

49 Render station entry. Source: Sydney Metro

4.1.3 Public Interface Strategy

Although the integrated station development's interface within the public domain is more relevant to the Crows Nest Station design, one of the key considerations for the OSD design is the public interface. Given the spatial constraints at ground level, the OSD concept proposes to elevate social infrastructure to podium level of Site A or the upper levels of site C. The proposed public podium are option for social infrastructure (i.e.: childcare centre, open space, community centre and green space) is proposed to be accessible from the main station entry facing Pacific Highway allowing for unimpeded pedestrian flow and ease of way finding, and visually relates well to the context at RL 110. The podium provides high amenity space with 360 degrees, uninterrupted panoramic views.

The public domain is part of the CSSI Approval but will be designed in collaboration with the OSD to ensure the public domain is integrated with the Station and OSD. The use of a glass structure and double volume height on the main entrance to the station (as illustrate in the indicative OSD design at figure 50) creates a highly transparent concourse with access to ample sunlight which also assists in wayfinding within the precinct for the new Metro station.





51 Illustration of the Double Volume Height Metro Entrance Along Pacific Highway Source : Foster + Partners

LEGEND

	Context Buildings
	Proposed OSD Envelope
	Crows Nest Station
	Metro station Entry
(>	Perspective View





BUILDING ENVELOPE

5.0 Building Envelope

Indicative Ground Floor 5.1

5.1.1 Ground Floor Plan Site A-B-C

The diagram opposite shows the indicative ground floor layout with both station entries, the OSD lobby entries, the loading dock and car parking access off Clarke Lane.

Crows Nest Station can be accessed from the Pacific Highway and opposite Hume Street Park on Site C while retail tenancies are scattered along Hume Street, Pacific Highway and Oxley Street to activate street level.

Proposed street widening of Clarke Lane will improve access to car parking and loading dock in the future.



Note:

For site A,B and C, the services zone is setback an additional 3 metres from all boundaries with exception of:

- The setback to Clarke Lane, where the setback is consistent with that indicated below
- the setback for site B from the southern boundary is 13.5 metres

52 Indicative Ground Floor Layout Plan of OSD Concept and Crows Nest Station



Render view corner of Pacific Highway and Hume Street Source : Sydney Metro

5.2 Building Envelope

5.2.1 Height of building envelopes

The height of the envelopes play a key role in defining the bulk and scale of the proposed building within its context. The envelope is a loose fit envelope for Site A to allow for design flexibility but setting a maximum height and an overshadowing control within which the detailed building will be designed. (See figures 56 and 57)

The following elevations demonstrate the extent of the OSD building envelope and the extent of the CSSI Approval.

The OSD building envelope put forward the following maximum heights

- Site A top of building maximum height is RL183 (27 storeys). A 5m services zone is located above the top of the building and is 3m setback from the building edge (station footprint) along Pacific Highway.

- Site B top of building maximum height is RL155 (17 storeys). The building envelope is stepped between RL 152 and RL 155 with this section being setback 6m from the southern boundary. An additional 3m height service zone (non habitable) sits above the maximum RL and is 3m setback from the building edge (station footprint) along Pacific Highway and Hume Street, and setback 13.5m from the southern boundary/ building envelope.

- Site C top of building maximum height is RL127 (8 storeys). A 5m services zone is located above the top of the building and is 3m setback from the building edge (station footprint) along Clarke Street.

The building services zone accommodate lift overruns, rooftop plant and services.

Note 1: the use of the space within the building services zone is restricted to non-habitable floor space.

Note 2: for the purposes of the concept SSD Application, the maximum height of the building envelope does not make provision for the following items, which will be resolved as part of the future detailed SSD Application(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 NSLEP 2013
- architectural roof features, which are subject to compliance with the provisions in Clause 5.6 of NSLEP 2013, and may exceed the maximum building height, subject to development consent.



54 Cross section of OSD Concept and Crows Nest Station Source: Sydney Metro

Crows Nest OSD Built Form and Urban Design Report



55 West elevation of OSD Concept and Crows Nest Station Source: Sydney Metro

5.2.2 Building envelopes in context

The axonometric diagrams show the extent of the OSD concept SSDA building envelope and the extents of the CSSI Approval. The envelopes simple represent an extrusion of the station footprint. The envelopes sit above the design of the station and station planning which has been set by the CSSI approval.

Crows Nest OSD represents an appropriate building height for a transit transport infrastructure. It is consistent with Government policy to place density above major transport infrastructure. The buildings have been designed to minimise overshadowing impacts to Willoughby Road and other areas of public open space such as Hume Street Park, Holtermann car parking and Ernest Place.

Crows Nest OSD represents a "balanced" approach of placing density on and above station infrastructure, whilst managing built form impacts such as overshadowing to surrounding public open spaces. It places the taller buildings and higher density along the Pacific Highway.

The axonometrics show that the bulk and scale of site C relates well to the context of Clarke Street.

Site A transitions to St Leonards and appropriately consolidates the density of Pacific Highway.

Site B intermediates between site A and the lower scale context to the north.





56 Axonometric of Proposed OSD Building Envelope and the Future High Rise Development in St Leonards Town Centre



⁵⁷ Axonometric of Proposed OSD Building Envelope and the Future High Rise Development in St Leonards Town Centre

5.2.3 Podium height

The site sections diagram shows the extent of the OSD concept SSDA building envelope within the current and future context of Crows Nest Leonards.

Building envelope for Site A offers design flexibility and is capable of accommodating two buildings with a 24 metres separation as illustrated in the indicative OSD Design. However, the envelope allows for the creation of an innovative design solution. Design guidelines have been established for the site as described in Section 5.2.4.

The maximum podium height for site A is set at RL 110 which is consistent with the building heights along Pacific Highway to the north of site A (see figure 58). The podium height also relates to the height of the St Leonards Centre, heritage item located at the intersection of Oxley and Clarke Street (see figure 60). The design of the future OSD should address the site's significance.

Site B top of the station (RL106.5) and Site C top of station (RL 98.5) fit within the context of Willoughby Road precinct with a majority of two storeys buildings (see figure 59, 60 and 62).



58 Southwest Elevation of Proposed OSD along Pacific Highway looking towards east



59 Northeast Elevation of Proposed OSD along Clarke Lane showing Crows Nest and St Leonards Town Centre



60 North Elevation of Proposed OSD looking south along Oxley Street



Five Ways Intersection

	Railway Line
1 Internet	



61 South Elevation of Proposed OSD along Hume Street looking north towards St Leonards Town Centre



63 South Elevation of Proposed OSD looking north towards St Leonards Town Centre

LEGEND



5.2.4 Design Guideline Summary

A Design Guidelines document has been prepared to guide the design of the Sydney Metro Crows Nest OSD and provide a reference document for the assessment of design outcomes.

Design parameters are developed for built form, integration with the public domain and Sydney Metro station, movement and connectivity and legacy outcomes of the development.

A summary of each of the design parameters is provided below. For more information please refer to the full document prepared by Sydney Metro: Crows Nest Over Station Development, Design Guidelines (October 2018)

• Built form

Respond to the existing urban fabric and built form context, with landmark buildings creating a focal point on the ridgeline. The delineation between podium and tower elements with streetwall articulation is key to design excellence. Responses create a consistent built edge along the Pacific Highway while achieving increased permeability, maximum activation at ground level and seamless entries into the station.

The low rise (podium) part of the building should relate in its expression to the existing context through the composition of its facade, as well as minimising bulk and scale.

The built form above the podium responds to the evolving height, scale and character of the area by considering the civic nature of Hume Street Park and Willoughby Road.

• Public domain and place

The landscape design is an important component of an appealing urban realm identity for Metro stations. The Crows Nest OSD will enhance the existing adjacent public spaces by contributing to an activated public domain which integrates retail and commercial precincts. High quality streetscapes with landscape areas accommodate commuter flows and general everyday use.

• Movement and Connectivity

Creating a legible, intuitive wayfinding and easy to use transport interchange. The project will prioritise pedestrian access, permeability and amenity within the development.

The project will facilitate future pedestrian desire lines to the St Leonard's commercial centre, Crows Nest Village and the revitalised Hume Street Park. To promote intuitive wayfinding, integrated design is key.

• Integration and legacy

Provide an OSD that seamlessly integrates all components of the development and is a positive legacy for future generations. Delivering a high standard of design and finish that promotes longevity and adaptability over time.

Sydney Metro has also identified benchmark projects which illustrate the design quality aspirations for the Crows Nest integrated station development sites.

Some of the benchmark projects are presented in the page opposite. Each project have a list of relevant key points for Crows Nest OSD.

Crows Nest OSD Built Form and Urban Design Report



One Central Park Sydney

Relevant to Crows Nest OSD because it demonstrates:

- seamless, well integrated sequence of public domain and retail spaces, both indoor and outdoor
- well integrated public art
- integration with existing small scale built form including adaptive reuse and heritage to create fine grain retail and food offering and retain unique character of place
- considered and innovative façade strategy



Aurora Place

88 Phillip Street, Sydney

Relevant to Crows Nest OSD because it demonstrates:

- achievement of high quality residential amenity (light and air)
- a good example of mixed use integrated development (workplace and residential)
- a well-crafted, site specific design solution with podiums and setbacks that respond to local context including adjoining heritage buildings
- high quality and articulated tower façade designs that respond to building use and contribute positively to the city skyline
- well integrated public art
- high quality materials, finishes and environmentally responsive façade that are appropriate to the context



Duo Central Park 1 Chippendale Way, Sydney

Relevant to Crows Nest OSD because it demonstrates:

- achievement of high quality residential amenity (light and air)
- a site specific, well integrated design solution with podiums and setbacks that respond to local context including incorporation of heritage buildings
- high quality tower façades that successfully articulate the mass of the individual buildings
- well considered use of appropriate materials
- well activated ground plane with pedestrian permeability
- well considered façade detailing appropriate to a main road environment

- well integrated public art
 - long façade has been articulated and integrates well with the street



Nishi Building 25 Edinburgh Ave Canberra

- Relevant to Crows Nest OSD because it demonstrates:
- award winning mixed use building including a hotel which activates the precinct
- dynamic and iconic design that responds to local context
- rich interiors and shared spaces



6.0

INDICATIVE DESIGN

Indicative Design 6.0

Signage zone 6.1

Components of signage strategies:

- entry wall signs to building lobbies
- fascia awning signs to lobby entries
- building identification signage Site B and C

Signage strategy to be refined as part of future detailed SSD Application. Signage is to achieve the following:

- be flush against the building facade
- be of a scale, proportion and form appropriate to its context and building
- fully integrate with the building design
- if illuminated, not cause unacceptable glare or any other adverse safety or amenity impacts



Entry to lobby



66 Clarke Lane Elevation of Proposed OSD Source: Foster + Partners

67 Hume Street Elevation of Proposed OSD Source: Foster + Partners

6.2 Public Art

6.2.1 Public Art Master Plan - Sydney Metro City and Southwest

The provision of Public Art at all station locations (and associated OSD) must be consistent with the Sydney Metro City & Southwest Public Art Master Plan (SMC&SW Public Art Masterplan)

The key objectives of the SMC&SW Public Art Master Plan are to:

- elevate the customer's travel experience
- create a benchmark in national transit art
- engage and expand diverse audiences for contemporary art
- raise awareness of and pride in local histories and cultural diversity
- foster creative partnerships

The Public Art Master Plan establishes parameters for artistic excellence, governance mechanisms and a structured art program that will improve the travel experience of Sydney Metro customers and build a cultural legacy; including

- defining the vision, locations and process for art to be commissioned and procured; and
- addressing the requirements for public art for the design and construction phases of the Project.

6.2.2 Public Art Strategy - Crows Nest OSD

An OSD Public Art strategy will be developed for the Stage 2 detailed SSDA application to align with the broader approach to Public Art outlined in the SMC&SW Public Art Masterplan with consideration of relevant North Sydney Council policies.

The objectives of the OSD Public Art Strategy for the Crows Nest are to:

- contribute to the cultural life and enjoyment of commercial areas; and
- allow for community self-expression

Public Art for the Crows Nest OSD will be commissioned based on standards of excellence and innovation, integrity of the work, relevance and appropriateness of the artwork to the site context, consistency with current planning, heritage and other relevant policies and cohesion with the SMC&SW Public Art Master Plan for the station.

A further guiding principle for the OSD Public Art Strategy is the enhancement of public thoroughfares, access ways and spaces created through the development of the station and surrounding precinct.



68 Example Art Piece: The Interloop at Wynyard Railway Station. Artist: Chris Fox

6.2.3 Public Art Management Plan - Crows Nest OSD

Management Plan) will be developed and implemented by the contractor responsible for the delivery of the OSD (OSD contractor).

The OSD Public Art management Plan must:

- be consistent with the SMC&SW Public Art Masterplan
- provide initial public art concepts
- provide a framework for the commissioning and implementation of public art through the design and construction process and operation of the OSD.

The OSD contractor will also coordinate with the public art Working Group to ensure a coordinated approach to public art throughout the Integrated Station Development.

6.2.4 Public Art Working Group

A Public Art Management Plan for the Crows Nest OSD (OSD Public Art A Public Art Working Group will be implemented for the integrated Station Development (Station and OSD) to oversee the execution of the OSD Public Art Masterplan and ongoing development, execution and delivery of the artworks.

> The primary purpose of the Public Art Working Group will be to provide a forum for considering and approving the best approach to curating, procuring, integrating, installing and decommissioning public art as outlined in the OSD Public Art Masterplan and OSD Public Art Management Plan.

A project resource will also be appointed in the role of Public Art Project Manager to manage the artist and the procurement installation and integration of agreed public art for the Integrated Station Development. The Project Manager will also advocate, educate and promote a strong understanding of public art and its role within the Contractor team during design and construction of the OSD.

6.2.5 Co-ordination of Public Art Plans

The OSD contractor will co-ordinate with the station contractor through the Public Art Working Group and though the selection of artists from a list decided by the TfNSW Selection Committee. The Committee will be set up in accordance with the Public Art Masterplan.

A more detailed OSD Public Art Plan will be developed as part of the future detailed SSD Application for the OSD.



69 Example Art Piece: History's Page on Wynscreen (Wynyard Walk), Sydney. Artist: James Price

6.2.6 Artwork Opportunities

Subject to further detailed design development in the future stages (including commissioning & implementation), opportunities have been identified as below:

- Residential, Hotel and Community lobbies
- Optional Rooftop podium Site A

Public Artwork strategy to be refined and submitted with detailed SSD Application.



71 Proposed soffit location above the community garden - Optional, only if social infrastructure is provided on site A podium rooftop



6.3 Public Rooftop Podium

The OSD indicative design responds to both the existing and desired future character of Crows Nest. The OSD indicative design sets a clear demarcation between building and podium.

The podium is proposed to be community focused and envisages a public childcare facility and community hub on the podium roof level.

The proposed childcare centre aims to alleviate the current spatial pressure on nearby Hume Street Park by relocating the centre on top of the Metro station Entry, giving public space back to the park.

The proposed rooftop garden with community centre/hub and childcare centre is accessible with highly visible vertical transportation located next to Metro station Entry. An alternative option is to provide is to provide social infrastructure on Site C



Source: Ethos[']Urban





72 Illustration of the vertical transportation connecting podium roof level and street level Source : Foster + Partners



74 Public Childcare Centre Precedent

75 Public Roof Garden Precedent - Crossrail London Rooftop Garden

76 Community Centre / Hub Precedent



77 Illustration of Podium Community Roof on Site A and its proposed use



78 Render of Podium Community Roof on Site A. Source: Sydney Metro



7.0

ENVELOPE ANALYSIS

Envelope Analysis - Indicative OSD Building 7.0

7.1 SEPP65 and ADG Compliance

Based on the Crows Nest OSD indicative design prepared by Foster + Partners, the residential scheme has been assessed for compliance with key SEPP 65 Apartment and ADG sections that require consideration for high rise residential apartment planning:

- Visual Privacy
- Solar and daylight analysis
- Natural Ventilation
- Ceiling heights
- Apartment size and layout
- Private open space and balconies
- Communal Open Space
- Common circulation and spaces
- Storage

A summary of the compliance is provided in the table.

The assessment shows that the indicative OSD design for Site A is capable of addressing compliance with ADG.

Refer to further discussion in Section 8.5 of the EIS.

ADG criteria	OSD Indicative built form
Visual privacy	
Separation between windows and balconies is provided to ensure visual privacy is achieved.	\checkmark
Minimum required separation distances from buildings to the side and rear boundaries are as follows for habitable rooms and balconies:	24m separation
 Up to 12m (4 storeys) 6m 	provided
• Up to 25m (5-8 storeys) 9m	between towers
• Over 25m (9+ storeys) 12m	Lower 3
Solar Access	
Living rooms and private open spaces of at least 70% of	\checkmark
apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid winter in Sydney	•
Metropolitan Area .	75%
A maximum of 15% of apartments in a building receive no direct	
sunlight between 9am and 3pm at mid winter.	v
	15%
Natural ventilation	
At least 60% of apartments are naturally ventilated in the	\checkmark
first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any	•
enclosure of the balconies at these levels allow adequate natural	67%
ventilation and cannot be fully enclosed.	
Ceiling heights	
Measured from finishes floor level to finishes ceiling level, minimum ceiling heights are:	\checkmark
 Typical floor habitable rooms 2700mm (Floor to floor height 3185mm) 	3.2m
Apartment size and layout	
Apartments are required to have the following minimum internal	
areas: • Studio 35m2 •	Average Studio 35-50m2
1 Bedroom 50m2	Average 1 Bedroom 50-6
2 Bedroom 70m2	Average 2 Bedroom 70-8
3 Bedroom 90m2	Average 3 Bedroom 92-13

Private open space and balcony

- . the site.
- winter).

Apartments are required to have primary balconies as follows: • Studio apartments 4m2 • 1 bedroom apartments 8m2 • 2 bedroom apartments 10m2 • 3+ bedroom apartments 12m2 Communal open space Communal open space has a minimum area equal to 25% of 28% of building Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a footprint and 76% receives minimum of 2 hours between 9 am and 3 pm on 21 June (mid sun for 2 hours Common circulation and space The maximum number of apartments off a circulation core on a single level is eight. • For buildings of 10 storeys and over, the maximum number of Maximum 8 apartments sharing a single lift is 40. apartment per floor 4 lift provided for each indicative building Storage In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: • Studio apartments 4m3 At least 50% • 1 bedroom apartments 6m3 of the required storage is • 2 bedroom apartments 8m3 located within • 3+ bedroom apartments 10m3 the apartment

7.2 Shadow Analysis summary

The key open spaces in the vicinity of the OSD are Hume Street Park, Ernest Place, the Willoughby Road restaurant strip and a future link between Hume Street Park and Willoughby Road.

The solar impact of the concept SSD Application in mid-winter (representing the worst-case scenario) at various times of the day is illustrated in the figures opposite. The shadow diagrams have modelled the full concept DA envelope, which cannot be fully built out in any event due to the other recommended controls to be approved such as maximum FSRs. The overshadowing impact of the building envelopes (with an indicative scheme notionally shown) at the winter solstice has been modelled.

The Assessment identifies that the majority of the public domain is not affected by OSD overshadowing at any time of the year. The increases in overshadowing identified are minor and over short durations, or nonexistent, including:

- the southernmost portion of Willoughby Road after 3pm on the winter solstice, although much of this portion of Willoughby Road is already affected by overshadowing by existing buildings at this time. The concept SSD Application therefore complies with the draft controls in the draft St Leonards and Crows Nest 2036 Plan released by DPE
- there is no impact at any time of the year on Ernest Place before 4.00pm. The concept SSD Application therefore complies with the draft controls in the draft St Leonards and Crows Nest 2036 Plan released by DPE
- minor additional shading of Hume Street Park at the summer solstice after 2:30pm. The maximum shadow area is 352 m2, approximately 5% of the park area and being summer solstice is a time of year where shade is desired. There is no impact on Hume Street Park during winter. The concept SSD Application therefore complies with the draft controls in the draft St Leonards and Crows Nest 2036 Plan released by DPE





Crows Nest OSD Shadow St

Crows Nest OSD Shadow Study 21st June, 3pm SSDA building envelope location Additional shadow cast by OSD building envelope Additional shadow cast by Indicative OSD buildings Shadow cast by existing Crows Nest buildings Willoughby Road Ernest Place, Crows Nest Centre and Holtermann Street Car Park Hume Street Park

SSDA building envelope location

Hume Street Park

AEST

10 1 m			1 Distant
Study	21st J	une, 4pm	AEST
Additional shadow cast by OSD building envelope	Additional shadow cast by indicative OSD buildings	Shadow cas Crows Nest	
Willoughby Road	Ernest Place, Crows Nest Centre	e and Holtermann Str	eet Car Park

Crows Nest OSD Built Form and Urban Design Report

7.3 Key vantage points & streetscape location summary

A Visual Impact Assessment has been prepared to assess the building envelope's visual effect on views from key vantage points and streetscape locations.

The visual catchment of the concept OSD is large because of the elevated topography of the site, however, existing and proposed tall buildings that block or impede long range views are also part of the relevant assessing context. The Assessment finds that the key visual catchments are predominantly in the local catchment, containing the suburbs of Crows Nest, St Leonards, Wollstonecraft and Waverton, and a larger catchment towards the west along the Lane Cove River valley.

At a more local level, there are significant proposed developments located to the near north of the site in the St Leonards CBD, including a proposed development up to 46 storeys at 500-520 Pacific Highway. Otherwise, the local scale is predominantly medium to low rise, particularly east of the site towards Willoughby Road and the surrounding heritage conservation areas.

The Visual Impact Assessment assesses a range of selected local and district view locations in the locality.

The proposal is more visually prominent from certain local viewpoints, in particular from Ernest Place, Hume Street Park and Willoughby Road. However, even in these instances the development appropriately responds to local context by:

- from Willoughby Road/Ernest Place, large expanses of sky remain visible and the legibility of a pedestrian reading and appreciation of the single storey shop-fronts on Willoughby Road remains.
- From Hume Street Park, there will be some loss of sky views from this location. However, the visual impact of placing density in the backdrop of this park is not inconsistent with other areas of Sydney where placement of density is located near open space and park facilities. Large expanses of sky views are still retained, placing the degree of change as acceptable.



79 Photomontage of proposed building envelopes from Ernest Place

80 Photomontage of proposed building envelopes from Hume Street Park





81 Render station entry. Source: Sydney Metro



8.0

INTEGRATED STATION DESIGN

8.0 Integrated Station Design

Key Requirements 8.1

8.1.1 Integrated Design

The indicative OSD buildings proposes a mix of uses on the Site and a programme proposed as follows.





Program

The indicative OSD design located on Site A has a total of 27 storeys including 2 levels of podium. The OSD building on Site B has a total of 17 storeys including 2 levels of podium.

The diagram illustrates a list of uses for the indicative OSD design.





Structure

The integrated design allows the use of the station egress stair cores and underground station box to provide lateral stability for the OSD buildings. With the OSD building core of Building A North and Building B located over the Station stair core, a simple and direct load path down to the foundation is achieved.

The core for Building A South and Building C are transferred at ground floor because the station concourse area and other station design requirements provide limited feasibility to continue the core structures directly down to foundation. The structural strategy is to laterally stabilise the podium structures primarily using the building cores, with some contribution from columns and beams via frame action.

In Building A North, A South and B, internal OSD columns are transferred over the car-park levels. This approach allows flexibility for floor layout at podium levels. With the OSD column transfer structures, the majority of the OSD building loads are transferred into the podium perimeter mega columns. These mega columns are located directly on top of the station box walls to allow the loads to pass down to the wall foundations.





84 Integrated Station Design - Plant

Plant

Level 1 of Site B houses most of the station plant room including Ausgrid High Voltage Control Room. Air intake and extract for the station tunnels are distributed along level 1 on Site A and B. The placement of plant services on level 1 on Site A and B provides a clear separation between OSD building and Metro station services.

Almost all of the plant room servicing the OSD building for Site A are located on the roof with the exception of Fire Tank and Pump room located on level 1 in the podium.

The plant rooms servicing hotel on Site B are located on the roof top and level 14 of the building below Hotel Facilities.



85 Integrated Station Design - Green Space

Green Space

The podium roof level of Site A is designed to be publicly accessible with roof garden, public childcare centre and community centre. The new podium level is connected with the Metro entry and concourse with highly visible vertical transportation provisions. The double volume height of unpaid concourse also connects street level and the roof level visually.

The rooftop of all buildings provide opportunities for future green space to be used by building occupants. Under the indicative OSD design, Oxley Street rooftop podium of site A would be publicly accessible.

The public domain is part of the concept CSSI approval but will be designed in collaboration with the OSD to ensure the public domain is integrated with the station and OSD.

LEGEND

OSD Building Plant Room Metro station Plant Room

LEGEND Proposed Roof Garden

8.2 Construction Staging

8.2.1 Scenarios

Three possible staging scenarios are illustrated in the follow diagrams for the delivery of the integrated station development.





87 Construction Staging Scenario 1

86 Construction Staging Scenario 2

Scenario 1

The Metro station and OSD are constructed concurrently and aims to be completed and operational by 2024.

Scenario 1 is the preferred scenario as it delivers an integrated station development

Scenario 2

The Metro station is constructed first and ready for operation in 2024. OSD construction might still be ongoing or aims to be completed after station construction is complete.



88 Construction Staging Scenario 3

Scenario 3

The Metro station is constructed and operational in 2024. The OSD is build at a later stage or is delivered at different stages across each site. It creates at least two distinct construction periods for the station and OSD and potentially more if the OSD is delivered site after site .



Crows Nest OSD Built Form and Urban Design Report



9.0

9.0 2036 Plan Summary and Rezoning Proposal

The Draft 2036 Plan released in October 2018 is the draft Land Use and Implementation Plan referred to in the Interim Statement released in August 2017. It has built on the work included in the Interim Statement and has updated the vision for the area as follows:

'The St Leonards and Crows Nest area will be a major centre for workers, residents, students and visitors, offering a variety of homes, jobs and activities for the diverse local population. The area will continue to be a place that people are proud to work in, visit and call home.

Continued growth in the health and technology sectors will deliver around 16,500 new jobs across existing, emerging and evolving industries over the next 20 years. People will benefit from a thriving economy with an abundance of work opportunities in the industrial area of Artarmon, Crows Nest village, the Royal North Shore Hospital and the commercial centre of St Leonards.

The village atmosphere of Crows Nest will be retained, with Willoughby Road continuing to be a vibrant high street that is valued by the community and an escape from the hustle and bustle of modern life. A connection to the past will be maintained by protecting heritage conservation areas in Naremburn and Holtermann Estate, celebrating the historic character of the area.

The Guiding Principles of the 2036 Plan

The vision have informed the below guiding principles:

Place

• A Vibrant Community

New development around the Crows Nest Sydney Metro station will provide energy and life along the Pacific Highway and St Leonards. The existing vibrancy and liveliness of the Crows Nest Village and Willoughby Road will provide a foundation for the revitalisation of the St Leonards Core.

• A place that protects its past

Heritage Conservation Areas and buildings are to be retained and celebrated as an important connection to the past.

Movement

• An accessible place

Heritage Conservation Areas and buildings are to be retained and celebrated as an important connection to the past.

Built Form

• A well designed place

New buildings that model the highest quality design, respecting and enhancing the existing local character of the area.

Land Use

• An employment hub

Providing 16,500 additional jobs over the next 20 years to support a growing and evolving economy, with opportunities for employment in the industrial, professional, creative, retail, health and education sectors.

• A home for people of all ages

A greater mix of homes will be available to the diverse range of people that live in the area.

Landscape

• A greener place

Parks and public green spaces will provide areas for locals to be active, creative, and enjoy green leafy spaces throughout the area, away from built up areas in St Leonards.

The table opposite assesses the consistency of the concept SSD Application with the proposed controls under the Rezoning Proposal. This assessment demonstrates compliance.

The table page 82 assesses the consistency of the concept SSD Application with the proposed design considerations from the Framework Plan in the Draft 2036 Plan Urban Design Study. This assessment demonstrates compliance.



90 St Leonards and Crows Nest 2036 Vision Summary

Source: St Leonards and Crows Nest 2036, NSW Department of Planning and Environment

Proposed controls in the Rezoning Proposal	Proposed concept SSD Application	Consistency
Zoning		
No changes are proposed to the existing B4 Mixed Use Zone	The buildings are to be occupied by residential, tourist and visitor accommodation, commercial and social infrastructure.	Compliant. The proposed uses are permitte
Height		
 The Rezoning Proposal seeks to increase the following maximum building heights for the Sydney Metro sites: Block A: RL 183 (equivalent to 27 storeys) Block B: RL 155 (equivalent to 17 storeys) Block C: RL 127 (equivalent to 8 storeys) Allowances for rooftop services including rooftop plant equipment and lift overruns will be made during drafting of the LEP controls. 	 The proposed heights under this concept SSD Application include: Block A: RL 183m (equivalent of 27 storeys) Block B: RL 155m (equivalent of 17 storeys) Block C: RL 127m (equivalent of 8 storeys) The following assumptions for rooftop services allowances were made: Block A: 5 metres above top of building Block B: 3 metres above top of building Block C: 5 metres above top of building 	Compliant. The proposed building height und proposed maximum building heig
FSR		
 The Rezoning Proposal seeks to introduce an FSR control for the Sydney metro sites, including: Block A: FSR of 12:1 Block B: FSR of 8:1 Block C: FSR of 4:1 The proposed FSR controls are indicative and may be redistributed between the Sydney Metro sites as part of the design excellence process. 	 The proposed FSR for the OSD component only of the concept SSD Application include: Site A: 9.67:1 Site B: 8.12:1 Site C: 4.44:1 In addition to the above, 5,000m2 of gross floor area is included within the station and station retail as part of the CSSI Approval. Hence, the total FSR of the integrated station development is 9.5:1. 	Compliant. The FSR of the total integrated by the Rezoning Proposal, even of be redistributed between the Sy process.
Non-residential FSR		
 The Rezoning Proposal seeks to increase the following non-residential FSR controls for the Sydney Metro sites: Block A: minimum non-residential FSR of 3:1 Block B: minimum non-residential FSR of 2:1 Block C: minimum non-residential FSR of 2:1 The proposed minimum non-residential FSR controls are indicative and may be redistributed between Sydney Metro sites as part of the design excellence process. 	 The proposed non-residential FSR for the OSD component only of the concept SSD Application include: Site A: 0.7:1 (or 2,700m2) (note: where social infrastructure is provided on Site A (and not on Site C) the OSD non-residential FSR increases to 3.24:1) Site B: 8.12:1 (or 15,200m2) Site C: 4.44:1 (or 2,700m2) (Note: where social infrastructure is provided on Site C (and not on Site A) the OSD non-residential FSR reduces to 2.81:1 	Compliant. Given the concept SSD Applicati the three sites, there is potentia FSR requirement by 2.3:1.
Design Excellence		
The Rezoning Proposal seeks to insert a new clause into the NSLEP 2013 requiring	Sydney Metro has prepared guidelines and a Design Excellence Strategy to guide the	Compliant.

The Rezoning Proposal seeks to insert a new clause into the NSLEP 2013 requiring any development on the Sydney Metro sites to demonstrate the highest standard of architectural, urban and landscape design. Sydney Metro has prepared guidelines and a Design Excellence Strategy to guide the Compliant. design of the future OSD.

ted in the B4 Mixed Use Zone.

under the concept SSD Application match the the neights under the Rezoning Proposal.

ed station development is less than what is permitted en considering that FSR controls are indicative and may Sydney Metro sites as part of the design excellence

cation seeks flexibility in the non-residential FSR across ntial for Site A to fall below the minimum non-residential

Draft 2036 Plan Urban Design Study - Framework Plan	Proposed concept SSD Application	Consistency	
Design considerations:		consistency	
accessibility.	The concept proposal seeks to integrate physically with Crows Nest Station and capitalise on its accessibility benefits. Sydney Metro has prepared guidelines and a Design Excellence Strategy to guide the design of the future OSD.	The future detailed SSD Applica	
Clarke Street	Public domain works around the site and retail activated street frontages will be delivered as part of the CSSI Approval. The OSD will add to the civic qualities of the precinct.	Compliant.	
through reverse podium setbacks	The building envelopes on Sites A and B are further setback an additional 2 – 2.8 metres and 1.2 – 2.6 metres respectively along Clarke Lane to allow for future street widening and create opportunities.	Compliant.	
	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.	Compliant.	
	No overshadowing impact to to Willoughby Road between 11 :30am-2:30pm and Hume Street Park between 10am-3pm.	Compliant.	
	Sydney Metro has prepared guidelines and a Design Excellence Strategy to guide the design of the future OSD.	The future detailed SSD Applica	
towards Willoughby Road and Crows Nest residential area.	The proposed building envelopes have been designed to provide an appropriate response to the surrounding context, while also enabling the delivery of a high quality development at the site. The proposed maximum heights for site B and C create a transition of building height from the low scale of Crows Nest towards the OSD building envelope on site A.	Compliant.	
and varied character of different street interfaces.	The maximum podium height for site A is set at RL 110 which is consistent with the building heights along Pacific Highway to the north of site A. The podium height also relates to the height of the St Leonards Centre, heritage item located at the intersection of Oxley and Clarke Street. Site B top of the station (RL106.5) and Site C top of station (RL 98.5) fit within the context of Willoughby Road precinct with a majority of two storeys buildings. Refer to section 5.2.3 of this report.	Compliant.	
	Sydney Metro has prepared guidelines and a Design Excellence Strategy to guide the design of the future OSD.	Compliant.	

lication(s) is to address this design consideration.

lication(s) is to address this design consideration.

E T H O S U R B A N