

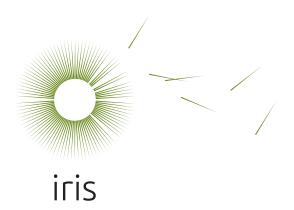


Major civil construction between The Bays and Sydney CBD

Environmental Impact Statement 2021

Technical Paper 5

Landscape and visual impact assessment



Sydney Metro West Major civil construction work between The Bays and Sydney CBD

Technical Paper 5: Landscape and Visual Impact Assessment



October 2021

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ABBREVIATIONS & GLOSSARY

Abbreviations

Abbreviations

Abbreviations	Definition
CBD	Central Business District
DCP	Development Control Plan
LEP	Local Environmental Plan
LSPS	Local Strategic Planning Statement
s170	Listed under Section 170 of the Heritage Act 1977
SEPP	State Environmental Planning Policy

Glossary

Glossary

Term	Definition
Accessibility	A public transport customer's ability to reach their destination unhindered and as independently as possible. Includes compliance with relevant disability standards.
Amenity	'The pleasantness of a place as conveyed by desirable attributes including visual, noise, odour etc.' (Australian Institute of Landscape Architects QLD, 2018)
Ancillary infrastructure	Includes the services facilities and traction substations.
Canopy (Urban canopy)	'Urban canopy: the layer of leaves, branches, and stems of trees that cover the ground when viewed from above.' (Office of the Government Architect NSW, 2017)
Construction site	The construction site is an area of land required to construct this proposal, including:
	The Bays tunnel launch and support site (which comprises part of the approved The Bays Station construction site)
	Pyrmont Station western construction site
	Pyrmont Station eastern construction site
	Hunter Street Station (Sydney CBD) western construction site
	Hunter Street Station (Sydney CBD) eastern construction site.
	Construction sites would be contained within the future operational station footprints for Pyrmont Station and Hunter Street Station (Sydney CBD) and may include site offices, amenities, workshops, material and plant storage areas, laydown areas, concrete batching plant etc. These footprints include the land that would be occupied permanently by the future station buildings and associated infrastructure/work, which would be subject to a separate assessment and approval. Additional areas may be required to support excavation work and to provide staff facilities and parking. These additional areas would be determined as part of further design development.
Glare	'Condition of vision in which there is discomfort or a reduction in ability to see, or both, caused by an unsuitable distribution or range of luminance, or to extreme contrasts in the field of vision.' (AS4282:2019)
Landscape	'All aspects of a tract of land, including landform, vegetation, buildings, villages, towns, cities and infrastructure.' (Transport for NSW, 2020)
Landscape and visual study area	Extends beyond the site to include the visual catchment of this proposal, adjacent open spaces and public realm, and areas of the landscape that provide a setting for the area.
Landscape character	The 'combined quality of built, natural and cultural aspects which make up an area and provide its unique sense of place'. (Transport for NSW, 2020)
Landscape character zone (or area)	'An area of landscape with similar properties or strongly defined spatial qualities, distinct from areas immediately nearby.' (Transport for NSW, 2020)
Legibility	The extent to which an urban environment can be easily understood. Legibility is enhanced through the provision of landmarks, clearly defined visual boundaries and other wayfinding elements.
Magnitude	Magnitude is the 'measurement of the scale, form and character of a development proposal when compared to the existing condition. In the case of visual assessment this also relates to how far the proposal is from the viewer.' (Transport for NSW, 2020)
Out of hours works	Defined as works outside standard construction hours (i.e. outside of 7am to 6pm Monday to Friday, 8am to 1pm Saturday and no work on Sundays/public holidays).
Permeability	The extent to which an urban area provides for ease of movement and connections between places.
Public realm	Streets, spaces and places. (Office of the Government Architect NSW, 2016).

ABBREVIATIONS & GLOSSARY

Glossary

Glossary

Term	Definition
Rail corridor (or corridor)	This area includes all elements within the Sydney Trains or Sydney Metro land used for the purposes of a railway. The rail corridor includes the permanent way, cuttings and embankments, overhead lines, signaling equipment, vegetation etc.
Sense of place	Is the intangible qualities and character of a place, interpreted and valued by people.
Sensitivity	'Susceptibility of a landscape or receptor to accommodate change without losing valued attributes.' (Australian Institute of Landscape Architects QLD, 2018)
	The sensitivity of a landscape character zone or view is <i>'its capacity to absorb change'</i> . (Transport for NSW, 2020)
Sky glow	'The brightening of the night sky that results from radiation (visible and non-visible), scattered from the constituents of the atmosphere (gaseous, molecules, aerosols and particulate matter), in the direction of observation.' It comprises Natural sky glow and artificial sky glow. (AS4282:2019)
Spill light	'Light emitted by a lighting installation that falls outside of the design area. Spill light may or may not be obtrusive depending on what it affects' (AS4282:2019)
State Significant Precincts SEPP	State Environmental Planning Policy (State Significant Precincts) 2005
Urban design	'Urban design is concerned with the arrangement, appearance and function of our suburbs, towns and cities. It is both a process and an outcome of creating localities in which people live, engage with each other, and the physical place around them. Urban design involves many different disciplines including planning, development, architecture, landscape architecture, engineering, law and finance.' (Urban Design Protocol, 2011)
Values	'Any aspect of landscape or views people consider to be important. Landscape and visual values may be reflected in local, state or federal planning regulations, other published documents or be established through community consultation and engagement, or as professionally assessed.' (Australian Institute of Landscape Architects QLD, 2018)
View	'Any sight, prospect or field of vision as seen from a place, and may be wide or narrow, partial or full, pleasant or unattractive, distinctive or nondescript, and may include background, mid ground and/or foreground elements or features.' (Australian Institute of Landscape Architects QLD, 2018)
Viewpoint	'The specific location of a view, typically used for assessment purposes.' (Australian Institute of Landscape Architects QLD, 2018)
Visual absorption capacity	'The potential for a landscape or scene to absorb a particular change without a noticeable loss of valued attributes.' (Australian Institute of Landscape Architects QLD, 2018)

EXECUTIVE SUMMARY

Overview

Sydney Metro West will double rail capacity between Greater Parramatta and the Sydney CBD, transforming Sydney for generations to come.

The once-in-a-century infrastructure investment will have a target travel time of about 20 minutes between Parramatta and the Sydney CBD, link new communities to rail services and support employment growth and housing supply.

The planning process for Sydney Metro West is being assessed as a staged infrastructure application under section 5.20 of the Environment Planning and Assessment Act 1979 (EP&A Act).

Stage 2 of the planning approval process (this proposal) includes all major civil construction work including station excavation and tunnelling between The Bays and Sydney CBD.

Where acoustic measures are proposed, the assessment has assumed the placement of an acoustic shed to consider the likely worst case visual impact. Where no acoustic shed is required, acoustic measures of a similar or smaller scale may be implemented, as required.

This proposal is subject to further design development, and changes may be made during the ongoing design which take into account the outcomes of community and stakeholder engagement and environmental field investigations. The construction works proposed are temporary in nature, that is, they would occur for around three years, prior to subsequent stages of other construction activities and operation of the metro service and stations.

This technical paper provides an assessment of the landscape and visual impacts of this proposal. This includes all works that would be seen on the surface and within the construction footprint during construction.

Approach to this landscape and visual impact assessment

The assessment considers a 'study area' which extends beyond the construction footprint to include the visual catchment of this proposal and adjacent public realm areas. This technical paper assesses the construction sites from west to east. These construction sites include three stations, The Bays, Pyrmont and Hunter Street (Sydney CBD).

This assessment identifies the potential landscape and visual impact of this proposal during the day and at night for each of these construction sites, for the period of construction.

Identified potential landscape and visual impacts

The following section summarises the potential landscape and visual impact that is expected at each construction site.

The Bays tunnel launch and support site Landscape impact

There would be a **negligible landscape impact** on White Bay and the Glebe Island portside industrial and commercial areas. This area is highly modified, and the location of considerable construction activity associated with a number of major infrastructure projects, including WestConnex Rozelle Interchange and Western Harbour Tunnel. This area has limited public access and there would be minimal opportunity for any impact on the use of adjacent areas. The changes as a result of this proposal would be contained and localised, and consistent in character with the surrounding industrial landscape and projects under construction.

Visual impact

The potential visual impacts associated with The Bays tunnel launch and support site are as follows:

- Minor adverse visual impact on views south from Mansfield Street open space. While the tunnel launch and support site would extend across a large portion of these views, the construction work would be seen in the context of the surrounding industrial landscape and other construction activity.
- Minor adverse visual impact in views from the Anzac Bridge Access Road shared use path. From this newly constructed pathway, there would be unobstructed views across the tunnel launch and support site, seen in close proximity, with work potentially obstructing views to the harbour and important visual features such as the Harbour Bridge.
- Negligible visual impact on views from Peacock Point Reserve in Balmain East and Barangaroo Reserve, due to the distance and visual compatibility of the construction work with the character of these views.
- Negligible visual impact on views from Hornsey Street, Rozelle, as while this proposal would intensify the construction character of this view, it would be consistent in character with the surrounding portside industrial areas of Glebe and White Bay.
- Negligible visual impact at night on The Bays tunnel launch and support site as the lighting would be set back from the nearest residential areas, and consistent in character with the existing uses on the construction site and largely absorbed into the existing brightly lit setting.

Pyrmont Station construction sites

Landscape impact

Pyrmont Station western construction site

The potential landscape impacts associated with the Pyrmont Station western construction site are as follows:

- Minor adverse landscape impact on Pyrmont Street and Pyrmont Bridge Road streetscapes in the vicinity of the construction site due to the loss of a somewhat prominent corner building which contributes to the visual character of the adjacent streets.
- Minor adverse landscape impact on the Paternoster Row laneway due to the break in the continuity of built form in this area, reducing the activation of this section of the street with the proposed acoustic shed having a simple façade with less articulation and variety of materials.
- Negligible potential overshadowing of residential properties at the Pyrmont Station western construction site due to the location of the construction site to the south of adjoining residential properties and separation of properties to the east, south and west by streets.

Pyrmont Station eastern construction site

The potential landscape impacts associated with the Pyrmont Station eastern construction site are as follows:

- Minor adverse landscape impact on the Union Street, Edward Street and Pyrmont Bridge Road streetscapes in the vicinity of the construction site due to the loss of street trees, reduction in streetscape activation and the amenity of the adjacent footpaths.
- **Negligible** potential overshadowing of residential properties at the Pyrmont Station eastern construction site due to the separation of the construction site from residential areas to the south by the wide Pyrmont Bridge Road corridor, and properties to the west by Edward Street.

EXECUTIVE SUMMARY

Visual impact:

Pyrmont Station western construction site

The potential visual impacts associated with the Pyrmont Station western construction site are as follows:

- Minor adverse visual impact from Paternoster Row, Pyrmont Bridge Road and Pyrmont Street due to the scale of the construction activity seen in close proximity, the removal of a somewhat prominent corner building and scale of the proposed acoustic shed on this locally prominent site and adjacent to the small Victorian Terraces on Pyrmont Street.
- Negligible visual impact at night on the setting of the Pyrmont Station western construction sites as the acoustic sheds would contain much of the lighting required for construction activity and any additional lighting would be readily absorbed into the surrounding area of medium district brightness.

Pyrmont Station eastern construction site

The potential visual impacts associated with the Pyrmont Station eastern construction site are as follows:

- Moderate adverse visual impact in views from the corner of Union Street and Pyrmont Bridge Road due to the scale of the works and proximity to this location.
- Moderate adverse visual impact in views from Pyrmont Bridge as while there would be only a noticeable change in this view due to the removal of vegetation and scale of the acoustic shed, this is a location of higher visual sensitivity.
- Moderate adverse visual impact would be experienced in views along Union Street due to the scale of the works and the removal of several existing mature street trees.

- Minor adverse visual impact in views from Edward Street and Pyrmont Bridge Road due to the size and vertical scale of the acoustic shed, and loss of some vegetation from within the construction site, and presence of construction vehicles on surrounding roads.
- **Minor adverse visual impact** from the residential properties on Harwood Street as only a small part of the construction site would be visible from this location.
- Negligible visual impact due to the Pyrmont Station construction site power supply route due to the small scale of these works.
- Negligible visual impact at night on the setting of the Pyrmont Station eastern construction sites as the acoustic sheds would contain much of the lighting required for construction activity and any additional lighting would be readily absorbed into the surrounding area of medium district brightness.

Hunter Street Station (Sydney CBD) construction sites

Landscape impact:

Hunter Street Station (Sydney CBD) western construction site

There would be a **moderate adverse landscape impact** on the George and Hunter Street streetscapes as while there would not be a direct impact on George Street, and the former Skinners Family Hotel would remain, there would be a large break in the continuity of the built form and reduction in street level activation. There is no acoustic shed proposed and there would be no potential for an overshadowing impact at this construction site.

Hunter Street Station (Sydney CBD) eastern construction site

There would be a **minor adverse landscape impact** on Richard Johnson Square and the Bligh, Hunter and O'Connell Street streetscapes. While there would be no direct impact on Richard Johnson Square, the appeal of this square as a meeting place and as a breakout space would be reduced due to the sites proximity to major construction activity. The streetscapes adjoining the site would also be altered by the creation of a large break in the continuity of the built form, the removal of street trees and effect of the construction activity on pedestrian circulation and amenity.

Visual impact:

Hunter Street Station (Sydney CBD) western construction site

There would be a moderate adverse visual impact from the nearby Sydney Light Rail Wynyard stop and George Street due to the scale and proximity of the construction activity seen from a location of regional visual sensitivity. Otherwise, there would be minor adverse visual impacts on views from George and Margaret Streets, and Hunter and Hamilton streets due to the scale of the works, particularly the demolition of the tall commercial buildings within the construction site.

Hunter Street Station (Sydney CBD) eastern construction site

There would be a minor adverse visual impact in views from locations along Hunter, Pitt, Castlereagh and Bligh streets. While there would be substantial work undertaken at this site, it would be consistent with the scale of the activity at the existing Sydney Metro City & Southwest Bligh Street tunnelling support site, which is not intrusive in this view, and would be largely absorbed into the densely urban setting. At night, there would be a negligible visual impact on the setting of the Hunter Street Station (Sydney CBD) construction sites as the works would be generally in character with the nearby brightly lit facilities from buildings, and the associated traffi volumes that occur in the vicinity of the site Any additional light sources and skyglow would generally be absorbed into the existing brightly lit night scene at this location.

Mitigation measures

A range of mitigation measures have been developed that would avoid, reduce and manage the identified potentialadverse landscape and visual impacts resulting from this proposal. These include measures to be implemented during construction such as:

- The location of elements within construction sites to minimise visual impact
- Identification of opportunities to retain and protect existing street trees during construction planning; their protection in accordance with Australian Standards; and the replacement of trees to achieve no net loss in tree numbers and/or canopy in proximity to the site as a minimum in the long term
- The design of lighting would minimise glare and light spill on adjacent receivers
- The design and maintenance of construction site hoarding (including prompt removal of graffiti), and the inclusion of public art on hoardings would be considered in high pedestrian locations. All structures would be finished in a colour which aims to minimise their visual impact
- The provision of additional trees would be undertaken in consultation with the relevant local council
- Opportunities to minimise visual amenity and landscape character impact on Richard Johnson Square would be investigated, such as artwork a green wall or architectural treatment of the construction site boundary.

1. INTRODUCTION

1.1 Sydney Metro West

1.1 Sydney Metro West

Sydney Metro West will double rail capacity between Greater Parramatta and the Sydney CBD, transforming Sydney for generations to come.

The once-in-a-century infrastructure investment will have a target travel time of about 20 minutes between Parramatta and the Sydney CBD, link new communities to rail services and support employment growth and housing supply.

Stations have been confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont and Hunter Street, in the Sydney CBD. The indicative locations of the proposed alignment, stations and the main elements of operational ancillary infrastructure are shown in Figure 1-1.

The planning process for Sydney Metro West is being assessed as a staged infrastructure application under section 5.20 of the *Environment Planning and Assessment Act* 1979.

The Sydney Metro West Concept and major civil construction between Westmead and The Bays (Stage 1 of the planning approval process for Sydney Metro West), application number SSI-10038, were approved on 11 March 2021.

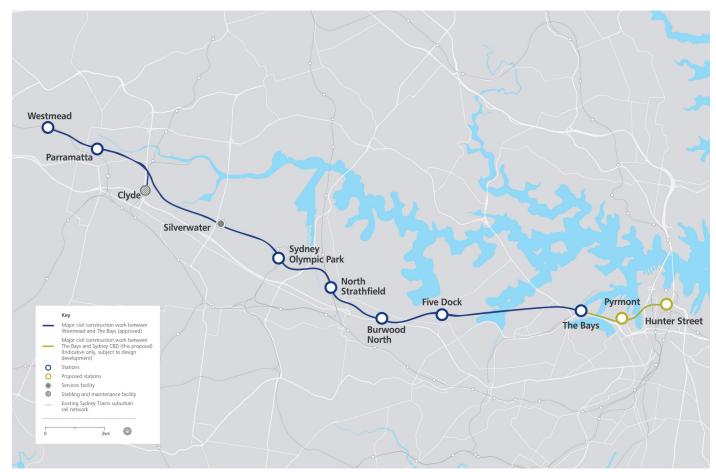


FIGURE 1-1: SYDNEY METRO WEST

1.1 Overview of the proposal

The Concept includes:

- Construction and operation of new passenger rail infrastructure between Westmead and Sydney CBD, including:
- Tunnels, stations (including surrounding areas) and associated rail facilities
- Stabling and maintenance facilities (including associated underground and overground connections to tunnels)
- Modification of existing rail infrastructure (including stations and surrounding areas)
- Ancillary development.

Major civil construction work for Sydney Metro West between Westmead and The Bays (Stage 1 of the planning approval process) includes:

- Tunnel excavation including tunnel support activities between Westmead and The Bays
- Station excavation for new metro stations at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock and The Bays
- Shaft excavation for services facilities
- Civil work for the stabling and maintenance facility at Clyde.

Stage 2 of the planning approval process (this proposal) includes all major civil construction work including station excavation and tunnelling between The Bays and Sydney CBD.

Future planning applications for Sydney Metro West will include tunnel fit-out, construction of stations, ancillary facilities and station precincts, and operation and maintenance of the Sydney Metro West line, between Westmead and Sydney CBD. The associated potential impacts are being assessed and will be presented within the Environmental Impact Statement currently being prepared for 'Sydney Metro West - Rail infrastructure, stations, precincts and operations' (Stage 3 of the planning approval process for Sydney Metro West). Sydney Metro West- Rail infrastructure, stations, precincts and operations have been assessed

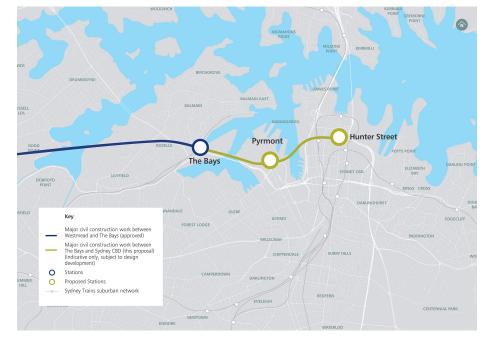


FIGURE 1-2: OVERVIEW OF SYDNEY METRO WEST BETWEEN THE BAYS AND SYDNEY CBD

in this Environmental Impact Statement only in relation to potential cumulative impacts with this proposal, where relevant.

1.2 Overview of the proposal

This proposal would be located largely underground in twin tunnels. Indicative locations of the proposed alignment and stations are shown in Figure 1-2.

The proposed major civil construction work between The Bays and Sydney CBD would include:

- Enabling work such as demolition, utility supply to construction sites, utility adjustments, and modifications to the existing transport network
- Tunnel excavation including tunnel support activities
- Station excavation for new metro stations at Pyrmont and at Hunter Street, in the Sydney CBD.

The surface construction work and shaft excavation are intended to occur across a period of about three years.

1. INTRODUCTION

1.3 Purpose and scope of this technical paper

The proposal is further described in in Chapter 5 (Project description) of the Environmental Impact Statement.

Components of this proposal are subject to further design, and changes may be made during the ongoing design which take into account the outcomes of community and stakeholder engagement and environmental field investigations. For example, during future detailed construction planning, further investigations will be undertaken to determine whether some of the street trees identified for removal could be retained as described in Chapter 9 (Mitigation measures). Nevertheless, this landscape and visual impact assessment has been carried out based on the worst-case scenario, which has assumed the removal of all three trees

It is important to note that this description states that The Bays Station construction site has been approved as part of the Sydney Metro West Environmental Impact Statement – Westmead to The Bays and Sydney CBD (Sydney Metro, 2020a).

This included the use of the site to:

- Carry out the excavation of The Bays Station
- Launch and support two tunnel boring machines for the drive west to the Sydney Olympic Park metro station construction site.

The Bays Station construction site is being established under the existing approval.

This technical report only assesses the proposed use of the eastern and southern part of The Bays Station construction site to launch and support two tunnel boring machines for the drive east to the proposed Hunter Street Station (Sydney CBD) construction sites. There would be minimal surface ground disturbance associated with this work.

1.3 Purpose and scope of this technical paper

Technical paper 5 (Landscape and visual impact assessment), is one of a number of technical papers that form part of the Environmental Impact Statement for major civil construction work between The Bays and Sydney CBD. The purpose of this technical paper is to identify and assess the potential impacts of this proposal in relation to landscape character and visual amenity. It responds directly to the Secretary's Environmental Assessment Requirements outlined in Section 1.4.

The assessment considers a landscape and visual 'study area' which extends beyond the construction footprint to include the visual catchment of this proposal and adjacent public realm areas. This technical paper assesses the construction footprint from west to east and divides it into construction sites for the purposes of this assessment. These construction sites are:

- Pyrmont Station construction sites
- Hunter Street Station (Sydney CBD) construction sites.

The objectives of this technical paper include:

- Provide a description of the existing environment surrounding each of the construction sites including key landscape and visual features
- Assess landscape impacts
- Assess day-time and night-time visual impacts
- Assess cumulative landscape and visual impacts including consideration of this proposal with other projects that may interact with this proposal in the future
- Identify measures to mitigate landscape and visual impacts.

1.4 Secretary's Environmental Assessment Requirements

1.4 Secretary's Environmental Assessment Requirements

The Secretary's Environmental Assessment Requirements were issued on 7 July 2021. The requirements specific to Landscape and Visual Amenity, and where these requirements are assessed in this technical paper, are outlined in Table 1-1.

In support of seeking the Secretary's Environmental Assessment Requirements, the Sydney Metro West Scoping Report – Major civil construction from The Bays to Sydney CBD (Sydney Metro, 2021) identified a number of investigations and further assessments relevant to this technical paper. How the technical paper addresses these matters is provided in Table 1-2.

1.5 Structure of this technical paper

The remainder of this technical paper is structured as follows:

- Chapter 2 description of the methodology used for the assessment
- Chapter 3 description of the legislative and policy framework
- Chapter 4 description of proposal components and character
- Chapter 5 The Bays tunnel launch and support site landscape and visual impact assessment
- Chapter 6 Pyrmont Station landscape and visual impact assessment
- Chapter 7 Hunter Street Station (Sydney CBD) landscape and visual impact assessment
- Chapter 8 description of cumulative impacts
- Chapter 9 identification of mitigation measures.

TABLE 1-1 SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS – LANDSCAPE CHARACTER AND VISUAL AMENITY

Secretary's Environmental Assessment Requirements	Where addressed
Design Place and Movement	
Visual, access, connectivity and related amenity impacts of construction including on streetscapes, key sites and buildings (including existing landscape works, greenspace and tree canopy).	Sections 5 to 7 See also technical Paper 1: Traffic and transport and Technical Paper 6: Social Impact Assessment.
Open space and tree impacts, including:	
• Estimating the number of trees to be cleared that will not be covered by a biodiversity offset strategy; and	Sections 5 to 7 See also Chapter 18 (Biodiversity) of the Environmental Impact Statement
 for areas where trees are to be cleared before construction, investigate means to increase the number of trees and canopy within proximity of the impacted areas by providing additional planting before construction. 	Section 9 See also Chapter 18 (Biodiversity) of the Environmental Impact Statement

TABLE 1-2 INVESTIGATIONS AND FURTHER ASSESSMENTS IDENTIFIED IN SCOPING REPORT – LANDSCAPE CHARACTER AND VISUAL AMENITY (SYDNEY METRO, 2021)

Investigations and further assessments	Where addressed
Description of the visual character and unique qualities of the area around the proposed work including streetscapes, key sites and buildings, existing landscape works, greenspace and tree canopy	Section 5.3, 6.3, 7.3
Consideration of the heritage and other social values of the site to establish the potential sensitivity of receivers and visual absorption capacity	Sections 5.1, 5.2, 7.2
Identification of the visual impacts of the proposal during daytime and night-time conditions (including lighting)	Sections 5.5, 5.6, 6.5, 6.6, 7.5, 7.6
Assessment of the potential temporary impacts of work covered by this proposal on trees, including an assessment of the number of street trees to be cleared and loss of canopy cover	Sections 5.5, 5.6, 6.5, 6.6, 7.5, 7.6
Identification of measures to avoid, minimise and/or mitigate potential impacts.	Section 9

2. ASSESSMENT METHODOLOGY

2.1 Guidance for landscape and visual impact assessment

2.1 Guidance for landscape and visual impact assessment

A range of guidance is available for the assessment of landscape and visual impacts. In New South Wales the following are typically referred to:

- Guidance note EIA-N04 Guidelines for Landscape Character and Visual Impact Assessment, Transport for NSW, 2020
- The Guidance for Landscape and Visual Impact Assessment, Third Edition, prepared by the Landscape Institute and Institute of Environmental Management & Assessment, UK, 2013
- The Guidance Note for Landscape and Visual Assessment, Australian Institute of Landscape Architects Queensland, 2018.

The methodology used for this assessment is described below and is consistent with the direction offered by these documents.

2.2 Method

A detailed landscape and visual assessment for this proposal has been carried out for each site in the following steps:

- A review of the relevant legislative and policy framework
- Identification of the existing environmental conditions
- Description of the components and character of this proposal
- An assessment of landscape character impact during construction
- An assessment of the daytime visual impact during construction
- An assessment of night-time visual impact during construction
- Identification of mitigation measures.

These steps are described in the following sections.

2.2.1 Legislative and policy framework

A range of legislation and policies from International, Federal, State and Local Government agencies provide guidance for development within the study area. Additionally, numerous masterplans and guidance documents exist, identifying ambitions for the future land use, built form and the desired character of the study area.

The relevant requirements which apply across the study area have been summarised in Chapter 3. Further site specific requirements have been summarised in the relevant chapter for each construction site.

2.2.2 Existing environment

The key landscape and visual features of each site have been identified to describe the existing environment of the study area. A site visit was carried out in May of 2021, and the existing character, landscape elements and views were recorded with photographs. This included the updating of views at The Bays. For the purposes of this assessment, an indicative number of trees on each site was estimated based on site observations and interpretation of aerial photography.

The landscape and visual conditions of the study area are evolving and changing over time and future development is redefining land use and the character of the study area in some locations. Where this is occurring, the future character and conditions of each location have been identified. This includes developments with a high level of certainty, including those currently under construction or with planning approval.

2.2 Method

2.2.3 Description of the character and components of this proposal

A description of the character and a summary of the key components and construction works this proposal is included. This summary describes the features that would influence the level of landscape and visual impact at each construction site. This includes the elements and works that would be visible throughout the various stages of construction during the day and at night.

2.2.4 Landscape impact assessment

Landscape as defined by Transport for NSW (2020) is ... 'All aspects of a tract of land, including landform, vegetation, buildings, villages, towns, cities and infrastructure.' It also defines landscape character as the ... 'combined quality of built, natural and cultural aspects which make up an area and provide its unique sense of place'. In the urban context, landscape refers not only to trees and areas of open space, but also the character and function of a place. It includes all elements within the public realm and the interrelationship between these elements and the people who use it.

A range of landscape elements could be directly or indirectly impacted by this proposal. To address these impacts, the landscape values of places within and surrounding each site were assessed. These include parkland, public plazas and streetscapes.

The landscape assessment was carried out by identifying the sensitivity of each landscape element and the likely magnitude of change expected as a result of this proposal. These factors were combined to make an overall assessment of the level of impact.

Whilst there are no statutory requirements for the protection of solar access for State significant infrastructure projects (such as this proposal), an assessment of overshadowing has been undertaken to consider this issue, using local planning guidance (outlined in section 2.2), to assess the potential

TABLE 2-1: LANDSCAPE SENSITIVITY LEVELS

Landscape sensitivity	Description
National	Landscape feature protected under national legislation or international policy, e.g. The Governors' Domain and Civic Precinct which is on the National Heritage List, and forecourt of the Sydney Opera House which is World Heritage listed.
State	Landscape feature that is heavily used and/or is iconic to the State, e.g. Martin Place, Hyde Park, Barangaroo Headland Park.
Regional	Landscape feature that is heavily used and valued by residents of a major portion of a city or a non-metropolitan region, e.g. Tumbalong Park Darling Harbour.
Local	Landscape feature valued and experienced by concentrations of residents and/ or local recreational users. Provides a considerable service to the community. For example, it provides a place for local gathering, recreation, sport, street use by cafes and/or shade and shelter in an exposed environment e.g. Pyrmont Bay Park.
Neighbourhood	Landscape feature valued and appreciated primarily by a small number of residents e.g. street trees in a local street. Provides a noticeable service to the community. For example, it provides a seat or resting place, passive recreation and/or some shade and shelter in a local street.

TABLE 2-2: LANDSCAPE MAGNITUDE OF CHANGE LEVELS

overshadowing impact of the proposal (including temporary acoustic sheds) on existing adjacent residential properties.

Landscape sensitivity

Landscape sensitivity refers to the value placed on a landscape element or urban place and the level of service it provides to the community. The sensitivity of a landscape may reflect the frequency and volume of users in a location. It may also be valued for other characteristics such as tranquillity, visual relief and contribution to microclimate. The value of landscapes is often described in local and NSW Government masterplans and planning guidance documents, reflecting the importance of landscape resources to the local, regional and state-wide community.

The sensitivity of landscape features is therefore considered in the broadest context of possible landscapes (refer to Table 2-1), from those of national importance through to those considered to have a neighbourhood landscape importance. Landscape features which are afforded legislative protection are specifically identified in the policy context section of this assessment. There are no landscapes of Aboriginal cultural heritage value that have been identified that would affect the landscape sensitivity levels. A full assessment of the impact of this proposal on Aboriginal cultural heritage values is contained in Technical Paper 4 (Aboriginal cultural heritage assessment report) (Artefact, 2021a). The Non-Aboriginal cultural heritage values of landscapes within the study area have also been considered as they contribute to landscape character and community values. An assessment of the direct impact on Non-Aboriginal heritage items is contained in Technical Paper 3 (Non-Aboriginal heritage impact assessment) (Artefact, 2021b).

Table 2-1 lists the landscape sensitivity levels that applies to this assessment.

2. ASSESSMENT METHODOLOGY

2.2 Method

Landscape magnitude of change	Description
Considerable reduction	Substantial portion of the landscape is changed.
or improvement	This may include substantial changes to vegetation cover (trees and canopy), the area of open space or public realm area, accessibility, permeability, legibility and wayfinding, comfort and amenity, activation and safety, overshadowing, and diversity of the public realm.
Noticeable reduction or	A portion of the landscape is changed.
improvement	This may include some alteration to vegetation cover (trees and canopy), the area of open space or public realm area, accessibility, permeability, legibility and wayfinding, comfort and amenity, activation and safety, overshadowing, and diversity of the public realm.
No perceived reduction or improvement	Either the landscape quality is unchanged or if it is, it is largely mitigated by public realm improvements.
	Does not alter or not noticeably alter the vegetation cover (trees and canopy), the area of open space or public realm area, accessibility, permeability, legibility and wayfinding, comfort and amenity, activation and safety, overshadowing, and diversity of the public realm.

Magnitude of change to the landscape

The changes to the landscape that would occur as a result of this proposal are assigned a magnitude of change level. This considers direct impacts on the landscape such as the removal of trees and tree canopy, open space and public realm areas, as well as indirect impacts, such as changes to the function of an area of open space or the public realm. The magnitude of change can result in adverse or beneficial effects. Table 2-2 lists the magnitude of change levels that applies to this assessment.

The levels described in Table 2-2 have been informed by several national and state policies including:

• The National Urban Design Protocol (Australian Sustainable Built Environment Council, 2011) which is endorsed by the NSW State Government. Its' principles of good urban places have been incorporated into the magnitude levels, these are: enhancing, connected, diverse, enduring, comfortable, vibrant, safe and walkable

- Better Placed: A design led approach: developing an Architecture and Design Policy for New South Wales (Office of the State Government Architect NSW, 2016) as described in Section 3.1.4
- Around the Tracks: Urban Design for Heavy and Light Rail (Transport for NSW, 2016) as described in Section 3.1.3.

Specific note has been made of considerations such as changes to the functioning of footpaths, built form, changes to public art, street trees and canopy, access to parks and open space, overshadowing, as well as the types of activities supported in the public realm where relevant.

2.2.5 Daytime visual impact assessment

This visual impact assessment considers visual amenity as experienced by various people (referred to as receivers) and aims to identify the range of views to the site which may be impacted, including views from residential areas, offices, open space (parks and reserves), public spaces (plazas and squares) and streets.

To address potential impact on visual amenity, assessments were carried out by identifying the existing visual conditions, views that are representative of these conditions, the sensitivity of the view and the magnitude of change expected as a result of this proposal, then making an overall assessment of the level of impact.

Identification of existing visual conditions

For each construction site, several viewpoints were selected to illustrate the visual influence of the site. These represent publicly accessible viewpoints from a range of locations and viewing situations. Particular attention was paid to views from places where viewers are expected to congregate such as plazas, parks, recreation areas, public transport nodes and commercial areas, as well as views to and from listed heritage items.

2.2 Method

Visual sensitivity

Visual sensitivity refers to the nature and duration of views. Locations from which a view would potentially be seen for a longer duration, where there are higher numbers of potential viewers and where visual amenity is important to viewers, can be regarded as having a higher visual sensitivity. In addition, views recognised by local, state or federal planning regulations would, by nature of their recognition in these documents, have a higher sensitivity.

The sensitivity of a viewpoint is considered in the broadest context of possible views, from those of national importance through to those considered to have a neighbourhood visual importance (refer to Table 2-3).

Magnitude of change to views

The magnitude of change describes the extent of change resulting from this proposal and the visual compatibility of these new elements with the surrounding landscape. There are some general principles which determine the ranking of magnitude of change which include elements relating to the view itself such as distance, landform, backdrop, enclosure and contrast. There are also characteristics of this proposal, such as scale, form, line, shape, pattern, colour or texture. The magnitude of change can result in an improvement or reduction in visual amenity.

A high magnitude of change would result if this proposal contrasts strongly with the existing landscape. A low magnitude of change occurs if there is minimal visual contrast and a high level of integration of form, line, shape, pattern, colour or texture between the development and the environment in which it is located.

Table 2-4 lists the terminology used to describe the magnitude of change levels.

TABLE 2-3: VISUAL SENSITIVITY LEVELS - DAYTIME

Visual sensitivity	Description
National	Heavily experienced view to a national icon e.g. view to the Sydney Opera House from Circular Quay or the Domain, including assets such as Lady Macquarie's Chair. There are no nationally sensitive views within this proposal.
State	Heavily experienced view to a feature or landscape that is iconic to the State, e.g. view along the main avenue in Hyde Park, or a view to Sydney Harbour from Observatory Hill.
Regional	Heavily experienced view to a feature or landscape that is iconic to a major portion of a city or a non-metropolitan region, or an important view from an area of regional open space, e.g. Views to Pyrmont Bridge, a Sydney CBD skyline view from Centennial Park.
Local	High quality view experienced by concentrations of residents and/or local recreational users, local commercial areas and/or large numbers of road or rail users. Views with local visual features and/or landmarks. For example, a view to Chifley Square.
Neighbourhood	Viewers whose interest is not specifically focused on views e.g. workers. Views where visual amenity is appreciated by a small number of isolated residents, not particularly valued by the wider community.

TABLE 2-4: VISUAL MAGNITUDE OF CHANGE LEVELS – DAYTIME

Visual magnitude of change	Description
Considerable	A substantial part of the view is altered.
reduction or	This proposal contrasts substantially with the surrounding landscape.
improvement	
Noticeable reduction	A small to moderate part of the view is altered.
or improvement	This proposal contrasts with the surrounding landscape.
No perceived	Either the view is unchanged or if it is, the change in the view is unlikely to
reduction or	result in a change in the amenity of the view.
improvement	This proposal does not contrast with the surrounding landscape.

2. ASSESSMENT METHODOLOGY

2.2 Method

2.2.6 Assessment of night-time visual impact

The assessment of night-time impact has been carried out with a similar methodology to the daytime assessment. However, the assessment also draws upon the guidance contained within AS4282:2019 Control of the obtrusive effects of outdoor lighting.

AS4282:2019 identifies four main potential effects of lighting, which are, the effects on residents, transport system users, transport signalling systems and astronomical observations. Of relevance to this assessment is the effects of lighting on the visual amenity of residents and transport system users.

AS4282:2019 also identifies environmental zones to categorise night-time landscape settings. Using these broad categories allows for an assessment to be made with the detail available at the planning approval application stage of the proposal and is therefore the basis for the method applied to the nighttime visual assessment contained within this technical paper.

The method for night-time visual assessment is as follows.

Night-time visual sensitivity

The environmental zone (defined in AS4282:2019) which best describes the existing night-time visual condition for each landscape character area has been selected. These zones are typical night-time settings and reflect the predominant light levels likely, based on observations of land use and lighting structures. Each environmental zone has been assigned a level of sensitivity as described in Table 2-5.

Night-time visual magnitude of change

Following the sensitivity assessment, the magnitude of change that would be expected within the study area is then identified. These changes are described, as relevant, in terms of:

- Sky glow the brightening of the night sky
- Glare condition of vision in which there is discomfort or a reduction in ability to see
- Light spill light emitted by a lighting installation that falls outside of the design area.

These terms are further defined in the glossary of this technical paper and in AS4282:2019.

Table 2-6 lists the terminology used to describe the magnitude of change at night.

2.2 Method

	Environmental Zones (AS42	82:2019)
Sensitivity level	Description	Examples
Very high	A0: Intrinsically dark	UNESCO Starlight Reserve
		IDA Dark Sky Parks
		Major optical observatories
		No road lighting – unless specifically required by the road controlling authority
High	A1: Dark	Relatively uninhabited rural areas
		No road lighting – unless specifically required by the road controlling authority
Moderate	A2: Low district brightness	Sparsely inhabited rural and semi-rural areas
Low	A3: Medium district brightness	Suburban areas in towns and cities
Very low	A4: High district brightness	Town and city centres and other commercial areas
	areas	Residential areas abutting commercial areas

TABLE 2-5: ENVIRONMENTAL ZONE SENSITIVITY - NIGHT-TIME

TABLE 2-6: VISUAL MAGNITUDE OF CHANGE LEVELS – NIGHT-TIME

Visual magnitude of change at night	Description
Considerable reduction or improvement	Substantial change to the level of skyglow, glare or light intrusion would be expected.
	The lighting of this proposal contrasts substantially with the surrounding landscape at night.
Noticeable reduction or improvement	Alteration to the level of skyglow, glare or light intrusion would be clearly visible. The lighting of this proposal contrasts with the surrounding landscape at
No perceived reduction or improvement	night. Either the level of skyglow, glare and light intrusion is unchanged or if it is altered, the change is generally unlikely to be perceived by viewers. The lighting of proposal does not contrast with the surrounding landscape at night.

2. ASSESSMENT METHODOLOGY

2.2 Method

2.2.7 Assigning impact levels

An assessment of landscape and visual impact has been made by combining the landscape or visual sensitivity and landscape or visual magnitude of change levels for each element and assigning an impact level (refer to Table 2-7).

Assessment of night-time visual impact has been made by combining the visual sensitivity of the environmental zone with the night-time visual magnitude of change for each area generally and assigning an impact level (refer to Table 2-8).

TABLE 2-7 LANDSCAPE AND VISUAL IMPACT LEVELS

		Sensitivity							
		National	State	Regional	Local	Neighbourhood			
Magnitude of change	Considerable reduction	Very high adverse	Very high adverse	High adverse	Moderate adverse	Minor adverse			
	Noticeable reduction	Very high adverse	High adverse	Moderate adverse	Minor adverse	Negligible			
	No perceived change	Negligible	Negligible	Negligible	Negligible	Negligible			
	Noticeable improvement	Very high beneficial	High beneficial	Moderate beneficial	Minor beneficial	Negligible			
	Considerable improvement	Very high beneficial	Very high beneficial	High beneficial	Moderate beneficial	Minor beneficial			

TABLE 2-8 NIGHT TIME VISUAL IMPACT LEVELS

		Sensitivity						
		Very high / E0: Intrinsically dark	High / A1: Dark	Moderate / A2: Low district brightness	Low / A3: Medium district brightness	Very low / A4:High district brightness		
	Considerable reduction	Very high adverse	Very high adverse	High adverse	Moderate adverse	Minor adverse		
of change	Noticeable reduction	Very high adverse	High adverse	Moderate adverse	Minor adverse	Negligible		
Magnitude of ch	No perceived change	Negligible	Negligible	Negligible	Negligible	Negligible		
	Noticeable improvement	Very high beneficial	High beneficial	Moderate beneficial	Minor beneficial	Negligible		
	Considerable improvement	Very high beneficial	Very high beneficial	High beneficial	Moderate beneficial	Minor beneficial		

2.3 Avoidance and minimisation of impacts

2.3 Avoidance and minimisation of impacts

The design development of Stage 2 has included a focus on avoiding or minimising potential landscape and visual amenity impacts. This has included:

 Design of construction footprints at all sites to be broadly consistent within the area that would be required for the operational footprint where feasible and reasonable. This would minimise the unnecessary disturbance of land and the subsequent landscape and visual impacts

Throughout the assessment there has been an acknowledgment of measures which have been integrated into the proposal design that minimise landscape and visual impacts.

Following the assessment of landscape and visual impact, measures to further mitigate potential impacts have been identified. These measures include opportunities for mitigation to address daytime and night-time impacts.

2.4 Cumulative impacts

An assessment of cumulative landscape and visual impacts has been undertaken. This includes consideration of this proposal with other projects that may interact with this proposal in the future. The developments which have the potential to have a cumulative impact with the Project are identified in Appendix G (Cumulative assessment methodology) of the Environmental Impact Statement. For this technical paper the cumulative landscape and visual impacts of the following (approved) projects have been considered:

The Bays:

- Major civil construction work between Westmead and The Bays
- WestConnex Rozelle Interchange Sydney Metro City & Southwest
- The new Sydney Fish Market
- Western Harbour Tunnel and Warringah Freeway Upgrade

Pyrmont:

The new Sydney Fish Market

Sydney CBD:

- Sydney Metro City & Southwest
- 50-52 Phillip Street New Hotel
- One Sydney Harbour
- Sydney Metro- Martin Place Over Station
 Development
- Residential apartments at 111-112 Castlereagh and 65-77 Market Street.

The cumulative landscape and visual assessment will identify impacts during construction and operation of this proposal, during the day and night.

3. LEGISLATIVE AND POLICY FRAMEWORK

3.1 State legislation and planning guidance

The legislative and policy context in the Sydney Metro West Environmental Impact Statement – Westmead to The Bays and Sydney CBD (Sydney Metro, 2020a) would broadly apply to the landscape and visual impact assessment for the major civil construction work between The Bays and Sydney CBD.

The legislation, policy and guidelines that are relevant to this proposal are summarised below.

3.1 State legislation and planning guidance

3.1.1 A Metropolis of Three Cities – the Greater Sydney Region Plan, 2018

This plan (Greater Sydney Commission, 2018) sets a 40-year vision (2016 – 2056) and establishes a 20-year plan to manage growth and change for Greater Sydney in the context of social, economic and environmental matters. It divides Greater Sydney into three regions, including the 'Western Parkland City' (including Penrith, Western Sydney Airport– Badgerys Creek Aerotropolis and Campbelltown –Macarthur), the 'Central River City' (including Greater Parramatta) and the 'Eastern Harbour City' centred around Sydney CBD (Greater Sydney Commission, 2018, p.6).

The role of this plan is to co-ordinate a wholeof-government approach to providing the appropriate infrastructure in the right places to support the growth of three cities. It also intends to provide a coordinated approach to district level planning. The three identified regions ('cities') of Greater Sydney extend across five districts which are the: Western City District, Central City District, Eastern City District, North District and South District.

This proposal is located in the 'Eastern Harbour City' and is identified as a key infrastructure project in the vision for both (Greater Sydney Commission, 2018, p.21). Greater Sydney's 'green infrastructure' including 'urban tree canopy, green ground cover, bushland, waterways, parks and open spaces' (Greater Sydney Commission, 2018, p.6) are valued assets. A target has been set to 'increase tree canopy cover to 40 per cent, up from the current 23 per cent' (Greater Sydney Commission, 2018, Strategy 30.1, p.164). Strategy 25.1 aims to 'protect environmentally sensitive areas of waterways' (Greater Sydney Commission, 2018, p.151) such as Sydney Harbour. The scenic value of landscape is also acknowledged in the plan in Objective 28, including waterways, urban bushland, urban tree canopy and green ground cover, parks and open spaces, which create a 'sense of identity' for Greater Sydney (Greater Sydney Commission, 2018, p.158).

'Views and vistas of ridgelines, waterways and the urban skyline' are also considered to 'help foster distinctive local character' and 'strengthen an appreciation of Greater Sydney's landscape' (Greater Sydney Commission, 2018, p.158). Strategy 28.2 aims to 'enhance and protect views of scenic and cultural landscapes from the public realm' (Greater Sydney Commission, 2018, p.158). Objective 32 aims to connect parks, open spaces, bushland and walking and cycling paths through network of green spaces known as the Greater Sydney Green Grid. Open space along the harbour foreshore 'form the backbone' of the Eastern Harbour City green grid, and 'will be enhanced and complemented by improved connections through tree-lined streets and established urban parks' (Greater Sydney Commission, 2018, p.168).

3.1 International and Commonwealth legislation and policy

3.1.2 Our Greater Sydney 2056 Eastern City District Plan - connecting communities, 2018

The Eastern City District Plan provides a 20year plan to manage growth and implement the Greater Sydney Region Plan at a district level, including the local government areas of Inner West and City of Sydney, in which this proposal would be located. The plan intends to provide a link between local and regional planning and inform local level planning documents. The plan also integrates regional land use, transport and infrastructure initiatives.

The plan is intended to inform local planning strategies and identifies a number of planning priorities and actions consistent with the relevant objectives, strategies and actions in the Greater Sydney Region Plan.

Planning Priority E6 'Creating and renewing great places and local centres, and respecting the District's heritage' includes two key objectives:

- Great places that bring people together (Objective 12)
- Environmental heritage is identified, conserved and enhanced (Objective 13) (Greater Sydney Commission, 2018, p.46).

The District's great places include local and strategic centres, local neighbourhoods and city high-rise areas which exhibit a diversity of character due to the mix of land uses and activities.

Planning Priority E14 'Protecting and improving the health and enjoyment of Sydney Harbour and the District's waterways' aims to protect the coast and waterways (Objective 25). The city waterways are identified as important for shaping the landscape and character of the city and contributing to the city's sense of place. Sydney Harbour is 'one of Greater Sydney's most recognised and valuable assets – it is part of what makes Sydney one of the most attractive and recognisable cities in the world' (Greater Sydney Commission, 2018, p.102). Key actions under Planning Priority E14 include:

- Protect environmentally sensitive areas of waterways and the coastal environment area
- Enhance sustainability and liveability by improving and managing access to waterways, foreshores and the coast for recreation, tourism, cultural events and water-based transport
- Work towards reinstating more natural conditions in highly modified urban waterways (Greater Sydney Commission, 2018, p.104).

Planning Priority E16 'Protecting and enhancing scenic and cultural landscapes' aims to protect scenic and cultural landscapes (Objective 28) and has two key actions:

- Identify and protect scenic and cultural landscapes
- Enhance and protect views of scenic and cultural landscapes from the public realm (Greater Sydney Commission, 2018, p.106).

Planning Priority E17 'Increasing urban tree canopy cover and delivering Green Grid connections' aims to increase urban tree canopy cover (Objective 30) and create a 'green grid which links parks, open spaces, bushland and walking and cycling paths' (Objective 31) (Greater Sydney Commission, 2018, p.107).

Planning Priority E18 'Delivering high quality open space' aims to ensure '*public open space is accessible, protected and enhanced*' (Greater Sydney Commission, 2018, p.112).

3. LEGISLATIVE AND POLICY FRAMEWORK

3.1 State legislation and planning guidance

3.1.3 Around the Tracks: Urban Design for Heavy and Light Rail, Transport for NSW, 2016

The NSW Government is committed to the development of a customer focused transport network to help it achieve its economic, social and environmental objectives. Good urban design is an important part of achieving these objectives. Key urban design objectives for heavy and light rail are described as creating liveable, sustainable and productive places, creating places for people, and optimising investment in heavy and light rail.

This document identifies eight urban design principles for heavy and light rail:

- Draw on a comprehensive site and context analysis to inform the design direction
- Provide value-for-money design solutions that achieve high quality low maintenance architectural and urban design outcomes that have longevity
- Provide connectivity and permeability for pedestrians
- Integrate the project with the surrounding area
- Maximise the amenity of the public domain
- Protect and enhance heritage features and significant trees
- Maximise positive view opportunities
- Design an efficient and functional transport solution which enhances and contributes to local amenity and prosperity.

3.1.4 Better Placed: A design led approach: developing an Architecture and Design Policy for New South Wales, 2018

This document (Office of the State Government Architect NSW, 2016), and the subsequent document Evaluating Good Design (Office of the State Government Architect NSW, 2018) provide detailed urban design principles, including:

- fit- contextual, local and of its place
- Better performance- sustainable, adaptable and durable
- Better for community- inclusive, connected and diverse
- Better for people- safe, comfortable and liveable
- Better working- functional, efficient and fit for purpose
- Better value- creating and adding value
- Better look and feel- engaging, inviting and attractive.

3.1.5 Sydney Green Grid – Spatial Framework and Project Opportunities, 2017

In acknowledging that 'green space is a key hallmark of liveability', the Sydney Green Grid proposes the creation and consolidation of a 'network of high quality green areas that connect town centres, public transport networks and major residential areas' (Office of the State Government Architect NSW, p.7), enhancing open space throughout Metropolitan Sydney.

This is located in the 'Central District', including 'The Bays' and 'Inner West', both 'project opportunity precincts' (Office of the State Government Architect NSW, p.116). Proposed changes to land use in The Bays precinct has the potential to 'allow for additional public open space, active sports facilities and increased foreshore access' (Office of the State Government Architect NSW, p.117); while the urban renewal occurring in the Inner West precinct 'provides a unique opportunity to

3.1 State legislation and planning guidance

help mitigate access and amenity issues associated with Parramatta Road' (Office of the State Government Architect NSW, p.116). The 'Cooks River to Iron Cove GreenWay' is identified as an 'important Green Grid project' opportunity in close proximity to Sydney Metro West, consisting of an 'urban environmental corridor' designed to improve access to active transport and the open space network (Office of the State Government Architect NSW, p.134).

3.1.6 Greener Places – An urban green infrastructure design framework for New South Wales, 2020

This policy is intended to guide the design, planning and delivery of green infrastructure across NSW, including strategically planned, designed, and managed parks, bushland, gardens and tree lined streets to support 'good quality of life in an urban environment' (Office of the State Government Architect NSW, 2020b p.11). Green Infrastructure is considered to be an essential asset. and 'should be as integral to NSW as its roads, rail lines and stormwater pipes' (Office of the State Government Architect NSW, 2020b p.14). This policy identifies the Government's infrastructure and urban renewal projects as an opportunity for the delivery of quality Green Infrastructure.

One of the four key principles to help deliver Green Infrastructure in NSW is the 'connectivity' of green spaces, particularly in and around high-density precincts, including design actions to increase planting along rail corridors and streets. Another principle is 'multifunctionality', which promotes the ability of green infrastructure projects to deliver multiple objectives such as strengthening the '*image and identity*' of a locality whilst improving 'access to open space' (Office of the State Government Architect NSW, 2020b p.36).

3.1.7 Draft Greener Places Design Guide – Open Space for Recreation Urban Tree Canopy Bushland and Waterways, 2020

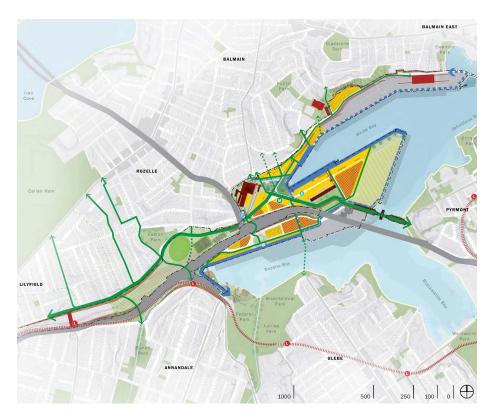
This document provides information on how to design, plan, and implement green infrastructure in urban areas throughout NSW. The major components that make up the green infrastructure network fall into three categories:

- Open space for recreation: green infrastructure for people
- Urban tree canopy: green infrastructure for climate adaptation and resilience, and refers to all trees on public and private land within urban areas
- Bushland and waterways: green infrastructure for habitat and ecological health.

The urban tree canopy guide considers the network of trees in cities to play a 'critical function', and provides an array of benefits, stating: 'trees contribute to attractive urban places, providing seasonal variation and creating memorable landmarks' (Office of the State Government Architect NSW, 2020a p. 30). The target for the Greater Sydney Region is to achieve 40 per cent urban tree canopy cover by 2056, including greater than 15 per cent urban tree canopy cover in CBD areas. The strategies to achieve this include the protection, maintenance and enhancement of existing urban tree canopy, and the creation of an 'interconnected urban tree canopy across NSW' (Office of the State Government Architect NSW, 2020a p. 39).

3. LEGISLATIVE AND POLICY FRAMEWORK

3.1 State legislation and planning guidance





3.1.8 The Bays West Place Strategy, 2021

The urban renewal of land within The Bays was identified as a State Significant Precinct and 'Growth Centre' by the NSW Government in 2017.

The Bays tunnel launch and support site would be located within the 'Bays West' area, which includes White Bay, the former White Bay Power Station, Glebe Island, Rozelle Bay and the former Rozelle Rail Yards, and is currently in the early stages of planning. The Bays West draft 'Place Strategy' for The Bays was released for consultation, to guide the transformation of Bays West into the future. In summary, The Bays West area will: 'build on its natural, cultural, maritime and industrial stories to shape an innovative and sustainable new place for living, recreation and working. New activities, places, connections and destinations will enrich Bays West's character and meaning over time through built form

and public spaces that embrace its natural and cultural heritage' (NSW Department of Planning, Industry and Environment (DPIE), 2021a p.12).

The Place Strategy also contains a Structure Plan (refer to Figure 3-2), which sets out a framework for the future of Bays West. It illustrates the primary land use, open space, and access and movement layout, capitalising on the existing and desired future place character and support its long term renewal. The structure plan marks out areas within the precinct capable of supporting new development, envisioning a 'mixed-use renewal with vibrant and diverse building outcomes'. The structure plan also defines zones with greater height potential, including 'development scale and intensity responsive to existing site characteristics, calibrated to consider amenity impacts to adjacent neighbourhoods and preserve key views'. Public domain zones are typically located to incorporate either natural features or heritage artefacts, 'maximising public benefit and amenity of these elements'. The precinct's harbour foreshore will also be 'progressively unlocked', and a new foreshore promenade established, reclaiming public access and delivering recreation opportunities. The promenade will 'stitch together key public domain zones and connect into the broader harbour foreshore network' (DPIE, 2021a p.57).

The Bays tunnel launch and support site would be located in the 'White Bay Power Station' sub-precinct, which will be the first stage to be delivered of this 20 year Place Strategy (DPIE, 2021a p.23). The power station is considered to be a 'key landmark' and 'an iconic building' that 'helps signify the precinct from afar and acts as a visual marker and gateway on the journey between the Inner West and the CBD' (NSW Department of Planning, Industry and Environment, 2021 p.43). This zone will be a 'key activity centre for the precinct, providing events, services, and infrastructure for existing and new communities'. It will be a 'nexus of connection

3.1 State legislation and planning guidance

between other sub-precincts and the adjacent suburbs, while providing a new regional open space connecting White Bay Power Station and the head of White Bay' (DPIE, 2021a p.59).

Sydney Metro and DPIE will progress master planning for each sub precinct, beginning with the 'White Bay Power Station (and Metro Station) sub-precinct' (including The Bays tunnel launch and support site) which will inform subsequent rezoning of the precinct.

3.1.9 Pyrmont Peninsula Place Strategy, 2020

This strategy provides a 20-year framework that identifies areas that can accommodate future growth in Darling Island, Blackwattle Bay, Tumbalong Park and Ultimo subprecincts, while enabling more gradual growth in the Pirrama, Pyrmont Village and Wentworth Park sub-precincts. The strategy includes measures to protect solar access, heritage and local character, while setting in place other measures, such as identification of additional public benefits and infrastructure to be delivered as development occurs, which will help ensure Pyrmont Peninsula remains a 'great place' to live (NSW Department of Planning, Industry and Environment, 2020 p.15).

The vision for Pyrmont includes ... 'In 2041, the Pyrmont Peninsula will be an innovative, creative and cultural precinct and an engine room of the Eastern Harbour CBD. It will connect to the Innovation Corridor and other innovation and job precincts via Sydney Metro and complement the Sydney CBD.' (NSW Department of Planning, Industry and Environment, 2020 p.20).

The Structure Plan sets out the spatial interface of the vision, key Peninsulawide directions, and identifies the areas of change. It sets a framework for the future of the Peninsula with indicative movement and open space networks linking distinct neighbourhoods and places (refer to Figure 3-2). Growth and change have been distributed based on the forecast in



FIGURE 3-2: PYRMONT STRUCTURE PLAN

3. LEGISLATIVE AND POLICY FRAMEWORK

3.2 State legislation and planning guidance

the Economic Development Strategy, an amenity-led urban design analysis to consider potential capacity and a character-led analysis to consider those special and important elements of the Peninsula that should be protected or enhanced. The Structure Plan aims to balance growth and change with character and place. It is focussed on the delivery of:

- A diverse, connected, restorative public domain
- An integrated movement network
- Ridgetop village character and community
- Significant renewal sites at parks and harbour edge.

The Place Strategy sets a preferred scenario to balance growth and change with character and place, including the Pyrmont Station. The strategy identifies the preferred land use and development future for the Peninsula, including the areas set to experience more growth and change and the potential building form based on protecting solar access to important public spaces and places, amenity analysis and local character considerations in each sub-precinct.

Seven sub-precincts in the Peninsula have been defined, based on existing (as well as potential) uses and character. Pyrmont Station construction site would be located in the Pyrmont Village sub-precinct, a 'ridgetop neighbourhood' characterised by 'street trees, corner pubs, and low to medium-rise terraces and heritage buildings lovingly restored as offices, restaurants, bars and shops' and a 'network' of pedestrian and cycling routes (NSW Department of Planning, Industry and Environment, 2020 p.73).

3.1.8 Blackwattle Bay State Significant Precinct Study, 2021

Blackwattle Bay (previously known as the Bays Market District) has been identified as a state significant precinct. The Blackwattle Bay State Significant Precinct Study was released for consultation in July 2021 and provides guidance on the intended urban renewal of Blackwattle Bay following the relocation of the Sydney Fish Market.

This study describes strategies to make the harbour foreshore more accessible and attractive, including the intended provision of around three hectares of new parks and plazas. (NSW Department of Planning, Industry and Environment (DPIE), 2021c p. xiv).

Amongst the guiding principles, the strategy will ... 'link the Blackwattle Bay precinct to the City, Glebe Island and White Bay and other surrounding communities and attractors'. (Principle 6, xiii) The Pyrmont Station site is located to the east of Blackwattle Bay and the strategy identifies a key characteristic of the Blackwattle Bay Precinct Plan as to provide access to the future Sydney Metro West Station (DPIE, 2021c).

3.2 Local Government planning guidance

3.2 Local Government planning guidance

The surface components of this proposal are located across two local government areas, including:

- Inner West Council
- City of Sydney.

Relevant local planning requirements and guidance for these areas have been summarised in the following sections. While these provisions do not apply to State significant infrastructure projects (this proposal) or State Significant Precincts such as The Bays Precinct, they have been considered in this assessment.

3.2.1 Inner West Council planning guidance

The Bays tunnel launch and support site would be located within the former Leichhardt Council area, which has been amalgamated with the former Ashfield and Marrickville Councils to become the Inner West Council. Relevant clauses from local government planning guidance documents have been summarised in the following sections.

The urban renewal of land within The Bays was identified as a State Significant Precinct and 'Growth Centre' by the NSW Government in 2017. The Bays, including the area containing The Bays tunnel launch and support site, has been removed from the Leichhardt Local Environmental Plan application area and relevant clauses from the Bays West draft Place Strategy have been summarised in Chapter 3.1.7 (The Bays West Precinct).

City Plan 2036: Local Strategic Planning Statement, 2020

The Pyrmont Station construction site would be located in the Harris Street village, on the western fringe of the city, containing commercial, residential and retail development and extensive foreshore areas with parks and waterside boardwalks. The entire peninsula is part of the City Fringe 'Innovation Corridor' (City of Sydney, 2020a p.59) and the 'station at Pyrmont as part of Sydney Metro West would be a catalyst for economic and employment growth in the area' (City of Sydney, 2020a p.72), linking Central Sydney, Pyrmont and The Bays.

The peninsula is also identified as a precinct for 'collaborative planning' between the NSW Government and council, with the intention of *facilitating an economic and jobs hub*' and a 'gateway to the CBD' (City of Sydney, 2020a p.50). City of Sydney intends to work with the NSW Government in its place based review of Pyrmont, to ensure the delivery of a 'genuine mixed-use precinct' that respects the 'existing character of the area' (City of Sydney, 2020a p.158), including 'the area's unique built form and heritage qualities' (City of Sydney, 2020a p.206). The peninsular will also 'play an important role in providing housing in the city' (City of Sydney, 2020a p.50).

Inner West Council Local Strategic Planning Statement, 2020

Based around six themes, the Inner West Council Local Strategic Planning Statement (LSPS) ... 'identifies the challenges and opportunities for our communities, in the context of a changing climate, changing technologies and a growing population. The Statement sets out planning priorities, objectives and actions to enable opportunities for social, economic and environmental benefits to be taken while maintaining the character, culture and values so important to the identity of Inner West communities.' (Inner West Council, 2020 p.2). One key focus of the Local Strategic Planning Statement is sense of place. The statement indicates that ... 'Community engagement has shown that the character, diversity, creativity, culture and heritage of Inner West are central to our identity.' (Inner West Council, 2020 p.2). The statement seeks development which is undertaken ... 'with respect for place, local character and heritage significance' (Inner West Council, 2020 p.6). It also advocates new development to 'enhance permeability and connectivity....to the public domain and provide a positive contribution to the public space' (Inner West Council, 2020 p.43).

The Statement describes the urban character of the Inner West Council area as 'quite diverse' with many distinct neighbourhoods and centres. The 'landscape' is identified as contributing to the community's identity (Inner West Council, 2020 p.12).

There are several Planning Priorities which consider landscape and visual amenity, including:

- Planning Priority 3 A diverse and increasing urban forest that connects habitats of flora and fauna (Inner West Council, 2020 p.34)
- Planning Priority 7 Provide for a rich diversity of functional, safe and enjoyable urban spaces connected with and enhanced by their surroundings (Inner West Council, 2020 p.43)
- Planning Priority 11 Provide accessible facilities and spaces that support active, healthy communities (Inner West Council, 2020 p.64).

It identifies a 'Blue/Green Grid' which aims to ... 'provide wildlife corridors and connect centres, recreational spaces, public transport hubs, schools and major residential areas with blue and green infrastructure' (Inner West Council, 2020 p.28). The northern foreshore of White Bay is identified as a 'future Blue/ Green link', with 'green infrastructure' embedded in the redevelopment of this area as a priority (Inner West Council, 2020 p.29 and 70).

3. PLANNING LEGISLATION AND POLICY

3.2 Local Government planning guidance

The 'adaptive reuse of White Bay power station that retains its heritage significance and provides a focal point for the precinct' is also a priority (Inner West Council, 2020 p. 70).

Leichhardt Local Environmental Plan 2013

The Bays tunnel launch and support site would be located within Leichhardt Council area, which has since been amalgamated with other neighbouring council areas to form the Inner West Council. Under the Leichhardt Local Environmental Plan 2013 Zoning Map the location of the construction site is identified as part of the 'Sydney Regional Environmental Plan No. 26 – City West'.

Sydney Regional Environmental Plan No 26—City West

The City West area is divided into four precincts and The Bays tunnel launch and support site would be located within the 'Bays Precinct'. The planning principles for this precinct are identified in *Sydney Regional Environmental Plan No 26—City West (Amendment No 7—Bays Precinct),* however The draft Bays West Place Strategy (NSW Department of Planning, Industry and Environment, 2021), is more relevant and part of first stage of The Bays State Significant Precinct urban renewal and transformation project.

Leichhardt Development Control Plan (DCP) 2013

The DCP (Leichhardt Council, 2013) covering the former Leichhardt Council area is relevant to The Bays tunnel launch and support site. An objective of the Residential Provisions is to 'ensure that the amenity, including solar access and visual privacy, of the development and adjacent properties is not adversely impacted' (Section C3.1). Section C.9: Solar Access requires the following for the retention of solar access to neighbouring dwellings:

- 'Where the surrounding allotments are orientated east/west, main living room glazing must maintain a minimum of two hours solar access between 9am and 3pm during the winter solstice
- Where the surrounding allotments are orientated north/south and the dwelling has north facing glazing serving the main living room, ensure a minimum of three hours solar access is maintained between 9am and 3pm during the winter solstice.' (Section C.9).

Section C3.10: Views aims to 'protect vistas and views from the public domain' whilst recognising 'the value of existing views from private dwellings and allow for the reasonable sharing of views between private properties'. The following development controls relate to view protection:

- 'New development should be designed to promote view sharing (i.e. minimise view loss to adjoining and adjacent properties and/or the public domain while still providing opportunities for views from the development itself)'
- 'Design solutions must respond graphically to the site analysis outcomes through the use of plans, elevations, photographs and photomontages to demonstrate how view sharing is to be achieved and illustrate the effect of development on views. In some cases, reasonable development may result in the loss of views, but new development must not significantly obstruct views.' (Section C.10).

3.2 Local Government planning guidance

3.2.2 City of Sydney planning guidance

The construction sites for Pyrmont and Hunter Street (Sydney CBD) stations are located within the City of Sydney local government area. Specific planning guidance relevant to each construction site at Pyrmont and Hunter Street (Sydney CBD) has been summarised in Chapter 6 and 7.

City Plan 2036: Local Strategic Planning Statement, 2020

City Plan 2036 (City of Sydney, 2020a) is the City of Sydney's LSPS and sets out the 20-year vision for land use planning in the City of Sydney local government area. The LSPS sets priorities to deliver the vision of a 'green, global and connected' city (City of Sydney, 2020a p.15). It provides guidance on how to manage change into the future whilst to ensuring that the special character and values of the City of Sydney are preserved. The Planning Statement builds on the City's other land use planning strategies (including the Central Sydney Planning Strategy) and will guide future changes to the planning controls in the City's local environmental plan (LEP) and development control plans (DCP). It also refers to the City's Greening Sydney Plan (Greener Places), in support of an increase urban bushland, green open spaces and canopy cover, to make the 'city more beautiful and appealing' (City of Sydney, 2020a p.35).

The planning statement sets 13 priorities and a series of actions to achieve the vision and guide future changes to our planning controls, including:

- Movement for walkable neighbourhoods and a connected city
- Align development and growth with supporting infrastructure
- Supporting community wellbeing with social infrastructure
- A creative and socially connected city
- Creating great places
- New homes for a diverse community
- Growing a stronger, more competitive Central Sydney
- Developing innovative and diverse business clusters in the city fringe
- Protecting industrial and urban services in the southern enterprise area and evolving businesses in the Green Square-Mascot strategic centre
- Protecting and enhancing the natural environment for a resilient city
- Creating better buildings and places to reduce emissions and waste, and use water efficiently
- Increasing resilience of people and infrastructure against natural and urban hazards
- Open, accountable and collaborative planning.

The City of Sydney is seen as a network of ten villages, each with its own character and reflecting the historic growth of Sydney. The pattern of development in Sydney has historically been first along ridge lines, which coincide generally with the location of the City's main activity or 'high streets'. The villages comprise a number of small, local and distinct neighbourhoods. These neighbourhoods are served by a network of 'active streets' that play an important role in supporting and sustaining both the surrounding and wider community and shape the character of each village. Pyrmont Station construction site would be located in the Harris Street village, and the Hunter Street Station (Sydney CBD) construction would be located in the CBD and Harbour village. More detail on these sites is provided in Chapters 6 and 7.

The City of Sydney's transport and access network is considered to be 'under considerable strain' (City of Sydney, 2020a p.39). The introduction of Sydney Light Rail, Sydney Metro, continued growth in active travel and a range of other transport initiatives, such as the managed growth of bus, ferry and light rail corridors, is intended to 'accommodate additional workforce growth to 2030' (City of Sydney, 2020a p.36).

The LSPS prioritises 'placemaking' and 'excellence in design' for the city's places, spaces and buildings, in order to 'attract *people, encourage them to stay'* and make high density places 'healthy and enjoyable' (City of Sydney, 2020a p.55). This includes the 'urban landscape', such as the design of streets, parks, squares, the ground level of buildings and private landscapes, which create the 'primary experience people have of the city' (City of Sydney, 2020a p.120). The LSPS also prioritises the protection and enhancement of 'cultural landscapes', including the 'foreshore and parklands and many important buildings and structures'. These structures and landscapes create 'view corridors' with some are considered 'iconic', including those of the Sydney Opera House and the Sydney Harbour Bridge (City of Sydney, 2020a p.128). The Plan refers to the Central Sydney Planning Strategy which proposes the preservation of significant view corridors, as identified in the following section

3. PLANNING LEGISLATION AND POLICY

3.2 Local Government planning guidance

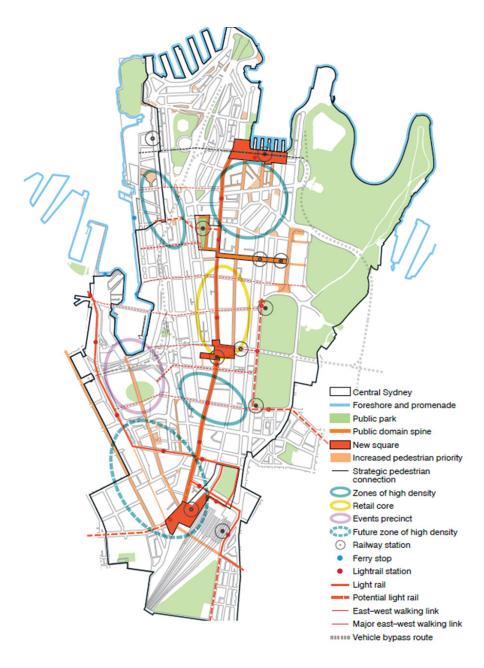


FIGURE 3 3: CENTRAL SYDNEY STRUCTURE PLAN

Central Sydney Planning Strategy, 2020

The Central Sydney Planning Strategy (CSPS), released in draft in 2016 and endorsed by Council in 2020, aims to ensure Central Sydney maintains its role as Australia's most productive and attractive city. Through '10 key moves' the strategy balances opportunities for development to meet the demands of growing numbers of workers, residents and visitors and their changing needs in Central Sydney, including the following that are relevant to this technical paper:

- 2. Ensure development responds to context
- Protect, enhance and expand Central Sydney's heritage, public places and spaces
- Reaffirm commitment to design excellence (City of Sydney, 2020b p.9).

A primary objective of the CSPS is identifying the opportunity for additional height and density, especially for commercial uses, while ensuring new development 'responds to context', enhances the public amenity of the city and achieves 'design excellence' (City of Sydney, 2020b p.10). This includes '*state projects including future metro stations*' (City of Sydney, 2020b p.27). The structure plan (refer to Figure 3-3) shows the key elements for the implementation of the strategy.

The structure plan is underpinned by three considerations: Ensuring excellent open spaces, connecting parts of Central Sydney together, and planning for the future density of the city. The Hunter Street Station (Sydney CBD) construction would be located in a 'zone of high density', adjacent to a proposed 'new square' extending between George Street and Wynyard Park (refer to Figure 3-3). The Hunter Street Station (Sydney CBD) sites would also be located in one of the four 'tall tower cluster areas' to include buildings above established maximum limits. Existing and new build towers on the western

3.2 Local Government planning guidance

edge of the Central Sydney planning area are now permitted to reach 110 metres in height (previously 80 metres) (City of Sydney, 2020b p. 195). Solar access planes, adequate building setbacks and separation, protected public views and heritage are listed as key considerations in the locations of these zones of high density.

The CSPS elevates the importance of Sydney's streets as public places, stating 'the physical environmental of Central Sydney's streets makes an important contribution to Sydney's profile as a Global City' (City of Sydney, 2020b p.270). The CSPS proposes a new provision to preserve significant views from public places by restricting encroachment of tall buildings, including views in each direction along Martin Place and north along Pitt Street (City of Sydney, 2020b p.253, refer to Figure 3-3). The design new development is required to 'make a positive contribution to the characteristics and composition of designated public views' (City of Sydney, 2020b p.253).

The CSPS also proposes to revise locality statements for special character areas in Central Sydney (currently part of the Sydney Development Control Plan 2012), including the planning controls and guidance. The Hunter Street Station (Sydney CBD) construction sites not within any of the special character areas.

The CSPS also identifies the importance of Pyrmont peninsula, noting that it plays a 'pivotal location in the Eastern City District's Innovation Corridor. By including a station at Pyrmont as part of the Sydney Metro West, a continuous employment corridor is established linking Central Sydney, Pyrmont and The Bays. This would accelerate the growth of employment clusters and ensure The Bays and The Bays Market District are not isolated from the Harbour CBD' (Central Sydney Planning Strategy 2016-2036 – Strategy Addendum, City of Sydney, 2020b).

Draft Minimising overshadowing of neighbouring apartments documentation guide, 2019

This guide (City of Sydney, 2019) is intended to be used to assess the potential overshadowing of a proposed building to adjacent sensitive land uses such as residential dwellings and public open space. While this guide does not apply to a CSSI project, it provides an indication of the expectations for overshadowing of neighbouring properties. That is:

'Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter in the Sydney Metropolitan Area' (Objective 3B-2).

4. OVERVIEW OF PROPOSAL COMPONENTS AND CHARACTER

4.1 Typical character of construction

4.1 Typical character of construction

Construction sites would be established along the alignment, extending across the nominated areas and inclusive of all enabling works identified in this proposal.

Elements seen at construction sites would typically include:

- Traffic management
- Site perimeter noise barriers, hoardings and/or security fencing with shade cloth (designed in accordance with Sydney Metro Branding Design Guidelines or public art in high pedestrian locations as appropriate)
- Demolition works including the removal of buildings and trees
- Equipment including cranes, piling rigs, excavators and other heavy equipment
- Site office, amenities, workshops, and plant (such as water treatment, concrete and asphalt batching plants, bentonite plant etc.)
- Laydown, material and plant storage areas
- Heavy vehicle access for deliveries and haulage
- Acoustic sheds or other acoustic measures
- Precast concrete segment storage.

Typical examples of these elements from previous stages of Sydney Metro are shown at Figure 4-1.

The duration of work at each construction site for this proposal is around three years. Further details are contained in the Chapter 5 (Project description) of the Environmental Impact Statement. Further construction activities and the operation of the metro would occur subsequently and these would be subject to separate planning approvals.

4.1 Typical character of construction

FIGURE 4-1 EXAMPLE CONSTRUCTION CHARACTER IMAGES

















- CONSTRUCTION SITE, BARANGAROO 1
- DEMOLITION SCAFFOLDING AND MESH, 2 PITT STREET
- METAL CLAD ACOUSTIC SHED, 3 CROWS NEST
- 4 CRANE, MARTIN PLACE
- 5 CONCRETE BATCHING PLANT, BARANGAROO



- SPOIL STORAGE MOUND WITH 6 EXCAVATORS, BARANGAROO
- 7 SITE OFFICES, BLIGH STREET
- 8 SITE BOUNDARY FENCING WITH MESH BANNERS, BARANGAROO
- 9 SITE BOUNDARY HOARDING, BARANGAROO



5.1 Existing environment

5.1 Existing environment

The Bays tunnel launch and support site would be located on the south-western foreshore area of White Bay, adjacent to the former White Bay Power Station. The foreshore land surrounding the power station is not publicly accessible and part of this area is currently used for The Bays Station major civil construction work. The Bays tunnel launch and support site would be located within the southern part of the approved construction site for The Bays Station and would utilise some of the existing construction facilities, including the relocated Port Access Road.

The Bays tunnel launch and support site forms part of The Bays precinct, as identified by the NSW Government. The Bays comprises 5.5 kilometres of harbour-front land and 95 hectares of largely government-owned land, about two kilometres east of the Sydney CBD (refer to Figure 5-1: The Bays tunnel launch and support site - Landscape context). The Bays landscape is in transition, with several major projects under construction in close proximity to the site. Key projects include major civil construction work between Westmead and The Bays as part of Sydney Metro West, the Port Authority of NSW Glebe Island multi-user facility project and WestConnex Rozelle Interchange. As part of the WestConnex M4-M5 link project, the Rozelle Interchange and Iron Cove Link is in the final stages of construction, including an underground bypass of Victoria Road between the Iron Cove Bridge and the Anzac Bridge.

The recent construction of the Anzac Bridge Access Road, has opened up views from locations to the west of The Bays tunnel launch and support site. The road increases in elevation when travelling towards the Anzac B and includes a new shared use pathway that overlooks the construction site. The Victoria Road corridor has also been widened, and two buildings were removed at the end of Hornsey Street, opening up views between this part of Rozelle and The Bays.

The Bays has a rich history of maritime, industrial and infrastructure uses and 'played a part in Sydney's significant transformation in the 20th Century' (Urban Growth NSW Development Corporation, 2015, p.5). In White Bay there are a number of important features, including the former White Bay Power Station, the Glebe Island grain silos, and the White Bay Cruise Terminal. The former White Bay Power Station (a State listed heritage item) and the Glebe Island Silos (a local listed heritage item) provide dominant visual landmarks and physical reminders of the site's industrial history. These industrial elements are identified as a 'key visual landscape' with a 'townscape role' in the Leichhardt Development Control Plan 2013 (Appendix C-3, A.2.2).

White Bay is located on the flat foreshore areas of Sydney Harbour and framed by the suburbs of Balmain, Balmain East and Rozelle to the north. These suburbs sit at a higher elevation than the White Bay site, and sit on a gradient which slopes south towards the Bay. These suburbs comprise predominantly residential uses and form the backdrop to most views north across White Bay. There are pockets of open space on the ridgetop and hillslopes in Balmain, allowing elevated views towards the site, including Peacock Point. Foreshore public open space areas form the edges to Jones Bay and Johnstons Bay at Pyrmont, including Pirrama Park, and allow for level views towards the site across the bay. Views are also available from the foreshore areas of Barangaroo and from Sydney Harbour Bridge. Ferries within this part of Sydney Harbour operate between ferry stops at Balmain East, Barangaroo and Pyrmont Bay and offer water views from near Barangaroo into White Bay.

5.1 Existing environment



ANZAC BRIDGE
 GLEBE ISLAND SILOS





- The Bays Station construction site The Bays tunnel launch and support site
- Approved Metro station under construction
 - Existing light rail
 - 1. M4-M5 Rozelle Interchange
- 2. White Bay Power Station
- 3. Mansfield Street Open Space
- 4. Glebe Island grain silos
- 5. White Bay

6. Glebe Island

300 m

Г 0

- Anzac Bridge
 Jones Bay
- 9. Johnstons Bay
- 10. White Bay Cruise Terminal
- 11. Balmain East
- 12. Peacock Point Reserve
- 13. Barangaroo Reserve

5.2 Planning guidance

5.2 Planning guidance

Further to the planning review carried out in Section 3 of this technical paper, the following review identifies relevant provisions in strategic planning documents, which are of note to the landscape and visual impact assessment of The Bays tunnel launch and support site.

5.2.1 Leichhardt Development Control Plan (DCP) 2013

The Leichhardt DCP (Leichhardt Council, 2013) includes an Urban Framework Plan that draws together key urban and environmental elements that contribute to the overall character and form of the local government area. However, this document has been superseded by the Bays West draft Place Strategy.

5.2.2 Bays West Draft Strategic Place Framework, 2021

The Bays West Draft Strategic Place Framework (SPF) is one of the supporting documents to the Bays West Draft Place Strategy and articulates a revised and expanded vision for the Precinct. It is intended to inform the renewal and redevelopment of the Precinct. The delivery of the Sydney Metro West project and a new station at Bays West will 'act as a catalyst for the urban renewal of the Precinct and provide an opportunity for integrated development' (DPIE, 2021b Section 2.1). In relation to the 'Design of Places & Spaces', the preservation of 'district and local views of landmark features that form a significant part of the place character' is listed as a priority.

There are a number of significant landmarks located within the Bays West Precinct, which 'act as unique visual markers on the journey between the Inner West and Sydney's CBD' (section A.3). These elements, which include the 'iconic White Bay Power Station, the Glebe Island Silos, and ANZAC Bridge' (section A.3). The strategy further states that it is 'critical for any future development within Bays West to respect and preserve the existing signature views towards these landmarks from key public viewpoints', which 'offer a deep connection between the site, its immediate neighbourhood, the surrounding districts, and the broader city in terms of navigation, memory, and identity' (Section A.3). The 'key viewsheds' and 'landmarks' are identified in Figure 5-2.

Sydney Metro and Department of Planning, Industry and Environment will undertake master planning of the White Bay Power Station and Metro sub-precinct (including The Bays tunnel launch and support site), which will inform subsequent rezoning of the precinct.

5.2.3 Conservation Management Plan for White Bay Power Station, 2010

The White Bay Power Station is a state listed heritage item and one of the key landmarks associated with The Bavs West Precinct. This Conservation Management Plan details a number of development constraints and sets out a series of prescribed viewsheds to help preserve its landmark status and visual prominence from key parts of the public realm. These consider both distant and localised views from both a land and a water approach, noting that while the building's facade and roof form are important within the local context, the two chimneys are a distinct feature of Sydney's skyline and clearly visible from further afield including at Observatory Hill and from the Sydney Harbour Bridge.

The conservation management plan for White Bay Power Station states that 'in order to retain the visibility and prominence of the White Bay Power Station as a harbourside landmark, it should not be substantially obscured by any development on nearby sites' and any new development 'must carefully consider its bulk, scale and placement in order to respect the visibility and prominence of the power station' (Design 5 Architects, 2010, p.12). In addition, the management

5.2 Planning guidance

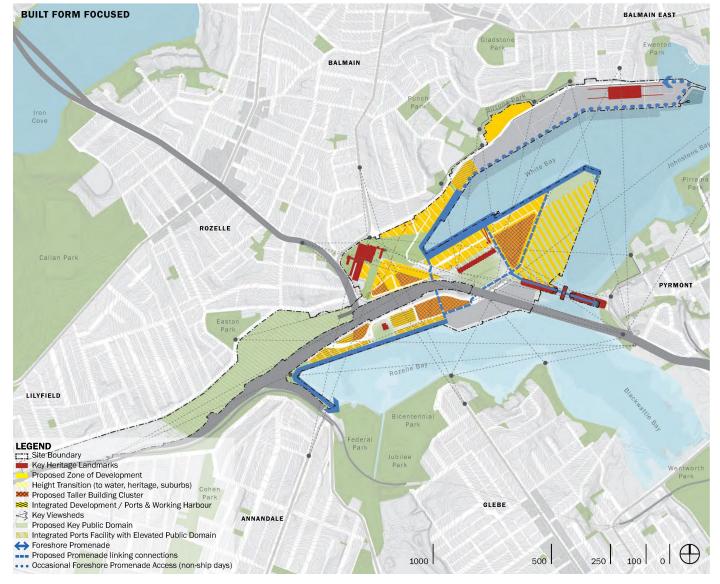


FIGURE 5-2 KEY VIEWSHEDS AND LANDMARKS [SOURCE: DPIE, 2021B, SECTION 4.2]

plan requires 'those views from major axial approaches such as Anzac Bridge, Glebe Point Road, Johnston Street Annandale, City West Link, Victoria Road (from north west), Mullens Street and Robert Street must be maintained as substantially unobstructed views' (Design 5 Architects, 2010, p.12).

5.3 Character and components of this proposal

5.3 Character and components of this proposal

The Bays tunnel launch and support site would cover about 25,000-35,000 square metres of the larger approximately 61,000 square metre area being used for the approved The Bays construction site (Sydney Metro Stage 1).

Key works and components at this construction site would include:

- Tunnel boring machine support services including high voltage power supply, spoil storage and removal, fresh air ventilation, work train, grout batching plant, water supply, water treatment and disposal, material storage as well as office facilities, worker amenities and parking, and storage and installation of precast concrete lining elements
- A metal clad acoustic shed (about 15 metres high) at the south-eastern part of the construction site
- The use of machinery and equipment such as mobile cranes, excavators, articulated dump trucks, concrete pumps etc.
- Noise barriers and hoardings surrounding the construction site, about three metres high.

Access to and egress from the construction site would be from James Craig Road via the Port Access Road, Sommerville Road and Solomons Way. The Port Access Road is currently being relocated prior to the start of major civil construction work between Westmead and The Bays, and enabled the commencement of work of Sydney Metro West (following a separate planning approvals process).

Overall, the works at the tunnel launch and support site would occur over a period of about three years.

The location and indicative layout of The Bays tunnel launch and support site, including vehicle access and egress, as well as the location for a potential conveyor to a barge to remove spoil is illustrated on Figure 5-3.

5.3 Character and components of this proposal

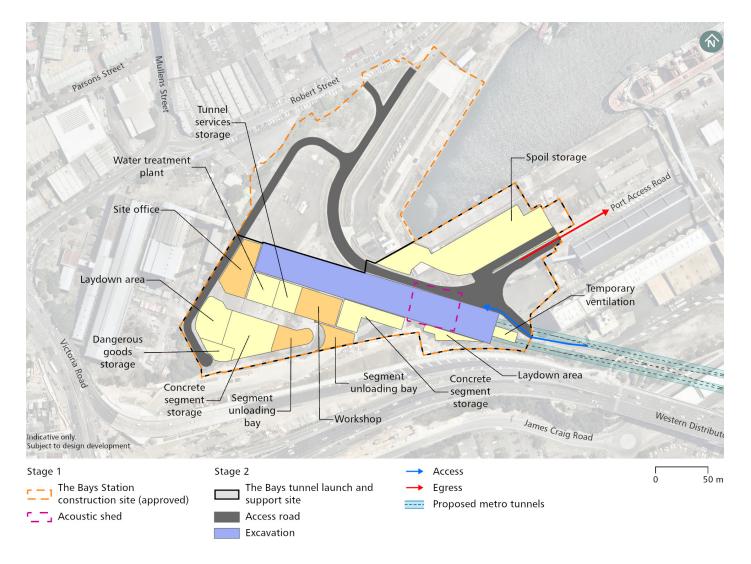
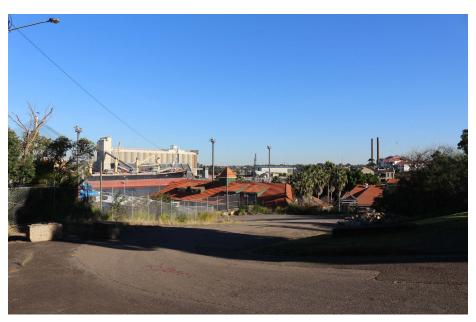


FIGURE 5-3: THE BAYS TUNNEL LAUNCH AND SUPPORT SITE INDICATIVE LAYOUT

5.4 Assessment of landscape impact



VIEW ACROSS VICTORIA ROAD TOWARDS ANZAC BRIDGE



WHITE BAY AND GLEBE ISLAND SILOS

5.4 Assessment of landscape impact

The landscape element and public realm area which may potentially be impacted by this proposal is the White Bay (including the site) and Glebe Island portside industrial and commercial areas.

The following section summarises the assessment of impact for this landscape and public realm area (refer to Table 2-7 for impact levels).

5.4.1 White Bay and Glebe Island portside industrial and commercial areas

Baseline conditions:

The White Bay and Glebe Island portside industrial and commercial areas are a predominantly working landscape. The landform is highly modified and largely cleared for the purposes of portside industrial activity). This landscape is undergoing a transformation, with tunnel launch and support activities on The Bays Station construction site as part of major civil construction for Sydney Metro West between Westmead and The Bays, and several projects under construction in the vicinity of the site, including the Port Authority of NSW Glebe Island multi-user facility project and WestConnex Rozelle Interchange project. The site and surrounding area has been largely cleared of vegetation, with some trees remaining along the boundary with Robert Street and adjacent to the Anzac Bridge. These trees are located behind fences so that they provide little contribution to the

5.4 Assessment of landscape impact

shade and amenity of the adjacent portside industrial and commercial areas.

Sensitivity:

The White Bay and Glebe Island portside industrial and commercial areas provide a setting for the industrial activities and are used mainly by workers from this area. The landscape is also currently used for The Bays Station construction site for Sydney Metro West. While this area contains several landmark buildings, including the former White Bay Power Station and Glebe Island grain silos, the landscape is not a highly valued feature of this environment, which primarily has a working function. The site and Glebe Island portside industrial and commercial areas are of **neighbourhood landscape sensitivity.**

Landscape impact:

As the foreshore land surrounding the power station is not publicly accessible, there would be no change in public access or permeability within this landscape. There would be no additional vegetation removed as a part of the proposal. Overall, this change would be contained and localised, and result in no perceived change in the landscape quality of the White Bay and Glebe Island portside industrial and commercial area, which is a landscape of neighbourhood sensitivity. This would result in a **negligible landscape impact**.











- 1 ROBERT STREET, WHITE BAY
- 2 WHITE BAY POWER STATION
- 3 VICTORIA ROAD TO HORNSEY STREET, ROZELLE
- 4 HORNSEY STREET, ROZELLE
- 5 ROBERT STREET, ROZELLE

5.5 Assessment of daytime visual impact

5.5 Assessment of daytime visual impact

The Bays tunnel launch and support site would be visible from a wide visual catchment which extends from nearby industrial, commercial and portside areas in Rozelle and Glebe Island, residential areas to the north and west in Rozelle, and residential areas along the lower slopes of Balmain and Balmain East. There are distant views from Barangaroo Reserve and elevated areas of Millers Point including from the Sydney Observatory about 2.2 kilometres away. There would also be elevated views from the south-west facing windows of the high density residential and commercial developments within Barangaroo and Pyrmont. Water based views to the site can be seen from public ferries travelling between Barangaroo, Pyrmont Bay and Balmain East, and from other watercraft using this part of Sydney Harbour.

From the west and south, views to the site are mostly obstructed by Victoria Road which is on elevated land as it rises to the Anzac Bridge and includes some areas of dense roadside vegetation.

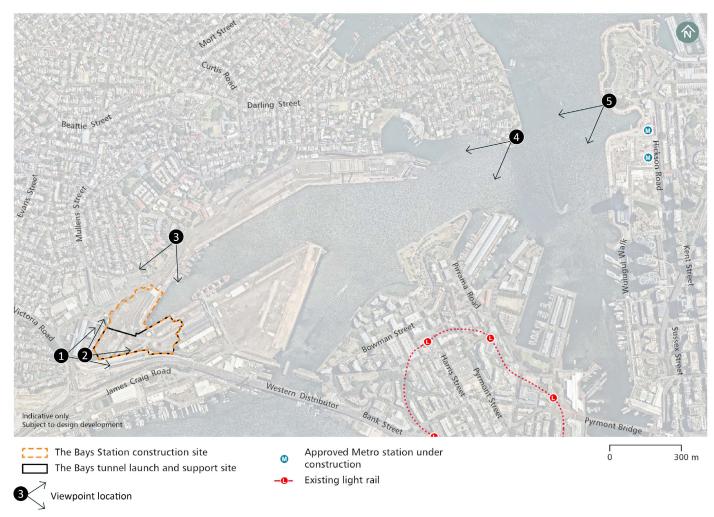


FIGURE 5-4: THE BAYS TUNNEL LAUNCH AND SUPPORT SITE - VIEWPOINT LOCATIONS

5.5 Assessment of daytime visual impact

The following viewing locations were selected as representative of the range of views to this proposal:

- Viewpoint 1: View east from Hornsey Street, Rozelle
- Viewpoint 2: View north-east from Anzac Bridge Access Road shared use pathway
- Viewpoint 3: View south from Mansfield Street open space, Rozelle
- Viewpoint 4: View south-west from Peacock Point Reserve, Balmain East
- Viewpoint 5: View south-west from Barangaroo Reserve, Barangaroo.

Figure 5-4 identifies the location of these viewpoints.

The following sections summarise the daytime visual impact identified in the representative viewpoint assessment.

5.5.1 Viewpoint 1: View east from Hornsey Street, Rozelle

Baseline condition:

This view from the eastern end of Hornsey Street represents views from this residential area of Rozelle (refer to Figure 5-5). Several Sydney landmarks are visible, including the former White Bay Power Station (left of view), Sydney Harbour Bridge (centre of view), the Glebe Island Silos and Anzac Bridge (right of view), which each rise above the skyline. The high-rise buildings in the Sydney CBD also provide a backdrop to this view. There are glimpses to White Bay in this view, however, much of the foreshore area is screened from this view by hoarding along the boundary of the WestConnex Rozelle Interchange construction site and by approved construction activity within and surrounding the site. The WestConnex Rozelle Interchange is in the final stages of construction and is a prominent feature in this view. Victoria Road, located in the foreground of this view, has been widened to construct the Victoria Road Access Road. This has included the removal of two buildings at the northern end of Hornsey Street, opening up easterly views over the road from the adjacent residential



FIGURE 5-5: VIEWPOINT 1 - VIEW EAST FROM HORNSEY STREET, ROZELLE, EXISTING VIEW

properties in Hornsey Street. The Anzac Bridge Access Road is also visible, a road recently constructed between Victoria Road and the Anzac Bridge, including a new shared use pathway that overlooks The Bays Station construction site.

Sensitivity: This view from Hornsey Street would be experienced by local residents and visitors to this part of Rozelle. While this location offers a views to several iconic Sydney landmarks, there are a small number of potential viewers, and the character of this view is dominated by road infrastructure. This view is of **neighbourhood visual sensitivity**.

Visual impact:

A construction site would be established in the centre, middle ground of this view. The site would occupy the southern part of The Bays Station construction site and include an acoustic shed, to the east of the excavation area in the centre of the site. While the ground level of the site would not be seen from this location, the upper portion of the acoustic shed would be visible, rising several stories above the site. This temporary structure would partly obstruct the glimpses to the bay and part of the Glebe Island port area.

While the construction site would be seen extending across the middle ground of this view, intensifying the construction character of this view, it would be consistent in character with the surrounding industrial landscape. Overall, this change would create a noticeable reduction in the amenity of this view, which is of neighbourhood sensitivity, resulting in a **negligible visual impact.**

5.5 Assessment of daytime visual impact



FIGURE 5-6: VIEWPOINT 2 – VIEW NORTH-EAST FROM ANZAC BRIDGE ACCESS ROAD SHARED USE PATHWAY, EXISTING VIEW



FIGURE 5-7: VIEWPOINT 2 – VIEW NORTH-EAST FROM ANZAC BRIDGE ACCESS ROAD SHARED USE PATHWAY, INDICATIVE EXTENT OF THE BAYS TUNNEL LAUNCH AND SUPPORT SITE (SHOWN BY BLUE SHADING)

5.5.2 Viewpoint 2: View north-east from Anzac Bridge Access Road shared use pathway

Existing conditions:

This view is from the shared use pathway on the northern side of the recently constructed Anzac Bridge Access Road, that links between Victoria Road and the Anzac Bridge (refer to Figure 5-6). This view overlooks the construction support site for the WestConnex Rozelle Interchange, including a wide access road and wash down bay. Beyond this, The Bays Station construction site can be seen, adjacent to the foreshore. This construction site will include a tunnel excavation area including an acoustic shed, and facilities such as access roads, parking areas, site offices, amenities, workshops, material/plant storage areas, laydown areas, an elevated conveyor, and water treatment plant and other works. Beyond the construction site, there is a glimpse to the bay, including the White Bay Cruise terminal and Glebe Island port area. Several Sydney landmarks are visible from this location, including the Sydney Harbour Bridge (centre of view), the Glebe Island Silos (right of view) which each rise above the skyline. The harbourside areas of Balmain East form a leafy backdrop to this view, with the high-rise buildings of North Sydney also providing a background feature to this view.

Sensitivity:

Views from this location would be experienced by cyclists and pedestrians travelling along the pathway, including recreational users, travelling between Rozelle and Pyrmont. While it is a largely a view with an industrial character with extensive construction activity, it includes several local visual features which provide some visual interest to the view. This view is of **local** visual sensitivity.

visual sensitivit

Visual impact:

The Bays tunnel launch and support site would occupy the southern part of The Bays Station construction site and would be seen in the centre, middle ground of this view

5.5 Assessment of daytime visual impact

(refer to Figure 5-7). The site would include an acoustic shed, located to the east of the excavation area and rising several stories above the site. This shed would enclose views to part of the ground level construction works and also partly obstruct views to parts of the harbour and the distant views to the Harbour bridge in the east (right of view).

While the construction site would extend across the middle ground of this view, intensifying the construction character of this view, and obstructing part of the view to the bay and wider Sydney landscape, it would be consistent in character and somewhat absorbed into the surrounding industrial and infrastructure dominated landscape. Overall, this change would create a noticeable reduction in the amenity of this view, which is of local sensitivity, resulting in a **minor adverse visual impact.**

5.5.3 Viewpoint 3: View south from Mansfield Street open space, Rozelle

Existing conditions:

This view is from an open space area near Mansfield Street and represents the view from this residential area of Rozelle (refer to Figure 5-8). The open space is elevated above the foreshore area of White Bay, allowing expansive views between the Glebe Island port area (left of view) and former White Bay Power Station (right of view). The view is framed by the iconic twin chimney stacks of the former White Bay Power Station (right of view) and the Glebe Island Silos (left of view) which each rise above the skyline.

The foreshore area in the centre of view is currently used for The Bays Station construction site of the approved major civil construction work between Westmead and The Bays. This approved construction site includes a tunnel excavation area, an acoustic shed, and facilities such as access roads, parking areas, site offices, amenities, workshops, material/plant storage areas, laydown areas, an elevated conveyor, and water treatment plant and other works.



FIGURE 5-8: VIEWPOINT 3 – VIEW SOUTH FROM MANSFIELD STREET OPEN SPACE, ROZELLE, EXISTING VIEW



FIGURE 5-9: VIEWPOINT 3 – VIEW SOUTH FROM MANSFIELD STREET OPEN SPACE, ROZELLE, INDICATIVE EXTENT OF THE BAYS TUNNEL LAUNCH AND SUPPORT SITE (SHOWN BY BLUE SHADING)

5.5 Assessment of daytime visual impact

Beyond the construction site, the recently constructed Anzac Bridge Access Road is visible, including a concrete retaining wall. The construction support site for the WestConnex Rozelle Interchange project is also visible, as is the large storage shed at Sydney Boathouse, visible in the centre background of view. The elevated residential areas of Rozelle, Annandale and Glebe create a leafy backdrop to this area of the view.

Sensitivity: This view from Mansfield Street open space is experienced mainly by local residents and their visitors. The open space is used for passive recreation and views from this location are of **local visual sensitivity**.

Visual impact:

The Bays tunnel launch and support site would occupy the southern part of The Bays Station construction site and would be seen in the centre, middle ground of this view (refer to Figure 5-9). An acoustic shed would be visible, to the east of the tunnel excavation area, adjacent to the former power station and mostly out of view (right of view). This temporary shed would rise several stories above the foreshore, obstructing the views to the works within it and also part of the Anzac Bridge Access Road, WestConnex Rozelle Interchange and leafy backdrop. This shed would be similar in scale to the Sydney Boathouse at Rozelle Bay (background of view).

Due to the elevated viewing position and angle of view, the construction site would be a prominent feature in this view. However, this view has a high visual absorption capacity due to the existing industrial scale uses and ongoing use of The Bays for construction work on other major infrastructure projects. Overall, there would be a noticeable reduction in the amenity of this view, which is of local sensitivity, resulting in a **minor adverse visual impact.**

5.5.4 Viewpoint 4: View south-west from Peacock Point Reserve, Balmain East

Existing conditions:

This view from Peacock Point Reserve represents views from an area of waterfront open space in Balmain East (refer to Figure 5-10) and adjacent residential properties. Located on the southern corner of a peninsula, Peacock Point Reserve provides panoramic water views across Sydney Harbour towards Jones Bay and White Bay to the south-west (centre of view) and east towards the high rise development within Barangaroo and Sydney CBD (out of view). The chimney stacks of the former White Bay Power Station, adjacent to the proposed construction site, are visible on the skyline in the background of the view, together with the distinctive forms of the Anzac Bridge and Glebe Island Silos. White Bay is frequented by large cruise ships which form dominant elements on the skyline (right of view) which temporarily obstruct views to the industrial and residential areas beyond. When in port, these ships rise above the surrounding horizon line.

Sensitivity:

This view from Peacock Point Reserve includes the waters of Sydney Harbour and White Bay. While it is a largely industrial view, it includes several local visual features including the stacks of the former White Bay Power Station, Anzac Bridge and the Glebe Island Silos. This view is experienced by local recreational users and is designed for the appreciation of views. This view is of **local** visual sensitivity.

5.5 Assessment of daytime visual impact

Visual impact: The Bays tunnel launch and support site would be visible in the background of this view, partly screened by the Glebe Island grain silos and foreshore area at Glebe Island, including bulk cargo ships when in dock (refer to Figure 5-11). An acoustic shed would be visible in the far background of the view, set back from the water edge and rising several stories above the foreshore. This shed would conceal works undertaken within it and partly screen the glimpses of the Anzac Bridge Access Road, WestConnex Rozelle Interchange and Sydney Boathouse. The acoustic shed would be of a similar scale to some of the adjacent industrial buildings and would be visually absorbed into the surrounding industrial landscape. The proposed works are unlikely to be differentiated from existing construction work occurring at The Bays, including other major infrastructure projects.

Overall, due to the distance and visual compatibility of the construction work with the character of The Bays, there would be no perceived change in the amenity of this view. This is a view of local sensitivity and there would be a **negligible visual impact** from this location.



FIGURE 5-10: VIEWPOINT 4 – VIEW SOUTH-WEST FROM PEACOCK POINT RESERVE, BALMAIN EAST, EXISTING VIEW



FIGURE 5-11: VIEWPOINT 4 – VIEW SOUTH-WEST FROM PEACOCK POINT RESERVE, BALMAIN EAST, INDICATIVE EXTENT OF THE BAYS TUNNEL LAUNCH AND SUPPORT SITE (SHOWN BY BLUE SHADING)

5.5 Assessment of daytime visual impact



FIGURE 5-12: VIEWPOINT 5 – VIEW SOUTH-WEST FROM BARANGAROO RESERVE, BARANGAROO, EXISTING VIEW

5.5.5 Viewpoint 5: View south-west from Barangaroo Reserve, Barangaroo

Existing conditions:

The western foreshore of the Barangaroo Reserve offers spectacular views across the open waters of the harbour to the suburb of Balmain East and urban areas of Pyrmont (refer to Figure 5-12). Glimpses are available towards Jones Bay and White Bay with the iconic Anzac Bridge, Glebe Island Silos and the former White Bay Power Station, as well as the construction sites for the projects described in Section 5.1 visible on the skyline in the distance. The waters of Sydney Harbour between Barangaroo and Balmain East, seen in this view, are frequented by a range of vessels from small boats, yachts and ferries to cruise ships. This creates an active and dynamic character to the harbour, which varies throughout the day, week and year.

The Bays Station construction site would be glimpsed in the background of this view through existing port side buildings, structures and bulk cargo ships in dock at Glebe Island.

Sensitivity:

Views from Barangaroo Reserve would be experienced by high volumes of recreational users using the foreshore promenade. This reserve is an important regional destination and is the venue for important city-wide events. This view has a few interesting features but is largely an incidental view across the harbour waters. Consequently, these views have a **regional visual sensitivity.**

Visual impact:

The Bays tunnel launch and support site would be visible in the far background of this view, mostly screened by the port side buildings, structures and bulk cargo ships in dock at Glebe Island. The acoustic shed at the construction site would be of a similar scale to some of the adjacent industrial buildings, and would be absorbed into the surrounding industrial landscape, and unlikely to be distinguished from other construction work in this view.

Overall, due to the distance and visual compatibility of the construction work with the character of this view, there would be no perceived change in the amenity of this view. This is a view of regional sensitivity and there would be a **negligible visual impact from this location.**

5.6 Assessment of night-time visual impact

5.6 Assessment of night-time visual impact

Existing conditions:

The setting of The Bays tunnel launch and support site would be located in an area of A3: Medium district brightness, comprising a **low visual sensitivity**. The footprint is located in the 'Bays West' area, which is moderately lit by security lighting at the former White Bay Power Station and the maritime and harbour industries at Rozelle Bay, White Bay and Glebe Island.

Headlights from heavy traffic and street lighting at the WestConnex Rozelle Interchange, including Victoria Road and Anzac Bridge Access Roads, provide both static and moving light sources, adding to the brightness of the night sky in this area. Visiting ships at the White Bay Cruise Terminal and other maritime vessels would add to night-time lighting levels. While the lighting associated with the approved works at The Bays Station construction site would be largely contained within the acoustic shed, there would also be lighting within the remaining areas of the site to support this work, which would add to brightness of the night sky at White Bay.

The nearby high-density areas of Pyrmont and the Sydney CBD would further contribute to a high level of sky glow in this part of Sydney.

Visual impact:

There would be night works required within The Bays tunnel launch and support site. However, this would be mostly contained within the acoustic shed that cover almost the entire area of the construction site, including the construction support areas such as workshops, offices and spoil storage areas. The lighting would be further screened and contained by site hoarding, the elevated Anzac Bridge Access Road, and adjacent buildings and structures such as the Glebe Island grain silos.

The proposed works would be generally in character with the surrounding construction activity in this location, and the heavy traffic that occurs along nearby major roads. The additional light sources and skyglow that would be seen from The Bays tunnel launch and support site would be absorbed into the existing moderately lit night scene.

Overall, there would be a no perceived change in visual amenity at night to the area surrounding the construction site, which is of low visual sensitivity, resulting in a **negligible** visual impact at night.

5.7 Summary of impact



VICTORIA ROAD SHARED USER PATH, VIEW EAST



VICTORIA ROAD SHARED USER PATH, VIEW WEST

5.7 Summary of impact

5.7 Summary of impact

Table 5-1, 5-2 and 5-3 summarise the potential landscape and visual impacts of this proposal.

TABLE 5-1: LANDSCAPE IMPACT SUMMARY

No.	Location	Sensitivity	Magnitude	Impact
1	White Bay and Glebe Island portside industrial and commercial	Neighbourhood	No perceived change	Negligible
	areas			

TABLE 5-2: DAYTIME VISUAL IMPACT SUMMARY

No.	Location	Sensitivity	Magnitude	Impact
1	View east from Hornsey Street, Rozelle	Neighbourhood	Noticeable reduction	Negligible
2	View north-east from Anzac Bridge Access Road shared use pathway	Local	Noticeable reduction	Minor adverse
3	View south from Mansfield Street open space, Rozelle	Local	Noticeable reduction	Minor adverse
4	View south-west from Peacock Point Reserve, Balmain East	Local	No perceived change	Negligible
5	View south-west from Barangaroo Reserve, Barangaroo	Regional	No perceived change	Negligible

TABLE 5-3: NIGHT-TIME VISUAL IMPACT SUMMARY

No.	Location	Sensitivity	Magnitude	Impact
1	The Bays tunnel launch and support site	Low (A3: Medium district brightness)	No perceived change	Negligible

6.1 Existing environment

6.1 Existing environment

The Pyrmont Station construction sites would be located along the northern side of Pyrmont Bridge Road. The Pyrmont Station western construction site would be located to the north of Pyrmont Bridge Road, between Pyrmont Street and Paternoster Row. The Pyrmont Station eastern construction site covers the entire triangular block, between Pyrmont Bridge Road, Union and Edward streets (refer to Figure 6-1: Pyrmont Station – Landscape context).

Pyrmont Bridge Road extends east—west through the centre of Pyrmont, providing access between Glebe and Darling Harbour, and onwards to the Sydney CBD. Within the vicinity of both construction sites, Pyrmont Road is four lanes wide and heavily trafficked. It includes a variety of low and medium rise developments with a mixture of retail, commercial, and residential uses.

The urban form in this part of Pyrmont is varied, including low and mediumrise character terrace buildings, former warehouse buildings and local hotels at prominent corner sites. It contains some remnant buildings which exhibit a traditional village character, such as the former Gilbey's Gin Distillery, on the corner of Pyrmont Bridge Road and Pyrmont Street (within the Pyrmont Station western construction site), and the Quarryman's Hotel (local listed heritage item) on the corner of Pyrmont Bridge Road and Harris Street. The curved façade of the five-storey former wool store building (former 'Waite & Bull' building) is one of several historic commercial warehouse buildings in this part of Pyrmont, considered to have a 'strong presence in the Pyrmont townscape' (OEH, 2016a). This building is located opposite Pyrmont Station western

construction site, at the corner of Pyrmont Street and Pyrmont Bridge Road. These buildings, and the Pyrmont Station western construction site, form part of the Pyrmont Heritage Conservation Area (detailed in Technical Paper 3: Non-Aboriginal Heritage). The Heritage Conservation Area includes buildings, structures and public open spaces that collectively provide a 'good example of a mid to late Victorian working class community consisting of both residential and commercial buildings which are largely intact and make a positive contribution to the streetscape' (OEH, 2011).

The study area also includes infill development, including modern commercial and residential buildings. The Pyrmont Station eastern construction site would be located near the proposed Star Casino development including a high-rise tower.

As Pyrmont is predominantly an urban landscape, the small areas of public open space, including corner parks and plazas, provide visual relief and attract use by local residents and workers from adjacent commercial buildings. The Elizabeth Healey Reserve, at the corner of Pyrmont Bridge Road and Harris Street, includes an open lawn area, terraced gardens, seating and several mature trees. A large mature fig tree along the Pyrmont Bridge Road frontage overhangs the street, providing shade and character to this part of the street. This reserve is also part of the Pyrmont Heritage Conservation Area and listed as a feature in the Pyrmont Bridge Road streetscape (OEH, 2011). The plaza at the corner of Pyrmont Bridge and Pyrmont roads also includes several large mature fig trees. It also includes a decorative stone fountain, the 'Samuel Hordern Fountain'. a local listed heritage item (Sydney LEP 2012). This fountain is described as a 'good example of a late Victorian public monument associated with a prominent local businessman which makes a positive contribution to the streetscape' (OEH, 2011).

6.1 Existing environment

FIGURE 6-1: PYRMONT STATION - LANDSCAPE CONTEXT



Pyrmont Station construction sites Western construction site Eastern construction site

- 1. Victorian terrace houses
- 2. Quarryman's Hotel

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- 3. Elizabeth Healey Reserve
- 4. Former 'Waite & Bull' building
- 5. Samuel Horden Fountain
- 6. Former warehouse 'Bank of NSW Stores'
- 7. Corner shop and residence 'Carmelu'
- 8. Star Casino
- 9. Former New York Hotel
- 10. Pyrmont Bridge Road Hotel
- 11. Pyrmont Bridge Hotel
- 12. Pyrmont Bridge





- HARRIS STREET 1
- 2 UNION SQUARE

6.2 Planning guidance

6.2 Planning guidance

Further to the planning review carried out in Section 3 of this Technical Paper, the following provisions in strategic planning documents are of note.. While the provisions of the Local Environmental Plan and Development Control Plan do not apply to State significant infrastructure projects (this proposal) they provide context for the landscape and visual impact assessment of Pyrmont Station construction sites.

6.2.1 Sydney Local Environmental Plan, City of Sydney, 2012

The construction sites are zoned B4 Mixed Use, which does not contain objectives relating to landscape character or visual amenity. The construction sites do not contain any heritage places, however, the western construction site is located within the Pyrmont Heritage Conservation Area, opposite the Former industrial 'Waite & Bull' building (local listed heritage building). As Pyrmont Station construction sites are located in close proximity to the following places, the 'settings and views' of these places will be considered in this technical paper.

Pyrmont Station western construction site::

- Former 'Waite & Bull' building, 137 Pyrmont Street
- Quarryman's Hotel, 214-216 Harris Street
- Samuel Hordern Fountain, corner of Pyrmont Street and Pyrmont Bridge Road.

Pyrmont Station eastern construction site:

- Former warehouse 'Bank of NSW Stores', 17-21 Pyrmont Bridge Road, located opposite site
- Pyrmont Bridge Road Hotel, 11 Pyrmont Bridge Road, located opposite site
- Former New York Hotel, 50 Union Street, located opposite site
- Corner shop and residence "Charmelu", 63–67 Union Street, located opposite site
- Terrace groups at 86-92 Union Street
- Pyrmont Bridge Hotel, 94-96 Union Street

The objective clause 2.8 is to ensure that the temporary use of land 'does not compromise future development of the land'. It also ensures development 'will not adversely impact on any adjoining land or the amenity of the neighbourhood' during the temporary use (cl. 2.8.3b).

6.2 Planning guidance

6.2.2 Sydney Development Control Plan 2012

As Pyrmont is outside of the 'Central Sydney Area', the Sydney Development Control Plan 2012 Central Sydney Planning Strategy Amendment does not apply to the Pyrmont Station construction sites.

The Sydney Development Control Plan 2012 (DCP) aims to recognise and reinforce the distinctive characteristics of the City of Sydney's neighbourhoods and centres. The DCP encourages development to respond to its context and is compatible with the existing built environment and public domain. The construction site is located in the 'Ultimo/ Pyrmont' local character area. Relevant principles for development in this area include:

- Development is to respond to and complement heritage items and contributory buildings within heritage conservation areas, including streetscapes and lanes.
- Maintain views and vistas from the public domain to the harbour, Central Sydney and surrounding areas
- Define and enhance the amenity of the public domain with awnings and buildings that align and address the street
- Retain historical low scale housing and large scale industrial buildings.
- Use compatible materials including sandstone (where sustainable) and face brick (s. 2.12.2)

As the Pyrmont Station construction sites would not be located in any of the 'specific areas' or 'specific sites' identified in the DCP, none of the specific guidelines are relevant.



PYRMONT BRIDGE, VIEW TOWARDS THE CBD



PYRMONT BRIDGE, VIEW TOWARDS PYRMONT

6.3 Character and components of this proposal

6.3 Character and components of this proposal

The proposed construction sites for the excavation of Pyrmont Station are:

- The Pyrmont Station western construction site, which would cover about 1,250 square metres, located between Paternoster Row and Pyrmont Street, north of Pyrmont Bridge Road. The site currently includes two mixed use, contemporary buildings.
- The Pyrmont Station eastern construction site, which would cover about 2,600 square metres, located between Edward Street, Union Street and Pyrmont Bridge Road. This site includes several mixed use contemporary buildings.
- The construction sites would be used to excavate Pyrmont Station using a mined technique. Shafts would be excavated within the two construction sites to provide access for excavation of the station caverns during construction.

This construction sites would include spoil storage and removal, water supply, water treatment and disposal, temporary ventilation plant, material storage and office facilities, worker amenities and parking. Access to and egress from the western construction site would be from Pyrmont Bridge Road, and access to the eastern construction site would be from Pyrmont Bridge Road, Edward Street and Union Street, with spoil removal via Pyrmont Bridge Road.

It is assumed that there would be acoustic sheds required at both sites, including:

- An acoustic shed covering the western construction site (about 37 metres by 38 metres in area and about 15 metres high)
- An initial acoustic shed within the existing carpark adjacent to Edward Street (about 16 metres by 30 metres in area and about 15 metres high)
- A larger acoustic shed for full extent of site (with sides of about 55 metres, 65 metres and 85 metres, about 20 metres high adjacent to Union St) following demolition of the buildings on the site.

The location and indicative layout of the Pyrmont Station construction sites, including vehicle access and egress is illustrated in Figure 6-2.

6.3 Character and components of this proposal

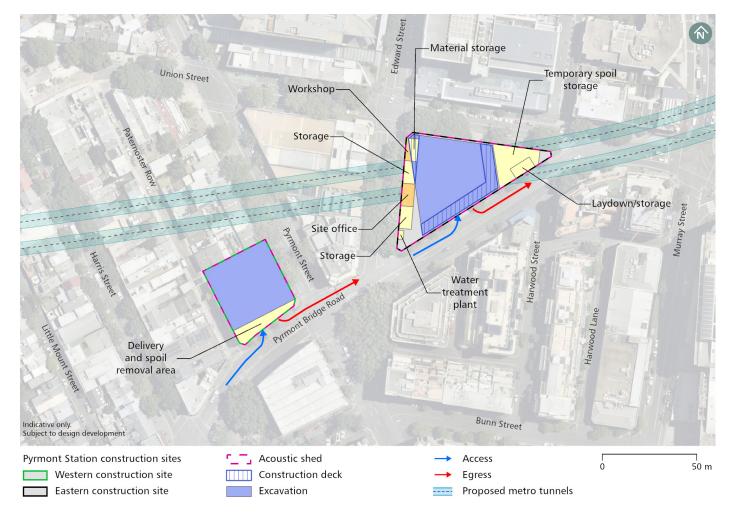


FIGURE 6-2: PYRMONT STATION CONSTRUCTION SITE LAYOUT

6.4 Assessment of landscape impact

6.4 Assessment of landscape impact

There are several landscapes and public realm areas which may potentially be impacted by the Pyrmont Station construction sites:

Pyrmont Station western construction site:

- Pyrmont Street and Pyrmont Bridge
- Road streetscapesPaternoster Row laneway

Pyrmont Station eastern construction site:

• Union Street, Edward Street and Pyrmont Bridge Road streetscapes.

There would also be the potential for overshadowing of residential properties and public realm areas at each of these sites, which will be assessed separately.

The following section summarises the assessment of impact for these landscape and public realm areas (refer to Table 2-4 for impact levels).



PYRMONT BRIDGE ROAD AT PATERNOSTER ROW

6.4.1 Pyrmont Station western construction site

Pyrmont Street and Pyrmont Bridge Road streetscapes

Existing conditions:

These streetscapes border the eastern and southern sides of the Pyrmont Station western construction site. Pyrmont Bridge Road is a busy road with up to four lanes of traffic, providing east-west access through Pyrmont, connecting Darling Harbour in the east with Glebe (via Bridge Road) in the west. An avenue of mature London Plane trees along both sides of Pyrmont Street strongly contribute to the character of this street. The large fig trees located in nearby public open spaces such as Elizabeth Healey Reserve at the corner of Harris Street, and the plaza at Edward Lane on the corner of Pyrmont Road, include large canopies that overhang the street, providing shade, comfort and amenity to the surrounding streets and local area. The decorative stone fountain (Samuel Hordern Fountain) in the plaza at the corner of Pyrmont Bridge Road and Pyrmont Road is also a visual feature, with its local importance reflected in its local listing as a heritage item (Sydney LEP 2010). Listed heritage buildings, including the character terrace buildings and former warehouses located on, opposite and adjacent to the construction site, add to the streetscape character, providing visual interest and reinforcing the character of the area.

Sensitivity:

Pyrmont Bridge Road and Pyrmont Street are located in Pyrmont Heritage Conservation Area and include a number of listed heritage buildings and mature street trees, in the vicinity of the construction site. These streets are generally experienced by people living, working, visiting or passing through this part of Pyrmont. Overall, these streetscapes are of **local landscape sensitivity.**

6.4 Assessment of landscape impact

Landscape impact:

The listed heritage buildings along these streets would be protected and retained during construction. The mature street trees along Pyrmont Street would also be retained. The buildings covering Pyrmont Station western construction site would be demolished, resulting in the loss of a somewhat prominent corner building, which contributes to the visual character of the adjacent streets. The loss of this building would create a break in the continuity of the built form along both streets that would be filled by the acoustic shed which would provide a blank façade to Pyrmont Street and a blank façade with vehicle access on Pyrmont Bridge Road. The site access and haulage along Pyrmont Bridge Road, and potentially along Pyrmont Road, including the vehicle access crossings of the footpath, would also detract from the character and pedestrian comfort along this street. Three street trees would be removed along Pyrmont Bridge Road. These trees are small and do not make a major contribution to the amenity of the streetscape, the removal of these trees, in combination with the additional vehicle movements in this area, would reduce the amenity of this section of the street. Overall, there would be a noticeable reduction in the quality of this landscape, which is of local sensitivity, and a minor adverse landscape impact.

Paternoster Row laneway

Existing conditions:

Paternoster Row is a narrow laneway, extending north-south between Pyrmont Bridge Road and Union Street. It is located within the Pyrmont Heritage Conservation Area and includes predominantly nineteenth century two storey terrace buildings. The eastern side the street is characterised by the rear of residential properties fronting Pyrmont Street, and several residential infill developments. The western side includes two storey Victorian terraces at the northern end, and several rear of shops from properties



PATERNOSTER ROW









- 1 PATERNOSTER ROW
- 2 VIEW EAST ALONG PYRMONT BRIDGE ROAD
- 3 VIEW WEST ALONG PYRMONT BRIDGE ROAD
- 4 ELIZABETH HEALEY RESERVE

6.4 Assessment of landscape impact



HARRIS STREET



VICTORIAN TERRACE HOUSES, PYRMONT STREET

which face Harris Street. This includes several rooftop terraces, including a rooftop dining area associated with the Quarryman's Hotel on the corner of Paternoster Row and Pyrmont Bridge Road. The building on the western construction site (former Gilbey's Gin Distillery) has a warehouse character with windows and entries facing the lane. This laneway provides one way vehicle movement and is paved to present a shared pedestrian and vehicular environment. There are a few small street small trees adjacent to the site.

Sensitivity:

Paternoster Row would attract less use than the surrounding roads and footpaths. It does, however, provide an important example of the scale and character of a nineteenth century laneway, and provides pedestrian access and permeability to the locality. The laneway would be used mainly by local residents and visitors accessing adjacent residential and commercial buildings and car parking areas. Located in a local conservation area, this laneway is of **local landscape sensitivity.**

Landscape impact:

The listed heritage buildings along this laneway would be protected and retained during construction. The building occupying the Pyrmont Station western construction site would be removed, creating a break in the continuity of built form in this area, reducing the activation of this section of the street. The acoustic shed would fill this void but have a simple façade with less articulation and variety of materials. There is no site access or haulage proposed for Paternoster Row, and existing vehicle and pedestrian access along the laneway would be maintained. Overall, there would be a noticeable reduction in the quality of this landscape, which is of local sensitivity, resulting in a minor adverse landscape impact.

6.4 Assessment of landscape impact

Potential overshadowing impacts

The proposed acoustic shed would be taller than the existing building on the Pyrmont Station western construction site and has the potential to cast a longer shadow during mid-winter. This additional shadow would be located to the west of the site in the morning, south of the site during the middle of the day, and to the east of the site in the afternoon.

This would include the potential for additional overshadowing of the properties to the west of Paternoster Row during the morning in mid-winter. This impact is unlikely to impact the rooftop terraces and the lower levels of these buildings are mainly garages the amenity of which would not be affected by additional shade. The residential properties to the north of the site, on Paternoster Row and Pyrmont Street are located to the north of the site and as such the acoustic shed would not cast a shadow on these properties.

The residential and commercial properties, including the Sebel Hotel, to the east of the site are also separated from the site by the four lanes of Pyrmont Street, reducing the potential for any material overshadowing impact. Similarly, the four lane wide Pyrmont Bridge Road separates the construction site from properties to the south and Elizabeth Healey Reserve and there is unlikely to be an overshadowing impact in these areas.

The pedestrian areas to the south west, south and south east of the site would experience shadow for longer duration, including a small area of Paternoster Row, the footpath adjoining the site on Pyrmont Bridge Road and Pyrmont Street.

Overall, due to the existing setting of medium density development, and location of the site to the south of the residential properties, there would be a limited potential for overshadowing. There would be a small area of public realm potentially experiencing additional shade and short duration and a **negligible landscape impact** due to overshadowing.

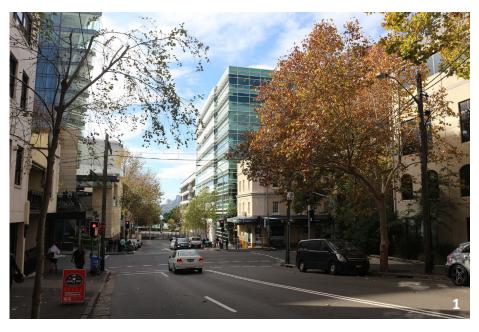


SAMUEL HORDERN FOUNTAIN



VIEW FROM PLAZA ACROSS PYRMONT BRIDGE ROAD AND ALONG EDWARD STREET

6.4 Assessment of landscape impact











- 1 VIEW EAST ALONG EDWARD STREET TO SYDNEY HARBOUR
- 2 VIEW WEST ALONG UNION STREET
- 3 UNION STREET BICYCLE LANES
- 4 VIEW EAST ALONG UNION STREET
- 5 VIEW ALONG EDWARD STREET

6.4.2 Pyrmont Station eastern construction site

Union Street, Edward Street and Pyrmont Bridge Road streetscapes

Existing conditions: These streetscapes form a triangular block, surrounding Pyrmont Station eastern construction site. Pyrmont Bridge Road is a busy road with up to four lanes of traffic, providing east-west access through Pyrmont, connecting Darling Harbour in the east with Glebe (via Bridge Road) in the west. The street includes several mature street trees and listed heritage buildings. such as corner hotels and former warehouse buildings, which contribute to the streetscape character. Union and Edward streets are local roads in Pyrmont, connecting to Pyrmont Bridge Road. These streets include several listed heritage buildings with decorative facades, such as the former New York Hotel and corner shop and residence 'Charmelu', both located opposite the construction site. There is a dedicated cycle lane along the northern side of Union Street, and awnings, mature street trees and gardens provide pedestrian scale and amenity to these streetscapes. The streets are activated, particularly in corner locations, with retail frontages, hotels, street cafes and alfresco dining.

Sensitivity:

Union Street, Edward Street and Pyrmont Bridge Road are characterised by several listed heritage buildings and mature street trees in the vicinity of the construction site. These streets attract people living, working and visiting this part of Pyrmont. Overall, these streetscapes are of **local landscape sensitivity** because of their important role within Pyrmont.

Landscape impact:

The listed heritage buildings along these streets would be retained, however, the contemporary buildings currently located within the Pyrmont Station eastern construction site would be demolished. The

6.4 Assessment of landscape impact

removal of this building would create a large break in the continuity of the built form in the area, reducing streetscape activation and the amenity of the adjacent footpaths. The acoustic shed would fill this void but have a simple façade with less articulation and variety of materials. The site access and haulage route along Pyrmont Bridge Road, and potentially along Union Street, with additional heavy vehicle movements, would also detract from the comfort along the footpaths adjoining the eastern construction site, particularly at the site access points on Pyrmont Bridge Road. Three mature London Plane street trees along Union Street would be removed, reducing the continuity of the planting and altering the shade and amenity of this street. Overall, there would be a noticeable reduction in the quality of this landscape, which is of local sensitivity, resulting in a minor adverse landscape impact.

Potential overshadowing impacts

The proposed acoustic shed would be taller than the existing building on the Pyrmont Station east construction site and has the potential to cast a longer shadow in areas to the west, south and east during mid-winter.

This would include the potential for additional overshadowing of the properties to the southwest and west of the site during the morning in mid-winter. The properties to the west of the site are commercial to the south of Edward Street and include some east facing residential properties at the northern end of the street, adjacent to the café on the corner with Union Street. Due to the separation of the site from these properties by Edward Street, which is four lanes wide, and their location to the north west of the acoustic shed, there is unlikely to be any overshadowing impact.

Similarly, in properties to the south of the site, the broad Pyrmont Bridge Road provides separation of these properties from the acoustic shed and the potential shadows are unlikely to extend to the residential properties which are on the upper levels of



PYRMONT BRIDGE ROAD HOTEL

these buildings.

There are no residential properties to the east of the site that would have the potential for overshadowing due to the narrowing of the site, and broad intersection between Union Street and Pyrmont Bridge Road.

There would potentially be a longer duration of shadow experienced on footpaths and areas of public realm to the south west, west and east of the site. However, this would be experienced in a densely urban area.

Overall, due to the existing setting of medium and high density development, and location of the site adjoining wide roadway to the west, south and east, there would be a small potential for additional shading of the public realm. This would result in a **negligible landscape impact** due to overshadowing at the eastern construction site.

6.5 Assessment of daytime visual impact

6.5 Assessment of daytime visual impact

The following viewpoints were selected as representative of the range of views to this proposal:

Pyrmont Station western construction site:

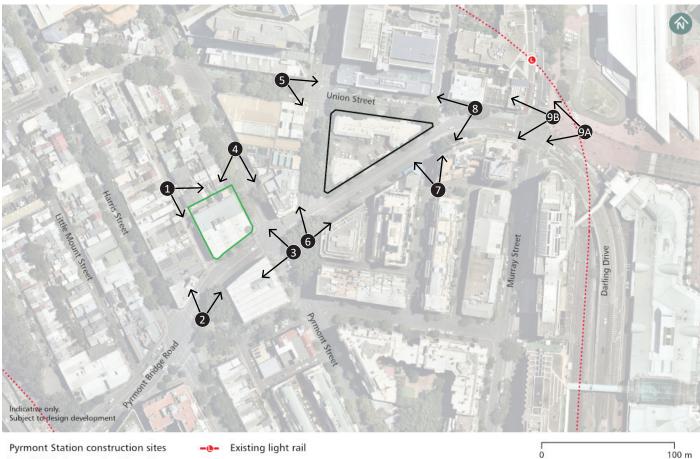
- Viewpoint 1: View south along Paternoster Row
- Viewpoint 2: View north along Pyrmont Bridge Road
- Viewpoint 3: View west across Pyrmont Bridge Road and Pyrmont Street intersection
- Viewpoint 4: View south along Pyrmont Street

Pyrmont Station eastern construction site

- Viewpoint 5: View east along Union Street
- Viewpoint 6: View north east to Edward Street and Pyrmont Bridge Road
- Viewpoint 7: View north along Harwood Street
- Viewpoint 8: View west from corner of Union Street and Pyrmont Bridge Road
- Viewpoint 9A/9B: View west from • Pyrmont Bridge.

Figure 6-3 identifies the location of these viewpoints.

The following sections summarise the daytime visual impact identified in the representative viewpoint assessment.



Western construction site

Eastern construction site г

Viewpoint location

100 m

FIGURE 6-3: PYRMONT STATION CONSTRUCTION SITE - VIEWPOINT LOCATIONS

6.5 Assessment of daytime visual impact

6.5.1 Viewpoint 1: View south along Paternoster Row

Existing conditions:

This view shows the rear façades of several buildings along Paternoster Row, including several garages (refer to Figure 6-4). The building on the western construction site has a warehouse character with windows and entries facing the lane. A few smaller street trees can be seen adjacent to the site.

The curved façade of the five storey former wool store building is visible in the background of view, along Pyrmont Bridge Road (centre of view), also part of the conservation area. This local listed heritage building (Sydney LEP 2012) is considered to have a 'strong presence in the Pyrmont townscape' (OEH, 2016a), with its arches and plain face brickwork providing visual interest in this view. The mature vegetation within the Elizabeth Healey Reserve, at the corner of Pyrmont Bridge Road and Harris Street, also enhances the character of the background of this view.

Sensitivity:

This view would be experienced by residents, workers, road users and visitors to this part of Pyrmont. While this view would have a lower number of viewers, it is located within a local conservation area and includes glimpses to character buildings and trees which are visual features. This view is of local visual sensitivity.

Visual impact:

The Pyrmont Station western construction site would be established in the centre of view, extending north from the corner of Pyrmont Bridge Road, along the eastern side of the laneway. The two mixed use buildings and adjacent driveway within the site would be demolished (refer to Figure 6-5). An acoustic shed would be erected over the site, screening views to works within the site. While the shed would present a blank façade to the laneway, it would reinstate the building line and frame the laneway. The colour of the acoustic shed would also be selected to complement the colours of the buildings



FIGURE 6-4: VIEWPOINT 1 - VIEW SOUTH ALONG PATERNOSTER ROW



FIGURE 6-5: VIEWPOINT 1 – VIEW SOUTH ALONG PATERNOSTER ROW, INDICATIVE EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)

6.5 Assessment of daytime visual impact

within the Heritage Conservation Area. Views to the listed heritage buildings and vegetation in the background of the view would be maintained.

This view would be seen in close proximity to nearby roof terraces in Paternoster Row, that would overlook the site and proposed acoustic shed. Construction vehicles would be seen travelling east along Pyrmont Bridge Road in the background of the view.

Overall, there would be a noticeable reduction in the amenity of this view, which is of local sensitivity, resulting in a **minor adverse visual impact.**

6.5.2 Viewpoint 2: View north east along Pyrmont Bridge Road

Existing conditions:

This view from the footpath alongside the Elizabeth Healey Reserve shows the construction site in the middle ground of the view, facing Pyrmont Bridge Road. This view is located in the Pyrmont Heritage Conservation Area (refer to Figure 6-6). The Quarryman's Hotel west of the construction site (left of view) is a three storey Federation Arts and Crafts style building on a prominent corner site which makes a 'positive contribution to the streetscape' (OEH, 2016b). This section of Pyrmont Bridge Road is wide, busy with vehicle traffic. There are three small street trees adjacent to the site, however, the large trees within the reserve provide amenity to this view. Paternoster Row is visible in the middle ground of view, a narrow laneway extending north from Pyrmont Bridge Road.

Sensitivity:

Views from this location are within the Pyrmont Heritage Conservation Area and would generally be experienced by park users including local residents and workers, road users and visitors to this part of Pyrmont. The character buildings and trees within the reserve and along Pyrmont Bridge Road are visual features in this view. This is a view of **local visual sensitivity.**

Visual impact:

The Pyrmont Station western construction site would be established in the centre of view, at the corner of Harris Street and Pyrmont Bridge Road (refer to Figure 6-7). This would include demolition of the buildings between Paternoster Row and Pyrmont Street, immediately north of Pyrmont Bridge. Several small street trees along Pyrmont Bridge Road, adjacent to the site, would also be removed. An acoustic shed installed over the entire site, screening views to works within to the site. However, construction vehicles would be seen accessing the site via entries from Pyrmont Bridge Road, seen in the middle ground of view. Overall, there would be a noticeable reduction in the amenity of this view, which is of local sensitivity, resulting in a minor adverse visual impact.

6.5 Assessment of daytime visual impact



FIGURE 6-6: VIEWPOINT 2 - VIEW NORTH EAST ALONG PYRMONT BRIDGE ROAD



FIGURE 6-7: VIEWPOINT 2 – VIEW NORTH EAST ALONG PYRMONT BRIDGE ROAD, INDICATIVE EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)

6.5 Assessment of daytime visual impact



FIGURE 6-8: VIEWPOINT 3 – VIEW WEST ACROSS PYRMONT BRIDGE ROAD AND PYRMONT STREET INTERSECTION



FIGURE 6-9: VIEWPOINT 3 – VIEW WEST ACROSS PYRMONT BRIDGE ROAD AND PYRMONT STREET INTERSECTION, INDICATIVE EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)

6.5.3 Viewpoint 3: View west across Pyrmont Bridge Road and Pyrmont Street intersection

Existing conditions:

This view shows the built form, scale and character of buildings at the Pyrmont Street and Pyrmont Bridge Road intersection (refer to Figure 6-8). The building on the corner of Pyrmont Street and Pyrmont Bridge Road centre of view is of modern style, with visual interest created by the rows of windows, brick detailing, and prominent corner feature. This building marks the eastern boundary of the Pyrmont Heritage Conservation Area, which includes a concentration of 19th century residential and commercial terrace buildings (right of view) which are 'largely intact and make a positive contribution to the streetscape' (OEH, 2011). The curved façade of the five storey former wool store building is seen at the corner of Pyrmont Street and Pyrmont Bridge Road (left of view), is also part of the conservation area and one of several historic commercial warehouse buildings seen from this location. This local listed heritage building (Sydney LEP 2012) is considered to have a 'strong presence in the Pyrmont townscape' (OEH, 2016a), with its arches and plain face brickwork providing visual interest in this view.

This view is from the plaza surrounding the Samuel Hordern Fountain, a local listed heritage item, shaded by large fig trees. These trees obstruct the view to the site from the cafes and restaurants which face this plaza space.

Sensitivity:

This view would generally be experienced by local residents, workers, road users and from within the Samuel Hordern Fountain Plaza. Several character buildings and street trees in the Pyrmont Heritage Conservation Area are visual features in this view. Views from this location are of **local visual sensitivity**.



FIGURE 6-10: VIEWPOINT 3 – VIEW WEST ACROSS PYRMONT BRIDGE ROAD AND PYRMONT STREET INTERSECTION, PHOTOMONTAGE

Visual impact:

The Pyrmont Station western construction site would be established in the centre of view, at the corner of Pyrmont Street and Pyrmont Bridge Road. The two mixed use buildings in the centre of this view would be demolished (refer to Figure 6-9). An acoustic shed would be erected over the entire site, screening views to the works (refer to Figure 6-10). The colour of this acoustic shed would be chosen to complement with the colours of the buildings within the Heritage Conservation Area. Construction vehicles would be seen accessing the site via Pyrmont Bridge Road (left of view) and travelling along Pyrmont Bridge Road and potentially along Pyrmont Road (right of view). While three small street trees along Pyrmont Bridge Road would be removed, the mature street trees along Pyrmont Street would be retained. These deciduous trees would soften views to the Pyrmont Street side of the construction site during the summer months.

Overall, due to the loss of a prominent corner building, there would be a noticeable reduction in the amenity of this view, which is of local sensitivity, resulting in a **minor adverse visual impact.**

6. **PYRMONT STATION**

6.5 Assessment of daytime visual impact



FIGURE 6-11: VIEWPOINT 4 - VIEW SOUTH ALONG PYRMONT STREET



FIGURE 6-12: VIEWPOINT 4 – VIEW SOUTH ALONG PYRMONT STREET, INDICATIVE EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)

6.5.4 Viewpoint 4: View south along Pyrmont Street

Existing conditions:

This view shows the mixed use building on the site, filtered through existing street trees, in the centre of the site (refer to Figure 6-11). The curved façade of the former wool store building can be seen in the background of view, at the corner of Pyrmont Street and Pyrmont Bridge Road (left of view). This local listed heritage building (Sydney LEP 2012) is considered to have a 'strong presence in the Pyrmont townscape' (OEH, 2016a), with its arches and plain face brickwork providing visual interest in this view. Several Victorian terraces, a part of a continuous row, and the mature London Plane street trees along Pyrmont Street, also enhance the visual character of this view.

Sensitivity:

This view is within the Pyrmont Heritage Conservation area and would generally be experienced by residents, workers, road users and visitors to this part of Pyrmont. The character buildings and street trees along Pyrmont Street are local visual features. This view is of **local visual sensitivity.**

Visual impact:

The Pyrmont Station western construction site would be established in the centre of view, extending north from the corner of Pyrmont Bridge Road, along the western side of the Pyrmont Street (centre of view). The two mixed use buildings within the site would be demolished (refer to Figure 6-12) and an acoustic shed would be erected over the site, screening views to construction activities within the site. The acoustic shed would be located adjacent to the Victorian terrace buildings in Pyrmont Street, and contrast in scale and detail. The street trees along Pyrmont Street would be protected and retained, filtering this view to the acoustic shed and maintaining the leafy character of this view. Construction vehicles may be seen travelling along Pyrmont Street in the foreground and Pyrmont Bridge Road in the

background of this view. The glimpse to the former wool store building would remain visible.

Overall, there would be a noticeable reduction in the amenity of this view due to the relatively compact site, and scale of the buildings which surround the construction site. As this is a view of local sensitivity, this would result in a **minor adverse visual impact.**

6.5.5 Viewpoint 5: View east along Union Street

Existing conditions:

This view, from near the Union and Edward Street intersection, shows the site surrounded by predominantly low to medium scale commercial and residential development (refer to Figure 6-13). Ground level retail uses with awnings over the footpath partially activate the street frontage. The Former New York Hotel (left of view) and corner shop (right of view), both locally listed heritage items (Sydney LEP 2012), are located on prominent corner sites and provide visual interest in this view. The mature street trees (London Plane) along Union and Edward streets also enhance the visual character of this area, channelling views along the street and filtering views to the adjacent built form. The street includes two lanes of traffic, with a cycleway along the northern side of Union Street, providing separated cycle and vehicular access.

Sensitivity:

This view by motorists and cyclists on Union Street, pedestrians including local residents, workers and tourists visiting Pyrmont. The listed heritage corner buildings are a local visual feature. Views from this location are of **local visual sensitivity.**

Visual impact:

Construction work at the Pyrmont Station eastern construction site would be visible in the middle ground of this view (centre-right of view). The existing modern commercial building which occupies the block would be demolished (refer to Figure 6-14). Initially

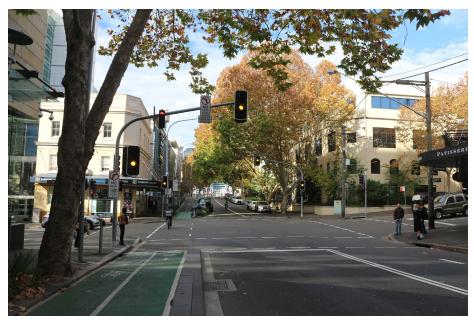


FIGURE 6-13: VIEWPOINT 5 - VIEW EAST ALONG UNION STREET



FIGURE 6-14: VIEWPOINT 5 – VIEW EAST ALONG UNION STREET, INDICATIVE EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)

6. PYRMONT STATION

6.5 Assessment of daytime visual impact



FIGURE 6-15: VIEWPOINT 6 – EXISTING VIEW NORTH EAST ALONG EDWARD STREET AND PYRMONT BRIDGE ROAD



FIGURE 6-16: VIEWPOINT 6 – VIEW NORTH EAST ALONG EDWARD STREET AND PYRMONT BRIDGE ROAD, INDICATIVE EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)

hoardings would be erected around the site, blocking street level views to the construction activity. An acoustic shed would be established across most of the site, further screening views to the site. Three mature London Plane street trees would be removed along Union Street adjacent to the construction site. The removal of these trees, visible in the middle ground of this view, would reduce the leafy character and interrupt the avenue of trees along this streetscape. There may be heavy vehicles seen travelling on Union Street and visible from this location.

Overall, due to the scale of the works and the removal of the existing mature street trees, there would be a considerable reduction in the amenity of this view. As this is a view of local sensitivity, this would result in a **moderate adverse visual impact.**

6.5.6 Viewpoint 6: View north east along Edward Street and Pyrmont Bridge Road

Existing conditions:

This view, from the plaza adjacent to the Samuel Hordern Fountain, a local listed heritage item includes the site in the centre middle ground (refer to Figure 6-15). There is a long vista north along Edward Street, towards Pyrmont Bay, with glimpses to the waters of Sydney Harbour. An avenue of mature London Plane trees is an attractive feature of this view, framing this view to the water. The view east along Pyrmont Bridge Road includes a glimpse to the Sydney CBD skyline in the background, contrasting with the low to medium scale development in this part of Pyrmont. While the built form along Edward Street and Pyrmont Bridge Road is varied, including a mixture of building heights, architectural styles and materials, the uniform building line provides some consistency and street tree planting creates a coherent character to this view.



FIGURE 6 17: VIEWPOINT 6 – VIEW NORTH EAST ALONG EDWARD STREET AND PYRMONT BRIDGE ROAD, PHOTOMONTAGE

Sensitivity:

This is a view of **local visual sensitivity.** It would be experienced by pedestrians using this plaza, as well as local residents, workers, road users and visitors to this area of Pyrmont. The street trees, as well as glimpses to the harbour and CBD skyline, are visual

Visual impact:

features in this view.

The Pyrmont Station eastern construction site would be established in the centre of view, at the corner of Edward Street and Pyrmont Bridge Road. An acoustic shed would be initially erected over a part of the site, (currently an existing carpark) facing Edward Street. This acoustic shed would be set back from the corner of the site, partly screened by the existing buildings and the existing street trees, which would be retained. Following this phase of construction, the existing commercial building on the site would be demolished (refer to Figure 6-16), and the acoustic shed would be expanded to cover most of the site (refer to Figure 6-17). The upper levels of nearby buildings in Edward Street and Pyrmont Bridge Road would overlook the site, including views to a large acoustic shed. Construction vehicles would be seen accessing the site via Pyrmont Bridge Road, with inbound and outbound haulage routes visible, travelling along Pyrmont Bridge Road.

Overall, there would be a noticeable reduction in the amenity of this view, which is of local sensitivity, resulting in a **minor adverse visual impact.**

6. **PYRMONT STATION**

6.5 Assessment of daytime visual impact



FIGURE 6-18: VIEWPOINT 7 - VIEW NORTH ALONG HARWOOD STREET



FIGURE 6-19: VIEWPOINT 7 – VIEW NORTH ALONG HARWOOD STREET, INDICATIVE EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)

6.5.7 Viewpoint 7: View north along Harwood Street

Existing conditions:

This view, from the corner of Union Lane and Harwood Street, includes the eastern construction site in the middle ground of the view (refer to Figure 6-18). Medium scale commercial and residential development frames this view. The Pyrmont Bridge Road Hotel, a local listed heritage building (Sydney LEP 2012), is visible in the foreground (left of view), on a corner site, with ground level retail uses and awning over the footpath. The mature London Plane street trees along Union Street and Pyrmont Bridge Road enhance the character of this view, filtering views to the adjacent built form.

Sensitivity:

They would be experienced by residents, workers, road users and visitors to this residential side street of Pyrmont. The heritage character corner building is a local feature in this view. Views from this location are of **local visual sensitivity**.

Visual impact:

The Pyrmont Station eastern construction site would be established in the centre, middle ground of this view. The existing commercial building would be demolished (refer to Figure 6-19), and an acoustic shed would be erected over the site. While the shrubs within the site (centre of view) would be removed, the street trees seen in this view would be retained, providing some screening of the acoustic shed. Construction vehicles would be seen travelling along Pyrmont Bridge Road, crossing the middle ground of view.

There would be similar views from the upper level, of the adjacent residential properties on Harwood Street and Union Lane.

As only a small part of the construction site would be visible from this location, there would be a noticeable reduction in the amenity of this view, which is of local sensitivity, and a **minor adverse visual impact.**

6.5.8 Viewpoint 8: View west from corner of Union Street and Pyrmont Bridge Road

Existing conditions:

This view is located at the eastern end of Union Street (right of view), where it meets Pyrmont Bridge Road (left of view), near Darling Harbour (refer to Figure 6-20). The mature London Plan trees along Pyrmont Bridge Road and particularly Union Street overhang the street, shading the footpaths and cycle path, enhancing the visual character of this view and filtering views to adjacent buildings. Medium density residential and commercial buildings to the north (right of view) and south, including the Pyrmont Bridge Road hotel (left of view), are visible in the background, rising above the built form on Union Street.

Sensitivity:

This view is of **local visual sensitivity**. It would be seen by pedestrians and local road users (both motorists and cyclists) travelling between Pyrmont and Darling Harbour. This would include residents, local workers and tourists to this part of Pyrmont.

Visual impact:

Pyrmont Station eastern construction site would be established in the centre of view, at the corner of Union Street and Pyrmont Bridge Road. The existing commercial building would be demolished, along with the removal of three mature London Plane trees along Union Street, in the middle and background of the view (refer to Figure 6-21). An acoustic shed would be erected over the site, covering much of the block, and screening views to the works within the site. Some vegetation at the corner of Union Street and Pyrmont Bridge Road would be removed, however, the existing street tree on this corner would filter the view to the acoustic shed. Construction vehicles would be seen accessing and egressing the site via Pyrmont Bridge Road, and travelling along Pyrmont Bridge Road and potentially Union Street, with heavy vehicles visible in the foreground of view.



FIGURE 6-20: VIEWPOINT 8 – VIEW WEST FROM CORNER OF UNION STREET AND PYRMONT BRIDGE ROAD



FIGURE 6-21: VIEWPOINT 8 – VIEW WEST FROM CORNER OF UNION STREET AND PYRMONT BRIDGE ROAD, INDICATIVE EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)

6. **PYRMONT STATION**

6.5 Assessment of daytime visual impact



FIGURE 6-22: VIEWPOINT 9A - VIEW WEST FROM PYRMONT BRIDGE



FIGURE 6-23: VIEWPOINT 9B – VIEW WEST FROM MURRAY STREET ADJACENT TO THE PYRMONT BRIDGE

Overall, due to the scale of the works, there would be a considerable reduction in the amenity of this view, which is of local sensitivity, resulting in a **moderate adverse** visual impact.

6.5.9 Viewpoint 9: View west from Pyrmont Bridge

Existing conditions:

The views from the western end of the Bridge includes the carved stone detailing of the bridge approaches (refer to Figure 6-22). The bridge structure has a 'high level of aesthetic value' (OEH, 2001). On Murray Street, opposite the western end of the bridge, the Pyrmont Bridge Hotel, a local listed heritage item and 'landmark' building (Sydney LEP 2012) can be seen located on a prominent corner site. This building has decorative gables and a distinctive corner tower, which make a 'positive contribution to the streetscape' (OEH, 2006) (refer to Figure 6-23). Beyond the hotel, the road splits into Union Street (right of view) and Pyrmont Bridge Road (left of view), creating visually prominent a triangular site in the centre of view. From this point, the built form gradually decreases to the west, towards Pyrmont, where the buildings reduce in scale and streets are shaded by mature street trees (centre of view).

Sensitivity:

Views along Pyrmont Bridge are experienced by large numbers of tourists accessing Darling Harbour and Pyrmont, and also by workers, local residents and their visitors. The Pyrmont Bridge is a State listed heritage structure, and this view includes heritage character buildings, including the Pyrmont Bridge Hotel, a local listed heritage building and 'landmark' (Sydney LEP 2021). Due to the number of receivers and visual features, this view is of **regional visual sensitivity.**

Visual impact:

The Pyrmont Station eastern construction site would be established in the centre of view, on the triangular site at the corner of Union Street and Pyrmont Bridge Road (refer to Figure 6-24 and 6-25). The commercial building located on the site would be demolished, as would the gardens within the site. The existing deciduous street trees on this corner would be retained, and continue to filter views to the site, particularly during the summer months. An acoustic shed would be erected over the site and would rise above the tree line in this view. Construction vehicles would be seen accessing and egressing the site via Pyrmont Bridge Road, with outbound haulage travelling along Pyrmont Bridge Road, in the middle and background of view. Construction vehicles may also be seen turning onto and then travelling west along Union Street.

Overall, there would be a noticeable reduction in the amenity of this view, which is of regional sensitivity, resulting in a **moderate adverse visual impact.**



FIGURE 6 24: VIEWPOINT 9B – VIEW WEST FROM MURRAY STREET ADJACENT TO THE PYRMONT BRIDGE, INDICATIVE EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)



FIGURE 6-25: VIEWPOINT 9B – VIEW WEST FROM MURRAY STREET ADJACENT TO THE PYRMONT BRIDGE, PHOTOMONTAGE

6. PYRMONT STATION

6.5 Assessment of daytime visual impact

6.5.10 Views to the Pyrmont power supply route

Existing conditions:

The Pyrmont power supply route (refer to Figure 6-26) would be located between the Pyrmont Station construction sites and Pyrmont substation in Harris Street. The power supply route would extend along the northern side of Pyrmont Bridge Road, starting at Pyrmont Station eastern construction site, to Pyrmont Station western construction site, and continue north along the eastern side of Harris Street, to the substation. The route would follow the footpath alongside low to medium rise commercial and residential areas in Pyrmont. Much of the route would pass through Pyrmont Heritage Conservation Area, including the curtilage of the Quarryman's Hotel, a local listed heritage building at the corner of Pyrmont Bridge Road and Harris Street. The route would also pass several mature street trees, particularly the 'substantial street trees (London Planes)' (OEH, 2011) along Harris Street, which are a landscape feature in the conservation area.

Sensitivity:

Views along the Pyrmont power supply route are generally experienced by road users, residents and visitors to adjacent residential and commercial buildings, including ground level retail outlets such as the Quarryman's Hotel. The power supply route is proposed to pass through the Pyrmont Heritage Conservation Area which is an aesthetically important area of Pyrmont. View along the route are of **local visual sensitivity**, due to the amenity values of the conservation area and high level of public use along Pyrmont Bridge Road and Harris Street.

Visual impact:

There would be open trench construction activity seen within the footpaths, in close proximity to pedestrians. The works would require the removal of sections of the pavement but not impact the existing street trees. The construction activity would be small scale and undertaken sequentially along the route. While some of the views along the route would contain built and landscape features of value, the works would not noticeably obstruct views to these features or impact them directly. The scale and extent of construction work would generally be absorbed within these views, resulting in noticeable reduction in the amenity of views along the route and a minor adverse visual impact along the route.



FIGURE 6-26: PYRMONT INDICATIVE POWER SUPPLY ROUTE

6. PYRMONT STATION

6.6 Assessment of night-time visual impact

6.6 Assessment of night-time visual impact

Existing conditions:

The Pyrmont Station construction sites would be located in an area of A4: High district brightness, which is of very low visual sensitivity. This lighting level is due to the low and medium rise residential and commercial buildings within this location. The brightly lit public realm and entertainment facilities at Darling Harbour, also contribute to the night-time lighting levels. Streetlights and headlights from traffic, particularly along Pyrmont Bridge Road, also contribute both static and moving light sources to the night scene. The mature vegetation on Pyrmont, Union and Edward streets provides some localised screening of the light from streetlights and traffic on the adjacent streets.

Visual Impact:

There would be night works required within the Pyrmont Station construction sites. However, this would be mostly contained within the acoustic sheds that would cover the construction sites. This would include night activities at the construction support areas such as workshops, offices and spoil storage areas. The lighting would be further screened and contained by site adjacent buildings and retained street trees. The removal of buildings within the construction sites would also potentially allow views from adjacent elevated hotels and nearby residential towers, which overlook the site, to view night-time works and construction vehicle movement along Pyrmont Bridge Road which occur before the establishment of or outside the acoustic sheds.

This work would be generally in character with the nearby brightly lit facilities from buildings and events within Darling Harbour, and the associated heavy traffic that occurs along nearby major roads. The additional light sources and skyglow that would be seen from the Pyrmont Station construction sites would generally be absorbed into the existing brightly lit night scene.

Overall, there would be a noticeable reduction in visual amenity at night to the area surrounding the Pyrmont Station construction sites, which is a very low visual sensitivity, resulting in a **negligible visual impact at night.**

6.7 Summary of impact

6.7 Summary of impact

Table 6-1, 6-2 and 6-3 summarise the potential landscape and visual impacts of this proposal.

TABLE 6-1: LANDSCAPE IMPACT SUMMARY

No.	Location	Sensitivity	Magnitude	Impact	
	Pyrmont Station western construction site				
1	Pyrmont Street and Pyrmont Bridge Road streetscapes	Local	Noticeable reduction	Minor adverse	
2	Paternoster Row laneway	Local	Noticeable reduction	Minor adverse	
	Potential overshadowing of residential properties			Negligible	
	Pyrmont Station eastern construction site				
3	Union Street, Edward Street and Pyrmont Bridge Road streetscapes	Local	Noticeable reduction	Minor adverse	
	Potential overshadowing of residential properties			Negligible	

TABLE 6-2: DAYTIME VISUAL IMPACT SUMMARY

No.	Location	Sensitivity	Magnitude	Impact	
	Pyrmont Station western construction site				
1	View south along Paternoster Row	Local	Noticeable reduction	Minor adverse	
2	View north east along Pyrmont Bridge Road	Local	Noticeable reduction	Minor adverse	
3	3 View west across Pyrmont Bridge Road and Pyrmont Street Local Noticeable redu intersection		Noticeable reduction	Minor adverse	
4	View south along Pyrmont Street		Noticeable reduction	Minor adverse	
	Pyrmont Station eastern construction site				
5	View east along Union Street	Local	Considerable reduction	Moderate adverse	
6	View north east along Edward Street and Pyrmont Bridge Road	Local	Noticeable reduction	Minor adverse	
7	View north along Harwood Street	Local	Noticeable reduction	Minor adverse	
8	View west from corner of Union Street and Pyrmont Bridge Road	Local	Considerable reduction	Moderate adverse	
9	View west from Pyrmont Bridge	Regional	Noticeable reduction	Moderate adverse	
	Views to the Pyrmont power supply route	Local	Noticeable reduction	Minor adverse	

TABLE 6-3: NIGHT-TIME VISUAL IMPACT SUMMARY

No.	Location	Sensitivity	Magnitude	Impact
1	Pyrmont Station construction sites	Very low (A4: High district brightness)	Noticeable reduction	Negligible

7.1 Existing environment

7.1 Existing environment

The Hunter Street Station (Sydney CBD) construction site would be located in the heart of the Sydney CBD, near the financial district and one of the busiest precincts of the city for vehicular and pedestrian movement. The construction site would be a short walk from some of Sydney's most prominent landmarks and attractions including Martin Place, Hyde Park, and Circular Quay. This part of the CBD is traversed by several important civic streets including Hunter Street and George Street, both of which are lined by office towers, intermittent historic buildings, mature trees and public squares.

There would be two Hunter Street Station (Sydney CBD) construction sites located on Hunter Street, generally between Bligh and



VIEW NORTH ALONG GEORGE STREET

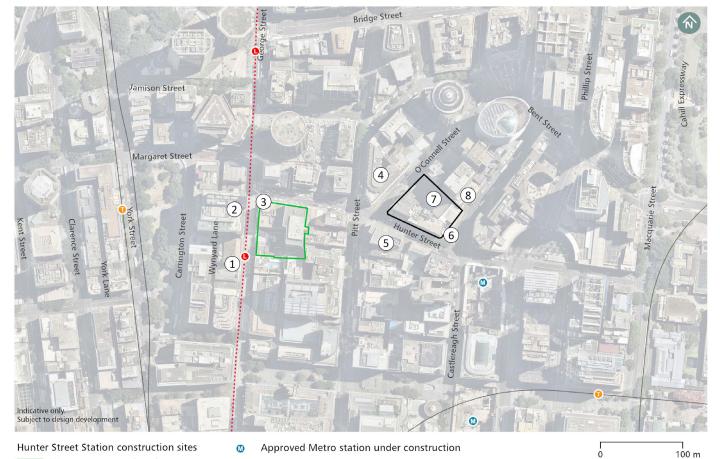
George Street. Hunter Street Station (Sydney CBD) western construction site extends south of Hunter Street, from the corner of George Street, including the historic former Skinners Family Hotel building at the corner (which would be retained). Hunter Street Station (Sydney CBD) eastern construction site extends north of Hunter Street, between Bligh and O'Connell Street, and includes the existing Bligh Street tunnelling support site established for Martin Place Metro Station (refer to Figure 7-1). Both sites currently include modern commercial medium and high-rise buildings.

Hunter Street Station (Sydney CBD) western construction site would be located on George Street, which has recently been pedestrianised as part of the Sydney Light Rail project. The Wynyard light rail stop is located to the south of Hunter Street, on George Street and adjacent to the construction site. The light rail includes north and southbound tracks, set within a wide pedestrian boulevard, with new paving, street trees and street furniture. The eastern entry to Wynyard Station is located opposite the construction site, on George Street. This entry to Wynyard Station has recently been upgraded and is a major entry point to the CBD. The heritage listed former Skinners Family Hotel building has a painted façade punctuated by large windows. It is relatively small and not prominent in views within this setting, but provides visual interest to the corner, marking the beginning of the pedestrianised section of George Street.

Hunter Street Station (Sydney CBD) eastern construction site would be located adjacent to Richard Johnson Square, at the corner of Bligh and Hunter streets. This public space is a historically and culturally important example of 20th century civic planning (local listed heritage item, Sydney LEP 2012). The square is a triangular shape space with a couple of trees, and a monument and plinth which marks this corner site.

7.1 Existing environment

FIGURE 7-1 HUNTER STREET STATION - LANDSCAPE CONTEXT



Hunter Street Station construction sites Western construction site Eastern construction site

- 1. George Street light rail stop
- 2. Wynyard Station entrance
- 3. Former Skinners Family Hotel
- 4. Former Wales House

С

- 5. Former 'Perpetual Trustee' building
- 6. Richard Johnson Square
- 7. Bligh Street tunnelling support site for Martin Place Metro Station
- 8. Former 'NSW Club' building

- Approved Metro station under construction 0
- -0 Existing light rail
 - **Existing Sydney Trains**
 - suburban rail network



- WYNYARD STATION ENTRY 1
- GEORGE AND WYNYARD STREET 2 OUTDOOR PLAZA SEATING



100 m

7.2 Planning guidance

Several street trees line Hunter, O'Connell and Bligh streets, providing shade and amenity to the streetscape and softening views within this intensely urban environment.

7.2 Planning guidance

Further to the planning review carried out in Section 3 of this Technical Paper, the following review identifies relevant provisions in strategic and master planning documents, which are of note to the landscape and visual impact assessment of the Hunter Street Station (Sydney CBD) construction sites.

7.2.1 Sydney Local Environmental Plan, City of Sydney, 2012

The construction sites are zoned B8 Metropolitan Centre. Although objectives promote uses with active street frontages and compatibility with land uses, it does not contain objectives specifically relating to landscape character or visual amenity. The sites are not located in a 'Special Character Area'.

The construction sites would be located near the following listed heritage items.

Hunter Street Station (Sydney CBD) western construction site:

- Former Skinners Family Hotel, 296 George Street (also on NSW State Heritage Register), located within construction site, at the corner of George and Hunter Streets
- Tank Stream tanks & tunnels, along Ash Street and Hamilton Street (also on NSW State Heritage Register), located along eastern boundary of construction site
- Former National Mutual Building, 350 George Street (also on NSW State Heritage Register)
- Former commercial building, 285–287 George Street
- Commercial building facades, 319–321 George Street
- "NSW Sports Club", 10–14 Hunter Street
- "Grand Hotel", 30–32 Hunter Street.

Hunter Street Station (Sydney CBD) eastern construction site:

- Richard Johnson Square including monument and plinth
- Former "NSW Club" building, 31 Bligh Street (also on NSW State Heritage Register), located along northern site boundary
- Former "Bank of NSW", 16 O'Connell Street, located along northern site boundary
- Former Wales House, 64–66 Pitt Street (Radisson Hotel) and Former "Rofe Chambers", 19-21 O'Connell Street (both on NSW State Heritage Register), located opposite the site
- Former "Perpetual Trustee" commercial building, 33–39 Hunter Street (also on NSW State Heritage Register, located opposite the site).

The '*settings and views*' of these places will be considered in this technical paper.

The 'design excellence' clause considers other matters such overshadowing and solar access, reflectivity, the impact on any special character area, and excellence and integration of landscape design (cl.6.21.4).

Key Move 4 of the CSPS aims to provide for employment growth in new tower clusters. The construction site would be located in one of the four proposed 'tall tower cluster areas' to include buildings above established maximum limits. Clause 6.16 of the current LEP: '*Erection of tall buildings in Central Sydney*', aims to ensure that tower development on land in Central Sydney:

- (a) provides amenity for the occupants of the tower and neighbouring buildings
- (b) does not adversely affect the amenity of public places
- (c) is compatible with its context
- (d) provides for sunlight to reach the sides and rear of the tower
- (f) encourages uses with active street frontages.

7.2 Planning guidance

The proposed amendments to the Sydney Local Environmental Plan 2012 would alter clause 6.16 'Erection of tall buildings in Central Sydney' to allow additional height and density in the most suitable locations. A new clause is also proposed: 'Protection of public views', to preserve and protect the important views from obstruction by tall buildings in Central Sydney. The proposed amendments to the Sydney Local Environmental Plan 2012 also recommend a 'Sun Access Planes' clause (cl. 6.17), which would affect the construction site. This clause aims to 'protect and improve sunlight to important public parks and places within and near Central Sydney throughout the year, and during periods in the day when they are most used' (cl. 6.17).

The amendment to the 'design excellence' clause also raised the following matters when considering proposals for new development:

- (b) whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain
- (c) whether the proposed development detrimentally impacts on view corridors (cl.6.21.4).

7.2.2 Sydney Development Control Plan 2012 Central Sydney Planning Strategy Amendment, 2020

In 2020 City of Sydney approved an amendment to the Sydney Development Control Plan 2012 as it applies to Central Sydney. The provisions progress key planning controls proposed in the CSPS. Key relevant changes include additional height and density in the most suitable locations, and ensuring new development achieves design excellence through a revised design policy.

The Hunter Street Station (Sydney CBD) construction sites would not be located in any of the 'Special Character Areas' nominated within Central Sydney that are of significance and important to the identity and quality of Central Sydney. However, the eastern construction site would be located adjacent the Chifley Square/Richard Johnson Square Special Character Area and will therefore need to consider the 'setting' of this area as well as public views and public vistas to heritage items and places of historic and aesthetic significance, such as Richard Johnson Square (cl. 5.1.1.2).

The LEP has been amended to include a new 'Views from Public Places' clause (cl. 5.1.8). This clause includes the following objectives:

- (a) To identify and preserve significant public views from public places
- (b) To ensure the silhouette created by existing clock towers, turrets and roof features on heritage listed items are clearly visible against the sky
- (c) To require development to respond to public views to Sydney Harbour by improving the view through building modulation
- (d) To require development to respond to significant public views from public places by enhancing views through, building modulation and/or high quality materials, finishes and design excellence.

The construction sites would not be within any of the view protection planes or public views identified in the LEP.



PAILINGS LANE

7.3 Character and components of this proposal

7.3 Character and components of this proposal

The proposed construction sites for the excavation of Hunter Street Station (Sydney CBD) are:

- Hunter Street Station (Sydney CBD) western construction site, which would cover about 3,700 square metres and would be located on the south east corner of Hunter Street and George Street and would also contain De Mestre Place. The site currently contains commercial buildings
- Hunter Street Station (Sydney CBD) eastern construction site, which would cover about 3,700 square metres and would be bounded by O'Connell Street, Hunter Street and Bligh Street. The site currently contains the existing Sydney Metro City & Southwest construction site at 33 Bligh Street with an existing acoustic shed.

The construction sites would be used to:

- Carry out the excavation of Hunter Street Station (Sydney CBD)
- Retrieve the tunnel boring machines driven east from The Bays tunnel launch and support site.

This station would be excavated using a mined technique, as described in Section 4. The existing shaft at the Sydney Metro City and South West Bligh Street construction site would be utilised and a new shaft would be excavated at the western construction site to the station cavern, to provide access during construction.

This construction site would include spoil storage and removal, water supply, water treatment and disposal, temporary ventilation plant, material storage as well as office facilities, worker amenities and parking, and storage.

Access to and egress from the Hunter Street Station (Sydney CBD) western construction site would be from Hunter Street. Access to and egress from the Hunter Street Station (Sydney CBD) eastern construction site would be from O'Connell Street via a cantilevered deck.

The existing acoustic shed on the Sydney Metro City & Southwest Bligh Street construction site at the eastern construction site would be maintained during mined cavern excavation works, and then removed to facilitate excavation of the shaft.

The location and indicative layout of the Hunter Street Station (Sydney CBD) construction sites, including vehicle access and egress is illustrated in Figure 7-2.



RICHARD JOHNSON SQUARE

7.3 Character and components of this proposal

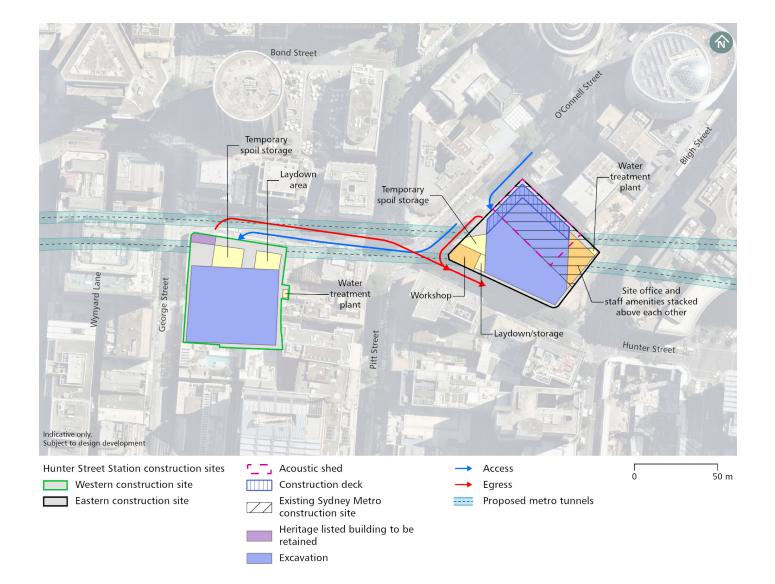


FIGURE 7-2: HUNTER STREET STATION CONSTRUCTION SITE LAYOUT

7.4 Assessment of landscape impact

7.4 Assessment of landscape impact

The following landscapes and public realm areas may potentially be impacted by the Hunter Street Station (Sydney CBD) construction sites.

Hunter Street Station (Sydney CBD) western construction site:

• George and Hunter Street streetscapes

Hunter Street Station (Sydney CBD) eastern construction site:

- Richard Johnson Square
- Bligh, Hunter and O'Connell Street streetscapes.

The following section summarises the assessment of impact for these landscape and public realm areas (refer to Table 2-4 for impact levels).

7.4.1 Hunter Street Station (Sydney CBD) western construction site

George and Hunter Street streetscapes Existing conditions:

George and Hunter streets are major routes in the grid of Sydney CBD. They intersect at the proposed Hunter Street Station (Sydney CBD) western construction site, beside the former Skinners Family Hotel building a State listed heritage item. This intersection also marks the northern end of the pedestrianised section of George Street, alongside the Sydney Light Rail corridor and Wynyard stop. Awnings, trees and high-quality urban furnishings provide comfort and amenity to the pedestrian areas of George Street, with the edges activated by a concentration of retail frontages, cafes and alfresco dining. Distinctive architectural features assist in wayfinding along both streets, including several heritage character buildings with decorative facades such as the former National Mutual Building at 350 George Street (also a State listed heritage building).

Sensitivity:

These George and Hunter Street streetscapes are of **regional landscape sensitivity.** These streets are heavily used by pedestrians and attract people living, working and tourists, with George Street being a destination as well as Wynyard Station being a major entry point to the CBD.

Landscape impact:

The former Skinners Family Hotel building is a local visual feature, which provides interest and variety to both streetscapes, will be retained. There would also be no direct landscape impact on the pedestrianised areas of George Street. The existing commercial buildings within Hunter Street Station (Sydney CBD) western construction site would be removed, and hoarding would be established along the site boundary. The removal of the buildings facing George and Hunter streets would create a large break in the continuity of the built form and reduce the street level

7.4 Assessment of landscape impact

activation. However, these buildings do not represent traditional building character, nor do they make a positive contribution to the character of either street that is noteworthy. The site access and haulage along Hunter Street would detract from the amenity and comfort for pedestrian along this street. One small street tree would be removed along Hunter Street.

Overall, there would be a noticeable reduction in the landscape quality of the George and Hunter Street streetscapes due to the scale and proximity of construction activity. This would result in a **moderate adverse landscape impact**.

7.4.2 Hunter Street Station (Sydney CBD) eastern construction site

Richard Johnson Square

Existing conditions:

Richard Johnson Square is used as a local meeting place and includes trees, seating and a listed heritage monument and plinth. The monument was constructed in the mid-1920s to commemorate the site of the first church erected in Australia and is named after its chaplain, Reverend Richard Johnson. The monument provides visual interest within the surrounding urban townscape.

Sensitivity:

This landscape provides a local meeting place for people working, living and visiting this part of the CBD, and is of **local landscape sensitivity.**

Landscape impact:

There would be no direct impact on Richard Johnson Square during construction. However, the appeal of this square as a meeting place and as a breakout space within this densely urban area of the CBD would be reduced by the proximity to major construction activity. The potential impact on footpaths adjacent to the construction site on Bligh and Hunter Streets would potentially divert pedestrians to surrounding footpaths and alter the patterns of access to and

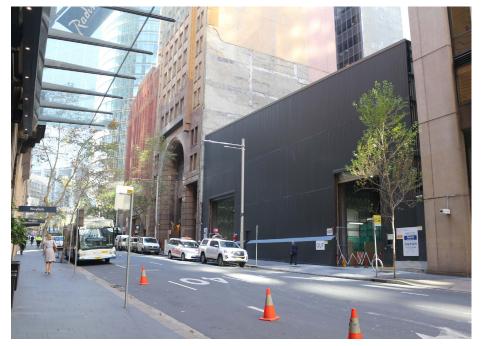






- 1 WYNYARD LIGHT RAIL STOP, GEORGE STREET
- 2 LITTLE HUNTER STREET
- 3 FORMER SKINNERS FAMILY HOTEL

7.4 Assessment of landscape impact



EXISTING ACOUSTIC SHED, BLIGH STREET CONSTRUCTION SITE



STREET TREES ON HUNTER STREET

movement through the Square. The removal of the existing buildings and acoustic shed would potentially allow for additional sunlight on the square during the afternoon in winter. Overall, it is expected that there would be noticeable reduction in the landscape qualities of Richard Johnson Square, resulting in a **minor adverse landscape impact.**

Bligh, Hunter and O'Connell Street streetscapes

Existing conditions:

Bligh and O'Connell streets are two north to south aligned streets in the CBD grid that link between Hunter and Bent streets. The southern end of these streets intersect with Hunter Street, which runs generally west to east between George and Macquarie streets. In this location, these streets are lined by high-rise office towers with retail space, restaurants and cafés at street level. The Bligh Street tunnelling support site for Martin Place Metro Station is located between Bligh and O'Connell streets, including demountable offices stacked to about three levels with hoarding along the Bligh Street frontage and an acoustic shed along the O'Connell Street frontage. This site creates a gap in the surrounding high-rise built form, allowing views through to nearby office towers. In views from O'Connell Street, the existing acoustic shed fits unobtrusively into the Bligh Street streetscape.

Bligh, Hunter and O'Connell Street include several historic buildings, such as the former 'NSW Club' building beside the Hunter Street Station (Sydney CBD) eastern construction site, at 31 Bligh Street, and the former Wales House and 'Perpetual Trustee' buildings located opposite the construction site. The decorative facades and use of materials at these properties contribute positively to the streetscape. Mature street trees along all three streets provide visual interest,

7.4 Assessment of landscape impact

pedestrian scale and add to the amenity of each street for pedestrians. Richard Johnson Square is located at the junction of Hunter and Bligh Street, beside the construction site, also providing visual interest within the surrounding urban townscape.

Sensitivity:

Bligh, Hunter and O'Connell Street are busy streets in Sydney CBD and include a number of listed heritage buildings and mature street trees, in the vicinity of the construction site. These streets are generally experienced by people living, working, visiting or passing through this part of the CBD and are of **local landscape sensitivity.**

Landscape impact:

The existing commercial buildings within Hunter Street (Sydney CBD) eastern construction site would be removed, however these buildings do not represent traditional building character, nor do they make a positive contribution to the character of either street that is noteworthy. The eastern construction site would maintain the existing Bligh Street tunnelling support site, continuing the presence of construction activity adjacent to these streets. The removal of the buildings facing Hunter Street would create a large break in the continuity of the built form. The site access and haulage along O'Connell Street and haulage along Hunter and O'Connell Street would detract from the pedestrian circulation and amenity for pedestrians using this side of the street. Three mature street trees would be removed, near the corner of Hunter and O'Connell Street, further detracting from the streetscape character. Overall, there would be a noticeable reduction in the landscape quality of these streetscapes, due to the scale and proximity of construction activity, resulting in a minor adverse landscape impact.







- 1 HUNTER STREET
- 2 O'CONNELL STREET
- 3 VIEW ALONG HUNTER STREET TO THE FORMER 'WALES HOUSE' (RADISSON HOTEL)

7.5 Assessment of daytime visual impact

7.5 Assessment of daytime visual impact

The following viewing locations were selected as representative of the range of views to this proposal:

Hunter Street Station (Sydney CBD) western construction site:

- Viewpoint 1: View north east along George Street from the Wynyard light rail stop
- Viewpoint 2: View south along George Street from corner of Margaret Street
- Viewpoint 3: View southwest from corner of Hunter and Hamilton streets

Hunter Street Station (Sydney CBD) eastern construction site:

- Viewpoint 4: View north east from corner of Hunter and Pitt streets
- Viewpoint 5: View north west from corner of Hunter and Castlereagh streets
- Viewpoint 6: View south along Bligh . Street.

Figure 7-3 identifies the location of these viewpoints.

The following sections summarise the daytime visual impact identified in the representative viewpoint assessment.

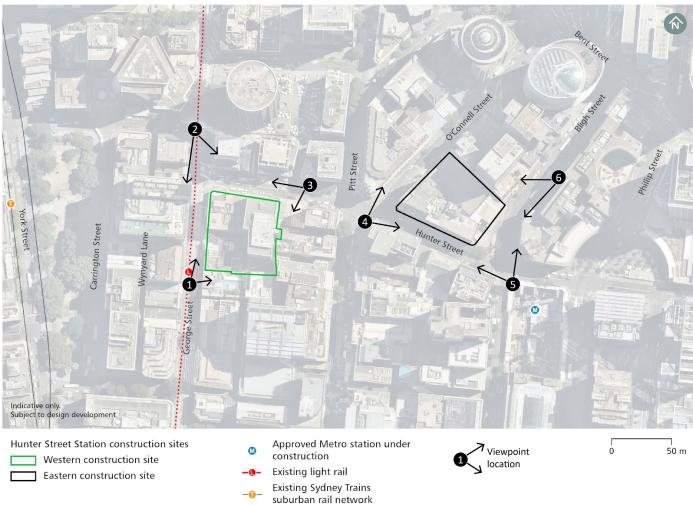


FIGURE 7-3: HUNTER STREET STATION

CONSTRUCTION SITES - VIEWPOINT LOCATIONS

7.5.1 Viewpoint 1: View north east along George Street from the Wynyard light rail stop

Existing conditions:

This view is from the Wynyard Light Rail stop, near the Wynyard Station entrance (refer to Figure 7-4). The two-way light rail route along George Street can be seen in the foreground of view. The street level is activated with light rail vehicles travelling across the view, and pedestrians moving freely around this pedestrianised plaza area. Light poles with banners, street furniture, and street trees add visual interest and variety to the street level seen this view. To the east of George Street there are high-rise office and hotel developments, with commercial frontages at street level. These buildings form a strong built edge to the street and enclose the view. The architecture seen from this location is an eclectic mix of historic and modern styles. The former Skinners Family Hotel (a State listed heritage building), can be glimpsed from this location, between surrounding high-rise towers. It is a three-storey brick building, marking the corner of George and Hunter Street.

Sensitivity:

Views from this location would generally be experienced by local residents, workers, road users and visitors to this part of Sydney's CBD. The character building and tree planting along George Street are visual features. This view is of **local visual sensitivity**.

Visual impact:

Hunter Street Station (Sydney CBD) western construction site would be established in the centre of view (refer to Figure 7-5). The heritage character corner building (former Skinners Family Hotel) would be retained and protected during construction. The adjacent commercial buildings within the site would be demolished and hoardings would be seen along the site boundary facing George Street. This hoarding would screen street level views into the construction site, however, larger equipment would be visible rising above this

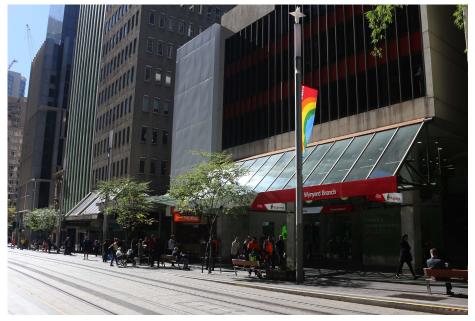


FIGURE 7-4: VIEWPOINT 1 - VIEW NORTH EAST ALONG GEORGE STREET FROM LIGHT RAIL STOP

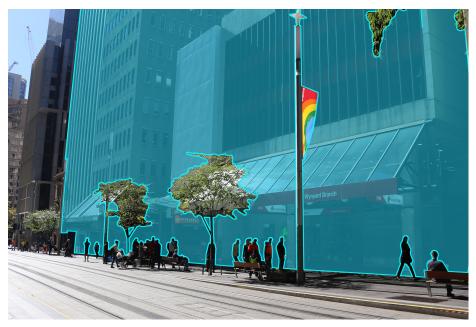


FIGURE 7-5: VIEWPOINT 1 – VIEW NORTH EAST ALONG GEORGE STREET FROM LIGHT RAIL STOP, INDICATIVE EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)

7.5 Assessment of daytime visual impact

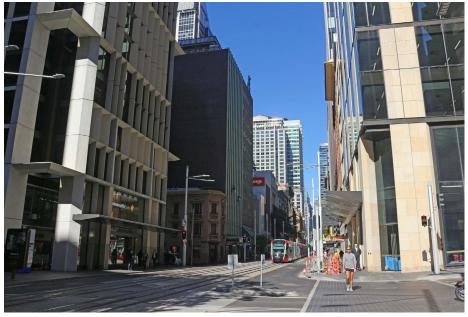


FIGURE 7-6: VIEWPOINT 2 – VIEW SOUTH ALONG GEORGE STREET FROM CORNER OF MARGARET STREET



FIGURE 7-7: VIEWPOINT 2 – VIEW SOUTH ALONG GEORGE STREET FROM CORNER OF MARGARET STREET, INDICATIVE EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)

hoarding. Due to the scale of the demolition works and proximity of the site to this viewing location, there would be a considerable reduction in the amenity of this view, which is of local sensitivity, resulting in a **moderate adverse visual impact.**

7.5.2 Viewpoint 2: View south along George Street from corner of Margaret Street

Existing conditions:

This view shows the two-way light rail route along George Street, south of Margaret Street, and light rail vehicles seen travelling across the foreground of view, along with vehicular traffic crossing the intersection (refer to Figure 7-6). The high-rise office and hotel developments are visible along George Street, including the Adina Apartment Hotel (left of view) and 275 George St commercial building (right of view). This built form channels views along the street and draws the eve upwards to the sky above the towers. The former Skinners Family Hotel (State listed heritage building), a three-storey brick building at the corner of George and Hunter Street, is a local visual feature, visible at street level in the centre of view. Further south, the decorative stone façade of the former National Mutual Building at 350 George Street (also a State listed heritage building) can be seen in the background of view. These buildings contrast in scale and character to the surrounding modern highrise developments and provide visual interest. The street trees along George Street and the podium and wall planting at the 320 George Street building further enhance the character of this view.

Sensitivity:

This view is of local visual sensitivity.

Views from this location would generally be experienced by local residents, workers, road users and visitors to this part of Sydney's CBD. The character buildings and planting along George Street are visual features.

Visual impact:

Hunter Street Station (Sydney CBD) western construction site would be established in the centre of view, extending south from the corner of Hunter and George streets. The heritage character corner building (former Skinners Family Hotel) would be retained and protected during construction. The adjacent commercial buildings within the site would be demolished (refer to Figure 7-7). Hoardings would be seen along the George Street site boundary, obstructing views to the lower level construction activity within the site. Larger equipment would be visible rising above this hoarding, above and surrounding the listed heritage building. Construction vehicles would also be seen accessing and egressing the site and travelling along Hunter Street. Overall, the works would be somewhat compatible and absorbed into the surrounding urban setting and there would be a noticeable reduction in the amenity of this view, which is of local sensitivity, resulting in a minor adverse visual impact.

7.5.3 Viewpoint 3: View southwest from corner of Hunter and Hamilton streets

Existing conditions:

This view from the corner of Hunter and Hamilton Street shows the site in the middle ground (refer to Figure 7-8). The height of the buildings and awnings over the footpath enclose and channel views along the street, limiting views upwards towards the buildings upon the site. The buildings along this section of Hunter Street exhibit variety of architectural styles, materials and building heights. The decorative stone façade of the building at 17 Hunter Street (left of view) marks the location of the State listed heritage item 'tank stream tanks & tunnels' (not visible in this view). The former Skinners Family Hotel, a State listed heritage item, is glimpsed in the background of view, at the corner of George and Hunter Street. These buildings contrast with the surrounding modern highrise commercial buildings in this view, along Hunter and George Street, providing visual interest to the streetscape.



FIGURE 7-8: VIEWPOINT 3 - VIEW SOUTHWEST FROM CORNER OF HUNTER AND HAMILTON STREETS



FIGURE 7-9 VIEWPOINT 3 – VIEW SOUTHWEST FROM CORNER OF HUNTER AND HAMILTON STREETS, INDICATIVE EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)

7.5 Assessment of daytime visual impact

Sensitivity: Views from this location would generally be experienced by local residents, workers, road users and visitors to this part of Sydney's CBD. The character buildings along Hunter and George streets are visual features this view. This view is of **local visual sensitivity.**

Visual impact:

Hunter Street Station (Sydney CBD) western construction site would be established in the centre of view, extending east from the corner of Hunter and George streets. The heritage character corner building (former Skinners Family Hotel) would be retained and protected during construction. The sandstone building at 17 Hunter Street would also not be impacted. The two high-rise buildings in between these sites would be demolished (refer to Figure 7-9). Hoardings would be visible along the site boundary along Hunter Street, obstructing views into the street level of the site. Larger equipment would be visible rising above this hoarding, above and surrounding the State listed heritage building. Construction vehicles would be seen travelling along Hunter Street and entering and exiting the site via two one-way accesses.

Overall, while the works would be of a large scale and in close proximity to pedestrians in this area, the dense urban setting has the capacity to absorb this change. This would result in a noticeable reduction in the amenity of this view, which is of local sensitivity, and there would be a **minor adverse visual impact.**

7.5.4 Viewpoint 4: View north east from corner of Hunter and Pitt streets

Existing conditions:

This view from the corner of Hunter and Pitt Street shows the site in the middle ground of the view (refer to Figure 7-10). The site and surrounding buildings include a mixture of architectural styles, materials and building heights. The sandstone façade of the former Wales House, a State listed heritage item, is an attractive feature of this view (left of view). This building has a 'strong townscape presence on its acutely angled corner site' (OEH, 2006). On the other side of O'Connell Street, the former "Bank of NSW" building can be seen (centre of view), another historic sandstone building that adds to the amenity of this view. These buildings contrast with the surrounding modern high-rise commercial buildings, along Hunter and O'Connell streets. The Bligh Street tunnelling support site for Martin Place Metro Station is glimpsed in the middle ground, along O'Connell Street, including an acoustic shed of about three storeys which fits unobtrusively in the streetscape. The street trees along Hunter and O'Connell streets enhance the character of this area, softening and filtering views to the adjacent built form.

Sensitivity:

Views from this location would generally be experienced by local residents, workers, road users and visitors to this part of Sydney's CBD. The character buildings and street trees along Hunter and O'Connell streets are visual features in views from this location. This view is of **local visual sensitivity.**

Visual impact:

Hunter Street Station (Sydney CBD) eastern construction site would be established in the centre of this view. The two high-rise buildings within the site would be demolished (refer to Figure 7-11). Three street trees located adjacent to the construction site would be removed, including the mature London Plane tree on Hunter Street (right of view), and the first and second tree along O'Connell Street from the corner of Hunter Street. The existing acoustic shed at the Bligh Street tunnelling support site, which is not prominent in this view, would remain in place for part of the works. Construction vehicles would be seen accessing the site from O'Connell Street, and Hunter Street.

Overall, while there would be a substantial change to this view associated with the demolition of the existing buildings, much of the work would then be enclosed within the existing acoustic shed and behind hoarding. The scale of the works would be generally compatible with the existing construction activity seen in this view, and somewhat absorbed into the surrounding urban setting. This would result in a noticeable reduction in the amenity of this view, which is of local visual sensitivity, and there would be a **minor adverse visual impact.**

7.5.5 Viewpoint 5: View north west from corner of Hunter and Castlereagh streets

Existing conditions:

Richard Johnson Square is visible in the centre of view, at the corner of Hunter and Bligh streets, including trees, seating and a listed heritage stone monument and plinth (refer to Figure 7-12). Beyond the square, the Bligh Street tunnelling support site for Martin Place Metro Station can be seen, including demountable site offices stacked to about three levels, and hoarding along the Bligh Street site boundary. This site creates a gap in the surrounding high-rise built form, allowing views through to office towers along O'Connell Street. The historic sandstone



FIGURE 7-10: VIEWPOINT 4 - VIEW NORTH EAST FROM CORNER OF HUNTER AND PITT STREETS



FIGURE 7-11: VIEWPOINT 4 – VIEW NORTH EAST FROM CORNER OF HUNTER AND PITT STREETS, INDICATIVE EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)

7.5 Assessment of daytime visual impact

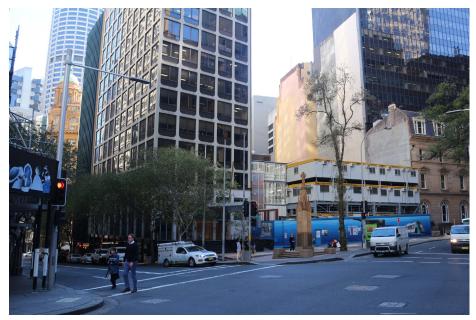


FIGURE 7-12: VIEWPOINT 5 – VIEW NORTH WEST FROM CORNER OF HUNTER AND CASTLEREAGH STREETS

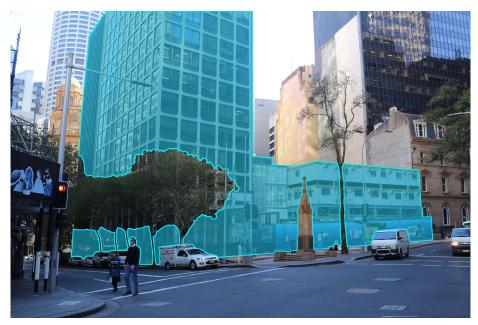


FIGURE 7-13: VIEWPOINT 5 – VIEW NORTH WEST FROM CORNER OF HUNTER AND CASTLEREAGH STREETS, INDICATIVE EXTENT OF EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)

façade of the former "NSW Club" building is visible to the north of the tunnelling support site (right of view). There is also a glimpse to the rounded corner of the former Wales House building junction of Hunter and O'Connell streets (left of view), also a State listed heritage building. This building is a local visual landmark that has a 'strong townscape presence on its acutely angled corner site' (OEH, 2006). The street trees along Hunter Street also enhance the visual character of this view.

Sensitivity: Views from this location would generally be experienced by local residents, workers, road users and visitors to this part of Sydney's CBD. The character buildings, historic public square and street trees along Hunter Street are visual features. This view is of **local visual sensitivity**.

Visual impact:

Hunter Street Station eastern construction site would be established in the centre of view, extending north from Hunter Street, between Bligh and O'Connell streets. The two high-rise buildings within the site would be demolished (refer to Figure 7-13), opening up a view to the listed heritage buildings on O'Connell Street, including the former Wales House building, a State listed heritage building. Hoardings would be seen along the site boundary, at Hunter and Bligh streets. The street trees along Bligh Street would also be retained and protected. The existing acoustic shed at the Bligh Street tunnelling support site would be maintained for a proportion of the works. Construction vehicles would be seen travelling along Hunter Street in the foreground of this view.

Overall, there would be substantial changes seen during the demolition of the existing buildings, however, the works would then be consistent with the scale of the activity at the Bligh Street tunnelling support site and largely absorbed into the densely urban setting. This would result in a noticeable reduction in the amenity of this view, which is of local sensitivity, and a **minor adverse** visual impact.

7.5.6 Viewpoint 6: View south along Bligh Street

Existing conditions:

Views from this location are enclosed by modern office towers along Bligh and Hunter streets (refer to Figure 7-14). At street level, building entries and street trees visually break-up the strong vertical line of the surrounding architecture. The historic sandstone façade of the former "NSW Club" building is visible in the middle ground, as is a glimpse to the former "Perpetual Trustee" building along Hunter Street (centre of view), both State listed heritage buildings. The Bligh Street tunnelling support site for Martin Place Metro Station is visible beside the former NSW Club building, including demountable offices stacked to about three levels and hoarding along the Bligh Street site boundary. Beyond the hoarding, Richard Johnson Square can be seen at the corner of Hunter and Bligh streets, including trees, seating and a listed heritage monument and plinth.

Sensitivity:

This view contains several state and local listed heritage items and is of **local visual sensitivity.** Views from this location would generally be experienced by local residents, workers, road users and visitors to this part of Sydney's CBD. The character buildings, historic public square and street trees along Bligh and Hunter streets are visual features.

Visual impact:

The high-rise building at the corner of Bligh and Hunter streets, beside the Bligh Street tunnelling support site, would be demolished (refer to Figure 7-15). The existing Bligh Street tunnelling support site would be maintained for a proportion of the works and hoardings would be seen along the site boundary on Bligh Street. The street trees along Bligh Street would be retained and protected. The historic sandstone façade of the former "NSW Club" building would partly obstruct views to the acoustic shed and the existing glimpse to the former "Perpetual



FIGURE 7-14: VIEWPOINT 6 - VIEW SOUTH ALONG BLIGH STREET



FIGURE 7-15: VIEWPOINT 6 – VIEW SOUTH ALONG BLIGH STREET, INDICATIVE EXTENT OF IMPACT FROM DEMOLITION (SHOWN BY BLUE SHADING)

7.6 Assessment of night-time visual impact

Trustee" building along Hunter Street (centre of view) would be maintained.

Overall, while there would be substantial changes seen during the demolition of the existing buildings, this work would then be consistent with the scale of the activity at the Bligh Street tunnelling support site and largely absorbed into the densely urban setting. This would result in a noticeable reduction in the amenity of this view, which is of local sensitivity, resulting in a **minor adverse visual impact.**



HUNTER STREET

7.6 Assessment of night-time visual impact

Existing conditions:

The Hunter Street Station (Sydney CBD) construction sites are located in an area of A4: High district brightness and have a **very low visual sensitivity** at night. This is due to the concentration of medium and high rise commercial, residential and hotel buildings within this location. Streetlights and headlights from traffic, including light rail vehicles, would further add light to the night scene.

Visual Impact:

There would be night works required within the Hunter Street Station (Sydney CBD) construction sites. At the western construction site, the lighting from any night works would be screened and contained by site hoarding surrounding the site, adjacent buildings and street trees (where retained). At the eastern construction site, this work would be mostly contained within the acoustic shed that would part of the site or by site hoarding surrounding the site.

The removal of buildings within the construction sites would also potentially allow adjacent elevated hotel, apartment and office towers, which overlook the sites, to view night-time works and construction vehicle movement along Hunter Street, particularly at the western construction site. These works would be generally in character with the nearby brightly lit facilities from buildings, and the associated heavy traffic that currently occurs along these major roads. Any additional light sources and skyglow would generally be absorbed into the existing brightly lit night scene.

Overall, there would be a noticeable reduction in visual amenity at night to the area surrounding the Hunter Street Station (Sydney CBD) construction sites, which are of very low visual sensitivity, resulting in a **negligible visual impact** at night.

7.7 Summary of impact

7.7 Summary of impact

Table 7-1, 7-2 and 7-3 summarise the potential visual impacts of this proposal.

TABLE 7-1: LANDSCAPE IMPACT SUMMARY

No.	Location	Sensitivity	Magnitude	Impact
1	George and Hunter Street streetscapes	Regional	Noticeable reduction	Moderate adverse
2	Richard Johnson Square	Local	Noticeable reduction	Minor adverse
3	Bligh, Hunter and O'Connell Street streetscapes	Local	Noticeable reduction	Minor adverse

TABLE 7-2: DAYTIME VISUAL IMPACT SUMMARY

No.	Location	Sensitivity	Magnitude	Impact	
	Hunter Street Station (Sydney CBD) western construction site				
1	View north east along George Street from light rail stop Local Considerable reduc		Considerable reduction	Moderate adverse	
2	View south along George Street from corner of Margaret Street		Noticeable reduction	Minor adverse	
3	View southwest from corner of Hunter and Hamilton streets	Local	Noticeable reduction	Minor adverse	
	Hunter Street Station (Sydney CBD) eastern construction site				
4	View north east from corner of Hunter and Pitt streets	Local	Noticeable reduction	Minor adverse	
5	View north west from corner of Hunter and Castlereagh streets	Local	Noticeable reduction	Minor adverse	
6	View south along Bligh Street	Local	Noticeable reduction	Minor adverse	

TABLE 7-3: NIGHT-TIME VISUAL IMPACT SUMMARY

No.	Location	Sensitivity	Magnitude	Impact
1	Hunter Street Station construction sites	Very low (A4: High	Noticeable reduction	Negligible
		district brightness)		

8. CUMULATIVE IMPACTS

8.1 The Bays tunnel launch and support site

Potential cumulative impacts were considered for assessment based on the likely interactions of this proposal with other projects and plans that met the adopted screening criteria. The approach to assessment and the other projects considered are described further in Appendix G (Cumulative impacts assessment methodology) of the Environmental Impact Statement.

8.1 The Bays tunnel launch and support site

The Bays tunnel launch and support construction site would be located near several other approved and proposed developments. Each of these has the potential for a landscape or visual impact that could interact with the potential impacts identified for this proposal.

These other projects include:

- Sydney Metro West Major civil construction work between Westmead and The Bays
- Sydney Metro City & Southwest (Chatswood to Sydenham) White Bay truck marshalling yard and tunnelling / construction of stations at Barangaroo
- The WestConnex Rozelle Interchange surface upgrade works at Victoria Road including a bridge upgrade, widening and realignment of Victoria Road
- Western Harbour Tunnel, including construction activities at Rozelle Rail Yards and White Bay
- Glebe island concrete batching plant
- Glebe island multi user facility
- Sydney Metro West Rail infrastructure, stations, precincts and operations, The Bays Station (subject to subsequent planning approvals process).

8.1.1 Landscape impact

Many of the infrastructure projects occurring within the vicinity of The Bays tunnel launch and support site have impacted the existing vegetation and canopy cover, connectivity of footpaths and area of available open space in areas to the south of The Bays tunnel and launch site. The landscape is currently characterised by major civil construction activity, heavy traffic and industrial scale support structures and buildings. To the north of the proposal there are several projects utilising the existing waterside areas of White Bay for construction support activities, including the WestConnex Rozelle Interchange, Sydney Metro City & Southwest (Chatswood to Sydenham), and the approved Sydney Metro construction site at The Bays (which also includes The Bays tunnel launch and support site proposed in this proposal).

As this proposal would utilise an existing construction site it would not require the removal of additional trees, or the alteration to the permeability, and accessibility of the public realm in this area. It would, therefore, not contributing to a cumulative effect on these landscape characteristics of the site. This proposal would, however, extend the duration of the impacts caused by the activity in the area, currently as a consequence of major civil construction work for Sydney Metro West between Westmead and The Bays, the Sydney Metro City & Southwest (Chatswood to Sydenham) White Bay truck marshalling yard, and the WestConnex Rozelle Interchange surface upgrade works at Victoria Road, and the Western Harbour Tunnel works.

There would be improvements over time as these infrastructure projects are completed. In these areas, it is expected that there would be both urban design and placemaking improvements to the infrastructure to the south of The Bays Station construction site. Furthermore, the areas surrounding this proposal to the north of Victoria Road would accommodate further construction activity including for The Bays Station (subject to subsequent planning approval process for

8.2 Pyrmont Station construction sites

Sydney Metro West (Rail infrastructure, stations, precincts and operations between Westmead and Sydney CBD)) and The Bays Precinct as intended by The Bays Precinct Urban Transformation Plan.

During construction there would be a potential cumulative landscape impact, of which this proposal would have a relatively small contribution as part of a wider transformation of the precinct. This cumulative impact would reduce over time with the completion of adjacent infrastructure projects.

8.1.2 Visual impact

There would be a potential cumulative visual impact to views from the north, including:

- From locations within Balmain and Balmain East, such as from the Mansfield Street Open Space and Peacock Point Reserve
- From locations across White Bay and the harbour, such as in views from Barangaroo Headland Reserve.

In these views this proposal would be seen within the context of the construction support sites for the Major civil construction work between Westmead and The Bays, Sydney Metro City & Southwest, the Western Harbour Tunnel works and WestConnex Rozelle Interchange projects. Combined they alter the character of a broad area of White Bay. There would, however, be visual compatibility between the components and character of these projects so that the differentiation of these projects in these views would be difficult. This cumulative impact would extend the duration of the identified adverse visual impacts from what has been experienced to date, and into the future as a part of the transformation of The Bays Precinct as a whole.

Similarly, in views from the south, such as from the residential areas along Hornsey Street and from the Anzac Bridge access road, there would be a cumulative visual impact with the foreground of these views being dominated by construction works associated with the WestConnex Rozelle Interchange. The setting of this proposal within an area currently occupied by and surrounded by other construction sites, would both increase the absorption capacity of this proposal into the view and extend the duration of the visual impacts experienced.

Any night works undertaken for this proposal would be seen as a continuation of the night works currently visible on and surrounding the site. This setting is an area of high district brightness and therefore has a high capacity to absorb additional light sources at night. There is a substantial separation between this site and the surrounding residences, further reducing the potential for a cumulative visual impact at night from these locations.

8.2 Pyrmont Station construction sites

The Pyrmont Station construction sites would be located near several other approved and proposed developments. Each of these has the potential for a landscape or visual impact that could interact with the impacts identified for this proposal. These other projects include:

- The new Sydney Fish Market
- Cockle Bay Wharf mixed use development
- Sydney Metro West Rail infrastructure, stations, precincts and operations, Pyrmont Station (subject to subsequent planning approvals process).

8.2.1 Landscape impact

Due to the separation of the proposed developments at the new Sydney Fish Market and Cockle Bay Wharf from this proposal, there are not predicted to be any cumulative landscape impacts. Each of these projects would be accompanied by landscape and urban design improvements to the public realm and contribute to the overall vision intended by the Eastern City District Plan and Pyrmont Peninsula Place Strategy.

8. CUMULATIVE IMPACTS

8.3 Hunter Street Station (Sydney CBD) construction sites

There would be a cumulative landscape impact expected with the proposed future construction and operation of the Sydney Metro West Pyrmont Station. This would include the potential for a continued impact on the amenity, level of comfort and accessibility of adjacent streetscapes during construction. However, during the operation of this proposed station and precinct (if approved) it is expected that these impacts would be eliminated as public realm and placemaking improvements are realised.

8.2.2 Visual impact

The Sydney Fish Market and Cockle Bay Wharf would be located beyond the visual catchment of this proposal and therefore would not have a cumulative visual impact during the day or at night.

There would be a cumulative visual impact expected with the construction of the future Pyrmont Station as part of Sydney Metro West - Rail infrastructure, stations, precincts and operations, as these proposals would be experienced in succession. This would include the potential for an increase in the duration of impacts to views from Paternoster Row, Pyrmont Bridge and Pyrmont Roads, the Elizabeth Healey Reserve and square at Edward Lane on Pyrmont Bridge Road at the western construction site, and from Union Street, Edward and Pyrmont Bridge Road at the eastern construction site. However, during the operation of the future proposed station and precinct (if approved) it is expected that these construction impacts would be eliminated as the built form is established on the sites and public realm and placemaking improvements are realised.

When moving through the Pyrmont Peninsula, there may be multiple sites seen in succession, including multiple large scale construction sites and heavy vehicles on the road network. However, this construction activity would be somewhat absorbed into the densely urban environment and a part of the character of this area as it undergoes an intended transformation envisioned by the Place Strategy. The site and most of these other projects are identified in the Place Strategy as being 'capable of change' in the Structure Plan (refer Figure 3-2 of this Technical Paper).

8.3 Hunter Street Station (Sydney CBD) construction sites

The Hunter Street Station (Sydney CBD) construction sites would be located near several other approved and proposed developments. Each of these has the potential for a landscape or visual impact that could interact with the impacts identified for this proposal.

These other projects include:

- Sydney Metro City & Southwest (Chatswood to Sydenham)
- Sydney Metro- Martin Place Over Station Development
- 50-52 Phillip Street New Hotel
- One Sydney Harbour
- 111 & 112 Castlereagh / 65-77 Market Street
- 317 and 319-321 George Street
- 180 George Street
- 194-204 Pitt Street, Sydney
- 301 and 305 Kent Street Concept Hotel development
- Sydney Metro West Rail infrastructure, stations, precincts and operations, Hunter Street Station (Sydney CBD) (subject to subsequent planning approvals process).

8.3.1 Landscape impact

Due to the separation of the western construction site from the Sydney Metro City & Southwest, Sydney Metro Martin Place - Over Station Development, the new hotel on Phillip Street, One Sydney Harbour and Castlereagh and Market Streets, there are not predicted to be any adverse cumulative

8.3 Hunter Street Station (Sydney CBD) construction sites

landscape impacts. Each of these projects would be accompanied by landscape and urban design improvements to the public realm and are likely to contribute to the overall cumulative improvements to the public realm of the Sydney CBD.

There would, however, be a cumulative landscape impact expected with the proposed future construction and operation of the Hunter Street Station (Sydney CBD) as part of Sydney Metro West - Rail infrastructure, stations, precincts and operations, at the western construction site as these proposals would be experienced in succession. This would include the potential for a continued landscape and visual impact on George and Hunter Streets during construction. However, during the operation of this proposed station and precinct (if approved) it is expected that these construction impacts would be eliminated as public realm and placemaking improvements are realised.

There are several other construction sites in close proximity to the eastern construction site, including the Sydney Metro City & Southwest Bligh Street construction site and for the Martin Place Station and Over Station Development. These projects currently impact the footpaths along Hunter Street and O'Connell Street. as well as the amenity of the Richard Johnson Square at the corner of Hunter and Bligh Street. The landscape impacts of this proposal on an additional section of Hunter and O'Connell Streets and the continued landscape impact surrounding the Bligh Street construction site and impacts on Richard Johnson Square would result in a cumulative landscape impact while the construction programs overlap. The further proposed work for subsequent stages of the Sydney Metro West project would be likely to extend this impact beyond the timeline of this proposal.

There are not predicted to be any adverse cumulative landscape impact with te new hotels, residential and commercial buildings proposed at One Sydney Harbour, on Phillip Street, George, Pitt, Castlereagh, Market and Kent Streets, due to the separation of these sites from this proposal.

8.3.2 Visual impact

The Sydney Metro City & Southwest, Sydney Metro Martin Place- Over Station Development, the new hotel on Phillip Street, One Sydney Harbour and Castlereagh and Market Streets, projects would be located beyond the visual catchment of the Hunter Street Station (Sydney CBD) western construction site. As such, they would not have a cumulative visual impact with any visual impact identified in this assessment during the day or at night.

At the eastern construction site, there are locations where multiple construction sites would be seen in views from Hunter, Bligh and O'Connell Streets. Some work would be visible at street level and extending into the skyline at various distances. Richard Johnson Square would be further surrounded by construction activity and would experience a cumulative visual impact for the duration of this proposal. This may potentially extend beyond this program with construction activity associated with the future stages of the Sydney Metro West project subject to separate approval.

There would also be a cumulative visual impact expected between this proposal and the proposed future construction and operation of Hunter Street Station (Sydney CBD) as part of Sydney Metro West – Rail infrastructure, stations, precincts and operations, as these proposals would be experienced in succession. This would include the potential for further impact to views from the Wynyard light rail stop, entry to Wynyard Station, George and Hunter Streets at the western construction site, and from Hunter, O'Connell, Pitt, Bligh and Castlereagh Streets at the eastern construction site. However, during the operation of this proposed station and precinct (if approved) it is expected that these impacts would be eliminated as the built form is established on the sites, restoring the continuity of built form, and public realm and placemaking improvements are realised.

There would be a potential for construction activity for the 317 and 319-321 George Street developments to be seen together in views from George Street and a cumulative visual impact.

Any night works undertaken at the construction sites would be either contained by acoustic sheds or hoarding and would be a continuation of the night works currently visible on sites seen in locations surrounding the sites. The CBD setting is an area of high district brightness and therefore has a high capacity to absorb additional light sources at night. The potential for any residential property or hotel to view multiple sites is limited, and appropriate mitigation measures would be implemented to minimise any direct light spill into private property.

When moving through the Hunter Street area of the CBD, there would be multiple construction sites seen in succession, including several large-scale construction sites and construction vehicles on the surrounding road network. This construction activity would be somewhat absorbed into the densely urban environment and a part of the character of the CBD as it continues to accommodate development, renewal and refurbishment work.

9. MITIGATION MEASURES

This section provides a summary of the mitigation and management measures that would avoid, reduce and manage the identified potential adverse landscape and visual impacts resulting from this proposal. Mitigation measures identified for this proposal are provided in Table 9-1.

These would be supplemented by mitigation measures detailed in Chapter 23 (Synthesis of the Environmental Impact Statement) of the Environmental Impact Statement with respect to cumulative impacts.

9 Mitigation measures

TABLE 9-1: MITIGATION MEASURES

ID	Impact	Mitigation measure	Application location(s)
LV1	Visual impacts	Where feasible and reasonable, the elements within construction sites would be located to minimise visual impact, for example materials and machinery would be stored behind fencing.	All sites
LV2	Trees	Opportunities for the retention and protection of existing street trees would be identified during detailed construction planning.	All sites
LV3	Trees	Existing trees to be retained would be protected prior to the commencement of construction in accordance with Australian Standard AS4970 the Australian Standard for Protection of Trees on Development Sites and Adjoining Properties.	All sites
LV4	Lighting impacts	Lighting of construction sites would be oriented to minimise glare and light spill impact on adjacent receivers.	All sites
LV5	Visual impacts	The design and maintenance of construction site hoardings would aim to minimise visual amenity and landscape character impact.	All sites
LV6	Visual impacts	Construction site hoardings would be designed in accordance with Sydney Metro Brand Design Guidelines and opportunities for public art on hoardings would be considered in locations of high pedestrian use.	All sites
LV7	Visual impacts	Graffiti would be removed promptly from hoardings and any other aspects of construction sites.	All sites
LV8	Visual impacts	All structures (including acoustic sheds or other acoustic measures, site offices and workshop sheds) would be finished in a colour which aims to minimise their visual impact, if visible from areas external to the construction site. This finish is to be applied to all visible fixtures and fittings (including exposed downpipes).	All sites
LV9	Trees	Trees removed by the major civil construction work between The Bays and Sydney CBD would be replaced to provide a net increase in the number of mature trees at a ratio of 2:1 across the entire Sydney Metro West project (as part of future approval stages of Sydney Metro West).	All sites
LV10	Visual impacts	Any new temporary structures on the construction site boundary facing Richard Johnson Square would consider urban design or landscape treatment to minimise visual amenity and landscape character impact where feasible and reasonable.	Hunter Street Station (Sydney CBD) construction site

REFERENCES

Australian Institute of Landscape Architects (AILA), QLD, 2018, *Guidance Note for Landscape and Visual Assessment, URL:* http://www.aila.org.au/iMIS_Prod/documents/AILA/QLD/2018/AILA_GNLVA_June_2018V2.pdf (accessed 16/03/2021).

City of Sydney, 2019, Draft Minimising overshadowing of neighbouring apartments Documentation guide, https://www.cityofsydney.nsw.gov.au/development-guidelines-policies/ minimising-overshadowing-of-/neighbouring-apartments-documentation-guidelines-draft (accessed 17/05/2021).

City of Sydney, 2020a, *City Plan 2036 – City of Sydney Local Strategic Planning Statement, URL:* https://www.cityofsydney.nsw.gov.au/strategic-land-use-plans/city-plan-2036 (accessed 29/03/2021).

City of Sydney, 2020b, *Draft Central Sydney Planning Strategy 2016-2036, URL:* https://www.cityofsydney.nsw.gov.au/policy-planning-changes/central-sydney-planning-framework (accessed 29/03/2021).

Greater Sydney Commission, 2018, *Greater Sydney Region Plan: A Metropolis of Three Cities* – *connecting people, URL:* <u>https://www.planning.nsw.gov.au/plans-for-your-area/a-metropolis-of-three-cities/a-metropolis-of-three-cities (accessed 23/03/2021).</u>

<u>Greater Sydney Commission, 2018a, Our Greater Sydney 2056 Central City District Plan</u> – <u>Connecting Communities, URL:</u> https://www.greater.sydney/central-city-district-plan (accessed 23/03/2021).

Greater Sydney Commission, 2018b, *Our Greater Sydney 2056 Eastern District Plan – Connecting Communities*, URL: https://www.greater.sydney/eastern-city-district-plan/introduction (accessed 23/03/2021).

Inner West Council, 2020, *Our Place Inner West Local Strategic Planning Statement, URL:* https://yoursay.innerwest.nsw.gov.au/our-place-inner-west (accessed 23/03/2021).

Institute of Lighting Professionals UK, 2020, *Guidance notes for the reduction of obtrusive light GN01-20*, URL: https://theilp.org.uk/publication/guidance-note-1-for-the-reduction-of-obtrusive-light-2020/ (accessed 23/03/2021).

Landscape Institute and Institute of Environmental Management & Assessment, 2013, *Guidance for Landscape and Visual Impact Assessment, Third Edition.*

Leichhardt Council, 2013, Leichhardt Development Control Plan 2013, URL: https://www. innerwest.nsw.gov.au/develop/plans-policies-and-controls/development-controls-lep-and-dcp/ development-control-plans-dcp/leichhardt-dcp (accessed 17/05/2021).

NSW Department of Planning and Environment, 2019, *The Star Casino, Section 75W Modification Assessment (MP 08_0098 MOD 13), URL:* https://www.planningportal.nsw.gov.au/ major-projects/project/26371 (accessed 01/06/2021).

NSW Department of Planning, Industry and Environment, 2021a, *Draft Bays West Place Strategy, URL:* https://www.planning.nsw.gov.au/Plans-for-your-area/State-Significant-Precincts/ The-Bays/Bays-West (accessed 29/03/2021).

NSW Department of Planning, Industry and Environment, 2021b, *Bays West Strategic Place Framework, URL:* https://shared-drupal-s3fs.s3-ap-southeast-2.amazonaws.com/master-test/fapub_pdf/Bays+West+Strategic+Place+Framework+(SPF).pdf (accessed 18/05/2021).

References

NSW Department of Planning, Industry and Environment, 2021c, *Blackwattle Bay*, *URL*: https://shared-drupal-s3fs.s3.ap-southeast-2.amazonaws.com/master-test/fapub_pdf/ Blackwattle+Bay+SSP+Study_revised+140721.pdf (accessed 05/08/2021).

NSW Department of Planning, Industry and Environment, 2020, *Pyrmont Peninsula Place Strategy, URL:* https://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Pyrmont-Peninsula (accessed 29/03/2021).

NSW Department of Planning, Industry & Environment, 2021, *Great Public Spaces Toolkit, URL:* https://www.dpie.nsw.gov.au/premiers-priorities/great-public-spaces/festival-of-place/great-public-spaces-toolkit?linkld=114981723 (accessed 28/04/2021).

NSW Office of Environment and Heritage (OEH), Heritage Inventory, 1996, *Pyrmont Bridge Hotel*, https://apps.environment.nsw.gov.au/dpcheritageapp/ViewHeritageItemDetails. aspx?ID=2424486 (accessed 25/05/2021).

NSW Office of Environment and Heritage (OEH), Heritage Inventory, 2000, *White Bay Power Station Complex*, URL:https://www.environment.nsw.gov.au/heritageapp/ ViewHeritageItemDetails.aspx?ID=4500460 (accessed 28/03/2021).

NSW Office of Environment and Heritage (OEH), Heritage Inventory, 2001, *Pyrmont Bridge*, https://apps.environment.nsw.gov.au/dpcheritageapp/ViewHeritageItemDetails. aspx?ID=4500383 (accessed 25/05/2021).

NSW Office of Environment and Heritage (OEH), Heritage Inventory, 2004 *Glebe Island Silos, URL:* https://apps.environment.nsw.gov.au/dpcheritageapp/ViewHeritageItemDetails. aspx?ID=4560016 (accessed 27/05/2021).

NSW Office of Environment and Heritage (OEH), Heritage Inventory, 2006, *Former Wales House, URL:* https://apps.environment.nsw.gov.au/dpcheritageapp/ViewHeritageItemDetails. aspx?ID=2423710 (accessed 27/05/2021).

NSW Office of Environment and Heritage (OEH), Heritage Inventory, 2009a, *Anzac Bridge, URL:* <u>https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=4305018</u> (accessed 28/03/2021).

<u>NSW Office of Environment and Heritage (OEH), Heritage Inventory, 2011, Pyrmont</u> <u>Heritage Conservation Area, URL</u> https://apps.environment.nsw.gov.au/dpcheritageapp/ ViewHeritageItemDetails.aspx?ID=2424801 (accessed 26/05/2021).

NSW Office of Environment and Heritage (OEH), Heritage Inventory, 2013a, *Glebe Island Bridge, URL* <u>https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.</u> <u>aspx?ID=5051118 (accessed 28/03/2021).</u>

<u>NSW Office of Environment and Heritage (OEH), Heritage Inventory, 2016a, Former wool</u> <u>store "John Taylor Wool Stores", URL</u> https://apps.environment.nsw.gov.au/dpcheritageapp/ ViewHeritageItemDetails.aspx?ID=2424379 (accessed 26/05/2021).

NSW Office of Environment and Heritage (OEH), Heritage Inventory, 2016b, *Quarryman's Hotel including interior, URL* https://apps.environment.nsw.gov.au/dpcheritageapp/ ViewHeritageItemDetails.aspx?ID=2424385 (accessed 26/05/2021).

Office of the State Government Architect NSW, 2020a, *Draft Greener Places – Establishing an urban Green Infrastructure policy for New South Wales, URL:* https://www.governmentarchitect.

REFERENCES

nsw.gov.au/policies/greener-places (accessed 29/03/2021).

Office of the State Government Architect NSW, 2020b, *Greener Places Design Guide – Open Space for Recreation Urban Tree Canopy Bushland and Waterways, URL:* https://www.governmentarchitect.nsw.gov.au/policies/greener-places (accessed 29/03/2021).

Office of the State Government Architect NSW, 2018, *Better Methods: Evaluating Good Design, Implementing Better Placed design objectives into projects.*

Office of the State Government Architect NSW, 2018a, Better Placed: An integrated design policy for the built environment of NSW.

Office of the State Government Architect NSW, 2018, Better Placed: Draft Good Urban Design Strategies for realising Better Placed objectives in the design of the built environment.

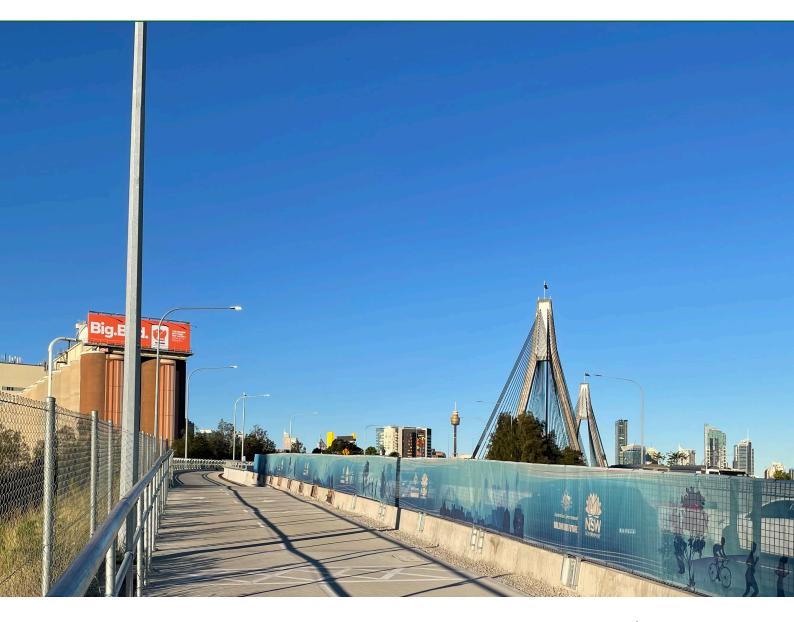
Office of the State Government Architect NSW, 2016, Better Placed: A design led approach: developing an Architecture and Design Policy for New South Wales, URL: <u>http://www.planning.</u> <u>nsw.gov.au/~/media/Files/DPE/Plans-and-policies/draft-nsw-architecture-and-urban-design-policy-2016-09.ashx (accessed 28/104/2021).</u>

<u>Transport for NSW, 2020, Environmental impact assessment practice note EIA-N04: Guideline for</u> <u>landscape character and visual impact assessment.</u>

Transport for NSW, 2016, Around the Tracks: urban design for heavy and light rail, interim issue.

<u>NSW Department of Planning, Industry and Environment, 2021, Draft Bays West Place Strategy</u> <u>URL:</u> https://www.planningportal.nsw.gov.au/bays-west (accessed 29/03/2021).

References



www.irisvisual.com.au