Redfern Station Upgrade – New Southern Concourse

Technical report 1 - Landscape character and visual

Artist's impression of the proposed Redfern Station Upgrade - New Southern Concourse. Indicative only, subject to detailed design.

Transport for NSW | May 2020

Redfern Station Upgrade: New Southern Concourse

Technical Report 1: Landscape Character and Visual

Client: Transport for New South Wales

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Background information

Transport for NSW (TfNSW) is the lead agency for the integrated delivery of public transport services across all modes of transport in NSW and is responsible for the delivery of projects within the Transport Access Program (TAP). TAP is a NSW Government initiative to provide an improved experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure across NSW.

TfNSW is seeking approval to construct and operate an upgrade of Redfern Station (Redfern Station Upgrade - New Southern Concourse, hereafter referred to as 'the Project') as a component of the TAP. The Project involves the construction of a new pedestrian concourse to the south of the existing Lawson Street concourse providing both lift and stair access to Platforms 1-10. The new pedestrian concourse would provide a new connection across the railway corridor, extending between Little Eveleigh Street and Marian Street in the suburbs of Redfern and Eveleigh and includes associated interchange upgrades.

Project overview

The key features of the Project include:

- a six metre wide concourse between Little Eveleigh Street and Marian Street
- new stair and lift access from the concourse to Platforms 1 to 10
- an upgraded station entrance at Marian Street including station services and customer amenities
- a new station entrance at Little Eveleigh Street including station services and customer amenities
- formalisation of a shared zone on Little Eveleigh Street
- upgrade of Marian Street/Cornwallis Street/Rosehill Street area including an extension to the existing shared zone
- relocation of shuttle bus zone from Little Eveleigh Street to Lawson Street
- kiss and ride on Lawson Street and Gibbons Street/with associated footpath upgrade
- footpath widening on Ivy Street
- relocation of a building on Platform 1 to accommodate the concourse
- works to platforms (including re-surfacing, re-purposing/relocating/alteration to platform features such as existing buildings, installation of canopies, drainage works, and installation of operational infrastructure such as wayfinding, signage and passenger information systems)
- overhead wiring relocations and upgrades
- operation of the Project.

Further details of the Project are provided in Chapter 5 of the Environmental Impact Statement.

The purpose of this technical report is to identify potential landscape character and visual impacts of the Project and to outline mitigation measures relating to impacts during detailed design, construction and operation of the Project. This assessment also addresses the requirements of the Secretary of the Department of Planning, Industry and Environment (DPIE) (the 'Secretary's environmental assessment requirements' or SEARs).

Methodology

This report has undertaken an assessment of the Project at operation using the *Guidelines for Landscape and Visual Impact Assessment* (GLVIA3) (Landscape Institute and Institute for Environmental Management, 2013). It also provides a brief, high level commentary around visual impacts arising from the construction process.

The study area for this assessment has been set at a 250 metre radius from the proposed station entry position on Little Eveleigh Street, which is considered conservative given the low elevation of the station platforms and the visual screening provided by the adjacent buildings.

Landscape character assessment

Five Landscape Character Zones (LCZs) have been identified within the broader landscape setting (refer Figure 7):

- LCZ 1: Rail Corridor
- LCZ 2: Community and Education
- LCZ 3: Mixed Use Commercial and Residential
- LCZ 4: Residential
- LCZ 5: Public Recreation.

As shown in Table 1, two of the five LCZs were subject to negligible change from the Project. Three of the five LCZs identified within the study area were affected by the Project. However, only one LCZ (LCZ 1: Rail Corridor) returned a High to Moderate impact of the Project on landscape character, in part due to:

- the Project being located within this LCZ and comprising the addition of a large piece of infrastructure in close proximity to Redfern Station
- Redfern Station containing several items of State heritage significance and therefore having an increased sensitivity to change
- heritage values within an area increase the landscape value associated with that LCZ.

While the change to landscape character is rated as High to Moderate within this LCZ, these changes are considered acceptable due to the placement of rail infrastructure within a working rail corridor, i.e. the character of the proposed infrastructure is in keeping with the character of the existing working rail corridor. The reuse of an existing building on Little Eveleigh Street and the low profile station entry accompanied by landscaping at Marian Street both assist in integrating the Project into the surrounding area beyond the rail corridor, while the design of the pedestrian concourse is consistent in character with other existing infrastructure within the LCZ such as other pedestrian concourses at train stations, overhead gantries, road bridges over the rail corridor, and station and rail corridor built form, including substations.

The other two LCZs affected were LCZ 4: Residential and LCZ 5: Public Recreation. Changes due to the Project would lie within to these LCZs but affect only small proportions of each. The overall Moderate ratings for each of these LCZs were due to the High sensitivity of these LCZs rather than the magnitude of change, which was Low in both cases.

Table 1 Summary of effects on landscape character

LANDSCAPE CHARACTER ZONE	SENSITIVITY	MAGNITUDE	SIGNIFICANCE OF LANDSCAPE EFFECTS	ADVERSE	NEUTRAL	POSITIVE
LCZ 1 - RAIL CORRIDOR	MODERATE	HIGH	**HIGH TO MODERATE**			X
LCZ 2: COMMUNITY AND EDUCATION	NEGLIGIBLE	NEGLIGIBLE	**NEGLIGIBLE**		X	
LCZ 3 - MIXED USE COMMERCIAL AND RESIDENTIAL	NEGLIGIBLE	NEGLIGIBLE	**NEGLIGIBLE**		X	X
LCZ 4 - RESIDENTIAL	HIGH	LOW	**MODERATE**			X
LCZ 5 - PUBLIC RECREATION	HIGH	LOW	**MODERATE**			X

Visual impact assessment - construction

As shown in Table 2, the effect of the Project on key views and visual amenity during the construction period at the ancillary facility areas ranged between Moderate and Low. This result is primarily due to the existing use of most of the ancillary facility areas, typically industrial and rail-related, and the limited duration of use, meaning that the change in use to ancillary facilities would result in a similar view to these existing sites from their surrounds.

Table 2 Summary of effects on views and visual amenity

ANCILLARY FACILITY LOCATION	SENSITIVITY	MAGNITUDE	SIGNIFICANCE OF VISUAL EFFECTS	ADVERSE	NEUTRAL	POSITIVE
ANCILLARY FACILITY 1 - EVELEIGH MAINTENANCE CENTRE	LOW	LOW	LOW		X	
ANCILLARY FACILITY 2 - SYDNEY TRAINS	LOW	LOW	LOW		X	
ANCILLARY FACILITY 3 - GIBBONS STREET RESERVE AND MARIAN STREET CAR PARK	MODERATE	MODERATE	MODERATE	X		

During the construction period, the Project would result in the following visual changes:

- the construction of the pedestrian concourse between Little Eveleigh Street and Marian Street
- the construction of the new station entrance on Little Eveleigh Street
- the construction of the upgraded station entrance on Marian Street
- road works / upgrades (including shared zones, relocation of Kiss and Ride zones, bike parking facilities, street furniture, signage, traffic calming devices and landscaping) in Little Eveleigh Street, Ivy Street, Lawson Street, Marian Street/Cornwallis Street/Rosehill Street and Gibbons Street
- three ancillary facility areas at the Eveleigh Maintenance Centre, Sydney Trains maintenance centre adjacent to the Carriageworks, and the Gibbons Street Reserve and Marian Street car park
- additional traffic, including heavy vehicles, on select routes surrounding the Project area.

These changes would result in a concentration of construction works at Redfern Station within the Project area, and generally reducing in intensity with distance from the station. The construction compounds at Ancillary Facility 2 and Ancillary Facility 3 would be seen from certain locations, including from passing trains, within the same view as each other and the construction at Redfern Station, and therefore would be easy to identify as related activity. Ancillary Facility 1 lies further south of these ancillary facility areas and Redfern Station, and would be seen in isolation from the other construction works and ancillary facility areas.

Due to this, it is considered that the construction activity at and immediately surrounding Redfern Station would be a High visual change, however, these changes would be temporary and with a good proportion contained within the rail corridor, which is reasonably visually contained due to the level change between the tracks and corridor, and the surrounding landscape.

Visual impact assessment - operation

As shown in Table 3, the effect of the Project at operation on key views and visual amenity returned overall ratings of either High or High to Moderate from seven out of the eight viewpoints. This was due to a combination of sensitive receptors at these locations, including residential receptors or recreational users of public open space, and a highly visible new structure (the proposed concourse), two new station entries bringing substantial pedestrian movement into residential streets, and road upgrades to the east and west of the rail corridor.

The change was considered positive from all but one location, where it was deemed neutral due to the viewing distance to the Project and screening vegetation. The positive result was due to the upgrade of the streetscapes in Little Eveleigh Street and Marian Street/Cornwallis Street/Rosehill Street to include shared zones, and the high quality of design of the new/upgraded station entrances and pedestrian concourse. The higher pedestrian numbers in Little Eveleigh Street and Marian Street would be mitigated somewhat by the addition of landscaping within these streetscapes, which would provide visual amenity and physical and visual separation between residences and pedestrians at ground level.

Table 3 Summary of effects on views and visual amenity during operation

VIEWPOINT	SENSITIVITY	MAGNITUDE	SIGNIFICANCE OF VISUAL EFFECTS	ADVERSE	NEUTRAL	POSITIVE
VIEWPOINT 1 - LITTLE EVELEIGH STREET WEST	HIGH	MODERATE	**HIGH TO MODERATE**			X
VIEWPOINT 2 - LITTLE EVELEIGH STREET EAST	HIGH	MODERATE	**HIGH TO MODERATE**			X
VIEWPOINT 3 - LAWSON STREET	HIGH	MODERATE	**HIGH TO MODERATE**			X
VIEWPOINT 4 - LAWSON STREET CONCOURSE	MODERATE	HIGH	**HIGH TO MODERATE**			X
VIEWPOINT 5 - REDFERN STATION PLATFORM	MODERATE	HIGH	**HIGH TO MODERATE**			X
VIEWPOINT 6 - GIBBONS STREET	MODERATE	LOW	**MODERATE TO LOW**		X	
VIEWPOINT 7 - MARIAN STREET	HIGH	HIGH	**HIGH**			X
VIEWPOINT 8 - ROSEHILL STREET	MODERATE	HIGH	**HIGH TO MODERATE**			X

Mitigation and management measures

Mitigation measures would be implemented to minimise the levels of landscape character and visual impact during the construction and operation phases of the Project.

Construction

The following mitigation measures are recommended to minimise landscape character and visual impacts as a result of construction:

- Limit disturbance of vegetation to the minimum amount necessary to construct the Project, particularly within the streetscapes affected by the Project.
- Provide well-presented and maintained construction hoarding and site fencing with shade cloth (or similar material, where necessary) to minimise visual impacts on key viewpoints during construction. Hoardings, site and acoustic fencing would be removed following completion of construction.
- Provide cut-off or directed lighting within the construction areas, with lighting location and direction considered to ensure glare and light spill are minimised.
- Construction personnel to keep the construction areas clean and tidy, including refuse placed in appropriate waste bins.
- Implement measures to ensure no tracking of dirt and mud into public roads and other public spaces.
- Consider measures to limit or deter graffiti within ancillary facilities.

Operation

The following mitigation measures are recommended during the operation of the Project to minimise visual impacts:

- Community artwork opportunities would be investigated, in keeping with existing cultural artwork in Redfern surrounding the station.
- Street tree planting would be incorporated into the landscape design including the incorporation of tall shrubs planting along the rail corridor boundary at Marian Street to assist in preserving privacy of residents within the Watertower residential building from the proposed pedestrian concourse.
- Lighting would be designed to minimise upward spread of light, and to minimise light spill and glare.
- Proposed structures/fencing would be designed to limit or deter graffiti.
- The ongoing maintenance and repair of the concourse and station entrances would be in accordance with Sydney Trains maintenance requirements.

Considering the positive or neutral landscape character assessments, the lack of high construction impact ratings and the predominantly positive ratings from the visual impact assessments, the Project is considered to be an acceptable change within the immediate surrounds and the overall landscape.

1. Introduction

1.1 Project overview

Transport for NSW (TfNSW) is the lead agency for the integrated delivery of public transport services across all modes of transport in NSW and is responsible for the delivery of projects within the Transport Access Program (TAP). TAP is a NSW Government initiative to provide an improved experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure across NSW.

TfNSW is seeking approval to construct and operate an upgrade of Redfern Station (Redfern Station Upgrade - New Southern Concourse, hereafter referred to as 'the Project') as a component of the TAP. The Project involves the construction of a new pedestrian concourse to the south of the existing Lawson Street concourse providing both lift and stair access to Platforms 1 to 10. The new pedestrian concourse would provide a new connection across the railway corridor, extending between Little Eveleigh Street and Marian Street in the suburbs of Redfern and Eveleigh and include associated pedestrian upgrades.

The key features of the Project include:

- a six metre wide concourse between Little Eveleigh Street and Marian Street
- new stair and lift access from the new concourse to Platforms 1 to 10
- an upgraded station entrance at Marian Street including station services and customer amenities
- a new station entrance at Little Eveleigh Street including station services and customer amenities
- formalisation of a shared zone on Little Eveleigh Street, including:
    - safety improvements to vehicle, cyclist and pedestrian interactions
    - improvements to streetscape such as landscaping, lighting, drainage and pavements
    - relocation of approximately 20 parking spaces (including 18 resident/restricted parking spaces, one accessible parking space and one car share scheme parking space) and bus zone
    - utility adjustments
- upgrade of Marian Street/Cornwallis Street/Rosehill Street area, including:
    - extension of existing shared zone including part of Rosehill Street
    - safety improvements to vehicle, cyclist and pedestrian interactions including footpath widening
    - improvements to streetscape such as lighting, drainage, landscaping and pavements as well as utility adjustments
    - changes to street parking arrangements including removal of approximately 16 parking spaces (including relocation of one car share scheme parking space)
- operation of the Project.

Other components of the Project include:

- relocation of the shuttle bus zone from Little Eveleigh Street to Lawson Street
- kiss and ride on Lawson Street and associated footpath upgrade
- kiss and ride on Gibbons Street, and associated footpath upgrade
- footpath widening on Ivy Street
- relocation of a building on Platform 1 to accommodate the concourse
- repurposing, relocations and alterations to platform building features and other platform features, including privacy walls, doors, screens and roofing, platform seats and electrical equipment
- addition of platform canopies
- platform resurfacing on all platforms and associated drainage alterations
- installation of station operational components and infrastructure including:
    - wayfinding and signage
    - tactile ground surface indicators (TGSI)
    - rubbish bins
    - CCTV
    - passenger information system (e.g. passenger information display, public address and hearing loops)
    - emergency equipment (e.g. for fire and life safety)

- service relocations and upgrades including:
    - relocation of overhead wiring structures
    - installation of a new rail signal between Platforms 1 and 2.

The Project's context and location is provided in Figure 1, and the Project area and an overview of the key features is shown in Figure 2.

Construction is anticipated to commence subject to Project approval in late 2020/early 2021 and would take approximately 18 months to complete.

Further details of the Project are provided in Chapter 5 of the Environmental Impact Statement.

The Project is subject to assessment and approval by the Minister for Planning under Division 5.2 of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act). This technical report provides an assessment of the potential impacts of the Project on landscape character and visual amenity and addresses the requirements of the Secretary of the Department of Planning, Industry and Environment (DPIE) (the 'Secretary's environmental assessment requirements' or SEARs, dated 20 December 2019) (refer Section 1.3).

1.2 Purpose of this technical report

This technical report (Landscape and visual impact assessment, (LVIA)), is one of a number of technical documents that forms part of the EIS. The purpose of this technical report is to identify potential impacts of the Project and to outline mitigation measures relating to changes in landscape character and views during detailed design, construction and operation of the Project. This report addresses the relevant SEARs as described in Section 1.3.

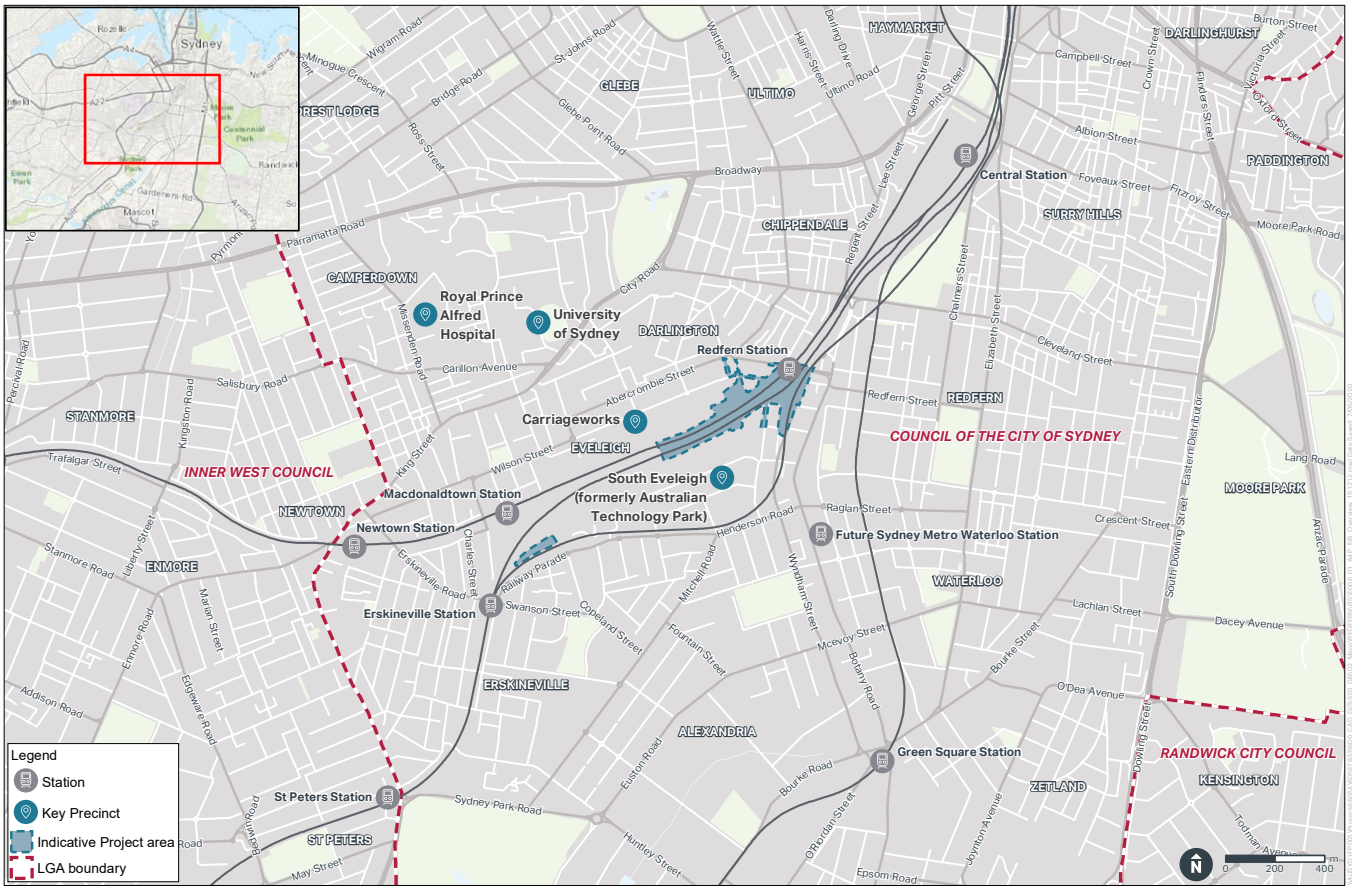

Figure 1 Project overview and location (Source: AECOM)

Figure 2 Project area and overview of key features (Source: AECOM)

1.3 Secretary's environmental assessment requirements

Landscape character and visual amenity were not considered key issues in the SEARs. Place and Urban Design was included as a key issue however, and some of the SEARs relating to this key issue are addressed in this report. This report also addresses the commitments made in the Scoping Report for the Project (*Redfern Station Upgrade - New Southern Concourse, Scoping Report*, TfNSW, 2019). The relevant SEARs and requirements from the Scoping Report, and where these are addressed, are outlined in Table 4.

Table 4 SEARs and Scoping Report requirements

SEARs			Section Addressed
Place and Urban Design	1.	identify how the project contributes to a well-designed built environment and meets the objectives of Better Placed.	Chapter 8 of the Environmental Impact Statement
	2.	identify accessibility elements and assess impacts on: a. cross corridor pedestrian and cyclist access, and the locations of public transport gate lines b. impacts on cyclists and pedestrian access, amenity and safety across and adjoining the project c. opportunities to integrate cycling and pedestrian elements with surrounding network.	Chapter 8 of the Environmental Impact Statement
	3.	identify the design process that has been used to inform the EIS design and will be used to refine the design, including, for example, the use of design review panels and consultation with community and other stakeholders.	Chapter 8 of the Environmental Impact Statement
	4.	provide before and after visual representations of the project from key receiver locations, state heritage items and conservation areas to illustrate the visual impacts.	Section 5.3
	5.	identify how the project will achieve a net increase in tree canopy in the vicinity of the project.	Chapter 8 of the Environmental Impact Statement
	6.	address the maintenance of the project.	Chapter 8 of the Environmental Impact Statement
Scoping Report			**Section Addressed**
	1.	Review topographic maps and aerial photography to identify features such as landform, elevation, land cover and distribution of residential properties and visual receptor locations.	Section 2.3
	2.	Review available information on likely landscape sensitivities including zoning or other designations relevant to landscape and visual amenity.	Section 2.3
	3.	Determine the potential extent and visibility of the Project.	Section 2.3
	4.	Assess the landscape character impact and visual impact of the Project.	Section 4 and 5
	5.	Identify mitigation measures to be integrated into the design development process to address the residual adverse impacts identified in the assessment.	Section 7

2. Assessment methodology

2.1 Overview

LVIA is a tool used to identify and assess the significance of and the effects of change resulting from development on both the landscape as an environmental resource in its own right, and on people's views and visual amenity.

There is no accepted national published guidance on LVIA specific to Australia. Therefore, the industry typically refers to guidance from elsewhere for producing LVIA. The method for this assessment has been developed with reference to *Guidelines for Landscape and Visual Impact Assessment, Third Edition* (Landscape Institute and Institute for Environmental Management (UK), 2013) (GLVIA3). GLVIA3 is widely recognised as comprising an example of 'best practice' in this field.

This report has undertaken an assessment of the Project at operation using GLVIA3. It also provides a brief, high level assessment of visual impacts during construction. The method distinguishes between the:

- 'impact', defined as the action being taken
- 'effect', defined as the change resulting from that action.

The following section outlines the detailed methodology undertaken for the preparation of this LVIA report.

2.2 Study area

The study area is determined based on several factors, including:

- topography of the surrounding landscape
- the number and complexity of landscape character zones surrounding the Project
- the visual containment of the Project due to the scale of the Project in comparison to surrounding built form, landform and vegetation.

For this Project the study area includes a 250 metre radius from the proposed station entry on Little Eveleigh Street. This study area extent is considered conservative given the low elevation of the station platforms and the visual screening provided by the adjacent buildings. The study area is only relevant for the visual receptors who would receive views during operation, as the ancillary facilities have been assessed based on proximity.

2.3 Existing environment

The existing environment section includes a broad description of the landscape within which the Project is located which is used for identification of elements and features relevant to assessment of the Project, including site setting, topography, land use, landscape and heritage values.

2.3.1 Desktop analysis of Project, landscape and visual resources

Existing data was gathered and reviewed, including:

- available information on sensitive visual receptors, Project design, and photos of similar examples of key infrastructure elements proposed
- GIS mapping, including visual envelope mapping, zoning / land use, topography and land cover
- Google Earth and Google Street View.

Using this data, a preliminary assessment of the landscape and visual resource was undertaken and used to inform a subsequent site inspection.

2.3.2 Visual envelope mapping

The likely visibility of the Project, once operational, from surrounding areas has been broadly mapped to define a visual envelope. This provides an indication of which parts of the Project are likely to be viewed from surrounding areas. The mapping typically shows 'worst case', i.e. some receptors may only see a small portion of the Project, while other receptors may view a more substantial part of the Project.

As only a high level assessment of construction impacts was undertaken in this report, visual envelope mapping of additional areas affected by construction, including ancillary facility areas, was not undertaken.

2.3.3 Site inspection

A site inspection was undertaken by two AECOM team members on 12 June 2019. The purpose of the inspection was to:

- identify views from sensitive visual receptors within publicly accessible locations .
- assess landscape character.
- undertake site photography to record key views and landscape character.

2.3.4 Landscape character zones

Drawing from the above, a landscape character assessment was undertaken. This identifies what makes a place distinctive, without necessarily assigning a value to it. It considers the way different components of the environment - both natural (the influences of geology, soils, climate, flora and fauna), and cultural (the historical and current impact of land use, settlement, enclosure and other human interventions) - interact together and are perceived to form a distinct pattern, which gives its particular sense of place.

To provide a framework for more clearly describing the area, and assessing how the Project would affect the elements that make up the landscape (including the aesthetic and perceptual aspects of the landscape and its distinctive character), distinct parts of the overall landscape have been separately defined and mapped as 'Landscape Character Zones' (LCZs).

2.4 Impact assessment

2.4.1 Landscape effects

Assessment of landscape effects deals with the effect of change and development on landscape as a resource in its own right. Landscape effects are assessed at operation of the Project. Landscape effects are not assessed during construction as these effects are temporary and cease to have an impact on landscape character at the conclusion of construction.

The consideration of potential impacts on landscape character is determined based on the existing landscape's sensitivity to change, and the magnitude of change that is likely to occur. The sensitivity of a landscape is judged on the extent to which it can accept change of a particular type and scale without adverse effects on existing landscape character. The magnitude of change to landscape character depends on the nature, scale and duration of the change that is expected to occur.

The sensitivity and magnitude of landscape effects address the following specific criteria:

- sensitivity of landscape to proposed change, based on:
    - susceptibility to change - this means the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular LCZ, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the existing situation, and/or the achievement of landscape planning policies and strategies
    - value of landscape
- magnitude of landscape effect, based on:
    - size or scale of change
    - geographical extent of effects
    - duration and reversibility of effects.

The extent of sensitivity and magnitude are each assessed and graded as being High, Moderate, Low or Negligible. A matrix is then used to combine the ratings for sensitivity and magnitude (refer Table 5). These are each described as being assessed to provide an overall 'Significance of Landscape Effects' finding. The extent of sensitivity and magnitude are each assessed and graded as being High, High to Moderate, Moderate, Moderate to Low, Low or Negligible in relation to the existing environment.

Where the Project is deemed to have no effect on the magnitude of change for a receptor, a No Impact rating can be given. For these circumstances, the sensitivity of the receptor would not be assessed. Overall impact ratings of High and High to Moderate are considered to be significant.

Table 5 Landscape character impact grading matrix

		MAGNITUDE			
		HIGH CHANGE	MODERATE CHANGE	LOW CHANGE	NEGLIGIBLE CHANGE
SENSITIVITY	HIGH	HIGH	HIGH TO MODERATE	MODERATE	NEGLIGIBLE
	MODERATE	HIGH TO MODERATE	MODERATE	MODERATE TO LOW	NEGLIGIBLE
	LOW	MODERATE	MODERATE TO LOW	LOW	NEGLIGIBLE
	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE

2.4.2 Visual effects

Assessment of visual impacts deals with the effects of change and development on the views available to people and their visual amenity. It assesses how the surroundings of individuals or groups of people may be specifically affected by changes in the context and character of views as a result of the change or loss of existing elements of the landscape and/or the introduction of new elements. Visual effects of the Project have been assessed at construction and operation using the following method.

The evaluation of potential effects on visual amenity is based on the sensitivity of the viewpoint (and the visual receptors it represents) to change, and the magnitude of change arising from the Project that is likely to occur.

The sensitivity of each viewpoint is mainly a function of:

- the occupation or activity of the people experiencing the view at particular locations.
- the extent to which their attention or interest may therefore be focused on the views and the visual amenity they experience at particular locations, for example:
    - people who are engaged in outdoor recreation where their attention or interest is likely to be focused on views and the visual amenity they experience are likely to be more sensitive to a proposed change in that view rather than
    - people at their place of work whose attention may be focused on their work, not on their surroundings, and where the setting is not important to the quality of working life
- value attached to the view experienced, for example:
    - value in relation to heritage assets, or through planning designations
    - indicators of value attached to views, e.g. through appearing on tourist maps, or provision of facilities for their enjoyment (such as parking places, sign boards and interpretative material).

The magnitude of change to views and visual amenity depends on:

- size or scale of change in the view with regard to the:
    - loss or addition of features in the view and changes in its composition
    - degree of contrast or integration of any new features with the existing landscape in terms of form, scale and mass, line, height, colour and texture
    - nature of the view of the Project in terms of amount of time it would be experienced, and whether the views would be full, partial or glimpses
- geographical extent of the visual effect with different viewpoints including the:
    - angle of view in relation to the main activity of the receptor
    - distance of the viewpoint from the Project
    - extent of area over which the changes would be visible
- duration and reversibility of visual effects, for example:
    - duration in terms of short term (0-5 years), medium term (6-15 years) or long term (16-30+ years)
    - reversibility with regard to the prospects and practicality of a proposed change being reversed in a generation, e.g. housing can be considered permanent, but wind energy developments for example are often argued to be reversible since they have a limited life, and could eventually be removed and the land reinstated (GLVIA3, 2013).

The extent of sensitivity and magnitude are each assessed and graded as being High, Moderate, Low or Negligible. A matrix is then used to combine the ratings for sensitivity and magnitude (refer Table 6). These are each described as being assessed to provide an overall 'Significance of Visual Effects' finding. The extent of sensitivity and magnitude are each assessed and graded as being High, High to Moderate, Moderate, Moderate to Low, Low or Negligible in relation to the existing environment. A qualitative assessment further assigns a rating of Adverse, Neutral or Positive to the change in the views seen by receptors.

Where the Project is deemed to have no effect on the magnitude of change for a receptor, a No Impact rating can be given. For these circumstances, the sensitivity of the receptor would not be assessed. Overall impact ratings of High and High to Moderate are considered to be significant.

In addition to assessing the visual impact at operation, a high level commentary has been provided around likely construction effects of the Project. Visual receptors have been considered in terms of the views they are likely to obtain from locations within proximity of the Project, including consideration of any key vantage points, e.g. lookouts where there is particular interest in the view.

Table 6 Visual impact grading matrix

		MAGNITUDE				EFFECT		
		HIGH CHANGE	MODERATE CHANGE	LOW CHANGE	NEGLIGIBLE CHANGE	ADVERSE	NEUTRAL	POSITIVE
SENSITIVITY	HIGH	HIGH	HIGH TO MODERATE	MODERATE	NEGLIGIBLE			
	MODERATE	HIGH TO MODERATE	MODERATE	MODERATE TO LOW	NEGLIGIBLE			
	LOW	MODERATE	MODERATE TO LOW	LOW	NEGLIGIBLE			
	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE			

2.4.3 Artist impressions

A photograph of the view looking towards the Project from each of the nominated receptor locations has been used to assist in the analysis process.

A set of artist's impressions were prepared by Novo Rail Alliance to illustrate indicative visual changes from key receptor locations. These artists impressions were used to demonstrate a particular view of the Project in its wider setting from publicly accessible areas. The viewpoints were chosen due to their proximity to the Project and the anticipated high frequency of people viewing the Project from these locations, including while traveling in a vehicle. The viewpoints were photographed during the site visit undertaken on 12 June 2019.

2.4.4 Mitigation and management measures

Following on from the assessment of impact on the landscape and visual resource, a set of mitigation measures have been developed aimed at reducing or avoiding adverse impact of the Project on identified sensitive receptors. Mitigation measures typically comprise a range of techniques including, but not limited to, appropriate lighting design, staging or construction method, material and colour selection, and landscape planting.

3. Existing environment

3.1 Site setting

The suburb of Redfern is located in the City of Sydney Local Government Area (LGA), approximately three kilometres south of Sydney Central Business District (CBD) and is a densely populated urban suburb. In addition to the Sydney CBD, Redfern is neighboured by the suburbs of Chippendale, Surry Hills, Moore Park, Waterloo, Alexandria, Eveleigh and Darlington. In these suburbs are some of Sydney's largest inner city parks, including Moore Park, Centennial Park and Victoria Park. Redfern Train Station connects two of the Western Sydney train lines and is the first stop south of Central Station. The Project location within the context of the surrounding environment and a Project overview is provided in Figure 1 and Figure 2.

3.2 Study area

The study area has been set at a 250 metre radius from the proposed station entry on Little Eveleigh Street, which is considered conservative given the low elevation of the station platforms and the visual screening provided by the adjacent buildings. The study area includes nearby residential towers on Gibbons Street and South Eveleigh south west of Redfern station, immediately adjacent to the rail corridor. To the south of the rail corridor is a mix of high and low density residential development and retail fringing major roads. To the north of the rail corridor lies Sydney University campus and Victoria Park, neighboured by low density residential and mixed-used residential/retail development. The study area is shown in Figure 3. The study area is only relevant for the visual receptors who would receive views during operation, as the ancillary facilities have been assessed based on proximity.

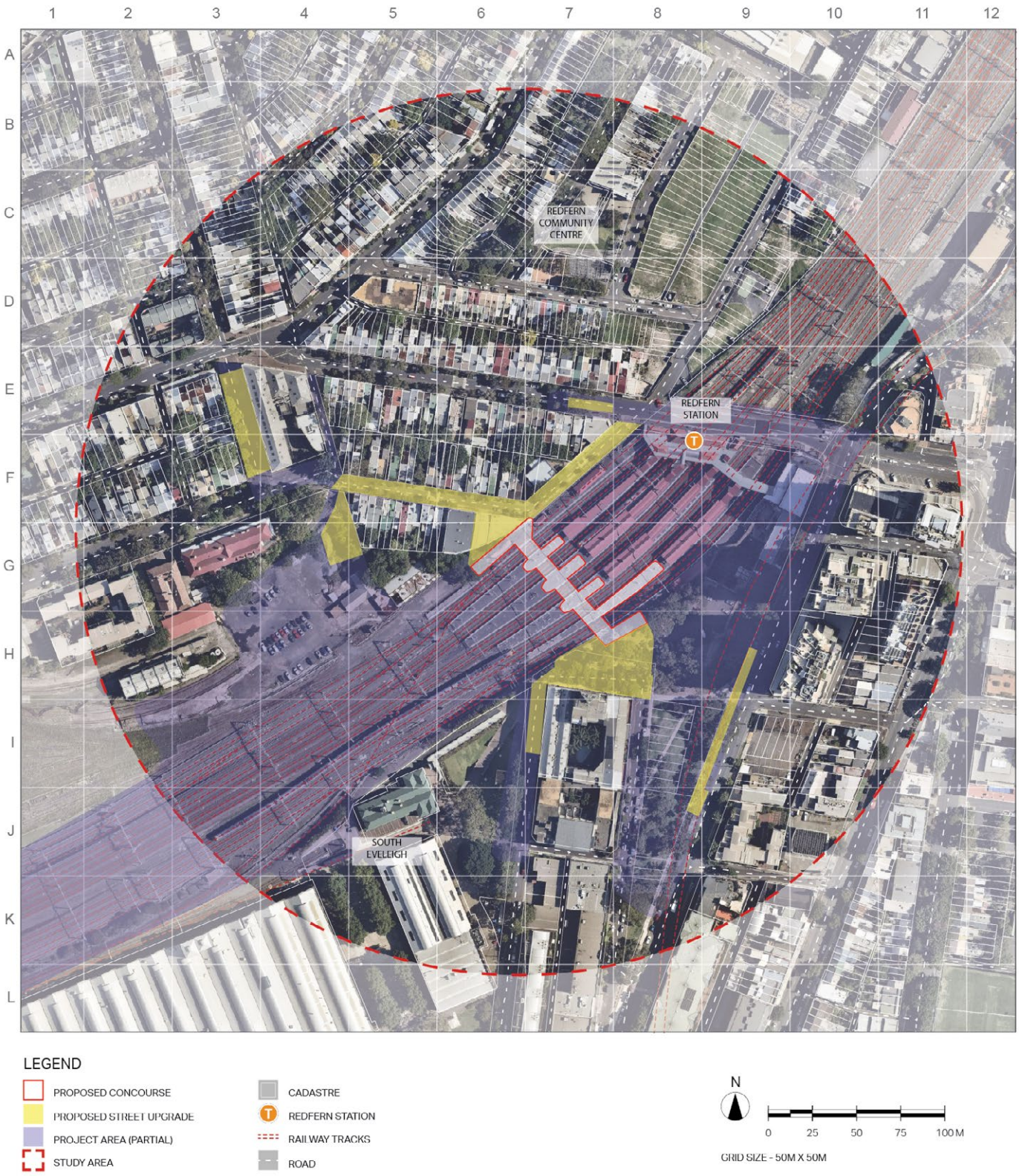

Figure 3 Study area (Source: AECOM)

3.3 Topography

To the east and west of the study area, two north-south orientated ridgelines are located in the suburbs of Redfern/ Surry Hills (east), and Camperdown (west). These are joined by a minor ridge line that passes Redfern Station. The rail corridor itself is excavated below the surrounding landscape grade. The landform within the study area is relatively flat, with the exception of the rail corridor as discussed above. A minor ridgeline also heads from Redfern Station southwards, towards Waterloo. Refer to Figure 4.

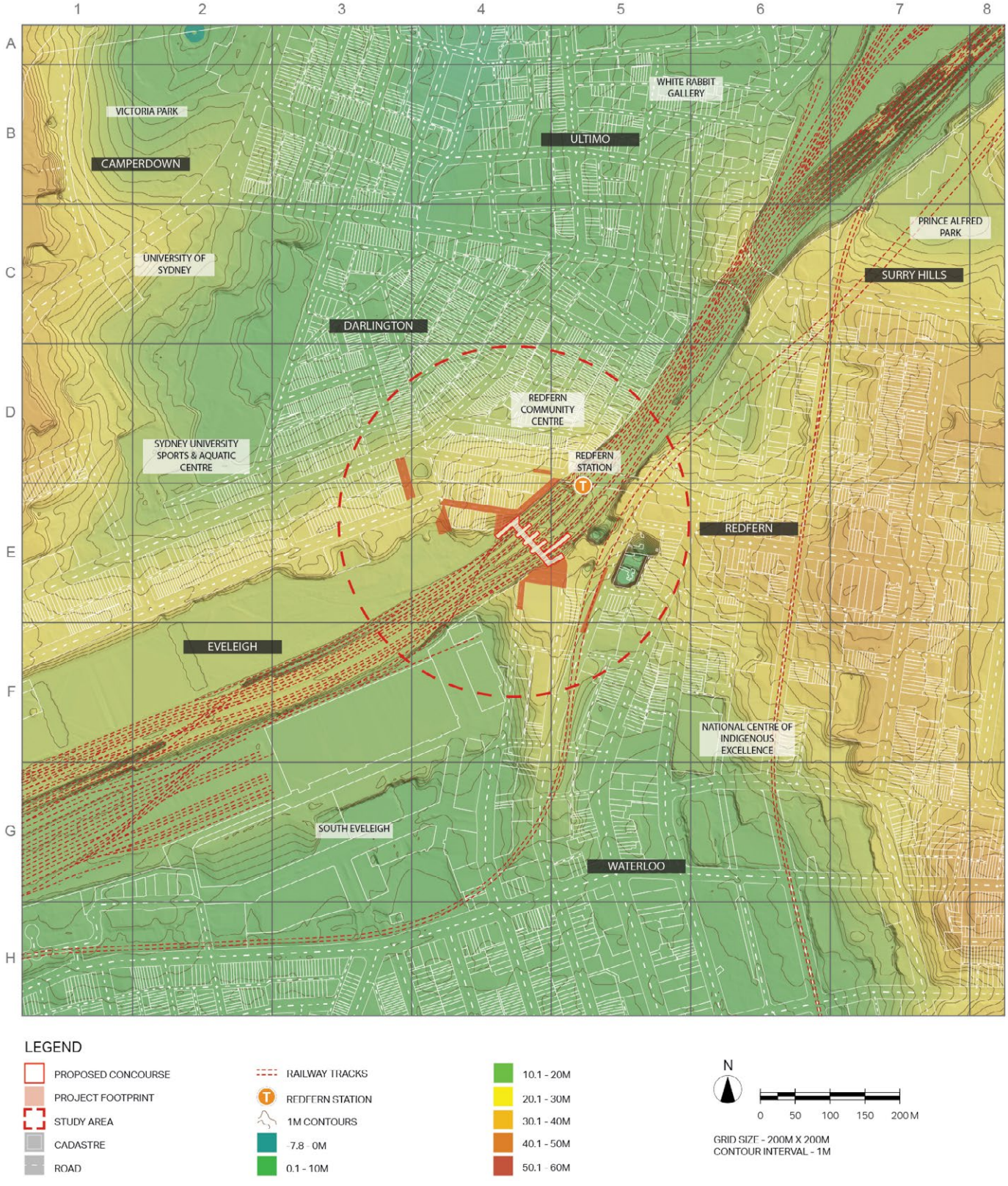

Figure 4 Topography (Source: AECOM)

3.4 Land Use

The rail corridor bisects the study area from the north-east to the south-west. This land, including Redfern Station, is zoned SP2 Infrastructure under the *Sydney Local Environmental Plan 2012* (Sydney LEP 2012). To the north-west of the rail corridor within the study area the key land uses comprise B4 Mixed Use Development and R1 General Residential (both low and high density). On the western edge of the study area boundary is an area zoned B1 Neighbourhood Centre.

To the south east of the rail corridor a Commercial Core (B3) is fringed by land which is not zoned under the Sydney LEP 2012, however, is subject to the State Environmental Planning Policy (State Significant Precincts) 2005. Some Public Recreation (RE1), Mixed Use (B4) and a Local Centre (B2) lie to the south of the rail corridor. The Project lies within land zoned R1 General Residential, SP2 Infrastructure, and B4 Mixed Use. Refer to Figure 5.

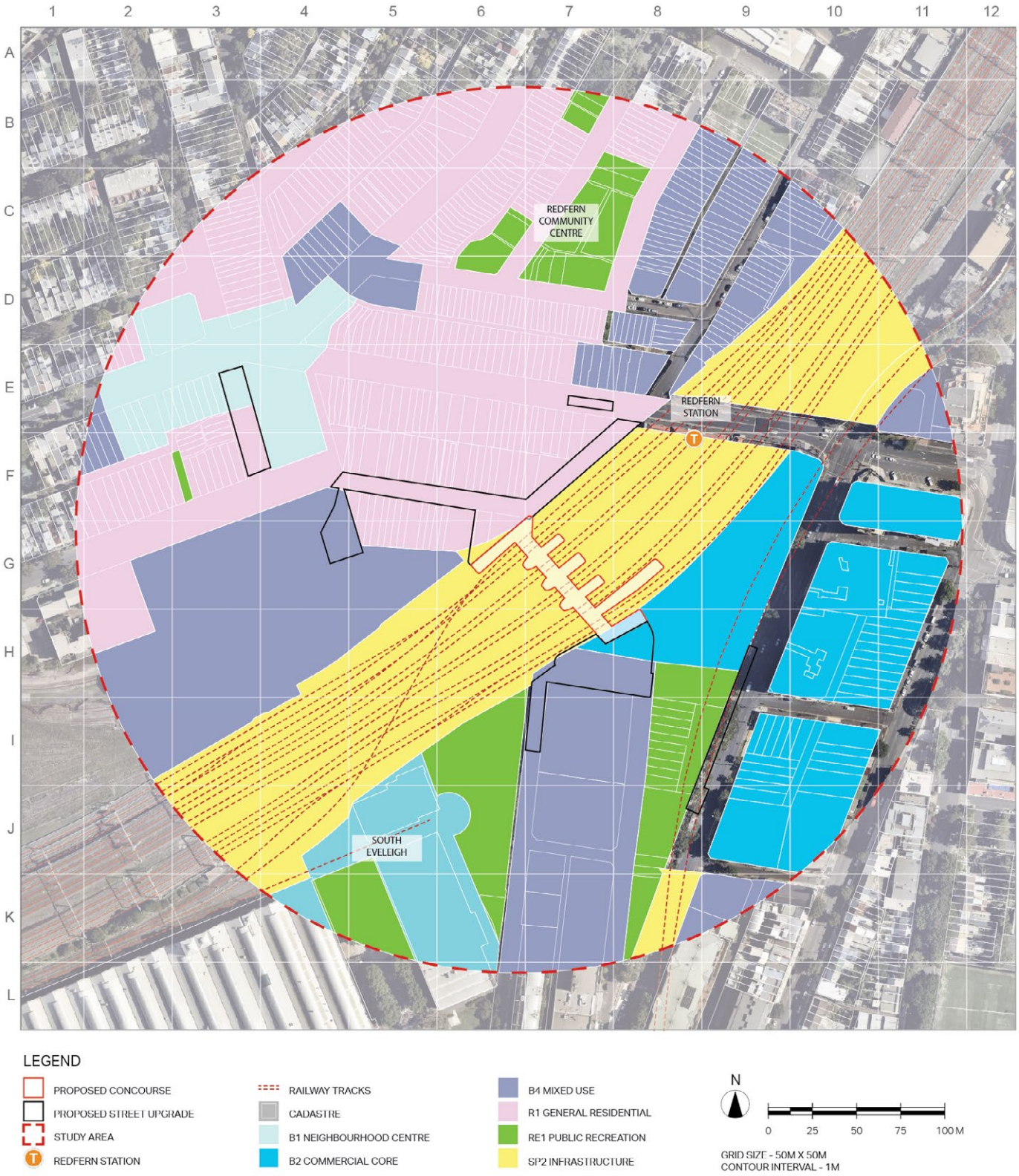

Figure 5 Land use (Source: AECOM)

3.5 Heritage

Redfern is an important area for both Aboriginal and non-Aboriginal heritage. The location and character of Redfern Station and the surrounding station precinct are integral to the character of Redfern as a suburb. Refer to Figure 6 for the locations of Non-Aboriginal heritage surrounding Redfern Station. As shown below, a large majority of the area is listed on either the State or local heritage register. For the purposes of this document, only the heritage items within the study area have been identified.

3.5.1 Aboriginal heritage

The Aboriginal Heritage technical report prepared for the Project (refer to Technical report 6 – Aboriginal Heritage of the EIS) found that no known Aboriginal sites or objects would be subject to direct or indirect impacts as a result of construction or operation of the Project, and that Aboriginal archaeological sensitivity of the majority of the Project area (within the inspected areas) was generally assessed as negligible.

3.5.2 Non-Aboriginal heritage

The Statement of Heritage Impact prepared for the Project (refer Technical report 5 – Non-Aboriginal heritage of the EIS) found that items of State heritage significance located within the Project area include:

- Redfern Railway Station Group, which is listed on the State Heritage Register (SHR) (#01234) and RailCorp Section 170 Heritage and Conservation Register (#4801095)
- Eveleigh Railway Workshops, which is listed on the State Heritage Register (SHR) (#01140) and RailCorp Section 170 Heritage and Conservation Register (#4801102)
- Eveleigh Chief Mechanical Engineers Office and moveable relics, which is listed on the State Heritage Register (SHR) (#01139) and RailCorp Section 170 Heritage and Conservation Register (#4801126).

The Redfern Railway Station Group is of significance as a major suburban station which played an important role in the development of the surrounding residential and industrial suburbs. The Eveleigh Railway Workshops are of significance as historic railway engineering workshops which contain one of the most complete late 19th century and early 20th century forge installations, and a collection of cranes, power systems, and hydraulic system. The Eveleigh Chief Mechanical Engineers Office is a large two-storey brick building dating from 1887.

Listed heritage items that are located within and surrounding the Project area are in Table 7 and shown in Figure 6.

Further information on these items and their heritage significance, along with potential impacts and mitigations measures, is provided in Technical report 5 – Non-Aboriginal heritage of the EIS and also summarised in Chapter 14 of the EIS (Non-Aboriginal heritage).

Figure 6 Heritage (Source: AECOM)

Table 7 Non-Aboriginal heritage items

Heritage listing	Items within the Project area	Level of significance	Items adjacent to the Project area and approximate distance to Project area
Register of the National Estate (non-statutory)	Eveleigh Railway Workshops (#15903)	Registered	The Block (50 metres)
	Darlington Heritage Conservation Area (#1785)	Registered	
	Eveleigh Chief Mechanical Engineers Office (former) (#1781)	Registered	
State Heritage Register	Redfern Railway Station Group (SHR#01234)	State	Eveleigh Railway Workshops Machinery (SHR#01141) (more than 100 metres)
	Eveleigh Railway Workshops (SHR#01140)	State	Redfern Post Office (SHR#011439) (more than 100 metres)
	Eveleigh Chief Mechanical Engineers Office and movable relics (#01139)	State	Sydney Terminal and Central Railway Station Group (more than 100 metres)
	Pressure tunnel and shafts	State	
RailCorp s170 Heritage and Conservation Register	Redfern Railway Station Group (#4801095)	State	N/A
	Eveleigh Railway Workshops (#4801102)	State	
	Chief Mechanical Engineer's Office #(4801126)	State	
	RailCorp Moveable Heritage Collection (former Paint Shop) (#4804410)	Local	
Urban Growth Development Corporation Section 170 Heritage and Conservation Register	Eveleigh Railway Workshops Precinct (#4745500)	State	N/A
Sydney Environmental Planning Policy (SEPP) (Major Development) 2005 Redfern -Waterloo Authority Sites	Eveleigh Chief Mechanical Engineers Office (#9)	State	Locomotive Workshop (#1) (five metres)
	Telecommunications Equipment Centre (#10)	Local	New Locomotive Workshop (#2) (10 metres)
	Redfern Station Booking Office (#11)	State	Works Managers Office (#3) (five metres)
			Large Erecting workshop (#4) (40 metres)
			Carriage Workshops (#5) (10 metres)
			Blacksmith's Shop (#6) (20 metres)
			Paint Shop (#7) (more than 100 metres)
			Scientific Services Building (#8) (10 metres)

Heritage listing	Items within the Project area	Level of significance	Items adjacent to the Project area and approximate distance to Project area
Sydney Regional Environmental Plan (REP) No 26 - City West Schedule 4	Administration Building Former Chief Mechanical Engineer's office (#5) Booking Office, Redfern Station, Lawson Street (#7)	State State	Locomotive Workshops - Bays 1-15, including machinery in Bays 1-4, Eveleigh Railyard (#1) (five metres) New Locomotive Shop, Eveleigh Railyard (#2) (10 metres) Works Managers Office, Eveleigh Railyard (#3) (five metres) Large Erecting Shop, Eveleigh Railyard (#4) (40 metres) Gasometer and Pump, Eveleigh Railyard (#6) (40 metres)
Redfern-Waterloo Authority /ATP s170 Register	Eveleigh Locomotive Workshops Precinct (#4745500)	State (significance as part of listing for Eveleigh Railway Workshops)	Locomotive Workshops Building (#4745501) (five metres) Works Manager's Office (former) (#4745502 (five metres) Engine Shop (former) (#4745503) (10 metres) Water Tower (#4745504) (10 metres)
Arts NSW s170 Register	The Carriage Works at Eveleigh (#307004)	State	
Sydney LEP 2012	Darlington Heritage Conservation Area (#C19) Golden Grove Heritage Conservation Area (C#18)	Local Local	Terrace House 'Waratah' (#I1322) (10 metres) Terrace Group including interiors (#I517) (two metres) Former McMurtrie, Kellerman & Co factory including interiors (The Foundry) (#I2245) (two metres) St Luke's Presbyterian Church including interior (#1352) (more than 100 metres)

3.6 Landscape character zones

Five Landscape Character Zones (LCZs) have been identified within the broader landscape setting (refer to Figure 7):

- LCZ 1: Rail Corridor
- LCZ 2: Community and Education
- LCZ 3: Mixed Use Commercial and Residential
- LCZ 4: Residential
- LCZ 5: Public Recreation.

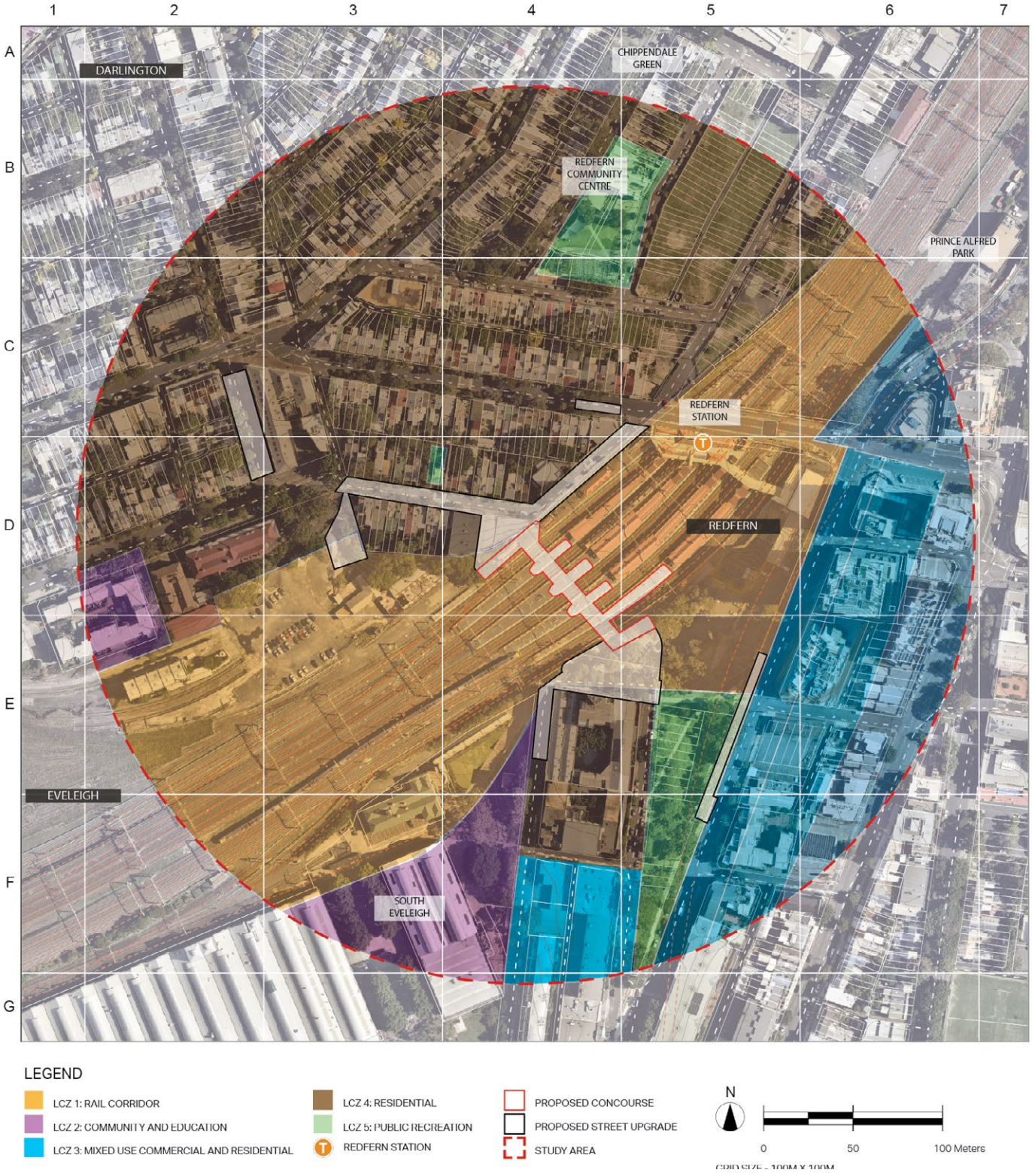

Figure 7 Landscape character zones (Source: AECOM)

3.6.1 LCZ 1 - Rail corridor

LCZ 1 typically comprises the rail corridor punctuated by train stations. Within the study area, it includes Redfern Station and the rail corridor leading into and out of the station to the north and south.

The rail corridor comprises a linear corridor which contains rail infrastructure such as tracks, gantries, overhead wiring, signals and operating trains. Small built forms occasionally lie within the corridor, including sheds and electrical infrastructure. Vegetation is typically limited to weedy vegetation fringing the corridor at the interface with other LCZs. The rail corridor is typically flat and curves gently as it travels across the landscape, with the tracks often at a different level to the landscape outside the corridor.

The corridor widens when it reaches stations. Stations are typically evenly spaced along the rail corridor, and include the rail infrastructure listed above but with additional built form and platforms, including platform buildings and canopies (refer to Figure 8). At Redfern Station, train sheds are located to the south of the corridor, running adjacent to South Eveleigh.

Redfern Station has multiple station entrances from which to enter the rail corridor. Each entrance has a different character, reflecting the different time at which each was constructed. The multiple entrances at Redfern station each reflect the character of the time in which they were constructed, such as the Lawson Street entrance, which was the original entry to the station constructed in the mid 19th Century (refer to Figure 9).

Figure 8 View looking south from the existing Lawson Street Concourse towards the platforms (Source: AECOM)

Figure 9 View of the Lawson Street station entrance looking south (Source: AECOM)

Other, more recent entries were constructed to spread the pedestrian load to the platforms. The Gibbons Street entrance (refer to Figure 10) is the newest entrance, with the more modern architecture characterising the entrance. The Marian Street entrance (refer to Figure 11) is a minor station entry which provides an entrance to and connectivity from the south to the rail network onto Platform 10 alone. It comprises a single gate entry with limited architectural features.

The platforms of Redfern station lie below the surrounding landscape within the rail cutting. The platforms and rail corridor stretching out to the north and south are visually contained by the retaining walls on either side of the corridor.

Figure 10 View of the Gibbons Street entrance (Source: AECOM)

Figure 11 View of the Marian Street entrance (Source: AECOM)

3.6.2 LCZ 2: Community and Education

This LCZ consists of large complexes or precincts which house community facilities (including South Eveleigh shown in Figure 12 and the Carriageworks shown in Figure 13). Larger educational examples of this LCZ lie outside of the study area and include the University of Sydney (shown in Figure 14) and the National Centre of Indigenous Excellence.

The LCZ typically comprises large buildings set within precincts. These precincts include landscaped areas with well-planned pedestrian networks. Built form and landscaping within this LCZ interprets the history and heritage of these areas, and often retains the heritage elements within them.

Within the Carriageworks and South Eveleigh, the large built forms are purposed legacy industrial buildings used as multipurpose spaces for functions, concerts, exhibitions and conferences. Given the original functions of these buildings, these areas are often located near existing rail corridors and as such retain their utilitarian character of their past life which lends a feel of authenticity.

Figure 12 View of Australian Technology Park (Source: AECOM)

Figure 13 Aerial view of Carriageworks (Source: Google Earth)

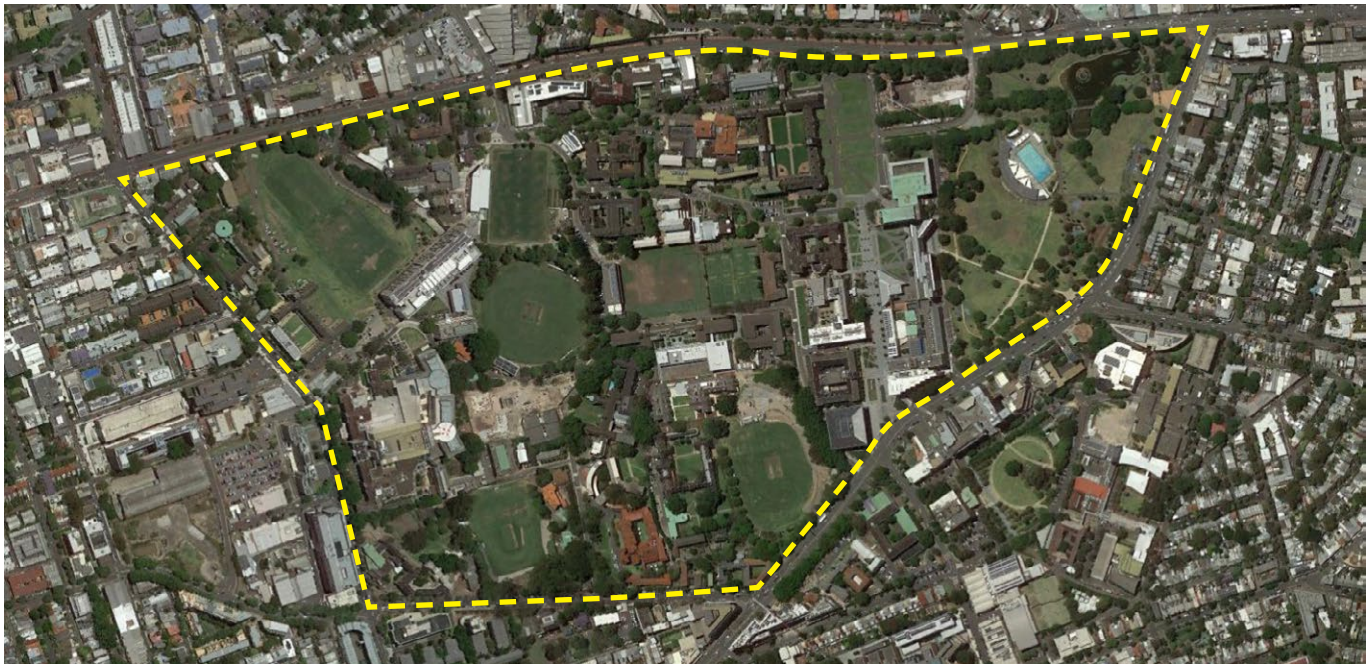

Figure 14 Aerial view of the University of Sydney showing its extensive facilities (Source: Google Earth)

3.6.3 LCZ 3: Mixed Use Commercial and Residential

This LCZ is situated to the north and east of the Project along Redfern and Gibbons Streets, and to the south of the Project between Cornwallis and Rosewall Streets. It comprises largely of mixed use development accessed primarily by major roads, with tall, densely placed mixed-use buildings which contain some commercial enterprises at ground level (such as shops and small business offices) and residential apartments on upper levels. The mix of commercial and residential differs between the buildings, with some more predominantly residential and others with a higher percentage of commercial.

Within this LCZ the character is defined by wide, busy streets, tall buildings with similar setbacks from the street, and built form typically fronting the footpath (i.e. little or no setback from the public footpath). Vegetation within the streetscape varies but is typically limited to street trees within the road verges (refer to Figure 15). Roads are typically signalised, with built form fringing the road corridors including tall residential developments along Gibbons Street as shown in Figure 16 and one to two storey shops as shown in Figure 17.

Built form varies, but typically have neutral colour schemes with bright accents such as greens and oranges (refer to Figure 16). The built form has large footprints which often take up entire blocks or large individual sites, resulting in a coarser urban fabric than other highly developed LCZs (such as LCZ 4: Residential).

Within the study area part of this LCZ is designated as Local Centre and forms part of the town centre of Redfern. This area (which lies to the east of the station) differs from the western side of the station (which contains some pockets of smaller scale retail shops and cafes) and consists of a mix of hotels, strip retail shopping, a police station and ground floor commercial/retail under tall residential buildings.

Figure 15 Cafe on the corner of Lawson Street and Little Eveleigh Street (Source: AECOM)

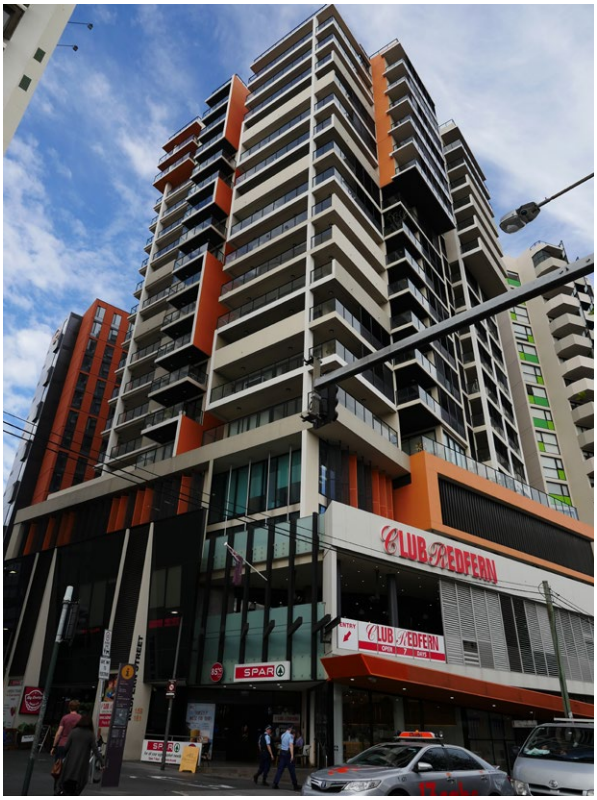

Figure 16 Ground floor retail on the intersection of Gibbons and Redfern Street (Source: AECOM)

Figure 17 View of Regent Street looking east, just north of Redfern Street (Source: AECOM)

3.6.4 LCZ 4 - Residential

This LCZ comprises areas which are primarily residential but can be either predominantly single or double storey semi-detached housing or taller residential apartments. Lower density residential development is typically found to the west of Redfern Station, and medium to high density housing to the immediate east of the station. Residential terraces are punctuated by occasional small-scale retail and cafes on main roads.

To the east of Redfern Station lies a small area of this LCZ between Cornwallis and Rosehill Streets, bounded to the north by Marian Street and to the south by Margaret Street. This residential comprises two apartment blocks – the Watertower (refer Figure 18) and Ariane. These residential buildings are a slightly higher density than the residential development to the west of the rail corridor, but are similar in character, positioned on quiet, narrow streets and with tree, shrub and groundcover planting at the street interface.

The residential development to the west of the station is typically older and smaller in scale, comprising single and double storey terrace housing with similar setbacks from the footpath (refer to Figure 19). This built form results in a finer grained urban fabric than other highly developed LCZs, such as LCZ 3: Mixed Use Commercial and Residential. Residential housing in this LCZ is typically of the Victorian era, with balconies overlooking the road corridor and similar awning and fencing details. The areas to the west of the station is listed in the Sydney LEP 2012 as a heritage conservation area (Darlington Heritage Conservation Area and Golden Grove Conservation Area fall within the study area as shown in Figure 6 and Figure 20). Some of these areas also contain other heritage listings under the Sydney LEP 2012.

Figure 18 Tall residential towers with views into the Project (Source: AECOM)

Figure 19 View on Lawson Street with terrace housing (Source: AECOM)

Figure 20 View along Little Eveleigh Reserve towards Redfern Station (Source: AECOM)

3.6.5 LCZ 5 - Public Recreation

This LCZ comprises three public spaces within the study area, including the Gibbons Street Reserve, which lies adjacent to Redfern Station as well as the Little Eveleigh Street Reserve and the park outside of the Redfern Community Centre (refer Figure 22). Typically, public open space is vegetated with mature trees and shrubbery bordering areas of open turf. Areas are open to at least one street frontage, and soften the built form of surrounding areas by providing a green outlook to the streetscape.

These areas serve a recreational purpose, with formal seating and sometimes formal playgrounds provided as well. While not specifically heritage items, Little Eveleigh Reserve (refer Figure 21) and the Redfern Community Centre are located within the Darlington Heritage Conservation Area mentioned in Section 3.6.2 and Section 3.5.2. These areas are of high community value and have value as public amenity.

Figure 21 View of Little Eveleigh Reserve from Little Eveleigh Street looking north (Source: AECOM)

Figure 22 View of Gibbons Street Reserve looking north towards Redfern Station (Source: AECOM)

4. Landscape character impact assessment

This section provides an assessment of landscape character impacts for each LCZ at operation of the Project.

4.1 LCZ 1: Rail Corridor

The potential effects of change on LCZ 1 are described Table 8.

Table 8 LCZ 1: Rail Corridor - Landscape Character Impact Assessment

LCZ 1 - Rail corridor
Anticipated Change The key change to this LCZ would be the introduction of a six metre wide concourse bridging the rail corridor between Little Eveleigh Street and Marian Street. The Project would include new stair and lift access from the concourse down to Platforms 1 to 10. A new station entrance on Little Eveleigh Street would be accessed via the upgraded / repurposed building adjacent to the rail corridor. The new Marian Street entry would be new. Materiality would include: concrete for footpaths, stairs and concourse deck; asphalt for platform regrading and resurfacing; brick work with anti-graffiti surface on services building and wet areas; pavers for forecourt areas and shared zones; painted steel for canopies and roofing; painted cladding for walls with the allowance for art work and heritage interpretation; and aluminium anti-throw screens.
Sensitivity to Change The susceptibility to change of LCZ 1 is influenced by the following: • the Project would comprise of the addition of a large, prominently positioned element bridging the rail corridor within the LCZ • the overall condition of the station buildings group appears well maintained and in good condition and reflective of the historic period of the area and function within the LCZ, with recent architectural additions (e.g. the existing northern Gibbons Street entrance) • the proposed use of materials and finishes differs from the existing materiality within the station precinct, much of which contributes to its heritage listing, however, there are existing modern architectural features within the station • a majority of Redfern Station is typically set within a rail cutting, lower than the surrounding areas, the proposed concourse would provide a southern boundary to the precinct which is otherwise open to the rail corridor • the current entrances to the station are finite (i.e. do not extend into the surrounding landscape with built form or landscaping) • there is currently no entrance to the station from Little Eveleigh Street. The value of the landscape is influenced by: • the heritage importance of items within and surrounding Redfern Station • its location near the centre of the town giving it civic importance • the mid-Victorian character of the station buildings and industrial character of utilitarian elements within the rail corridor, such as gantries, workshops, and substations, is strongly reflected in the adjacent areas • the apparent level of care with which the station precinct is maintained. Given the above, the sensitivity of LCZ 1 is considered to be Moderate.

LCZ 1 - Rail corridor
Magnitude of Change The magnitude of change for the LCZ is influenced by: • the scale of the proposed changes would be similar to some of the largest pieces of existing infrastructure such as the Eveleigh Workshops, gantries, existing pedestrian concourses such as the Lawson Street concourse, and substations within the rail corridor • the proposed concourse would differ from the established predominant architectural style within the station, however, there have been recent additions to the station precinct and the history of the station has been one of accrued elements over time • while the station entries would be only visible from their immediate surrounds due to their low profile and integrated landscaping, the pedestrian concourse would be visible from a further distance due to its elevation and the unobstructed views along the rail corridor from the north and south • the form and materiality of the proposed concourse and new station entrances would contrast with the industrial and heritage character of the rail corridor and the brickwork in existing buildings, the magnitude of change on little Eveleigh Street is reduced by the adaptive reuse of existing building etc, provides a transition space to the residential area • the duration of the Project would be long-term, with low potential for reversibility. The concourse and station entrances have been designed so as not to preclude future development. Given the above, the magnitude of anticipated change is considered to be High.
Significance of Landscape Character Effect Using the landscape character and visual impact grading matrix, the rating of the impact on landscape character is High to Moderate. However, the Project would have a high refinement of architectural design, with the new station entrances integrated into the surrounding setting with landscaping and the adaptive reuse of an existing building. The proposed pedestrian concourse would comprise a new elevated element within the rail corridor. It is therefore considered to be a High (positive) change, with positive elements including the high quality of the design and landscaping within Marian Street, Little Eveleigh Street and Rosehill Street, which includes proposed street trees to provide visual amenity. It is recommended from the findings in this report, that design elements and materiality reference the industrial and heritage character of the LCZ, however, maintain the visual quality of a 'new' piece of infrastructure rather than replicating heritage items.

4.2 LCZ 2: Community and Education

The potential effects of change on LCZ 2: Community and Education are described in Table 9.

Table 9 LCZ 2: Community and Education - Landscape Character Impact Assessment

LCZ 2: Community and Education
Anticipated Change This LCZ lies adjacent to the western end of the Project area at Little Eveleigh Street and Wilson Street. Despite the close proximity of the Project to this LCZ, the Project would have no impact on LCZ 2: Community and Education as the proposed works do not adjoin the LCZ. Additionally, the topography of the surrounding landform inhibits effects from the Project into the LCZ.
Significance of Landscape Character Effect There would be no changes to landscape character arising from the Project on LCZ 2: Community and Education.

4.3 LCZ 3: Mixed Use Commercial and Residential

The potential effects of change on LCZ 3: Mixed Use Commercial and Residential are described in Table 10.

Table 10 LCZ 3: Mixed Use Commercial and Residential - Landscape Character Impact Assessment

LCZ 3: Mixed Use Commercial and Residential
Anticipated Change
The Project does not fall within this LCZ, although a small portion of the Project would lie adjacent to a small portion of the LCZ at Gibbons Street. The majority of the LCZ lies to the north east and south of the Project, typically buffered by the rail corridor and portions of LCZ 4: Residential. The changes adjacent to the LCZ at Gibbons Street would not alter the character within the LCZ. It is concluded that the Project would not affect the character of this LCZ due to the above.
Significance of Landscape Character Effect
There would be negligible changes to landscape character arising from the Project on LCZ 3: Mixed Use Commercial and Residential.

4.4 LCZ 4: Residential

The potential effects of change on LCZ 4: Residential are described in Table 11.

Table 11 LCZ 4: Residential - Landscape Character Impact Assessment

LCZ 4: Residential
Anticipated Change
Changes to LCZ 4: Residential would occur within a small part of the LCZ surrounding Redfern Station where the Project changes would occur (i.e. at Little Eveleigh Street, Little Ivy Street and Lawson Street). The key changes to this area include: • upgrade of Little Eveleigh Street, including creation of a new station entrance in which an existing warehouse is repurposed, and shared zone, removal and relocation of approximately 20 restricted residential parking spaces, vegetation trimming and/or removal, re-planting of vegetation, landscaping and street lighting adjustments • pavement re-surfacing and footpath widening works within Ivy Street • kiss and ride on Lawson Street, with associated footpath upgrade • relocation of community bus zone from Little Eveleigh Street to Lawson Street • the upgrade of Marian Street/Cornwallis Street would include the creation of an upgraded station entrance (at Marian Street) and shared zone, removal of approximately 16 parking spaces, trimming and/or removal of some trees, and adjustments to footpaths and street lights. The concourse would be visible from the LCZ, with changes including stairway and lift access to platforms, bicycle parking spaces, gatelines, signage, station operational components, and heritage interpretation and/or public art.

LCZ 4: Residential
Sensitivity to Change The susceptibility to change of LCZ 4 is influenced by the following: • the overall character of the LCZ 4 is broadly considered to be of high quality, with the character of the housing to the east of the Project area forming part of the character associated with the suburb of Redfern • the Project elements surrounding the station would be primarily within road corridors, with the proposed changes within the streetscape conforming to the existing character • the proposed entrances to the concourse on either side of the rail corridor are outside of the rail corridor and rail cutting, and do not detract from the existing predominant architectural style and character of the rail corridor and station. The value of the landscape is influenced by: • local heritage conservation areas (to the west of the station within the LCZ 4), as well as listed heritage items • the proximity of the LCZ 4 to the town centre and station, which have cultural and community values. Given the above, the sensitivity of LCZ 4 is considered to be High.
Magnitude of Change The magnitude of change for the LCZ 4 is influenced by the following: • while streetscape upgrades would constitute a notable change, the reinstated landscape within the streets would be of a similar character to the existing environment, but with the primary change that there would be shared zones rather than car dominated local roads • the addition of the concourse over the rail corridor would be within the LCZ but only affect a minor proportion of it. The scale of the proposed concourse would be similar in scale and materiality to other rail infrastructure, but would be a new element • the Project would be visually contained by the built form of the streetscape • the duration of the Project would be long-term, with low potential for reversibility, however, the concourse and station entrances have been designed so as not to preclude future development. Given the above, the magnitude of change to LCZ 4 due to the Project would be Low.
Significance of Landscape Character Effect Using the Landscape character and visual impact grading matrix, the rating of the impact on landscape character is Moderate. The Project would have a high quality of architectural design and would be integrated into the surrounding setting with landscaping. It is therefore considered to be a Moderate (positive) change. Design elements and materiality to reference the industrial and heritage character of the LCZ are recommended in Section 7.

4.5 LCZ 5: Public Recreation

The potential effects of change on LCZ 5 are described in Table 12.

Table 12 LCZ 5: Public Recreation - Landscape Character Impact Assessment

LCZ 5 - Public Recreation
Anticipated Change Changes to LCZ 5: Public Recreation would be limited to within Gibbons Street Reserve. A new footpath upgrade would be located along the edge of the Reserve, which would be associated with the new Kiss and Ride on Gibbons Street (adjacent to the Reserve). Some trees would be removed. An upgraded station entrance (at Marian Street) would also be located adjacent to this LCZ. Little Eveleigh Street Reserve would be adjacent to the street upgrades of Little Eveleigh Street. No works would occur within this reserve.

LCZ 5 - Public Recreation
Sensitivity to Change The susceptibility to change of LCZ 5 is influenced by the following: • the overall character of the LCZ is of high landscape quality • where the Project lies within the LCZ, it would be unable to accommodate these changes without change to the character of the landscape at these locations. The value of the landscape is influenced by the areas of heritage value within the LCZ, as well as cultural, community and amenity values. Given the above, the sensitivity of LCZ 4 is considered to be High.
Magnitude of Change The magnitude of change for the LCZ is influenced by the following: • changes due to the Project would be localised and would affect only one of the three parks within the study area, and therefore affect only a small proportion of the overall LCZ • the changes would result in the removal of a small number of trees (the loss of an element) and the construction of built elements (new elements), as well as changes to landscaping and paving adjacent to the LCZ • the change adjacent to the LCZ including an upgraded station entrance and access to the pedestrian concourse crossing the rail corridor, is likely to activate the reserves, bringing more people through the space • the duration of the Project would be long-term, with low potential for reversibility. However, the concourse and station entrances have been designed so as not to preclude future development. Given the above, the magnitude of change to LCZ 4 due to the Project would be Low.
Significance of Landscape Character Effect Using the Landscape character and visual impact grading matrix, the rating of the impact on landscape character is Moderate. While the Project would have a high quality of architectural and landscape design, trees would be removed within and adjacent to the reserves, therefore the Project would result in both positive and negative changes. It is therefore considered to be an overall Moderate (neutral) change. Landscaping and replacement of trees would assist in mitigating impacts of the Project on landscape character.

5. Visual impact assessment

5.1 Visual envelope mapping

Mapping of the visual envelope of the Project (i.e. where it can be seen from) is shown in Figure 23. As can be seen from the mapping, the area from which the Project can be seen is relatively small, broadly comprising:

- views from within the station and immediate surrounding area, largely contained within this area due to the elevation change between the rail corridor and the surrounding areas
- views from Little Eveleigh Street, Marian Street/Cornwallis Street/Rosehill Street and Lawson Street, including from residential buildings
- partial views from along Gibbons Street, mainly obstructed by the trees within Gibbons Street Reserve
- views from the tall buildings to the north and south of the rail corridor
- views from the tall residential buildings to east of the station along Gibbons Street.

Visibility of the Project is substantially limited due to:

- the dense built form in the area which would obstruct clear views towards the Project from more than 100 metres away from the Project
- mature vegetation within Gibbons Street Reserve which obstructs views to the station from Gibbons Street
- the elevation difference between the station and the surrounding areas immediately adjacent to the rail corridor.

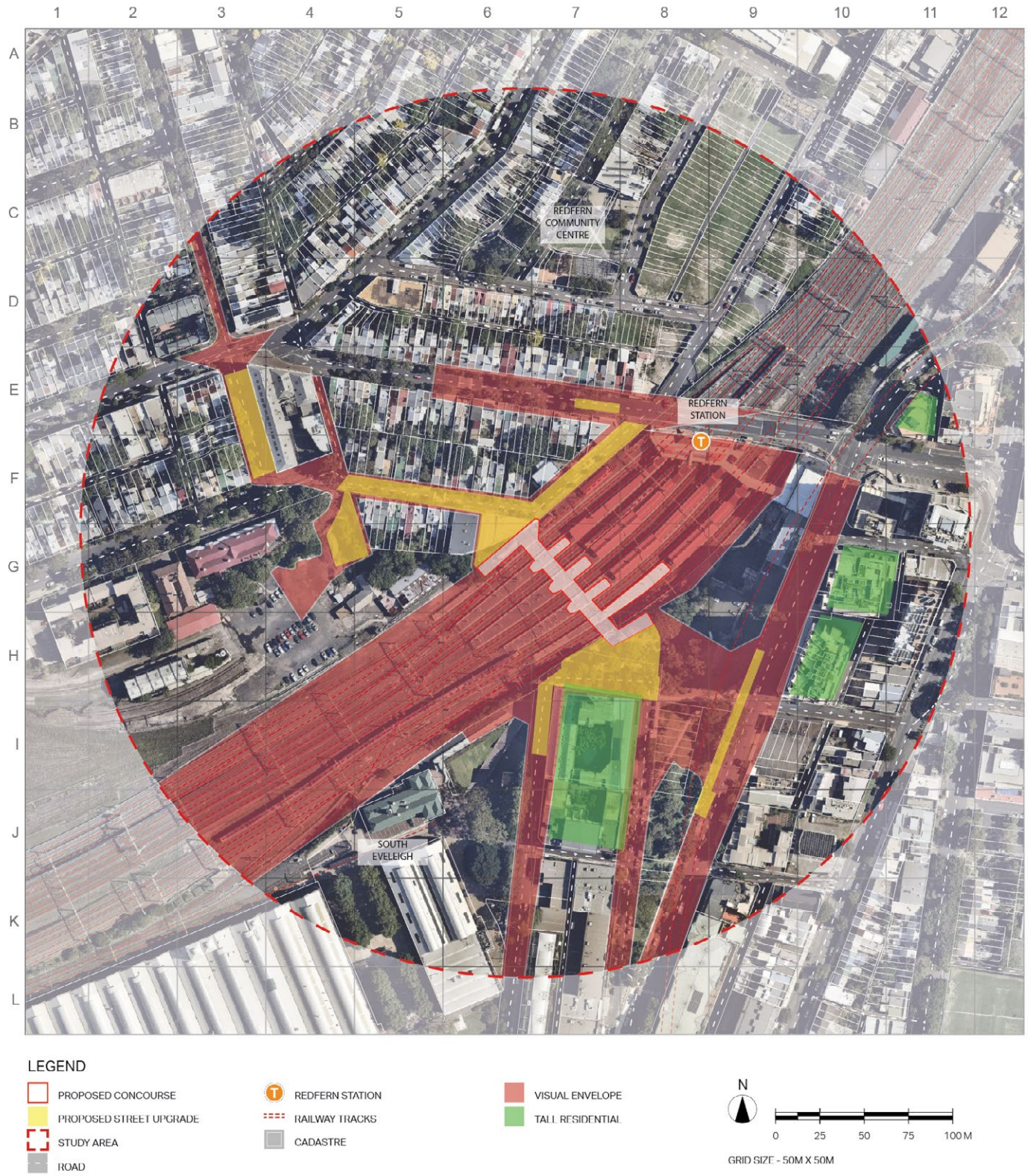

Figure 23 Visual Envelope Map showing key areas from which the Project would be seen (Source: AECOM)

5.2 Visual receptors

Visual effects of the Project are assessed for the following key visual receptors:

- rail and bus commuters passing through or around Redfern station
- workers in the nearby retail and hospitality
- local residents surrounding the station.

5.2.1 Viewpoints rationale

Viewpoints are shown in Figure 24. The rationale for choice of viewpoints is as follows:

- Viewpoint 1: the western end of Little Eveleigh Street, which captures the change as a result of the changing Little Eveleigh Street from a road to a new shared zone. A partial view is also captured of the new station entrance which adapts an existing warehouse building at 125-127 Little Eveleigh Street.
- Viewpoint 2: near the bend on Little Eveleigh Street on the northern footpath, which captures the view of the residences along Little Eveleigh Street, which is subject to the shared zone upgrade and is within close proximity to the new station concourse. A partial view is also captured of the new station entrance which adapts an existing warehouse building at 125-127 Little Eveleigh Street.
- Viewpoint 3: Lawson Street at the intersection of Little Eveleigh Street and Lawson Street, which acts as a representative visual receptor for the café on the corner, some residences along Lawson Street, and from commuters walking along Lawson Street, accounting for views into the rail corridor and to the new concourse.
- Viewpoint 4: Lawson Street concourse to the left of the staircase that leads to Platforms 4 and 5, which is representative of the views that commuters would receive when walking and waiting along the concourse, as well as a representative view for the workers at the nearby coffee cart, accounting for views within the rail corridor and towards the new concourse.
- Viewpoint 5: Redfern Station Platforms 4 and 5 near the end of the platform, which captures the view of commuters travelling to Redfern Station and those waiting on the platform, accounting for views to the new concourse and lifts.
- Viewpoint 6: Gibbons Street, which acts as a proxy for the views from residents along Gibbons Street, visitors and workers to the retail and hospitality businesses along Gibbons Street, as well as rail and bus commuters.
- Viewpoint 7: Marian Street at the north western corner of the medium density residential building named 'The Watertower', which captures the view of commuters that would use the new Marian Street entrance, as well as the view for local residents. This view would include the new entrance on Marian Street and the new concourse and lifts.
- Viewpoint 8: Rosehill Street, which captures the views from commuters using South Eveleigh as a thoroughfare, as well as the workers and visitors of the community amenity.

‘Before’ and ‘after’ photomontages were prepared for each of the above listed viewpoints.

Other locations considered but not utilised comprised:

- directly across from the existing Lawson Street station entrance - no significant views of the Project were available from this location
- the most southern edge of Platforms 4 and 5 within Redfern Station - the visual effects of the Project were considered to be adequately covered within Viewpoint 5, and alternating the view of the Project to the likely less populated area of the platform added no further value
- Gibbons Street, near the start of the proposed accessible ramp - no significant views of the Project were available from this location
- within Gibbons Street Reserve at the intersection of the internal footpaths - the visual effects of the Project were captured by Viewpoint 7 and Viewpoint 8, both of which capture a wider range of receptors
- north-eastern corner of the medium residential tower named 'The Watertower' residential building - the visual effects of the Project are captured by Viewpoint 7 and the location of the potential viewpoint is almost completely encompassed by the Project
- Ivy Street near Abercrombie Street, where footpath widening would comprise an upgrade of existing infrastructure. These changes would not alter the character and use of the street and therefore would result in minimal visual impact.

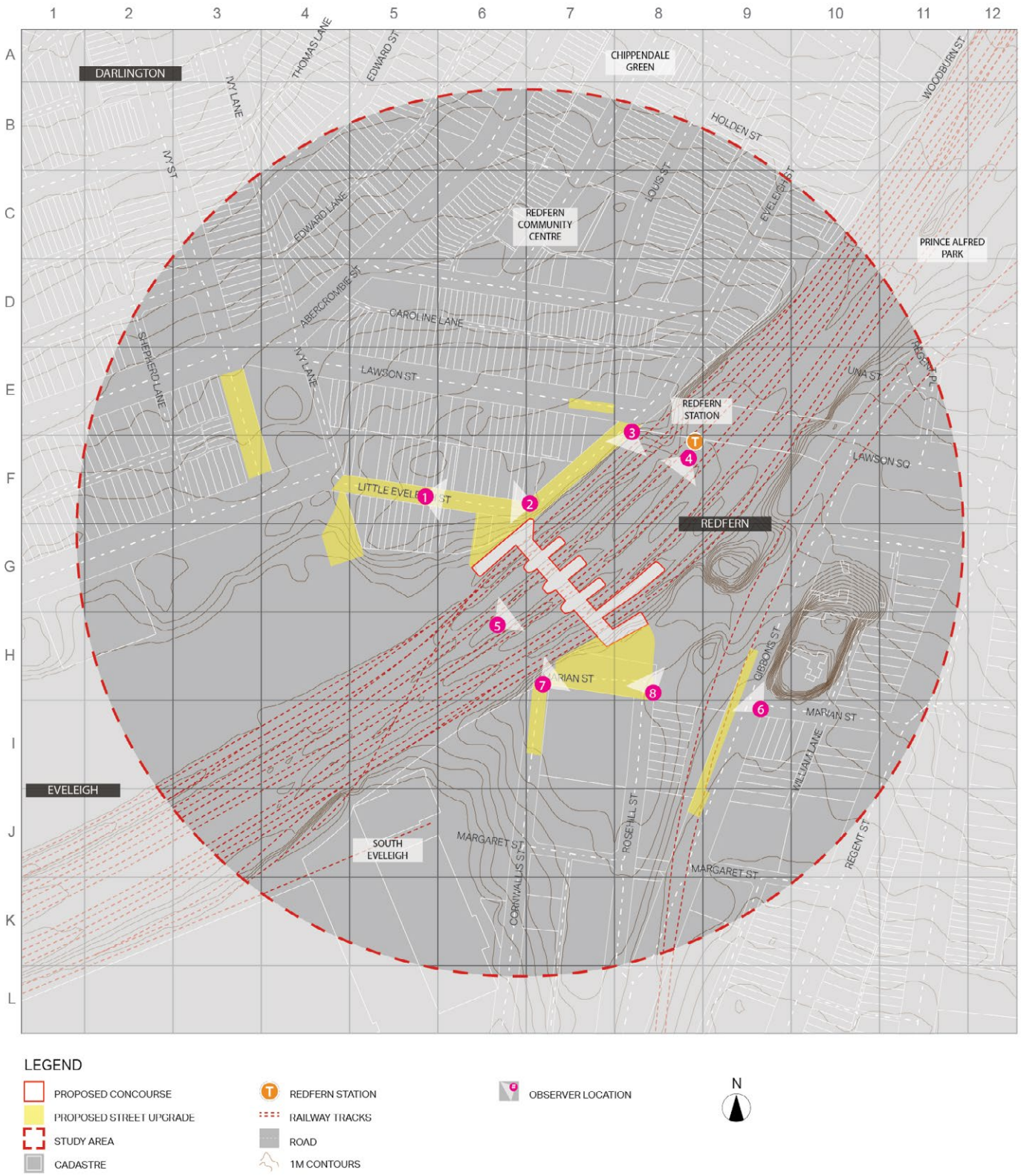

Figure 24 Plan of viewpoints (Source: AECOM)

5.3 Operational visual impacts

5.3.1 Viewpoint 1 - Little Eveleigh Street (West)

This viewpoint acts as a proxy for views from residences along Little Eveleigh Street. Table 13 summarises visual impacts to these receptors.

Figure 25 Existing view of Viewpoint 1 - Little Eveleigh Street (West) facing east (Source: Novo Rail)

Figure 26 Photomontage of Viewpoint 1 - Little Eveleigh Street (West) facing east at operation (Source: Novo Rail)

Table 13 Viewpoint 1 - Little Eveleigh Street (West) - Visual Impact Assessment

Viewpoint 1 - Little Eveleigh Street West
Receptors Receptors at this location include: • residents in terrace housing • commuters and passers-by (pedestrians, cyclists, motorists, students from University of Sydney) on Little Eveleigh Street.
Existing View This view is taken from the Little Eveleigh Street looking eastwards towards the rail corridor (refer to Figure 24). Key elements of the existing view (refer to Figure 25) comprise: • terrace housing fringes the road, seen in the foreground and middle ground of the view to the north and south of the road. This housing comprises two storey attached dwellings with small setbacks from the footpath. Some small trees and shrubs are seen in the front courtyards of the dwellings, with visually permeable fencing (e.g. wrought iron filigree fencing) at the footpath boundary. Balconies are present at the first floor of each house • the footpath is seen in the foreground and middle ground of the view, with occasional small to medium sized street trees • the road pavement is seen in the foreground to background, with a green cycleway painted on the northern side of the road. Parked cars are seen on the southern side of the road, with occasional speed bumps spanning the road pavement in the middle ground • the road culminates in a distance view to tall apartment buildings which lie on the opposite side of the rail corridor. Two larger, brick facade industrial warehouse buildings are seen on the southern side of the road in the middle to background of the view.
Anticipated Change to View The key changes to the view would comprise (refer to Figure 26): • a shared zone would be created on Little Eveleigh Street, which would include: - the relocation of approximately 20 restricted residential car parking spaces - traffic signage and traffic calming devices (e.g. speed humps) may be installed - some vegetation may require trimming or removal - Landscaping, bicycle spaces, and street lighting adjustments • a new entrance to Redfern Station would be seen located in the re-purposed warehouse building in the middle ground of the view, with the proposed pedestrian concourse seen at the culmination of the street to the east. The new entrance to Redfern Station would bring a considerable number of pedestrians directly into Little Eveleigh Street, who would either return to Lawson Street adjacent to the rail corridor, or head west along Little Eveleigh Street on the way to the University of Sydney or the Carriageworks.

Viewpoint 1 - Little Eveleigh Street West
Sensitivity to Change The susceptibility to change of receptors at Viewpoint 1 is influenced by the following: • the nature of the visual receptors who would experience this view of the Project, comprising: - residents, who are typically considered to comprise of sensitive visual receptors given the proprietary interest they could be expected to take in changes to the outlook from their homes - pedestrians, cyclists and motorists, who would have a casual interest in the views as they move along the street. This viewpoint lies within the Darlington Heritage Conservation Area. • the extent to which the attention or interest of receptors would be focused on the view: - residents would be moderately focused on the view, particularly as they entered and left their premises or spent time on their porch or balcony - due to their slower travel speed and potential to be walking for leisurely purposes, pedestrians would be particularly focused on their view. At this viewpoint the value of the view as seen by receptors is influenced by the heritage character of the streetscape, with homogeneous terrace housing and landscaping, and occasional well-maintained industrial built form. Given the above, the sensitivity of typical receptors to the anticipated change is considered to be High.
Magnitude of Change The magnitude of change for the viewpoint is influenced by the following: • the scale of the road upgrade to a shared zone would be similar to the existing condition, with additional landscaping lining both sides of the streetscape which would visually soften the corridor, provide privacy to the residential properties and improve overall character. No existing landscape elements would be lost overall • the pedestrian concourse and associated built form would not be visually prominent within the view, as it would be framed between built form lining the street and partially screened by streetscape vegetation • changes seen from this viewpoint would be predominantly at street level and be limited by built form on either side of the road and vegetation within the road corridor • the new station entrance on Little Eveleigh Street and shared zone would result in an influx of pedestrian movement within the road corridor, either heading north or west along Little Eveleigh Street • the duration of the changes would be long-term. Given the above, the magnitude of anticipated change is considered to be Moderate.
Significance of Visual Effect Using the visual impact grading matrix, the rating of the visual impact of the Project at Viewpoint 1 is considered to be High to Moderate (positive). However, the high quality of the proposed streetscape design, coupled with additional landscaping, would be a positive visual influence to views along the streetscape. The proposed pedestrian concourse and new entry to Redfern Station would improve passive surveillance within the street (which generally increases safety), however, would increase the number of pedestrians within Little Eveleigh Street substantially. Pedestrian activity would be separated from residential boundaries along the street by landscaping.

5.3.2 Viewpoint 2 - Little Eveleigh Street (East)

This viewpoint acts as a proxy for views from residences along Little Eveleigh Street which intersects with the new entrance to the pedestrian concourse spanning the rail corridor. Table 14 summarises visual impacts to these receptors.

Figure 27 Existing view of Viewpoint 2 - Little Eveleigh Street (East) facing west (Source: Novo Rail)

Figure 28 Photomontage of Viewpoint 2 - Little Eveleigh Street (East) facing west at operation (Source: Novo Rail)

Table 14 Viewpoint 2 - Little Eveleigh Street (East) - Visual Impact Assessment

Viewpoint 2 - Little Eveleigh Street East
Receptors Receptors at this location include: • residents in terrace housing • commuters and passers-by (pedestrians, cyclists, motorists, students from University of Sydney) on Little Eveleigh Street.
Existing View This view is taken from Little Eveleigh Street adjacent to the rail corridor, looking west (refer to Figure 24). Key elements of the existing view (refer to Figure 27) comprise: • terrace housing in the foreground and middle ground of the view to the northern side of the road, comprising two storey attached dwellings adjoining the footpath, with small setbacks from the boundary. Small entry balconies are bordered by fencing (e.g. wrought iron filigree fencing) at the footpath boundary. Balconies are present at the first floor of each house • two larger, brick facade industrial warehouse buildings (including the 'Big Issue' building at 125-127 Little Eveleigh Street) are seen on the southern side of the road in the foreground to middle ground of the view • a chain link fence runs along the boundary of the existing rail corridor to the left of frame • the footpath is seen in the foreground and middle ground of the view on both sides of the road, with occasional small to medium sized street trees • the road pavement is seen in the foreground to background, with a green cycleway painted on the northern side of the road. Parked cars are seen on the southern side of the road • the road culminates in a distance view to street trees and residential houses.
Anticipated Change to View The key changes to the view would comprise the following (refer to Figure 28): • a shared zone on Little Eveleigh Street, which would include: - the relocation of approximately 20 restricted residential car parking spaces - pavement resurfacing to establish the shared zone and accessible station entrance. The shared zone would include restricted car access, cyclists and pedestrians sharing the new pavement on Little Eveleigh Street - traffic signage and traffic calming devices (e.g. speed humps) may be installed - some vegetation may require trimming or removal - landscaping and street lighting adjustments. • • the new entrance to Redfern Station would be located in the re-purposed industrial building (current 'Big Issue' building at 125-127 Little Eveleigh Street) in the foreground of the view to the left of frame. The new entrance would include a new canopy, station signage, lighting and openings in the warehouse façade and would introduce a considerable number of pedestrians directly into Little Eveleigh Street, many of whom would head north along Little Eveleigh Street to Lawson Street.

Viewpoint 2 - Little Eveleigh Street East
Sensitivity to Change The susceptibility to change of receptors at Viewpoint 2 is influenced by the following: • nature of the visual receptors who would experience this view of the Project, comprising: - residents, who are typically considered to be sensitive visual receptors given the proprietary interest they could be expected to take in changes to the outlook from their homes - pedestrians, cyclists and motorists, who would have a casual interest in the views as they move along the street. This viewpoint lies within the Darlington Conservation Area. • the extent to which the attention or interest of receptors would be focused on the view: - residents would be moderately focused on the view, particularly as they entered and left their premises or spent time on their porch or balcony - due to their slower travel speed and potential to be walking for leisurely purposes, pedestrians would be particularly focused on their view. At this viewpoint the value of the view as seen by receptors is influenced by the heritage character of parts of this streetscape, including terrace housing and landscaping, and occasional industrial built form. Given the above, the sensitivity of typical receptors to the anticipated change is considered to be High.
Magnitude of Change The magnitude of change for the viewpoint is influenced by the following: • the scale of the road upgrade to a shared zone would be similar to the existing condition, with additional landscaping lining both sides of the streetscape which would visually soften the corridor, provide privacy to the residential properties and improve overall character • changes seen from this viewpoint would be predominantly at street level and would be limited by built form on either side of the road and vegetation within the road corridor • the provision of a station entrance would change the use of 125-127 Little Eveleigh Street and activate the streetscape, bringing substantial numbers of pedestrians within the road corridor • the duration of the changes would be long-term. Given the above, the magnitude of anticipated change is considered to be Moderate.
Significance of Visual Effect Using the visual impact grading matrix, the rating of the visual impact of the Project at Viewpoint 2 is considered to be High to Moderate (positive). The high quality of the streetscape design, coupled with additional landscaping, would be a positive visual influence to views along the streetscape, however, the addition of substantially more pedestrians within the road corridor could be viewed as positive or negative depending on the visual receptor. The additional pedestrians on the street would improve passive surveillance within the street (which generally increases safety), and reduce the speed of vehicles within the corridor, while the increase in landscaping and trees would improve visual amenity (as provided by the design). While there may be a perceived reduction in privacy to limited residential properties, landscaping provided along property boundaries within the road would be a physical barrier between property boundaries and pedestrians. It is worth noting that a system of co-design is underway which aims to ensure that the visual outcome of the streetscapes are in keeping with local residents requirements, as well as the preservation of the visual identity of the area.

5.3.3 Viewpoint 3 - Lawson Street

This viewpoint assessed the view south along Little Eveleigh Street from the corner of Lawson Street and acts as a proxy for views from the cafes at the corner of Lawson Street and Little Eveleigh Street and residents of nearby houses. Table 15 summarises visual impacts to these receptors.

Figure 29 Existing view of Viewpoint 3 - Lawson Street facing south (Source: Novo Rail)

Figure 30 Existing view of Viewpoint 3 - Lawson Street facing south at operation (Source: Novo Rail)

Table 15 Viewpoint 3 - Lawson Street - Visual Impact Assessment

Viewpoint 3 - Lawson Street
Receptors Receptors at this location include: • residents in terrace housing • commuters and passers-by (pedestrians, cyclists, motorists, students from University of Sydney) on Little Eveleigh Street and Lawson Street • visitors to cafes and shops on Lawson Street.
Existing View This view is taken from the corner of Little Eveleigh Street and Lawson Street (refer to Figure 24). Key elements of the existing view (refer to Figure 29) comprise: • chain link fencing along the rail corridor in the foreground of the view with station platforms, platform buildings, staircases, overhead steel gantries and other associated infrastructure within Redfern Station seen in the middle ground beyond the fencing • the footpath and road pavement of Little Eveleigh Street seen in the foreground to middle ground, heading south. Bike parking is located in the middle ground of the view on the eastern side of the road • garages and the side of a residential apartment building to the right of frame in the foreground to middle ground, with cafes operating out of some garages at street level. The building directly to the right of frame is a local heritage listed building, Terrace House 'Waratah' • mature trees in the middle ground of the view along Little Eveleigh Street • apartment buildings and tree canopies are seen in the background of the left of view above the rail corridor and fencing.
Anticipated Change to View The key changes in the view comprise (refer to Figure 30): • a shared zone would be created on Little Eveleigh Street, which would include: - the relocation of approximately 20 restricted residential car parking spaces - pavement resurfacing to establish the shared zone. The shared zone would include cars, cyclists and pedestrians sharing the new pavement on Little Eveleigh Street - traffic signage and traffic calming devices (e.g. speed humps) may be installed - some vegetation may require trimming or removal - landscaping and street lighting adjustments - new bike hoops adjacent to the fencing to the left of frame. • the proposed pedestrian concourse spanning the rail corridor, seen in the middle ground to background of the view.

Viewpoint 3 - Lawson Street

Sensitivity to Change

The susceptibility to change of receptors at Viewpoint 3 is influenced by the following:

- the nature of the visual receptors who would experience this view of the Project, comprising:
  - residents, who are typically considered to comprise sensitive visual receptors given the proprietary interest they could be expected to take in changes to the outlook from their homes, however, very few residents would see these changes from their homes at this location
  - pedestrians, cyclists and motorists, who would have a casual interest in the views as they move along the street. This viewpoint lies within the Darlington Heritage Conservation Area, however, this portion of Little Eveleigh Street lies adjacent to the rail corridor and is fringed with side and rear elevations of adjoining development
  - cafe visitors and staff, who would obtain views of the changes from close proximity.
- the extent to which the attention or interest of receptors would be focused on the view:
  - residents would typically be moderately focused on the view, particularly as they enter and leave their premises or spent time on their porch or balcony. However, due to this location running adjacent to the property fencing of the residences, residents would not be able to view the streetscape from within their homes
  - cafe visitors would have a greater interest in the view as they sat and ate or waited for their orders
  - due to their slower travel speed and potential to be walking for leisurely purposes, pedestrians would be particularly focused on their view. The rail corridor provides a point of interest at this location, particularly given the elevated position of the viewpoint in comparison to the station and rail corridor to the east.

At this viewpoint the value of the view as seen by receptors is influenced by the utilitarian character of the rail corridor to the east and the heritage building to the west of this viewpoint.

Given the above, the sensitivity of typical receptors to the anticipated change is considered to be High.

Magnitude of Change

The magnitude of change for the viewpoint is influenced by the following:

- the scale of the road upgrade to a shared zone would be similar to the existing condition, with additional landscaping lining both sides of the streetscape (which would visually soften the corridor, provide privacy to the residential properties and improve overall character in the middle to background)
- the proposed pedestrian concourse would be seen in the middle ground to the east, spanning the rail corridor. This would constitute an additional piece of rail infrastructure and would partially block views to background apartments and the horizon, seen beyond the existing fence. However, the views blocked will be minimal as they are currently obstructed by existing rail infrastructure
- the provision of a station entrance at the Little Eveleigh Street warehouse building would activate the streetscape, bringing pedestrians to the street
- the duration of the changes would be long-term.

Given the above, the magnitude of anticipated change is considered to be Moderate.

Significance of Visual Effect

Using the visual impact grading matrix, the rating of the visual impact of the Project at Viewpoint 3 is considered to be High to Moderate (positive). The upgrade to the streetscape would be positive, particularly given the resurfacing of the road and the addition of landscaping, although the additional landscaping would be difficult to see from this viewpoint. The proposed new station entrance would improve passive surveillance within the street (which generally increases safety), improve visual amenity, and the proposed pedestrian concourse would be in keeping with the character of the existing rail corridor.

5.3.4 Viewpoint 4 - Lawson Street Concourse

This viewpoint assessed the view south along the rail corridor from the existing Lawson Street Concourse, which is the existing major station entrance to Redfern Station. Table 16 summarises visual impacts to receptors at this location.

Figure 31 Existing view of Viewpoint 4 - Lawson Street Concourse facing south (Source: Novo Rail)

Figure 32 Photomontage of Viewpoint 4 - Lawson Street Concourse facing south at operation (Source: Novo Rail)

Table 16 Viewpoint 4 - Lawson Street Concourse - Visual Impact Assessment

Viewpoint 4 - Lawson Street Concourse
Receptors Receptors at this location include: • commuters entering the station and heading down to the platforms to the south • station workers • visitors to the coffee cart on the overbridge.
Existing View This view is taken from the existing Lawson Street concourse at Redfern Station (refer to Figure 24). Key elements of the existing view (refer to Figure 31) comprise: • station platforms and steps, including rust red coloured roofing running the length of the platforms and stairs, and railway tracks and passing trains in the foreground and middle ground of the view • overhead steel gantries in the middle ground of view, screening views to the horizon • partially screened views of the residential apartments on Gibbons Street and the medium residential building named 'The Watertower' residential building seen in the background against the horizon • mature vegetation in the background to the centre left of frame from Gibbons Street Reserve.
Anticipated Change to View The key changes to the view would comprise (refer to Figure 32): • the proposed pedestrian concourse would be seen in the middleground of the view, suspended above the rail corridor and further screening views to the horizon. The concourse would comprise: - covered stairways connecting the concourse to Platforms 1 to 10 - the concourse would be approximately six metres wide and span approximately 80 metres between Little Eveleigh Street and Marian Street - the bottom of the concourse would provide the required clearance for overhead wiring and ongoing train operations. • vegetation removal to the left of frame in the middle to background where the proposed pedestrian concourse joins Marian Street.
Sensitivity to Change The susceptibility to change of receptors at Viewpoint 3 is influenced by the following: • commuters would have a casual interest in views as they enter the station and head to and from the platforms, however, due to the elevated location of the viewpoint and the distance views along the rail corridor, this may heighten interest in the view from this location • receptors may be locals or tourists. Tourists are a more sensitive receptor group, with heightened interest in views from locations. At this viewpoint the value of the view as seen by receptors is influenced by the utilitarian character of the rail corridor, the elevation of the view, and the heritage elements of Redfern Station and surrounds seen within the view. The horizon line is partially screened by existing gantry infrastructure within the rail corridor. Given the above, the sensitivity of typical receptors to the anticipated change is considered to be Moderate.

Viewpoint 4 - Lawson Street Concourse
Magnitude of Change The magnitude of change for the viewpoint is influenced by the following: • the scale of the proposed pedestrian concourse and associated structures would be characteristic within the rail corridor but comprise new elements within the view. The structures would be similar to the existing metal infrastructure (including gantries, trains and tracks), but more modern in the materiality and finish than the existing station infrastructure of roofing, fencing and surfacing. As it is appropriate to visually separate existing (heritage listed) station infrastructure from new infrastructure, the proposed concourse and associated structures would not be similar in materiality to the existing • the proposed pedestrian concourse would be seen in the middle ground to background to the south and be seen screening the horizon within the rail corridor • taller apartment buildings and existing vegetation would still be seen above the proposed pedestrian concourse • the duration of the changes would be long-term • the geographical extent of change would be heightened given the elevated nature of the structure. Given the above, the magnitude of anticipated change is considered to be High.
Significance of Visual Effect Using the visual impact grading matrix, the rating of the visual impact of the Project at Viewpoint 4 is considered to be High to Moderate (positive). The addition of a large piece of infrastructure within a rail corridor is considered appropriate given the function-driven design of rail infrastructure. However, it results in a visual narrowing of views between the existing Lawson Street concourse and the proposed pedestrian concourse. The high quality of design results in a positive change to the view from this location, with the proposed colouration of the concourse in keeping with existing gantries within the rail corridor.

5.3.5 Viewpoint 5 - Redfern Station platform

This viewpoint acts as a proxy for views from all platforms in Redfern Station. For the purposes of this document, Platforms 4 and 5 were chosen as it is the middle platform of the station and caters to the City Circle Line train service. Table 17 summarises visual impacts to receptors.

Figure 33 Existing view of Viewpoint 5 - Redfern Station Platform facing north (Source: Novo Rail)

Figure 34 Photomontage of Viewpoint 5 - Redfern Station Platform facing north at operation (Source: Novo Rail)

Table 17 Viewpoint 5 - Redfern Station platform - Visual Impact Assessment

Viewpoint 5 - Redfern Station platform
Receptors Receptors at this location include: • commuters on station platforms • station workers.
Existing View This view is taken from Platforms 4 and 5 within Redfern Station looking north back towards the Lawson Street concourse (refer to Figure 24). Key elements of the existing view (refer to Figure 33) comprise: • station platforms and associated tracks with passing trains seen in the foreground and middle ground of the view • platform buildings to the far left and far right of frame in the middle ground and background, which respectively visually contain views within the rail corridor • overhead steel gantries in the middle ground across the entire view • medium residential buildings seen in the background of the view on either side of the rail corridor, elevated above the level of the platforms and tracks • the Lawson Street concourse and associated Redfern Station buildings, which are seen partly screened by overhead gantries and wiring on the horizon.
Anticipated Change to View The key changes to the view would comprise (refer to Figure 34): • the proposed pedestrian concourse would be seen in the middle ground of the view, suspended above the rail corridor and screening views to the station entrance building on the Lawson Street concourse on the horizon within the rail corridor. The concourse would comprise: - six new steel and glass lifts and covered stairways connecting the concourse to Platforms 1 to 10 - the concourse would be approximately six metres wide and span approximately 80 metres between Little Eveleigh Street and Marian Street - the bottom of the concourse would provide the required clearance for overhead wiring and ongoing train operations • vegetation removal to the right of frame in the middle to background where the proposed pedestrian concourse joins Marian Street.
Sensitivity to Change The susceptibility to change of receptors at Viewpoint 5 is influenced by the following: • commuters would typically have a low interest in views from the platforms, given the utilitarian nature of the rail corridor and visual containment of views within the corridor • receptors may be locals or tourists. Tourists are a more sensitive receptor group, with heightened interest in views from locations, however, views at this location are predominantly restricted to within the rail corridor. Local receptors would have a low sensitivity to changes within the corridor given their regular experience of it and within the context of daily work commutes. At this viewpoint the value of the view as seen by receptors is influenced by: • the utilitarian character of the rail corridor • the NSW State Heritage Register listing of the Redfern Railway Station Group, noting that the station buildings are located in the background (and therefore not visually prominent) within the view. Given the above, the sensitivity of typical receptors to the anticipated change is considered to be Moderate.

Viewpoint 5 - Redfern Station platform
Magnitude of Change The magnitude of change for the viewpoint is influenced by the following: • the scale of the proposed pedestrian concourse and associated structures would be characteristic of the rail corridor, but comprise new elements within the view. The structures would be similar to the existing metal infrastructure, including gantries, trains and tracks, but more modern in materiality and finish than the existing station infrastructure of roofing, fencing and surfacing. However, due to the proposed concourse screening views to the existing station buildings to the north, this comparison of old versus new is less likely to take place from this location • the proposed pedestrian concourse would be seen in the middle ground to the north and be seen screening the horizon within the rail corridor • taller apartment buildings and existing vegetation would still be seen above to the left and right beyond the rail corridor • the duration of the changes would be long-term • the geographical extent of change would be heightened given the elevated nature of the structure. Given the above, the magnitude of anticipated change is considered to be High.
Significance of Visual Effect Using the visual impact grading matrix, the rating of the visual impact of the Project at Viewpoint 5 is considered to be High to Moderate (positive). Although the proposed pedestrian concourse is the addition of a large piece of infrastructure within a rail corridor, it is considered appropriate given the function-driven design of rail infrastructure. The lower sensitivity of the visual receptor at this location decreases the visual impact rating of the Project from this viewpoint.

5.3.6 Viewpoint 6 - Gibbons Street

This viewpoint is located on the eastern side of Gibbons Street, looking west towards the Gibbons Street Reserve and 'The Watertower' residential building, and acts as a proxy for views from businesses and residents on Gibbons Street. Table 18 summarises visual impacts to these receptors.

Figure 35 Existing view of Viewpoint 6 - Gibbons Street facing east (Source: Novo Rail)

Figure 36 Photomontage of Viewpoint 6 - Gibbons Street facing east at operation (Source: Novo Rail)

Table 18 Viewpoint 6 - Gibbons Street - Visual Impact Assessment

Viewpoint 6 - Gibbons Street
Receptors Receptors at this location include: • workers and visitors to businesses on Gibbons Street • commuters arriving by bus and walking to and from the station from the community bus stop • passers-by on Gibbons Street, including vehicles, cyclists and pedestrians • residents in tall apartment buildings on Gibbons Street.
Existing View This view is taken from the eastern verge of Gibbons Street looking west (refer to Figure 24). Key elements of the existing view (refer to Figure 35) comprise: • Gibbons Street road reserve, comprising four lanes of one way traffic, in the foreground of the view • mature street trees adjacent to the footpath on the western verge of Gibbons Street, with lawn areas and trees in the Gibbons Street Reserve in the middle ground • a brick retaining wall and landscaping, including mature trees opposite the viewpoint, seen in front of solid fencing surrounding the Marian Street car park in the middle ground • 'The Watertower' residential building in the background centre of frame, partly screened by mature vegetation within Gibbons Street Reserve.
Anticipated Change to View The key changes to the view would comprise (refer to Figure 36): • at street level; - a new Kiss and Ride on Gibbons Street - upgrades and adjustments to footpaths and street lighting on Gibbons Street and Marian Street - some vegetation trimming or removal • from elevated residences and businesses: - a new Kiss and Ride on Gibbons Street - upgrades and adjustments to footpaths and street lighting on Gibbons Street and Marian Street - some vegetation trimming or removal - the upgraded Marian Street station entrance, shared zone and associated landscaping.

Viewpoint 6 - Gibbons Street
Sensitivity to Change The susceptibility to change of receptors at Viewpoint 6 is influenced by the following: • the nature of the visual receptors who would experience this view of the Project, comprising: - residents, who are typically considered to comprise sensitive visual receptors given the proprietary interest they could be expected to take in changes to the outlook from their homes - pedestrians, commuters from the Marian Street entrance, cyclists and motorists, who would have a casual interest in the views as they move along the street - workers and visitors to commercial properties on Gibbons Street, who may obtain views to the changes, but would predominantly be focused on activities within these properties • the extent to which the attention or interest of receptors would be focused on the view: - residents would be moderately focused on the view, particularly as they entered and left their premises or spend time on their balcony (some from elevated positions in tall apartment buildings on Gibbons Street) - receptors travelling along the road, pedestrians would be particularly focused on their view as they walked along the street. The value of the view as seen by receptors is influenced by: • views to recreational parks and reserves, which are typically highly valued within city areas; however, passers-by, particularly pedestrians, would only see views for short periods of time on their journey • the high value residents generally place on views from their homes • the lower value workers would have on their views as they would typically be focused on their daily tasks within their place of employment. Given the above, the sensitivity of typical receptors from this viewpoint to the anticipated change is considered to be Moderate.
Magnitude of Change The magnitude of change for the viewpoint is influenced by the following: • the scale of the change would be similar to other rail infrastructure adjoining the rail corridor but would be seen from a reasonable distance and at least partially screened by landform and existing mature vegetation from ground level views • the proposed pedestrian concourse and Marian Street entrance would be seen from apartments in the upper storeys of surrounding apartment buildings, but the changes would be in keeping with the scale of existing rail infrastructure within and adjoining the rail corridor • the duration of the changes would be long-term. Given the above, the magnitude of anticipated change is considered to be Low.
Significance of Visual Effect Using the visual impact grading matrix, the rating of the visual impact of the Project at Viewpoint 6 is considered to be Moderate to Low (neutral). The viewing distance and screening from existing vegetation from ground level rather than the sensitivity of the visual receptor at this location decreases the visual impact rating of the Project from this viewpoint. Receptors in apartments on Gibbons Street viewing from upper storeys would see views to the Project, including infrastructure spanning the rail corridor, but this is not considered a higher change due to the similar scale in the Project to existing elements within the rail corridor.

5.3.7 Viewpoint 7 - Marian Street

This viewpoint represents the views of residents within 'the Watertower' residential building on Marian Street as the view from within the building is not available for this report. Table 19 summarises visual impacts to these receptors.

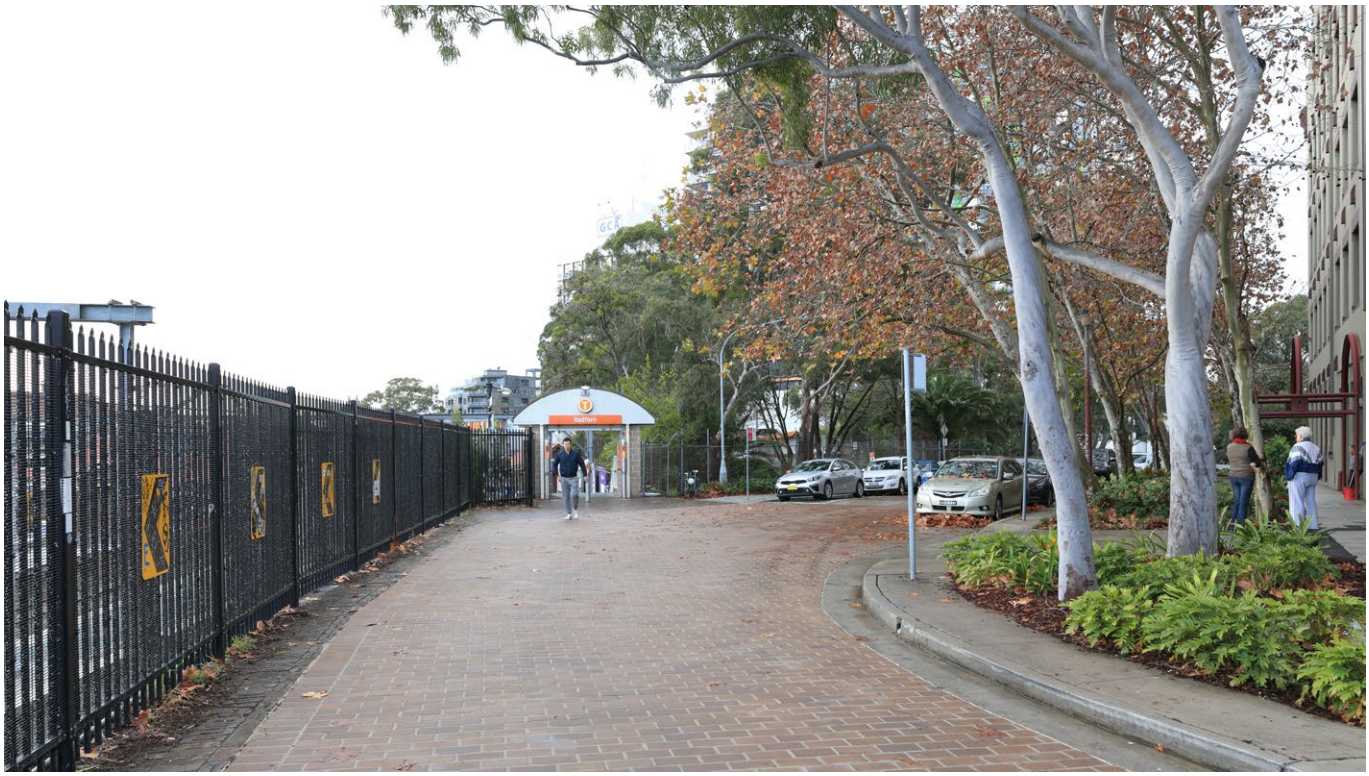

Figure 37 Existing view of Viewpoint 7- Marion Street facing north-east (Source: Novo Rail)

Figure 38 Photomontage of Viewpoint 7- Marion Street facing north-east at operation (Source: Novo Rail)

Table 19 Viewpoint 7 - Marian Street - Visual Impact Assessment

Viewpoint 7 - Marian Street
Receptors Receptors at this location include: • passers-by on Marian Street, including vehicles, cyclists and pedestrians • commuters accessing the station from the minor station entrance at this location • workers and visitors to South Eveleigh • residents in the medium residential building on Marian Street.
Existing View This view is taken from the corner of Marian Street and Cornwallis street, adjacent to the rail corridor, looking north (refer to Figure 24). Key elements of the existing view (refer to Figure 37) comprise: • existing aluminium fencing to the left of frame in the foreground and middle ground of the view, partially screening views into the rail corridor • the road pavement and footpath on Marian Street in the foreground, with mature trees and groundcovers in the road verge to the right of frame • the existing Marian Street entrance to Redfern station in the middle ground of the view • corner of the 'The Watertower' residential building.
Anticipated Change to View The key changes to the view would comprise (refer to Figure 38): • changes to the road pavement and footpath on Marian Street to upgrade the street to a shared zone to be used by cyclists and pedestrians and the retention of existing paving treatments on Cornwallis Street • removal of 16 parking spaces including five unrestricted parking spaces, and eleven restricted parking spaces (signed two-hour restricted/permit holders unrestricted) • removal of some vegetation • the upgraded Marian Street station entrance, including: - the new concourse to the left of view - approximately 20 additional bike hoops - services building - station forecourt and seating areas • station operational components including wayfinding and signage, gatelines, station signage and top up machines, CCTV and heritage interpretation and/or public art • the proposed new station entry would bring more pedestrians into the street at this location • the proposed pedestrian concourse spanning the rail corridor to the west would be seen partially screened by the existing fencing to the left of frame.

Viewpoint 7 - Marian Street
Sensitivity to Change The susceptibility to change of receptors at Viewpoint 7 is influenced by the following: • the nature of the visual receptors who would experience this view of the Project, comprising: - residents, who are typically considered to comprise sensitive visual receptors given the proprietary interest they could be expected to take in changes to the outlook from their homes - pedestrians, cyclists and motorists, who would have a casual interest in the views as they move along the street • the extent to which the attention or interest of receptors would be focused on the view: - residents would be moderately focused on the view, particularly as they entered and left their premises or spend time on their balcony (many from elevated positions in tall residential apartments on Gibbons Street) - commuters would have a casual interest in views as they enter the station and head to their platform, these receptors may be locals or tourists. Tourists are a more sensitive receptor group, with heightened interest in views from locations - due to their slower travel speed and potential to be walking for leisurely purposes, pedestrians would be particularly focused on their view. The value of the view as seen by receptors is influenced by: • the high value residents generally place on views from their homes • commuters would be unlikely to place high value on views entering the rail corridor • while Redfern station is heritage listed, no views to heritage elements would be altered from this location. Given the above, the sensitivity of typical receptors to the anticipated change is considered to be High.
Magnitude of Change The magnitude of change for the viewpoint is influenced by the following: • the scale of the proposed upgraded station entrance and pedestrian concourse with associated structures would be characteristic of those within the rail corridor but comprise new elements within the view. The modern materiality and finish of the Project would be in contrast to that of the existing station infrastructure of roofing, fencing and surfacing. However, due to the visually compartmentalised position of this upgraded station entrance, this comparison of old versus new is less likely to take place from this location • the new station entry at this location would bring pedestrians directly into the quiet residential street • the proposed pedestrian concourse would be visible but partially screened by existing fencing at this viewpoint • the duration of the changes would be long-term. Given the above, the magnitude of anticipated change is considered to be High.
Significance of Visual Effect Using the visual impact grading matrix, the rating of the visual impact of the Project at Viewpoint 7 is considered to be High (positive). The high quality of the design of the streetscape and station entrance would result in a positive visual influence to views within the streetscape. The proposed new station entrance would increase pedestrian numbers and thereby improve passive surveillance within the street (which generally increases safety), with improved visual amenity provided by the design.

5.3.8 Viewpoint 8 - Rosehill Street

This viewpoint is located at the corner of Rosehill Street and Marian Street, looking west towards the upgraded station entrance and pedestrian concourse. Table 20 summarises visual impacts to this receiver. Note that Viewpoint 7 addresses views seen by residents in the adjacent building 'the Watertower' residential building.

Figure 39 Existing view of Viewpoint 8 - Rosehill Street facing west (Source: Novo Rail)

Figure 40 Photomontage of Viewpoint 8 - Rosehill Street facing west at operation (Source: Novo Rail)

Table 20 Viewpoint 8 - Rosehill Street - Visual Impact Assessment

Viewpoint 8 - Rosehill Street
Receptors Receptors at this location include: • passers-by on Marian Street, including vehicles, cyclists and pedestrians • commuters accessing the station from the minor station entry at this location • residents from the nearby medium density residential building 'the Watertower'.
Existing View This viewpoint is located at the corner of Rosehill Street and Marian Street, looking west towards the upgraded station entrance and pedestrian concourse (refer to Figure 24). Key elements of the existing view (refer to Figure 39) comprise: • the Rosehill Street / Marian Street road pavement in the foreground, flanked on either side by the footpath, parked cars and mature street trees • the Marian Street car park to the right of frame, fenced with temporary fencing and partially screened by parked cars and existing mature street trees and other vegetation • taller residential buildings on the western side of the rail corridor are seen on the horizon in the distance and are partially screened by vegetation.
Anticipated Change to View The key changes to the view would comprise (refer to Figure 40): • road pavement and footpath upgrades to extend the existing shared zone on Marian Street and retention of existing paving treatments on Rosehill Street • removal of some vegetation • the new Redfern Station Marian Street station entrance, including: - approximately 20 new bike hoops - services building - station operational components including wayfinding and signage, gatelines and top up machines, ticket gates, CCTV, and heritage interpretation and/or public art - increased pedestrian numbers within the quiet residential street • a 'gun barrel' view along the proposed pedestrian concourse spanning the rail corridor is seen from this viewpoint.

Viewpoint 8 - Rosehill Street
Sensitivity to Change The susceptibility to change of receptors at Viewpoint 8 is influenced by the following: • the nature of the visual receptors who would experience this view of the Project, comprising: - pedestrians, cyclists and motorists, who would have a casual interest in the views as they move along the street - commuters, comprising locals or tourists - residents, who are typically considered to comprise sensitive visual receptors given the proprietary interest they could be expected to take in changes to the outlook from their homes • the extent to which the attention or interest of receptors would be focused on the view: - commuters would have a casual interest in views as they enter the station and head to their platform, these receptors may be locals or tourists. Tourists are a more sensitive receptor group, with heightened interest in views from locations - due to their slower travel speed and potential to be walking for leisurely purposes, pedestrians would be particularly focused on their view - residents would be moderately focused on the view, particularly as they entered and left their premises. The value of the view as seen by receptors is influenced by: • commuters would be unlikely to place high value on views entering the rail corridor • while Redfern Station is heritage listed, no views to heritage elements would be altered from this location. Given the above, the sensitivity of typical receptors to the anticipated change is considered to be Moderate.
Magnitude of Change The magnitude of change for the viewpoint is influenced by the following: • the scale of the proposed upgraded station entrance and pedestrian concourse with associated structures would be characteristic of those within the rail corridor but comprise new elements within the view. The modern materiality and finish of the Project would be in contrast to that of the existing station infrastructure of roofing, fencing and surfacing. However, due to the visually compartmentalised position of this secondary entry, this comparison of old versus new is less likely to take place from this location • the new station entry at this location would bring pedestrians directly into the quiet residential street • the proposed pedestrian concourse would be seen clearly as it spans the rail corridor, and would comprise a large, new element within the view • the duration of the changes would be long-term. Given the above, the magnitude of anticipated change is considered to be High.
Significance of Visual Effect Using the visual impact grading matrix, the rating of the visual impact of the Project at Viewpoint 8 is considered to be High – Moderate (positive). The high quality of the streetscape and station entrance design would result in a positive visual influence on views within the streetscape. The proposed upgraded station entrance would increase pedestrian numbers and thereby improve passive surveillance within the street and within Gibbons Street Reserve (which generally increases safety), with improved visual amenity provided by the design. The high quality of the station entrance design would be a visual improvement to the existing Sydney Trains car park which exists on the site.

5.4 Construction visual impacts

Construction activity due to the Project would occur at several locations, including:

- three ancillary facility areas (refer Figure 41):
  - Ancillary Facility 1 - Eveleigh Maintenance Centre
  - Ancillary Facility 2 - Sydney Trains
  - Ancillary Facility 3 - Gibbons Street Reserve and Marian Street car park
- Redfern Station and surrounds with construction works comprising:
  - a six metre wide concourse between Little Eveleigh Street and Marian Street
  - new stair and lift access from the concourse to Platforms 1 to 10
  - an upgraded station entrance at Marian Street including station services and customer amenities
  - a new station entrance at Little Eveleigh Street including station services and customer amenities
  - formalisation of a shared zone on Little Eveleigh Street , including:
  - safety improvements to vehicle, cyclist and pedestrian interactions
  - improvements to streetscape such as landscaping, lighting, drainage and pavements
  - relocation of approximately 20 parking spaces (including 18 resident/ restricted parking spaces, one accessible parking space and one car share scheme parking space) at the western end of little Eveleigh Street
  - utility adjustments
  - upgrade of Marian Street/Cornwallis Street/Rosehill Street area including:
  - extension of existing shared zone to include part of Rosehill Street
  - safety improvements to vehicle, cyclist and pedestrian interactions including footpath widening
  - improvements to streetscape such as lighting, drainage, landscaping and pavements
  - changes to street parking arrangements including removal of approximately 16 parking spaces (including relocation of one car share scheme parking space)
  - the proposed traffic routes for construction traffic between and at the above listed sites.

At the above listed areas, visible construction elements would be expected to typically include a range of site sheds, site hoarding and fencing of work sites, car parking facilities for a variety of construction vehicles bringing in workers and materials, mobile construction equipment and lighting and elevated work platforms including cranes and scissor lifts. Workers would be encouraged to use public transport and would be potentially noticeable during peak hours. Refer to Chapter 5 of the EIS for a full description of the proposed construction works to take place.

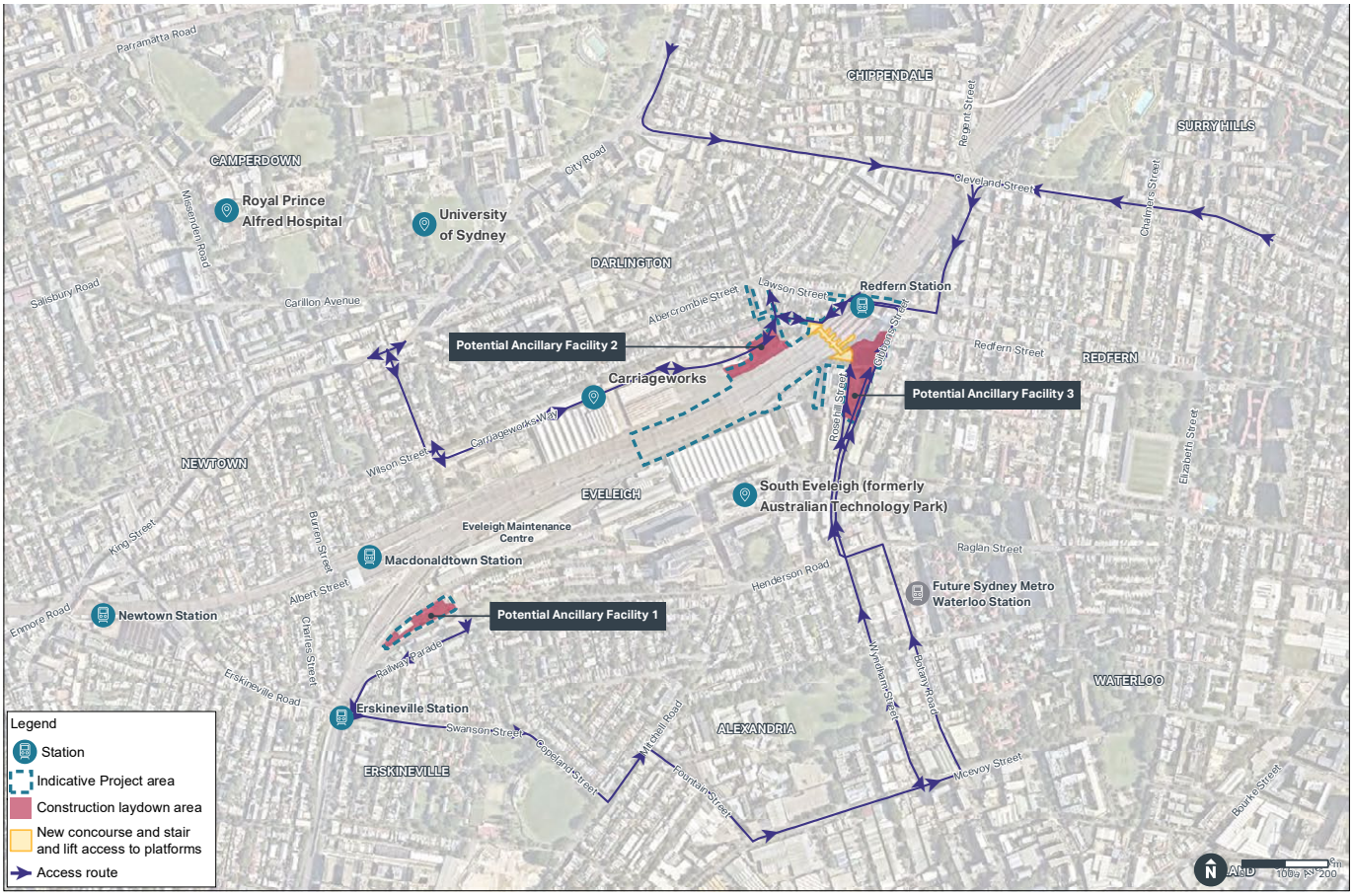

Figure 41 Ancillary facilities and key access routes (Source: AECOM)

5.4.1 Ancillary Facility 1 - Eveleigh Maintenance Centre

The potential effects of visual change due to Ancillary Facility 1 - Eveleigh Maintenance Centre are described in Table 21.

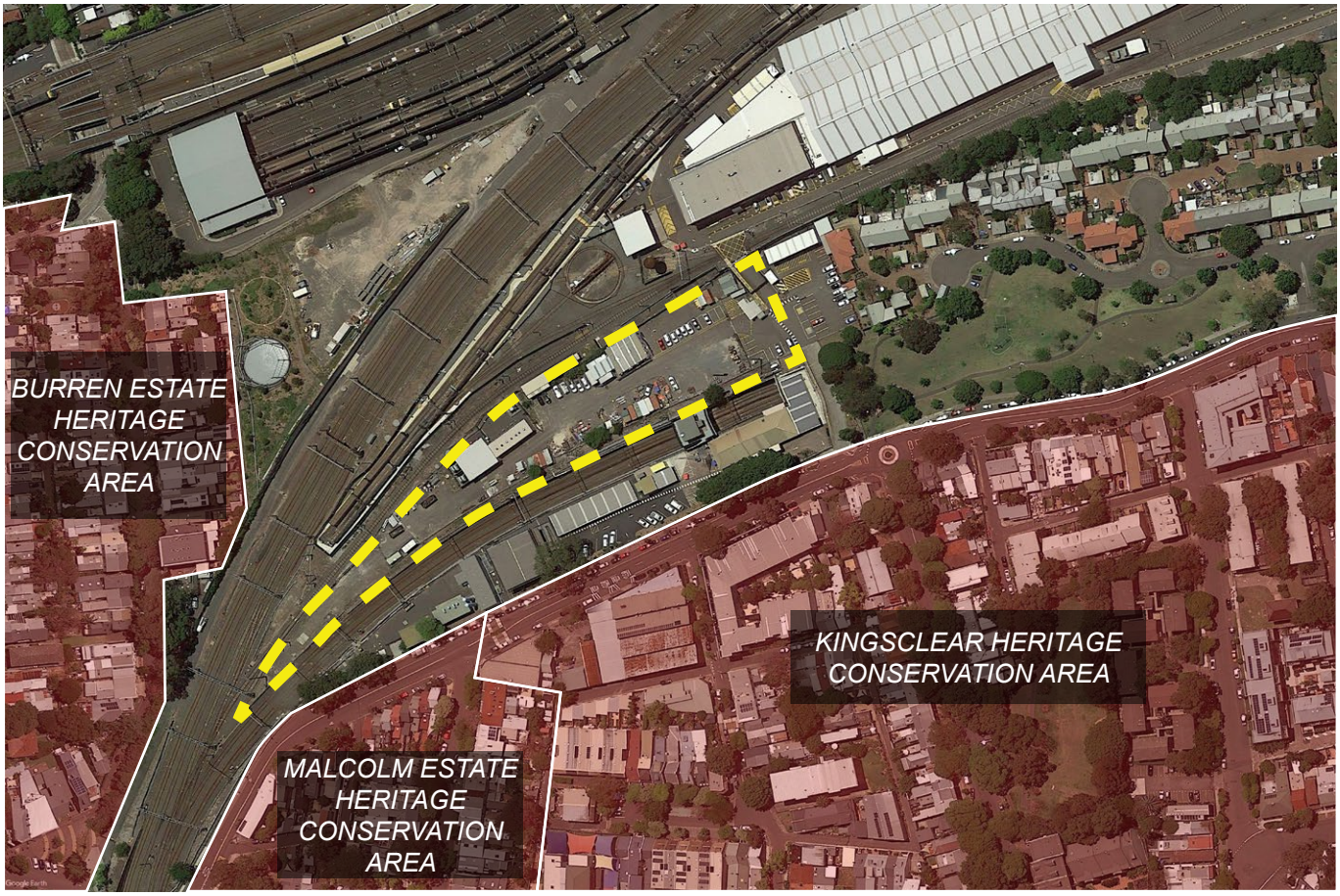

Figure 42 Aerial view of Ancillary Facility 1 - Eveleigh Maintenance Centre (Source: AECOM)

Table 21 Ancillary Facility 1 - Eveleigh Maintenance Centre - Visual Impact Assessment

Ancillary Facility 1 - Eveleigh Maintenance Centre
Existing Use The Eveleigh Maintenance Centre is currently used by Sydney Trains as an industrial maintenance centre.
Typical Receptors The typical visual receptors for the ancillary facility area are: • commuters on trains travelling between Erskineville Station and Redfern Station • Sydney Trains employees • recreational users of South Sydney Rotary Park • a limited number of residents on Railway Parade, Explorer Street and Henderson Road • workers in the train sheds north of the ancillary facility area.
Anticipated Change to Ancillary Facility 1 Eveleigh Maintenance Centre would be utilised as site offices and an administration centre for the Project. This would include the construction of several site sheds and car parking facilities.

Ancillary Facility 1 - Eveleigh Maintenance Centre
Sensitivity of Receptors to Change The susceptibility to change of typical receptors to Ancillary Facility 1 is influenced by the following: • commuters would obtain glimpse views to the site as they pass on trains, which would typically be moving at a fast pace • recreational users of South Sydney Rotary Park would obtain limited views of Ancillary Facility 1 due to screening by mature vegetation within the park and the adjoining buildings • while residents are typically a sensitive viewer group given that they have a proprietary interest in the views from their homes and properties, a low number of residential receptors would obtain views to Ancillary Facility 1 at this location and these views would at least by partially obstructed by mature vegetation or built form. Residences on Explorer Street face away from Ancillary Facility 1, with the changes occurring beyond back fences of these properties • rail workers typically would have their attention on their daily tasks within the rail yard and surrounds. The value of the view as seen by receptors is influenced by: • the views from trains at this location include areas that are industrial or highly utilitarian, considering the character of the rail corridor and surrounding development. However, some views to heritage listed items could be seen from the rail corridor • recreational park users would place more value on views from recreational areas, although they may only be experiencing these views for a short period of time • residents generally place a high value on views from their homes. Henderson Road lies within the Kingsclear Conservation Area (refer to Figure 42) • workers would typically be focused on their daily tasks within their place of employment, therefore would not place a high value on views, particularly within the rail yards. Given the above, the sensitivity of typical receptors to the anticipated change is considered to be Low.
Magnitude of Change The magnitude of change for the Ancillary Facility 1 is influenced by the following: • the scale of Ancillary Facility 1 would be similar to that of the existing site use. No existing landscape elements would be lost • the proposed use of the facility as site offices and an administration centre would be a typical use of the Eveleigh Maintenance Centre • changes within the site would almost be visually contained within the existing Eveleigh Maintenance Centre • the geographical extent of the changes at this location would be limited to 50 to 150 meters within the ancillary facility area • the duration of the ancillary facility area would be short-term (approximately 24 months), and reversible. Given the above, the magnitude of anticipated change is considered to be Low.
Significance of Visual Effect Using the visual impact grading matrix, the rating of the visual impact of Ancillary Facility 1 is considered to be Low (neutral).

5.4.2 Ancillary Facility 2 - Sydney Trains

The potential effects of visual change due to Ancillary Facility 2 - Sydney Trains are described in Table 22.

Figure 43 Aerial view of Ancillary Facility 2 - Sydney Trains (Source: AECOM)

Table 22 Ancillary Facility 2 - Sydney Trains - visual impact assessment

Ancillary Facility 2 - Sydney Trains
Existing Use This ancillary facility area is currently used by Sydney Trains as an industrial maintenance centre.
Typical Receptors Typical receptors for the ancillary facility area are: • rail commuters travelling to or from Redfern Station • residents on Little Eveleigh Street and Wilson Street • workers at Redfern Station and within the existing maintenance centre.
Anticipated Change to Ancillary Facility 2 This area would be partly utilised as a construction laydown area. This laydown area would be accessed from either Carriageworks Way or Little Eveleigh Street and would provide construction parking facilities and rail corridor access. It is anticipated that some components of the concourse would be assembled here prior to installation within the rail corridor.

Ancillary Facility 2 - Sydney Trains
Sensitivity of Receptors to Change The susceptibility to change of typical receptors to Ancillary Facility 2 is influenced by the following: • rail commuters would obtain glimpse views to the site as they passed on trains, which would typically be moving at a fast pace • residents are typically a sensitive viewer group given that they have a proprietary interest in the views from their homes and properties. A low number of residential receptors would obtain views from their apartments from Wilson Street, and it is unlikely that residents on Little Eveleigh Street would obtain views from their properties to the changes due to screening by back fencing, built form and mature vegetation. These areas lie within the Darlington Heritage Conservation Area and Golden Grove Heritage Conservation Area • workers would typically have their attention focused on their daily tasks within the maintenance centre, station and surrounds. The value of the view as seen by receptors is influenced by: • the views from trains at this location include areas that are industrial or highly utilitarian, considering the character of the rail corridor and surrounding development. However, some views to heritage items could be seen from the rail corridor • recreational park users would place more value on views from recreational areas, although they may only be experiencing these views for a short period of time • residents generally place a high value on views from their homes. Henderson Road lies within the Kingsclear Conservation Area (refer to Figure 42) • workers would typically be focused on their daily tasks within their place of employment, therefore would not place a high value on views, particularly within the rail yards. Given the above, the sensitivity of typical receptors to the anticipated change is considered to be Low.
Magnitude of Change The magnitude of change for the Ancillary Facility 2 is influenced by the following: • the scale of Ancillary Facility 2 would be similar to that of the existing site use. No existing landscape elements would be lost • the proposed use as a construction laydown area would be in keeping with its current use as an industrial rail maintenance area • the geographical extent of the changes at this location would be seen from the surrounding areas only • the duration of the ancillary facility area would be short-term (18 months), with high potential for reversibility. Given the above, the magnitude of anticipated change is considered to be Low.
Significance of Visual Effect Using the visual impact grading matrix, the rating of the visual impact of Ancillary Facility 2 is considered to be Low (neutral).

5.4.3 Ancillary facility 3- Gibbons Street Reserve and Marian Street Car park

The potential effects of change from Ancillary Facility 3 - Gibbons Street Reserve and Marian Street Car park are described in Table 23.

Figure 44 Aerial view of Ancillary Facility 3 - Gibbons Street Reserve and Marian Street Car park (Source: AECOM)

Table 23 Ancillary Facility 3 - Gibbons Street Reserve and Marian Street Car park - Visual Impact Assessment

Ancillary Facility 3 - Gibbons Street Reserve and Marian Street Car park
Existing Use
This Ancillary Facility area is currently broken up into three separate areas, currently used as a private car park for Sydney Trains staff, a public parking area and a public reserve.

Ancillary Facility 3 - Gibbons Street Reserve and Marian Street Car park

Typical Receptors

Typical receptors for the ancillary facility area are:

- commuters travelling to or from Redfern station
- residents in apartments and lease holders and visitors to commercial properties on Gibbons Street and Marian Street
- Sydney Trains staff at Redfern Station and within the existing parking facility
- passers-by on Gibbons Street and Marian Street.

Anticipated Change to Ancillary Facility 3

Part of Gibbons Street Reserve would be used as a laydown area for construction equipment and infrastructure and would be accessed via Gibbons Street. This would require the removal of a small number of trees. Due to the existing slope of the reserve, re-levelling of part of the Gibbons Street Reserve would be required to enable a safe work area. It is anticipated approximately 200 tonnes of spoil would require be required to be cut and filled to establish a level safe work area.

Following completion of works at Redfern Station, the Gibbons Street Reserve would be returned to passive recreational use in consultation with City of Sydney Council.

The existing car park on Marian Street would be utilised as site offices and an administration centre for the Project. This would include the erection of several site sheds and car parking facilities. The Project would also utilise a storage area under the existing car park on Marian Street for the storage of construction equipment and materials.

Sensitivity of Receptors to Change

The susceptibility to change of typical receptors to Ancillary Facility 3 is influenced by the following:

- it is unlikely that commuters would obtain views to the ancillary facility area as they passed on trains due to the level difference between the tracks and the surrounding landscape. Tracks at this location are below the level of Marian Street and the Marian Street car park
- residents are typically a sensitive viewer group given that they have a proprietary interest in the views from their homes and properties. A moderate number of residential receptors would obtain views from their apartments on Marian Street and Gibbons Street
- workers and visitors to commercial properties in surrounding areas would get detailed views to the changes but would predominantly be focused on activities within these properties
- recreational users of Gibbons Street Reserve would be excluded from the site during the construction phase, therefore would not get views to the Project
- passers-by (both vehicular traffic and foot / bicycle traffic) would see detailed views to the changes and be somewhat focused on the landscape seen along their journey
- workers would typically have their attention focused on their daily tasks within the maintenance centre, station and surrounds
- this location was previously used as an ancillary facility for the recent Gibbons Street upgrade and was restored to its existing state.

The value of the view as seen by receptors is influenced by:

- views to recreational parks and reserves are typically highly valued within city areas. Passers-by, particularly pedestrians, would see views for short periods of time on their journey
- residents generally place a high value on views from their homes
- orkers would typically be focused on their daily tasks within their place of employment (or within the parking area), and therefore would not place a high value on views.

The overall rating of sensitivity of receptors to Ancillary Facility 3 has been averaged between the highly sensitive residential receptors and the low sensitivity workers. Given the above, the sensitivity of typical receptors to the anticipated change is considered to be Moderate.

Ancillary Facility 3 - Gibbons Street Reserve and Marian Street Car park
Magnitude of Change The magnitude of change for the Ancillary Facility 3 is influenced by the following: • the scale of Ancillary Facility 3 would be dissimilar to that of the existing site use, particularly within the Gibbons Street Reserve. No existing landscape elements would be lost • the Project at this location would be seen at ground level from the immediate surrounding areas only but would also be seen from tall residential apartments on Gibbons Street • the duration of the ancillary facility area would be short-term (18 months), with moderate potential for reversibility, given the reinstatement of landscaping within the reserve. Given the above, the magnitude of anticipated change is considered to be Moderate.
Significance of Visual Effect Using the visual impact grading matrix, the rating of the visual impact of Ancillary Facility 3 is considered to be Moderate (adverse). This rating is based on the averaging of typical receptors at this location, and the short term nature and potential for reversibility of the change.

5.4.4 Construction Footprint - Redfern Station

The potential effects of visual change due to construction surrounding Redfern Station are described in Table 21.

Table 24 Redfern Station - Visual Impact Assessment

Redfern Station
Existing Use Redfern Station and surrounds have a mix of uses, with the station and rail corridor used for public transportation, and the surrounding use to the east and west primarily residential areas.
Typical Receptors The typical visual receptors for construction at and surrounding Redfern Station are: • commuters within the rail corridor • Sydney Trains employees • recreational users of Gibbons Street Reserve • residents in surrounding streets, including Little Eveleigh Street, Ivy Street, Ivy Lane, Marian Street and Rosehill Street • passers-by (vehicles, pedestrians and cyclists) • employees and visitors to nearby cafes and other small businesses.
Anticipated Change to Redfern Station and surrounds From the surrounding streetscape, site hoarding and fencing are anticipated to be visible surrounding rail corridor construction. Within the streets, visible construction elements would be expected to typically include a range of site sheds, site hoarding and fencing of work sites including noise attenuation walls, car parking facilities for a variety of construction vehicles bring in workers and materials, mobile construction equipment and lighting and elevated work platforms including cranes and scissor lifts. Road works and associated landscaping would be visible within the upgraded streets of Little Eveleigh Street and Marian Street.

Redfern Station
Sensitivity of Receptors to Change The susceptibility to change of typical receptors at and surrounding Redfern Station is influenced by the following: • commuters would obtain glimpse views to the site as they pass on trains, which would typically be slowing as it nears the station platforms. They may have more prolonged views to the construction at the station as they boarded or alighted trains, or as they waited at the station • no visitors would be allowed within Gibbons Street Reserve due to the ancillary facility located there • residents are typically a sensitive viewer group given that they have a proprietary interest in the views from their homes and properties. There are a large number of residential receptors surrounding Redfern Station • rail workers typically would have their attention on their daily tasks. The value of the view as seen by receptors is influenced by: • the views from trains at this location include areas that are industrial or highly utilitarian, however, some views to heritage listed items can be seen from the rail corridor • residents generally place a high value on views from their homes • workers would typically be focused on their daily tasks within their place of employment, therefore would not place a high value on views, particularly within the rail yards. Given the above, the sensitivity of typical receptors to the anticipated change is considered to be High.
Magnitude of Change The magnitude of change at Redfern Station is influenced by the following: • the scale of the construction activity would not be similar to structures existing within the area • during construction, views to the landscape would change • the construction activity proposed at this site would be in contrast to the existing character of the area • the geographical extent of the changes at this location would be seen from along the neighbouring streets, along the rail corridor, and from within Redfern Station • the duration of the ancillary facility area would be short-term (18 months), and reversible. Given the above, the magnitude of anticipated change is considered to be High.
Significance of Visual Effect Using the visual impact grading matrix, the rating of the visual impact of construction activity at Redfern Station is considered to be High (adverse).

5.4.5 Traffic routes

An increase in heavy vehicular traffic would occur within the access routes shown in Figure 41. This change would be temporary, occurring during the 18 month construction period, but would be seen as a change to traffic volume and vehicle type by receptors along these routes, which would include the more sensitive residential and commercial receptors, pedestrians, and recreational users of nearby public open space. While these receptors would potentially have high value associated with views from locations along these routes, the magnitude of change would be low, considering the existing use and character of the roads would not change and the change would be temporary and highly reversible.

6. Summary of outcomes

6.1 Summary of effects on landscape character

As shown in Table 25, , two of the five LCZs were subject to negligible change from the Project. Three of the five LCZs identified within the study area were affected by the Project. One LCZ (LCZ 1: Rail Corridor) returned a High to Moderate impact on landscape character. This is due to the Project being located within this LCZ and comprised the addition of a large piece of infrastructure, which contains a number of items of State heritage significance and therefore has increased sensitivity to change. Heritage values within an area also increase the landscape value associated with that LCZ. While the changes are rated as High within this LCZ, they are considered acceptable due to the placement of the infrastructure within a working rail corridor. The reuse of an existing building on Little Eveleigh Street and the low profile station entry with landscaping at Marian Street assists in integrating the Project into the surrounding areas beyond the rail corridor, while the design of the pedestrian concourse is consistent in character with other existing infrastructure within the LCZ such as other pedestrian concourses at train stations, overhead gantries, road bridges over the rail corridor, and station and rail corridor built form, including substations.

The other two LCZs affected were LCZ 4 - Residential and LCZ 5: Public Recreation. Changes due to the Project would lie within to these LCZs but affect only small proportions of each. The overall Moderate ratings for each of these LCZs were due to the high sensitivity of these LCZs rather than the magnitude of change, which was Low in both cases.

Table 25 Summary of effects on landscape character

LANDSCAPE CHARACTER ZONE	SENSITIVITY	MAGNITUDE	SIGNIFICANCE OF LANDSCAPE EFFECTS	ADVERSE	NEUTRAL	POSITIVE
LCZ 1 - RAIL CORRIDOR	MODERATE	HIGH	**HIGH TO MODERATE**			X
LCZ 2: COMMUNITY AND EDUCATION	NEGLIGIBLE	NEGLIGIBLE	**NEGLIGIBLE**		X	
LCZ 3 - MIXED USE COMMERCIAL AND RESIDENTIAL	NEGLIGIBLE	NEGLIGIBLE	**NEGLIGIBLE**		X	X
LCZ 4 - RESIDENTIAL	HIGH	LOW	**MODERATE**			X
LCZ 5 - PUBLIC RECREATION	HIGH	LOW	**MODERATE**		X	

6.2 Summary of effects on views and visual amenity from the Project

As shown in Table 26, , the effect of the Project at operation on key views and visual amenity returned overall ratings of either High or High to Moderate from seven out of the eight viewpoints. This was due to a combination of sensitive receptors at these locations, including residential receptors or recreational users of public open space, and a highly visible new structure (the proposed concourse), two new station entries bringing substantial pedestrian movement into residential streets, and road upgrades to the east and west of the rail corridor. The change was considered positive from all but one location, where it was deemed neutral due to the viewing distance to the Project and screening vegetation. The positive result was due to the upgrade of the streetscapes in Little Eveleigh Street and Marian Street/Cornwallis Street/Rosehill Street to include shared zones, and the high quality of design of the new/upgraded station entrances and pedestrian concourse. The higher pedestrian numbers in Little Eveleigh Street and Marian Street was mitigated somewhat by the addition of landscaping within these streetscapes, which provided visual amenity and separation between residences and pedestrian movement at ground level.

Table 26 Summary of effects on views and visual amenity during operation

VIEWPOINT	SENSITIVITY	MAGNITUDE	SIGNIFICANCE OF VISUAL EFFECTS	ADVERSE	NEUTRAL	POSITIVE
VIEWPOINT 1 - LITTLE EVELEIGH STREET WEST	HIGH	MODERATE	**HIGH TO MODERATE**			X
VIEWPOINT 2 - LITTLE EVELEIGH STREET EAST	HIGH	MODERATE	**HIGH TO MODERATE**			X

VIEWPOINT	SENSITIVITY	MAGNITUDE	SIGNIFICANCE OF VISUAL EFFECTS	ADVERSE	NEUTRAL	POSITIVE
VIEWPOINT 3 - LAWSON STREET	HIGH	MODERATE	**HIGH TO MODERATE**			X
VIEWPOINT 4 - LAWSON STREET CONCOURSE	MODERATE	HIGH	**HIGH TO MODERATE**			X
VIEWPOINT 5 - REDFERN STATION PLATFORM	MODERATE	HIGH	**HIGH TO MODERATE**			X
VIEWPOINT 6 - GIBBONS STREET	MODERATE	LOW	**MODERATE TO LOW**		X	
VIEWPOINT 7 - MARIAN STREET	HIGH	HIGH	**HIGH**			X
VIEWPOINT 8 - ROSEHILL STREET	MODERATE	HIGH	**HIGH TO MODERATE**			X

6.3 Summary of effects on views and visual amenity during construction

As shown in Table 27, the effect of the Project on key views and visual amenity during the construction period at the Ancillary facility areas returned ratings between Moderate and Low. This result is primarily due to the existing use of most of the ancillary facility areas, which are typically industrial and rail-related, meaning that the change in use to ancillary facilities would not be visually different from existing, and would result in a similar view to these sites from their surrounds.

Table 27 Summary of effects on views and visual amenity

VIEWPOINT	SENSITIVITY	MAGNITUDE	SIGNIFICANCE OF VISUAL EFFECTS	ADVERSE	NEUTRAL	POSITIVE
ANCILLARY FACILITY 1 - EVELEIGH MAINTENANCE CENTRE	LOW	LOW	LOW		X	
ANCILLARY FACILITY 2 - SYDNEY TRAINS	LOW	LOW	LOW		X	
ANCILLARY FACILITY 3 - GIBBONS STREET RESERVE AND MARIAN STREET CAR PARK	MODERATE	MODERATE	**MODERATE**	X		

During the construction period, the Project would result in the following visual changes:

- the construction of the pedestrian concourse between Little Eveleigh Street and Marian Street
- the construction of the new station entrance on Little Eveleigh Street
- the construction of a new parking area at the western end of Little Eveleigh Street
- the construction of the upgraded station entrance on Marian Street
- road works / upgrades (including shared zones, relocation of kiss and ride zones, bike spaces, street furniture, signage, traffic calming devices and landscaping) in Little Eveleigh Street, Lawson Street, Marian Street/Cornwallis Street/Rosehill Street, Gibbons Street
- three Ancillary facility areas at the Eveleigh Maintenance Centre, Sydney Trains maintenance centre adjacent to the Carriageworks, and the Gibbons Street Reserve and Marian Street car park, Redfern
- additional traffic, including heavy vehicles, on selected routes surrounding the site.

These changes would result in a concentration of construction works at Redfern Station and just south of the station to the east and west, and reducing in intensity with distance from the station. The construction compounds at Ancillary Facility 1 and Ancillary Facility 2 would be seen from certain locations, including from passing trains, within the same view as each other and the construction at Redfern Station, and therefore would be easy to identify as related activity. Ancillary Facility 1 lies further south of these Ancillary Facility areas and Redfern Station, and would be seen in isolation from the other works and Ancillary Facility areas.

Due to this, it is considered that the construction activity at and immediately surrounding Redfern Station would be a High visual change, these changes would be temporary and with a good proportion contained within the rail corridor, which is reasonably visually contained due to the level change between the tracks and corridor, and the surrounding landscape.

7. Mitigation and management measures

7.1 Overview

This chapter describes the environmental management approach for the Project for landscape and visual amenity during construction and operation. Further details on the environmental management approach for the Project are provided in Chapter 24 of the Environmental Impact Statement (Environmental management approach and framework).

A Construction Environmental Management Framework (CEMF) (Appendix D of the Environmental Impact Statement) describes the approach to environmental management, monitoring and reporting during construction. Specifically, it lists the requirements to be addressed by the construction contractor in developing the CEMP, sub-plans, and other supporting documentation for each specific environmental aspect.

A Visual Amenity Management Plan would be developed for the Project as identified by Section 6.4 (Visual amenity management) of the CEMF.

The chapter includes a compilation of the performance outcomes as well as mitigation measures, including those that would be included in these plans.

7.2 Performance outcomes

The landscape character and visual performance outcomes for the Project are as follows:

- construction sites and compounds are planned and managed to minimise adverse visual effects
- the obtrusive effects of lighting are minimised during construction
- the obtrusive effect of lighting are minimised during operation
- materials and finishes for the concourse are selected with consideration of minimising visual impacts
- additional tree removal and trimming of vegetation is avoided where possible to minimise changes in landscape character
- there is a net increase in trees within the vicinity of the Project area to minimise adverse landscape impacts community artwork investigated and included as appropriate
- graffiti avoidance measures are incorporated into the design.

The Project would be designed, constructed an operated to meet these performance outcomes.

7.3 Mitigation measures

The construction and operation mitigation measures are listed in Table 28.

Table 28 Mitigation measures

ID	Mitigation measure	Applicable location(s)
Construction		
LV1	Provide well-presented and maintained construction hoarding and site fencing with shade cloth (or similar material) (where necessary) to minimise visual impacts on key viewpoints during construction. The construction compounds would be designed to limit or deter graffiti. Hoardings, site and acoustic fencing would be removed following construction completion.	Project area
LV2	Provide cut-off or directed lighting within the construction areas, with lighting location and direction considered to ensure glare and light spill is minimised.	Project area
LV3	Construction personnel to keep the construction areas clean and tidy, including refuse placed in appropriate waste bins.	Project area
LV4	Implement measures to minimise tracking of dirt and mud into public roads and other public spaces.	Project area
LV5	Limit disturbance of vegetation to the minimum amount necessary to construct the Project, particularly within the streetscapes affected by the Project,	Project area
LV6	Consider measures to limit or deter graffiti within ancillary facilities.	Ancillary facilities

ID	Mitigation measure	Applicable location(s)
Operation		
LV7	Community artwork opportunities would be investigated, in keeping with existing cultural artwork in Redfern surrounding the station.	Pedestrian concourse
LV8	Street trees would be planted on Little Eveleigh Street and Marian Street at the new station entrances. Tall shrub plantings would also be considered along the rail corridor boundary at Marian Street to assist in preserving privacy of residents within the Watertower residential building.	Little Eveleigh Street and Marian Street
LV9	Lighting would be designed to minimise upward spread of light, and to minimise light spill and glare.	Project area
LV10	Proposed structures/fencing would be designed to limit or deter graffiti	Project area
LV11	The ongoing maintenance and repair of the concourse and station entrances would be in accordance with Sydney Trains maintenance requirements.	Project area

8. Conclusion

Overall, the effects of the Project on landscape character were only rated High to Moderate within the LCZ within which the Project is located: LCZ 1: Rail Corridor. This was due to the addition of a large piece of rail infrastructure within and surrounding Redfern Station, which has increased landscape value due to the items of heritage significance and heritage conservation areas that lie within and around it. While the changes are generally in keeping with the use of the rail corridor, they are considered High within this LCZ. The reuse of an existing building on Little Eveleigh Street and the low profile station entry with landscaping at Marian Street assists in integrating the Project into the surrounding areas beyond the rail corridor, with the station entrances designed to complement the surrounding heritage items but not replicate them or their design, while the design of the pedestrian concourse is consistent with other pieces of infrastructure within the LCZ. Proposed landscaping and tree planting within Little Eveleigh Street soften the streetscape and increase visual amenity.

The effects of the Project on key views and visual amenity within the surrounding area was retaining overall ratings of either High or High to Moderate from seven out of the eight viewpoints. This was due to a combination of sensitive receptors at these locations, including residential receptors or recreational users of public open space, and a highly visible new structure (the proposed pedestrian concourse) and road upgrades to the east and west of the rail corridor. These changes were considered positive from all but one location, where it was deemed neutral due to the viewing distance from the Project and screening vegetation. The overall positive result was in part due to the upgrade of the streetscapes in Little Eveleigh Street, Rosehill Street and Marian Street to include shared zones, and the high quality of design of the new/upgraded station entrances and pedestrian concourse.

During the construction period, the Project would result in a concentration of construction works at and around Redfern Station and just south of the station to the east and west, reducing in intensity with distance from the station. This activity would include increased traffic, including heavy vehicles, using the access routes to the Ancillary Facility areas and the broader construction site as described in Section 5.4. The construction compounds at Ancillary Facility 1 and Ancillary Facility 2 would be seen from certain locations, including from passing trains, within the same view as each other and the construction at Redfern Station, and therefore would be easy to identify as related activity. Ancillary Facility 1 lies further south of these Ancillary facility areas and Redfern Station, and would be seen in isolation from the other works and Ancillary facility areas.

It is considered that the construction activity at and immediately surrounding Redfern Station would be a High visual change, however, these changes would be temporary and predominantly contained within the rail corridor.

9. References

AECOM, 2018, Redfern Station Accessibility Upgrade Preliminary Environmental Assessment Transport Access Program 3 Ref-6127761

Landscape Institute and Institute for Environmental Management (UK), 2013, Guidelines for Landscape and Visual Impact Assessment, Third Edition (2013)

Sydney Local Environmental Plan 2012, https://www.legislation.nsw.gov.au/#/view/EPI/2012/628