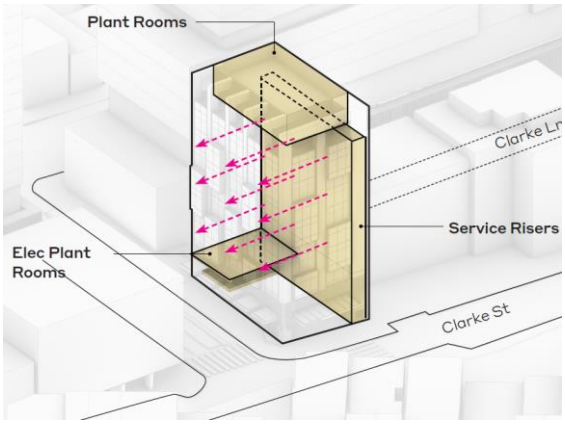
The station integration can be categorised into the following components:

- structural integration – the structural design of the OSD occurs above the transfer deck, which has been designed to enable loads from the internal columns above this level to span across the building onto perimeter columns and core walls. This avoids internal column continuity into the station area which is required to maintain an open ground floor to create a spacious and inviting station entrance. The Structural Assessment provided at **Appendix O** and discussed further in **Section 9.16** below confirms that the structural design of the proposed OSD has been appropriately integrated with the station box.

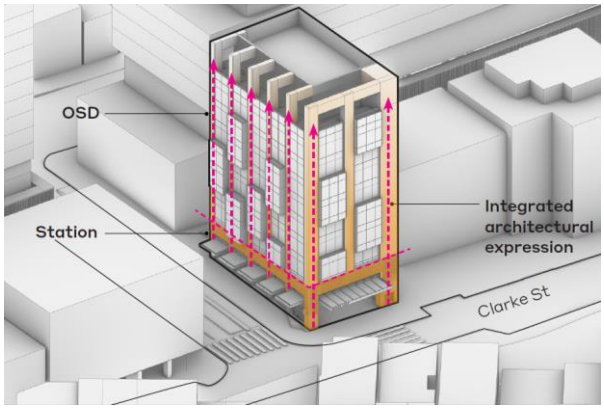
- services integration – the management of in-ground services, including the modification of existing assets and installation of new assets, has been considered in hand with the station box and public domain being delivered under the CSSI Approval. This strategy reduces the potential for the future disruption of footpath access should the construction of OSD be delayed after the completion of the station, removing the need for construction works impacting the operation of the station. The Infrastructure and Utilities Assessment at **Appendix I** confirms that the proposed OSD can be appropriately serviced.
- façade integration – the OSD building line is consistent with the station box beneath to ensure a consistent built form outcome. Above ground station services are carefully concealed and integrated into OSD facades with intakes and discharges vertically stacked, minimising any impact on the architecture and public domain. Architectural materials and finishes have been used to visually distinguish between the station box and OSD without the need for upper level setbacks.
- pedestrian flow integration – a clear separation of circulation is possible through the integrated planning of the ground plane and vertical circulation systems throughout. This includes separating the entrance and lifts for the station on Clarke Street from the OSD lobby and dedicated building lifts that are accessed from Hume Street.



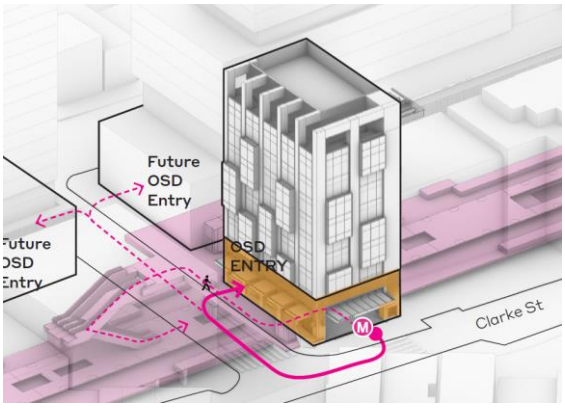
Structural



Services



Façade



Pedestrian flow

Figure 43: Integration between the OSD and station design

9.2.1 Public domain and wayfinding

The public domain works within and surrounding the Crows Nest Station precinct are part of the design and delivery package for the CSSI Approval. While forming part of a separate process, a holistic approach to the integration of station and OSD at the ground plane is an important consideration and has been embodied in the approved Concept SSD Application and this subsequent detailed application for the Site C OSD.

The ground levels and ground floor arrangement detailed in the architectural plans at **Appendix C** reflect the station design which has been approved and is being delivered under the terms of the CSSI Approval in consultation with Council.

The public domain works being delivered under the CSSI Approval comprise:

- footpaths, street tree planting, lighting and street furniture
- new pedestrian crossing with traffic lights at the Pacific Highway and Oxley Street intersection
- new pedestrian crossing on Clarke Street and Hume Street
- new publicly accessible bicycle parking on Hume Street, the Pacific Highway, Clarke Street and Oxley Street
- new on-road marked cycle link on Hume Street
- new 'kiss and ride' and taxi bays on Oxley Street
- the relocation of bus stops on the Pacific Highway
- installation of wayfinding signage and Sydney Metro information

The fit-out and use of the ground floor OSD entrance lobby on Hume Street, which forms part of this application, has been designed with consideration of these public domain improvements and supports a high quality and vibrant ground plane. The remaining OSD components occur above the ground floor and as such do not impact the public domain design.

Future wayfinding signage in the form of metro signs will be provided in accordance with the CSSI Approval and consistent with the line-wide design being developed for metro station precincts. Business identification signage for the retail tenancies and the building's commercial lobby will be subject to future and separate detailed design and will distinguish between the public station entrances and the retail and commercial entrances. Awnings will also define the commercial entrance associated with the OSD, as well as the separate station entrance and retail entrances.

9.2.2 Construction management

The Site C OSD is entirely integrated with, and will be constructed at the same time as, the station portal being provided on this site. Accordingly, the proposed works will be completed by the station contractor as a continuation of the Construction Environmental Management Framework and Construction Noise and Vibration Strategy utilised for the CSSI Approval.

Construction management is discussed further in **Section 9.20**.

9.2.3 Recommendation

The design of the structure, services, and architectural expression of the OSD has been designed in tandem with the station box to ensure seamless integration between these two planning pathways. The design of the OSD lobby has further been considered in the context of public domain improvements and wayfinding being designed and developed under the separate CSSI Approval.

While no further study or refinement is required at this stage, mitigation measures are proposed in other sections of this EIS addressing the detailed construction drawing stage of the project and the construction management process to ensure that the OSD is fully integrated with the station subject to the CSSI Approval.

9.3 Public space

9.3.1 Public space provision

Under the terms of the CSSI Approval, a degree of development is already approved that will cover the full extent of the site and extend up to the transfer slab at RL 98.5m. This ensures that the site will already accommodate a multi-storey building notwithstanding the proposed OSD, and as such there is no potential to provide public open space on this site.

Further, while the public domain and surrounding public open space areas do not form part of this application, the Site C OSD has been designed to respond to its context. The OSD does not compromise the Crows Nest station's linkages and access to public spaces, and has been designed with the future outcomes of the surrounding public domain in mind.

9.3.2 Activation

The ground plane of the building is largely influenced by the CSSI Approval. Nevertheless, the Site C OSD responds to the parameters established by the CSSI Approval and approved Concept SSD Application and provides separate entrances for the station and OSD lobby to benefit wayfinding and minimise conflicting pedestrian movements during peak periods of station usage.

The entrance of the OSD facing Hume Street has been designed with consideration of, and to complement, the separate approved retail tenancies along this frontage as well as the station entrance at Clarke Street, ensuring that a continuous activated frontage is provided to the site's two main sources of pedestrian traffic. These frontages also benefit the site's interface with the Crows Nest Village and Hume Street Park (discussed further in the sections following).

The full height glazing used for the office floors will ensure that a sense of activity within the building is visible from the surrounding public domain and open space areas, and while also achieving a high standard of passive surveillance.

9.3.3 Permeability and connectivity

The design of the Site C OSD also responds to the desire to improve permeability and connectivity within Crows Nest, as encapsulated by the 2036 Plan. The OSD is located on a spatially advantageous site at the convergence of Clarke and Hume Streets, and serves as a gateway building for the Crows Nest Station precinct. The building provides an appropriate setback to the Hume Street and Clarke Street frontages to maximise the footpath and has been designed with consistent building lines to benefit wayfinding and ensure there is a legible street network around the site. The Site C OSD has been designed to be highly legible when seen from Clarke

Street and the Hume Street Park, including the future connection to Willoughby Road under construction (**Section 3.8**).

The OSD entrance complements the approved retail tenancies (CSSI Approval) along Hume Street, improving Hume Street's desired future character as an active retail street that takes advantage of the pedestrian growth between the Crows Nest Station precinct and the established Willoughby Road village centre.

The Accessibility Assessment provided at **Appendix N** and discussed further in **Section 9.18** below further confirms that the proposed development is accessible to all and appropriately integrates with the station areas.

9.3.4 Amenity

The Site C OSD will not result in any significant new or adverse amenity impacts on the surrounding public domain and open space areas in accordance with the approved Concept SSD Application. In this way, the proposed development ensures that these surrounding spaces can continue to be welcoming, attractive and accessible.

While the Site C OSD will be visually prominent when viewed from surrounding public spaces towards the Crows Nest village centre, especially Hume Street Park owing to the site's location opposite this space (see **Section 9.5.3.1** below), these impacts are consistent with what was assessed and found to be acceptable in the Concept SSD Application. Further, the proposed development complies with the NSLEP 2013 controls for height and density on this site.

The detailed design of the OSD overall presents a more articulated and finessed scheme and is an improved outcome from a visual impact perspective when compared to the building envelope. Given Sydney Metro's transformative role for this area, the proposal is considered to be consistent with the strategic opportunity to provide a built form that serves as a visual marker for the station.

Careful consideration has also been afforded to solar access and wind conditions as a result of the proposed development on surrounding public spaces and, as demonstrated in **Sections 9.5.1** and **9.5.2** below. The surrounding public domain and open space areas will continue to achieve a high level of amenity.

9.3.5 Private open space

A rooftop terrace will be delivered for the future tenants of this building. The terrace is landscaped and will benefit from excellent views of the Hume Street Park and surrounding the Crows Nest village. As demonstrated in the overshadowing plans at **Appendix M**, this rooftop will also benefit from extensive direct sunlight and will be a welcoming and attractive break-out space.

The landscaped rooftop, in conjunction with planting on the building facades, has the potential to assist in mitigating the urban heat island effect and ensuring appropriate comfort levels on-site.

9.3.6 Recommendation

The Site C OSD will have a positive impact on street level activation, and has considered broader permeability and connectivity from the Crows Nest Station precinct and surrounding area. It is considered that the Site C OSD respects the amenity and functionality of the surrounding public domain and Hume Street Park which inform the context of this site. The Site C OSD has also been designed to ensure a high degree of amenity for the future building tenants, providing an accessible landscaped rooftop terrace. The OSD building has an entry lobby on Hume Street which means there will be easy connection to the metro station and Hume Street Park for the building's occupants.

9.4 Crime prevention through environmental design

A Crime Prevention through Environmental Design (CPTED) report has been provided at **Appendix R** to assess the detailed design of the Site C OSD and make recommendations for improved safety and security. CPTED is a situational crime prevention strategy that focuses on the design, planning and structure of the environment.

The CPTED assessment confirms that the proposed development has a low crime risk rating and that the design is considered to be generally consistent with the principles of CPTED, including:

- being integrated with the station entrance, and because of the site's frontages to pedestrian and vehicle thoroughfares and the adjacent open space, the site already benefits from a high level of natural surveillance. The proposal will further maximise this natural surveillance with sightlines from the commercial floors to the surrounding area as well as the glazed lobby entrance, which will permit surveillance from the public domain to the inside of the building at night and vice versa.
- the building's lobby is separated from the station entrance, ensuring there is a clear distinction between public and private spaces. Whilst all access points are legible and inviting, signage will further enhance this perception and benefit wayfinding. Given the above, it is considered that the architectural design provides for clearly defined spaces, capable of being well managed and cared for.
- given the quality and design of the proposed development, the proposal will enhance the image and activity of the site, thereby encouraging a sense of shared ownership.

The CPTED Report identifies recommendations on how to further improve safety within the site where appropriate. Further details on specific measures such as lighting layouts and surveillance camera (CCTV) layouts will be progressed at the detailed design and construction phase.

9.4.1 Recommendation

The development was assigned a Crime Risk Assessment Rating (CRAR) of 'low' noting that the OSD provides a high level of natural surveillance to the development itself and the surrounding street network, provides a strong degree of territorial reinforcement (i.e. displays strong ownership cues), and improves the quality of the built environment from that as existing. The provision of an OSD entrance lobby separate to the general station entrance allows this lobby to be managed as appropriate for its function separate from the Metro use.

The CPTED report provides a number of recommendations to be explored to further reduce crime opportunities at the site. These recommendations are generally minor and would not change the CRAR rating of the site, which is already at 'low'.

Potential recommendations include ensuring that sightlines are not obstructed by equipment (especially within the OSD lobby), the implementation of a CCTV network, and the provision of secure electronic access for site users. These initiatives are identified in the Mitigation Measures in **Section 12** will be further explored as the project proceeds.

9.5 Environmental amenity

9.5.1 Overshadowing

A comprehensive series of overshadowing studies were commissioned as part of the approved Concept SSD Application to address impacts on key public domain areas, and provide a detailed solar impact analysis of all buildings adjacent to and surrounding the site. These impacts were all judged to be acceptable and appropriate for the context of the site.

A further analysis of the potential overshadowing caused by the proposed Site C OSD in this context of the approved Concept SSD Application building envelopes has been prepared by Virtual Ideas (**Appendix M**) and discussed in the sections following.

9.5.1.1 Overshadowing to public open space

The key public open space areas in the context of the site comprise the Hume Street Park, including its extension to Willoughby Road that is under construction, Ernest Place, and Willoughby Road itself.

As described in **Section 7.1** above, the detailed design of the proposed OSD is consistent with the approve building envelope for Site C and complies with the NSLEP 2013 provisions). The overshadowing studies provided at **Appendix M** incorporate and distinguish the approved building envelope from the detailed and articulated built form proposed under this detailed SSD Applications. The plans demonstrate the following:

- 21 March (Autumn Equinox) – minor additional shadow is cast on the surrounding road network and a small area of the northern façade of the commercial building at 10-12 Clarke Street from 2pm. No further shadow is cast on key public open space areas.
- 21 June (Winter Solstice) – minor additional shadow is cast on the surrounding road network, a small area of the roof of the commercial building at 10-12 Clarke Street from 12pm, and on the roof of the commercial building at 4 Clarke Street at 3pm. No further shadow is cast on key public domain areas.
- 21 September (Spring Equinox) – minor additional shadow is cast on the surrounding road network and a small area of the northern façade of the commercial building at 10-12 Clarke Street from 1pm and on the roof of the commercial building at 11 Clarke Street at 3pm. No further shadow is cast on key public domain areas.
- 21 December (Summer Solstice) – minor additional shadow cast on the roof of the neighbouring commercial building at 20 Clarke Street in the morning from 9am – 11am, and on the surrounding road network. No further shadow is cast on key public domain areas.

Accordingly, the shadow cast by the proposed development remains generally consistent with the approved building envelope and does not adversely impact the amenity of the surrounding area or the identified key public open space areas including Hume Street Park, Willoughby Road, the Crows Nest Community Centre or Ernest Place. The proposed development complies with Clause 6.19B of the NSLEP 2013, the 2036 Plan and the Design Guidelines, which ensure that development will not overshadow Willoughby Road between 11.30am and 2.30pm in midwinter, and Ernest Place between 10am and 3pm in midwinter.

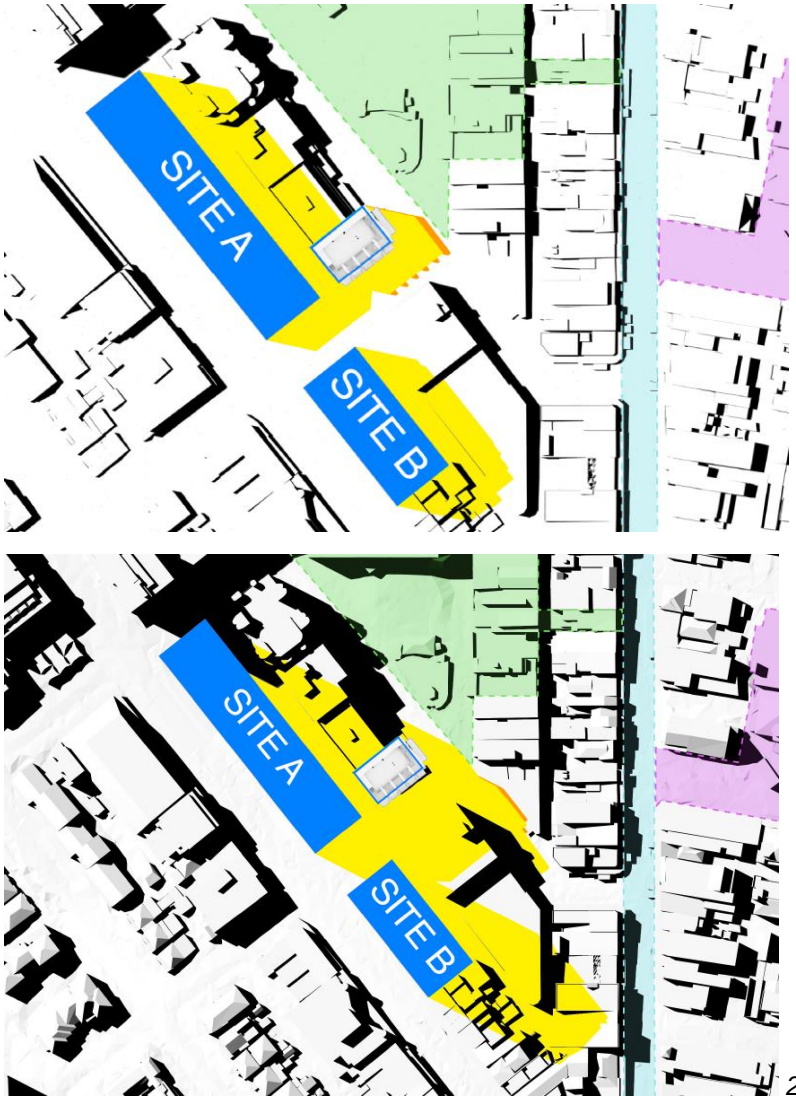


Figure 44: Overshadowing closest to key public domain areas, showing that the proposed development remains consistent with the Concept SSD Application and the planning controls

9.5.1.2 Overshadowing to surrounding residential development

The St Leonards/Crows Nest strategic centre is primarily intended to be a jobs and employment location. However, a number of existing and proposed residential premises are located in the denser areas of the centre, some of these within close proximity to the Crows Nest Station precinct.

These include:

- 545-553 Pacific Highway, St Leonards
- 22 Clarke Street, Crows Nest
- 7-19 Albany Street, St Leonards and
- 472-486 Pacific Highway, St Leonards.

The overshadowing studies provided at **Appendix M** confirm that the shadows cast by the proposed development, including the minor protrusions from the approved building envelope, will not impact the surrounding residences south of the Pacific Highway and adjacent to the site at 22 Clarke Street.

9.5.1.3 Recommendation

The overshadowing impacts of the Site C OSD remain generally consistent with that established under the approved Concept SSD Application, which have been comprehensively assessed against the relevant planning controls and found to be acceptable. While the detailed design of the building has resulted in a minor increase to the total overshadowing, this has not impacted any surrounding protected public open space areas or residences. Accordingly, it is clear that the proposed works will not give rise to any unacceptable overshadowing impacts, and as such no further study or refinement is required and no specific mitigation measure has been nominated.

9.5.2 Wind

A Wind Impact Assessment Report (**Appendix L**) has been prepared to assess the effect of the proposed development on local wind conditions surrounding the site as well as outdoor spaces provided on the site, and to provide recommendations where necessary. The Wind Impact Assessment Report is informed by wind tunnel testing comparing the existing and future configuration of the site and the Crows Nest Station precinct. Comparisons of wind speeds for the existing and proposed building configurations are the most objective way in assessing the impact of a subject development on the local pedestrian wind conditions.

Wind speed at all areas within and around the development site will meet the relevant Australian Wind Engineering Society (AWES) safety criterion. The proposed development was also assessed against a pedestrian comfort criteria.

9.5.2.1 Surrounding pedestrian environment

The approved Concept SSD Application and associated building envelopes will increase building height at Sites A, B and C beyond what was existing on the site formerly and what exists on the site now as an active construction site. These changed conditions are expected to increase prevailing winds around the future built forms including downwash and accelerated winds around the building corners.

- tall buildings tend to intercept the stronger winds at higher elevations and redirect them to the ground level which is called down-washing
- when winds approach at an oblique angle to a tall façade and are deflected down, a localised increase in the wind activity, or corner acceleration, can be expected around the exposed building corners at pedestrian level

The modelling undertaken confirms the following conditions in the surrounding environment:

- the Oxley Street and Hume Street frontages are modelled as being comfortable for walking or strolling and, suitable for active pedestrian use. This is considered to be an acceptable outcome as pedestrians will be active and less likely to remain in one area for prolonged periods of time at footpath locations. Street tree planting planned as part of the public domain improvements in the CSSI Approval will further assist in reducing wind along these locations.
- the OSD entrance to Site C from Hume Street is modelled as being comfortable for strolling. The pedestrian awnings at the ground floor entrances to the building will assist in mitigating downwash, further noting that the building entrance is not likely to accommodate pedestrian loitering for extended periods of time.
- the indicative building entrances for sites A and B are predicted to be comfortable for sitting or standing, which are considered to be appropriate conditions for building entrances.

The Wind Impact Assessment Report has found that the wind conditions at most locations around the site would be expected to be marginally stronger than the existing wind conditions. However, wind speeds at all areas assessed on and around the development site will meet the recommended safety criterion and will not result in spaces that are unsuitable for their intended uses.

9.5.2.2 Private open space

The Site C OSD will accommodate a landscaped rooftop terrace that will be accessible to the future tenants of the building. An assessment of this terrace space confirms that this space is appropriate for pedestrian standing at most times of the year, meaning conditions may be windier than desired for sitting at times. Design features such as large planting and wind screens will assist in mitigating winds and have been integrated into the design of the roof terrace.

9.5.2.3 Recommendation

The Wind Impact Assessment Report notes that no mitigation measures are generally required at ground level as the relevant criteria has been met, but that street trees with large crowns would be beneficial in further reducing wind activity along the footpaths and the Site C entrances. In this regard, street trees retained in the public domain form part of the CSSI Approval outside of this proposed SSD Application.

The assessment also notes that the currently proposed vegetative landscaping on the accessible garden is considered to be suitable and appropriate in ameliorating and acting as a buffer against potential wind impacts. The planting will be capable of growing to 1.5 metres to 2 metres in height for appropriate wind control.

Accordingly, no mitigation measures are identified.

9.5.3 View and visual amenity and privacy

A View and Visual Impact Assessment (VVIA) is provided at **Appendix Q** addressing potential changes from surrounding public areas and private residences as a result of the detailed design of the Site C OSD. For consistency, the VVIA utilises the same views as those assessed in the Concept SSD Application and that were identified in consultation with North Sydney Council.

The VVIA is benchmarked against the approved building envelopes that were assessed and approved by the Minister as part of the approved Concept SSD Application for the Crows Nest Station precinct.

9.5.3.1 Public view impacts

The VVIA assesses a range of selected local and district view locations in the locality, consistent with those assessed in the Concept SSD Application. An additional view has also been modelled to further analyse the potential changes to the outlook from the Hume Street Park, as a key open space area neighbouring the Site C OSD.

Note, the park extension area (pedestrian connection) is an active construction site and as such an assessment of views from this specific location has not been possible. Instead, the views from Ernest Place on Willoughby Road which are proximate to the park extension area were used as a substitute and the alternative location analysed in the VVIA.

The VVIA finds the following in relation to public views:

- The Site C OSD is largely obscured in long range viewpoints and some medium range viewpoints by the landscape or surrounding development. These views will remain largely cohesive compositions of natural and built elements including other proposed developments in the St Leonards centre, the Site A and B building envelopes, and water, parkland, and vegetation. The proposal does not obscure any iconic Sydney landscape features such as Sydney Harbour and Sydney Harbour Bridge.
- While the broader Crows Nest Station precinct may impact the composition of some views, the Site C OSD is the smallest building in this context and is largely absorbed by the surrounding approved building envelopes or a collection of prominent new and existing developments in the surrounding centres. The proposal is consistent with the changing built form context and desired future character of the St Leonards/Crows Nest Centre under the 2036 Plan. Further, the development remains consistent with the approved Concept SSD Application building envelope and fully compliant with the NSLEP 2013 controls.
- From areas to the direct east or south, such as Hume Street Park and Ernest Place (see **Figure 45** to **Figure 49** below), the change to the composition of public views is significant due to the delivery of the Crows Nest Station precinct, but this is largely resulting from the approved taller Site A and B building envelopes behind as opposed to Site C. In this respect the Site C OSD is largely absorbed by the taller building envelopes behind and ample sky views remain in each location tested. In terms of comparison to the approved concept building envelope, from a visual impact perspective, the proposal offers an improved outcome presenting a more articulated and finessed scheme.
- The architectural roof feature ensures that the building services zone forms part of the overall architectural language of the building and is screened and integrated into the building. This ensures that the most prominent aspect of the building demonstrates high-quality design and positively contributes to the local skyline.

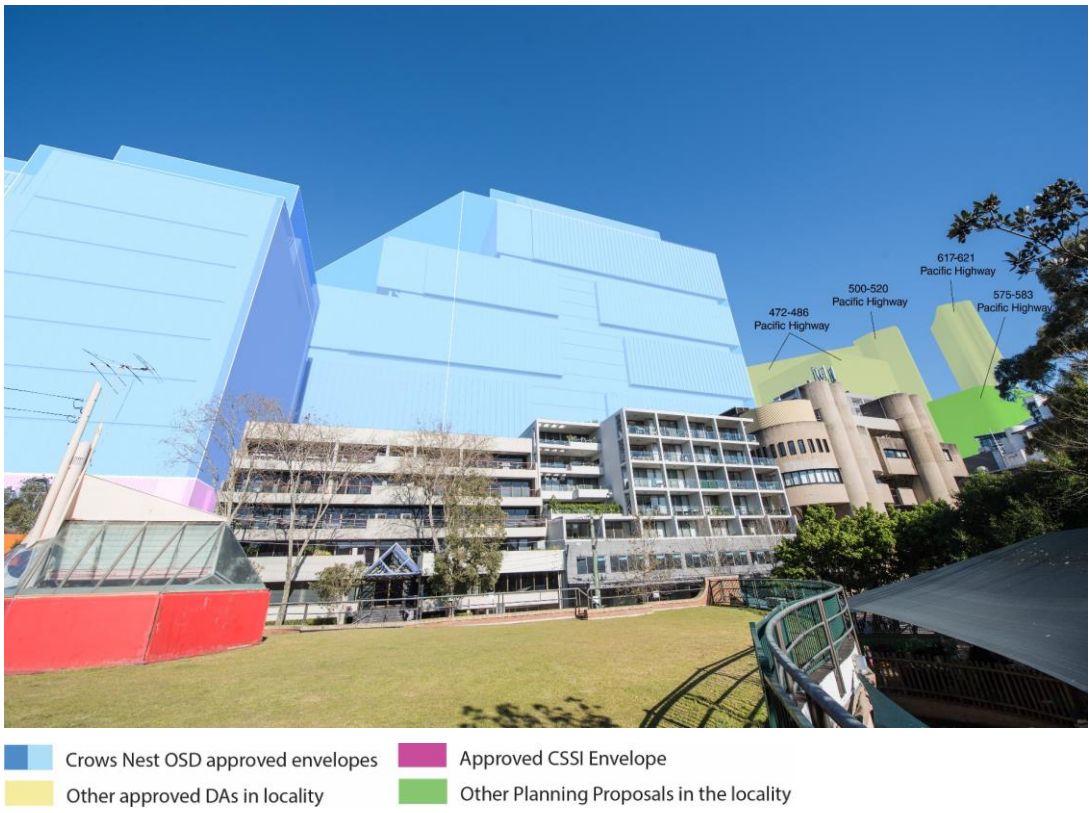


Figure 45: the approved building envelopes as viewed from Hume Street Park, Crows Nest

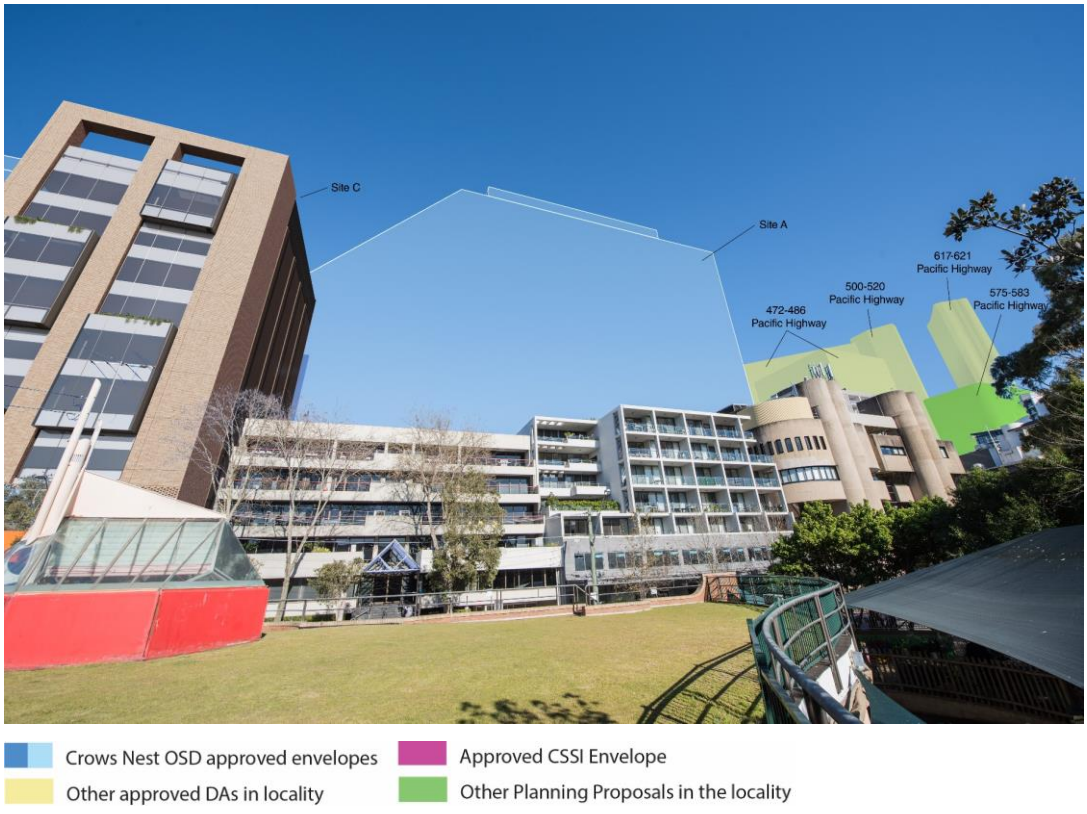


Figure 46: the detailed design of Site C and the approved building envelopes for Sites A and B as viewed from Hume Street Park, Crows Nest

Figure 47: the detailed design of Site C and the approved building envelopes for Sites A and B as viewed from within Hume Street Park, Crows Nest

Figure 48: the approved building envelopes as viewed from Ernest Place, Willoughby Road, Crows Nest

Figure 49: the detailed Site C OSD and approved building envelopes for Sites A and B as viewed from Ernest Place, Willoughby Road

9.5.3.2 Private view impacts

Impacts on private views are limited, as the Site C OSD is generally not located in direct views from surrounding residential development and is largely screened by the approved taller Site A and B building envelopes. As aforementioned, the proposed OSD is consistent with the approved building envelope for this site and complies with the NSLEP 2013 provisions governing height and floorspace.

As identified in the approved Concept SSD Application, the key private residential views that have the potential to be impacted are that of 545 Pacific Highway (16 storeys), 22-26 Clarke Street (8 storeys), 400 Pacific Highway (5 storeys) and 402-420 Pacific Highway (5 storeys). Views from 22-26 Clarke Street remain unaffected by the Site C OSD, as this building is located on the same superblock as Site C and does not rely on views over to Site C from across the block. Views from 400 and 402-420 Pacific Highway also remain unaffected as Site C will be entirely screened from these sites by the larger Site A and Site B building envelopes.

Accordingly, the private view lines with the potential to be affected are those with a southern aspect from the mid and upper levels of 545 Pacific Highway (see **Figure 50** and **Figure 51** below). In this context, the Site C OSD will impede a portion of the longer range views to the edge of the North Sydney CBD and to North Sydney and Crows Nest mixed use areas. However, these views are not identified as being iconic, and a proportion of the view will remain available to the east of the Site C OSD. Iconic views, including of the Sydney CBD, Harbour Bridge, or Sydney Tower, remain undisrupted by the Site C OSD. Therefore, the visual impacts of the Site C OSD on surrounding key residential receivers has been found to be acceptable.

Figure 50: 545 Pacific Highway – medium rise view – approved Site A and C building envelopes

Figure 51: 545 Pacific Highway – medium rise view – proposed detailed design of Site C OSD and the approved Site A building envelope

9.5.3.3 Recommendation

Ultimately the visual and view impacts of the detailed design of the Site C OSD are considered to be acceptable noting that no adverse or significant additional impact is identified with respect to the assessment of the approved Concept SSD Application. While some moderate impacts were identified when comparing the proposal to the existing pre-development site and context, the proposed development is ultimately consistent with the approved Concept SSD Application and represents a lesser impact in the context of higher density development occurring elsewhere in the Crows Nest Station precinct and the St Leonards/Crows Nest centre in accordance with the 2036 Plan.

The VVIA confirms that, from a visual impact perspective, the detailed design of the Site C OSD is considered to be appropriate and supportable. The built form has incorporated façade treatments and articulated elements which exhibit design excellence and contribute to the visual interest of the Crows Nest village centre, as discussed in **Section 9.1**. The proposed building takes the place of the approved building envelope and provides a more articulated and finessed scheme that has been designed in accordance with the endorsed Design Guidelines and Design Excellence Strategy and achieves design excellence.

9.5.4 Reflectivity

A Reflectivity Report has been prepared at **Appendix T** that assesses the risk of solar reflections from the façade of the Site C OSD, and the resultant safety impacts to drivers and pedestrians. It assesses the OSD from locations where there is a risk of glare from the sun from Hume Street and Clarke Street, from both the perspective of a pedestrian and vehicle.

For the purposes of assessment, the specular reflectivity for all façade materials was considered to not exceed 20%, as is consistent with limits adopted by the City of Sydney Council (in the absence of a comparable limit being adopted by North Sydney Council). In this regard, where the specular reflectivity of façade materials is <20%, the report confirms that the risk of reflections resulting in safety impacts on drivers and pedestrians are limited, and that the impacts are considered to be acceptable.

9.5.4.1 Recommendation

The detailed design of the Site C OSD does not present area risk to drivers or pedestrians from the reflectivity of the building facades. The mitigation measures in **Section 12** promote selecting materials and finishes with a normal specular reflectivity of façade materials of 20% or less in accordance with the reflectivity assessment when completing the detailed design and construction of the building.

9.5.5 Lighting

All public domain areas and the first two floors of the building are the subject of the CSSI Approval and as such the illumination of these external areas does not form part of this application. Further, no external lighting is proposed for the Site C OSD facades above.

Future business or building identification signage will be contained within the proposed signage zones and subject to a separate approvals Illumination will consider the context of the site and any relevant controls and standards, including Australian Standard 4282(1997): Control of obtrusive effects of outdoor lighting.

9.5.5.1.1 Recommendation

As no external lighting is proposed as part of this application, no mitigation measure is identified as being appropriate or necessary. Public domain lighting is subject to the CSSI Approval and the potential illumination of signage will be subject to separate and future applications.

9.6 Transport, traffic, parking, and access

A Traffic and Transport Assessment is provided at **Appendix J** addressing the strategy for access and servicing for the Site C OSD and determining the likely impacts of the proposed development during the construction and operational phases.

Construction traffic impacts and the Construction Traffic Management Plan is discussed at **Section 9.20.3** below.

9.6.1 Existing travel patterns

An analysis of Journey to Work data from the Australian Bureau of Statistics confirms that employees working near the proposed Crows Nest Station reported a much higher usage of cars at 43%, while only 6% reported walking as their main mode of transport and 40% by train. However, public transportation growth has outpaced that of private transport, with the private vehicle transport growth rate being significantly lower than the population growth rate. Further, as the Journey to Work data relates to travel patterns prior to the commencement of the metro line, it is expected there will be a significant increase in travel via train in this area.

The Transport, Traffic and Parking Assessment at **Appendix J** provides an estimate of the trip generation by mode with consideration of the above for the prior use of the site, based on trip generation rates adopted by the *RMS Guide to Traffic Generating Developments* and travel patterns for the immediate area.

The former uses of the Crows Nest Station precinct, including Site C, were estimated to have generated in the order of 116-131 trips in the AM peak period, 81 trips in the PM peak period and 1035 trips per day. Given the former uses within this precinct were commercial uses, the majority of trips were estimated to have been dominated by inbound travel in the AM peak period, and outbound in the PM peak period.

9.6.2 Expected travel patterns

The expected travel patterns of the Site C OSD remain consistent with that analysed as part of the approved Concept SSD Application.

Due to the constrained nature of the site, and to promote active transportation and public transport use (including that of the new Metro), no car parking spaces are being provided within Site C. Accordingly, it is expected that workers travelling to the proposed Site C OSD will predominately use public transport, with likely minimal number of trips being taken by car and overall significantly less than the former use of Site C as a tyre store.

With regards to pedestrian trip generation, there will be an increase in the number of pedestrian trips to and from Site C resulting from the delivery of the new commercial floorspace. The OSD will generate 76 hourly pedestrian trips during the AM peak, and 69 hourly pedestrian trips during the PM peak. However, most of these trips will only be between the OSD and the metro station below (and hence already included in the forecast station patronage) and will not need to cross or access the surrounding road network.

It would also be expected that there would be an increase in the use of bicycles in travelling to and from the site as a result of public domain upgrades being delivered as part of the CSSI Approval, which includes a new on-road marked cycle link on Hume Street and publicly accessible bicycle parking within the public domain, as well as dedicated bicycle parking on Level 1 of the building for use by the building tenants and visitors.

The use of active and sustainable transport options will be advertised and encouraged for those on site via a site-specific Workplace Travel Plan (discussed further below).

9.6.3 Parking

Bicycle parking (25 spaces) and end of trip facilities will be provided on Level 1 of the building. These will be accessed by cyclists on foot via the building lobby off Hume Street and the Site C building lifts. These proposed bicycle parking spaces and end of trip facilities comply with North Sydney Council's parking rates and the Green Star sustainability accreditation requirements for the development.

Private vehicle parking is not possible to be provided on Site C which accommodates the station entrance at the ground floor, and is the smallest site in the Crows Nest Station precinct. The provision of no parking on this site is consistent with the Concept SSD Application as well as North Sydney Council's maximum car parking rates. The proposed development is ideally located to access public transport, being integrated with the station entrance beneath, and in close proximity of the existing St Leonards Station and surrounding bus networks. Planned car park demand is considered to be low for Site C and able to be accommodated within existing surrounding car parking stations in the event that office staff and visitors are required to drive to the site.

9.6.4 Impact of trip generation

9.6.4.1 Vehicles

As noted above, no parking is to be provided on Site C and the vehicular trip generation associated with the proposed commercial offices will be negligible and less than that generated by the former use of the site as a tyre repairs store. Vehicular trip generation from the Site C OSD is calculated as being minor in the AM peak and the PM peak and even allowing for some low level of private vehicle use by Site C workers utilising off-site car parking, the overall traffic generation of OSD Site C will be negligible and much less than the former use of the Site C as a tyre business.

SIDRA modelling detailed in the assessment at **Appendix J** confirms that the surrounding intersections will perform at an acceptable Level of Service during both AM and PM peak periods up to the future year 2025. While there will be queuing along the Pacific Highway during both AM and PM peak hours, this is due to the growth of background traffic in Crows Nest only and is irrelevant to the consideration of the Site C OSD which will generate less traffic than the previous use of the site.

The proposed Site C OSD does not necessitate any improvements to the surrounding road network or intersections and does not compromise road safety.

Table 23: Comparison of vehicle trip generation between the former and approved use of Site C

Land Use	Scale (unit, sqm GFA)	AM				PM				Daily			
		Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total	In	Out
Tyre repair store	922.5	0.01	9	8	1	0.01	9	1	8	0.1	18	9	9
Site C OSD	3,100	0.0017	5	4	0	0.0014	4	0	3	0.0123	33	17	17

9.6.4.2 Pedestrians

Most of the pedestrian trips associated with the development will be between the Site C OSD and the metro station. As such it is likely that generated pedestrian trips will not need to cross the surrounding road network.

The cumulative pedestrian flows from Crows Nest Station and all OSD have been modelled, confirming the proposal is likely to produce a maximum of 9.7% of all pedestrian trips on the pedestrian network around Crows Nest station in 2036. Crows Nest station would generate approximately 82.9% of pedestrian trips, while background pedestrian movements would account for approximately 7.4%.

With regard to pedestrian trips and pedestrian comfort, assessment against the Fruin Level of Service (LoS) was undertaken for footpaths at and surrounding the site with regard to the pedestrian volumes during the AM peak (when the footpaths are expected to be the busiest). The Assessment confirms a LoS rating of 'A' for all nearby segments of the pedestrian network around the proposed Site C OSD (for reference, a LoS rating of C or higher is considered to be acceptable). Given the very low contributions to passenger flows from the Site C OSD, particularly compared to passenger flows from Crows Nest Station, the impact of the OSD on the pedestrian network is negligible.

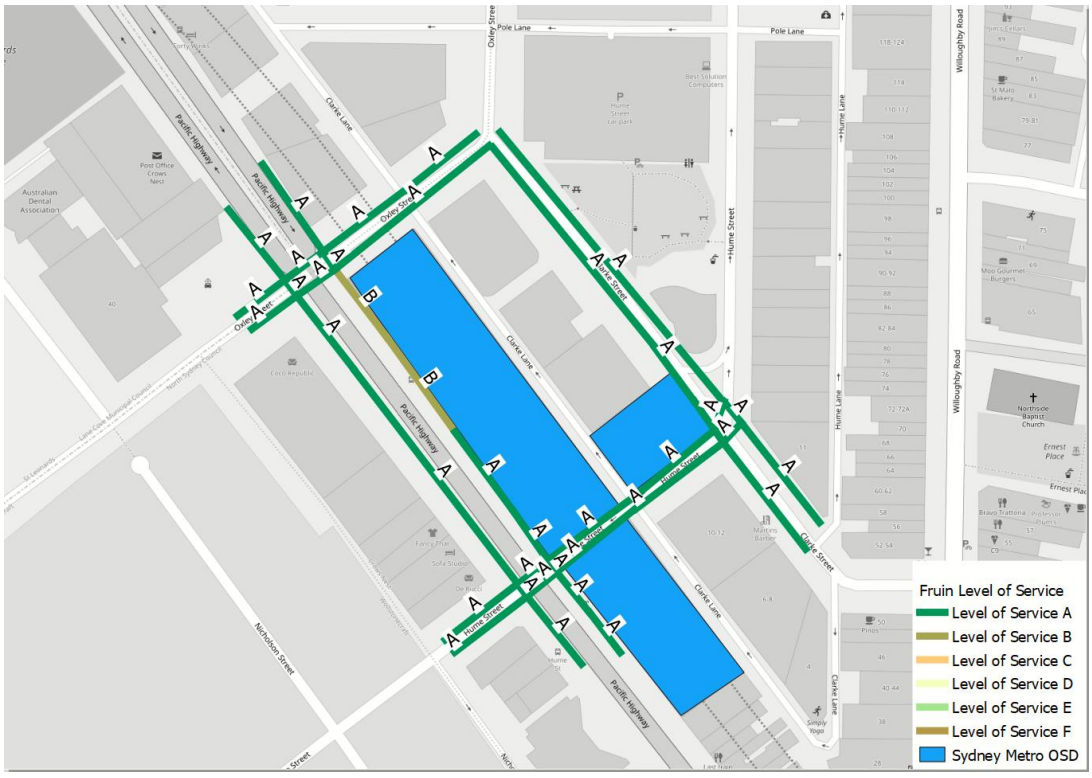


Figure 52: Capacity of pedestrian networks surrounding the site

9.6.4.3 Point to point

The OSD Site C development will have no impacts on taxi and other point-to-point services like rideshare (Uber, Lyft etc) operations. Demand for taxi and rideshare services would be accommodated as part of the public domain spaces around the site being delivered under the CSSI Approval. No bus/coach parking is required for the operation of the proposed offices.

A taxi zone accommodating three spaces is proposed as part of the IAP on Oxley Street. This will be located proximate to the Site C OSD and can be used for point-to-point services and kiss-and-ride parking.

9.6.4.4 Bicycle

The number of trips to and from the Site C OSD by bicycle are likely to increase driven by the delivery of new commercial floorspace. This demand can be accommodated by the existing road network and cycle path upgrades as part of the CSSI Approval, as well as the bicycle parking provided on the site as part of this development and in the surrounding public domain as part of the CSSI Approval.

9.6.4.5 Emergency vehicles

Emergency vehicle access will continue to be possible via the surrounding road network including the Pacific Highway, Clarke Lane, Hume Street and Clarke Street. It is not anticipated that there would be any impacts to emergency vehicle access as a result of the proposed Site C OSD.

9.6.5 Site servicing

Site C is considered too small in area to accommodate an on-site loading dock, and the ground floor of the building is already largely allocated to station areas in accordance with the CSSI Approval. Accordingly, a staged loading and servicing strategy is proposed for the site as discussed in **Section 4.7.3**.

All deliveries and loading including waste collection for the Site C OSD will initially occur at a lay-by in Clarke Lane. Bins and deliveries would, therefore, be loaded and unloaded from vans and trucks within Clarke Lane. A permanent off-street loading solution will then be provided in the adjacent Site A for the Site C OSD. Waste removal will continue to occur from the lay-by in Clarke Lane.

The public domain works as part of the CSSI Approval will deliver two (2) rolled-kerb servicing bays located in Clarke Lane, one adjacent to the entrance of the Site B loading dock and the other on the opposite side of Clarke Lane adjacent to Site C. The peak number of vehicles servicing Site C is expected to be no more than four (4) vehicles per hour without the separate dedicated loading dock on Site A, and as such Clarke Lane can accommodate the likely demand.

It is recommended that a management plan be prepared prior to the commencement of operations for Site C to manage the use of the Clarke Lane spaces to ensure deliveries and servicing is coordinated and scheduled. This will effectively manage traffic flow during peak periods and enable demand to be moderated throughout the day so that vehicles are not queuing to utilise the service bay/s. The operation and management of the future loading dock in Site A will be addressed as part of a separate Loading Dock Management Plan for this building at the appropriate future stage. This recommendation is identified in the Mitigation Measures in **Section 12**.

The proposed servicing arrangement is consistent with the Concept SSD Approval and has been developed in consultation with Transport for NSW's Sydney Coordination Office (SCO). Swept path analysis is provided with the report at **Appendix J** confirming that vehicles can enter and exit the lay-by space in Clarke Lane in a forward direction at all times.

All non-essential servicing activity, including facilities maintenance and cleaning, vending machines replenishment should be conducted out of normal business hours as these services likely require dwell times in excess of an hour. All services to the commercial OSD Site C building should be encouraged to occur outside of peak hours.

9.6.6 Workplace/Green Travel Plans

A Green Travel Plan has been prepared at **Appendix J** that discusses the initiatives provided by the Site C OSD to promote sustainable and active transport when travelling to and from the site, including through the provision of no on-site car parking and the installation of dedicated bicycle parking and end of trip facilities on level 1 of the building. The Site C OSD Travel Plan will held by Council, and provided to owners/ tenants. These initiatives will naturally evolve with time and be refined in conjunction with the tenants of the building.

Upgrades to the public domain surrounding the Site C OSD under the CSSI Approval will also tie into the Site C site, including the installation of additional pedestrian crossings on the Pacific Highway, Hume Street and Clarke Street and the conversion of Clarke Lane between Hume Street and Oxley Street to a Shared Zone, enabling pedestrians to safely access the Site C OSD through reducing vehicle speeds and increasing driver awareness.

9.6.7 Recommendation

The Site C OSD building will not result in any adverse traffic, parking or access impacts. The provision of no parking on site is in accordance with Council's policies to reduce private vehicle use and will promote active and sustainable transport usage. The development, therefore, will have a negligible impact on the operation of surrounding road network and intersections and a strong emphasis on using sustainable and active modes of transport. The OSD will generate additional pedestrian activity compared to the previous use of the site, but this can be accommodated within the surrounding streets without adverse impacts on amenity and safety.

All access arrangements for the site, including pedestrian pathways, cycling, emergency vehicles, point-to-point transfers, and loading and servicing have been found to be adequate and appropriate.

Nevertheless, a number of recommendations are identified for the Site C OSD project to ensure that optimal outcomes are delivered, including the preparation of a Loading Dock Management Plan to optimise deliveries and waste collection from Clarke Lane. These recommendations are identified in the Mitigation Measures in **Section 12**.

9.7 Sustainability

9.7.1 OSD targets and initiatives

An Ecologically Sustainable Development (ESD) Framework is provided at **Appendix F** that outlines the incorporation of ESD principles and initiatives into the design of the Site C OSD. The project has been designed against the following benchmarks and initiatives:

- Section J Energy Efficiency requirements of the National Construction Code (NCC) which sets minimum energy performance requirements for all new developments, including the performance of building fabric, glazing thermal performance, air-conditioning, ventilation, lighting, power and hot water. Verification modelling has been completed for the Site C OSD confirming that the development will exceed the minimum performance levels.
- 5 Star Green Star Design and As Built v1.3 rating for commercial buildings. The ESD Framework includes a Green Star Scorecard detailing the targeted credits for the Site C OSD development and confirming the development will be capable of achieving this target.
- 5 Star NABERS Energy rating and 4 Star NABERS Water rating. Predictive NABERS modelling has been completed demonstrating that the design is capable of achieving the relevant ratings.

Therefore, the proposed development is capable of achieving the sustainability targets nominated in the approved Concept SSD Application, which will be further tracked and incorporated into or implemented in the final delivery of the development.

The ESD Framework also assesses the Site C OSD against the relevant standards and guidelines for building sustainability, including the *Sydney Metro City & Southwest Sustainability Strategy 2017* (which outlines performance targets, initiatives and outcomes adopted by Sydney Metro for all Sydney Metro City & Southwest projects) and relevant sections of the North Sydney DCP, where it was found to generally be consistent with both.

9.7.2 ESD principles under EP&A Regulations

An assessment of the Site C OSD against the ESD principles under the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulations; EP&A Regs) is provided under Section 2.2 of the ESD Framework at **Appendix F**. A summary of this assessment is provided in **Table 24** below.

Table 24: Assessment against EP&A Regulations ESD principles

ESD principle	Consistency
a) The precautionary principle	The Site C OSD does not incorporate elements during either its construction or operational phases that will have a reasonable possibility of resulting in irreversible environmental damage or degradation. To minimise the Site C OSD's impact on the environment consistent with the precautionary principle, the design incorporates industry best practice for building systems, transportation, water use, construction, materials, and waste management. This will be tracked through the following initiatives: • compliance with NCC Section J Energy Efficiency Requirements • a 5 Star Green Star Design and As Built v1.3 rating • 5 Star NABERS Energy and 4 Star NABERS Water rating targets

ESD principle	Consistency
b) Inter-generational equity	The Site C OSD will compliment the delivery of Sydney Metro Crows Nest station, siting a commercial building directly above a rapid transit station, which will provide long-term transit-oriented development benefits. Sydney Metro is Australia's largest transport project, transforming the way commuters travel through Sydney for generations to come. The Site C OSD incorporates numerous sustainable development initiatives including a 5 Star Green Star Design and As Built v1.3 rating. Many of the Green Star credits target responsible building materials, sustainable products, and recycled materials, as consistent with the preservation of inter-generational equity.
c) Conservation of biological diversity and ecological integrity	No vegetation will be removed, or any ground level works undertaken, as part of this detailed SSD Application. Furthermore, the project has been issued a waiver confirming will not adversely impact biodiversity on the site or in the region requiring further assessment. The site was previously covered by impervious surfaces during its use as a tyre shop, and thus the incorporation of a rooftop garden and vegetative planter boxes as part of the Site C OSD design is considered to enhance the site's ecological value and integrity.
d) Improved valuation, pricing and incentive mechanisms	The Site C OSD will comply with Green Star Material category requirements to ensure that sustainable materials are selected for the development. Materials cost and environmental benefits will be analysed to choose the most sustainable products, e.g. materials with recycled content, and/or third party certified materials. This will improve the development's overall environmental life cycle performance and deliver long-term value for all stakeholders.

9.7.3 Recommendation

The Site C OSD will achieve strong sustainability outcomes including compliance with NCC Section J Energy Efficiency requirements, a 5 Star Green Star Design and As Built v1.3 rating, and 5 Star NABERS Energy and 4 Star NABERS Water ratings. The project has also been assessed against the relevant framework including the Sydney Metro Sustainability Strategy and the sustainability requirements of the North Sydney DCP within the ESD Framework at **Appendix F**, and found to be compliant.

More intrinsically, delivering a commercial building above a new metro station aligns land use with the delivery of infrastructure, as an excellent transit-oriented development opportunity. This will reduce energy consumption and emissions involved with commuting for generations to come, consistent with the precautionary principle and that of inter-generational equity.

The continued target and achievement of the nominated sustainability criteria through to the operation of the OSD has informed the Mitigation Measures in **Section 12**.

9.8 Heritage and archaeology

The Site C OSD site is not listed as a heritage item, nor is it located within a Heritage Conservation Area, and no heritage items are located adjacent to the site. However, a number of heritage items are found in the general proximity of the Crows Nest Station precinct, as identified in **Section 3.9** above. Potential heritage impacts of the Site C OSD, therefore, generally constitute the potential for the detailed built form to visually detract from items in the locality for visitors to appreciate and interpret the heritage item.

Heritage impacts of the Site C OSD building envelope were comprehensively assessed under the approved Concept SSD Application and found to have acceptable impacts in the locality. As the detailed design of the Site C OSD is almost entirely consistent with the planning and assessment framework developed under the approved Concept SSD Application, it is considered that the bulk and scale remains appropriate.

With regards to heritage items identified in **Section 3.9**, the approved envelopes of sites A and B provide visual screening from most heritage items, including all heritage items to the south of the site (items 2-3, 10-18 in **Figure 20** above), so that Site C generally cannot be perceived from these locations. Site A also screens the Site C OSD from the Former Marco Building (item 5), and the Hume Street Carpark largely screens the OSD from Electricity Powerhouse No 187 (item 4). These items are also located a minimum of 2 blocks away from the Site C OSD and, therefore, any disruptions to views and the heritage significance of these items from the proposed commercial building would inherently be limited. Although a number of heritage items are located to the east (items 6-9, 19), they are also all a minimum of at least 2 blocks away from Site C and impacts on these items are negligible.

The sole heritage item within reasonable proximity to the Site C OSD which is not directly screened by sites A and B, is the six-storey St Leonards Centre building (item 1) at 28-34 Clarke Street to the northwest of the site. The St Leonards Centre and surrounding context is identified at **Figure 12** above. To mitigate adverse heritage impacts on the Centre, the built form of the OSD steps down from the remaining Crows Nest Station precinct development to respond to its bulk and scale, with other development along Clarke Street also providing substantive visual separation and screening. The heritage significance of the St Leonards Centre building is also primarily evident through its Oxley Street, Clarke Street and Clarke Lane frontages, which the Site C OSD does not disrupt.

A Heritage Interpretation Plan (HIP) for the site is also mandated under Condition E21 of the CSSI Approval. Given the commonality of the OSD buildings with the CSSI Approval, the creation of a separate HIP is not considered to be necessary.

The archaeological potential and significance of the site has been assessed under the CSSI Approval. The Site C OSD relates only to the built form at site above the approved Crows Nest station entrance box, and does not propose any demolition works at the site. The site is an active construction zone that is already substantially excavated, as part of Crows Nest station construction works. Therefore, the delivery of the Site C OSD has not impact on the site's archaeological potential and significance.

9.8.1 Recommendation

Due to the above, the Site C OSD building will have no adverse impacts on heritage items in the vicinity of the site. The proposed development is consistent with the objectives of Clause 5.10 – Heritage conservation under the NSLEP 2013 as:

- The Site C OSD building will not preclude the conservation of environmental heritage in North Sydney.
- The Site C OSD will not impact the fabric or setting of any heritage item as none are located in the immediate proximity of, or adjacent to, the site. Views from the heritage items have been assessed above and as part of the approved Concept SSD Application, where they have been judged to be acceptable.
- The Site C OSD does not impact the conservation of archaeological sites with archaeology and excavation works having also already been considered under the CSSI Approval (and the Site C OSD pertains to above ground works only and does not include demolition).
- A Heritage Interpretation Plan for the site is to be developed for the Crows Nest Station precinct in accordance with the CSSI Approval.
- Aboriginal cultural heritage is separately addressed in **Section 9.9** below.

The Site C OSD therefore is consistent with the relevant heritage planning framework, and no mitigation measures with regard to non-Aboriginal environmental heritage are considered necessary.

9.9 Aboriginal cultural heritage

The demolition of structures, clearing of the site, and bulk excavation works have already been completed or are under works on the site at this time. The OSD does not incorporate any ground-level or below-ground works, as these components are being delivered as part of the CSSI Approval. Consequently, it is considered that the potential for OSD works to impact on items of Aboriginal Heritage remains is very low and has been addressed as part of the CSSI EIS by GML Heritage Pty Ltd.

Conditions E23-E25 of the CSSI Approval regulate the assessment and management of any Aboriginal objects that are discovered as part of the separate CSSI works. Requirements include consultation with Registered Aboriginal Parties with work completed by a qualified archaeologist.

9.9.1 Recommendation

The impacts of development on Aboriginal cultural heritage within or adjacent to the site have already been assessed under the CSSI Approval, which found that the development of the site was appropriate and supportable. The proposed development will not alter the desired future concept of the site being for a multi-storey building located above and integrated with the station, and does not require any on-ground or below-ground works. Accordingly, no further study or refinement is required, and no specific mitigation measure has been nominated noting that the conditions of the CSSI Approval adequately address the assessment and management of any Aboriginal objects.

9.10 Contamination

The proposed OSD does not require any on-ground or below-ground works, including the demolition of any structures and any ground disturbance beyond that undertaken in accordance with the CSSI Approval. The CSSI Approval and site excavation works relate to Site C up to the transfer slab. In this regard, no OSD work relates directly to the ground or below ground works except for works above the ground floor slab which would be limited to the internal fit-out of the cold building shell constructed under the terms of the CSSI Approval. Therefore, there is no ability for the OSD to be exposed directly to any areas of earth or former structures on the site.

Site investigations were undertaken as part of the CSSI Approval for the Crows Nest Station precinct (refer to Chapter 18 and Technical Paper 8 of the CSSI EIS), concluding that there were no NSW EPA Notified or Regulated Site within 500m of the site and that the site had increasingly become commercial from the former residential land use since the 1930s. The site was deemed appropriate for its intended uses subject to conditions of approval, and excavation works have subsequently been completed.

Condition E66 to E70 of the CSSI Approval outline the relevant processes to be applied to works on the site if suspected to, or known to, relate to contaminated land/materials.

9.10.1 Recommendation

There is no ability for the proposed OSD to be exposed directly to any areas of earth or former materials on the site, with all site preparation, bulk earthworks, and the construction of building up to Level 2 being the subject of the separate CSSI Approval. Accordingly, no further study or refinement is required and no specific mitigation measure has been nominated noting that the conditions of the CSSI Approval adequately address contamination and any unexpected finds.

9.11 Noise and vibration

A Noise and Vibration Assessment (**Appendix K**) has been prepared to assess the potential noise and vibration impacts of the proposed Site C OSD during both the construction and operational phases of the development. More detailed assessment of operational acoustic and vibration impacts will be undertaken once \ building plant equipment has been chosen and finalised.

9.11.1 Noise environment and criteria

The existing noise environment surrounding the site comprises predominantly commercial receivers on all sides with a few residential high-rise buildings to the north of the site and some residential buildings to the east, south and west. The most relevant sensitive receivers comprise the adjoining properties at 20 Clarke Street (commercial) and 22 Clarke Street (residential), and the adjacent Site B residential OSD which is only relevant to operational noise as this OSD will be constructed after or at the same time as the proposed Site C OSD.

Unattended noise monitoring was undertaken at the closest neighbour to Site C, being the commercial building at 20 Clarke Street, and attended noise monitoring was also conducted at five locations in close proximity of the site.

While the NSW Industrial Noise Policy (INP) applies to the CSSI Approval and integrated components of the proposed development, the OSD portion of the development has also been assessed against the Noise Policy for Industry, and the NSDCP 2013 requirements have been considered for completeness.

9.11.2 Operational noise and vibration

The primary source of operational noise emissions and vibration is expected to be from plant and services, noting that no on-site loading dock or vehicle parking is proposed as part of Site C.

Plant and services for the OSD are accommodated in the rooftop services zone. While the design of such plant and equipment is yet to be finalised, the Assessment provides a preliminary analysis of potential acoustic treatments and vibration emission recommendations that can be implemented to ensure the development meets all operational acoustic and vibration criteria. It confirms that rooftop plant and services are capable of meeting these criteria, and that the future detailed design and selection of the plant and services will ensure that they meet the relevant requirements. The proposed development is not considered to result in significant noise or vibration emission requiring mitigation.

9.11.3 Construction noise and vibration

A preliminary construction noise and vibration assessment has been provided as part of **Appendix K**, noting that further investigation will be required following the development of a detailed construction methodology. It is emphasised that no demolition of excavation works form part of this application and will occur as part of the CSSI Approval.

The analysis confirms that the exceedance of the nominated noise criteria may occur at locations including commercial and residential receivers, and the neighbouring buildings on Clarke Street may be 'highly affected' when undertaking structural piling works and building fabric and interior works. These predicted exceedances represent a conservative worst-case 15 minute period, and would be attributed to the use of such equipment as concrete saws and piling rigs. Accordingly, an acoustic barrier is likely to be required surrounding the site. The barrier is to be constructed with a solid material of minimum 8.5 kg/m_2 surface weight and is to extend minimum 3.5m from ground level. Localised treatments are recommended in the form of moveable barriers surrounding noisy equipment/activities or potentially a physical barrier to any adjacent windows.

Owing to the proximity of Site C to the neighbouring commercial building at 20 Clarke Lane, there is the potential for construction works to also have a vibration impact on this building. The actual impacts are dependent on several factors including the machine, the geology of the ground, and the distance between the building and the source. Accordingly, the assessment identifies minimum working distances for the different types of equipment to mitigate cosmetic damage and human comfort.

9.11.4 Recommendation

The Noise and Vibration Assessment (**Appendix K**) confirms that further assessment and mitigation for noise and vibration may be required once a detailed construction methodology is developed, and when the building plant equipment has been chosen and finalised. The Assessment makes recommendations for operational noise and vibration attenuation, and mitigation measures for construction works, and confirms that the proposed development is capable of complying with the relevant criteria and standards.

It is recommended that a detailed construction noise and vibration assessment be prepared by a suitably qualified engineer prior to commencing works on the site with reference to the recommendations in the report. Plant and equipment should also be selected and installed with reference to the recommendations in the report.

These recommendations have informed the mitigation measures in **Section 12.**

9.12 Aviation

The airspace limitations applying to the Crows Nest Station precinct comprise:

- an Outer Horizontal Surface (OHS) of 156 metres Australian Height Datum (AHD), which is also the Obstacle Limitation Surface (OLS) on the site
- procedures for Air Navigation Surfaces-Aircraft Operations (PANS-OPS) surface at 335.2 metres AHD, and
- a Radar Terrain Clearance Chart Height (RTCC) clearance of 335.2 metres AHD.

The maximum height of the Site C OSD building is 132 metres AHD and as such it is below the PANS-OPS surface and the OLS. The proposed building, therefore, does not constitute a 'controlled activity' under the *Airports Act 1996* and does not require a further safety assessment.

In the event that cranes required for OSD construction works will breach the PANS-OPS surface or the OLS, a separate and further application will be made to SACL and CASA to approve their operation.

9.12.1 Recommendation

No further assessment of the building design is required, as the maximum height of the building remains well below all airspace limitations applying to the Crows Nest Station precinct.

A condition of consent is recommended requiring that separate approval is obtained for any construction cranes that would penetrate the OLS, if required for OSD construction works. This is also reflected in the Mitigation Measures in **Section 12** of the EIS.

9.13 Waste management

9.13.1 Construction waste

A Waste Management Plan (WMP) has been prepared at **Appendix G** which details the expected waste generation and management measures to be implemented during the construction phase of the Site C OSD.

All waste and recycling materials generated during construction will be stored in bins provided by the appointed contractor, with the bins to be appropriately coloured and signed for the division of waste for recycling/reuse. Records will be kept of all wastes and recycling and either used again on site, or transported offsite.

Actions will be taken to avoid pollutants entering stormwater drains, or generating litter, as delineated within the WMP. There will be no treatment of waste or recycling on-site with the exception for possible sorting of materials and removal of contaminants prior to forwarding to off-site facilities.

Expected waste generation rates are detailed in the WMP. Construction of the OSD is expected to generate approximately 1,796m^3 of concrete waste, 8,496m^3 of timber waste and 439 tonnes of ferrous metals. These materials are to be collected by the relevant specialist contractors for recycling.

9.13.2 Operational waste

The WMP at **Appendix G** also delineates expected waste generation and outlines proposed waste management measures during the operational phase of the Site C OSD. It is specific to waste generated by the Site C OSD only, as waste generation by the station entry and retail forms part of the CSSI Approval, and waste generated from these areas will be stored and managed separately.

The Site C OSD will generate garbage waste and comingled recyclables through the operation of the proposed office. It is predicted to generate 1,820 litres of garbage and 1,820 litres of recycling weekly. This necessitates the provision of 1x 2,200 litre general waste bin and 1x 2,200 comingled recyclables bin, with collection to occur twice a week.

The Site C OSD offices will also generate a small amount of e-waste. This will be accommodated through a 240 litre mobile bin for e-waste with collection as required.

Bins will be permanently stored in the waste management room provided on the ground floor level of the Site C OSD. Office staff/cleaners would be responsible for transporting waste generated by the development via the lifts to the central storage room for collection.

9.13.3 Recommendation

The WMP at **Appendix G** confirms that processes can be put in place for the handling of waste generated during construction and that the appropriate management strategies to minimise stormwater pollutants/litter and maximise recycling are already in place as part of the CSSI Approval. The ongoing monitoring of waste and recycling during construction will occur as the OSD is built.

With regards to operational waste, the Waste Management Plan at **Appendix G** also identified that there is sufficient capacity to handle the maximum waste generated by the operation of OSD, and that appropriate management strategies are in place. It is recommended that the ongoing monitoring of waste and recycling is conducted by the building manager in conjunction with the appointed waste contractor and cleaning contractor, if appropriate.

Appropriate Mitigation Measures are identified in **Section 12**.

9.14 Stormwater and flooding

9.14.1 Quantity

As discussed in **Section 4.11** above, as all servicing will occur as part of the CSSI Approval, no assets will be handed over to Council as part of this application. Separate coordination with Council will occur as part of the CSSI Approval.

Notwithstanding this, it is proposed to install a detention tank for stormwater within Site C, consistent with the strategy considered in the approved Concept SSD Application. Modelling and assessment of this onsite detention tank confirms that it is appropriately sized to comply with North Sydney Council's controls. The downpipes provided to direct the flows to the detention tank have the capacity to take unattenuated flows for a 100-year average recurrence internal (ARI) event from the site.

9.14.2 Quality

Water quality measures to be implemented in the Crows Nest Station precinct include roof gardens and rainwater tanks, in-ground treatment methods such as litter baskets, and stormwater pits to capture gross pollutants and suspended solids. Modelling of these potential water quality treatment measures confirms that the proposed development will meet Council requirements and Green Star target rating targets for the quality of stormwater runoff.

9.14.3 Flooding

This detailed SSD Application only seeks consent for the fit-out and use of the ground floor lobby, and does not include the structure of the building up to Level 2 (i.e. below the transfer slab) or any surrounding public domain areas. Accordingly, flood affection for the site will be resolved through the station design under the terms of the CSSI Approval, recognising that the flood modelling, impact assessment and mitigation measures for the site are to be undertaken as part of the station works under the CSSI Approval.

Notwithstanding this, the assessment provided at **Appendix H** confirms that:

- Given the positioning of Site C at the top of the catchment and the gradient of the adjacent roads, flood depths in the gutter next to Site C are typically less than 150mm during the 1% AEP event [3], and typically less than 250mm during a probable maximum flood (PMF) event.
- Flood level impacts greater than 50mm are observed in the road corridor along Hume Street as a result of the road level being lifted and the flood level being lifted with it in the public domain works being completed under the CSSI Approval. However, the flood depth increase is less than 50mm when considering the entire site and surrounds, demonstrating compliance with "Sydney Metro – Chatswood to Sydenham SPIR REMM FH9" that governs the design development of the public domain and station areas.
- The critical storm duration in the vicinity of Site C is short (5 to 15 minutes) and there is very little flood attenuation occurring due to the steep and paved nature of the catchment. As a result, the time of inundation as a result of the proposed OSD would not increase.
- The approved Concept SSD Application adopted a flood protection level for all entrances, ventilation openings, tunnel portals and other openings of 300mm above the surrounding finished ground level or sufficient to prevent local flash flooding entering the underground structures, but did not identify specific flood protection levels for OSD entrances. The flood protection level for the Site C OSD lobby was based on the larger of the PMF flood level and the surrounding finished ground level at the entrance threshold. It is noted that flood modelling demonstrates that the PMF flood depth at the boundary of Site C will never exceed 300mm.
- Accounting for increased rainfall owing to Climate Change, the assessment confirms that there will be almost no impact on the flood protection levels for the Site C OSD. The increase in rainfall intensity on the flood level adjacent to the Site C would be lower than the PMF flood level.

[3] AEP refers to the chance of a flood of a given or larger size occurring in any one year, usually expressed as a percentage. A 1% AEP is a flood that has a 1% chance of occurring, or being exceeded, in any one year and refers to a flood that occurs on average once every 100 years.

9.14.4 Recommendation

It is considered that the proposed development does not result in any significant or adverse impacts, and as such no further study or refinement is required. The detailed design, construction and implementation of stormwater assets will occur under the CSSI Approval, as are flood planning and attenuation works. No specific mitigation measures are nominated in this instance.

9.15 Infrastructure and utilities

An Infrastructure and Utilities Assessment has been prepared at **Appendix I** which details the expected impact of the Site C OSD on existing utility assets, the capacity of existing services infrastructure to accommodate the development, the proposed connections to existing services assets, and compliance of the utilities design with the relevant standards and design guidelines.

9.15.1 Recommendation

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 Crows Nest integrated station development. Hence, no mitigation measures are considered to be required.

9.16 Structural adequacy

A Structural Statement has been prepared at **Appendix O** which discusses the structural philosophy and systems of the Site C OSD building. The Statement confirms that the building's structural design has considered all relevant design and planning criteria as well as integration with other engineering services, and complies with the following design criteria and guidelines:

- the Building Code of Australia NCC 2019
- all current relevant Australian Standards
- the Sydney Metro Crows Nest Station Scope of Works and Technical Criteria, and
- all Sydney Metro/TfNSW standards and requirements

The Site C OSD is confirmed as having been designed to align the architectural intent of the building with the Crows Nest Station under the CSSI Approval.

9.16.1 Recommendation

The Structural Statement confirms that the building is structurally adequate with consideration of the relevant design criteria and guidelines. No specific mitigation measures have been nominated in the statement, noting that compliance with the Australian Standards and BCA will be an ongoing requirement in certifying the construction and occupation of the building.

9.17 Biodiversity

As discussed in **Section 8.3** above, a waiver from the need to prepare a Biodiversity Development Assessment Report in accordance with the *Biodiversity Conservation Regulation 2017* was issued by DPIE on 1 March 2021. It was determined that the proposed Site C OSD is not likely to have any significant impacts on biodiversity values requiring further assessment as it is contained in an urban area that is highly modified from its original condition and has been cleared as an active construction site. The proposed development will not adversely impact biodiversity on the site or in the region.

9.17.1 Recommendation

The assessment confirms that the proposed development does not result in any significant or adverse impacts, and as such no further study or refinement is required and no specific mitigation measure has been nominated.

9.18 Accessibility and the Building Code of Australia

A BCA and Access Assessment Report has been provided at **Appendix N**. The assessment confirms that the Site C OSD is capable of compliance with the relevant provisions and guidelines for access to premises for persons with a disability, including Part D3 of the Building Code of Australia (BCA).

9.18.1 Recommendation

The development is capable of complying with the applicable requirements of the *DDA Premises Standards 2010* and the BCA. No mitigation measure is nominated noting that compliance with the *Disability Discrimination Act 1992* is a standard condition for certifying the construction and occupation of a building. No specific mitigation measure is, therefore, necessary in this instance.

9.19 Fire engineering

The Architectural Plans have been reviewed and assessed for their ability to achieve the performance requirements of the BCA with respect to fire engineering. The Fire Engineering Assessment at **Appendix S** confirms that the proposed development is capable of complying with the BCA, and where the relevant Deemed-to-Satisfy (DtS) provisions cannot be achieved or are onerous or irrelevant, an alternative performance solution has been proposed to ensure an acceptable level of fire safety on the site.

Fire engineering solutions are to be further developed as part of the detailed documentation stage of the proposal (construction phase) to address and further test performance solutions.

9.19.1 Recommendation

The assessment confirms that compliance with the BCA is achievable, with some items being addressed under a Performance Solution. Non-compliances the DtS Provisions of the BCA may be identified as the design further develops that will require additional Performance Solutions. However, it is not considered likely that these Performance Solutions will materially affect the detailed OSD design.

No mitigation measures are identified as compliance with the fire safety and engineering requirements of the BCA is a standard condition for certifying the construction and occupation of the building, and as such no specific mitigation measures are considered to be necessary in this instance.

9.20 Construction management

The assessment at **Appendix U** confirms that the OSD on Site C is to be constructed at the same time as, and integrated with, the station portal also being delivered on this site. Accordingly, construction works will be conducted in accordance with the Construction Environmental Management Plan and associated subplans already in place for these station areas under the CSSI Approval. This management framework was prepared in consultation with Transport for NSW, Council and DPIE where relevant.

9.20.1 Construction hours

All work on the site will occur between the following hours:

- 7am and 6pm Monday to Friday.
- 8am and 1pm Saturday.
- No works on Sundays or public holidays.
- Other times outside of the above hours only where approved in writing by the NSW Department of Planning, Industry and Environment due to extenuating circumstances (e.g. erecting and dismantling tower cranes, services connections and other works that would unduly interfere with the surrounding area or road network during normal daytime hours and should therefore be completed out of hours).

Outside of standard construction hours deliveries associated with works will comply with the Construction Traffic Management Plan, the Logistics Lane Traffic Management Plan and the Concrete Delivery Operations Traffic Management Plan.

9.20.2 Site establishment works

The demolition and excavation works associated with the CSSI Approval have already established the site including the erection of hoardings around the site and any associated work zones and sediment and erosion control measures in accordance with associated industry codes of practice.

9.20.3 Vehicle access and control

The cumulative construction traffic volumes, including the Site C OSD, will be consistent with this approved traffic generation of the CSSI Approval given the constrained nature and smaller scale of the proposed Site C OSD which will be delivered alongside the station entrance on Clarke Street.

A Construction Traffic Management Plan (CTMP) has been provided at **Appendix U**, which discusses the construction traffic, pedestrian and cyclist management measures being facilitated during the construction of the Site C OSD. As confirmed within the CTMP, all vehicles accessing the site will use the state road network from the surrounding areas to keep construction related traffic to a minimum on any local roads. The construction routes will be clearly communicated by traffic control to ensure construction vehicles are following the correct route. All vehicle movements are planned to minimise the impact on the road network, including:

- developing a route that maximises the use of the arterial roads, and only utilises permitted roads in accordance with any relevant guidelines and specifications
- selecting a route that has minimal impact, and/or, where potential impacts can be effectively managed
- as required consulting with local councils, road authorities, Traffic and Transport Liaison Group (TTLG) and relevant stakeholders
- using vehicles that can safely navigate the route
- avoiding movements during peak hours wherever possible
- developing detailed access plans and educating all drivers on the plans
- ensuring the deliver fleet are regularly maintained by the relevant sub-contractor, and
- taking disciplinary action taken on non-compliant workers.

All deliveries will be pre-booked and managed through a web and app-based software tool that allows truck drivers to book a timeslot for loading/ delivery areas and receive real-time notifications. The software also allows the contractor to track actual vehicle arrival and departure times.

Figure 53: Delivery routes

Owing to the extent of works occurring on the site, no on-site carparking will be provided for construction workers. Workers will instead be required to arrive by public transport or park in nearby parking stations.

9.20.4 Pedestrian and cycle access

Hoarding has been erected around the site boundary as part of the CSSI Approval to control access to the construction site and to protect pedestrians and cyclists using the surrounding road network and footpaths. The construction of the building up to Level 2 and public domain works also form part of the CSSI Approval, and as such the proposed OSD itself will not impact pedestrian or cycle connections around the site. In the event that areas surrounding the site are interrupted by construction works, diversions will be put in place so that pedestrians and cyclists can continue to

travel around the site in accordance with the management processes established under the CSSI Approval.

In the rare case a temporary footpath is required, they will be considered during the development of Traffic Management Plans and Traffic Control Plans. There are currently no planned activities associated with the works that specifically and adversely impact cyclists or pedestrians.

9.20.5 Construction staging

The proposed Site C OSD is integrated with the station box below, and as such will be delivered alongside the station areas. It is expected the Site C OSD will commence in March 2022 and take 15 months to complete.

9.20.6 Air quality controls

Whilst odour problems are not associated with this type of construction work and are expected to be negligible/ minimal, dust emissions are expected to occur as a result of the proposed construction works. Mitigation measures will be implemented to avoid dust generation, including both on-site practices such as limiting or ceasing crushing activities or enacting other dust suppression measures when there are high winds (>30 km/h). Physical measures will also be employed such as erecting screens and barriers around dusty activities. No concrete crushing will occur on site.

9.20.7 Waste management

Managing waste generated by the construction of OSD will be the responsibility of the relevant contractor, with regard to materials procurement, handling, storage, use and disposal. Regular waste reports will be prepared throughout the construction process, detailing the monthly and cumulative performance.

9.20.8 Community consultation and engagement

Sydney Metro employs a communication protocol for coordinating works with external stakeholders and the community as required. This includes appointing a communications manager responsible for all external communication and consultation, including:

- managing and actioning complaints in relation to the works
- providing regular project updates to surrounding stakeholders
- ensuring all workers on site are aware of their responsibilities in relation to project communications

Sydney Metro has provided regular project updates with regard to the progress of the station delivery works to-date, and will continue to provide regular information and updates in the delivery of the associated and integrated OSD.

9.20.9 Recommendation

The integrated delivery of the Site C OSD with the station beneath will ensure a continuation of the construction management processes that have been endorsed and are in place for the delivery of station areas under the CSSI Approval. This framework is based on the integrated knowledge of the broader and earlier station construction and includes how the Site C OSD construction will fit into the overall construction program and activities.

9.21 Contributions and public benefits

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

The conditions of the approved Concept SSD Application also require that a planning agreement be entered into with North Sydney Council, and that this VPA be exhibited and executed by 30 June 2021 or any such date agreed by the Secretary of DPIE. The VPA was reported at Council's meeting on 22 February 2021 and placed on public exhibition until 23 April 2021.

In this regard, the proposed development contributes to funding public facilities, amenities, and services to meet the needs of the growing residential and workforce population within the North Sydney LGA.

10 Social and economic impacts

An assessment of the social and economic impacts of the Crows Nest Station precinct was completed as part of the approved Concept SSD Application. This detailed SSD Application represents the next stage in the realisation of the vision established in this approved Concept SSD Application as discussed further below.

10.1 Social impacts

The Site C OSD will have a positive social impact on the St Leonards / Crows Nest Strategic Centre through the provision of high-quality commercial floor space above the Crows Nest Station. It is an integral part of the Crows Nest Station precinct, which will create a vibrant focal point for the community to gather, work and reside. In conjunction with the public domain upgrades and retail activated street frontages to be delivered under the terms of the CSSI Approval, the Site C OSD will contribute to the civic qualities of the precinct and encourage healthy sustainable modes of transport such as walking and cycling in addition to the use of the metro.

As noted in **Sections 7.2** and **7.3** above, the design of the Site C OSD is consistent with the approved Crows Nest Design Excellence Framework and Design Quality Guidelines, ensuring that the Site C building provides a memorable landmark that is commensurate with the important role of the site within the St Leonards / Crows Nest Strategic Centre and broader north shore.

The delivery of high quality commercial floorspace at the site responds to the need to improve employment outcomes in the Planned Precinct, an area identified for uplift within the North District Plan. The Site C OSD will support a vibrant mixed-use precinct in future with further residential, retail and commercial floorspace to be provided on Sites A and B, ensuring the delivery of a scheme that responds to a wide variety of community needs and aligns with the concept of a '30-minute city'.

The employment generated by the development during the construction and operational phases will have further social benefits associated with the ability for workers to provide for their families and spend money in the local community.

Having regard to the above, it is considered that the Site C OSD would not result in any significant or adverse social impacts, and would result in some social benefits.

10.2 Economic impacts

The delivery of the Site C OSD above the Crows Nest Station will have a positive economic impact by providing additional direct and indirect employment, supporting economic activity. It is estimated that the project will support approximately 180 direct and indirect jobs during construction and a further 190 direct and indirect jobs during the operation of the development. This will contribute to employment targets listed in the 2036 Plan, which targets up to 3,020 new jobs in Crows Nest by 2036.

The North District Plan identifies the St Leonards / Crows Nest Strategic Centre as a health and education precinct where uplift is to occur. The delivery of new employment-generating floorspace at the site will help meet the demand for commercial office suites in the locality, in a well-connected and affordable location with fast public transit to the Sydney CBD. Realising this approved and envisaged increase in density will also lead to direct economic benefits within the Crows Nest Station precinct and the immediate locality through flow-on economic benefits.

11 Site suitability and public interest

11.1 Site suitability

The detailed design of the Site C OSD is the result of a comprehensive and substantive planning process to deliver a truly mixed use precinct at Crows Nest Station that capitalises on the significant uplift opportunities offered by the Sydney Metro Southwest line, and in-line with the envisaged future character of the area under the 2036 Plan.

The proposal builds upon the approved planning framework under the CSSI Approval and Concept SSD Application, as the next phase in realising the vision for this site and delivering a high-quality building.

In this regard, the site is considered to be suitable for the Site C OSD, as it:

- provides opportunities to support the future patronage of the new metro line, aligning development with the delivery of new infrastructure
- is directly integrated with the significant public transport improvements, and will be developed in coordination with planned public domain improvements
- is located in close proximity to the existing Willoughby Road shopping strip will support expenditure and spending in the community
- has excellent access to a wide range of services and facilities that will support, and benefit from, the future occupants of the development
- provides the opportunity to enhance the activation of the adjacent Hume Street Park and extension area, and
- remains capable of being appropriately serviced to accommodate the development.

The proposed Site C OSD is also considered to be suitable for the site and its surrounding context, as it:

- delivers high-quality commercial floor space and contributes to the delivery of an integrated public transport and mixed-use hub that will create a superior customer experience for commuters and residents and will contribute to the vibrancy of the Crows Nest village
- responds to the local character of Crows Nest through stepping down from taller developments on Sites A and B and in the St Leonards centre to the established village centre at Willoughby Road
- is compatible the desired future character of the St Leonards/Crows Nest Planned Precinct and will activate the surrounding streetscape, improving vibrancy, pedestrian activity/amenity, and opportunities for passive surveillance
- is consistent with the overarching plan for the Crows Nest Station precinct and will not preclude the future delivery of OSD on Sites A and B, or the operation of the Metro (the OSD being generally operationally independent)
- provides cycling and end of trip facilities to support active modes of transport, and reduce car dependency in-line with the relevant planning legislation
- provides a high quality articulated and visually appropriate built form that demonstrates design excellence, and
- will result in only minor environmental impacts that can be appropriately managed and mitigated.

The suitability of the development is also reflected in its consistency with the relevant planning framework:

- it is consistent with the applicable metropolitan and district strategies including the Greater Sydney Region Plan, North District Plan, Premier's Priorities, and Future Transport 2056
- most crucially, it is consistent with the St Leonards and Crows Nest 2036 Plan which details the desired future character and built form for Crows Nest
- it is commensurate with the approved building envelope established for the site and the terms of the approved Concept SSD Application, and seamlessly integrates with the Crows Nest metro station areas under the CSSI Approval, and
- it has been designed in accordance with the endorsed Crows Nest Design Excellence Framework and Design Quality Guidelines which provide the relevant framework to ensure an optimal design outcome is achieved on the site.

11.2 Public interest

The detailed design and delivery of the Site C OSD is in the public interest. The proposed development forms an integral part of the ongoing planning process to provide a world class new mixed-use precinct above a new metro station delivered as part of Australia's biggest public transport project. The delivery of the Site C OSD at the same time as the station entrance ensures that station users will not be disrupted by construction works occurring above the station entrance.

The delivery of the envisaged commercial floorspace will provide real economic and employment outcomes for Crows Nest, realising the future desired character of the area under the 2036 Plan, to deliver tangible long lasting benefits to the local community.

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

- it provides additional employment floorspace within Crows Nest in the context of the St Leonards/Crows Nest Planned Precinct under the North District Plan and 2036 Plan, investing in an area identified for uplift and growth
- it provides for the co-location of employment and transport infrastructure through integrating offices with the Crows Nest metro station, thereby reducing commute times and car dependency in line with the outcomes of the '30-minute city'
- it forms part of a vibrant mixed-use precinct planning framework established under the approved Concept SSD Application to deliver integrated residential, commercial, and retail floorspace to continue to grow the local economy and the vibrancy of the local area
- it activates the surrounding streetscape, improving vibrancy, pedestrian activity/amenity, and opportunities for passive surveillance at the site, benefiting not only the Site C OSD but also surrounding existing sites,
- it supports jobs growth to contribute to targets in providing 180 direct and indirect jobs during construction and a further 190 direct and indirect jobs during the operation of the development, as well as flow-on economic benefits

- it achieves the approved targets for sustainability and wellbeing, ensuring general improvements where possible for energy and water consumption, transportation, and material selection and emissions, and
- it exhibits design excellence and contributes to the architectural legacy of the Sydney Metro project and its mark on the broader skyline.

12 Mitigation measures

A full list of measures required to mitigate the potential impacts associated with the proposed Site C OSD are detailed in **Table 25** below.

Table 25: Mitigation measures to avoid, manage or offset any identified environmental impacts

No.	Matter	Proposed OSD-specific measure	OSD interface issue with CSSI Approval
1	Built form	Any design development should occur in accordance with the process outlined in the Crows Nest Over Station Development Design Excellence Strategy to ensure design integrity.	N/A
2	Materials and finishes	All external materials and finishes above the transfer slab should have a spectral reflectivity of less than 20%, unless a further Reflectivity Assessment confirms that the design does not result in unacceptable glare.	This detailed SSD Application only seeks consent for the building located above the station transfer slab (or Level 2 on Site C). All works below Level 2 of the building relate to internal uses and fit-outs only. Accordingly, the detailed design and materials that are selected for the ground floor to Level 2 of the building form part of the CSSI Approval. Regardless, the building at these elevations is predominantly brick-clad which has a matt finish.
3	Signage	Details of the exact content, materiality, and illumination of signs within the signage zones should be subject to a separate planning application. Signage should be compatible with, but distinct from, the character of the separate metro station signage to support wayfinding.	Wayfinding and identification signage for the metro station entrance and areas forms part of the CSSI Approval being developed as part of the SDPP and IAP.
4	Loading, servicing, deliveries and waste collection	Prepare a Loading Dock Management Plan prior to the commencement of operations of the OSD on the site for the use of Clarke Lane. The LDMP should detail: • loading dock management details including any required booking or communication process • service vehicle volumes including size and frequency • details around incident management at the access to the loading dock, and	The permanent dedicated loading space on Site A will be managed by a separate Loading Dock Management Plan prepared at the appropriate future stage, in accordance with the conditions of consent and Mitigation Measures nominated in the approved Concept SSD Application.

No.	Matter	Proposed OSD-specific measure	OSD interface issue with CSSI Approval
		• management of conflicts between vehicles and pedestrians and cyclists	
6	Sustainability	The detailed design of the OSD should achieve a 5 Star NABERs energy rating, 4 Star NABERs water rating, and a 5 Star Green Star As Built v1.2 rating, with consideration of the initiatives identified in the Environmentally Sustainable Development Strategy (April 2021)	N/A
7	Operational noise and vibration	External plant and services should be designed in accordance with the recommendations of the Noise and Vibration Impact Assessment (April 2021), and confirmed to meet the relevant criteria and standards via a mechanical noise and vibration assessment prior to its construction/installation	This detailed SSD Application only relates to plant and services that are required for the operation of OSD.
8	Construction	For construction concurrent with the construction of Crows Nest Station, works should be in accordance with the Sydney Metro Construction Environmental Management Framework, with consideration of the following: • adhering to the minimum working distances for mitigating vibration in the of the Noise and Vibration Impact Assessment (April 2021), and • adhering to the recommended noise mitigation measures detailed in the Noise and Vibration Impact Assessment (April 2021) • adhering to the construction waste management recommendations in the Waste Management Plan (April 2021)	N/A
9	Crime prevention through environmental design	The final detailed construction drawings for the Site C OSD should have consideration of the recommendations in the CPTED Report (April 2021). A CCTV network should be designed in consultation with a suitably qualified security consultant. Signage would be installed advising visitors that CCTV is in operation.	This detailed SSD Application only seeks consent for the building located above the station transfer slab (or Level 2 on Site C). All works below Level 2 of the building relate to internal uses and fit-outs only. Accordingly, the detailed design of the station and public domain areas is under the CSSI Approval.

No.	Matter	Proposed OSD-specific measure	OSD interface issue with CSSI Approval
10	Waste management	The final detailed construction drawings for the Site C OSD should address the recommendations for the design of the waste storage room detailed in the Waste Management Plan (April 2021). Facilities management should be responsible for the delivery and review the operational aspects of the Waste Management Plan (April 2021) on an annual basis in accordance with Green Star Criteria. The review process should be completed with reference to the framework provided in the Waste Management Plan (April 2021).	This detailed SSD Application only relates to the OSD uses and areas.
11	Aviation	Separate approval should be obtained for any construction cranes that would penetrate the OLS, if required for OSD construction works.	If utilising the same cranes as those completing works associated with the CSSI Approval, approval may have already been obtained.

13 Environmental risk assessment

The Environmental Risk Assessment (ERA) establishes a residual risk by reviewing the significance of environmental impacts and the ability to manage those impacts. The ERA for this EIS has been adapted from Australian Standard AS4369.1999 Risk Management and Environmental Risk Tools.

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

- the adequacy of baseline data;
- the potential cumulative impacts arising from other developments in the vicinity of the site; and
- measures to avoid, minimise, offset the predicted impacts where necessary involving the preparation of detailed contingency plans for managing any significant risk to the environment.

Figure 54 indicates the significance of environmental impacts and assigns a value between 1 and 10 based on:

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

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

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

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

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

Figure 54: Risk assessment matrix

Table 26: Environmental risk assessment

Item	Phase	Potential environmental impact	Proposed Mitigation Measure and/or comment	Significance of impact	Management of impact	Residual impact
Visual and view impacts	Operation & construction	• Impact of building on public views, including public open spaces • Impact of building on private views, including residential buildings	• The Visual and View Impact Assessment confirms while the proposed building will be visible within the landscape from some locations, impacts would be low or medium in nature and are reasonable within the desired future context of the site and the applicable planning framework for the land. The detailed design of the building is with the approved building envelope for Site C. • Construction works have already commenced on the site, and hoarding is already erected around the site and will be maintained throughout the construction of the proposed OSD. The proposal, therefore, does not present a visual impact during the construction phase.	**3**	**2**	**5** **Low/Medium**
Overshadowing	Operation	• Overshadowing in the public domain and key public spaces • Overshadowing onto surrounding residential properties	• The proposed development complies with Clause 6.19B of the NSLEP 2013, the 2036 Plan and the Design Guidelines, which ensure that development will not overshadow Willoughby Road between 11.30am and 2.30pm in midwinter, and Ernest Place between 10am and 3pm in midwinter. • The shadows cast by the proposed development will not impact surrounding residences south of the Pacific Highway and adjacent to the site.	**2**	**1**	**3** **Low**

Item	Phase	Potential environmental impact	Proposed Mitigation Measure and/or comment	Significance of impact	Management of impact	Residual impact
Privacy	Operation	• Privacy impacts on surrounding residential properties	• The nearest surrounding residences are located adjacent to the site, within the same block as Site C at 22 Clarke Street, or south of the site at Site B. • The Site C OSD does not incorporate windows over the western side boundary, and is sufficiently separated from both the Lyall Apartments and the future Site B residences.	**1**	**1**	**2** **Low**
Traffic impacts	Construction	• Traffic generated by construction vehicles • Conflict with normal pedestrian and vehicular trips	• The Site C OSD is entirely integrated with, and will be constructed at the same time as, the station portal being provided on this site. Accordingly, the proposed works will be completed by the station contractor as a continuation of the Construction Environmental Management Framework and already implemented strategies for construction management.	**2**	**3**	**5** **Low/Medium**
	Operation	• Additional traffic generation during Site C OSD operation	• No on-site parking is proposed for Site C. • Traffic generation is modelled as being less than the operation of the former tyre store on the site.	**1**	**1**	**2** **Low**
Indigenous heritage	Construction	• Impact on Indigenous heritage	• Assessed under CSSI Approval • The no below ground or on-ground works form part of this detailed SSD Application.	**N/A**	**N/A**	**N/A**

Item	Phase	Potential environmental impact	Proposed Mitigation Measure and/or comment	Significance of impact	Management of impact	Residual impact
Non-Indigenous heritage	Operation	• Impact on surrounding heritage items, including St Leonards Centre • Impact on non-indigenous archaeology	• The Site C OSD is designed to be consistent with the building envelope established under the Concept SSD Application, which has been found to be acceptable with regard to heritage • The built form responds to the bulk and scale of the St Leonards Centre, with the Site C OSD stepping down from the remaining Crows Nest Station precinct	1	**1**	**2** **Low**
Noise and vibration	Construction	• Noise and vibration impacts during the construction of the proposed OSD	• Construction works on the site may require acoustic barriers • Minimum working distances for equipment to be implemented to mitigate vibration impacts	**2**	**2**	**4** **Low/Medium**
	Operation	• Noise and vibration impacts resulting from the operation of the OSD	• Plant, services and equipment has been modelled as being capable of complying with the relevant criteria and assessment • The future detailed design and selection of plant and services will further ensure compliance	**1**	**1**	**2** **Low**
Infrastructure and utilities	Construction and Operation	• Adequate capacity and connections to existing infrastructure and utilities • Need to remove, alter, augment, or install new infrastructure and utilities	• Appropriate utility and service connections will be provided under the CSSI Approval to meet the servicing requirements of the Crows Nest integrated station development	**1**	**1**	**2** **Low**

Item	Phase	Potential environmental impact	Proposed Mitigation Measure and/or comment	Significance of impact	Management of impact	Residual impact
Flooding	Operation	• Impacts of OSD on flood planning • Impacts of flooding on safety and operation of the OSD	• Generally handled under CSSI Approval • OSD areas comply with the adopted flood protection level, and there will be almost no impact on the flood protection levels for the Site C OSD • Detention tank to be installed with capacity for unattenuated flows from 100-year flood event	**1**	**1**	**2** **Low**
Water cycle management	Operation	• Impacts of OSD on runoff and stormwater • Impacts of OSD on water quality	• Implementation of water quality measures including roof gardens/rainwater tanks, litter baskets, stormwater pits	**1**	**2**	**3** **Low**
Contamination	Construction	• Soil contamination on site • Exposure to contamination or hazardous materials during construction	• Assessed under CSSI Approval	**N/A**	**N/A**	**N/A**
Wind	Operation	• Wind impacts on public domain and streetscapes • Suitability of OSD outdoor areas (i.e. landscaped rooftop terrace)	• All relevant Australian Wind Engineering Society (AWES) safety criterion met • Conditions at surrounding streetscape frontages meets relevant comfort criterion • Vegetative planting and wind screens to be incorporated into level 9 rooftop terrace	**2**	**2**	**4** **Low/Medium**
Reflectivity	Operation	• Potential impacts to the safety of drivers, pedestrians, and ferries	• Materiality of building designed to avoid adverse reflectivity impacts, as confirmed by Reflectivity Report	**1**	**1**	**2** **Low**

Item	Phase	Potential environmental impact	Proposed Mitigation Measure and/or comment	Significance of impact	Management of impact	Residual impact
Crime prevention through environmental design	Operation	• Potential for crime and perception of crime and anti-social behaviour	• Site C OSD assessed Crime Risk Assessment Rating (CRAR) of 'low' • Building designed to maximise natural surveillance and provides clearly defined spaces • Further measures including lighting layouts and CCTV to be progressed at the detailed construction phase	**1**	**2**	**3** **Low**
Biodiversity	Construction	• Impacts on flora and fauna	• BDAR waiver issued on 1 March 2021 confirming no impact on biodiversity values	**N/A**	**N/A**	**N/A**
Waste management	Construction	• Waste generation and management associated with construction activities	• Waste and recycling materials to be appropriately sorted and stored in clearly coloured/labelled bins • Litter/stormwater pollution to be minimised in line with WMP • Generated waste to be collected by relevant specialist contractors	**2**	**2**	**4** **Low/Medium**
	Operation	• Waste generation and management associated with building operations	• General waste and recycling bins to be provided with waste collection twice a week • E-waste bin to be provided with collection as required • Office staff/cleaners to transport generated waste to waste storage room for collection	**2**	**2**	**4** **Low/Medium**
Sustainability	Operation	• Carbon emissions • Energy and water consumption	• Compliance with NCC Section J Energy Efficiency Requirements • 5 Star Green Star Design and As Built v1.3 rating • 5 Star NABERS Energy and 4 Star NABERS Water rating targets	**2**	**2**	**4** **Low/Medium**

Item	Phase	Potential environmental impact	Proposed Mitigation Measure and/or comment	Significance of impact	Management of impact	Residual impact
Accessibility	Operation	• Adequate access for persons with a disability • Achievement of relevant standards	• Site C OSD capable of compliance with accessibility requirements as confirmed in Access Report • Compliance with *Disability Discrimination Act 1992* to be reaffirmed during certification process	**2**	**1**	**3** **Low**
Air and water quality	Construction	• Potential for water and air pollution/quality impacts during construction • Erosion and runoff	• Screens and barriers to be erected around dusty activities • Dust-generating activities (e.g. crushing) to be limited or cease when there are high winds	**1**	**2**	**3** **Low**
Aviation	Operation	• Impacts on PANS-OPS surface and the OLS limits	• No breach of PANS-OPS or OLS	**N/A**	**N/A**	**N/A**
	Construction	• Potential for construction equipment to impact the PANS-OPS surface and the OLS limits	• Cranes not envisaged to breach PANS-OPS or OLS • Cranes to be subject to separate assessment and approval in future	**1**	**1**	**2** **Low**
BCA and fire safety	Operation	• BCA compliance • OSD fire safety	• Site C OSD capable of compliance with relevant BCA requirements • Site C OSD capable of compliance with fire engineering requirements • Further assessment to occur as part of certification process	**2**	**1**	**3** **Low**
Structural adequacy	Operation	• Structural adequacy of the building • Structural adequacy with regards to integration with CSSI Approval	• Site C OSD is structurally adequate as confirmed in Structural Statement • Compliance with BCA/Australian Standards to be further assessed as part of certification process	**2**	**1**	**3** **Low**

Item	Phase	Potential environmental impact	Proposed Mitigation Measure and/or comment	Significance of impact	Management of impact	Residual impact
Communication and community	Construction	• Information about DA • Construction impacts and complaints	• This EIS will be publicly exhibited by DPIE and Sydney Metro will undertake further engagement during this period • Section 5 of the EIS identify consultation activities that have been undertaken to date to inform the scope of the project and provide information to the community regarding the overall proposal and planning process • Subject to planning approval, regular communications will be provided to local residents and stakeholders throughout the construction phase to advise of the progress of works, likely impacts and special activities	**2**	**3**	**5** **Low/Medium**
Cumulative impacts	Construction	• Cumulative construction impacts of the Site C OSD, other OSD sites, Sydney Metro CSSI Approval and surrounding developments	• Site C OSD is not inconsistent with approved Concept SSD Application • The construction of the OSD will occur at the same time as, and part of, the station works already occurring on the site – the existing management framework more than address the demand of the integrated OSD works	**2**	**2**	**4** **Medium**
	Operation	• Cumulative operational impacts of the Site C OSD, other OSD sites, Sydney Metro CSSI Approval and surrounding developments	• Site C OSD is not inconsistent with approved Concept SSD Application • Being a 9-storey commercial building within the Crows Nest/St Leonards centre, the Site C OSD's contribution to cumulative operational impacts is not expected to be significant	**2**	**1**	**3** **Low/Medium**

14 Conclusion

This EIS provides a comprehensive assessment of the environmental, social and economic impacts of the detailed SSD Application for the Site C OSD pursuant to the approved Concept SSD Application, and with reference to the CSSI Approval. This EIS has addressed the requirements outlined in the SEARs (**Appendix A**), as well as the relevant requirements contained at Schedule 2 of the EP&A Regulation.

The approved Concept SSD Application provided for a mixed-use development across three sites (known as Site A, Site B and Site C) integrated with the future Crows Nest metro station. This SSD Application represents the next phase in delivering this vision for the Crows Nest metro station and specifically seeks consent for the detailed design, construction and use of over station development (OSD) on Site C.

The proposed development aligns with the objectives and desired future character of the area detailed in the applicable strategic plans and policies, is permitted with consent and is compliant with the development standards in the NSLEP 2013, and is not inconsistent with the terms of the approved Concept SSD Application including with respect to land use, building envelope, the Design Guidelines, and the Design Excellence Strategy, and the ESD Strategy.

This application sets out the detailed measures relating to the construction, further detailed design, and operation of the Site C OSD in a manner that is consistent with the approved Concept SSD Application and related CSSI Approval, and which ensures that the new building will achieve the project objectives.

Having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development, the carrying out of the project is justified for the following reasons:

- a full assessment has been undertaken of the environmental impacts of the proposal and strategies are proposed to manage and mitigate impacts. On this basis, the development has been demonstrated to be appropriate within the St Leonards / Crows Nest Strategic Centre context and the specific circumstances of the site
- the proposal successfully integrates with the Crows Nest metro station being delivered on Site C, noting that there is a fundamental responsibility for the development to respond to the important opportunity and unique circumstances of the precinct, and capitalise on the unparalleled access to public transport
- the proposed development is permissible with consent and meets the requirements of the relevant statutory planning controls, and is not inconsistent with the approved Concept SSD Application
- the detailed design of the Site C OSD are aligned with the endorsed Design Guidelines and Design Excellence Strategy and has achieved design excellence
- the proposal is consistent with the principles of ecological sustainable development as defined by Schedule 2(7)(4) of the EP&A Regulation, and will support a more ecologically sustainable development targeting 5 Star NABERs energy rating, 4 Star NABERs water rating, and a 5 Star Green Star As Built v1.2
- the proposal protects the amenity of the surrounding public domain and residences including with regard to overshadowing, wind, reflectivity, visual and view impacts, and lighting

- the land is extremely well served by public infrastructure, particularly public transport infrastructure, and other utilities and public infrastructure are readily available and can be augmented to meet the needs of the additional business activities and population arising from the increased density
- the proposal will provide for additional surveillance opportunities with the delivery of the future buildings and overall improvements to the Precinct, in turn increasing the perception of the area as a high quality and safe environment, and
- the project has been informed by pre-lodgement community consultation and establishes a framework for ongoing consultation and engagement with the community through the detailed design, construction and operational phases of the development.

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

15 Appendices

A. Secretary's Environmental Assessment Requirements

B. Site survey

C. Design Report and Architectural and Landscape Plans

D. Design Integrity Report

E. Compliance against the terms of approval for the Concept SSD Application

F. Ecologically Sustainable Development Framework

G. Waste Management Plan

H. Stormwater and Flooding Report

I. Infrastructure and Utilities Assessment

J. Traffic and Transport Assessment, including Green Travel Plan

K. Noise and Vibration Assessment

L. Wind Impact Assessment

M. Overshadowing Diagrams

N. Accessibility Assessment

O. Structural Statement

P. Cost Summary Report

Q. Visual and View Impact Assessment

R. Crime Prevention Through Environmental Design Report

S. Fire Engineering Report

T. Reflectivity Report

U. Construction Management Assessment