



Design Integrity Report

Detailed State Significant Development Application Crows Nest Site C Over Station Development

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1 Introduction

This Design Integrity Report (DIR) has been prepared by Sydney Metro (the Applicant) to accompany a Detailed State Significant Development (Detailed SSD) development application (DA), which seeks consent for commercial Over Station Development (OSD) above the Crows Nest Station Site C (Site C). The DIR responds to Secretary's Environmental Assessment Requirements and sets out how the proposed development achieves design excellence and how design integrity will be maintained in subsequent stages.

1.1 Project overview

The Detailed SSD DA seeks approval for the detailed design, construction and use of a new nine-storey commercial office building on Site C above the Sydney Metro Crows Nest Station entrance on Clarke and Hume Streets. The proposed development also includes the fitout of the ground floor lobby, bicycle parking and end of trip facilities.

The proposed commercial building will provide additional premium office floor space to the precinct, complementing the St Leonards commercial core and integrating with the broader Crows Nest village. The detailed design of the proposal has been subject to rigorous design development, testing and review though the Sydney Metro Design Review Panel (DRP) to ensure that it achieves design excellence.

In summary, the Detailed SSD DA (SSD-13852803) seeks development consent for:

- Construction, use and fitout of a new commercial office building;
- A total gross floor area (GFA) of 3,100m²;
- A maximum building height of RL 127m, with an additional 5m 'building services zone' for rooftop plant and equipment, lift overruns and services (RL 132m);
- Use and fitout of spaces within the CSSI building envelope for the purposes of building entrance lobby (ground level) and bicycle parking and end of trip facilities (level 1);
- An accessible garden on part of level 9 for use by building tenants;
- Rooftop plant and service areas;
- Associated building servicing and building landscaping elements; and
- Signage zones for building / business identification.

1.2 Site location and description



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

Site C is located at the north-western corner of Hume Street and Clarke Street, and comprises one allotment with the address of 14 Clarke Street, Crows Nest. It is legally described as Lot 1 in DP1123850.

The site is roughly rectangular in shape, and being located within the Crows Nest village centre. Adjoining Site C is a seven storey residential building (known as 'Wyndel Apartments') at 22-26 Clarke Street and a five storey commercial building at 20 Clarke Street.

The existing buildings on the site have been demolished to facilitate the construction of Crows Nest Station under the CSSI Approval. The demolition works are now complete, and the site is vacant and surrounded by construction hoarding. Once the station is completed as per the CSSI Approval, the entry within Site C will provide connection to the east towards Willoughby Road.

1.3 Background

1.3.1 Sydney Metro

Sydney Metro is Australia's biggest public transport project. Services started in May 2019 in the city's North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new metro railway stations underground at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Waterloo and new metro platforms under Central.

In 2024, Sydney will have 31 metro railway stations and a 66km standalone metro railway system. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre. Future metro lines are proposed including Sydney Metro West and Sydney Metro Western Sydney Airport.

On 9 January 2017, the Minister for Planning approved the Sydney Metro City & Southwest – Chatswood to Sydenham project as a Critical State Significant Infrastructure project (CSSI 15-7400) (CSSI Approval). The CSSI Approval includes all works required to construct the Sydney Metro Crows Nest Station, including the

demolition of the existing buildings and structures on the site. The CSSI Approval also includes the construction of below and above ground improvements within the metro station structure for integration with the OSD within the 'metro box' envelope.

1.3.2 2Concept Approval (SSD 9579)

In August 2020, the Department of Planning, Infrastructure and Environment (DPIE) finalised the St Leonards and Crows Nest 2036 Plan and the Rezoning Proposal for the Crows Nest Metro Station site. The Rezoning Proposal introduced new planning controls including design excellence provisions for the OSD on the Crows Nest site.

On 23 December 2020, the Minister for Planning and Public Spaces granted consent to the Concept Application (SSD 9579) (Concept Approval) for:

- Mixed use development over the approved Crows Nest Metro Station including:
- Maximum building heights:
- Building A: RL 175.6m
- Building B: RL 155m
- Building C: RL 127m
- Maximum gross floor area (GFA) of 56,400m² including:
- 43,400m² commercial GFA
- 13,000m² residential GFA
- Building C: 56,400m²
- Maximum 101 car parking spaces.

1.4 Purpose of this report

DPIE has issued Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement for the proposed development. Specifically, this DIR has been prepared with regards to SEARs No. 5, which states:

- 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).

This DIR is structured as follows:

- Section 1 Introduction
- Section 2 Consistency with Design Objectives of Concept Approval
- Section 3 Consistency with Conditions of Concept Approval
- Section 4 Consistency with the approved Design Guidelines
- Section 5 Sydney Metro DRP Advice and Recommendations.

2 Design Objectives of Concept Approval

In accordance with Condition B8(a)(i) of the Concept Approval, the DIR is required to demonstrate how design excellence and design integrity have been achieved in accordance with the design objectives of the Concept Approval. The detailed design of the Site C OSD is consistent with the Concept Approval project objectives as discussed below. The EIS and subsequent Submissions Report submitted with the Concept Proposal (SSD 9579) established the following design objectives.

The Site C OSD proposal is consistent with the design objectives as discussed below.

Design Objective	Response
Support the NSW Government's planning strategies and objectives, including the Greater Sydney Region Plan (2018) and the North District Plan (2018)	The proposal addresses relevant planning priorities of the North District Plan by locating additional employment opportunities above new transport infrastructure. The proposal is also considered sustainable as it is likely to result in a high proportion of trips by public transport, as well as walking and cycling, to reduce emissions and improve health.
Enable building forms which responds 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 2036 Draft Plan and the Rezoning Proposal	The proposed built form of the Site C OSD complements the St Leonards commercial core. The design and articulation of the proposal is generally consistent with the building envelope approved under the Concept Approval
Minimise, to the fullest extent possible, overshadowing impacts on public open spaces including Hume Street Park, Ernest Place and the Willoughby Road restaurant precinct	The proposal minimises overshadowing and amenity impacts and integrate with the broader Crows Nest village. The proposed development does not overshadow the Hume Street Park
Enhance the customer experience and urban amenity through the development of an integrated design concept that ensures delivery of a quality public domain experiences with strong connections to the surrounding area	The detailed design for the Site C OSD has been completed in conjunction with the station design ensuring that an integrated design is achieved.
Create an urban environment that drives the high usage public domain experience with strong connections to the surrounding area	The ground floor lobby area consists of active uses which relate to the metro station and the commercial office floor space and will interface with the public domain. The public domain works delivered under the CSSI Approval enhance the customer experience and urban amenity and provide 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	The Site C OSD is consistent with transit oriented development principles. The proposal does not include any off street car parking to encourage walking, cycling and public transport trips. Secure bicycle parking and end of trip

facilities are provided for the building occupants.

Create an urban environment that drives the high usage of the Sydney Metro network, responding directly to the surrounding area The Site C OSD is located above the Crows Nest Station and will drive high usage of the Sydney Metro network providing convenient connections for workers and visitors.

Provide the opportunity to deliver the OSD as early as possible with the aim of opening concurrently or shortly following completion of the Crows Nest Station

The Site C OSD is being delivered by the station contractor and therefore can be completed either concurrently or shortly after the completion of the Crows Nest Station

Enable a design that responds sensitively to surrounding heritage items

The proposal is sympathetic to the character of the buildings within the vicinity and will have negligible impacts on the existing significant views surrounding the site. The podium form and articulation references buildings in the immediate context and clearly delineates podium functions from activities above. The street wall delivers activation, permeability, a sense of human scale and heritage sensitivity.

Create a framework which works to achieve design excellence in the final integrated station development

A Design Excellence Strategy has been prepared for the Site C OSD and endorsed by the Planning Secretary as part of the Concept Approval. This establishes the rigorous process to ensure the Site C OSD achieves design excellence. This DIR has been prepared for the purposes of demonstrating how design excellence and design integrity has been achieved for the project.

3 Consistency with Concept Approval

This section demonstrates the proposal's consistency with the relevant conditions of consent in the Concept Approval which are relevant to design excellence and design integrity.

3.1 Maximum building envelopes

"B1. Future development application(s) for the development must demonstrate that the building is contained wholly within the approved building envelopes consistent with the plans listed in Condition A2 and as modified by this consent."

The proposed OSD Site C is consistent with the approved building envelope and maximum height limit that applies to Site C. The proposed articulation elements including the brick clad columns, window 'pop-outs' and planter boxes are contained within the permitted building articulation zones.

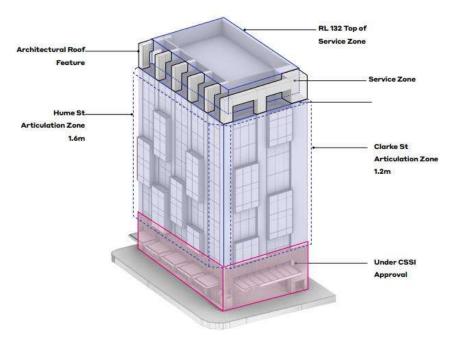


Figure 2: Building articulation zones

3.2 Maximum gross floor area

"B3. The maximum achievable gross floor area for the non-station related floor space is 56,400m² (including 43,400m² commercial and 13,000m² residential GFA)..."

The total gross floor area for Site C OSD is 3,100m² with a floor space ratio of 5:1:1 (excluding station areas relating to the CSSI Approval) and complies with Condition B3 of the Concept Approval.

3.3 Built form and urban design

"B7. All future development applications for new built form must include:

- (a) Detailed plans, envelopes and sections
- (b) Artist's perspectives and photomontages
- (c) A design statement demonstrating the design quality of the proposed development and having regard to the character of surrounding development"

These abovementioned details are provided within the Architectural Design Report and Architectural and Landscape Plans attached to the EIS, accompanying the Detailed SSD DA.

4 Crows Nest Amenity and Design Guidelines

The proposed development has been prepared in accordance with the Crows Nest Amenity and Design Guidelines (dated January 2021) which have been endorsed by the Planning Secretary under the Concept Approval. For completeness, the criteria of the Design Guidelines are addressed in the sections outlined in the following table.

Criteria		Design Complies (Y/N)	Comment
Sy	dney Metro Design Objectives		
1.	Sydney Metro places the customer first. Stations are welcoming and intuitive with simple, uncluttered spaces that ensure a comfortable, enjoyable and safe experience for a diverse range of customers.	Y	Refer to Station Design and Precinct Plan
2.	Sydney Metro is a transit- oriented project that prioritises clear and legible connections with other public and active transport modes within the wider metropolitan travel network that intersect with this new spine.	Y	The Crows Nest Station benefits intermodal travellers who will be able to have access to the Metro's broader catchment linking the localities CBD's to provide a unique level of connectivity between communities. Refer to Section 4.1 of the Architectural Design Report for more information.
3.	Sydney Metro is a landmark opportunity to regenerate and invigorate the city with new stations and associated development that engage with their precincts, raise the urban quality and enhance the overall experience of the city.	Y	The Site C OSD creates 3,100 sqm of premium boutique grade commercial space across 7 levels of approximately 350 sqm. The building has been configured with the core distributed along the northern party wall to optimise access for natural light and outlook to local streets, Hume Park and the village beyond. Facades are articulated with projecting glazed bay windows to provide interesting views along the street and to enable various workplace meeting or social settings. Floor plates are flexible for subdivision to smaller tenancies or contiguous floorplans for single tenancies.
4.	Sydney Metro's identity is stronger for the unique conditions of centres and communities through which it passes. This local character is to be embraced through distinctive station architecture	Y	The Site C OSD will contribute to the regeneration of the Crows Nest precinct which is set to become an increasingly prominent part of a vibrant, better connected, walkable area. Refer to Section 1.4 of the

Criteria	Design Complies (Y/N)	Comment
and public domain that is well integrated with the inherited urban fabric of existing places.	(1711)	Architectural Design Report for more information.
5. Sydney Metro is a positive legacy for future generations. A high standard of design across the corridor, stations and station precincts, that sets a new benchmark, is vital to ensuring the longevity of the Metro system, its enduring contribution to civic life and an ability to adapt to a changing city over time.	Y	Benefiting from the smaller scale setting and proximity to the parks and tree lined streets, Site C has also been designed for a connection to nature for occupiers. All tenancies have access to a landscaped perimeter roof terrace featuring integrated planters framing seating alcoves incorporating automated irrigation for social gatherings below brick clad portals. Irrigated planters are also integrated into the projected bay windows to animate and soften the facade and provide a connection to plants internally at most levels.
Sydney Metro City & Southwes	st Chatswood t	o Sydney Design Guidelines
Create a new transport focus on the southern side of the St Leonards strategic centre.	Y	The Site C OSD occurs over the metro station's Hume Street and the Clarke Street's entrance structure. The design of structure, services, and architectural expression of the station and OSD are conceived to create a fully integrated outcome.
Maximise legibility and connectivity with the local urban structure.	Y	The station entry located on Clarke Street and the OSD commercial lobby on Hume Street promotes primary pedestrian movement along the Clarke and Hume Street widened pavement frontages. Importantly, both entrances work separately to avoid pedestrian conflict during peak times. The Hume street frontage is also envisaged to be developed into an attractive retail street experience for people consistent with the general amenity in Crows Nest Village.
3. Integrate the station with local improvement plans and make a positive contribution to the sense of place.	Υ	The Site C station building shares a consistent two storey scale, facade proportion and sculptural masonry. Together, the station buildings form a cohesive strong architectural base for the future OSDs. The selection of finishes responds to the Crows Nest character of brick typologies

C	riteria	Design Complies (Y/N)	Comment
			referencing the local federation architecture. The Site C base also incorporates a graduating projected brick pattern from smooth to variegated at the level 2 interface with the OSD. The identity from a local or visitors perspective is unique to the Crows Nest location.
Ur	ban Design Strategies		
•	Crows Nest Station is an opportunity to enhance the amenity and green character of Oxley Street and Hume Street. This could include enhanced pedestrian space, paving upgrades and street trees.	NA	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
•	There is an opportunity to create a seamless entry experience into the station through materiality and extending the character of the surrounding public domain into the station.	NA	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
•	The station and associated development above has the opportunity to create a consistent built edge along the Pacific Highway, aligned with existing buildings and maximising activation at ground level. The over station development will explore varied heights and a stepped form to	NA	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.
	create transition between the taller towers of St. Leonards and village scale of Crows		The public domain works being delivered under the CSSI Approval comprise:
•	Nest. The Sydney Metro station entry on the corner of Hume and Clarke Streets directly addresses cycle, kiss and ride and taxi access including improved pedestrian crossing	NA	 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
•	of Clarke Street. This station entry will be scaled to reflect the local fine grained character of the area and accommodate new and existing active transport links.		 Clarke Street and Hume Street New publicly accessible bicycle parking on Hume Street, the Pacific Highway, Clarke Street and Oxley Street
•	Through a variety of uses and ground plane activation, the development will also create opportunities for engagement with the general public.		 New on-road marked cycle link on Hume Street new 'kiss and ride' and taxi bays on Clarke Street

Criteria	Design Complies (Y/N)	Comment
		 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 CSSI Approval public domain design.
Built Form		
Responding to the surrounding streetscape scale, with direct reference to the local context	Y	Site C OSD responds to the lower scale of the adjacent urban fabric consisting of mixture of small scaled federation styled housing types, diverse heritage retail street scapes, brick and terracotta tiles architectural forms, street trees and landscaped frontages all combined to inform the approach to the design.
Minimising bulk and scale through horizontal and vertical articulation and choice of materials	Y	The built form of Site C OSD is extruded from the station box to form a simple rectangular prism compatible with the scale of similar brick buildings in Crows Nest. The brick envelope is spliced to create portals evocative of the vertical rhythm of the Blue Gum high Forest that once occupied the areas and reduced scale of Willoughby Road 4m to 6m shopfronts at street level. The brick portals are designed to visually 'clasp' an assemblage of glazed modules both flush and variably projecting to animate the facade whilst providing a sense of tangible occupancy linked to street life.
3. Innovation in delivering distinct podium and OSD components while respecting design outcomes at St Leonards	Y	The Site C OSD built form acknowledges the urban design framework proposed under DPIE 2036 Plan. The transition in scale

		Design	
Cr	iteria	Complies (Y/N)	Comment
		,	and contextual height of Site C OSD responds to the fine grain character of Crows Nest village
4.	Extensive use of landscaping and green elements at street level and top-of-podium levels	Y	Public Domain interface is part of CSSI area and is pursuant to the issue of the approved station design and Precinct plan.
5.	Appropriate street setbacks that allow for managed customer and pedestrian flow and comfort.	Y	Refer to architectural design report Section 03.1 for approved Stage 1 building envelope providing street setbacks diagrams.
6.	Maximising site permeability and connectivity with through site links	Y	The Site C OSD occurs over the metro station's entrance structure and the public domain interface with station metro box. Crows Nest will be a significant transport interchange requiring a high level of public amenity and permeability. Pedestrian comfort, safety, access and amenity are key considerations in the precinct design, approved under the CSSI approval.
7.	Respecting surrounding historical cues and materiality, including traditional shopfront facades and the St Leonards Centre	Y	The Site C OSD shares a consistent two storey scale, facade proportion and sculptural masonry. The selection of finishes responds to the Crows Nest character of brick typologies referencing the local federation architecture. The Site C base also incorporates a graduating projected brick pattern from smooth to variegated at the level 2 interface with the OSD. The identity from a local or visitors' perspective is unique to the Crows Nest location.
8.	Relating car park heights to the scale of the St Leonards Centre and designing for future adaptation	NA	No carpark provision for Site C OSD
9.	Addressing pedestrian level wind environments at ground level	Υ	The public domain within and surrounding the Crows Nest Station precinct are part of the design and
10.	Strong activation of street frontages, station entries and lobbies including integration of Clarke Lane, where appropriate.	Y	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

Criteria	Design Complies (Y/N)	Comment consideration and has been
		embodied in the approved Concept SSD Application
Built form above the podium		
Provide a built form above the podium that achieves design excellence, visual interest and responds to the evolving height, scale and character of the area. The design will establish a Sydney Metro landmark, respond to the civic nature of Hume Street Park	with future development for and B mediates a scale transfer between Crows Nest low form and the high-rise tow Leonards. The built form consists of that frame vertical glazing window pop-outs. The gla outs variably project from and are described as port	The OSD Site C built form together with future development for Site A and B mediates a scale transition between Crows Nest low rise built form and the high-rise towers of St Leonards.
and Willoughby Road while acknowledging its presence on the Pacific Highway.		The built form consists of brick pillars that frame vertical glazing and window pop-outs. The glazed popouts variably project from the facade and are described as portals which will help in animating the frontage.
		Refer to section 5 of architectural design report for details
Building articulation		
Horizontal and vertical modulation	Y	The OSD façade has distinctive brick pillars which rise from the station box through to the top of the building. The three components of the building are distinguished by varying brick texture that changes from the station box (podium), commercial mid-section and the extruded roof feature portals that crown the building. The brick pillars reinforce the vertical modulation with a 5-6m rhythm that is derived from the surrounding Crows Nest built form.
		design report for details
Founda and building set 1. C		
Façade and building articulation	Y	The design of Site C OSD utilises the articulation zone as per concept approval SSD 9579 to articulate the facade. The assemblage of variably projecting glazed modules slotted within the brick pillar framing is a design feature which allows for façade articulation and providing

Criteria	Design Complies (Y/N)	Comment
		softening of façade with its integrated roof planters
		Refer to section 3 and 4 for details

Υ

Public domain and place

 Activating the streetscape through active and passive public domain outcomes and incorporating extensive areas of landscaping and green spaces

The scope includes the fitout of Site C OSD entry lobby, services core along the northern site boundary. The ground level building footprint is setback 2.1m from the southern boundary and 1.2m from the eastern boundary to preserve generous pedestrian pavement widths around site C and the Pacific Highway.

Full height glazing is provided along the western facade to ensure an open light filled experience for OSD tenants and visitors.

The wider urban design and public domain approach for the Station project is described in the Crows Nest Station Design and Precinct Plan (SDPP). This plan has been prepared to present an integrated urban and place making outcome to guide the design of the permanent built surface works and landscaping associated with the project. The public domain works being delivered under the CSSI Approval comprise:

Footpath widening, new street trees, lighting, and street furniture, new cycle links, Kiss & Ride and taxi bays

2. Extending the ground plane visually and materially) into the station entries

Y The OSD entry is designed to be complementary to the station entry using a consistent materials palette with open sightlines through to Hume street.

The finishes palette includes large format porcelain floor tiles, the external brick taken inside as a feature wall in combination with hardwood timber batten wall and lift lobby ceiling

Criteria	Design Complies (Y/N)	Comment
	(1711)	The typical bay window varies in its protrusion and is a design feature which allows for facade articulation and views to be framed. Its integration with roof landscaping to enable a softening of the facade and meet sustainability requirements
3. Creating destination opportunities to engage the public with the development on a day-to-day basis	Y	The station's eastern entry addressed Clarke Street as a key connecting street to central Crows Nest Village on Willoughby Road. Local use is encouraged with improved public domain amenities, including café space provided adjacent to OSD entry lobby on Hume street as part of CSSI scope
 Doorways and facade lines offering open, welcoming and barrier free customer access around station entries 	Υ	The public domain works within and surrounding the Crows Nest Station precinct are part of the design and
5. High quality, flexible streetscapes and urban plazas that expand and contract, accommodating both peak commuter flows and general everyday use	Υ	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
Building signage should respond to the station design and context	Y	embodied in the approved Concept SSD Application and this subsequent detailed application for the Site C OSD. 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.
7. Using appropriate materials and finishes that allow for integration of extensive natural landscaping and respond to local heritage, geography and civic character.	Y	The brick and terracotta tiled architectural forms, street trees and landscaped frontages have all combined to inform the approach to the design also inspired the integration of planting on the roof terrace and façade projected windows

Criteria	Design Complies (Y/N)	Comment
Movement and connectivity		
Integrate the development's role as an entry point into the precinct, prioritising pedestrian access, permeability and amenity within the development and across the precinct. Facilitate legible, safe and convenient interchange opportunities across transport modes.	Y	The Site C station entry located on Clarke Street and the OSD commercial lobby on Hume Street promotes primary pedestrian movement along the Clarke and Hume Street widened pavement frontages. Both entrances work separately to avoid pedestrian conflict during peak times. Hume Street Park currently and the future masterplan expansion will also attract pedestrian movements to Site C.
		Level 1 within the two storey station building volume incorporates the OSD end of trip facilities and bike parking accessed via the two lifts provided in the OSD lobby
		The public domain interface is part of CSSI area and is pursuant to the issue of the approved station design and Precinct plan. The following key moves have been developed for Crows Nest Station to ensure the development integrates with the urban design context (refer diagrams):
		Prioritise pedestrian comfort and safety;Integrate local pedestrian and
		 cycle networks; Celebrate Hume Street as an active public space; Respect the local character; and Establish active and legible building interfaces. Crows Nest station primarily serves a pedestrian and bus interchange catchment including a Kiss & Ride drop-off and pick up along the Hume
Internation and Invest		Street and Clarke Street kerb frontages
Integration and legacy		
Provide an OSD that seamlessly	Υ	The Crows Nest OSD built form

integrates all components of the

development and is a positive

legacy for future generations.

and responds in urban contextual

acknowledges this transition in scale

Criteria	Design Complies (Y/N)	Comment
		height build up towards St Leonards Centre. The highest building mass of the proposed OSD is located on the west portion of the OSD and the lowest portion located on Site C. The Crows Nest Station and OSD will form part of the vision for the evolving urban context development adjacent to the Pacific Highway. The future precinct will transition in height from the high density St Leonards Centre to the low density Crows Nest area.

5 Sydney Metro DRP Advice

The design excellence strategy for the Site C OSD has two phases, the first being 'defining quality expectations' and the second being 'design integrity'. The table below summarises the DRP presentations at each phase.

During Phase 1, the design team presented the OSD scheme to the Sydney Metro DRP on a number occasions as design options were developed and tested. The DRP provided design advice on matters such as the proposed land uses, building envelopes, built form and the integration of the OSD with the station design. The DRP's advice fed into the Concept Approval and accompanying Design Guidelines.

Following the determination of the Concept Approval in December 2020, the 'design integrity' phase commenced. During Phase 2, the Detailed SSD DA scheme for Site C OSD was presented to the DRP to ensure design excellence was achieved and that the further development and refinement of the scheme had responded appropriately to the DRP's earlier advice on the Concept proposal.

DRP	Date	Topics
Phase 1: Defining Quality Expectations		
DRP 1	25 March 2019	OSD building envelopes
DRP 2	4 June 2019	OSD massing and entries
DRP 3	17 Sept 2019	Site C concepts and vision
DRP 4	15 October 2019	OSD building envelopes
DRP 5	3 December 2019	Site C indicative scheme
DRP 6	31 March 2020	Site C built form and façade design
DRP 7	18 May 2020	Site C façade design and detailing
DRP 8	15 Dec 2020	Design excellence strategy and design guidelines
Phase 2: Design Integrity		
DRP 9	19 March 2021	Site C built form, materials and landscaping

The key matters raised by the DRP with respect to the Site C OSD were:

- (a) Community uses (no longer proposed);
- (b) Built form and façade design;
- (c) Materiality and finishes; and
- (d) Landscape design and maintenance

The following section outlines the DRP advice and how the design development for Site C OSD has responded to these key issues. The DRP recommendation letter on how the project achieves design excellence is included as Appendix A.

5.1 Community Uses

The DRP supported commercial land uses for Site C OSD (DRP No. 3). The design team explored the inclusion of community uses within the building such as a child care centre, youth hub, co-working spaces, event spaces, or meeting rooms and collaboration spaces (DRP Nos. 4 and 5). Following consultation with North Sydney Council, it was decided to remove the community use from the scheme and propose a full commercial building instead. Bicycle parking and end of trip facilities were proposed on the first floor for use by the commercial tenants (DRP No. 6).

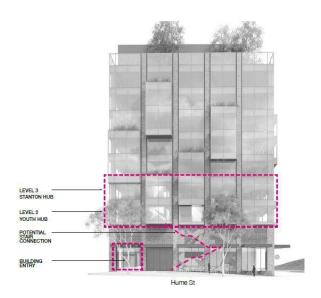


Figure 3: Indicative location of youth hub (no longer proposed) (DRP No. 5) (3 December 2019)

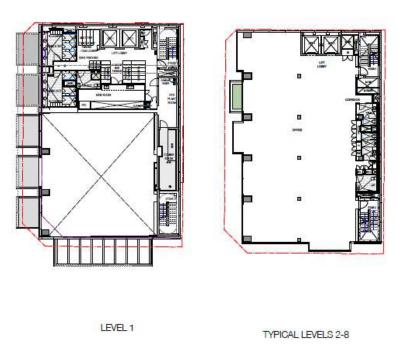


Figure 4: End of trip facilities and commercial floorplate (DRP No. 6) 31 March 2020

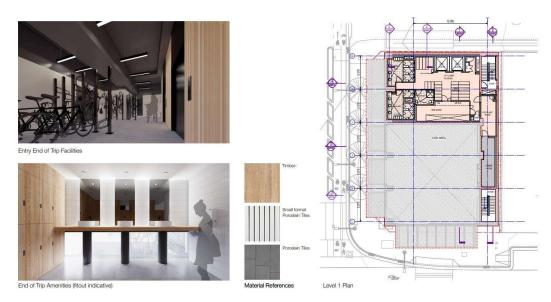


Figure 5: End of trip facilities and bicycle parking (DRP No. 9) 19 March 2021

5.2 Built form and façade design

5.2.1 Brick pillars

The early design concepts for the Site C OSD proposed a concrete portal structure with a glazed façade (DRP Nos. 2 and 4).



Figure 6: Clarke Street view (DRP No. 4) (14 October 2019)

In DRP No. 5, brick pillars were included in the façade design in response to the materiality of the station design and the local character of the area, in particular the rhythm, scale and materials of the shopfronts. The brick pillars framed continuous glazing which extended up the façade between the pillars. The glazing between the pillars formed portals which were intended to add articulation to the form.

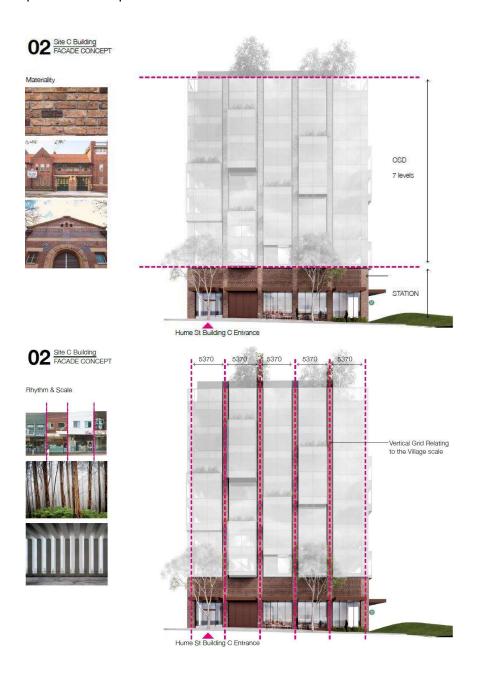


Figure 7: Site C OSD Façade concept (DRP No. 5) (3 December 2019)



Figure 8: Clarke Street view (DRP No. 5) (3 December 2019)

The DRP expressed concerns that the building lacked 'tectonic clarity' due to the thinness of the brick columns above the podium, the lack of connection and strength of the columns, and the lack of definition and framing of the top of the building (DRP No. 5). Further design development of the brick pillars was requested by the DRP.

In DRP No. 6, the design team presented the built form design concept and options on how the brick pillars could be integrated with the façade design and architectural expression. The design team's preferred option expressed the brick pillars as thin vertical columns and enabled the use of glazing across the eastern façade.

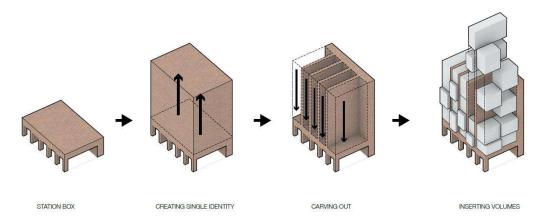


Figure 9: Built form design concepts (DRP No. 6) (31 March 2020)



Figure 10: Design development of the brick pillars (DRP No. 6) (31 March 2020)

Further design development of the façade and brick pillars were presented at DRP No. 7. The key changes to the façade design included:

- Extending the brick pillars beyond the facade in to the roof making it an architectural feature, integrating with the plant enclosure and crowning the rooftop;
- The brick pillars have been designed to project an additional 120mm to accentuate their solidity and prominence along the façade. It also emphasises the vertical rhythm of the streetscape;
- The extended brick finish to the eastern and western facades frame the built form, emphasising the relationship with the station and removes the concept of a glass box; and
- Adding a metal finish to the reveal of the pop out bay windows, improving solar shading.



Figure 11: Clarke Street view (DRP No. 7) (18 May 2020)

The DRP has accepted the design changes to the façade and roof top (DRP No. 9). A sample board will be submitted to the DRP for review during construction.

5.2.2 Thermal performance and glazing

The DRP encouraged the design team to explore an operable façade to the east with appropriate sun shading as an alternative to using performance glazing (DRP No. 3). Two options were presented to DRP No. 6.



Figure 12: Sun shading options for eastern facade (DRP No. 6) (31 March 2020)



Figure 13: Eastern elevation of preferred option (DRP No. 6) (31 March 2020)

An operable façade was not pursued further due to the added complexities to the mechanical ventilation system. Further refinements were made to the eastern façade to improve thermal performance (DRP No. 7) and included:

- Glazed area reduced by 27% to reduce the amount of exposure to the solar radiation and increase the thermal performance; and
- Solid treatment to the reveal of 'pop-out' bay windows to reduce the exposure to the direct sunlight.

The DRP accepts that the proposal meets the relevant requirements under Section J of the BCA.

5.2.3 Northern facade

The DRP accepted that the northern façade of the building would be a blank wall as future development was expected on the site immediately to the north (based on the St Leonards and Crows Nest 2036 Plan). However, the DRP recommended some articulation of the façade as an interim measure (DRP No. 5).

In response to the DRP's comments, the design of the northern facade includes a brick finish returns on the visible corner. (DRP No. 6). The following improvements have been made to the design:

- The first 5m of the wall from the street is clad in brick to reinforce the monolithic quality of the brick cladding
- The remaining facade is formed in painted precast panels to similarly match the brick appearance.
- The precast panels mirror the vertical articulation of the south facade where each structural grid is expressed as a pilaster.



Figure 14: Northern elevation study (DRP No. 6) (31 March 2020)

5.3 Landscape maintenance

The DRP supported roof level planting but recommended that planting of large trees be reviewed (DRP No. 5). A revised planting schedule was prepared and the large trees were replaced with low maintenance species which would not require frequent access for maintenance (DRP No. 6). Layered planting was proposed within the planter boxes consisting of cascading ground covers, shrubbery and large sculptural planting that would be visible from the street level. Irrigation and drainage was proposed to be built in to the façade planter boxes.



Figure 15: Landscape planting schedule (DRP No. 6) (31 March 2020)

The DRP recommended further design work on the planter boxes at roof level and above the projecting windows to ensure they could be accessed for maintenance (DRP No. 7).

In response to the DRP comments, further detailed design was undertaken for the roof top landscape and façade planter boxes, including selection of low maintenance species and detailing minimum soil depths, irrigation feed lines and drainage outlets (see Figures 16 to 18) (DRP No. 9).

A façade maintenance and access strategy was presented by the design team at DRP No. 9 to demonstrate how the rooftop and façade planting areas would be accessed for routine maintenance of the landscaping. The proposed strategy includes:

- The use of davit arms or similar for industrial rope access for cleaning and abseiling;
- A swing stage, or platform can be suspended from the same supporting davit arms from the roof for other 'heavy' maintenance. A temporary swing stage may be utilised for any non-typical maintenance requirements; and
- A street boom (crane) or medium sized cherry picker can be utilised to lift heavy materials if required.

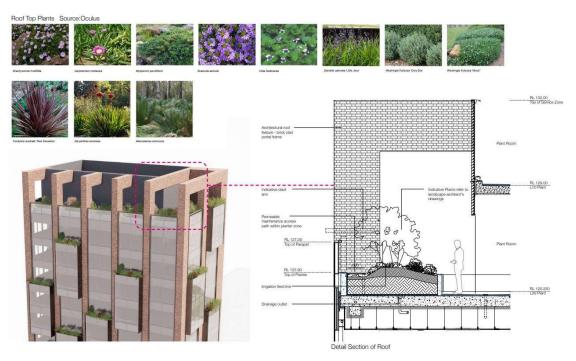


Figure 16: Roof planting detail (DRP No. 9) (19 March 2021)



Figure 17: Façade planting detail (DRP No. 9) (19 March 2021)

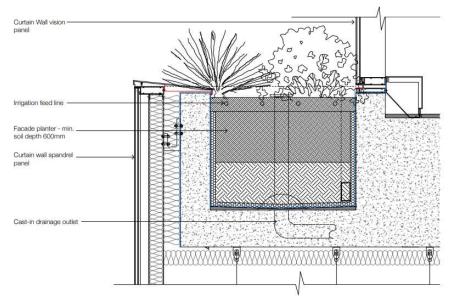


Figure 18: Façade planter and drainage detail (DRP No. 9) (19 March 2021)

Sydney Metro has also prepared a detailed landscape specification for the Site C OSD to ensure that the landscaped areas are properly maintained by the contractor until the plantings are well established and that any dead or failed plants are replaced. The landscape maintenance during the establishment period will include regular watering, weeding, prevention and treatment of pests/diseases, pruning, fertilizing, mulching and any other horticultural activities to ensure the health and survival of the landscaping.

While the DRP has noted the additional information presented by the design team at DRP No. 9, the Panel remain concerned that the maintenance of the planters would not occur regularly and has recommended that a maintenance regime be included as part of the conditions of planning approval.

Ultimately, the responsibility for the on-going maintenance of the landscaping will reside with the future owner and occupants of the building. However, the design of the landscaping is capable of achieving design excellence for the following reasons:

- Irrigation, drainage and appropriate soil depths have been included in the design of the planters to ensure the long term health and success of the landscaping
- Low maintenance species have been selected for the planters which do not require frequent access for maintenance, such as watering, weeding, pruning and mulching;
- Roof davits will be incorporated into the design of the roof structure to support
 abseiling or platforms which will be used to access the façade landscape
 planters for seasonal maintenance. Landscape maintenance via abseiling is
 not uncommon and a number of companies provide these services;
- Sydney Metro has prepared a detailed landscape specification for the Site C OSD to ensure the contractor properly installs and maintains the landscaping during the establishment period and any defects are rectified.

Appendix A: DRP Letter of Design Excellence

GOVERNMENT ARCHITECT NEW SOUTH WALES

24 September 2021

Sydney Metro Design Review Panel Letter of Design Excellence Crows Nest Site C Over Station Development – SSD 13852803

I refer to the Crows Nest Site C Design Excellence Strategy (the Strategy) endorsed by the Department of Planning, Industry and Environment (DPIE) on 9 June 2021. The Strategy requires a Design Integrity Report to be submitted to DPIE with the Detailed State Significant Development (SSD) Application and provide evidence that the design excellence standards have been met. I understand that DPIE have requested a letter endorsed by the Chair of the Sydney Metro Design Review Panel (DRP) outlining how the project achieves design excellence.

Design Review Panel

The Sydney Metro DRP was established under the conditions of approval for CSSI-7400 and has subsequently been endorsed as an alternative to the State Design Review Panel for the purposes of design excellence for Crows Nest Site C Over Station Development (the Project). The DRP is chaired by the NSW Government Architect (GANSW) and the current panel members are:

- Abbie Galvin GANSW FRAIA (Chair)
- Kim Crestani
- Tony Caro
- Bob Nation AM
- Peter Phillips
- Yvonne von Hartel AM

Prior to the determination of the Concept Application (SSD-9579), the DRP provided design advice to Sydney Metro during the development of the scheme including advice on the proposed land uses, building envelopes and built form for the Project. During the detailed design development stage, the Project was presented to the DRP on following occasions:

- DRP 3 3 December 2019
- DRP 4 31 March 2020
- DRP 5 19 May 2020
- DRP 8 15 December 2020DRP 9 19 March 2021

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Key Findings

The DRP is satisfied the Project is capable of achieving design excellence. In particular, the design changes made to the façade and roof form, which include the use of brick through the full height of the building, provide a stronger tectonic clarity and are supported by the DRP. The design proposal now readsas a brick building with glass windows rather than a glass building on a brick base and this design approach is supported.

The elements that contribute to the design being capable of achieving design excellence are summarised below:

Built form and massing

The scale and massing of the building is appropriate to the context and aids in the transition between the taller buildings proposed on the Pacific Highway and the village context of Hume Park beyond.

• Façade articulation

The façade has been designed to provide articulation, interest and urban greening, and maximise views in and out of the building, while maintaining a clear architectural concept and masonry character. This is reinforced by the extension of the brick piers at roof level and the landscaped balconies across both street facing facades.

Integration of structure and station entry

The design has integrated the station entry, services and structure with the building above creating a unified composition at ground level.

Materiality and finishes

The balance of glazing to masonry is successful and reinforces the architectural intent. It is sympathetic to the context and local character.

Environmental performance

The reduction in glazing (27%) and integral shading provided by the structure and façade articulation improve the environmental performance of the building and its ability to achieve a 5 Star Green Star rating.

Ground Plane and Activation

The station entry and OSD entries have been clearly articulated and separated. Activation has been maximised addressing both the street and station entry. The ground plane has been well detailed with high quality materials and provides interest, articulation and clear views into the building.

Neighbours

The scale and materiality is appropriate to the context. The brick façade has been returned on the northern façade to reinforce the masonry character of the building and accommodate possible setbacks to the proposed adjacent development.

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The following elements require further refinement to ensure design excellence:

Landscape maintenance plan

A landscape maintenance plan should be prepared to ensure the planter boxes at roof level and above the projecting windows are accessible and regularly maintained

• Sample Board

A sample board is requested for review by the DRP either during construction or the next phase of design development

Yours sincerely,

Abbie Galvin

NSW Government Architect LFRAIA

Sydney Metro DRP Chair

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