

## 14 Non-Aboriginal heritage

This chapter provides a summary assessment of the potential impact on non-Aboriginal heritage items and archaeological remains as a result of the Project and identifies mitigation measures to address these impacts. A full copy of the assessment report is provided in **Technical report 5 – Non-Aboriginal heritage**.

### 14.1 Introduction

The SEARs relating to environmental heritage, and where these requirements are addressed in this chapter, are listed in **Table 14-1**.

**Table 14-1 SEARs**

SEARs	Where addressed in this EIS
<b>11. Heritage</b>	
1. direct and/or indirect impacts (including cumulative impacts) to the heritage significance of:	
a. Aboriginal places, objects and cultural heritage values, as defined under the <i>National Parks and Wildlife Act 1974</i> and in accordance with the principles and methods of assessment identified in the current guidelines; b. Aboriginal places of heritage significance, as defined in the Standard Instrument – Principal Local Environmental Plan;	<b>Section 15.3</b> <b>Section 15.4</b>
c. environmental heritage, as defined under the <i>Heritage Act 1977</i> ; d. (d) items listed on the State, National and World Heritage lists; and e. heritage items and conservation areas identified in environmental planning instruments applicable to the project area.	<b>Section 14.2.1</b> <b>Section 14.4</b>
2. Where impacts to State or locally significant non-Aboriginal heritage items are identified, the assessment must:	
a. include a significance assessment, a statement of heritage impact for all heritage items and a historical archaeological assessment;	<b>Appendix B of Technical report 5 – Non-Aboriginal heritage</b>
b. assess the consistency of the project against any relevant conservation management plan and outline measures considered to avoid and minimise those impacts in accordance with the current guidelines;	<b>Section 14.4</b> <b>Section 14.4.5</b>
c. justify impacts to the item of significance; and	<b>Technical report 5 – Non-Aboriginal heritage</b> <b>Section 14.4</b>

SEARs	Where addressed in this EIS
d. be undertaken by a suitably qualified heritage consultant(s) and/or historical archaeologist.	<p>This Statement of Heritage Impact has been undertaken by:</p> <ul style="list-style-type: none"> <li>• Ameera Mahmood, Senior Heritage Architect (NSW Arch Reg No.8254), AECOM</li> <li>• Chris Lewczak, Principal Archaeologist, AECOM</li> <li>• Dr Susan Lampard, Principal Archaeologist, AECOM</li> </ul>

## 14.2 Method of assessment

### 14.2.1 Statutory context

The main legislation relevant to non-Aboriginal heritage in NSW is the *Heritage Act 1977* ('the Heritage Act'). The Heritage Act includes provisions to conserve the State's environmental heritage; it provides for the identification, registration, and protection of items of State heritage significance; and it constitutes the Heritage Council of NSW, conferring on it functions relating to the State's heritage.

The *Heritage Act* (as amended) was enacted to conserve the environmental heritage of NSW. Under section 32, places, buildings, works, relics, movable objects or precincts of heritage significance are protected by means of either Interim Heritage Orders (IHO) or by listing on the NSW State Heritage Register (SHR).

The *Environmental Planning and Assessment Act 1979* (EP&A Act) establishes the framework for heritage values to be formally assessed in land use planning and environmental impact assessment processes. The EP&A Act requires that environmental impacts are considered prior to land development, and the level of significance of the impact assessed. This includes impacts on cultural heritage items and places, and archaeological sites and deposits.

Items and places of national heritage significance, as well as heritage places owned by the Australian Government, are managed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPBC Act provides for the identification, registration, and protection of items of national heritage significance. National heritage is one of the nine matters of national environmental significance protected by the EPBC Act.

The Heritage Act and the EP&A Act enable creation of statutory registers which provide legal protection for heritage items. The State Heritage Register, government agency Heritage and Conservation Registers established under Section 170 of the Heritage Act, and the environmental heritage schedules of LEPs are statutory listings. Places on the National Heritage List and Commonwealth Heritage List are protected under the EPBC Act.

### 14.2.2 Approach

The objectives of the assessment were to ensure that the design, construction and operation of the Project facilitates the protection, conservation, and management of heritage items within and adjacent to the Project area. The assessment has been undertaken in accordance with the following:

- New South Wales (NSW) Heritage Division documents *Assessing Heritage Significance* (NSW Heritage Office, 2001)
- *Statements of Heritage Impact* (NSW Heritage Office & Department of Urban Affairs & Planning, 2002)
- *The Burra Charter, The Australia International Council on Monuments and Sites (ICOMOS) Charter for Places of Cultural Significance 2013* (ICOMOS (Australia), 2013).

The assessment included:

- Desktop searches of relevant heritage registers
- A review of the Project drawings, concept design reports, and design options
- Definition of a study area for the assessment (within 200 metres of the proposed concourse, car park (key works) and ancillary facilities)
- Understanding of the historical context of the Project area and surrounds, summarised from key documents, including:
  - NSW SHR listings for the Redfern Station, Eveleigh Railway Workshops, Chief Mechanical Engineers Office and adjacent conservation areas
  - *Redfern Station Heritage Assessment, Paul Davies, 2007*
  - *Eveleigh Railway Workshops: Overarching Conservation Management Plan, Otto Cserhalmi & Partners, 2017*
  - *Eveleigh Carriageworks Conservation Management Plan, Otto Cserhalmi & Partners, 2003 (policy revisions)*
  - *Redfern Railway Station – A Guide for Interpretation, Sharp. S, 2013*
  - *Chief Mechanical Engineer's Building – Conservation Management Plan, Paul Rappoport, 1997*
  - *Heritage Platforms Conservation Management Strategy (CMS), 2015*
- A review and summary of the options analysis undertaken to develop the concept design for the Project
- Assessment of the construction and operation of the Project based on the following documents:
  - Architectural drawings, photomontages, materials and finishes schedules
  - *Redfern Station Upgrade – Draft Heritage Interpretation Strategy, Tonkin Zulaikha Greer Architects, 2019*
- Site inspections undertaken on 12 June, 26 June, 30 September 2019 and 27 February 2020 by AECOM staff, assessing the existing station (both internal and external) along with the existing character of the Project area and surrounding land uses.

#### 14.2.3 Identification, significance and assessment of heritage items

##### Heritage significance assessment methodology

In accordance with the guideline *Assessing Heritage Significance*, an item would be considered to be of State significance if it meets two or more criteria at a State level, or of local heritage significance if it meets one or more of the criteria outlined in **Table 14-2**. The Heritage Council of NSW requires the summation of the significance assessment into a succinct paragraph, known as a Statement of Significance. The Statement of Significance is the foundation for future management and impact assessment.

**Table 14-2 Significance assessment criteria**

Criterion	Inclusions/Exclusions
<b>Criterion (a)</b> – <i>an item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area).</i>	The site must show evidence of significant human activity or maintains or shows the continuity of historical process or activity. An item is excluded if it has been so altered that it can no longer provide evidence of association.

Criterion	Inclusions/Exclusions
<b>Criterion (b)</b> – an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local to area).	The site must show evidence of significant human occupation. An item is excluded if it has been so altered that it can no longer provide evidence of association.
<b>Criterion (c)</b> – an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area).	An item can be excluded on the grounds that it has lost its design or technical integrity, or its landmark qualities have been more than temporarily degraded.
<b>Criterion (d)</b> – an item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons.	This criterion does not cover importance for reasons of amenity or retention in preference to a proposed alternative.
<b>Criterion (e)</b> – an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area). Significance under this criterion must have the potential to yield new or further substantial information.	Under the guideline, an item can be excluded if the information would be irrelevant or only contains information available in other sources.
<b>Criterion (f)</b> – an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area).	An item is excluded if it is not rare or if it is numerous, but under threat. The item must demonstrate a process, custom or other human activity that is in danger of being lost, is the only example of its type or demonstrates designs or techniques of interest.
<b>Criterion (g)</b> – an item is important in demonstrating the principal characteristics of a class of NSW's (or local area's): <ul style="list-style-type: none"> <li>cultural or natural places cultural or natural environments.</li> </ul>	An item is excluded under this criterion if it is a poor example or has lost the range of characteristics of a type.

Where available the SHR or State Heritage Inventory (SHI) statement of significance and significance assessment has been used within the assessment for listed items. For Redfern Station, the SHR, the significance assessment and the statement of significance specifically prepared for the Project area has been used within the assessment. The significance assessment and statement of significance were updated for Redfern Station in the assessment to reflect analysis undertaken of the changes to the historical and physical evidence over time.

### Grading of significant elements

Individual elements of an item can have a different contribution to the item's heritage significance; hence it is useful to define which elements are of significance and which may detract from its significance. The NSW Heritage Division (NSW Heritage Office, 2001:11) uses the grading criteria provided in **Table 14-3**.

**Table 14-3 Grading of significance criteria (NSW Heritage Office, 2001:11)**

Grading	Justification	Status
Exceptional	Rare or outstanding element directly contributing to an item's local and State significance.	Fulfils criteria for local or State listing.
High	High degree of original fabric. Demonstrates a key element of the item's significance. Alterations do not detract from significance.	Fulfils criteria for local or State listing.

Grading	Justification	Status
Moderate	Altered or modified elements. Elements with little heritage value, but which contribute to the overall significance of the item.	Fulfils criteria for local or State listing.
Little	Alterations detract from significance. Difficult to interpret.	Does not fulfil criteria for local or State listing.
Intrusive	Damaging to the item's heritage significance.	Does not fulfil criteria for local or State listing.

The significance grading of individual elements within the Project area has been based on previous heritage assessments, and additional analysis undertaken of the historical and physical evidence.

### Magnitude of heritage impact

The assessment of potential impacts was based on impacts to the significance of a heritage item and its elements, as follows:

- direct impacts – as a result of the removal/demolition or alteration of fabric of heritage significance
- visual impacts – as a result of changes to the setting or curtilage of heritage items or places, historic streetscapes, or views
- potential direct impacts – as a result of impacts from construction works and/or vibration and removal/demolition of adjoining structures.

The potential impacts to heritage items were then assessed against the *Guidance on Heritage Impact Assessments for Cultural World Heritage properties* (ICOMOS, 2011).

The significance of the effect of change – i.e. the overall impact - on an attribute is a function of the importance of the attribute and the scale of change. This can be summarised for each attribute described using the following descriptors. As change or impacts may be adverse or beneficial, there is a nine-point scale with “neutral” as its centre point:

- Major beneficial - A beneficial change to key historic building elements that contribute to the heritage value such that the resource is totally altered. A beneficial comprehensive change to its setting
- Moderate beneficial - A beneficial change to many key historic building elements, such that the resource is significantly modified. A beneficial change to the setting of an historic building, such that it is significantly modified
- Minor beneficial - A beneficial change to key historic building elements, such that the asset is slightly different. A beneficial change to setting of an historic building, such that it is noticeably changed
- Negligible beneficial - A slight beneficial change to historic building elements or setting that hardly affect it
- Neutral - No change to fabric or setting
- Negligible adverse - A slight adverse change to historic building elements or setting that hardly affect it
- Minor adverse - An adverse change to key historic building elements, such that the asset is slightly different. An adverse change to setting of an historic building, such that it is noticeably changed
- Moderate adverse - An adverse change to many key historic building elements, such that the resource is significantly modified. An adverse change to the setting of an historic building, such that it is significantly modified

- Major adverse - An adverse change to key historic building elements that contribute to the heritage value such that the resource is totally altered. An adverse comprehensive change to its setting.

From a heritage perspective, impacts are only acceptable if sufficient justification is provided, and options to avoid harm have been explored and discounted. Where impacts are identified, the justification for these impacts (including information on the options considered) is provided. Additional information on how the design was developed taking into account impacts to heritage, is summarised in **Chapter 4** of this EIS and in Section 7.2 of **Technical report 5 – Non-Aboriginal heritage**.

#### 14.2.4 Historical archaeology assessment

The potential for a site to contain historical archaeology was assessed by identifying former land uses and associated features through historical research, and evaluating whether subsequent actions (either natural or human) may have impacted evidence for these former land uses. The significance of potential archaeological remains was then assessed using a framework based on the NSW heritage criteria.

The historical archaeological assessment involved:

- reviewing heritage and archaeological site listings
- analysis of historical background and maps
- a site inspection
- understanding previous impacts
- assessment of archaeological significance.

Should subsurface archaeological materials be uncovered during construction, these would be addressed in accordance with TfNSW's *Unexpected Heritage Finds Guideline* (Transport for NSW, 2016). This is discussed further in **Section 14.5**.

### 14.3 Existing environment

#### 14.3.1 Heritage listed items and conservation areas

Heritage listed items and conservation areas within the study area are shown in **Figure 14-1**.

Items of State significance within the Project area include:

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

Locally listed conservation areas include

- Golden Grove Conservation Area (C18)
- Darlington Heritage Conservation Area (C19).

Locally listed heritage items located within the study area include:

- Terrace House 'Waratah' (#11322)
- Terrace Group including interiors (#1517)
- Former McMurtrie, Kellerman & Co factory including interiors (The Foundry) (#12245)
- St Luke's Presbyterian Church including interior (#1352).

The historical context for these items and conservation areas, as relevant to the potential Project impacts, is provided in the following section.

### 14.3.2 Historical context

#### Redfern Station

Redfern Station (renamed from 'Eveleigh Station' in 1906) is a major suburban station with historic significance at State level and has a direct association with the development Sydney's railway to the western suburbs. Land was resumed for the station and Eveleigh Railway Workshops in the 1880s with both sites expanding over the subsequent years in response to increasing demands of the railway system.

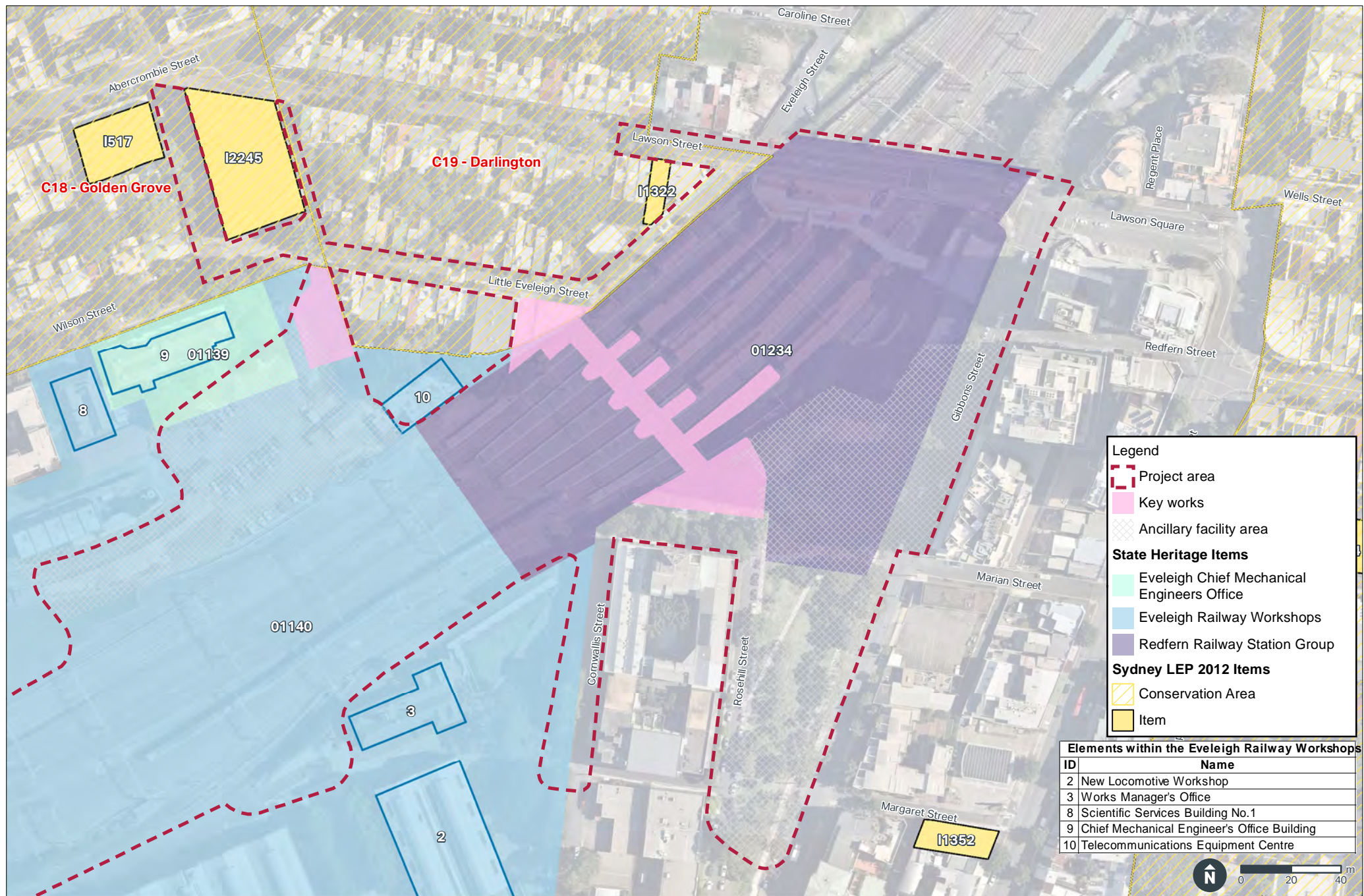
The physical connection between the Station and Eveleigh Railway Workshops is evident in the planning of the Station with Platform 1 being immediately adjacent to the Workshops. When the station opened in 1884 it was aimed to primarily serve the surrounding suburbs, which had expanded during the Victorian era, provide access to the Eveleigh Railway Workshops employees and provide passenger interchange between the Illawarra line and the main railway line.

In 1884 the layout consisted of four platforms; two side platforms and an island. The station had an overbridge on Wells Street (now Lawson Street) that allowed access to the platforms via stairs. Most of the current Platform 1 structures originate from this period. Over the years the station continued to expand (to the east) with two tracks (Platforms 5/6) added in 1891-1892, Platforms 7/8 in 1912-1915 and, with rail electrification, the addition of Platforms 9/10 (1924-1927).

The connection between the station and the Workshops is also evident with the construction of a southern footbridge in 1914 and its use through until 1996, when it was demolished. The footbridge provided access to Eveleigh Carriageworks (North Eveleigh Precinct), the Locomotives (South Eveleigh Precinct) and Redfern Station. This public footbridge enabled an easier commute between the station and the Eveleigh Railway Workshops and connected the Locomotive and Carriage Works precincts and surrounding residential areas.

In 1927 subsurface lines or 'dives' were constructed for the Illawarra lines (west of the station) and engine dives from the Eveleigh Railway Workshops passing under and across the rail corridor. Construction of the Eastern Suburbs Railway Line (ESR) began in the 1940s and resulted in the installation of underground Platforms 11 and 12. Various modifications to the station have occurred over time aimed at improving circulation and access, including a new entrance at Gibbons Street constructed in the 1990s which has been refurbished recently (2018).





**FIGURE 14-1: HERITAGE ITEMS IN THE STUDY AREA**



## **Eveleigh Railway Workshops**

The Eveleigh Railway Workshops were planned, and land was resumed for the site by the early 1880s, contemporaneously with the original Station's development, and both sites expanded over the subsequent years in response to the increasing popularity and demands of the railway system. In its first phase of development, Eveleigh Railway Workshops consisted of two main complexes on either side of the main line, the Locomotive Workshops and the Carriage Workshops. The Eveleigh Railway Workshops has seen multiple phases of development during its long history of use, ending in 1989 with the closure of the site (OCP Architects, 2017:48).

### **Chief Mechanical Engineers Office**

The Chief Mechanical Engineer's building was built in 1887 as part of the expansion of the Eveleigh Railway Workshops to accommodate the various engineers and staff who were to supervise the design and construction of the locomotives, carriages, and wagons.

### **Darlington Heritage Conservation Area**

Darlington Heritage Conservation Area is representative of the mid-nineteenth century residential subdivision and mid to late-nineteenth-century working-class housing. There is clear evidence of the influence of the Eveleigh Railway Workshops and the establishment of the railway line in the working-class terraces, workers cottages, light industrial buildings, the topography and street patterns. The Conservation Area also has heritage significance for its association with the Aboriginal community. The Block is located nearby and was purchased for Indigenous housing in 1973 and provided the opportunity for Indigenous Australians moving to Sydney to remain living in a community environment with extended family (NSW Office of Environment & Heritage, SHI, 28 Jul 06).

125-127 Little Eveleigh Street falls within the Darlington Heritage Conservation area. It was constructed c.1930 and exemplifies the warehouse buildings associated with light industries that occupied the area, stimulated by developments at Redfern Station and Eveleigh Railway Workshops. The building was built as a brush factory by Alfred Wyld who began producing brushes in Glebe in the early 1900s developing his business as a family-run enterprise with multiple locations.

The Chief Mechanical Engineer's building also falls within the Darlington Conservation area.

### **Golden Grove Heritage Conservation Area**

Golden Grove Heritage Conservation Area is representative of the late nineteenth-century residential subdivision developed with the influence of the Eveleigh Railway Workshops. The terraces and streetscapes evidence the working and middle-class community in the late Victorian era.

### **Locally listed items**

#### ***Terrace House 'Waratah'***

Terrace House 'Waratah' is a two storey Victorian Filigree style terrace house representing representative the mid-nineteenth century residential subdivision and mid to late-nineteenth-century working-class housing of the Darlington Heritage Conservation Area. This item is located at 117 Lawson Street, Redfern and is approximately 2 metres away from the Project area.

#### ***Terrace Group including interiors***

Two-storey Victorian commercial terrace group, associated with the development of the Golden Grove Estate and the expansion of workers housing related to the development of the Eveleigh Railway Workshops in the 1880s and 1890s. This item is located at 254–266 Abercrombie Street, Darlington and is approximately 2 metres away from the Project area.

#### ***Former McMurtrie, Kellerman & Co factory including interiors (The Foundry)***

Built in approximately 1883 as a boot factory for McMurtrie, Kellermann & Co and later converted to a gas meter manufacturing works for Parkinson and Cowan, this former factory represents the industrial development of Darlington from the late nineteenth century to the mid twentieth century. This item is located at 181 Lawson Street, Darlington and is approximately 2 metres away from the Project area.

### **St Luke's Presbyterian Church including interior**

St Luke's Presbyterian Church is a fine example of a Victorian Gothic Church which makes an important contribution to the streetscape and township of Redfern. It has social significance as a place of worship for the local community. This item is located at 118 Regent Street, Redfern and is approximately 50 metres away from the Project area.

#### **14.3.3 Redfern historical significance**

##### **Revised significance assessment and statement**

As part of AECOM's assessment, the SHR Significance assessment was reviewed and updated to reflect the analysis of historical and physical evidence. This significance assessment is provided in full in Section 5.2.17 of **Technical report 5 – Non-Aboriginal heritage**.

The Statement of Significance from the SHR listing was also reviewed and updated to reflect the analysis of historical and physical evidence. The revised Statement of Significance is:

*The Redfern Railway Station Group is a significant heritage item associated with the growth and development of Redfern as a place, as well as an important element and transportation hub associated with the NSW Railways. Originally designed by John Whitton, engineer-in-chief of NSW Railways (1856-1890), the station's development is associated both with the development of the industrial and residential aspects of Redfern and surrounding suburbs, and also to the importance of the station being associated with the railway workshops at Eveleigh. Redfern Station's location on the western line in proximity to the early iterations of Central Station and the Eveleigh Railway Workshops led to the station becoming a critical junction in Sydney and NSW's rail network, evident by the 1912 and 1925 expansions of the station, expanding from two to 10 platforms, and construction of the Engine Dive to avoid impact to the station layout.*

*Redfern Station houses a large collection of buildings at the one station demonstrating its evolution as a public transport hub. This includes phases associated with the construction and establishment of the station from 1884, and later expansions in 1912 and 1925, up until the present. These buildings include the Overhead Booking Office building, a rare example of a Queen Anne architectural type, and a landscape focal point as the remainder of the station is located within a cutting. Buildings on Platform 1 are also associated with the initial and early phases of the original station. Platforms 4 to 10 contain a collection of standard design buildings that show the design detail (and evolution of that design over a short period) that was used across the rail network, but uniquely here are located in one suburban station.*

*The continued expansion of Redfern in the early nineteenth and twentieth century shows the evolving nature of the station as it expanded to keep up with local demand and growth of the railway network. This includes the construction of the Eastern Suburbs Railway. The change to the station highlights the importance of Redfern as a hub for rail commuters, including for commuters who live in the local area. Despite this, the station retains its general layout plan with the focus on the northern entrances and platform structures contrasted with the openness of the southern platforms. The station's location within the cutting also serves to separate the platforms from the main road network, while also drawing the observer to views along the railway, reinforcing the connection with the Eveleigh Rail Yards.*

*The station as a hub has played an important role in the development of a sense of community and mobility for Aboriginal communities from Redfern and across New South Wales, who also have a strong tradition of working on NSW's rail infrastructure.*

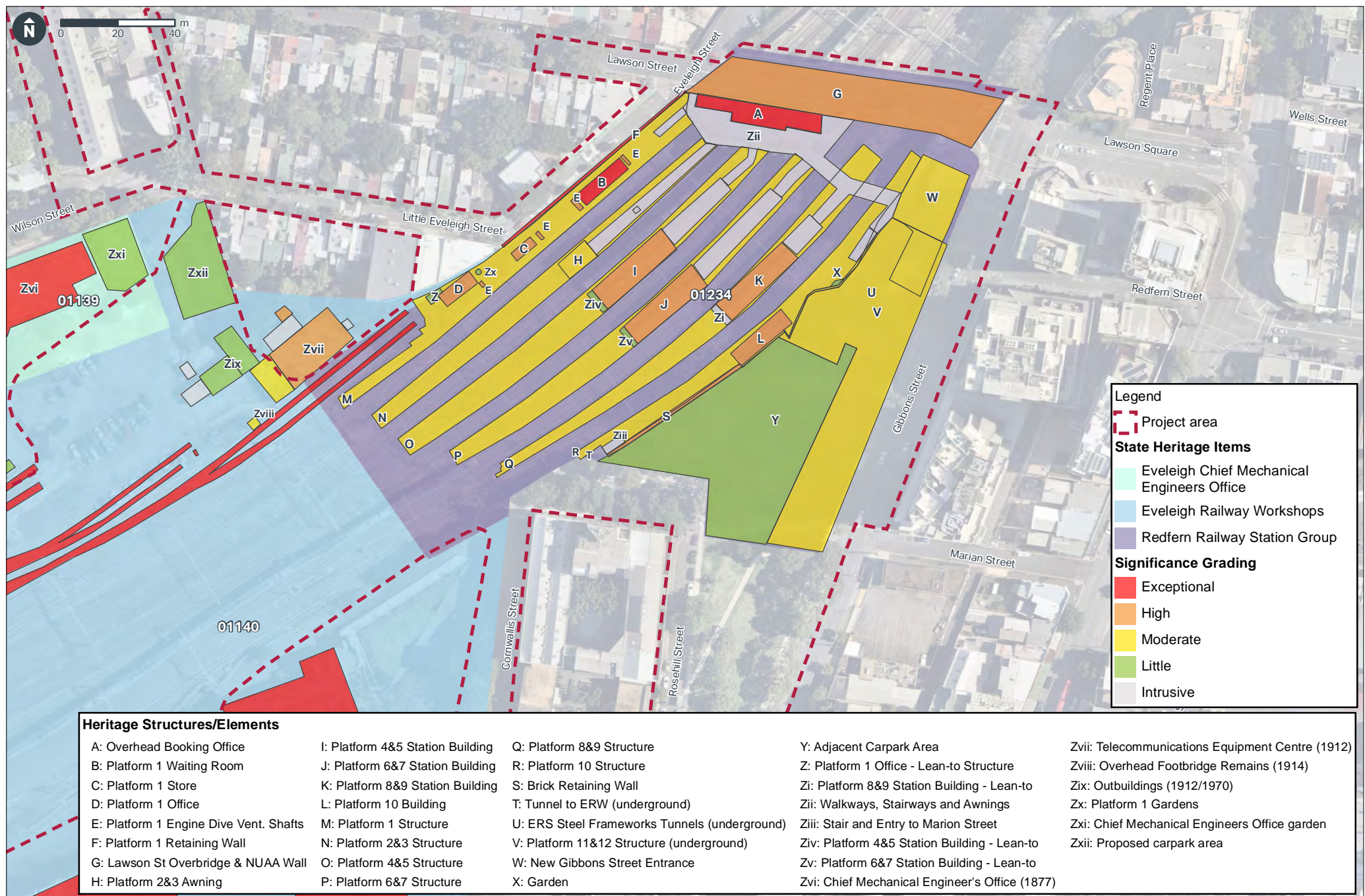
*The Marian Street car park area has been identified as potentially containing archaeological relics and deposits associated with terrace houses demolished to make way for the expansion of Redfern Station for the creation of Platform 10 in c.1925. These relics and deposits are likely to be of local significance.*

##### **Grading of significant elements**

The grading of significant elements within the study area is outlined in **Figure 14-2**. The grading is based on the NSW Heritage Division grading criteria provided in **Table 14-3** and has been updated to reflect the analysis of historical and physical evidence. The discussion for the grading of the significant elements is in Section 5 of **Technical report 5 – Non-Aboriginal heritage**.

Note, the legend in **Figure 14-2** describing the heritage structures/elements does not cover over important structures/elements in relation to Project impacts.





**FIGURE 14-2: GRADING OF SIGNIFICANT ELEMENTS WITHIN THE STUDY AREA**



#### 14.3.4 Historically significant views and vistas

The significant heritage views identified in previous heritage assessments (Otto Cserhalmi & Partners, 2017 and Otto Cserhalmi & Partners, 2003) have been reviewed to identify the historically significant views relevant to the Project. The historically relevant views include:

- View 1 (from Platform 1 stair) – Demonstrates the historical association of Redfern Station to the Eveleigh Railway Workshops but is obscured by overhead wiring structures
- View 2 is from the corner of Cornwallis and Marian Street looking south east towards the old Water Tower and was ruled out as being a significant view for this assessment
- View 3 (from the rail corridor between the Eveleigh Carriage Workshops and Locomotive Workshops looking north towards Redfern Station) – Demonstrates the connection between the Eveleigh Railway Workshops and Redfern Station and each item's respective history, including their industrial partnership. However, this view is not accessible to the public
- View 4 (from future overbridge of rail lines) – This view would reference similar aspects of the former overbridge. Note that this view has been identified as a heritage opportunity. The Project allows this opportunity to be realised, and has not been assessed further in this chapter
- View 5 (from site entry and Chief Mechanical Engineers Building of site, rail lines and locomotive workshops) – This view demonstrates the connection of the Chief Mechanical Engineers Building to the Eveleigh Railway Workshops
- View 6 (from Platform 2/3 looking north) – This view demonstrates the enclosed environment of the early station configuration
- View 7 (from Platform 2/3 looking south) – This view demonstrates the open character at the end of the platforms in contrast to the view looking north.

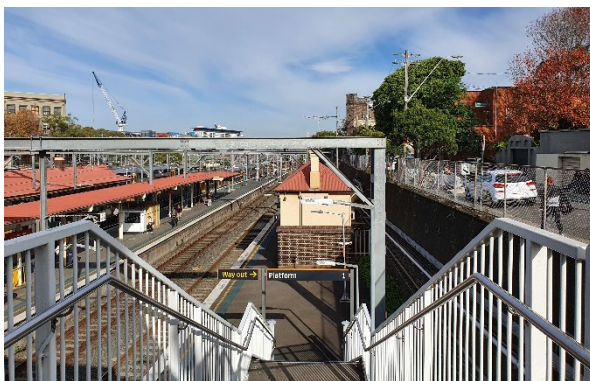


Figure 14-3 View 1



Figure 14-4 View 3



Figure 14-5 View 5



Figure 14-6 View 6



Figure 14-7 View 7

#### 14.3.5 Archaeological potential

The archaeological potential of the Project area is shown on **Figure 14-8**.

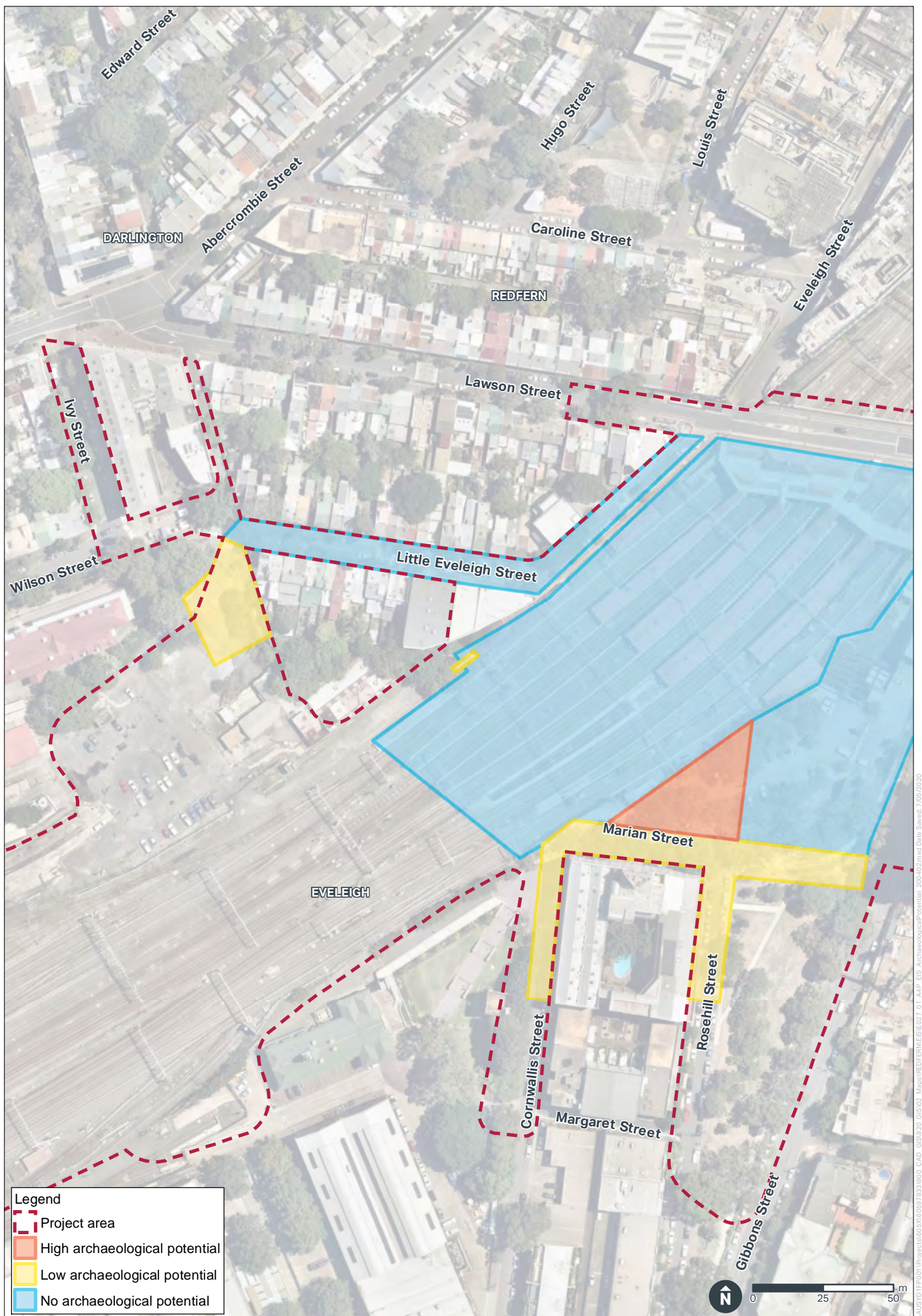
One area has been identified as having high historical archaeological potential within Redfern Station. This area has been identified as containing potential relating to the c.1850s terrace houses constructed on the site. This area is adjacent to the cut and cover operation associated with the construction of the ESR. Archaeological remains in this area are likely to relate to the former terrace houses constructed on the site between 1855 and the 1880s. The construction of the ESR cleared this area, but no large-scale excavation appeared to have occurred, and the site has been used for Marion Street car park since.

Three areas have been identified as having low archaeological potential, as outlined on **Figure 14-8**. This includes an area off Little Eveleigh Street, an area on Platform 1 and Cornwallis/Marian Street and Rosehill Street.

The section off Little Eveleigh Street was associated with the pre-railway use of the Chisholm Estate. The area on Platform 1 may be the lower course foundation remains of one of the early railway sheds associated with the Eveleigh Workshops on Platform 1. Remains for former road surfaces are expected to also be present under Marian, Cornwallis and Rosehill Street. If present, these remains are considered to be a 'work' and not a relic.

The remainder of the Redfern Station SHR boundary area does not contain areas of archaeological potential. The expansion of the railway cutting for the station was likely excavated to a depth greater than the foundations associated with any terrace houses or other structures, including privies.





**FIGURE 14-8: AREAS OF HISTORICAL ARCHAEOLOGICAL POTENTIAL**

## 14.4 Impact assessment

### 14.4.1 Overview

The Project area has complex issues including heritage constraints and urban design challenges, as well as physical limitations which include existing underground tunnels.

The Project is not only responding to accessibility issues, but also to future pedestrian traffic requirements from adjacent developments, providing cross corridor connections to access major hubs and celebrating the cultural and built history of the area by implementing heritage interpretation. In aiming to satisfy and solve these issues, the impacts to heritage items are inevitable.

Notwithstanding, heritage considerations have been a key component in the development and assessment of options of the Project, which has included ongoing consultation with heritage specialists throughout the process, community feedback on heritage impacts, and independent review of the design by the TfNSW Design Review Panel (DRP). The extensive optioneering and design process undertaken for the Project is summarised in **Chapter 4** of this EIS and in Section 7.2 of **Technical report 5 – Non-Aboriginal heritage**.

This section provides a summary of the heritage impact assessment for the Project, as presented in full in Section 9.2 of the **Technical report 5 – Non-Aboriginal heritage**.

### 14.4.2 Impacts to heritage significance

#### Overview

Impacts to the heritage significance of the Redfern Railway Station Group, the Eveleigh Railway Workshops and the Eveleigh Chief and Mechanical Engineers Office, as well as conservation areas and other local heritage items within the City of Sydney LGA were assessed against the methods of the *Guidance on Heritage Impact Assessments for Cultural World Heritage properties* (ICOMOS, 2011) (refer to **Section 14.2.3**).

#### Redfern Railway Station Group

A summary of the impact of the Project on the heritage significance SHR criteria for the Redfern Railway Station Group is provided in **Table 14-4**.

**Table 14-4 Assessment of impacts to heritage significance of the Redfern Railway Station Group**

Proposed works	Overall heritage Impact	Assessment of impact
<b>Historical significance SHR criteria (a)</b>		
Overall Project works including: <ul style="list-style-type: none"> <li>• New concourse, platform canopies, stairs and lifts</li> <li>• New entrance to Marian Street</li> <li>• Platform 1 Office Building modification and relocation</li> <li>• Platform 1 to 10 upgrade works</li> </ul>	Moderate adverse	<p>The Project, in general, retains the key elements that contribute to Redfern Station's historical significance, respecting the station's role as a major suburban station that served Eveleigh Railway Workshops and the surrounding suburbs.</p> <p>These elements include items graded as exceptional significance (Overhead Booking Office, Platform 1 Waiting Room and Platform 1 Retaining Wall). The collection of early station buildings is retained, with the Platform 1 Office Building relocated. There is no impact to the Gibbons Street entrance or the Eastern Suburbs railway infrastructure from the Project. The concourse provides overall station improvements which would ensure the station's longevity, as well as enhancing the historical associations to Eveleigh Railway Workshops.</p> <p>The new concourse would have a moderate adverse impact on this criterion, resulting in a change of historic character.</p>



Proposed works	Overall heritage Impact	Assessment of impact
		The construction of the concourse has a direct impact on the Platform 1 Office Building. The building is proposed to be relocated which has a major adverse impact on the historical significance of the station however this is moderated by retaining the building on the same platform and providing an equally appropriate historical association with Eveleigh Railway Workshops.
<b>Historical association SHR criteria (b)</b>		
Overall Project works	Neutral	Redfern Station has a strong association with John Whitton, the engineer-in-chief of NSW Railways (1856-1890). The design and original development of Redfern Station was overseen towards the end of the Whitton's role with the NSW Railways. The Project would not impact on Redfern Station's association with John Whitton. There are opportunities to interpret this significance as part of the heritage interpretation for the Project.
<b>Aesthetic significance SHR criteria (c)</b>		
Overall Project works including: <ul style="list-style-type: none"> <li>• New concourse, platform canopies, stairs and lift access</li> <li>• Platform 1 Office Building modification</li> <li>• Platform 1 to 10 upgrade works</li> </ul>	Major adverse	<p>The collection of nineteenth and early twentieth century railway buildings are generally retained at the station, including the Overhead Booking Office and Waiting Room. The concourse would have a major adverse impact by altering the setting of the station, by visually connecting to the road network, inhibiting some of the views of the Eveleigh Railway Workshops (refer to view 1 in <b>Figure 14-3</b>, view 3 in <b>Figure 14-4</b> and view 7 in <b>Figure 14-7</b>), and adding an additional element to the southern end of the station, enclosing the station.</p> <p>A significant view demonstrating the enclosed nature of the early station configuration would be retained (refer to view 6 in <b>Figure 14-6</b>).</p> <p>The relocation Platform 1 Office Building, would have a moderate adverse impact on the collective group of nineteenth century buildings at the station.</p>
<b>Social significance SHR criteria (d)</b>		
Overall Project works	Negligible beneficial	<p>The Project would have a neutral impact on the social significance associated with the indigenous community of Redfern Station.</p> <p>The concourse would reference historic routes and association with Eveleigh Railway Workshops. Proposed heritage interpretation works, especially those relating to the former workers of Eveleigh Railway Workshops, would enhance the community's sense of place and connection to the local history.</p>
<b>Technical/Research significance SHR criteria (e)</b>		
Overall Project works	Negligible adverse	The impact to historical archaeological remains associated with Redfern Station is expected to be negligible, as the archaeological potential is low,

Proposed works	Overall heritage Impact	Assessment of impact
		<p>where Project works are proposed within the Station area.</p> <p>Impact to archaeological remains associated with the former terrace houses anticipated under the proposed Marian Street entrance is expected to be a negligible adverse impact. Archaeological investigations in this area prior to construction would reveal information relating to the early life of people who lived in these terraces houses, but would not offer any information relating to the construction or use of Redfern Station.</p>
<b>Rarity SHR criteria (f)</b>		
<p>Over Project works including:</p> <ul style="list-style-type: none"> <li>• New concourse, platform canopies, stairs and lifts</li> <li>• Platform 1 Office Building modification</li> <li>• Platform 1 to 10 upgrade works</li> </ul>	Moderate adverse	<p>The impact assessment against the rarity criterion - has determined that the overall Project works would have moderate adverse impacts on the rarity values of the station (actions that would have a long-term and substantial impact on the significance of a heritage item). The majority of items identified as rare features within the station have been retained (the proposed works do not affect the Overhead Booking Office or the cast-iron newel post on Platform 1). The brick air vents associated with the Engine Dive are also retained. The air vents on Platform 1 adjacent to the proposed stair would be conserved and protected during proposed works. Views of the overall station from the Overhead Booking Office would also remain. The relocation of Platform 1 Office Building however has a negative impact on the station's intact collection of railway buildings, which has been identified as a rare element.</p>
<b>Representativeness SHR criteria (g)</b>		
Overall Project works	Neutral	<p>Although the relocation of Platform 1 Office Building would alter the setting, the building would still contribute to the collection of nineteenth-century buildings at the station.</p> <p>The Station would continue to serve as a major commuter station on the Sydney network.</p> <p>The Project does not have an impact on the heritage significance under this criterion.</p>

### Eveleigh Railway Workshops

An assessment of the potential impact of the Project on the heritage significance for the Eveleigh Railway Workshops is summarised in **Table 14-5**.

Table 14-5 Assessment of impacts to heritage significance of the Eveleigh Railway Workshops

Proposed works	Overall heritage impact	Assessment of impact
<b>Historical significance SHR criteria (a)</b>		
Overall Project works including: <ul style="list-style-type: none"> <li>New concourse, platform canopies, stairs and lift access</li> <li>New car park to Little Eveleigh Street</li> </ul>	Neutral	<p>The new concourse, platform canopies, stairs and lifts and the new car park to Little Eveleigh Street would in overall have a neutral impact on the historic values of the Eveleigh Railway Workshops. The proposed car park and landscaping work off Little Eveleigh Street are within the heritage boundary of the Eveleigh Railway Workshops. The proposed direct impacts include excavating vacant land located at the North Eveleigh Precinct, construction of a new car park, associated surface grading and landscaping works. The area has been assessed as being of little significance.</p> <p>The proposed concourse would connect North and South Eveleigh Precincts, which has benefits to the heritage item by reinstating former historical routes (c.1914 footbridge).</p>
<b>Aesthetic significance SHR criteria (c)</b>		
Overall Project works including: <ul style="list-style-type: none"> <li>New concourse, platform canopies, stairs and lifts</li> <li>New car park to little Eveleigh Street</li> </ul>	Minor adverse	<p>The new concourse, platform canopies, stairs and lifts and the new car park to Little Eveleigh Street would in overall have a minor adverse impact on the historic values of the Eveleigh Railway Workshops. The materiality of the concourse would have an impact on the industrial character of the Eveleigh Railway Workshops, but the landmark qualities and aesthetics of the original 19th century developments complex would be retained. As Redfern Station is located outside the Eveleigh Railway Workshops heritage boundary the Workshops' industrial character is less relevant outside the Eveleigh Railway Workshops Precinct. Significant views to and from the rail corridor and Eveleigh Railway Workshops are also distant views cluttered by rail infrastructure.</p> <p>The proposed car park would be located within the Eveleigh Railway Workshops curtilage. The Eveleigh Railway Workshops complex has a strong industrial character and the proposed car park is inconsistent with this use. However, the area south of the site and along the rail corridor is occupied by a large car park. In comparison, the proposed car park is a small area and is discretely located. The concourse is also located a long way away from the major built elements of the Eveleigh Railway Workshops</p>
<b>Social significance SHR criteria (d)</b>		
Overall Project works	Minor beneficial	<p>No potential negative impacts associated with the Project have been identified on the social significance of Redfern Station.</p> <p>The Project has benefits to the community through the referencing historic routes between the North and South Eveleigh precincts. Heritage</p>

Proposed works	Overall heritage impact	Assessment of impact
		interpretation on the concourse would enhance the community's sense of place and connection with both Redfern Station and Workshops. The Project would have a minor beneficial impact to the social significance of the Eveleigh Railway Workshops.
<b>Technical/Research significance SHR criteria (e)</b>		
Overall project works including: <ul style="list-style-type: none"> <li>Platform 1 Office Building modification and relocation</li> <li>New car park on Little Eveleigh Street</li> </ul>	Minor adverse	<p>The proposed car park and landscaping works would have an impact on any archaeological remains that may be present relating to the early phase of sheds associated with the Eveleigh railway workshops and is assessed as minor.</p> <p>Archaeological potential may exist below the remains of the floor remains present on the site that are associated with the railway sheds constructed in c.1900. This archaeological potential would relate to the first railway sheds constructed at Eveleigh in 1881. This archaeological potential, however, has been assessed as low as the archaeological potential due to the construction of the c.1900 railway sheds on the site. These later sheds are likely to have levelled the surrounding area prior to their construction.</p> <p>If any archaeological remains of the pre-1900 railway sheds were to remain on site, they would have the potential to yield information regarding the operation of the Yards.</p>
<b>Rarity SHR criteria (f)</b>		
Overall Project works	Neutral	The Project would not impact on the size and quality of the site that is considered rare.

### Eveleigh Chief Mechanical Engineer's Office and Moveable Relics

An assessment of the potential impact of the Project on the Eveleigh Chief Mechanical Engineers Office is summarised in **Table 14-6**.

**Table 14-6 Assessment of impacts to heritage significance of the Eveleigh Chief Mechanical Engineer's Office and Movable Relics**

Proposed works	Overall heritage impact	Assessment of impact
<b>Aesthetic significance SHR criteria (c)</b>		
New car park to Little Eveleigh Street	Neutral	<p>The Project includes the construction of a car park adjacent to the heritage boundary of the Chief Mechanical Engineer's Office. Whilst there are no direct impacts on the aesthetic significance of the item, indirect impacts are foreseen.</p> <p>The Chief Mechanical Engineers Office and associated garden are set on raised ground overlooking the proposed car park area to the east. The works in this area would not impact the principal façade, which is located along Wilson Street. The eastern elevation has been graded as 'exceptional' significance. The proposed car park would be located within the existing driveway and overgrown garden, which has been graded as having little</p>



Proposed works	Overall heritage impact	Assessment of impact
		<p>significance and would be modified to hard landscaping. The proposed car park would have a minor adverse impact on the Chief Mechanical Engineers Office building (resulting in the slight alteration of the setting of a historical item).</p> <p>Fencing installed around the building has removed the connection with the Eveleigh Railway Workshops. Significant views are mainly associated to the north (Wilsons Street) and south (rail corridor and Carriageworks) and not easterly views. The view at the entrance from Little Eveleigh Street (refer to view 5 in <b>Figure 14-5</b>) demonstrates the connection of the Chief Mechanical Engineers Office Building to the Eveleigh Railway Workshops. Currently this view is obscured by the existing driveway security gate but the proposal to open up the area to residents would enhance this view. This is considered a minor beneficial impact.</p>
<b>Rarity SHR criteria (f)</b>		
New car park to Little Eveleigh Street	Neutral	The Project would not impact on the rarity criterion of this item (historical, scientific and social).

### Darlington Conservation Area

An assessment of the potential impact of the Project on the Darlington Conservation Area is summarised in **Table 14-7**.

**Table 14-7 Assessment of impacts to heritage significance of the Darlington Heritage Conservation Area**

Proposed works	Overall heritage impact	Assessment of impact
<b>Historical significance SHR criteria (a)</b>		
Overall Project works including: <ul style="list-style-type: none"> <li>Upgrade to surrounding streets</li> <li>125 - 127 Little Eveleigh Street</li> </ul>	Minor adverse	The proposed upgrade to surrounding streets and proposed works to 125-127 Little Eveleigh Street have an overall minor adverse impact to the historical significance of the Darlington Heritage Conservation Area.
<b>Historical association SHR criteria (b)</b>		
Overall Project works	Neutral	<p>The Project would not impact on the historical association with working-class settlement, corner store communities associated with the establishment of the railways and small-scale industry.</p> <p>The Project would also not impact on the historical association with 'The Block'.</p>
<b>Aesthetic significance SHR criteria (c)</b>		
Overall Project works including: <ul style="list-style-type: none"> <li>Upgrade to surrounding streets</li> <li>125 - 127 Little Eveleigh Street</li> </ul>	Minor beneficial	The proposed upgrade to surrounding streets and proposed works to 125-127 Little Eveleigh Street would have an overall minor beneficial impact to the historical significance of the Darlington Heritage Conservation Area.

Proposed works	Overall heritage impact	Assessment of impact
<b>Social significance SHR criteria (d)</b>		
Overall Project works, particularly "The Block"	Neutral	The Project would not have an impact on the social significance of the conservation area associated with 'The Block'.
<b>Rarity SHR criteria (f)</b>		
Overall Project works, particularly "The Block"	Neutral	The Project would not have an impact on the rarity values of the conservation area associated with 'The Block'.
<b>Representativeness SHR criteria (g)</b>		
Overall Project works	Neutral	The early Victorian subdivision is retained and there would be no impact on the representative criteria of the conservation area.

### Golden Grove Conservation Area

An assessment of the potential impact on the Project on the Golden Grove Conservation Area is summarised in **Table 14-8**.

**Table 14-8 Assessment of impacts to heritage significance of Golden Grove Heritage Conservation Area**

Proposed works	Overall heritage impact	Assessment of impact
<b>Historical significance SHR criteria (a)</b>		
Upgrade to surrounding streets	Neutral	The Project would result in the widening of the eastern footpath of Ivy Street. This would have no impact on the heritage streetscape of Ivy Street. The street has been rated 'A' rating as a highly intact streetscape (a street within the key period of significance of the area). Elements that contribute to the historic character of the street are predominantly the buildings, including the former McMurtrie Kellerman and Co Factory and terrace houses. Whilst, the footpath sets the alignment of the street, it is not considered as a contributory element and therefore the impact is considered neutral. The physical and visual alterations to Ivy Street do not impact on the Victorian residential subdivision, which developed with the Eveleigh Railway yards.
<b>Historical association SHR criteria (b)</b>		
Overall Project works	Neutral	The Project would not impact on the historical association with working-class settlement, corner store communities associated with the establishment of the railways and small-scale industry.
<b>Aesthetic significance SHR criteria (c)</b>		
Overall Project works including: <ul style="list-style-type: none"> <li>New car park to Little Eveleigh Street</li> <li>Upgrade to surrounding streets</li> </ul>	Neutral	The proposed car park on Little Eveleigh Street and upgrade to surrounding streets within the Golden Grove Heritage Conservation Area would have a neutral impact on the aesthetic values of the HCA.

Proposed works	Overall heritage impact	Assessment of impact
<b>Technical Research significance SHR criteria (e)</b>		
Works to Ivy Street	Neutral	There is the potential for remains of former road surfaces to be exposed during any road repair or trenching works. These remains are considered to be works and are not rare or unusual. If encountered, these remains would be recorded prior to their removal. There are not expected to be any other archaeological remains present within the exiting road reserve.
<b>Representativeness SHR criteria (g)</b>		
Overall Project works	Neutral	The Project would not have an impact on the heritage significance associated with the conservation area under this criterion. The area would remain representative of the Victorian subdivision and terrace house development.

### Locally listed items

#### ***Terrace House 'Waratah'***

This item is located outside of the Project area and as such the Project would have no direct impact on the item. Indirect impacts would result from the Project as the building is in the sightlines of the Project. The concourse is located more than 50m from the building and the visual impacts would be a negligible adverse impact. Modifications to the streetscape of Little Eveleigh Street would also have negligible adverse impact on the heritage item. The new development is sympathetic to the heritage item as the Project would not visually dominate the item as the key feature (the concourse) is located substantially away from the item.

#### ***Terrace Group including interiors***

There are no direct impacts to this item as the building is located outside of the Project area. The terrace is not located within the visual sightlines of the key works (the concourse) as it is screened from the Project by the Eveleigh Chief Mechanical Engineers Office, so there would be no adverse indirect impacts as a result of the Project.

#### ***Former McMurtrie, Kellerman & Co factory including interiors (The Foundry)***

This item is located less than one metre from the Project including the proposed modifications to Ivy Street. Direct impacts to the building have been minimised by ensuring that street works are limited to the footpath and would not affect the building. The proposed upgrade to Ivy Street would have a negligible adverse indirect impact to the item.

#### ***St Luke's Presbyterian Church including interior***

The Project would not result in direct or indirect impacts to this item as it is located over 50m from the Project area, and there are direct sightlines from this item to the proposed concourse and station entrances.

### Archaeological potential and impacts

As outlined in **Section 14.3.5**, there is one area of high archaeological potential and three areas of low archaeological potential within the Project area. These areas overlap with the works associated with the Project which would involve ground disturbance including:

- the construction of the Little Eveleigh Street car park
- the relocation of the Platform 1 Office Building and OHW works
- the construction of the Marian Street entrance
- the construction of a shared zone on Marian Street/Cornwallis Street and Rosehill Street.

Measures would be required to be put in place to manage the potential to discover archaeology in these locations, as discussed in **Section 14.5**.

#### 14.4.3 Construction impacts

Construction of ancillary facilities and hoardings would be temporary and involve minimal ground disturbance. These areas would either be reinstated, or form part of the permanent operational Project. Therefore, no additional direct or indirect impacts are expected from the ancillary facilities or hoardings.

Vibration arising from construction or excavation work has the potential to impact on the fabric of heritage items, potentially causing subsidence, or affecting structural integrity. In locations where heritage items are adjacent to demolition, construction, or excavation works, an assessment of the potential impact of vibration was undertaken as part of the noise and vibration assessment for the Project (refer to **Technical report 4 – Noise and vibration assessment** and **Chapter 13** of this EIS).

As part of the Construction Environmental Management Plan (CEMP), a Heritage Management Sub-Plan would be prepared including appropriate protective measures to ensure that the heritage fabric is preserved and protected during preliminary works through to Practical completion of Project. Measures may include monitoring impacts from noise and vibration, undertaking a condition survey and if maximum vibration levels have exceeded or are predicted to exceed those set as standard as well as consideration of alternative construction methods.

#### 14.4.4 Conservation policies and strategies

Managing change to items of cultural significance is set out in a Conservation Management Plan (CMP). Presently a CMP does not exist for Redfern Station. Section 9.3 of **Technical report 5 – Non-Aboriginal heritage** provides a consistency assessment of the Project against relevant conservation policies and strategies. Overall, the Project has demonstrated a general compliance with the conservation policies and strategies. Where the Project has been assessed to be non-compliant with the policy/strategy, relevant measures have been provided to avoid and minimise potential impacts in accordance with the policy/strategy.

#### 14.4.5 Statement of heritage impact

The objective of a Statement of Heritage Impact is to evaluate and explain how the proposed development, rehabilitation or land use change would affect the heritage value of the site and/or place. **Technical report 5 – Non-Aboriginal heritage** has been prepared in accordance with the NSW Heritage Office & Department of Urban Affairs and Planning *NSW Heritage Manual* (NSW Heritage Office & NSW Department of Urban Affairs and Planning, 1996) and NSW Heritage Office *Statements of Heritage Impact* (NSW Heritage Office & Department of Urban Affairs & Planning, 2002).

The proposed concourse, platform canopies, stairs and lifts, have been sited at the southern end of the Redfern Station and away from significant historic structures, allowing for the majority of heritage elements at the Station to be retained. However, a major adverse impact to the aesthetic significance of Redfern Station Railway Group is expected from the construction of the Project. Moderate adverse impacts to the historic, aesthetic and rarity values of the Redfern Station Railway Group are expected from the relocation of Platform 1 Office Building. Mitigation measures have been integrated into the Project.

Direct impacts to key heritage features have been avoided including the Overhead Booking Office, Platform 1 Waiting Room and Platform 1 Retaining Wall. However, relocation of the Platform 1 Office Building is necessary to construct the new concourse. Options for retention of the Platform 1 Office Building were considered and relocation was determined as the sole practical means of ensuring its survival, avoiding demolition. Adverse impacts of the relocation have been mitigated by relocating the building to the same platform and providing an equally appropriate setting in association with the Eveleigh Railway Workshops.

The Project also has the potential to have a minor adverse impact on both the aesthetic and technical values of the Eveleigh Railway Workshops resulting from the construction of the concourse and Platform 1 Office Building relocation and proposed car park. The proposed concourse would also result in indirect impacts on the aesthetic values of the station.



The Project has the potential to have a neutral impact to the Eveleigh Chief Mechanical Engineers Office and Golden Grove Heritage Conservation Area.

The proposed works to 125-127 Little Eveleigh Street has the potential for minor adverse impact on the Darlington Heritage Conservation Area. However, the impacts would be mitigated by the conservation works to the building which would improve the building's presentation and have a positive impact on the aesthetic significance of the Conservation Area.

Relocation of the Platform 1 Office Building is necessary to gain direct access to Little Eveleigh Street from the proposed concourse. The adverse impacts of the relocation are mitigated by retaining and adapting the warehouse at 125-127 Little Eveleigh Street (a contributory item in Darlington Conservation Area) and ensuring minimal impacts to the heritage streetscape of Little Eveleigh Street. The relocation ensures that an equally appropriate historical setting is provided for the Platform 1 Office Building, relating its function to the Eveleigh Railway Workshops. The relocation has also avoided potential demolition of the building.

Furthermore, the construction of the concourse, lifts and stairs would respect and/or enhance the heritage significance by:

- future-proofing the station's commuter demand to at least 2036, which ensures the longevity of the heritage listed station as a tangible link to the construction of the line and as a major suburban station that served the Eveleigh Railway Workshops and the surrounding suburbs
- providing references to historic views lost when the former footbridge was demolished and creating new vantage points that provide extensive high-level views to the station, the rail corridor and Eveleigh Railway Workshops beyond
- providing opportunities for heritage interpretation connecting the station to Eveleigh Railway Workshops
- acting as a gateway and landmark feature to rail commuters entering the city and to the urban renewal precincts such as the Eveleigh Carriageworks (North Eveleigh Precinct) and the Locomotives (South Eveleigh Precinct)
- allowing sensitive urban renewal and activation of Little Eveleigh Street, respecting the existing heritage character of the HCA
- removing intrusive elements such as the Platform 10 stairs to Marian Street.

## 14.5 Mitigation and management

### 14.5.1 Overview

A CEMF (**Appendix D** of the EIS) 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 Construction Environmental Management Plan (CEMP), sub-plans, and other supporting documentation for each specific environmental aspect.

A Heritage Management Sub-Plan (HMP) would be developed for the Project as identified in Section 6.3 of the CEMF.

A compilation of the performance outcomes as well as mitigation measures, including those that would be included in this plan is provided below.

### 14.5.2 Performance outcomes

The heritage performance outcomes for the Project are as follows:

- The Project has considered the following heritage opportunities:
  - transparency of the concourse is maximised
  - the bulk and scale of the concourse is minimised
  - the reflectivity of proposed materials of the concourse is minimised
  - separation between heritage fabric and new elements is incorporated

- bulk and scale of platform canopies are minimised
- structures such as billboards or advertising on the concourse that would diminish the transparency of the structure and disrupt views are avoided
- Heritage items are sensitively protected and managed during the construction of the Project
- Heritage elements are protected as far as practicable including:
  - careful relocation of the Platform 1 Office Building and sensitive work to existing buildings on Platforms 4/5, 6/7 and 8/9
  - the warehouse character of 125-127 Little Eveleigh Street is retained.
  - the industrial character of the Eveleigh Railway workshops is respected
  - the existing SHR curtilage of the Eveleigh Chief Mechanical Engineer's Office is retained
- Materiality of new elements at the Marian Street entry is in keeping with the public domain design
- Movable heritage items are identified, conserved and protected during construction
- Heritage fabric is conserved through the reuse of salvageable heritage fabric where possible
- A historical record of areas modified by the Project is maintained for future reference through archival recording
- Heritage interpretation is undertaken that communicates the heritage value of the site to visitors
- Potential archaeology within the Project area is protected or appropriately managed
- Heritage inventories are updated to reflect the Project design to ensure that records of heritage items are maintained
- Avoidance of structures such as billboards or advertising on the concourse that would diminish the transparency of the structure and disrupt views.

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

### 14.5.3 Mitigation measures

The mitigation measures that would be implemented to address potential impacts on non-Aboriginal heritage sites and areas of archaeological potential are listed in **Table 14-9**.

### Table 14-9 Mitigation measures

ID	Mitigation measure	Applicable location(s)
<b>Construction</b>		
NAH1	<p>Detailed design of the Project would consider the following Heritage opportunities:</p> <ul style="list-style-type: none"> <li>• adaptation of Platform 1 Office Building including:</li> <li>• finding temporary use as soon as practicable</li> <li>• finding a permanent use for the building in consultation with the community</li> <li>• moving the building two metres north of the platform to ensure that access to the building for future use can be maintained</li> <li>• developing a landscape plan with heritage input for the area around the proposed car park that interprets the relationship with the Eveleigh Chief Mechanical Engineers Office.</li> </ul> <p>Further design refinement in consultation with a heritage architect of the concourse, platform canopies, stairs and lifts including:</p> <ul style="list-style-type: none"> <li>• reviewing opportunities to increase the transparency of the concourse by:</li> </ul>	<p>Platform 1 Office</p>       <p>Car park</p>

ID	Mitigation measure	Applicable location(s)
	<ul style="list-style-type: none"> <li>- maintaining perforations in aluminium panels to be large as possible noting the limitations imposed by the ASA standard ESB 003. The proposed perforations are 25 x 25 mm. The intent is for the perforations to increase gradually to form large openings in succession from the lower portion to the roof of the concourse. Each horizontal section should be assessed for compliance to achieve the maximum opening size i.e. greater than 25 x 25 mm. Where compliance cannot be achieved, dispensation and/or alternative solutions should be exhausted.</li> <li>- installing roof canopies only where necessary and detailing these to be of a slim profile.</li> <li>- incorporating clear glazing on the concourse as much as possible; including the proposed framed views across the rail corridors. The size of these clear glazed elements should be as large as possible</li> <li>- incorporating clear glazed elements into the proposed lifts and ensuring the required structures for lifts and glazing are consolidated to achieve minimal bulk and maximum transparency.</li> <li>• reducing the bulk and scale of the proposed concourse:               <ul style="list-style-type: none"> <li>- detail design should aim for steel framing and supports to be as slim as possible</li> <li>- the height of the concourse should be analysed during detailed design to ensure that overall structural and architectural elements are kept to a minimum profile to achieve an overall reduced height.</li> </ul> </li> <li>• assessing perforated aluminium panels for reflectivity to ensure that glare is reduced</li> <li>• ensuring that a separation between heritage fabric and new elements is retained such as the incorporation of glazing or voids at the junction of the concourse and 125-127 Little Eveleigh Street</li> <li>• avoiding inserting advertising on the concourse that would reduce the transparency and disrupt views</li> <li>• ensuring that materiality of new elements at the Marian Street entry is in keeping with the public domain design</li> <li>• ensuring that the design incorporating the independent TfNSW DRP comments is presented to the TfNSW DRP for further review and comment during detailed design.</li> </ul>	Marian Street Entrance Concourse
NAH2	A heritage architect would be engaged to provide ongoing heritage and conservation advice throughout detailed design and construction and any subsequent relevant design modifications.	General
NAH3	A specialist tradesperson, well versed in working with heritage fabric, would be engaged during the construction stage of the Project.	General

ID	Mitigation measure	Applicable location(s)
NAH4	<p>A historical record of areas modified would be prepared for future reference. Archival recording should be completed prior to the commencement of construction and at completion of construction. The following elements would be included:</p> <ul style="list-style-type: none"> <li>• identified significant views</li> <li>• Platform 1 Office Building and surrounding area</li> <li>• Platform 4/5, 6/7 and 8/9 buildings</li> <li>• retaining walls on Platform 1 and 10</li> <li>• examples of various platform facings</li> <li>• 125-127 Little Eveleigh Street</li> <li>• Little Eveleigh Street streetscape.</li> </ul>	General
NAH5	<p>A Heritage Management Sub-Plan would be included in the CEMP. This would include the following measures:</p> <ul style="list-style-type: none"> <li>• protecting heritage items from adjacent construction works by:               <ul style="list-style-type: none"> <li>- prioritising protection of heritage elements as part of the early works</li> <li>- monitoring impacts from noise and vibration. If maximum vibration levels are exceeded, or are predicted to exceed applicable standards, consider alternative construction methods to minimise damage to heritage elements</li> </ul> </li> <li>• undertaking a dilapidation survey of the area adjacent to the Chief Mechanical Engineers Office Building driveway prior to carrying out the works associated with the new car park and upon completion making good all affected areas</li> <li>• compiling a program of salvageable heritage fabric and a reuse plan, approved by the heritage architect prior to commencing works</li> <li>• avoiding potential damage to heritage items from negligence during construction by implementing a heritage induction to all on-site staff and contractors. The induction should clearly describe the heritage constraints of the site.</li> </ul>	<p>General</p> <p>At various heritage elements</p>
NAH6	<p>The heritage elements of the Platform 1 Office Building would be conserved and protected by:</p> <ul style="list-style-type: none"> <li>• undertaking a dilapidation survey</li> <li>• prior to relocating, the windows and door would be secured and boarded up, using a reversible methodology</li> <li>• undertaking investigative work to avoid disturbance of fabric</li> <li>• maintaining the same alignment when relocating the Building</li> <li>• protecting and conserving Elston's Sidings during the works</li> <li>• avoiding installing a concrete finished floor to the Building</li> <li>• ensuring that relocation works are closely supervised by the heritage architect and specialist tradesperson</li> <li>• ensuring the following steps are undertaken during or post building relocation, if damage to the building is sustained:               <ul style="list-style-type: none"> <li>- the nominated Project architect would be contacted immediately</li> <li>- all damage to elements would be recorded</li> <li>- a heritage architect and specialist tradesperson would supervise and undertake required repairs</li> </ul> </li> <li>• conserving and retaining the existing path from Platform 1 to the Telecommunications Equipment Centre.</li> </ul>	Platform 1 Office Building and surrounding heritage elements



ID	Mitigation measure	Applicable location(s)
NAH7	<p>Ensuring that the heritage elements on Platform 4/5, 6/7 and 8/9 buildings be conserved and protected by:</p> <ul style="list-style-type: none"> <li>• using traditional repair and conservation methods for detailing proposed works</li> <li>• ensuring the demolition of the extension to the Platform 8/9 building would not damage the surrounding fabric</li> <li>• retaining original features of the building and their conservation and restoration if feasible</li> <li>• incorporating new sympathetic fabric in accordance with the guidelines of the Burra Charter.</li> </ul>	Platform 4/5, 6/7 and 8/9 buildings
NAH8	<p>Ensuring that the warehouse character of 125-127 Little Eveleigh Street would be retained by:</p> <ul style="list-style-type: none"> <li>• retaining external building elements: Masonry walls, parapet line of the roof, fenestration, patina (including painted signs) of the brickwork (including remnant painted signs)</li> <li>• internal building elements: Original timber columns, original exposed timber framing to floors and ceilings (subject to detailed structural review)</li> <li>• designing new entry canopies to be a slim profile, sympathetic to the colours and material of the existing building               <ul style="list-style-type: none"> <li>- modifying the external openings, where appropriate, to make reference to the existing fenestration pattern of the building</li> <li>- undertaking conservation works and repair works to the exterior of the building</li> <li>- designing the new Colorbond roof to be sympathetic to the existing colour palette of the building</li> <li>- avoiding anti-graffiti paint to the exterior of the brickwork.</li> </ul> </li> </ul>	125-127 Little Eveleigh Street
NAH9	<p>Reducing the aesthetic impacts associated with the insertion of the proposed car park through landscaping treatments by:</p> <ul style="list-style-type: none"> <li>• undertaking a holistic approach when selecting materials and finishes in areas that are located within or adjacent to the Eveleigh Railway Workshops including boundary fencing, planning layouts, signage, materials, and plantings</li> <li>• updating the Urban Design and Public Domain Plan prior to finalisation of detailed design that incorporates a coherent presentation and linkage with the Eveleigh Railway Workshops. Retaining and protecting existing trees</li> <li>• introducing minimal soft landscaping to retain the existing industrial character of the rail yard.</li> </ul>	Eveleigh Railway Workshops
NAH10	<p>The existing SHR curtilage of the Eveleigh Chief Mechanical Engineer's Office would be protected by:</p> <ul style="list-style-type: none"> <li>• retaining and protecting the existing trees</li> <li>• protecting and retaining the existing garden within the heritage boundary of the building and minimising impacts of the proposed works - physically or visually.</li> </ul>	Eveleigh Chief Mechanical Engineer's Office
NAH11	<p>The building fabric of the McMurtrie, Kellerman &amp; Co factory at 181 Lawson Street would be protected during construction in particular adjacent to basement windows.</p>	Ivy Street and McMurtrie, Kellerman & Co factory, 181 Lawson Street (I2245)

ID	Mitigation measure	Applicable location(s)
NAH12	Designing new infrastructure such as OHW as simple clean structures with consolidated service runs to reduce the cluttered look of existing infrastructure at the station.	Ivy Street and McMurtrie, Kellerman & Co factory, 181 Lawson Street (I2245)
NAH13	<p>Inspection of the following areas would be undertaken to identify movable heritage items:</p> <ul style="list-style-type: none"> <li>Platform 1 Office Building</li> <li>Platforms 4-9 buildings</li> <li>125-127 Little Eveleigh Street.</li> </ul> <p>If movable heritage items are found:</p> <ul style="list-style-type: none"> <li>tag and record items</li> <li>storage of moveable heritage should be coordinated with the Eveleigh Railway Workshop Collection.</li> </ul>	Platform 1 Office Building, Platforms 4-9 buildings, 125-127 Little Eveleigh Street
NAH14	<p>Protecting and managing the potential archaeology on site by undertaking the following:</p> <ul style="list-style-type: none"> <li>archaeological test excavation and salvage on the northern side of Marian Street, proposed car park off Little Eveleigh Street and area of relocation of the Platform 1 Office Building, prior to the commencement of bulk excavation works. A Historical Archaeological Research Design (HARD) would be prepared in accordance with the relevant Heritage, DPC guidelines</li> <li>archaeological monitoring for excavation works in the area of the proposed new car park on Little Eveleigh Street. The methodology for undertaking this archaeological monitoring would be included in the HARD</li> <li>archaeological monitoring for any excavation works along Marian Street, Rosehill Street and Cornwallis Street to record remains of earlier road surfaces. Once recorded, these road surfaces can be removed. The archaeological monitoring methodology would be included in the HARD</li> <li>stop-work procedures would be implemented should unexpected finds be uncovered in accordance with TfNSW's Unexpected Heritage Finds Guidelines.</li> </ul>	<p>Marion Street Entrance</p> <p>Little Eveleigh Street Car park</p> <p>Marian Street, Rosehill Street and Cornwallis Street</p> <p>General</p>
NAH15	<p>Communicate the heritage value of the Project by the following:</p> <ul style="list-style-type: none"> <li>implementing the heritage interpretation strategy for the Project</li> <li>Considering guidelines provided in <i>Sydney Trains Heritage Interpretation Guidelines</i>, and the City of Sydney council signage policies</li> <li>undertaking further community consultation as part of the Heritage Interpretation Strategy</li> <li>developing a Signage Plan to ensure that the design is contemporary, of high design quality, and reflects traditional patterns</li> <li>interpreting the current position of the Platform 1 Office Building after the building is relocated</li> <li>interpreting the association of Redfern Station with the Aboriginal community of Redfern</li> <li>interpreting the historic gardens on the platforms at Redfern Station</li> </ul>	General

ID	Mitigation measure	Applicable location(s)
	<ul style="list-style-type: none"> <li>interpreting the story of the former footbridge (1914-1996) at the proposed car park entry.</li> </ul>	
NAH16	Consulting with the City of Sydney with regard to refining detailed design in the following areas: <ul style="list-style-type: none"> <li>125-127 Little Eveleigh Street</li> <li>streetscape works.</li> </ul>	125-127 Little Eveleigh Street, Darlington and Golden Grove Heritage Conservation Areas
<b>Operation</b>		
NAH17	Updating the SHR, SHI, s170 listing description for Redfern Railway Station Group and Eveleigh Railway Workshops to reflect the upgrades from the Project, following completion of works.	General

Following the implementation of the management measure above, there would be residual impacts from the Project including:

- the Project would result in a major adverse impact to the aesthetic significance of Redfern Station Railway Group
- the Project would result in a moderate adverse impact to the historic and rarity values of the Redfern Station Railway Group (including the relocation of the Platform 1 Office Building which would have a moderate adverse impact on the station's intact collection of railway buildings, which has been identified as a rare element)
- the Project would have a minor adverse impact on both the aesthetic and technical values of the Eveleigh Railway Workshops
- the proposed works to 125-127 Little Eveleigh Street have the potential for minor adverse impact on the Darlington Heritage Conservation Area.

Potential cumulative impacts are addressed in **Chapter 23** of this EIS.